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BULLETIN 136

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Numbers 27-32

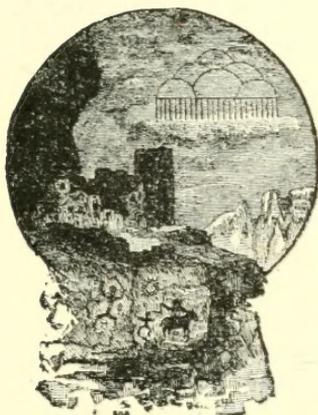


H. C. ...

SMITHSONIAN INSTITUTION
BUREAU OF AMERICAN ETHNOLOGY
BULLETIN 136

ANTHROPOLOGICAL PAPERS

Numbers 27-32



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LETTER OF TRANSMITTAL

SMITHSONIAN INSTITUTION,
BUREAU OF AMERICAN ETHNOLOGY,
Washington, D. C., December 15, 1941.

SIR: I have the honor to submit the accompanying manuscripts, entitled "Music of the Indians of British Columbia," by Frances Densmore; "Choctaw Music," by Frances Densmore; "Some Ethnological Data Concerning One Hundred Yucatan Plants," by Morris Steggerda; "A Description of Thirty Towns in Yucatan, Mexico," by Morris Steggerda; "Some Western Shoshoni Myths," by Julian H. Steward; and "New Material from Acoma," by Leslie A. White; and to recommend that they be published as a bulletin of the Bureau of American Ethnology.

Very respectfully yours,

M. W. STIRLING, *Chief.*

DR. C. G. ABBOT,
Secretary of the Smithsonian Institution.



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PUBLISHER'S NOTE

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SMITHSONIAN INSTITUTION
Bureau of American Ethnology
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Anthropological Papers, No. 27

Music of the Indians of British Columbia

By FRANCES DENSMORE

FOREWORD

Many tribes and locations are represented in the present work, differing from the writer's former books,¹ which have generally considered the music of only one tribe. This material from widely separated regions was available at Chilliwack, British Columbia, during the season of hop-picking, the Indians being employed in the fields. The work was made possible by the courtesy of Canadian officials. Grateful acknowledgment is made to Dr. Duncan Campbell Scott, Deputy Superintendent General, Department of Indian Affairs at Ottawa, who provided a letter of credential, and to Mr. C. C. Perry, Indian agent at Vancouver, and Indian Commissioner A. O. N. Daunt, Indian agent at New Westminster, who extended assistance and cooperation. Acknowledgment is also made of the courtesy of Walter Withers, corporal (later sergeant), Royal Canadian Mounted Police, who acted as escort between Chilliwack and the hop camp, and assisted the work in many ways. Courtesies were also extended by municipal officers in Chilliwack and by the executive office of the Columbia Hop Co., in whose camp the work was conducted.

This is the writer's first musical work in Canada and the results are important as a basis of comparison between the songs of Canadian Indians and those of Indians residing in the United States.

On this trip the writer had the helpful companionship of her sister, Margaret Densmore.

¹ See bibliography (Densmore, 1910, 1913, 1918, 1922, 1923, 1926, 1928, 1929, 1929 a, 1929 b, 1932, 1932 a, 1936, 1937, 1938, 1939, 1942).

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LIST OF SONGS

1. ARRANGED IN ORDER OF SERIAL NUMBERS

SONGS WITH TREATMENT OF THE SICK

Serial No.	Catalog No.	Page
1. Introductory song with treatment of the sick.....	2031	19
2. Song when treating smallpox.....	2032	20
3. Song when treating fever.....	2035	21
4. Song when treating palsy.....	2036	22
5. Song when treating hemorrhage from the lungs.....	2033	23
6. Song when treating pneumonia.....	2034	23
7. Two girls on a horse.....	2048 (a and b)	25
8. "Look at this sick person".....	2049	26
9. An appeal to certain animals.....	2050	27
10. An appeal to the deer.....	2051	28
11. "I am going to cure this sick man".....	1691	30
12. "I am trying to cure this sick man".....	1693	31
13. "The whale is going to help me cure this sick man".....	1694	32
14. "The thunderbird will help me cure this sick man".....	1692	32
15. Song of Y'ak, the medicine man (a).....	1695	33
16. Song of Y'ak, the medicine man (b).....	1715	34
17. Song of Y'ak, the medicine man (c).....	1716	35
18. "This song cheers me".....	2026	36
19. "I am going to make you better".....	1711	36
20. Doctor's song (a).....	1667	37
21. Doctor's song (b).....	1668	38
22. Doctor's song (c).....	1669	38
23. Song of a medicine man at Nitinat Lake (a).....	1696	39
24. Song of a medicine man at Nitinat Lake (b).....	1697	40
25. Doctor Jim's song.....	2061	40
26. Song of a medicine man at Carmanah.....	1698	41

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27. Song when going to war.....	1699	42
28. Song when returning from war.....	1700	43
29. War dance song.....	1701	44
30. Song when carrying heads of the enemy on poles (a).....	1702	45
31. Song when carrying heads of the enemy on poles (b).....	1703	46
32. Song concerning a ransomed captive.....	1672	47
33. The rider on the kohaks.....	2039	47

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34. Song of approach to a potlatch.....	2046	49
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36. Potlatch song.....	1710	50

1. ARRANGED IN ORDER OF SERIAL NUMBERS—Continued

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39. Dance song of the Fraser River Indians (c)-----	2042	53
40. Dance song (a)-----	1704	54
41. Dance song (b)-----	1705	54
42. Dance song (c)-----	2047	55
43. Dance song (d)-----	2024	55
44. Klokali dance song-----	1706	56
45. Thunderbird dance song-----	1717	57
46. Song of Campbell dance-----	1673	57
47. Dance song from Babine-----	1690	58
48. Dance song of the Thompson River Indians (a)-----	2055	59
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55. Social song (a)-----	1674	63
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65. Slahal game song (g)-----	1671	71
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68. Gambling song (b)-----	2063	73

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76. Song to a little girl-----	1714	80
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1. ARRANGED IN ORDER OF SERIAL NUMBERS—Continued

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79. "All my sweethearts are gone except one".....	2045	81
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88. Song of a seal.....	1670	88
89. Song of a shark hunter.....	2062	89
90. Song of a hunter.....	2030	89
91. Song of happiness.....	2029	90
92. Dream of going to Ottawa.....	2025	90
93. "I wish I was in Butte Inlet".....	1678	91
94. Song of a traveler.....	1679	91
95. "Your pretty hair".....	2060	92
96. A woman's song.....	2043	93
97. Song of a man alone at home.....	2022	94
98. Indian cowboy song.....	2059	94

2. ARRANGED IN ORDER OF CATALOG NUMBERS

Cat- alog No.	Title of song	Name of singer	Se- rial No.	Page
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1666	Canoe song (b).....	do.....	70	74
1667	Doctor's song (a).....	do.....	20	37
1668	Doctor's song (b).....	do.....	21	38
1669	Doctor's song (c).....	do.....	22	38
1670	Song of a seal.....	do.....	88	88
1671	Slahal game song (g).....	do.....	65	71
1672	Song concerning a ransomed captive.....	do.....	32	47
1673	Song of Campbell dance.....	do.....	46	57
1674	Social song (a).....	do.....	55	63
1675	Social song (b).....	do.....	56	63
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1678	"I wish I was in Butte Inlet".....	Sophie Wilson.....	93	91
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2. ARRANGED IN ORDER OF CATALOG NUMBERS—Continued

Cat- alog No.	Title of song	Name of singer	Se- rial No.	Page
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1684	Divorce dance song (a).....	do.....	83	84
1685	Divorce dance song (b).....	do.....	84	85
1686	"Wrap a feather around me".....	do.....	73	77
1687	"I am going to stay at home".....	do.....	80	82
1688	"She is glad to see him".....	Ellen Stevens.....	81	83
1689	"Give me a bottle of rum".....	do.....	82	83
1690	Dance song from Babine.....	Abraham Williams.....	47	58
1691	"I am going to cure this sick man".....	F. Knightum.....	11	30
1692	"The thunderbird will help me cure this sick man."	do.....	14	32
1693	"I am trying to cure this sick man".....	do.....	12	31
1694	"The whale is going to help me cure this sick man."	do.....	13	32
1695	Song of Y'ak, the medicine man (a).....	do.....	15	33
1696	Song of a medicine man at Nitinat Lake (a).	do.....	23	39
1697	Song of a medicine man at Nitinat Lake (b).	do.....	24	40
1698	Song of a medicine man at Carmanah.....	do.....	26	41
1699	Song when going to war.....	do.....	27	42
1700	Song when returning from war.....	do.....	28	43
1701	War dance song.....	do.....	29	44
1702	Song when carrying heads of the enemy on poles (a).	do.....	30	45
1703	Song when carrying heads of the enemy on poles (b).	do.....	31	46
1704	Dance song (a).....	Annie Tom.....	40	54
1705	Dance song (b).....	do.....	41	54
1706	Klokali dance song.....	do.....	44	56
1707	Song after receiving a gift (a).....	do.....	53	62
1708	Song after receiving a gift (b).....	do.....	54	62
1709	"I will scrape my body on the rocks".....	do.....	74	78
1710	Potlatch song.....	do.....	36	50
1711	"I am going to make you better".....	do.....	19	36
1712	Song of dance with wolf headdress (a).....	do.....	50	60
1713	Song of dance with wolf headdress (b).....	do.....	51	60
1714	Song to a little girl.....	do.....	76	80
1715	Song of Y'ak the medicine man (b).....	Wilson Williams.....	16	34
1716	Song of Y'ak the medicine man (c).....	do.....	17	35
1717	Thunderbird dance song.....	do.....	45	57
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1719	Doctor Jim's song.....	do.....	25	40
2021	Song concerning the prophet Skilmaha.....	Jimmie O'Hammon.....	86	87
2022	Song of a man alone at home.....	do.....	97	94
2023	Slahal game song (b).....	do.....	60	63
2024	Dance song (d).....	do.....	43	55
2025	Dream of going to Ottawa.....	do.....	92	90

2. ARRANGED IN ORDER OF CATALOG NUMBER—Continued

Cat- alog No.	Title of song	Name of singer	Se- rial No.	Page
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2027	Song with termination of mourning-----	do-----	87	87
2028	Slahal game song (a)-----	do-----	59	67
2029	Song of happiness-----	do-----	91	90
2030	Song of a hunter-----	do-----	90	89
2031	Introductory song with treatment of the sick.	Tasalt-----	1	19
2032	Song when treating smallpox-----	do-----	2	20
2033	Song when treating hemorrhage from the lungs.	do-----	5	23
2034	Song when treating pneumonia-----	do-----	6	23
2035	Song when treating fever-----	do-----	3	21
2036	Song when treating palsy-----	do-----	4	22
2037	A desire for clear weather-----	do-----	35	49
2038	Song of pleasure-----	do-----	66	72
2039	The rider on the kohaks-----	do-----	33	47
2040	Dance song of the Fraser River Indi- ans (a).	Dennis Peters-----	37	52
2041	Dance song of the Fraser River Indi- ans (b).	do-----	38	52
2042	Dance song of the Fraser River Indi- ans (c).	do-----	39	53
2043	A woman's song-----	do-----	96	93
2044	"I wish I were a cloud"-----	do-----	78	81
2045	"All my sweethearts are gone except one".	do-----	79	81
2046	Song of approach to a potlatch-----	do-----	34	49
2047	Dance song (c)-----	do-----	42	55
2048	Two girls on a horse (a and b)-----	John Butcher-----	7	25
2049	"Look at this sick person"-----	do-----	8	26
2050	An appeal to certain animals-----	do-----	9	27
2051	An appeal to the deer-----	do-----	10	28
2052	Slahal game song (c)-----	Otter Billie-----	61	69
2053	Slahal game song (d)-----	do-----	62	69
2054	Slahal game song (e)-----	do-----	63	70
2055	Dance song of the Thompson River Indians (a).	Henry McCarthy-----	48	59
2056	Dance song of the Thompson River Indians (b).	do-----	49	59
2057	Slahal game song (f)-----	do-----	64	70
2058	Gambling song (a)-----	Annie Bolem-----	67	72
2059	Indian cowboy song-----	do-----	98	94
2060	"Your pretty hair"-----	Julia Malwer-----	95	92
2061	The little boy and the whale-----	Jake George-----	75	79
2062	Song of a shark hunter-----	Wilson Williams-----	89	88
2063	Gambling song (b)-----	Julia Charlie-----	68	73

NAMES OF SINGERS, NUMBER OF SONGS TRANSCRIBED, AND HOME OF SINGER

Name	Number of songs	Home
Bob George.....	13	Powell River on Sliamon Reserve.
F. Knightum.....	13	Carmanah, on Vancouver Island.
Annie Tom.....	11	Nitinat village, on Vancouver Island.
Jimmie O'Hammon.....	10	Squamish River.
Tasalt.....	9	Near Chilliwack, on Fraser River.
Dennis Peters.....	8	Hope, on Fraser River.
Jane Green.....	5	Skcena River.
John Butcher.....	4	Lytton, on Thompson River at junction with Fraser.
Wilson Williams.....	4	Carmanah, on Vancouver Island.
Otter Billie.....	3	Thompson River.
Henry McCarthy.....	3	Thompson River.
Sophie Wilson.....	3	Church House, on Homalko Reserve.
Annie Bolem.....	2	Boothroyd, on Frazer River.
Katharine Charlie.....	2	Vancouver Island.
Ellen Stevens.....	2	Nass River.
Julia Charlie.....	1	Thompson River.
Jake George.....	1	
Henry Haldane.....	1	Port Simpson.
Johnson.....	1	Port Simpson.
Julia Malwer.....	1	Sardis.
Abraham Williams.....	1	Babine region.
Total.....	98	

SPECIAL SIGNS USED IN TRANSCRIPTIONS OF SONGS

— placed above a series of notes indicates that they constitute a rhythmic unit.

(. placed above a note shows that the tone was prolonged slightly beyond the indicated time.

MUSIC OF THE INDIANS OF BRITISH COLUMBIA

By FRANCES DENSMORE

INTRODUCTION

The Indians of British Columbia find employment in the seasonal industries of the region, many working in the canneries and hop-picking camps. About 1,000 Indians were living in such a camp near Chilliwack in September 1926, and from these Indians the material here presented was obtained. They came from widely separated localities, including Vancouver and Cooper Islands, the Sliamon and Homalko Reserves, on the west coast of British Columbia, the vicinities of Port Simpson, the regions adjacent to the Fraser, Thompson, Nass, and Skeena Rivers, and the Babine country. The Indians of the latter localities must travel a considerable distance to the railroad. Thus a singer from the Skeena River said that she traveled 5 hours by automobile to reach Hazelton, and a singer from the Babine region made the trip to Hazelton by pack horse, traveling with a friend, after manner of Indian boys. The Babine region takes its name from a river that flows through a lake of the same name. It is a sparsely settled region and mountainous. The Indians of all the northern region assemble at Prince Rupert, whence they are taken to Vancouver by steamer. There they are joined by groups from other localities and transported to Chilliwack by electric cars. The journey is under the auspices of the several hop companies, and constables are provided by the Indian Office in each district through which they pass.

Chilliwack is located on the Fraser River, 65 miles southeast of Vancouver. The climate in the valley is particularly favorable to the raising of hops, which constitute an important industry. The workers in the Columbia Hop Co.'s Camp are housed in cabins and communal houses arranged in streets (pl. 1, fig. 1). In the distance are seen the mountains which, at this point, mark the boundary between the United States and Canada. There was an early, cold rain while the work was in progress, and snow appeared on the tops of these mountains.

The cabins generally housed two families (pl. 1, fig. 2). The communal houses (pl. 2, fig. 1) had an open space in the center,

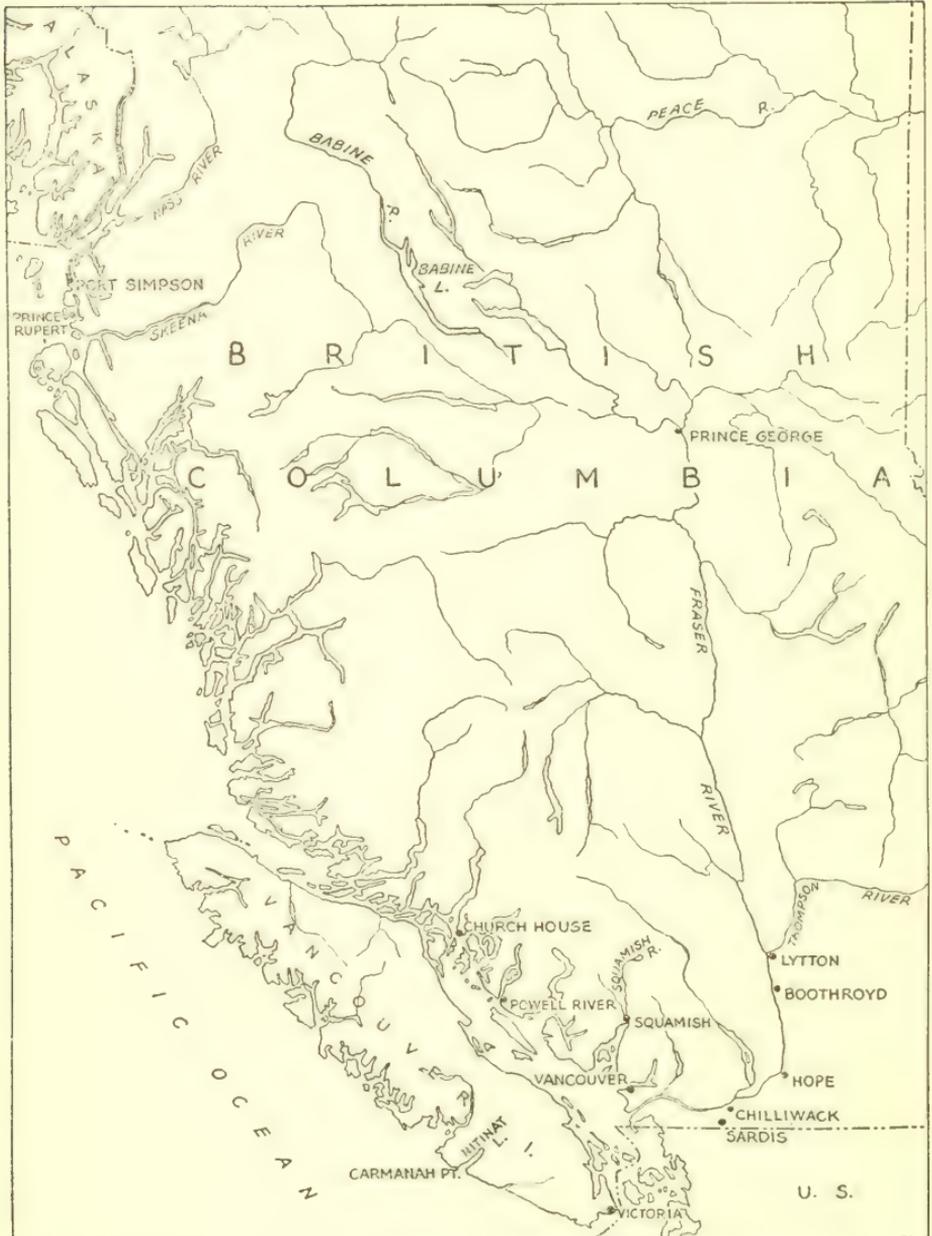


FIGURE 1.—Map of British Columbia.

extending the length of the building, with numerous cubicles on each side for separate families. Each cubicle had one window. The cooking was done on four or five stoves in the long central space, each family using the stove nearest its cubicle. The buildings and camp streets were lighted by electricity.

As the able-bodied people were at work during the day, it was necessary to record most of the songs in the evenings, and for this purpose the Hop Co. generously offered the use of a small building next the entrance that was used for Red Cross supplies and known as the Red Cross shack (pl. 2, fig. 2). This contained a small stove and had one small window on each of the sides not shown in the illustration. The shack was constructed of upright boards with wide cracks between them. When songs were being recorded, a crowd usually congregated outside the building and, as a reward for keeping quiet, they were allowed to look through the cracks, so that often a row of eyes could be seen through these perpendicular openings.

An interesting incident of a hop-picking camp is the exchange of articles of clothing brought for that purpose. The clothing of men, women, and children is exchanged in this manner, the transfers being attended by much discussion and bargaining, several garments often being exchanged for one of supposedly greater value. A group engaged in this form of barter is shown in plate 3, figure 1.

The harvesting of hops is a picturesque scene. Each vine climbs a cord which extends from the ground to a horizontal wire stretched between tall poles. A corner of a hop field is shown in plate 3, figure 2. When the hops are ripe these wires are lowered to permit the picking of the hops (pl. 4, fig. 1). Drooping wires are seen in plate 4, figure 2, and plate 5, figure 1, ready for the harvesting of the hops, while plate 5, figure 2, shows the wires pulled upward to their original position after the hops and cords have been removed. The hops are gathered in baskets, which are emptied into huge canvas containers, and the pay of each worker is according to the quantity of hops that he or she gathers. It was interesting to see the more active pickers help the older or less capable workers by emptying an occasional basket of hops into their containers.

The Indians employed in the hop fields are from widely separated localities, as stated, and many faces show the mixture of races which is common in British Columbia. This appears in the woman and her child from Kamloops (pl. 6, fig. 1) and in the portraits of singers and informants.

By a fortunate circumstance, two young men in the hop-picking camp had been at Neah Bay, and were acquainted with the writer's work. They were cousins, F. Knightum and Wilson Williams by

name, and lived at Carmanah, 5 miles from Nitinat Lake. They had taken their fish across the Strait of Juan de Fuca to sell at Neah Bay, and had often heard the Indians tell of recording songs. Other Nitinat besides themselves attended the celebration of Makah Day, at which the writer was present. As a result of this acquaintance, the Nitinat were ready to consider the work favorably and consented to record 35 songs, many being the songs used in the treatment of the sick, which are usually difficult to obtain. Their influence assisted in the securing of songs from other groups in the camp.

Twenty-one singers were employed, the total number of recorded songs being 121. These singers came from 16 localities. The songs recorded and not transcribed were studied; many were found to resemble the transcribed songs so closely as to be without value, while others were not of sufficient interest to be transcribed.

Interesting data on the hunting of sea lions were obtained from Francis James, who lives on Cooper Island. These facts are not connected with any song, but form part of the general information concerning Indians of western British Columbia.

Francis James said that his people hunt sea lions, starting on the hunt about the last of March. Sometimes they are able to get sea lions on the eastern side of the channel, almost at the mouth of the Fraser River. It was customary, in old days, for 14 canoes to go on such a hunt, and spears were used in killing the animals, but the most important members of the expedition were the men who knew the words that would make a sea lion stop. There were only one or two such men with an expedition and they learned the words from their old people. A sea lion might be going far away, but when a man spoke these words it would turn back and get in such a position that it could be speared. The words were *spoken*, not *sung*.

Sometimes a sea lion was captured that weighed a ton, and sometimes the sea lion was so strong that it upset a canoe, or dragged the canoe a long way, but when the sea lion "began to die" all the men threw their spears into it. Sometimes the wounded animal lived all night, and an effort was made to get it to go toward the shore, the canoes, by their ropes, trying to drag it in that direction. The ropes had "floaters" attached to them, similar to those on the whale-ropes of the Makah.

When the sea-lion hunters arrived at home, the meat was divided and there was a great feast. The man who first threw the spear into the sea lion received only the fin. The man who threw the second spear received the most meat and helped to divide it among the others. The hind quarters were considered the best portion of the meat, but the fin was the finest delicacy. It was customary to

smoke the meat and keep the fat to eat with dried salmon. The hide was formerly used for the making of gun cases.

TREATMENT OF THE SICK

Two men who are engaged in treating the sick at the present time consented to record a portion of the songs which they use and to describe their methods. These men were Tasalt (pl. 6, fig. 2), who lives near Chilliwack, B. C., and John Butcher, who lives at Lytton, on the Thompson River. Both are men past middle age, but in sturdy health, working in the hop fields and living in the camp while hop picking is in progress.

Tasalt is commonly known as Catholic Tommy. The name Tasalt is inherited from a remote past and he does not know its meaning. In manner and mode of life he is quiet. H. Harding, Chief of Municipal Police in Chilliwack, has a wide and intimate acquaintance with Indians throughout the region, but did not know that Tasalt treated the sick, until the present material was obtained. Although living in the hop-pickers' camp, Tasalt was not in one of the communal houses. Instead, he lived in a shack located in the rear of a building on the edge of the camp (pl. 7, fig. 1). It seemed scarcely a habitation for a human being, even as a temporary abode, but it had the advantage of privacy. Tasalt's wife is a cripple, lying on a rough wooden bunk while he is absent at work. The roof is low and little light enters the place, yet in these surroundings the writer found this interesting medicine man.

Songs are the chief means employed by Tasalt in treating the sick. His mother was a doctor, but did not teach him and gave him no songs. He has received all his songs from spirits. His wife sings and drums while he treats the patient. He does not draw his hands along the patient's body, which is a method used by John Butcher (cf. p. 24), but he "gets the sickness and throws it away." After this has been done, he tells the patient not to eat much, and the sick man rests and sleeps. In a severe case he must work two or three times, but after the "sickness has been taken out" the person regains his strength rapidly. No material remedies are used. All sorts of cases are brought to him and he treats them all, having special songs for certain illnesses. He said that he had been able to help all except two of these cases, but "when he sees the sick person gradually disappear so that only the clothes remain, he gives up." He allows the persons in the room to cry if they wish to do so. This is forbidden in many tribes because of a belief that it will reduce the power of the doctor who is treating the sick person. In these tribes, the relatives of the patient and all who are in the room are asked to sing

with the doctor in order to augment his power by their own. Tasalt requires no assistance except that of his wife.

When the purpose of the present work had been explained to Tasalt, he said that he would record his songs for the treatment of smallpox, fever, palsy, hemorrhage from the lungs, and pneumonia. Five songs were recorded, and it was supposed the entire series had been obtained, so the subject of inquiry was changed. About a week later, Tasalt returned, and said that he did not record the song for the treatment of pneumonia and wished to record it in order to fulfill his promise. He explained that the first song he recorded was in the nature of an introduction and should not have been counted as part of the series. He came again and recorded his song for the treatment of pneumonia, following it with his own dancing song (not transcribed), after which he said that he had finished his contribution of songs. The sources of the songs for the treatment of smallpox, fever, and pneumonia were not designated, but the other two were received from spirits not hitherto mentioned in connection with the treatment of the sick.

The introductory song and the songs for the treatment of smallpox and fever are similar in character (Nos. 1, 2, and 3). They are soothing melodies, framed by the descending tetrachord B flat-A-G-F and the tetratone (incomplete tetrachord) G-F-D. The opening measures are practically the same in these songs. The phrase indicated as the rhythmic unit is not repeated with accuracy, as in other songs, but contains interesting variations. The occurrences of this phrase are indicated by consecutive letters in the three songs (A to O), the only duplications occurring in the phrases G and I, and the phrases E and N. In these, as in other songs used by Indian doctors, it appears that the basis of musical therapy among the Indians consists in the use of subtle rhythms, and in variations of rhythm that hold the attention of a listener.

After singing each song as transcribed, Tasalt repeated a portion of the melody, taking care to bring his performance within the length of the phonograph cylinder. Each song has its own characteristic quality and the partial rendition of one song could not be mistaken for that of another. The first song contains 33 ascending, and 40 descending intervals. Approximately the same number of ascending and descending intervals occurs in the two songs next following, showing that the length, as well as the form, of the song was clear in the singer's mind.

No. 2. Song When Treating Smallpox

(Catalog No. 2032)

Recorded by TASALT

$\text{♩} = 66$

Free translation.—I am curing you. I am going to take you and cure you.

Analysis.—The chief characteristic of this melody is the succession of minor thirds at the close of each phrase. The division of the first count of the rhythmic unit is alternately two sixteenth notes followed by an eighth and the reverse.

In the practice of Tasalt, a person suffering from fever was not allowed to drink water.

No. 3. Song When Treating Fever

(Catalog No. 2035)

Recorded by TASALT

♩ = 60

The musical score consists of five staves of music in a single system. The first staff begins with a treble clef, a key signature of one flat (B-flat), and a 4/4 time signature. A tempo marking of ♩ = 60 is placed above the first staff. The melody is written on a single line. The second staff contains a measure marked 'Fausse' with a fermata. The third staff has two phrases labeled 'L' and 'M'. The fourth staff has two phrases labeled 'N' and 'O'. The fifth staff concludes the piece with a double bar line.

Free translation.—Strengthen me, make me live, dear spirit.

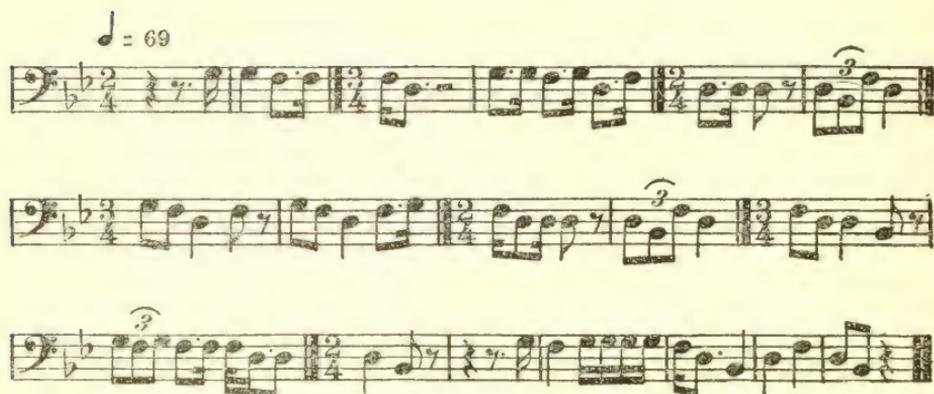
Analysis.—The opening of this song is more direct than the two preceding, which it so closely resembles in many respects. The first tone is accented, not preceded by a short, unaccented tone as in the preceding songs. The melody moves more freely, and descends to the final tone by several descending intervals. It is interesting to note the downward glissando and the short pause in the opening portion of the melody.

A spirit called ha'wil gave the next song to Tasalt. This spirit was said to live in the water and to resemble a dog, but it had a golden breast and golden eyes. The song was used for severe cases of shaking palsy.

No. 4. Song When Treating Palsy

(Catalog No. 2036)

Recorded by TASALT



Free translation.—I am hawil and I am going to take the disease away.

Analysis.—The rhythm of this song is particularly steady and well defined, which would adapt it to its purpose. No rhythmic unit occurs and the song contains frequent changes of measure lengths but the steady quality is maintained. Alternate measures end with a rest except in the closing measures. Attention is directed to a melodic phrase which occurs on the first count of the fifth and ninth measures. A swaying of the melody in successive descent and ascent is restful and soothing and was noted also in the songs of a Yuma doctor (cf. Densmore, 1932, Nos. 40, 41, 42, and 43).

Tasalt said that he learned the next song when he was "training to be a doctor," and that he received it from a "wild spirit" called skeup'. He could not describe this spirit but said the spirits went away when the white men came.

No. 5. Song When Treating Hemorrhage From the Lungs

(Catalog No. 2033)

Recorded by TASALT



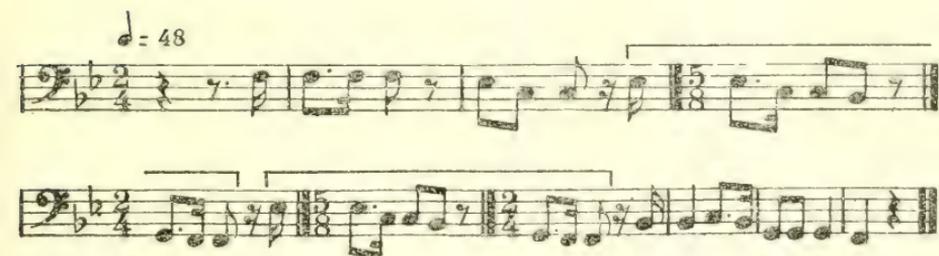
Free translation.—I am going to cure this hemorrhage (the last word being an imperfect pronunciation of the English word).

Analysis.—The structure of this is different from the other healing songs recorded by Tasalt. There is no rhythmic phrase and the melody flows smoothly within its compass of ten tones. The downward and upward swaying of the melody, mentioned in the song next preceding, appears also in this song, with its soothing effect, while a certain liveliness is introduced by means of the divided triplets of eighth notes in the fourth and fifth measures. The ear expects the same at the opening of the sixth measure, but the first tone is prolonged and is followed by several triplets. This is the gentlest melody recorded by Tasalt, with no rhythms that would excite a patient.

No. 6. Song When Treating Pneumonia

(Catalog No. 2034)

Recorded by TASALT



Analysis.—In this song with its short, almost jerky rhythm, we find a contrast to the preceding songs of this group. The time is broken by rests and there is one rhythmic unit. The song has a compass of an octave, and the pitch of the lowest tone is four tones lower than in the preceding songs recorded by Tasalt. The slight break in the time caused by the 5-8 measure is interesting and was distinctly given. The tones occurring in the melody are B flat, C, E flat, F, and G, with B flat as the implied keynote. These constitute the first 5-toned scale (cf.

footnote, p. 71) in which the third and seventh above the keynote do not occur. This scale occurs rarely in Indian music under the present system of analysis, appearing only 21 times in 1,553 songs. Other occurrences in this series are Nos. 37, 43, and 94.

The second native doctor who recorded songs is John Butcher who, as already stated, lives at Lytton on the Thompson River. His native name is Skwealke, briefly translated "Dawn." He is not tall, but heavy in stature, with a bushy, iron-gray beard. John Butcher and his family live in "E" (pl. 2, fig. 1), one of the large, communal houses provided for the hop-pickers, and his cubicle is first at the right of the entrance. He is very industrious, working in the hop-fields all day, so it was necessary to record his songs in the evening, in the Red Cross shack (pl. 2, fig. 2). His granddaughter acted as his interpreter.

Fasting is practiced by Butcher as a means of maintaining his power. It is said that he goes into the mountains and sometimes remains 7 or more days without food. During this time he sees the "little people," who are like Indians, but about 3 feet in height. They run around with sickness between their hands and put it into the people. Butcher gets it out, throws it away, and tells the little people to go away. While he is in the mountains, he talks with the animals who are his helpers, and they show him medicinal plants, telling their uses. (Cf. p. 29; also Densmore, 1922, pp. 127-128.)

When treating illnesses of a general character, Butcher puts his hands in water and then lays his hands on the sick person's head and moves them downward to his feet, then he "seems to hold the sickness in his two hands," and he makes motions as though throwing it away somewhat as though he were throwing a ball. In his treatment he sings, and then goes away, returning the next day. It is usually necessary for him to visit a sick person three times. No one sings with him unless the patient is very sick. In such a case he gets another doctor to help him and both sing.

The healing songs he recorded are those he uses in a case of confinement and are the first songs of this class that have been recorded by the writer. (A song for this purpose was recorded among the Seminole in Florida in 1933.) If a birth is delayed, he puts his hands in water and "rubs the patient's abdomen." Aside from this, his treatment of such cases is entirely by means of songs. He said the deer is a particularly good helper in such cases and that by its aid the child comes quickly and with little pain to the mother.

The first song of the series mentions two girls on a horse, the first girl telling the one who sits behind her to strike the horse to make it go faster.

No. 7. Two Girls on a Horse

(Catalog No. 2048, *a* and *b*)

Recorded by JOHN BUTCHER

Introduction

♩ = 120

Irregular in tonality

The Introduction section consists of five staves of music in bass clef. The first staff is in 3/4 time. The second staff contains a measure with a 5/4 time signature. The third staff is in 3/4 time. The fourth staff has a '4 measure rest' indicated above the first measure. The fifth staff ends with 'etc'.

Song

♩ = 92

The Song section consists of five staves of music in bass clef. The first staff is in 2/4 time. The second staff has a 2/4 time signature. The third staff has 3/4, 5/8, and 2/4 time signatures. The fourth staff has 5/8, 3/4, and 2/4 time signatures. The fifth staff has 2/4, 3/4, and 2/4 time signatures.

Free translation

Poor sister, hit the horse,
Good-bye, my friend.

Analysis.—The introduction to this song contains only the tones A and B flat. The phrases are generally two or four measures in length, each followed by a rest of at least a quarter note duration. In its repeated semitones the melody conveys an impression of stark suffering, yet it is a gentle melody, seeming to express also the sympathy of the doctor.

The healing songs used by John Butcher are characterized by a sixteenth note followed by a rest, occurring in the opening measures of this song and on the accented count of the rhythmic unit. The melody tones are F, G, A, and B flat, with G as the implied keynote. In tone material and in prolonged tones, this melody resembles a portion of the Makah and Clayoquot songs recorded at Neah Bay, Washington. The progressions are small, 17 of the 40 intervals being whole tones. The measures transcribed in 5-8 time were uniformly sung in all the renditions, and the long rests were uniform in duration.

In the next song, the doctor talks to a sturgeon and to a bird. The words of the interpreter are retained in the translation. It is interesting to note that the doctor does not ask that his own powers be strengthened, but that aid be extended to the patient. The same concept is expressed in the Chippewa tribe by the words translated "take pity," the phrase being frequently used to denote the attitude of supernatural beings toward members of the human race.

No. 8. "Look at This Sick Person"

(Catalog No. 2049)

Recorded by JOHN BUTCHER

$\text{♩} = 66$
Irregular in tonality

The musical score consists of four staves of music in 5/8 time. The first staff begins with a treble clef, a key signature of one sharp (F#), and a 5/8 time signature. It contains two phrases: (1) and (2). The second staff continues the melody with phrase (1) and then phrase (2). The third staff continues with phrase (1) and then phrase (2). The fourth staff continues with phrase (2). The music features a mix of eighth and sixteenth notes, with frequent rests. The overall mood is somber and plaintive.

Free translation

Go easy on this sick person,
Look at this sick person and go easy.

Analysis.—The most prominent tone in this song is B, and the melody progresses chiefly between B and A sharp, with single occurrences of G sharp and C sharp. After singing the song as transcribed, the singer began at the opening measures, but did not give an accurate repetition, occasionally varying the length of unimportant tones or substituting two sixteenth notes for one eighth note.

The free use of rhythm by this singer is shown by the slight differences in the rhythmic units of this and the two songs next following, these units being shown separately for convenience in comparison (p. 29). Only one duplication occurs, the second unit in No. 9 being like the fourth unit in No. 10. In two instances a phrase designated as a rhythmic unit in one song occurs once in another song. The length of the tones was clearly defined throughout these songs, and the slight differences in the phrases show a remarkable preception of rhythm on the part of the singer.

Two songs were taught to Butcher by his father whose name meant Road. The melody was the same in the two songs and the transcription is from the first song. In this the doctor talks to the seal, grizzly bear, and deer, and in the second song he talks to the eagle. Before recording these songs Butcher spoke a few sentences which were translated as follows: "I hope the sick person gets well. It will be awful if she goes away and dies."

No. 9. An Appeal to Certain Animals

(Catalog No. 2050)

Recorded by JOHN BUTCHER

$\text{♩} = 63$

Irregular in tonality

The musical score consists of four staves of music. The first staff begins with a tempo marking of quarter note = 63 and the instruction 'Irregular in tonality'. The music is written in a single melodic line with a treble clef and a key signature of one flat. The notation includes various note values, rests, and dynamic markings. Above the staff, several phrases are bracketed and labeled with circled numbers: (1) above the first and fourth phrases, (2) above the second and third phrases, and (1) above the fifth and sixth phrases. The score ends with a double bar line.

Analysis.—The phonograph record of this song is about two minutes in duration, with no repetition of the sequence of phrases here presented. The transcription is terminated arbitrarily, as in some of the healing songs of the Yuma. A large portion of the intervals are approximately semitones. The small compass, noted in songs recorded at Neah Bay, consists of a fundamental tone and the adjacent tones above and below. The time was maintained with great regularity.

The recording of the next song was ended abruptly. A group of men had gathered around the door of the shack where the songs were being recorded, and Butcher said they would be harmed by hearing these songs. In the portion recorded, he calls upon the deer, and there is a pause during which he imitated the sounds made

by a deer. This was said to mean that the deer heard and answered his appeal. He said that if he had continued he would have called upon the grizzly bear.

No. 10. An Appeal to the Deer

(Catalog No. 2051)

Recorded by JOHN BUTCHER

$\text{♩} = 63$

Pause, with imitation of voice of a deer

Analysis.—An examination of this melody shows a prominence of a minor third in the portion before the voice of the deer is supposed to be heard, and a prominence of a whole tone thereafter. Three-fourths of the intervals are whole tones. This and the two songs next preceding are on the same pitch and in approximately the same tempo, showing the ability of the singer to hold both pitch and tempo.

John Butcher said that the songs for success in hunting had the same melodies as the songs for treatment of the sick, but appealed to the animals for success in hunting. A song of this sort, recorded but not transcribed, did not duplicate the melody of any recorded song for the sick, but was in the same style, with the same prolonged tones. Butcher sings this before going to hunt, so he will have good luck. The words are:

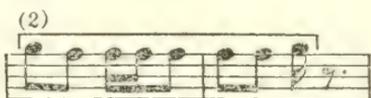
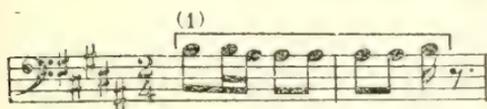
Going out to hunt deer, going to get my gun, and I scared up a big bear. I killed a deer and let the bear eat it.

Reference has already been made to the following comparison of rhythmic units in songs recorded by this singer.

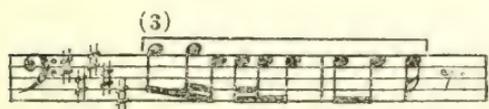
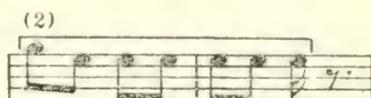
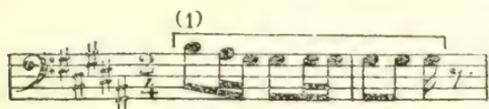
Rhythmic Units in No. 8



Rhythmic Units in No. 9



Rhythmic Units in No. 10



Information concerning the treatment of the sick by Nitinat medicine men was obtained from two cousins, F. Knightum and Wilson Williams, who came from Carmanah, a village on Vancouver Island. They were accustomed to sing with their grandfather while he treated the sick, and in this manner they learned his songs. Their grandfather's name was Y'ak, a Nitinat name which has no known meaning. The Nitinat medicine men were said to confine their activities to helping the sick, "not throwing sickness at other people, as is done in some other tribes."

The Nitinat use herbal remedies for minor ailments and injuries. Some major illnesses and conditions are treated by "sucking out the difficulty" and others by passing the hands downward over the patient's body and then "throwing away the sickness," in a manner already described. Knightum said that if a man were injured and "the blood settled," his grandfather would suck out the trouble; he also "sucks out little worms, kills them, and throws them away." He does not give any herbal remedies.

Four sources of their grandfather's power were described by the informants, these being the wolves, the whales, the spirits of the dead, and the thunderbird. The first will be mentioned in connection with the treatment of the sick. Knightum said that his grandfather once speared a whale which talked to him, and therefore a whale helps him at the present time. The spirits of the dead sometimes come to him and give him songs to use in treating the sick. (Cf. Densmore, 1929 a, pp. 115-135.)

Y'ak treats a sickness which has been put into human beings by "little people who live in the mountains and come down"; he also

treats sickness caused by other human beings, his method being the same for both. In this treatment, the patient lies on his back and Y'ak, using native red paint, makes a drawing of a wolf on the man's chest. He then takes a piece of soft cedar bark, puts it on the sick man's head, and begins to sing. During the treatment, he puts his hands on the picture of the wolf, draws them down to the man's feet and "throws the sickness away" by casting it from his fingertips. The treatment is always given at night and he allows the people to cry if they are moved to do so.

The songs of this medicine man are in groups of four and he calls upon one or another of his sources of power as he feels that the case requires. He usually sings 3 or 4 nights with a sick person, this time being sufficient for a cure, and sings different songs each night, changing them as he likes. Among the Nitinat, as in some other tribes, the number of singers is increased if the patient is very ill, thus enabling more persons to add their power to that of the doctor. Knightum said that if a person is very sick his grandfather "needs lots of singers" and that "everybody sings." The songs are accompanied by beating on an ordinary hand drum. While singing these songs, his grandfather "sees everything, all over the world." The words of these songs are summarized in the titles, and, with one exception, contain the affirmation which characterizes the songs of Indian doctors.

No. 11. "I Am Going to Cure This Sick Man"

(Catalog No. 1691)

Recorded by F. KNIGHTUM

Voice $\text{♩} = 108$

Drum $\text{♩} = 108$

See drum rhythm below



Drum rhythm



Analysis.—The first four tones in this melody are the principal tones occurring in the song. They constitute a minor triad and minor seventh, a group of tones found in particularly primitive melodies. The occurrence of G as a passing

tone completes the material of the second 5-toned scale. It is a forceful melody, containing no change of measure lengths and progressing by 10 ascending and 11 descending intervals. Other occurrences of the 5-toned scale are Nos. 15, 18, and 65 (cf. footnote, p. 71).

No. 12. "I Am Trying to Cure This Sick Man"

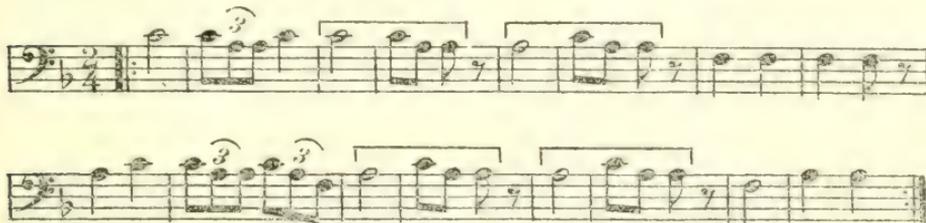
(Catalog No. 1693)

Recorded by F. KNIGHTUM

Voice ♩ = 100

Drum ♩ = 100

Drum rhythm similar to No. 11



Free translation.—I am trying to cure this sick man as I treated when I first began to be a doctor.

Analysis.—This is a melody of unusual simplicity, containing only the tones of the major triad. In its emphasis on the first count of the measures and in its general effect of firmness, it resembles a majority of the other songs attributed to Y'ak. This personal peculiarity in a man's songs is seldom noted in Indian music and suggests that Y'ak was a man of strong character. The song contains 9 ascending and 10 descending progressions.

An interesting attempt at part singing occurred during the recording of this song, another singer "putting in extra tones" softly, during prolonged tones of the melody (cf. p. 48).

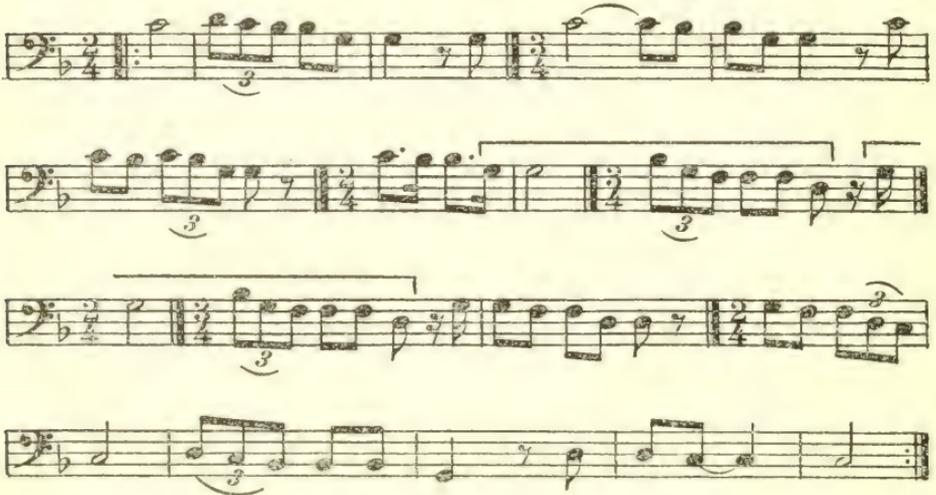
No. 13. "The Whale Is Going to Help Me Cure This Sick Man"

(Catalog No. 1694)

Recorded by F. KNIGHTUM

Voice $\text{♩} = 96$ Drum $\text{♩} = 96$

Drum rhythm similar to No. 11



Analysis.—This melody is framed chiefly on four descending tetratones (incomplete tetrachords), these being C-B flat-G, B flat-G-F, G-F-D, and F-D-C, followed by a descent from D to G. The song closes on C and is transcribed as having F for its keynote, though its tonality is not established. It resembles the song next preceding in the use of a half note on the first count of the rhythmic unit.

No. 14. "The Thunderbird Will Help Me Cure This Sick Man"

(Catalog No. 1692)

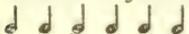
Recorded by F. KNIGHTUM

Voice $\text{♩} = 100$ Drum $\text{♩} = 108$

See drum rhythm below



Drum rhythm



Analysis.—Five sorts of intervals occur in this song. To this variety is due, in part, the cheerful and lively character of the melody. Attention is directed to the discrepancy in the metric unit of voice and drum, each tempo being steadily maintained.

The three songs next following were recorded by Y'ak's grandsons, but no information was obtained concerning their use.

No. 15. Song of Y'ak, the Medicine Man (a)

(Catalog No. 1695)

Recorded by F. KNIGHTUM

Voice $\text{♩} = 104$

Drum $\text{♩} = 104$

Drum rhythm similar to No. 11

Analysis.—A decided contrast is noted between this and the four preceding songs attributed to the same man. This song is more lively, contains shorter note value, and has two rhythmic units. The tone material is the same as that which formed the framework of No. 11, but this song contains no passing tone. The song contains no change of measure lengths, and the ascending and descending intervals are equal in number. Attention is directed to the occurrence of a triplet of eighth notes on an accented count in the first, and an unaccented count in the second rhythmic unit.

No. 16. Song of Y'ak, the Medicine Man (b)

(Catalog No. 1715)

Recorded by WILSON WILLIAMS

Voice ♩ = 112

Drum ♩ = 112

Drum rhythm similar to No. 11

*Fine**Free translation.*—I hope you will be cured by me.

Analysis.—The rest which occurs in the rhythmic unit of this song is always preceded by an ascending and followed by a descending interval. Rests in the rhythmic unit of an Indian song are somewhat unusual. This song contains three double occurrences of the rhythmic unit, with connective measures in different rhythms, giving variety to the rhythm of the song as a whole. The last 10 measures were omitted in some renditions, the connective measure being introduced at this point and the singer returning to the opening of the melody. With the exception of three intervals, the song progresses by minor thirds and whole tones.

No. 17. Song of Y'ak, the Medicine Man (c)

(Catalog No. 1716)

Recorded by WILSON WILLIAMS

Voice $\text{♩} = 112$ Drum $\text{♩} = 112$

Drum rhythm similar to No. 11

The musical score consists of four staves of music. The first staff begins with a treble clef, a key signature of one flat (B-flat), and a 2/4 time signature. The melody is characterized by short notes followed by short rests, creating a rhythmic pattern. The second staff continues the melody with similar rhythmic motifs. The third staff shows a continuation of the piece, with some measures containing multiple notes beamed together. The fourth staff concludes the piece with a final measure and a double bar line.

Analysis.—A peculiarity of this song is the short tones followed by short rests. Several renditions were recorded, this exclamatory style being carefully maintained. The rhythm is more interesting than the progressions, which consist chiefly of minor thirds and whole tones. Drum and voice were synchronous throughout the performance.

Another song used by Y'ak, the medicine man, was studied but not transcribed, as it contained no peculiarities that have not already been noted in his songs.

The next singer said his father was a doctor and received songs from a spirit which appeared to him in the mountains. It was his father's custom to go into the mountains and remain without food. Once he became ill, after remaining without food or water for 2 days, and a spirit came and helped him, so that he did not die. The spirit looked like a woman and changed its appearance, so that sometimes it was large and sometimes small. This spirit became his constant helper. He saw it whenever he went into the mountains and it gave him songs. The interpreter, about 32 years old, said this man was his uncle and that, as a child, he saw the man going away to the mountains. No description of his treatment of the sick was obtained. This is one of his songs:

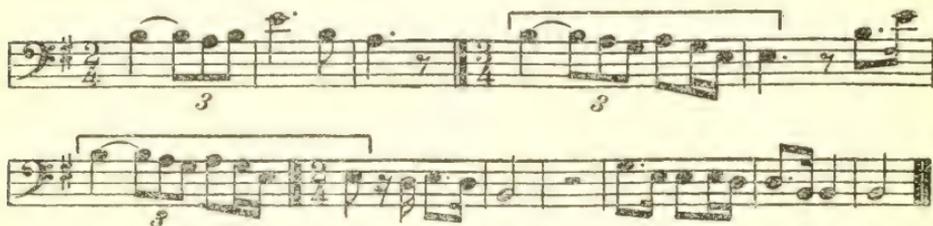
No. 18. "This Song Cheers Me"

(Catalog No. 2026)

Recorded by JIMMIE O'HAMMON

Voice $\text{♩} = 56$ Drum $\text{♩} = 76$.

Drum rhythm similar to No. 11

*Free translation*

For a long time I have been walking and seeing nothing ;
 Now I find this song and it cheers me.

Analysis.—This melody is based on the interval of a fourth, which is often associated with motion in men, birds, or animals. This interval occurs first between B and E, then as A descending to E, while the song closes with E descending to B in the lower octave. The two latter intervals contain a passing tone. The tone material is that of the second 5-toned scale. Attention is directed to the difference in tempo of the voice and drum, this difference being steadily maintained.

Annie Tom recorded a song used by her grandfather, who was a doctor and obtained his power from the thunderbird. The words form the title and contain the affirmation which characterizes many Indian songs used in treating the sick.

No. 19. "I am Going to Make You Better"

(Catalog No. 1711)

Recorded by ANNIE TOM

Voice $\text{♩} = 52$ Drum $\text{♩} = 52$

Drum rhythm similar to No. 1

*Fine*

Analysis.—This peculiar song was sung once, after which the repeated portion was sung four times. The intonation on the tone transcribed as D sharp in the opening measures was somewhat uncertain, approaching E if the phonograph were freshly wound, thus increasing its speed and slightly raising the pitch. The chief interest of the song lies in its rhythm, which was maintained throughout the performance. The beat of the drum is rapid, consisting of four beats to one time unit of the melody.

Bob George said that his grandfather was a doctor and that the next was his personal song. The singer heard his father sing it and learned it in that manner. His father died in 1920 at the age of about 100 years. This indicates the age of the song.

No. 20. Doctor's Song (a)

(Catalog No. 1667)

Recorded by BOB GEORGE



Analysis.—An alternation of double and triple measures characterizes this song, the first of each measure being strongly accented except in the third and seventh measures. The first phrase contains four and the second phrase contains five measures, the additional length being secured by a change of accent on a quarter note in the latter portion of the phrase. It is a cheerful, pleasing melody and yet, to our ears, it has a plaintive character. This may be due to the prominence of the subdominant in the eight measures preceding the close.

No information was obtained concerning the next two songs except that they belonged to doctors.

No. 21. Doctor's Song (b)

(Catalog No. 1668)

Recorded by BOB GEORGE

$\text{♩} = 84$

Analysis.—Only three tones occur in this song, but the variety in the movement and rhythm produces an agreeable melody. The song contains 32 measures and 54 progressions, all of which are whole tones. Attention is directed to the prominence of E, the tone above the keynote, and to a comparison between the last two occurrences of the rhythmic unit.

No. 22. Doctor's Song (c)

(Catalog No. 1669)

Recorded by BOB GEORGE

$\text{♩} = 63$

Analysis.—In this melody we have an interesting example of thematic treatment, the triple measures in the opening portion being followed by two double measures that extend the rhythmic unit. A minor third comprises about one-fourth of the intervals. The keynote is regarded as B flat, the melody being classified as on the fourth 5-toned scale. Other songs based on this scale are Nos. 31, 79, 85, 91, 92, and 95. (Cf. footnote, p. 71.)

No. 23. Song of a Medicine Man at Nitinat Lake (a)

(Catalog No. 1696)

Recorded by F. KNIGHTUM

Voice $\text{♩} = 88$ Drum $\text{♩} = 88$

Drum rhythm similar to No. 11

Analysis.—Three renditions of this song were recorded, the transcription being from the second. Attention is directed to the portion of the song beginning with the seventh measure. There was little accent in this portion and the division into measures is somewhat arbitrary, but the time value of the eighth note was maintained. This is a semirecitative and in other renditions we find the same general melodic pattern, but not an exact duplication of phrases. The principal interval is a descending whole tone which comprises 20 of the 50 progressions. This and the descending minor third, which occurs frequently, were sung somewhat glissando, producing a soothing effect.

No. 24. Song of a Medicine Man at Nitinat Lake (b)

(Catalog No. 1697)

Recorded by F. KNIGHTUM

Voice ♩ = 72

Drum ♩ = 72

Drum rhythm similar to No. 1



Analysis.—The transcription of this song is from the first rendition, the remainder of the performance containing the characteristic phrases, but no exact repetitions. Attention is directed to the fourth measure from the close with its explosive accent on the second count. The slow tempo and small intervals occurring in the open measures of the song suggest gentleness, while the short, crisp phrases followed by short rests are full of energy, intensified by the rapid beats of the drum. More than three-fourths of the intervals are whole tones, occurring chiefly in descending progression.

It is the custom in many tribes to designate a man only by a nickname. The doctor to whom the next song belonged was known as "Doctor Jim." He had been dead for many years, but was remembered as a "good doctor."

No. 25. Doctor Jim's Song

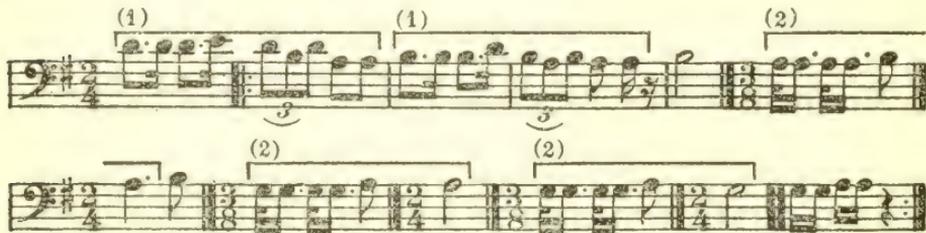
(Catalog No. 1719)

Recorded by KATHERINE CHARLIE

Voice ♩ = 63

Drum ♩ = 63

Drum rhythm similar to No. 11

*Fine*

Analysis.—Drum and voice were synchronous in all the renditions of this song, the drumbeats being distinctly given. The first portion of the melody is based on the descending and ascending interval of a fourth, and the second portion, with a different rhythm, is based upon consecutive whole tones. With one exception the progressions are whole tones and minor thirds.

A certain medicine man living at Carmanah is able to locate lost persons and articles. It is his custom to dance with his arms held out and shaking, his fingers extended and trembling, this manner probably being in accordance with his dream. It was said that a man once went out hunting and became lost. This doctor danced for about 3 hours before he was able to locate the man, then he told the people where they would find the hunter. The people went to the place indicated by the doctor and there they found the man. His song has no words.

No. 26. Song of a Medicine Man at Carmanah

(Catalog No. 1698)

Recorded by F. KNIGHTUM

Voice ♩ = 80

Drum ♩ = 84

Drum rhythm similar to No. 11

1st rendition



2nd rendition



3rd rendition



Analysis.—In this agitated melody with its slight changes in repetition we find a contrast to the calm, reassuring songs of Y'ak, a contrast which corresponds to the methods employed by the two men. Eight renditions of this song were recorded, the first phrase showing three variations, as indicated in the three renditions which are presented. The drum is slightly faster than the voice, each tempo being maintained through the performance.

WAR SONGS

The customs of war differ among the tribes represented at Chilliwack, and songs from three localities were recorded. The largest group is from the Nitinat, who cut off the heads of their enemies,

a custom which also prevailed among the Makah (Densmore, 1939, pp. 184-185). These songs are very old and have come down from the time when the Nitinat used spears and knives in war. The following song was sung when they were ready to embark in their canoes for a war expedition.

No. 27. Song When Going to War

(Catalog No. 1699)

Recorded by F. KNIGHTUM

Voice ♩ = 96
 Drum ♩ = 96
 See drum rhythm below

The musical notation consists of three staves of music in bass clef with a key signature of one flat (B-flat) and a time signature of 2/4. The first staff contains the first six measures, featuring a melody with dotted notes and triplets. The second staff continues the melody for the next six measures, including accents and triplets. The third staff concludes the piece with a double bar line, showing a change in time signature to 3/4 for the final two measures.

Drum rhythm: Quarter notes in opening measures followed by

The drum rhythm is shown as three measures of music. The first measure contains a quarter note. The second and third measures each contain two eighth notes, with an accent mark (>) placed above the first eighth note in each measure.

Analysis.—This melody begins on the first of the measure and is characterized by force and directness. The drumbeat was variable and consisted of quarter notes, changing to eighth notes accented in groups of two, with an occasional return to the quarter-note beat. The fourth is prominent in the framework of the melody and, as in other songs having this characteristic, the keynote is not fully established. The song is, however, considered minor in tonality. Five renditions were recorded without a break in the time.

Occasionally the Nitinat went on foot to seek the enemy, the following song being sung by warriors returning on foot. The Nitinat have no horses at the present time, depending upon their boats for transportation.

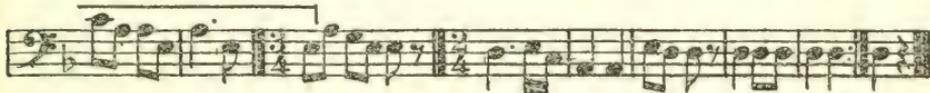
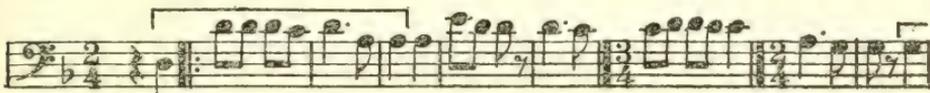
No. 28. Song When Returning From War

(Catalog No. 1700)

Recorded by F. KNIGHTUM

Voice $\text{♩} = 96$ Drum $\text{♩} = 96$

See drum rhythm below



Drum rhythm: Quarter notes in opening measures followed by



Analysis.—Three descending fourths are prominent in the framework of this melody. The melodic trend resembles that of the song next preceding and, as in that song, D is regarded as the keynote.

The opening ascent of an octave was noted also in several Chippewa war songs. Six renditions of this song were recorded and show unimportant differences which occur more frequently in melodic progressions than in the rhythm. The singer took breath in various places, after the manner of young singers, the indicated rests being given in the rendition which was selected for transcription. The drumbeat was in quarter notes during the earlier rendition,* changing to the triplet rhythm in the third rendition, but showing occasional beats in quarter-note time.

In the dance that followed a war expedition, each warrior held his spear diagonally across the front of his body and, as he danced, he thrust the point of the spear upward above his left shoulder, this constituting a gesture of the dance.

*In music above, for "opening measures," read, "first renditions."—F. D.

No. 29. War Dance Song

(Catalog No. 1701)

Recorded by F. KNIGHTUM

Voice ♩ = 168

Drum as indicated

The musical score consists of four systems, each with a voice line and a drum line. The voice line is written in bass clef with a key signature of two flats (B-flat and E-flat). The drum line is written in bass clef and contains irregularly spaced notes. The first system is labeled 'Drum (irregular)'. The time signature is 6/8. The melody is characterized by a mix of eighth and sixteenth notes, with some measures containing triplets. The drum accompaniment consists of single notes placed at various intervals, corresponding to the 'irregular' drumbeats mentioned in the text.

Analysis.—Five renditions of this peculiar song were recorded, the transcription being from the third. This is the first song recorded by the writer in which the drumbeat is so slow that it cannot be measured by the metronome. The interval between drumbeats varies slightly, as indicated, and it appears from a comparison of the renditions that the player was guided by the relation between drum and voice rather than by an effort for a steady rhythm in the drum. The melodic differences in the other renditions consist chiefly in the addition of passing or ornamental tones and in the omission of an occasional phrase. An example of ornamentation in other renditions is the substitution of two sixteenth notes (C-B flat) for the second eighth note (B flat) in the second measure. The song has a compass of 11 tones and omits the fourth tone of the octave. The ascending and descending intervals are almost equal in number, the latter comprising five each of fourths, major thirds, minor thirds, and whole tones, with one semitone. Such uniformity in progressions is unusual in the songs under analysis.

The heads of the enemy were carried on poles in the dances that followed a victory. The two songs next following were sung in such dances and were accompanied by drums and by the striking together of sticks. These songs are still sung by the Nitinat in their dances.

No. 30. Song When Carrying Heads of the Enemy on Poles (a)

(Catalog No. 1702)

Recorded by F. KNIGHTUM

Voice $\text{♩} = 184$
 Drum as indicated

Drum (irregular)

Analysis.—This song is characterized by a slow drumbeat similar to that in the song next preceding. Four renditions were recorded and show no differences except in the drumbeat, which varies slightly. The transcription is from the first rendition. The song contains 27 progressions, 17 of which are whole tones.

No. 31. Song When Carrying Heads of the Enemy on Poles (b)

(Catalog No. 1703)

Recorded by F. KNIGHTUM

Voice ♩ = 112
 Drum as indicated

Drum(irregular)

Analysis.—Several renditions of this song were recorded, the one selected for transcription being that in which the metric unit is nearest to a quarter-note. It is a wild, barbaric melody, sung with much freedom. This song contains short, explosive tones like those which occurred in preceding war songs, but does not have the slow drumbeat which characterized the preceding songs. It is based on the fourth 5-toned scale and progresses chiefly by whole tones.

From the Sliamon and Homalko Reserve comes the song of a dance that was held when captives had been ransomed and brought home. The ransom was paid in blankets. This song was sung at such a dance, the men carrying a knife in one hand and a gun in the other.

No. 32. Song Concerning a Ransomed Captive

(Catalog No. 1672)

Recorded by BOB GEORGE



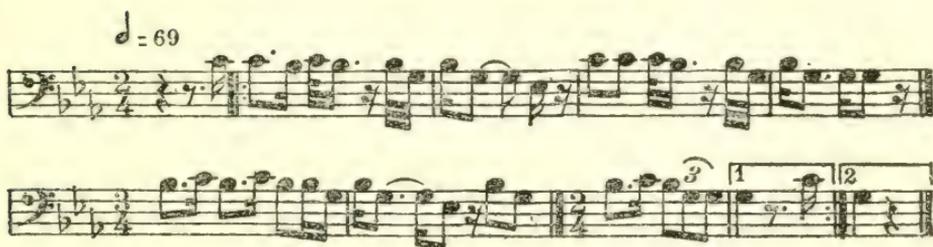
Analysis.—The two ascending progressions at the opening of this song are aggressive, and are followed by an unbroken descent of six tones. Five renditions were recorded, followed by a short pause, after which the singer began upon C sharp instead of C natural, continuing his performance on that pitch level.

Tasalt, whose songs in treating the sick have been presented (Nos. 1-5), said that his tribe were not head hunters and had been at war during his lifetime, using bows, arrows, and spears. He recorded two very old songs used in war dances. These songs are connected with a tradition of a man who rode on a mythical creature of the deep, called kohaks. It is said that a dangerous water spirit lived in the Strait of Juan de Fuca and the man rode upon the kohaks far out on the water, killed the bad spirit, and returned, making a safe landing. By this he protected his people from danger and was qualified to become a warrior.

No. 33. The Rider on the Kohaks

(Catalog No. 2039)

Recorded by TASALT



Free translation.—I am riding out on the kohaks.

Analysis.—The principal tones in this melody are B flat and C. The song is based on a major triad and sixth, but the form is unusual, the keynote occurring only on the last half of an unaccented count. The rhythm is somewhat jerky and difficult to show in notation. About two-thirds of the progressions are minor thirds and whole tones.

The savage spirit of ancient warfare is shown in the words of an old song recorded by Anna George who lives at Sardis. This war song belonged to her great-grandfather whose name was George, and she intends to teach it to her children, requesting them, in turn, to teach it to their descendants so that it may be preserved. The words of the song are "Don't you scream. I am a woman and I am going to hit you." The song was not transcribed.

POTLATCH SONGS

The man who recorded the next song is from the town of Hope, on the Fraser River. At a potlatch his people used two sorts of rattles. The man who gave the potlatch used a rattle consisting of a container enclosing small pebbles or shot, while the leaders of the ceremony used rattles made of shells. A rattle made of pecten shells on a hoop of whalebone was used by a Makah doctor (Densmore, 1939, pl. 14, *d*).

The next song is that of the guests arriving at a potlatch and dancing as they come from their canoes. The host does not go to meet them, but remains to welcome them at his door. A similar performance was witnessed at Neah Bay, when the guests at the Makah Day celebration danced up the shore from a large canoe in which they were supposed to have arrived from distant homes. Some had small drums and the motions of the dance were individual. The approach to the place of the celebration was remarkably picturesque. A portion of the dances at this celebration was shown in the writer's paper on Nootka and Quileute Music (Densmore, 1939, pls. 22, 23, 34).

Men and women joined in this song, which was said to be particularly fine when sung "in parts." The addition of harmonic parts to a native melody has been seldom noted among the Indians. It may be an evidence of musical influence from the white race.

No. 34. Song of Approach to a Potlatch

(Catalog No. 2046)

Recorded by DENNIS PETERS

Voice ♩ = 72
 Drum ♩ = 76
 Drum rhythm similar to No. 11

Analysis.—The ease with which “parts” could be added to this song is shown by its tone material. The melody contains the tones of the major triad, with the sixth occurring three times. The compass of six tones lies entirely above the keynote, the largest interval being a major third. Ascending and descending intervals are about equal in number.

No. 35. A Desire for Clear Weather

(Catalog No. 2037)

Recorded by TASALT

Free translation.—It will be nice for all the people if the weather clears.

Analysis.—The tempo of this song is unusually slow and the manner of singing the prolonged tones is characteristic of the songs of this region. The division of the first count is effective and occurs twice in the song. There is an unusual number of rests, which were given clearly in all the renditions.

The next song was inherited in the family of the singer and was sung by the host before distributing the presents at a potlach. The

prolonged, high tone at the opening of the song may have been intended to attract the attention of the guests.

No. 36. Potlatch Song

(Catalog No. 1710)

Recorded by ANNIE TOM

Voice ♩ = 72

Drum ♩ = 132

Drum rhythm similar to No. 14



Analysis.—Four rhythmic periods form the length of this song, the rhythm of the first differing from the others in its opening measure. The intervals consist of three whole tones, occurring chiefly in descending progression. While E is suggested as a keynote, the tonality of the melody is not established. The first note of each measure, especially in the upper register, was sung with a decided accent. Five renditions were recorded and show no differences.

The following explanation of a potlatch was given by Francis James, who lives on Cooper Island. James said that when he was a little boy it was the custom for a man to give a potlatch in order to collect the debts owing to him. If his friends had borrowed money and it was time for payment, he announced that he would give a potlatch, and told those who owed him money that he expected them to attend. They came and returned the money. When he had received payment for all the debts, he gave presents to the people who had returned the money, perhaps a blanket or similar gift, and sometimes he gave them money. (Cf. Densmore 1939, pp. 72-95.)

A song of the host at a potlatch was recorded by Dennis Peters, but was not transcribed as similar songs have already been presented. He said the host at a potlatch entered with a blanket wrapped around him, singing a song inherited in his family. The singers joined in this song. The host danced during the song and then gave away his blanket. The song was repeated with the gift of each valuable article. Between the repetitions of the song and during the bestow-

ing of the gifts there were sounds which can only be described as prolonged howls. An old person might give such a howl while the host was singing. The host would then stop singing and give the person the blanket or other gift which he had in his hand, after which he would take up another article and resume his song.

DANCE SONGS

Dennis Peters, who recorded the next three songs, is a particularly intelligent Indian, living at Hope. He said that, at a season of the year which he thought to be December, the old-time Indians living on the Fraser River were seized with a malady resembling fits, and they "had to dance to get over it." The affliction returned every year and lasted about a month. There were special songs for this dance and the songs used by the men were different from those used by the women. He said that his own people discontinued this custom 20 or 30 years ago, but that it is still kept up by people living on the lower Fraser River. Sometimes the people fainted and remained unconscious (or semiconscious) for 2 hours, during which time they wept aloud. "A whole lot of singers had to get around them and sing before they could get up." The emotional excitement suggests a connection between this and the cult of Smoholia, or Skilmaha, also that of the Shakers, whose meetings were held regularly at Neah Bay, when the Makah songs were recorded.

The dances at this annual event were of two sorts, the first being a slow dance with a rapid drum and the second being a dance with a great deal of motion and jumping. While the drum was said to be faster than the voice in the opening songs of this dance, the difference is in the number of beats in the first song, the drum being in eighth-note values while the song contains longer tones. In the second song of the group, the drum has a much faster metric unit than the voice, with shorter note values.

It appears this dance had power to benefit the sick, as Peters related the following incident which was known to him: A young man's brother was seriously burned with gasoline, and the young man felt himself responsible for the accident. He lost his voice, and the Indian doctors were unable to help him. Finally, they said he would regain his voice only when dancing. Accordingly, a dance was given for his benefit, and the moment he began to dance he regained his voice. He has, however, been "sickly" ever since the event. It is interesting to note this coincidence of the use of gasoline and a primitive belief in healing.

This and the song next following are those of the slow dance with rapid drum.

No. 37. Dance Song of the Fraser River Indians (a)

(Catalog No. 2040)

Recorded by DENNIS PETERS

Voice $\text{♩} = 76$ Drum $\text{♩} = 76$

Drum rhythm similar to No. 11



Analysis.—Two interesting phases of this song are its tone material and its thematic structure. The tone material is that of the first 5-toned scale, in which the third and seventh tones above the keynote do not occur.² The rhythmic unit is simple and occurs twice in the opening phrases. The seventh and eighth measures show two characteristic count divisions separated by a quarter note, and the tenth measure shows the rhythmic unit changed by an even division of the first count. These contrasts give interest to the rhythm of the song as a whole. The melody contains no change of measure lengths and has a compass of 9 tones.

The next song is for the same part of the dance but belongs to a different village.

No. 38. Dance Song of the Fraser River Indians (b)

(Catalog No. 2041)

Recorded by DENNIS PETERS

Voice $\text{♩} = 92$ Drum $\text{♩} = 144$

Drum rhythm similar to No. 11



Analysis.—Attention is directed to the discrepancy between the metric unit of voice and drum in this performance. The prolonged tones of the song are also

² Other songs on this scale are Nos. 6, 43, and 94. Cf. footnote 3, p. 71.

unusual. A group of two eighth notes occurs on both the accented and unaccented counts of the measure. The melody contains all the tones of the octave, which is unusual in the songs of British Columbian Indians.

The next song is that of the rapid dancing in which the people jumped from the ground, and in which the "dancing was *even* with the drum." The change of motion occurs "after they have been around two or three times."

No. 39. Dance Song of the Fraser River Indians (c)

(Catalog No. 2042)

Recorded by DENNIS PETERS

Voice $\text{♩} = 84$

Drum $\text{♩} = 84$

Drum rhythm similar to No. 11



Analysis.—This is a more fluent melody than the two songs immediately preceding. It opens with an interesting phrase and closes with an ascending interval of a fourth. More than half the progressions are whole tones.

The next song affords an example of two interesting customs, the insertion of new words in an old song and the use of mispronounced English words. The tune was said to be very old and the words "Klismus payah" are inserted between native words, occurring in the eighth measure. The song was sung at Christmas and the words are readily identified as "Christmas presents." The frequent high tones have a suggestion of eagerness. These are followed by descending series of tones. Annie Tom is from the Nitinat village on Vancouver Island.

No. 40. Dance Song (a)

(Catalog No. 1704)

Recorded by ANNIE TOM

Voice $\text{♩} = 108$ Drum $\text{♩} = 108$

Drum rhythm similar to No. 14



Analysis.—Seven renditions of this song were recorded, the only difference being a slight variation in the note values of the opening measures. The consecutive eighth notes are effective in contrast to the other rhythms, and the sixteenth rest near the close of the song was clearly given in all the renditions, terminating a neat, short phrase.

The next song was sung when “going toward a partner” in the dance.

No. 41. Dance Song (b)

(Catalog No. 1705)

Recorded by ANNIE TOM

Voice $\text{♩} = 96$ Drum $\text{♩} = 132$

Drum rhythm similar to No. 14

Analysis.—The duration of the three opening measures in this song is equivalent to three measures in double time, but the melody is transcribed according to the accents given by the singer. The tempo changes slightly during the song, but the tempo of the drum does not correspond to either tempo of the voice. Twenty-three of the 27 intervals are minor thirds and whole tones.

The two songs next following have no words and are used in social dances.

No. 42. Dance Song (c)

Catalog No. 2047)

Recorded by DENNIS PETERS

Voice ♩ = 66

Drum ♩ = 66

Drum rhythm similar to No. 14



Analysis.—A peculiarity of this melody is the equal stress on the first and second counts of the measures, though the song is felt to be in double rhythm (cf. No. 1). A second peculiarity is the descending sequence of two whole tones ending on the keynote. These tones are rapid, as in Nos. 65 and 70. All the phrases begin with an ascending progression. The rhythmic unit occurs in the first and last portion of the melody, the middle portion showing a slight, but interesting difference in rhythm. The fourth is a prominent interval in the melody, two ascending fourths constituting an ascent of a seventh, midway through the song.

The next song was said to be very old.

No. 43. Dance Song (d)

(Catalog No. 2024)

Recorded by JIMMIE O'HAMMON

Voice ♩ = 66

Drum ♩ = 66

Drum rhythm similar to No. 1



Analysis.—This is an interesting example of a melody on the first 5-toned scale in which the third and seventh above the keynote do not occur. The sixth above the keynote is a prominent interval and suggests a major tonality. The song has a compass of nine tones, lying partly above and partly below the keynote. The melody shows unusual variety in form though it contains only three intervals other than minor thirds and whole tones.

The following song of the Klokali was said to be very old. The Klokali is an important ceremony of tribes on the northwest coast and

was formerly held in midwinter, continuing 6 days and closing with dramatic dances on the beach. The modern Klokali is solely for pleasure and lasts only 1 day. According to Swan (1870, pp. 66, 67),

The ceremony of the great Dukwally, or the Thunder bird, originated with the Hesh-kwi-et Indians, a band of Nittinats living near Barclay Sound, Vancouver Island.

Swan then relates the legend of the young man who was dragged on the stones of the beach, saying the chief of the wolves was so pleased with the bravery of the young man that he imparted to him all the mysteries of the Thunderbird performance. A song connected with this legend appears as No. 74, p. 78. A description of the Klokali among the Makah and Clayoquot is contained in Nootka and Quileute Music (Densmore, 1939, pp. 101-128).

No. 44. Klokali Dance Song

(Catalog No. 1706)

Recorded by ANNIE TOM

Voice $\text{♩} = 88$

Drum $\text{♩} = 88$

Drum rhythm similar to No. 14



Analysis.—The phonograph cylinder contains nine renditions of this melody, after which the singer gave the opening interval, prolonging the high tone to more than twice its transcribed length and allowing the voice to slide downward in a howl. The Klokali songs recorded at Neah Bay, as well as the songs when towing a dead whale, were terminated in this manner. Triple and double measures alternate in this song, each measure beginning with a marked accent. The song contains seven measures and only seven progressions.

The Nitinat Indian who recorded the next song said the Thunderbird dance is danced every year, in the latter part of July, by his people. The costume consists of a blanket with eagle feathers suspended along the edge, the dancer extending his arms as he dances. The gift mentioned in the song may be “about one dollar.”

No. 45. Thunderbird Dance Song

(Catalog No. 1717)

Recorded by WILSON WILLIAMS

Voice ♩ = 80

Drum ♩ = 144

Drum rhythm similar to No. 14

Free translation.—I am going to give my money to the other people.

Analysis.—A peculiarity of this song is the discrepancy between the tempo of voice and drum, each being steadily maintained. The metric unit of the drum is not a multiple of that of the voice. Five renditions were recorded and show no differences except the omission, in two renditions, of the eighth and ninth measures. This number of renditions is valuable for comparison as the song is unusually difficult. The tones are those of the minor triad and fourth and the song contains no change of measure lengths.

No information was obtained concerning the next song except that it was connected with the "Campbell dance," in which wooden head-dresses were worn.

No. 46. Song of Campbell Dance

(Catalog No. 1673)

Recorded by BOB GEORGE

Voice ♩ = 88

Analysis.—This is similar to many songs heard among tribes of the north woodland region. It progresses entirely by minor thirds and whole tones except for the ascending fourth at the opening. No unit of rhythm occurs, the entire

song having a rhythmic unity which cannot be divided into phrases. There is no change of measure length, and the several renditions are uniform in every respect.

No. 47. Dance Song From Babine

(Catalog No. 1690)

Recorded by ABRAHAM WILLIAMS

Voice ♩ = 104



Analysis.—As this is the only song obtained from Indians living at Babine it is interesting to find it a melody with so much individuality. An ascent of a tenth in three measures is very unusual in Indian songs, yet it occurs twice in this melody, each time with a return to the original tone. Three other phrases ascend a fourth and return to the original tone. Thus the tone D, which is the lowest tone of its compass, occurs at the beginning and end of five phrases. The song contains all the tones of the octave except the second and sixth and, except for two ascending octaves, it progresses entirely by minor thirds and whole tones.

The songs of a certain social dance of the Thompson River Indians were accompanied by a drum and by the striking together of two sticks, the latter accompaniment being similar to that heard at Neah Bay. It has also been heard among the Menominee of Wisconsin and the Choctaw in Mississippi. Men and women took part in this dance.

No. 48. Dance Song of the Thompson River Indians (a)

(Catalog No. 2055)

Recorded by HENRY MCCARTHY

Voice $\text{♩} = 76$ Drum $\text{♩} = 76$

Drum rhythm similar to No. 11

1st rendition



2nd rendit.

*Free translation.*—Everybody, come and dance.

Analysis.—This melody moves freely within its compass of eight tones. Slight differences occurred in the four renditions and, as an example of such differences, the second rendition is presented as well as the first. The principal interval is a minor third.

No. 49. Dance Song of the Thompson River Indians (b)

(Catalog No. 2056)

Recorded by HENRY MCCARTHY

Voice $\text{♩} = 69$ Drum $\text{♩} = 96$

Drum rhythm similar to No. 11

*Free translation.*—Sing, everybody sing.

Analysis.—The melodic structure of this song is based upon two whole tones with a larger connecting interval. Attention is directed to the discrepancy between the tempo of voice and drum.

The three songs next following were those of a dance in which a wooden headdress representing a wolf was worn. The circumstances under which the songs were recorded made it impossible to secure information concerning the dance.

No. 50. Song of Dance With Wolf Headdress (a)

(Catalog No. 1712)

Recorded by ANNIE TOM

Voice ♩ = 100

Drum ♩ = 132

Drum rhythm similar to No. 14



Analysis.—The compass of this song is lower than that of white women's voices, a peculiarity noted in a majority of songs recorded by Indian women. The song consists chiefly of repetitions of a rhythmic unit except the phrase beginning with C in the third measure. This change in rhythm gives character to the melody.

No. 51. Song of Dance With Wolf Headdress (b)

(Catalog No. 1713)

Recorded by ANNIE TOM

Voice ♩ = 120

Drum ♩ = 120

Drum rhythm similar to No. 11



Analysis.—A sharp, crisp manner of singing, as well as an emphasis on the first tone of each measure, characterizes this song. Six sorts of ascending intervals occur, which is an unusual variety of these progressions. It is interesting to note the difference between the measures which follow the rhythmic unit in its three occurrences. In the first instance, a 2-4 measure leads the melody upward while, in the second and third instances, a 3-4 measure ends the phrase abruptly on a low tone. The third occurrence of the rhythmic unit is followed by a succession of measures in quarter and eighth notes, without the dotted eighths which occurred in the preceding portions of the song.

The next song was sung when the dancing began.

No. 52. Song of Dance With Wolf Headdress (c)

(Catalog No. 1718)

Recorded by KATHARINE CHARLIE

Voice ♩ = 108

Drum ♩ = 132

Drum rhythm similar to No. 14



Analysis.—Five renditions of this song were recorded and in all of them the singer gave a clear intonation on G sharp in the second measure; the next occurrence was slightly lower, and the third was sung as G natural. This suggests that the pitch of the first tone was above the natural range of the singer's voice. The discrepancy between the tempo of voice and drum was steadily maintained. The song contains 17 measures and 40 progressions, which is an unusual freedom of movement.

SOCIAL SONGS

It is customary for a person to sing and dance alone after receiving a gift. This was seen at Neah Bay, on the celebration of Makah Day, in 1926. The recipient of a gift sang and "danced," standing still and turning the body from side to side while the hands were upraised with palms forward, on a level with the elbows. This resembled the positions in Makah honor songs (Densmore, 1939, pl. 21, a, b.)

Gifts are presented to visitors near the close of a gathering, which explains the words of the next song.

No. 53. Song After Receiving a Gift (a)

(Catalog No. 1707)

Recorded by ANNIE TOM

Voice ♩ = 92

Drum ♩ = 144

Drum rhythm similar to No. 14

*Fine**Free translation.*—Good-bye my friend, I am going away.

Analysis.—An interesting discrepancy between the tempo of voice and drum occurs in this song, and was steadily maintained during the five renditions. The chief interest of the melody lies in the frequent use of the fourth, and in the measure that was sung between the renditions. The singing continued after the end of the phonograph cylinder had been reached but, from listening to the singing, it appears that the end of the melody is on E, as indicated in the transcription.

It is probable that the person who sang the next song had received a gift of money at a dance. He was impressed by the amount and thought he might afford a room at the village hotel, which is regarded as the height of luxury.

No. 54. Song After Receiving a Gift (b)

(Catalog No. 1708)

Recorded by ANNIE TOM

Voice ♩ = 100

Drum ♩ = 152

Drum rhythm similar to No. 14

*Fine**Free translation.*—How much money for a room in the hotel?

Analysis.—Several points of unusual interest occur in this melody. The metronome indication of voice and drum is as accurate as possible by the scale of the instrument, and it will be noted that, within the duration of a measure, the voice has two metric units and the drum has three units. Voice and drum were synchronous on the first count of each measure, and the time of each was steadily maintained. Attention is next directed to the similarity between the first phrase of the song and the connective phrase, in which the words occur. The latter is the more melodious and differs in the position of the rest. The rhythmic unit is preceded and followed by various rhythms. Except for one ascending fourth, the only intervals are minor thirds and whole tones. The song has the unusual compass of 11 tones, both the highest and lowest tones being distinctly sung.

There was no dancing with the next four songs, and it was said that "everybody sang." The man who recorded the songs lives on Powell River.

No. 55. Social Song (a)

(Catalog No. 1674)

Recorded by BOB GEORGE

♩ = 84



Analysis.—Except for two larger intervals, this melody progresses entirely by minor thirds and whole tones. The measure lengths change frequently and the trend of the song is steadily downward. Attention is directed to the third occurrence of the rhythmic unit in which the third count is divided differently than in the first occurrence, giving variety to the rhythm, yet continuing the principal accents. The song contains all the tones of the octave except the fifth and is melodic in structure.

No. 56. Social Song (b)

(Catalog No. 1675)

Recorded by BOB GEORGE

♩ = 100



Analysis.—Several renditions of this song were recorded and show no differences. The melody is characterized by a variety of ascending intervals, four

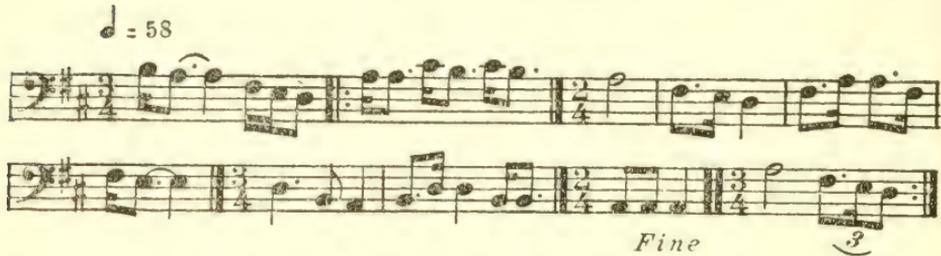
sorts of upward progressions occurring, while the descending intervals consist of minor thirds and whole tones. It is a pleasing melody, major in tonality and containing all the tones of the octave except the seventh.

The next two songs are very old, the singer having learned them from his father.

No. 57. Social Song (c)

(Catalog No. 1676)

Recorded by BOB GEORGE



Analysis.—Attention is directed to the count divisions in the second measure of this song, which occur with a different accent in the fifth and sixth measures. The song has no rhythmic unit and it appears there is no rest in the melody as the singer introduced an eighth rest at a different point in each rendition, the pause being apparently for taking breath. Many bytones were introduced but cannot be shown in notation.

No. 58. Social Song (d)

(Catalog No. 1677)

Recorded by BOB GEORGE

$\text{♩} = 69$

Analysis.—This song is classified in the key of D major although the keynote occurs only in the second and fifth measures from the close. The tone C sharp is the most prominent tone in the opening measures and is the highest tone of the compass. The latter portion of the song is characterized by an unbroken descent in each phrase. The melody has a compass of 10 tones and contains all the tones of the octave except the fourth.

SLAHAL GAME SONGS

The playing of the slahal game is common to many tribes in the Northwest. The game among the Thompson River Indians is de-

scribed by James Teit, who states that it is known to the whites as "lehal." This authority states further, that—

Many Spences Bridge women used to play it, and had a different song for it from that of the men. Lower Thompson women seldom or never played this game. [Teit, 1900, p. 275.]

The implements of the slahal game are two bones, differently marked, and the action consists in hiding the bones in a player's hands, the opponents guessing their position. In a small game only one pair of bones is used, but at Chilliwack, in the game witnessed by the writer, two pairs of bones were used, each being hidden by one man. These bones are highly valued by their owners, but one man consented to lend a pair to be photographed (pl. 7, fig. 2).

Age and long use have yellowed and polished these bones, which were made from a bone of the hind leg of an ox, the ends tipped with brass. One bone is decorated with a band midway its length and was called the male, while the other, with decorations near the end, was called the female.

The game is played outdoors and the number of players is according to the available space, an average number being 34. The players are divided into two "sides," and kneel on the ground in two lines, facing each other. A heavy plank is in front of each line of players, slightly elevated above the ground to give resonance as they pound upon it with short sticks. When two sets of bones are to be used, a man in the middle of each line acts as leader of his side and designates a man toward his right and another toward his left to hide the bones while the opponents guess their location. After a certain score has been made, the playing changes sides and those who were guessing take their turn at hiding the bones. On being requested by the leader, each man takes a pair of bones and puts his hands under a coat that lies across his knees while he arranges the bones to his satisfaction, concealing one in each hand. The two men then raise their hands in the air and move them rhythmically to and fro with many gestures, according to individual fancy. Their companions sing and a majority pound on the plank but, in the game at Chilliwack, two or three at the end of the line pounded on drums (pl. 8). In these games the guessing was done by the opposing leader, seated in the middle of the line, others guessing only by his permission. It was said that the expression of the face, which, in some games, may betray the location of a hidden article, did not form a factor in slahal, but that the guessing "depends on the good judgment of the guesser." According to this informant, the relative location of the bones "will go all one way for a while," and skill depends largely on a study of averages and probabilities, making success a matter of study rather than skill.

The guesses are indicated by signals given with the thumb and forefinger of the right hand, each signal indicating the location of both bones in the hands of both players. Only four combinations are possible, these being (1) with the unbanded bones in the hands nearest each other, (2) with the unbanded bones in the hands farthest apart, (3) with the unbanded bones toward the guesser's left hand, and (4) toward his right. If the guesser decides upon the first combination, he points toward the ground; for the second combination, he indicates his guess by a spread of thumb and forefinger; and for the third and fourth, he points to the hand of either player which, in his opinion, contains the bone without a band. Figure 2 shows three of the possible combinations.

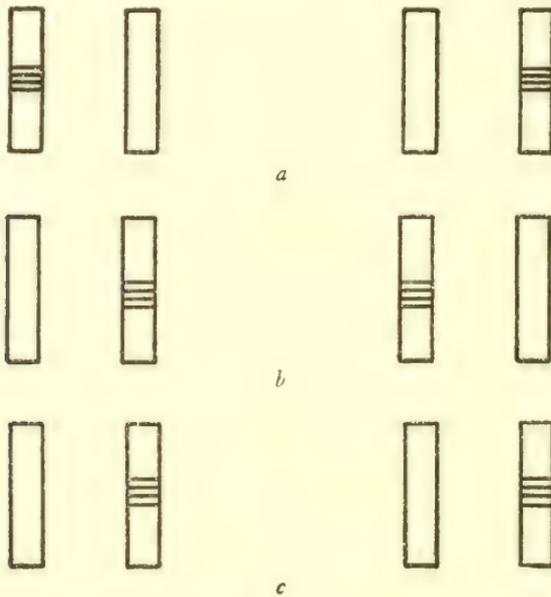


FIGURE 2.—Sketch showing locations of bones in slahal game.

A slahal game was played every Sunday afternoon at Chilliwack, extending far into the evening, a huge bonfire giving sufficient light. Occasionally the game was played in the evening during the week. The firelight on the rows of swaying, singing men was picturesque, and, during a portion of the period, the moon was full, shining on the snow on the mountain tops and the square lines of the camp buildings, making a background for the scene. A hundred or more men and women stood behind the players or were grouped in the vicinity.

The games at Chilliwack were for pleasure, though there was some betting. Their purpose was "to make the old people happy," and men who were known to be poor players were allowed to hide the bones

if they wished to do so. Good feeling prevailed, as people from widely separated localities joined the game, which they were accustomed to play at home.

The traditional origin of the slahal game was related by Jimmie O'Hammon, chief of a band of Squamish Indians living on the Squamish River. He is known as "Chief Jimmie Jimmie" and his group is known as O'Hammon's Band (cf. p. 86). He said that slahal was played before the flood, when all the people spoke the same language. Only one bone was used at that time and the players "hugged themselves with their arms" when playing. After the flood, there still were people who played the game, but many languages were spoken and the people were "all split up." When Christ came and changed the people into animals, there were some who were not changed, and they preserved the game, so it has come down to the present day. An old song "about Christ changing some of the people into animals" was recorded, but not transcribed.

The following song is very old and is concerning a man who dreamed about the slahal bones. The words of the song were said to be about his dream, but they have been forgotten. The dream may have been concerning the origin of the game, or it may have been a dream in which a man was told how he might become a successful player. In the latter case, the song would be sung by his companions when he was hiding the bones. (Cf. Densmore, 1913, pp. 210, 212.) The phonograph record contains the "squeals" of the women as in the next song.

No. 59. Slahal Game Song (a)

(Catalog No. 2028)

Recorded by JIMMIE O'HAMMON

Voice ♩ = 84

Drum ♩ = 84

See drum rhythm below

Drum rhythm

Analysis.—A peculiarity of this song is the meter of the drum, three even beats of which are equal to one count of the melody. This occurs in no other

song recorded at Chilliwack. The rhythm of voice and drum were steadily maintained in all the renditions. The melodic progressions are all major seconds except the two minor thirds at the close of the song. In rhythmic structure, the song consists of five periods, each containing two measures. The ascent to the closing tone carries the melody forward to its repetitions.

Concerning the next song, the singer said it was used "before Christ changed some of the people into animals." He said his stepfather sang it to him when he was a child. There are sounds on the phonograph record that were said to be "the squeals of the women when a score stick was thrown." It is not unusual for Indians to record the sounds that are incident to the singing of a song, when they record the melody.

No. 60. Slahal Game Song (b)

(Catalog No. 2023)

Recorded by JIMMIE O'HAMMON

Voice $\text{♩} = 126$

Drum $\text{♩} = 126$

Drum rhythm similar to No. 11

Analysis.—Only a portion of this performance is transcribed, the remainder consisting of similar phrases. In this somewhat monotonous melody there is a distinct rhythmic unit. The second measure of this unit is slightly varied in its repetitions. Each measure began with a strongly accented tone; this exclamatory manner of singing gambling songs has been noted in several other tribes. (Cf. Densmore, 1922, Songs Nos. 96 and 98.)

No. 61. Slahal Game Song (c)

(Catalog No. 2052)

Recorded by OTTER BILLIE

Voice ♩ = 56

Drum ♩ = 56

Drum rhythm similar to No. 1



Analysis.—This song is characterized by a slow tempo and rapid drum. The singer's voice is low in range and the song begins and ends on the keynote, which is the lowest tone of its compass. The ascending and descending intervals are the same in both number and size, each group consisting of two minor thirds and three major seconds. No change of measure length occurs in the melody, this peculiarity, together with the prominence of the keynote, giving a steadiness to the song which would assist its use with the game.

No. 62. Slahal Game Song (d)

(Catalog No. 2053)

Recorded by OTTER BILLIE

Voice ♩ = 56

Drum ♩ = 56

Drum rhythm similar to No. 1

Analysis.—While the tempo and rhythmic unit in this are the same as in the song next preceding, the characteristics of the melody are entirely different. This song is major instead of minor in tonality, has a much larger compass than the preceding, and contains lyric passages. The measure in triple time near the close of the song is particularly vigorous and, with the preceding tone, represents an ascent of an octave within three counts. In some renditions, a sixteenth note on E takes the place of the first rest in the third and seventh measures, giving the melody a smoothly flowing quality.

No. 63. Slahal Game Song (e)

(Catalog No. 2054)

Recorded by OTTER BILLIE

Voice $\text{♩} = 96$ Drum $\text{♩} = 96$

Drum rhythm similar to No. 11

Free translation.—When I took the bones, I beat.

Analysis.—The chief peculiarity of this song is the two-measure phrase which ends on an accented tone and is followed by a short rest. Such phrases constitute the entire melody. The ascending and descending intervals are equal in number and size, each comprising 5 minor thirds and 20 whole tones. The jerky, emphatic rhythm is characteristic of songs which were heard during the playing of this game. The words refer to the game implements, which, as stated, are short bones, concealed in the player's hands.

No. 64. Slahal Game Song (f)

(Catalog No. 2057)

Recorded by HENRY McCARTHY

Analysis.—This song is peculiar in that the third above the keynote occurs only as the highest tone, this occurrence being in the third measure. The most prominent tone is E, the tone above the keynote, this being the accented tone in 7 of the 10 measures. The fourth is a prominent interval, 2 descending fourths carrying the melody downward in the third and fourth measures. The rhythm is more broken than in the preceding slahal game songs, with more frequent rests and no decided accents.

The singer of the next song is from the Sliamon Reserve on Powell River.

No. 65. Slahal Game Song (g)

(Catalog No. 1671)

Recorded by BOB GEORGE

The musical score consists of five staves of music in bass clef, with a key signature of one sharp (F#) and a 2/4 time signature. The tempo is marked as quarter note = 69. The melody is written in a single line on each staff. The music features a mix of eighth and sixteenth notes, with several triplet markings (indicated by a '3' over a group of notes) and some rests. The piece concludes with a final note and a fermata.

Analysis.—This interesting melody contains the tones of the second (minor) 5-toned scale.³ The intonation was excellent, and drum and voice coincided throughout the performance. Like many other songs recorded from this locality, the melody moves freely, having a large number of progressions and being lyric in character. This may be due to the influence of the Roman Catholic Church with its tuneful melodies, although missions of this Church have been present in tribes which did not have these fluent melodies. It is interesting to note that the songs here presented are the first songs recorded by Indians who live beside large rivers.

The next song was sung after a slahal game, but could be sung at any time.

³ The 5-toned scales considered in these analyses are the five pentatonic scales according to Helmholtz (1885, p. 269), described by him as follows:

"1. *The First Scale*, without Third or Seventh (sequence of tones G, A, C, D, E).

"2. *The Second Scale*, without Second or Sixth (sequence of tones A, C, D, E, G).

"3. *The Third Scale*, without Third and Sixth (sequence of tones D, E, G, A, C).

"4. *The Fourth Scale*, without Fourth or Seventh (sequence of tones C, D, E, G, A).

"5. *The Fifth Scale*, without Second and Fifth (sequences of tones E, G, A, C, D)."

See also Densmore, 1918, p. 7.

No. 66. Song of Pleasure

(Catalog No. 2038)

Recorded by TASALT



Analysis.—The melodic plan of this song is simple. It begins on the octave, ends on the keynote, and gives prominence to the third and fifth above the keynote. It is, however, classified as melodic with harmonic framework because of the accented F in the third measure. A dotted eighth followed by a sixteenth note is a frequent count division but the song contains no phrase which can be designated as a rhythmic unit. The descending fourth is a particularly prominent interval and gives liveliness to the melody. The tone material is the fourth (major) 5-toned scale and the trend of the melody is steadily downward.

GAMBLING SONGS

Two gambling songs composed by Indians living on the Thompson River were recorded, though the game with which they were used was not designated. The singer of the next song lives at Boothroyd, a town on the Fraser River, and recorded only this song and one other (p. 94).

No. 67. Gambling Song (a)

(Catalog No. 2058)

Recorded by ANNIE BOLEM

Analysis.—The uncertainty of intonation by this singer made the song difficult to transcribe until a delicate adjustment of the speed of the phonograph gave the present alinement of intervals. An effort was made to preserve the song because it is a valuable example of interrupted rhythm. The purpose of the song was to baffle and confuse the opponents, for which the rhythm is admirably adapted. The only tones are the keynote and its second, third, and fourth. Whole tones comprise 14 of the 18 progressions.

No. 68. Gambling Song (b)

(Catalog No. 2063)

Recorded by JULIA CHARLIE



Analysis.—This melody progresses with unusual freedom and alternation of ascent and descent. The characteristic progression is a descending whole tone which comprises more than half the intervals. Rests occur frequently in the song, dividing it into short phrases, yet the rhythmic unit comprises five measures. The song contains no change of measure length. A slight change of rhythm occurs in the third period, a peculiarity frequently noted in Indian songs.

CANOE SONGS

Among the most characteristic songs recorded at Chilliwack are those that were sung when paddling the canoes. It was said that 10 or 15 persons often went in a canoe and that everyone sang. The words of the first song were said to be "Roman Catholic," and the songs were sung "when taking the priest from place to place."

In these charming songs we feel the rhythm of the canoe moving through deep but quiet waters. Around is the magnificence of the mountains and we seem to see the wonderful lights and shadows of the far north. The songs are happy and suggest safety. These Indians living on Powell River did not encounter the storms that beat upon the land of the Clayoquot, on the west coast of Vancouver Island. The river was a highway and they sang as they paddled their canoes from one village to another.

No. 69. Canoe Song (a)

(Catalog No. 1665)

Recorded by BOB GEORGE

Analysis.—The peculiar rhythmic effect of this song is partially due to the continuous double time, the character of the two rhythmic units, and the decided accents on the first of the measures in which the units do not occur. The units are alike except that in one the complete measure is preceded by a tone and in the other is followed by a tone, thus giving a swaying effect. The thirty-second rests were followed by an unaccented tone too short for transcription, on which the syllable *ki* was sung, the syllable *a* following on the accented tone. This melody is harmonic in structure and the tempo is slow. It was sung with a sustained tone and good intonation. Two renditions were recorded, each being once repeated.

No. 70. Canoe Song (b)

(Catalog No. 1666)

Recorded by BOB GEORGE

Analysis.—This, like the song next preceding, is without change of measure lengths. The only tones are F, G, and A, and the song swings back and forth within the compass of a major third, suggesting the motion of paddling a canoe. In rhythmic form, it is simpler than the preceding song and contains two rhythmic units, differing only on the final tones.

An Indian named Johnson, from Port Simpson, also recorded a canoe song. He said that each chief has his own canoe song and the people can tell who is coming by the song that is being sung. Ten or twelve men are in a canoe and they keep time to the song with their paddles. One man who knows the song is appointed to start it, and he repeats the words before they begin to sing. The man who steers the canoe gives the signal for the men to begin to paddle by saying, "Who-oo," with a prolonged tone.

No. 71. Canoe Song (c)

(Catalog No. 1682)

Recorded by JOHNSON

♩ = 84



Free translation.—(First rendition.) There is rock where they are hammering a copper hiatsk. (Second rendition.) Nobody invited me. I am in a foggy place (confused and do not know where to go).

Analysis.—The structure of this melody resembles those recorded at Neah Bay and is different from other songs in this group and from songs of the Indians living at Powell River. It has a compass of four tones, comprising a keynote with the tone below and two tones above it. The tone E, regarded as the keynote, occurs in more than half the measures and is usually on an accented count. Ascending and descending intervals are about equal in number and the song contains only one interval (a minor third) that is larger than a whole tone.

STORIES AND THEIR SONGS

Henry Haldane (pl. 9, fig. 1), who related the first of these stories, lives at Port Simpson. He said that his grandfather's generation lived at Kitknont and his father's at Kitsala. He prefaced the story with the statement that thousands of years ago, when the flood came, his ancestors got into their canoe and drifted until the waters subsided; then they found themselves on Queen Charlotte's Islands. They camped near Skiddegate, on a place that now belongs to the Haida. They knew they were far from their former home, and so decided to stay there. They married the Haida and the party increased in numbers.

At one time a young boy of his father's people went trout fishing in a creek. They went up a creek and all fished. The boy was the chief's son. All the others in the party caught plenty of fish, but he could not get any, so he went down to the camp and cooked their trout. The boy sat down with the others and they gave him a trout on a plate. A frog jumped on the trout and the boy threw the frog away. As he was about to eat his trout, the frog jumped back again on his plate and, in anger, he threw the frog into the fire. He went to bed, and early next morning they started for home. While he was

pulling hard at his oar, he heard a woman on the shore call, "Hey, take me in. I want to go with you." He looked and saw an old woman with a stick.

The boy said to his companions, "No, pull ahead." The old woman followed along the shore, but the boys would not take her in. Then she said, "See here, boys. When you get around that point, one of you will die in the canoe. So on, one after another will die until only one will get home. He will tell the tale and then die." It was said, "The old woman was a frog, and it was her daughter who came to the young man and wanted to marry him."⁴

When they passed the point indicated by the old woman, one of the young men died. This continued as the old woman had predicted, until only one reached home. He was the young man on whose plate the frog had jumped. He told the story and then dropped dead. The next day the people heard a woman coming down from the mountains. There was a lake behind the village. She sang and everybody went out to see her, and she cried. Then a fire came down from heaven and burned all those people. Mr. Haldane said, "That was why my father's people made this song for the children. When the old people were feeling good with liquor, my father took me on his lap and sang this kind of song for me."

No. 72. Song With Story of the Frog Woman

(Catalog No. 1681)

Recorded by HENRY HALDANE



Free translation.—My brother killed a frog and thereafter the whole village burned to death. We came from the Haida. We all belong to the Haida, therefore my name is Chief Kala (name of singer's father).

Analysis.—This is a particularly fluent melody lying partly above and partly below the keynote. It is minor in tonality and progresses by minor thirds and major seconds, except for two major thirds and one fourth. The whole tone between the seventh and keynote is interesting, since many songs of minor tonality give little prominence to the seventh.

An old story was said to be "put into" the following song. A widow has gone crazy and she tries to sing. In the song she says, "I don't know where I am going. I am dressed up, but I take off my fine things and give them to poor orphan girls. You will see

⁴ This sentence does not pertain to the story as related.

these girls dressed up. You must take a nice feather and wrap it around me because the fish took me thousands and thousands of years ago. I don't know where I am going." It is probable this is contained in the words of the song. The singer is from the Skeena River region.

No. 73. "Wrap a Feather Around Me"

(Catalogue No. 1686)

Recorded by JANE GREEN

$\text{♩} = 104$

The musical score is written in bass clef with a key signature of two sharps (F# and C#) and a 2/4 time signature. It consists of four staves of music. The first staff begins with a tempo marking of quarter note = 104. The music features a complex, irregular rhythm with frequent changes in the number of beats per measure. There are several triplet markings (indicated by a '3' in a circle) and various phrasing slurs. The score includes first and second endings, marked with '(1)' and '(2)' above the notes. The final measure of the piece is marked with a double bar line and a repeat sign.

Analysis.—The sequence of tones occurring most frequently in this song is the descending sequence E-C sharp-B-G sharp, forming a minor sixth. This occurs 5 times and the rhythm of the phrase is different in every occurrence. A triplet of eighth notes occurs in each rhythmic unit, appearing in the middle of one and at the beginning of the other unit. This highly complex rhythm is a fitting expression of the fragmentary ideas that underlie the song. The succession of B, B sharp, and C sharp was sung glissando. Such a sliding of the voice usually occurs in descending progression. The song contains 70 intervals, 34 of which are minor thirds and whole tones. An ascending minor sixth occurs 3 times, which is an unusually large proportion of this interval.

The story of the man who dragged his body on the rocks in order to become a successful whaler was obtained among the Makah and holds an important place in the legends of the northwest coast (Densmore, 1939, p. 57). The singer, a member of the Nitinat tribe, said this was her father's song, and was sung by the Nitinat when towing a dead whale.

No. 74. "I Will Scrape My Body on the Rocks"

(Catalog No. 1709)

Recorded by ANNIE TOM



Free translation.—I will scrape my body on the rocks because I want to get a whale.

Analysis.—This peculiar melody lies chiefly within a compass of a minor third. It contains no rhythmic unit, but each phrase contains an ascending followed by a descending trend. The progressions are unusual and comprise 4 fourths, 2 minor thirds, 12 whole tones, and 10 semitones. The transcription is from the first rendition, the intonation on C natural being less clear in the later renditions.

The following story was told to little children: One day a chief was walking on the beach with his little boy. They saw a big whale which had been killed and was lying on the sand. The chief made a hole through the tail, and said, "Little boy, you had better jump through that hole." The song was sung in connection with the story, but the exact connection was not explained.

No. 75. The Little Boy and the Whale

(Catalog No. 2061)

Recorded by JAKE GEORGE

Voice $\text{♩} = 88$ Drum $\text{♩} = 88$

Drum rhythm similar to No. 14

The musical score consists of seven staves of music. The first staff is a vocal line in bass clef with a key signature of one flat (B-flat) and a 2/4 time signature. The subsequent six staves are drum accompaniment, also in bass clef with a key signature of one flat and a 2/4 time signature. The drum part features a complex, syncopated rhythm with various note values and rests. The vocal line is a simple melody of eighth and quarter notes, with some phrasing slurs and a fermata over a note in the fifth staff. The overall structure is a single melodic line with a rhythmic accompaniment.

Analysis.—This is a pleasing melody consisting of the tones F, G, and A, with one occurrence of B natural. The tone F is clearly the fundamental and the signature of the transcription is that of the key of F major. This signature is only for convenience of observation, the tone material being that of the key of C. In this instance the notation shows, in the simplest possible manner, the pitch and affiliation of the tones sung by the Indian, but does not carry the full significance in musical usage. Attention is directed to the ascending sequence of three whole tones, occurring about midway through the melody. Such a sequence is rare in recorded Indian songs. The progressions comprise 36 whole tones in ascending and the same number in descending order.

Among the Nitinat, as among the Makah and Clayoquot, the old women have a pleasant custom of going to a house and singing in honor of infants or little children, their songs being rewarded with food or gifts (Densmore, 1939, p. 215). Such songs usually represent the child as engaged in the activities of an adult, or praise its appearance.

No. 76. Song to a Little Girl

(Catalog No. 1714)

Recorded by ANNIE TOM

Voice $\text{♩} = 88$ Drum $\text{♩} = 88$

Drum rhythm similar to No. 14

Free translation.—Dear little girl, did you have a small face?

Analysis.—The framework of the first and second phrases in this song is a minor triad and minor seventh, and the trend of each phrase is upward, then downward. The principal interval is a whole tone. Five renditions were recorded, and in each rendition a descending glissando occurred near the close of the song, while the descending fourth, which constitutes the final interval, was sung without a glissando.

A song to put a child to sleep was recorded by a woman from Church House, on the Homalko Reserve. The words consisted of the admonition, "Go to sleep, go to sleep."

No. 77. Lullaby

(Catalog No. 1680)

Recorded by SOPHIE WILSON

 $\text{♩} = 58$

Analysis.—This melody consists of glissando phrases alternating with rapidly enunciated tones. It is impossible to indicate the progress of the glissando by ordinary notation, but the pitch of the highest and lowest tones were clearly sung. The tempo was maintained throughout several renditions.

LOVE SONGS

Dennis Peters, who lives on the Fraser River, recorded two songs of this class, both expressing the gentle loneliness which characterizes many Indian love songs. The first of the group was said to be the song of a woman who was separated from her husband and “made up a song about him.”

No. 78. “I Wish I were a Cloud”

(Catalog No. 2044)

Recorded by DENNIS PETERS



Free translation.—I wish I were a cloud so I could stay always in the air and see my husband all the time.

Analysis.—A peculiarity of this song is the prominence of D, the tone above the keynote. An appealing quality is given by the ascending glissando in the first measure and by the five ascending fourths, while the drooping trend of the last seven measures suggests the depression implied in the words.

A different type of melody is presented in the next song, the words of which are summarized in the title.

No. 79. “All My Sweethearts Are Gone Except One”

(Catalog No. 2045)

Recorded by DENNIS PETERS

Voice $\text{♩} = 69$



Analysis.—This pleasing melody has a compass of 11 tones, lying partly above and partly below the keynote. The tone material is that of the fourth 5-toned

scale. The song consists of three periods, the first and third being designated as the rhythmic unit while the second differs slightly in rhythm. A resemblance to the song next preceding is seen in the frequency of ascending fourths and fifths.

A woman from the Skeena River country recorded the following song.

No. 80. "I Am Going to Stay at Home"

(Catalog No. 1687)

Recorded by JANE GREEN



Free translation.—I was of two minds about going with you and now I have made up my mind to stay at home. I heard what you are doing, that is why I am going to stay at home.

Analysis.—This song is unusual in the number and variety of its progressions. The song contains 15 measures and 3 times descends an octave within 3 measures. Eleven sorts of intervals occur, 6 being in ascending and 5 in descending progression. The song is major in tonality and contains all the tones of the octave except the seventh. The rhythmic unit is simple and is preceded and followed by various rhythms which are not repeated. This is interesting in view of the words. The melody was not accurately repeated but the essential rhythms appear in all the renditions.

A love song recorded by Henry Haldane of Port Simpson was not transcribed. The rendition was preceded by the words, "I am going to sing a Haida love song," these words being recorded by the phonograph. The first verse was in the Indian language, and the words were translated, "O, my heart is broken because I did not see my girl, so I always cry." The second verse was in Chinook, and was translated, "Show me your kindness. Give me a drink and I will do the same for you in return." The singer said, "the Hudson's Bay people came among these Indians in 1862 and brought the Chinook." This suggests that the Chinook words may have been added to an older, native song.

The two songs next following are from the Nass River region.

No. 81. "She Is Glad to See Him"

(Catalog No. 1688)

Recorded by ELLEN STEVENS

$\text{♩} = 80$

Free translation.—She has been trying to see her sweetheart for a long time and is glad to see him.

Analysis.—Two renditions of this song were transcribed, the first rendition being here presented. The tone material is the same in the two renditions, but the first has the larger compass, using C in the upper as well as the lower octave. Successive renditions showed similar unimportant differences. ShriII cries were interpolated at the close of the ninth measure. The intervals are larger than in a majority of the British Columbian songs.

No. 82. "Give Me a Bottle of Rum"

(Catalog No. 1689)

Recorded by ELLEN STEVENS

$\text{♩} = 104$

Free translation.—When she got a sweetheart he offered her a drink and she said she wanted rum. If you want to give me a drink, give me a bottle of rum.

Analysis.—The fourth is a rather frequent interval in this melody, the other progressions being minor thirds and whole tones. The song is minor in tonality, harmonic in structure and contains all the tones of the octave. Two rhythmic units occur, separated by slightly different rhythms in their two occurrences. Beginning with the eighth measure from the close we find a phrase which suggests the first rhythmic unit.

DIVORCE SONGS

Two songs connected with an old custom of divorce were recorded by Jane Green from Skeena River. If a woman quarreled with her husband and was sent away, she gave a dance in about 3 days and her husband gave a similar dance 3 days after hers. Both spent much money on these dances and gave many presents. At the woman's dance about seven women stood in a row, about two arms' lengths apart, and moved their heads as they danced, while the woman who had been sent away by her husband stood still in the middle of the row. The people clapped their hands as they sang the following song. In explanation of the last portion of the words, it was said, "We have a story that if I travel and get lost somebody will touch me when I am almost dead and little mice will take me to a house and I will put some wool in the fire, and a little old woman will scrape lots of it under her blanket."

No. 83. Divorce Dance Song (a)

(Catalog No. 1684)

Recorded by JANE GREEN



Fine

Free translation.—In a little while. I guess you love me now. I guess you admire me now. You threw me away like something that tasted bad. You treat me as if I were a rotten fish. My old grandmother is going to take her own dry blackberries and put them under her blanket.

Analysis.—Certain resemblances occur between this and the song next following which is also a divorce song. Both songs begin in double time, have a compass of about an octave, and end on the keynote, which is the lowest tone of the compass. This song is in the key of B major, is based on the major triad and sixth, and contains only one interval larger than a minor third. The ascent to accented tones, occurring frequently in the first portion, gives a plaintive effect while the trend of the latter portion is steadily downward, the repeated tones at the close seeming to express a finality in the singer's mind.

The next song was also sung at a woman's divorce dance.

No. 84. Divorce Dance Song (b)

(Catalog No. 1685)

Recorded by JANE GREEN

Free translation.—I thought you were good at first. I thought you were like silver and I find you are lead. You see me high up. I walk through the sun. I am like the sunlight myself.

Analysis.—The change from major to minor tonality occurs in all the renditions of this song, the keynote remaining the same, but the third and sixth being lowered a semitone. The intervals are more varied than in the song next preceding and comprise two semitones and five intervals larger than a minor third. Without these intervals the melody would be monotonous, as the remaining intervals consist of minor thirds and whole tones, about equal in ascending and descending order. The first portion of the song is rather lively and is based on the interval of a fourth, but with the change to minor tonality the fourth is replaced by minor thirds. The final measures are slower in tempo and contain a rather sad but coherent phrase.

MISCELLANEOUS SONGS

The singer said she had heard the old people sing the following song. In explanation she said her people believe that the spirits of the dead make known their presence in a room by a slight explosive noise in the fire.⁵ She said, "If you hear 'ping' in the fire it is some dead person speaking. When he comes into the room he causes a thought of him to come into the minds of the people in the room, then he speaks through the fire." Continuing her narrative, she said that a spirit who does not want to speak through the fire makes known his presence in the woods by making a tree fall when there is no wind. "If a person is walking in the woods and sees a tree fall when there is no wind he will say 'Now you chopped down the big rotten tree.'"

⁵ Cf. story of The Girl who Married the Fire Spirit (Swanton, 1900. pp. 239X240).

No. 85. Song to a Spirit in the Fire

(Catalog No. 1683)

Recorded by JANE GREEN

The musical score is written on four staves in treble clef with a key signature of three sharps (F#, C#, G#). The tempo is marked as quarter note = 104. The score is divided into three rhythmic phrases, each indicated by a bracket and a number: (1) on the first staff, (2) on the second staff, and (3) on the third and fourth staves. The time signature changes from 2/4 to 3/4 and back to 2/4 throughout the piece.

Free translation.—Who is dead that you feel so badly? I am very ashamed of you, still you are speaking after you are dead. You speak through the fire. I am not going to do that myself if I am dead. I am going to take an ax and chop down a tree.

Analysis.—This is a cheerful melody based on the fourth 5-toned scale. The fourth is a frequent interval, and the minor thirds and whole tones are equal in number. The song contains three phrases which are indicated as rhythmic units. A frequent change of measure lengths also gives variety to the rhythm.

The man who recorded the next song is chief of the O'Hammon Band of Indians living on the Squamish River. His name is the same as that of the band of Indians and was given as O'Hammon, O'Hammond, and O'Hammel, the first form being given on the best authority and used in the present paper. He is commonly called "Chief Jimmie Jimmie." The next song is concerning an Indian prophet named Skilmaha who lived in the vicinity of Hope about a century ago, "before the coming of the white man." This prophet foretold the coming of a different people and had many followers. It is probable that reference is made to Smoholla, the Dreamer of the Columbia River region, whose influence extended widely in Washington and Oregon and undoubtedly spread toward the north (Mooney, 1896, pt. 2, pp. 731-745). Smoholla was born in 1815 or 1820 (Mooney, 1896, pt. 2, p. 717) and the religion which he founded is described as "a system based on the primitive aboriginal mythology and usage, with an elaborate ritual which combined with the genuine Indian features much of what he had seen and remembered of Catholic ceremonial parade, with perhaps some additions from Mormon forms" (Mooney, 1896, pt. 2, p. 719).

No description of the teachings of Skilmaha was obtained, but it was said that he was subject to trances of a cataleptic nature. It appears that his power is challenged in the following song. The words show a knowledge of the Old Testament, contradicting the statement of the Indians that Skilmaha lived before the coming of the white man.

No. 86. Song Concerning the Prophet Skilmaha

(Catalog No. 2021)

Recorded by JIMMIE O'HAMMON

$\text{♩} = 63$



Free translation.—I would believe you if you would destroy us by fire.

Analysis.—The tone material of this melody is the key of E major and the song ends on the tone above the keynote (cf. Nos. 87 and 97). Its repetitions differ somewhat in note values, the song appearing to have more than one set of words, which affects the duration of tones. One half the progressions are whole tones.

The Indians of the Fraser River region terminate the period of mourning for the dead in a ceremonial manner. This custom was witnessed by the writer among the Chippewa and Menominee, and described among the Yuma and Cocopa Indians. (See Densmore, 1913, pp. 153–162; 1932, pp. 163, 164; 1932 a, pp. 73–85.) The following song was used at such a ceremony in British Columbia and belonged to the brother of a man who was drowned. It was called a “crying song.”

No. 87. Song with Termination of Mourning

(Catalog No. 2027)

Recorded by JIMMIE O'HAMMON

$\text{♩} = 56$



Free translation.—I will cry as I walk and look up at the sky.

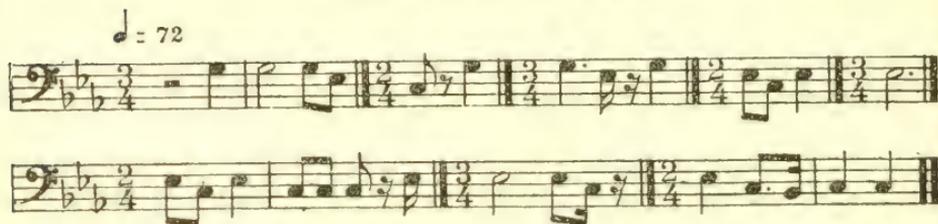
Analysis.—The tempo of this song is slow and it was sung with the wailing tone used by Indians in songs of sorrow. The tone material is that of a major scale, ending on the tone above the keynote (cf. Nos. 86 and 97). Except for one ascending fifth, the melody progresses by minor thirds and whole tones.

The singer said that, when a child, he heard his father sing the next song. He said that "a man went to the salt water to hunt seal and he saw a seal swimming and heard it sing this song." This is the first song attributed to a seal which has been recorded by the writer, though special inquiry has been made for such songs.

No. 88. Song of a Seal

(Catalog No. 1670)

Recorded by BOB GEORGE



Analysis.—This song contains only the tones of the minor triad and seventh, the latter occurring only as next to the last tone. The transcription is from the first rendition, the subsequent renditions using the same tones and having the same general rhythm, but showing some difference in the order of the phrases. The song consists of two periods of five measures each. Rests occur in these periods, but the rhythmic feeling is carried forward to the end of the phrase.

The preparations for hunting a shark were the same as for hunting whale. (For other songs of this class, see Densmore, 1939.) The weapon used was a spear with a long line, and 8 or 10 canoes joined in the hunt. The shark was killed for its oil, the fat being boiled to secure the oil, which was put in the skin of a seal as a container.

No. 89. Song of a Shark Hunter

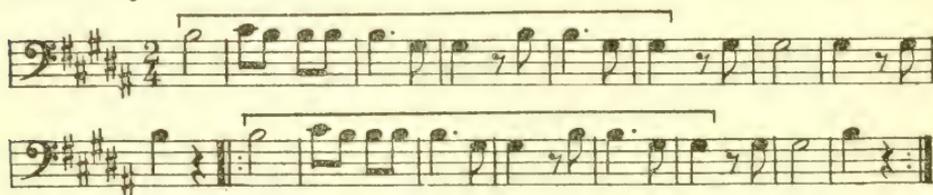
(Catalog No. 2062)

Recorded by WILSON WILLIAMS

Voice $\text{♩} = 120$

Drum $\text{♩} = 120$

Drum rhythm similar to No. 11



Analysis.—The repetition of the phrases in this song is an example of variation in renditions. The song was first sung as transcribed, then the last phrase was sung twice, the first phrase twice, the second phrase five times, and the first

phrase twice, the performance being concluded by the end of the phonograph cylinder. Thus there appeared to be no definite number for the repetitions of each phrase. A mannerism which cannot be transcribed consisted in the use of a very short, unaccented tone before each accented tone. The song contains no change of measure length and its chief interest lies in its use and in its simple rhythm.

The man who recorded the next song seems to have a remarkable fluency in expressing himself through music. He said that he once shot and wounded a mountain goat and could not reach the animal, though he tried as hard as he could. That night he thought of the suffering animal and made up this song in which he seems to feel its pain in his own body.

No. 90. Song of a Hunter

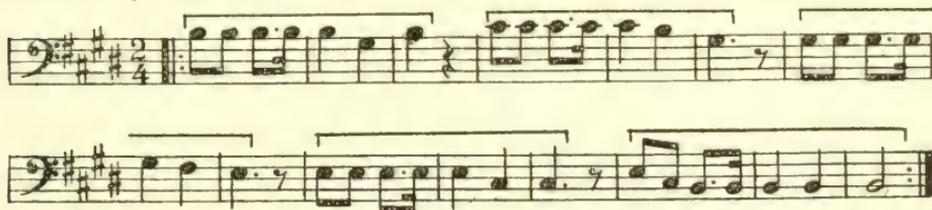
(Catalog No. 2030)

Recorded by JIMMIE O'HAMMON

Voice ♩ = 126

Drum ♩ = 126

Drum rhythm similar to No. 14



Free translation.—It hurts where he was shot.

Analysis.—This song is so short that the phonograph cylinder contains many repetitions, without intervening pauses. The rhythmic structure consists of five periods of equal length and the same rhythm, as though a single idea repeated itself in the singer's mind. This is further suggested by the repeated notes with which each phrase begins. The song has a compass of nine tones and contains all the tones of the octave except the fourth.

The rhythm and action of walking, as an inspiration to musical composition, has not previously been noted, but Jimmie O'Hammon said that songs came to him as he "was walking along." (Cf. Densmore, 1939, p. 268.) The next song has no definite use but came to the singer as he walked and was happy.

No. 91. Song of Happiness

(Catalog No. 2029)

Recorded by JIMMIE O'HAMMON



Analysis.—This is a singularly calm and cheerful melody, with a strong individuality. Quadruple measures seldom occur in Indian songs, but there is no secondary accent in the measures thus transcribed in this melody. The tones are those of the fourth 5-toned scale and the song has a compass of 10 tones with a strongly descending trend. Except for 1 interval, the progressions are whole tones and minor thirds.

Pleasant thoughts, as well as the motion of walking, inspired the next song, which is concerning a dream of going to Ottawa.

No. 92. Dream of Going to Ottawa

(Catalog No. 2025)

Recorded by JIMMIE O'HAMMON

$\text{♩} = 100$

The musical score for 'Dream of Going to Ottawa' is written in bass clef with a key signature of one flat (B-flat) and a 3/4 time signature. The tempo is marked as quarter note = 100. The melody is presented on three staves. The first staff contains the first four measures, the second staff contains the next four measures, and the third staff contains the final four measures. The melody is characterized by a strong descending trend and includes several triplet markings (indicated by a '3' in a circle) over the final notes of the first, second, and third measures.

Analysis.—The first part of this song, containing the rhythmic unit, is in the upper part of the compass, while the second part, in the lower register, is more determined in rhythm but contains no rhythmic unit. The song has a compass of nine tones and is based on the fourth 5-toned scale.

The singer of this and the song next following is Mrs. Sophie Wilson (pl. 9, fig. 2), who lives at Church House on the Homalco Reserve, north of Butte Inlet. She also recorded a lullaby (No. 77). This is said to be a very old song, the meaning of the words being indicated in the title.

No. 93. "I Wish I Was in Butte Inlet"

(Catalog No. 1678)

Recorded by SOPHIE WILSON



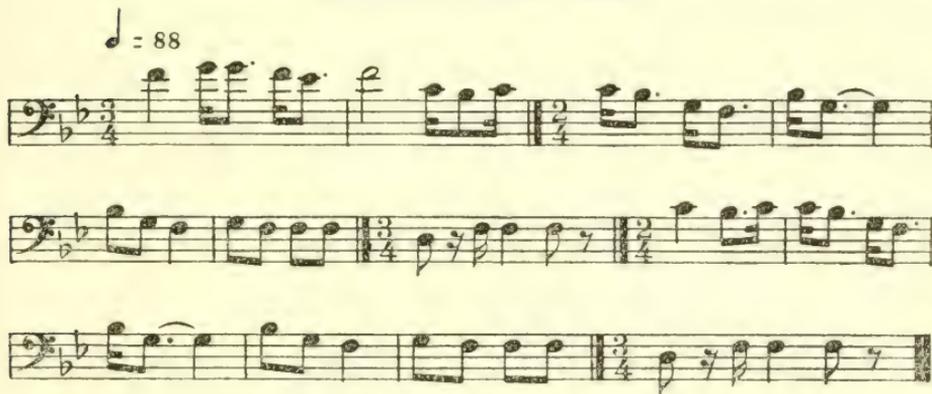
Analysis.—The prominence of ascending intervals, especially in the opening measures, seems to express a yearning, though it is not claimed that the Indian form of expression is similar to that of the white race. The song contains three sorts of ascending and only two sorts of descending intervals. The keynote (A flat) occurs only twice, and one of these occurrences is on the last count of a measure. Attention is directed to a comparison between the rhythmic units, a quarter note being unaccented in the first and accented in the second unit. There is an interesting determination in the rhythm of the closing measures.

Many Indians living on the west coast of British Columbia are employed in the salmon canneries. It appears that the present singer has been a traveler, and it is probable that she has been thus employed. She has pleasant memories of several towns, and also mentions her home, Church House, among the "happy places."

No. 94. Song of a Traveler

(Catalog No. 1679)

Recorded by SOPHIE WILSON



Free translation.—Ridden Cannery is a happy place, they have electric lights; Swell Cove is a happy place, and Tabishin and Church House.

Analysis.—This song was recorded on two entire cylinders, the melody being the same throughout the performance. As first recorded, the melody was said to be a "whisky song," the words here presented being sung with the second rendition. The song has a compass of 11 tones and is based on the first 5-toned scale in which the third and seventh above the keynote are absent. Thirty of the thirty-four intervals are whole tones and minor thirds.

The next was said to be a "general song" addressed by a man to his niece whose hair was long and handsome. This is the only song recorded by this singer.

No. 95. "Your Pretty Hair"

(Catalog No. 2060)

Recorded by JULIA MALWER



Free translation.—There is nothing that I wish more than your pretty hair, my niece.

Analysis.—The principal part of this melody is on the upper tones of its compass, which is unusual. The descending trend is gradual and the lowest tone occurs only in the final measures. Except for one ascending fifth, the intervals are minor thirds and whole tones. The tone material is the fourth (major) 5-toned (Gaelic) scale and the melody, though strongly individual, suggests the influence of Scotch or Irish melodies.

Next is presented the song of a woman "who longed for happiness, but could not be happy without whiskey."

No. 96. A Woman's Song

(Catalog No. 2043)

Recorded by DENNIS PETERS

Voice ♩ = 60

Drum ♩ = 60

Drum rhythm similar to No. 14

The musical score is written in bass clef with a key signature of two flats (B-flat and E-flat) and a time signature of 2/4. It consists of three staves of music. The first staff begins with a quarter rest followed by a quarter note G2, then an eighth note G2 beamed to an eighth note A2, followed by a quarter note B-flat2. A triplet of eighth notes (G2, A2, B-flat2) is marked with a '3' below it. The second staff continues the melody with eighth and quarter notes. The third staff is enclosed in a box with a first ending bracket labeled '1' and a second ending bracket labeled '2'. It features a triplet of eighth notes and ends with a double bar line and repeat sign.

Analysis.—There is an appealing quality in the ascending and descending fourths with which this song opens. A similar song recorded among the Chipewya (Densmore, 1910, No. 137) contains the words “I do not care for you any more.” The latter portion of this melody is based on the tonic triad with the fifth as its lowest tone, the song ascending and descending on these tones. With two exceptions the intervals are fourths and whole tones.

There is an element of humor in the next song, which was said to be very old. It is the song of a man, left at home alone, who sings about his wife and wishes she would return.

No. 97. Song of a Man Alone at Home

(Catalog No. 2022)

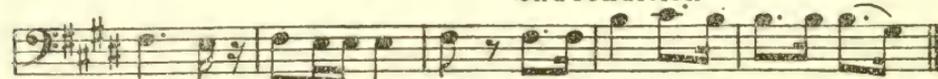
Recorded by JIMMIE O'HAMMON

Voice $\text{♩} = 72$

1st rendition



2nd rendition



Free translation.—Don't be away too long. Don't stay away if you are not doing anything.

Analysis.—This is a whimsical melody with an ascent of a major sixth in its first two progressions and an almost equal number of ascending and descending intervals. Slight differences occur in the renditions, two of which are transcribed. It is interesting to note a teasing quality, which seems to increase during the performance. The song contains the tones of a major scale ending on the tone above the keynote (cf. Nos. 86 and 87).

The next song was said to have been composed at Kamloops, British Columbia, and to be sung by Indian cowboys when riding the range.

No. 98. Indian Cowboy Song

(Catalog No. 2059)

Recorded by ANNIE BOLEM

 $\text{♩} = 96$ *Fine*

Analysis.—Six consecutive renditions of this song were recorded, the first half of the performance showing a steady rise in pitch. The first rendition began on E flat, the second ended on F natural, and the fourth rendition began on F sharp, this pitch level being continued to the end of the performance. A rise in pitch level has been noted in Indian songs containing a sudden change in register, this occurring chiefly in Pueblo songs. (Cf. Densmore, 1938, pp. 182–183.) The latter portion of this song is in the lower portion of its compass, which necessitates an ascent of an octave to the first tone of the repetition. This may explain the singer's lack of ability to maintain the level of pitch. The dotted quarter note (B flat) occurring about midway through the melody gives vigor to the rhythm. With one exception the phrases have a descending trend. The low range of voice is often found among Indian women.

MISCELLANEOUS NOTES

The following information was supplied by Dennis Peters:

If a girl comes to maturity in July, the headman comes, cooks a salmon, and gives her a little. If this is not done, the salmon goes away.

A girl dreamed that she was fishing. She put down her hook twice without success, and the third time she felt something heavy. The lake was clear and deep. She drew up her line and when the object was about 10 feet below the surface she saw it was the shape of a head. She pulled it up, and it was the wooden mask worn later by the headman when he presided at weddings and important events. The masks were all made like this, and were worn with the open mouth on a level with the wearer's eyes.

SUMMARY OF ANALYSES

These songs were recorded by men and women from widely separated localities and the songs are of many types. For that reason a summary must concern itself with varied characteristics, not with a single pattern peculiar to a region.

Four patterns of melodic structure have been observed in more than 2,500 Indian songs, recorded by the present writer. These are (1) a formation on the simplest overtones of a fundamental, generally called a triad formation, (2) a formation based on the interval of a fourth, (3) a typical folk-song structure which will be described, and (4) a period formation. The fourth pattern does not occur in the present series of songs and the first is not prominent. The second pattern of melody has been connected, in certain tribes, with songs of men, birds, or animals in motion, especially with songs concerning birds (cf. Densmore, 1913, pp. 99–101). In many instances, this pattern consists of ascending and descending intervals of a fourth; in others we find an incomplete tetrachord to which the term "tetratone" has been applied (see p. 18); and in still others we find a complete tetrachord, with the semitone variously placed. This formation was noted with special frequency among the Nootka and Quileute songs recorded at Neah Bay, Wash. Thirty songs in a total of 210 contained

this formation, and a list of the titles and uses of these songs does not connect them with the idea of motion nor with birds and animals. It appears as a distinct form. In this connection, it is interesting to note that the tetrachord was the basis of the musical theory of ancient Greece, the term meaning specifically the four strings of the lyre. The outer strings were always tuned to a perfect fourth, an interval expressed by the Greeks, as in modern times, by the acoustic ratio 3 to 4. The inner strings were tuned in a variety of relations to each other and to the outer strings. The musical theory of Europe since the seventeenth century has been based on the triad, in which the interval between the outer tones is a perfect fifth, expressed by the ratio 2 to 3.

In the songs under present analysis there are instances in which the tetrachord is complete, as in No. 27; instances in which it is incomplete, as in No. 13; and songs in which the fourth is prominent in the framework of the melody, without intermediate tones of sufficient frequency to suggest an incomplete tetrachord, as in Nos. 28, 35, 53, 66, and 79. In songs with this formation the relation of the tones to a keynote is not always clear, showing this to be a distinct type of melody formation.

Mention has been made of the triad formation as occurring infrequently in the present series of songs. Two instances of this formation are Nos. 88 and 90. Special attention is directed to a peculiar pattern of melody in which a keynote is clearly implied, but the song ends on the tone above the keynote, preceded by the keynote. This occurs in Nos. 86, 87, and 97. This has been found in only 9 songs in a total of 1,553 under cumulative analyses (Densmore, 1939), 8 of the number being recorded at Neah Bay, and the ninth being a dance song of the Cocopa Indians on the Mexican border. The three songs in the present series having this ending were recorded by Jimmie O'Hammon. No. 86 is concerning the prophet Skilmaha, No. 97 is a whimsical song of a man left alone at home, and No. 87 is a song of the formal termination of the period of mourning for the dead, a custom observed among the Cocopa and Yuma (cf. Densmore, 1932, pp. 41-100). The songs with this ending recorded at Neah Bay comprised the following: Five Makah songs of the Potlatch and the Klokali dance, and one Makah song of a man who stayed at home from war, this being the same whimsical type of song as No. 97 in the present series. One of the Neah Bay songs with this ending was a Clayoquot song to quiet the waves of the sea, and another was a Quileute song used in treating the sick. It will be noted that five are songs of dances in which foreign influence might be embodied, and two are songs of supposedly magic power, which was frequently attributed to strangers. The visit of "Spaniards" to Neah Bay has been noted (Densmore, 1939, p. 7), and the occurrence of these slight coincidences

in musical form becomes significant, especially as the high vocal drone was observed among the Papago of southern Arizona and the Quileute, near Neah Bay. (Cf. Densmore, 1929, p. 14; 1939, pp. 25-26.)

The typical folk-song structure, indicated as the third form of structure in Indian songs, is described as follows by A. H. Fox-Strangways, the eminent English authority on this subject, in an article chiefly concerning English folk song. He states,

the folk singer has not only no harmony (in the sense of other notes than the melody), but no feeling for it . . . His "harmony" is in the tune itself; one note of the tune has an affinity for (or an antipathy to) some other; connections are thus formed, and structure is made possible. Shortly, the folk-songster is satisfied with *affinity* between notes, where we must have *consonance* clinching what is past and prophesying what is to come. The nucleus of his scale is three notes a tone apart (F, G, A, for instance) which have this affinity; above and below this are two outliers, C, D, which also have it; beyond those five he takes notes tentatively. [Fox-Strangways, 1935.]

Without pursuing this subject further, we note the preference for whole tone progressions in the fact that, in the cumulative analysis of 1,343 songs, 41 percent of the progressions were whole tones and 4 percent were semitones. This table of analysis was not extended to the Nootka and Quileute songs, as the uniformity of percentages in various tribes appeared to establish the melodic feature under consideration. This stepping from tone to an adjacent tone is distributed all through Indian melodies and is not a striking contrast to our own usage. It becomes evident as a phase of melodic structure, however, when it is unusually prominent, and this was first observed in songs recorded at Neah Bay. In previous songs it had been shown chiefly in songs with a compass of three tones which formed only 4 percent of 1,553 melodies. At Neah Bay this type of melody was a characteristic of the material, in many of these songs the compass being only three tones with the middle tone as the most prominent. The singer appeared to feel that the middle tone was the basis of his melody, stepping thence to the adjacent tone above and below. Two instances of this in the present series are Nos. 9 and 71, the first being an appeal to certain animals by a doctor when treating the sick, and the second being the song of a man in a "foggy place," confused and uncertain where to go. No. 49 consists of the two intervals of a whole tone each, F sharp-G sharp and B-C sharp. Several songs of the present series end with two whole-tone progressions descending to the keynote. Two songs (Nos. 71 and 75) consist of the three tones, the keynote, its second, and third (major tonality), with one additional tone, the former containing the semitone below, and the latter containing a whole tone above this series. One song, No. 70, contains only the keynote and its major second and major third. These melodies resemble certain dancing songs of the Cocopa (cf. Densmore, 1932, Songs Nos. 116-119).

The Indians of British Columbia have been in contact with people from Scotland for many generations and No. 95 suggests Scotch influence. These songs have not been tabulated with reference to the fourth and second 5-toned scales, often designated as the Gaelic scales. A downward glissando at the end of the song, frequently noted at Neah Bay, appears in No. 44.

An interesting phase of rhythm occurs in Nos. 1 and 42. These songs are felt to be in double rhythm and are transcribed in 2-4 time, yet the stress is equal on the first and second counts of the measure in the larger part of the melody. Transcriptions of Indian songs are divided into measures according to the accented tones, yet the accents in Indian singing are not always emphatic. The uneven measure lengths in Indian songs do not represent a jerky, heavy emphasis on certain tones. There is a rhythm of the melody as a whole which is apparent to a student, hearing the phonograph record over and over many times. This is subtle and constitutes a large part of the charm of the song. The uneven lengths of separate measures should be recognized as part of the larger rhythm of the melody as a whole.

The accompanying drum is usually in a steady meter throughout an Indian song. Thus the metronome indication and the rhythm indication at the beginning of a transcription are understood to be maintained during the entire performance. When an important difference appears it is generally transcribed with the drum on a separate staff. This occurs in Nos. 29, 30, and 31 in the present series. These are war songs. An irregular drumbeat was transcribed with 6 songs recorded at Neah Bay, these comprising 1 dream song, 1 song of the Homatsa dance, and 4 songs of the Klukluwatk dance. One song of the northern Ute, a Turkey dance song, was thus transcribed (cf. Densmore, 1922, No. 30). Among the Yuma and Cocopa Indians, 14 songs were thus transcribed. These comprised, among the Yuma, 8 songs of the Deer dance, 3 of the Lightning dance, and 1 of the Bird dance, with 2 songs of the Cocopa Bird dance (cf. Densmore, 1932, Nos. 50, 55, 57, 58, 59, 60, 62, 63, 64, 66, 69, 97, 105, 110). It is not claimed that the songs transcribed with irregular drumbeat are all the songs in which this occurred.

From the foregoing, it appears that the songs recorded in British Columbia bear interesting resemblances to the songs recorded at Neah Bay and on the Mexican border, as well as resemblances to Scotch songs and to the accepted basis of English folk song. The foregoing observations are offered as an aid to further study, not as presenting any hypothesis or theory. They have arisen in the examination of the melodies, which are transcribed, as nearly as is possible, in ordinary musical notation. These observations suggest influences from the east, across Canada, and also from the south, along the coast of the United States.

BIBLIOGRAPHY

CULLIN, STEWART

1907. Games of the North American Indians. 24th Ann. Rep. Bur. Amer. Ethnol., 1902-03, pp. 1-846.

DENSMORE, FRANCES

1910. Chippewa music. Bur. Amer. Ethnol. Bull. 45.
 1913. Chippewa music—II. Bur. Amer. Ethnol. Bull. 53.
 1918. Teton Sioux music. Bur. Amer. Ethnol. Bull. 61.
 1922. Northern Ute music. Bur. Amer. Ethnol. Bull. 75.
 1923. Mandan and Hidatsa music. Bur. Amer. Ethnol. Bull. 80.
 1926. Music of the Tule Indians of Panama. Smithsonian Misc. Coll., vol. 77, No. 11.
 1928. Uses of plants by the Chippewa Indians. 44th Ann. Rep. Bur. Amer. Ethnol. 1926-27, pp. 275-397.
 1929. Chippewa customs. Bur. Amer. Ethnol. Bull. 86.
 1929 a. Papago music. Bur. Amer. Ethnol. Bull. 90.
 1929 b. Pawnee music. Bur. Amer. Ethnol. Bull. 93.
 1932. Menominee music. Bur. Amer. Ethnol. Bull. 102.
 1932 a. Yuman and Yaqui music. Bur. Amer. Ethnol. Bull. 110.
 1936. Cheyenne and Arapaho music. Southwest Mus. Pap. No. 10. Los Angeles.
 1937. The Alabama Indians and their music. *In* Straight Texas. Publ. Texas Folk-Lore Soc., No. 13, pp. 270-293.
 1938. Music of Santo Domingo Pueblo, New Mexico, Southwest Mus. Pap. No. 12. Los Angeles.
 1939. Nootka and Quileute music. Bur. Amer. Ethnol. Bull. 124.
 1942. A search for songs among the Chitimacha Indians in Louisiana. Anthrop. Pap. No. 19, Bur. Amer. Ethnol. Bull. 133.

FOX-STRANGWAYS, ARTHUR HENRY

1935. The folksong basis. London Observer. January.

HELMHOLTZ, HERMANN LUDWIG FERDINAND VON

1885. On the sensations of tone as a physiological basis for the theory of music. Trans. by A. J. Ellis, 2d English ed. London.

MOONEY, JAMES

1896. The Ghost Dance religion. 14th Ann. Rep. Bur. Ethnol., 1892-93, pt. 2, pp. 641-1110.

SWAN, JAMES G.

1870. The Indians of Cape Flattery, at the entrance to the Strait of Fuca, Washington Territory. Smithsonian Contr. Knowledge, vol. 16, No. 220, pp. i-ix, 1-106.

SWANTON, JOHN R.

1909. Tlingit myths and texts. Bur. Amer. Ethnol. Bull. 39.

TEIT, JAMES

1900. The Thompson Indians of British Columbia. Mem. Amer. Mus. Nat. Hist., vol. 2, Anthrop. 1, No. 4.



1. STREET IN HOP-PICKERS' CAMP.



2. TYPICAL DWELLINGS IN HOP-PICKERS' CAMP.



1. COMMUNAL DWELLING IN HOP-PICKERS' CAMP.



2. "RED CROSS SHACK" IN WHICH SONGS WERE RECORDED. CORPORAL (LATER SERGEANT) WITHERS, OF THE ROYAL CANADIAN MOUNTED POLICE, STANDS IN FOREGROUND



1. GROUP OF INDIANS ENGAGED IN BARTER OF CLOTHING.



2. CORNER OF HOP FIELD.



1. WIRES LOWERED FOR REMOVAL OF HOPS.



2. INDIANS GATHERING HOPS.



1. WOMEN GATHERING HOPS.



2. WIRES RAISED TO ORIGINAL POSITION AFTER REMOVAL OF HOPS



1. INDIAN WOMAN AND CHILD.



2. TASALT.



1. DWELLING (AT RIGHT) OCCUPIED BY TASALT.



2. BONES USED IN SLAHAL GAME.



1. SLAHAL GAME IN PROGRESS, SHOWING DRUM.



2. SLAHAL GAME IN PROGRESS, LEADER INDICATING "GUESS."



1. HENRY HALDANE.



2. MRS. SOPHIE WILSON.



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Choctaw Music

By FRANCES DENSMORE



FOREWORD

The following study of Choctaw music was conducted in January 1933, as part of a survey of Indian music in the Gulf States, made possible by a grant-in-aid from the National Research Council. A certain peculiarity had been observed in songs of the Yuma of southern Arizona, the Pueblo Indians of New Mexico, the Seminole of Florida, and the Tule Indians of Panama. The purpose of the survey was to ascertain whether this peculiarity was present in the songs of other tribes in the South. This purpose was fulfilled by the discovery of this peculiarity in songs of the Choctaw living near the Choctaw Indian Agency at Philadelphia, Miss. No trace of the peculiarity was found in songs of the Alabama in Texas, and no songs remained among the Chitimacha of Louisiana. On leaving Mississippi, the research was resumed among the Seminole near Lake Okechobee in Florida. On this extended trip the writer had the helpful companionship of her sister, Margaret Densmore.

The Choctaw represent a group of Indians whose music has not previously been studied by the writer and their songs are valuable for comparison with songs collected in other regions and contained in former publications.¹

Grateful acknowledgment is made to the National Research Council for the opportunity of making this research.

FRANCES DENSMORE.

¹ See bibliography (Densmore, 1910, 1913, 1918, 1922, 1923, 1926, 1928, 1929, 1929 a, 1929 b, 1932, 1932 a, 1936, 1937, 1938, 1939, 1942).

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LIST OF SONGS

1. ARRANGED IN ORDER OF SERIAL NUMBERS

WAR SONGS

Serial No.	Catalog No.	Page
1. War song-----	2208	124
2. "Begging for gunpowder" song-----	2366	125
3. "I am going"-----	2367	125
4. "Slacker song"-----	2368	126
5. Victory song-----	2369	127

SONGS WITH GAMES

6. Song for success in the ball game-----	2263	131
(Duplicate of No. 6)-----	2266	131
7. Bullet game song (a)-----	2202	133
8. Bullet game song (b)-----	2270	134
9. Bullet game song (c)-----	2371	134

TICK DANCE SONGS

10. Tick dance song (a)-----	2200	136
11. Tick dance song (b)-----	2201	137
12. Tick dance song (c)-----	2210	138
13. Tick dance song (d)-----	2215	139
14. Tick dance song (e)-----	2357	140
15. Tick dance song (f)-----	2358	140
16. Tick dance song (g)-----	2370	141
17. Tick dance song (h)-----	2374	141
18. Tick dance song (i)-----	2375	142
19. Tick dance song (j)-----	2376	142
20. Tick dance song (k)-----	2352	143

DRUNKEN-MAN DANCE SONGS

21. Drunken-man dance song (a)-----	2355	144
22. Drunken-man dance song (b)-----	2363	144
23. Drunken-man dance song (c)-----	2364	145
24. Drunken-man dance song (d)-----	2365	146
25. Drunken-man dance song (e)-----	2379	147
26. Drunken-man dance song (f)-----	2380	148
27. Drunken-man dance song (g)-----	2381	148
28. Drunken-man dance song (h)-----	2382	148

DUCK DANCE SONGS

29. Duck dance song (a)-----	2203	150
30. Duck dance song (b)-----	2269	151

1. ARRANGED IN ORDER OF SERIAL NUMBERS—Continued

SNAKE DANCE SONGS		
Serial No.		Catalog No. Page
31.	Snake dance song (a)-----	2204 152
32.	Snake dance song (b)-----	2373 153
STEAL-PARTNER DANCE SONGS		
33.	Steal-partner dance song (a)-----	2377 154
34.	Steal-partner dance song (b)-----	2359 154
35.	Steal-partner dance song (c)-----	2378 155
36.	Steal-partner dance song (d)-----	2360 155
37.	Steal-partner dance song (e)-----	2361 155
38.	Steal-partner dance song (f)-----	2362 156
39.	Steal-partner dance song (g)-----	2205 157
BEAR DANCE SONGS		
40.	Bear dance song (a)-----	2192 158
41.	Bear dance song (b)-----	2264 158
42.	Bear dance song (c)-----	2267 159
43.	Bear dance song (d)-----	2268 160
STOMP DANCE SONGS		
44.	Stomp dance song (a)-----	2194 161
45.	Stomp dance song (b)-----	2195 162
46.	Stomp dance song (c)-----	2196 163
47.	Stomp dance song (d)-----	2197 164
48.	Stomp dance song (e)-----	2198 165
49.	Stomp dance song (f)-----	2199 166
50.	Stomp dance song (g)-----	2211 167
51.	Stomp dance song (h)-----	2216 168
	(Repetition of No. 51)-----	2216 168
52.	Stomp dance song (i)-----	2271 169
	(Repetition of No. 52)-----	2271 169
53.	Stomp dance song (j)-----	2372 170
54.	Stomp dance song (k)-----	2354 170
55.	Stomp dance song (l)-----	2353 171
56.	Backward-and-forward dance song-----	2206 171
MISCELLANEOUS DANCE SONGS		
57.	Terrapin dance song (a)-----	2207 172
58.	Terrapin dance song (b)-----	2356 173
59.	Quail dance song-----	2265 173
60.	Turkey dance song-----	2209 174
61.	Chicken dance song-----	2193 175
62.	Pleasure dance song-----	2214 176
HUNTING SONG		
63.	Hunting song-----	2272 177
SONGS CONNECTED WITH PASTIMES		
64.	"Rabbit in the garden"-----	2212 179
65.	A dog chases a raccoon-----	2213 180

2. ARRANGED IN ORDER OF CATALOG NUMBERS

Catalog No.	Title of song	Name of singer	Serial No.	Page
2192	Bear dance song (a)-----	Sidney Wesley-----	40	158
2193	Chicken dance song-----	do-----	61	175
2194	Stomp dance song (a)-----	do-----	44	161
2195	Stomp dance song (b)-----	do-----	45	162
2196	Stomp dance song (c)-----	do-----	46	163
2197	Stomp dance song (d)-----	do-----	47	164
2198	Stomp dance song (e)-----	do-----	48	165
2199	Stomp dance song (f)-----	do-----	49	166
2200	Tick dance song (a)-----	do-----	10	136
2201	Tick dance song (b)-----	do-----	11	137
2202	Bullet game song (a)-----	do-----	7	133
2203	Duck dance song (a)-----	do-----	29	150
2204	Snake dance song (a)-----	do-----	31	151
2205	Steal-partner dance song (g)-----	do-----	39	157
2206	Backward-and-forward dancesong-----	do-----	56	171
2207	Terrapin dance song (a)-----	do-----	57	172
2208	War song-----	do-----	1	124
2209	Turkey dance song-----	do-----	60	174
2210	Tick dance song (c)-----	do-----	12	138
2211	Stomp dance song (g)-----	do-----	50	167
2212	"Rabbit in the garden"-----	do-----	64	179
2213	A dog chases a raccoon-----	do-----	65	180
2214	Pleasure Dance-----	do-----	62	176
2215	Tick dance song (d)-----	do-----	13	139
2216	Stomp dance song (h)-----	do-----	51	168
	(Repetition of 2216)-----	do-----		168
2263	Song for success in the ball game-----	Robert Henry-----	6	131
2264	Bear dance song (b)-----	do-----	41	158
2265	Quail dance song-----	do-----	59	173
2266	Duplicate of No. 2263-----	Gus Willis-----		131
2267	Bear dance song (c)-----	do-----	42	159
2268	Bear dance song (d)-----	do-----	43	160
2269	Duck dance song (b)-----	do-----	30	151
2270	Bullet game song (b)-----	do-----	8	134
2271	Stomp dance song (i)-----	do-----	52	169
	(Repetition of No. 2271)-----	do-----		169
2272	Hunting song-----	Lysander Tubby-----	63	177
2352	Tick dance song (k)-----	Olman Comby-----	20	143
2353	Stomp dance song (l)-----	do-----	55	171
2354	Stomp dance song (k)-----	Robert Henry-----	54	170
2355	Drunken-man dance song (a)-----	do-----	21	144
2356	Terrapin dance song (b)-----	do-----	58	173
2357	Tick dance song (e)-----	Lysander Tubby-----	14	140
2358	Tick dance song (f)-----	do-----	15	140
2359	Steal-partner dance song (b)-----	do-----	34	154
2360	Steal-partner dance song (d)-----	do-----	36	155
2361	Steal-partner dance song (e)-----	do-----	37	155

2. ARRANGED IN ORDER OF CATALOG NUMBERS—Continued

Catalog No.	Title of song	Name of singer	Serial No.	Page
2362	Steal-partner dance song (f)-----	Lysander Tubby----	38	156
2363	Drunken-man dance song (b)-----	do-----	22	144
2364	Drunken-man dance song (c)-----	do-----	23	145
2365	Drunken-man dance song (d)-----	do-----	24	146
2366	"Begging for gunpowder" song-----	do-----	2	125
2367	"I am going"-----	do-----	3	125
2368	"Slacker song"-----	do-----	4	126
2369	Victory song-----	do-----	5	127
2370	Tick dance song (g)-----	do-----	16	141
2371	Bullet game song (c)-----	do-----	9	134
2372	Stomp dance song (j)-----	do-----	53	170
2373	Snake dance song (b)-----	do-----	32	153
2374	Tick dance song (h) ¹ -----	do-----	17	141
2375	Tick dance song (i) ¹ -----	do-----	18	142
2376	Tick dance song (j) ¹ -----	do-----	19	142
2377	Steal-partner dance song (a) ¹ -----	do-----	33	154
2378	Steal-partner dance song (c) ¹ -----	do-----	35	155
2379	Drunken-man dance song (e) ¹ -----	do-----	25	147
2380	Drunken-man dance song (f) ¹ -----	do-----	26	148
2381	Drunken-man dance song (g)-----	do-----	27	148
2382	Drunken-man dance song (h)-----	do-----	28	148
2383	Whistle melody-----	Robert Henry-----	-----	130

¹ Gus Willis joined in the singing of this song.

NAMES OF SINGERS AND NUMBER OF SONGS TRANSCRIBED,
EXCLUSIVE OF DUPLICATES

Lysander Tubby-----	27
Sidney Wesley ² -----	25
Robert Henry-----	6
Gus Willis-----	5
Olman Comby-----	2
Total-----	
	65

CHARACTERIZATION OF SINGERS AND PLACES WHERE SONGS WERE
RECORDED

Sidney Wesley² (pl. 10, fig. 1) treats the sick by means of herbs. His hair is white and rather long and he called attention to it as an evidence that he is a doctor. The interpreter stated that his hair was purposely disarranged, according to his regular custom. Although commonly known as Doctor Wesley, he has a Choctaw name given him when a child. In explaining his Choctaw name (see p. 112), the interpreter said, "It means that if anything like game is to be killed, the owner of this name kills it himself instead of leaving the work to be done by someone else." His independence and self-reliance are in accord with his name. Wesley was not asked to record his singing with the sick. He said it is "like praying," and that he never heard of prayer to a "spirit-animal," which is customary in certain other tribes. He said, "The chief tells the doctor to help the sick person." Sidney Wesley lives near the Government Day School at Tucker, 7 miles south of Philadelphia, Miss., and his songs were recorded in the house of his neighbor and friend, Mary Hickman^{2a} (pl. 10, fig. 2). He was a particularly pleasant man to work with, and his use of English was sufficient for the simpler phases of the work.

Lysander Tubby (pl. 11, fig. 1) is a much younger man than Wesley and learned the Choctaw songs from an older brother. He lives across the road and a short distance from the Pearl River Day School, which is 8 miles west of Philadelphia. Many dances are held in that locality and Tubby is the leader of the singers. A portion of his songs were recorded in the Pearl River School and a portion were recorded in the office of the United States Indian agent at Philadelphia, whose courtesy is gratefully acknowledged.

Robert Henry^{2b} (pl. 20, fig. 2) resides in a different part of the reservation, his home being in Bogue Chitto village, about 14 miles northwest of Philadelphia. Henry takes part in the ceremonial ball game and is considered the best authority on the magic connected with it. Songs were recorded in his house, including a song for success in the game, and the playing of the whistles used before and during the game to bring success.

² Died May 5, 1937.

^{2a} Died August 25, 1934.

^{2b} Died December 18, 1940.

Gus Willis is a prominent member of the older group in the tribe and lives at Pearl River. Dances are often held at his house and he leads the singing on these occasions. His Choctaw name is Lo'winte, the meaning of which is not known. In addition to songs that he sang alone, he recorded songs with Lysander Tubby to show the manner in which other singers join the leader of the singing. His songs were recorded at the Pearl River Day School.

Olman Comby (pl. 11, fig. 2) is a native policeman at the agency and is 40 years of age. He acted as interpreter throughout the work and recorded a limited number of songs at the agency office, when Lysander Tubby's songs were being recorded. He also supplied information on various tribal customs.

SPECIAL SIGNS USED IN TRANSCRIPTION OF SONGS

 placed above a series of notes indicates that they constitute a rhythmic unit.

+ placed above a note indicates that the tone is sung slightly less than a semitone higher than the diatonic pitch, in all renditions of the song.

— placed above a note indicates that the tone is sung slightly less than a semitone lower than the diatonic pitch, in all renditions of the song.

.) placed above a note or rest shows that the tone or rest is given less than the indicated time.

BRIEF LIST OF WORDS USED BY THE CHOCTAW OF MISSISSIPPI

These words were noted down as pronounced by the Indians. The corrected spelling and the analysis of doubtful words were supplied by Dr. John R. Swanton, whose cooperation is gratefully acknowledged. The cross † (the Polish ł) is a surd l, which approximates English *thl* and is sometimes so rendered.

NAMES OF PERSONS

American name	Indian name	Meaning
Sidney Wesley . . .	LapIn'tabe'se'ihoke'.	Commonly translated, "Kills it himself." This word has in it Ilapintabi, perhaps with the suffix -achi, which may mean "he himself killed it." Ihoke' seems to mean "it is so," hoke being a form of oke from which some think our O. K. is derived. This word is not entirely clear.
Mary Hickman . . .	Ato'baa'ntci	Commonly translated, "putting it back." It may be itabanchi or itabananchi, "to put together," or it may contain atoba, "to make of," or "where a thing is made," and anchi, "to put a robe on."

MUSICAL INSTRUMENTS

O'skula	Whistle.
Alepa chito	Big drum.
Iti' mobûbe' (may be Itimaboa also pronounced Itimola be)	"Striking things together." striking sticks.

DANCES

Hila	A dance, or "to dance."
Hila tolupli	Stomp dance.
Shatanni hila	Tick dance.
Tinsanale hila (perhaps from Choctaw iti ^a shanali, to turn or twist around one another)	Drunken-man dance.
Sinti hila	Snake dance.
Kofi hila	Quail dance.
Itimolevi (should perhaps be Itimilauei)	Steal-partner dance.
Taloe	Song.



CHOCTAW MUSIC

By FRANCES DENSMORE

THE CHOCTAW TRIBE

The earliest mention of the Choctaw tribe is in the De Soto narratives.³ In his march down the Alabama Valley in 1540, De Soto took captive "the giant Tascalusa," chief of the Mobile tribe, which was closely related to the Choctaw. Later he passed through some of the eastern towns of the Choctaw Indians on the Black Warrior River.

The Choctaw are a Muskogean tribe whose early home was in southeastern Mississippi and southwestern Alabama. They were mainly an agricultural people when the white man came, and their wars were usually defensive.

The French entered this region at the very end of the seventeenth century and established colonies at Mobile, Biloxi, and New Orleans. Concerning the population of the Choctaw tribe, Dr. J. R. Swanton (1922, pp. 450, 451, 454) says, "It would seem from the figures given us by travelers and officials that during the eighteenth century the tribe had a population of about 15,000."

Friendly relations with the French were established and the Choctaw helped the French in their wars on other tribes. In the war against the Natchez in 1730, a large body of Choctaw warriors served under a French officer. This friendly relationship continued until the English traders succeeded in winning some of the eastern Choctaw villages. War followed between the Choctaw who were friendly to the English and those who remained loyal to the French, this war continuing until 1763. In that year, the French surrendered their possessions in the United States to Great Britain, and members of the Choctaw tribe continued to move across the Mississippi River into Louisiana.

The English authorities in the southern colonies made two or three treaties with Indians in that region, fixing boundaries that were

³ For material regarding the social and ceremonial life of the Choctaws, including salient facts of their history, see Swanton (1922, 1931).

referred to in treaties made later with the United States. The first of these is "a treaty between Great Britain and the Chickasaw and Choctaw Indians," made at Mobile, March 26, 1765. Article 5 of this treaty is, in part,

to prevent all disputes on account of encroachments, or supposed encroachments, committed by the English inhabitants of this or any other of His Majesty's Provinces, on the lands or hunting grounds reserved and claimed by the Chickasaw and Choctaw Indians, and that no mistakes, doubts or disputes, may, for the future, arise thereupon, in consideration of the great marks of friendship, benevolence and clemency, extended to us, the said Chickasaw and Choctaw Indians, by His Majesty King George the Third, we, the chiefs and head warriors, distinguished by great and small medals, and gorgets, and bearing His Majesty's commissions as Chiefs and leaders of our respective nations . . . do hereby agree, that, for the future, the boundary be settled by a line extended from Gross Point, in the island of Mount Louis . . . to the mouth of the eastern branch of the Tombechee River . . .

The exact boundaries are apart from present interest, but the article closes with the statement that "none of His Majesty's subjects shall be permitted to settle on Tombechee River to the northward of the rivulet called Centebonck" (Thomas *in* Royce, 1899, pp. 559, 560).

The first treaty between the Government of the United States and the Choctaw Indians was concluded at Hopewell, S. C., January 3, 1786 (Royce 1899, p. 650). By this treaty the boundaries of certain lands were designated, "the Choctaw nation to live and hunt" within these boundaries. More important was the famous treaty of Dancing Rabbit Creek, September 27-28, 1830, by which all Choctaw, except those who chose to become citizens of the United States, were to surrender their lands east of the Mississippi and to accept in place of them a new Reservation in what is now the State of Oklahoma. The greater part removed soon afterward, but a considerable body, the "Mississippi Choctaw," refused to emigrate, and their descendants remain in their old country to the present day.

The Mississippi Choctaw numbered 2,255 in 1904, 1,162 in 1910, and 1,253 in 1916-19. Harvey K. Meyer, superintendent of the Choctaw Indian Agency at Philadelphia, Miss., states (correspondence December 21, 1939): "When the census for this jurisdiction was compiled in January of the calendar year, a total of 1,974 were then enrolled as eligible Choctaws."

At the present time (1933), many of the Choctaw continue to wear a distinctive costume, evidently influenced by early white settlers. Maggie Billie (pl. 12, fig. 1) is an expert basket maker, and wears this costume when she comes to town. Her dress, apron, woven bead collar, and fancy comb are shown in plates 12 and 13. The latter is made from an ordinary "round comb"; the white ornamentation is cut from a man's celluloid collar and the beadwork is on a stiffened band of dark cloth. The costume of little girls is

similar to that of the women (pl. 14). A head band of pierced silver was formerly worn by the men (pl. 15, fig. 1). At present (1933), the typical costume of a man includes a white shirt opened in the back and having a white bosom that is round at the lower edge. With this is worn a flat collar of woven beadwork (pl. 15, fig. 2) and a necklace consisting of many strings of small beads (pl. 18, fig. 1).

MUSICAL INSTRUMENTS

Striking sticks.—The only instrument used by the Mississippi Choctaw in accompanying their songs is a pair of striking sticks. These are made when needed, and those made by Sidney Wesley were about 10 inches long. The sticks are not round, but slightly flattened on two sides, affording suitable surfaces for striking together. This form of percussion is not common among the Indians but was noted among the Menominee in connection with "magic power."⁴

Drum.—Each medicine man at a ball game carried a drum, beating upon it during the game. Robert Henry, Sidney Wesley, and Gus Willis said that, within their knowledge, the drum has been used at no other time by the Mississippi Choctaw. The instrument is a small hand drum. Evidently this was in general use at an earlier time, as a missionary wrote, "The ancient Choctaw, in all his solemn ceremonies, as well as amusements and merrymakings, did not depend upon the jarring tones of the diminutive drum as he did upon his own voice" (Cushman, 1899). The same authority mentions a drum made from the trunk of a tree.

The Choctaw at Bayou Lacomb, La., used a drum made from a tree trunk.⁵

Whistles.—A description of the cane whistles used by the Choctaw is contained in the section on the ball game (pp. 129, 130). These were blown by the medicine men on the night before that game, and during

⁴ David Amab described the opening of his grandfather's "medicine bundle" at a feast to secure success in hunting. "Amab helped his grandfather prepare the sticks which were tapped together during the songs . . . Those made for the writer were about 9 inches long, but it was not unusual for a hunter to use sticks that were longer. One stick was designated as the 'beater,' and a song concerning this stick was recorded, with the sticks tapped together as an accompaniment" (Densmore, 1932, p. 65).

⁵ "The only musical instrument known to the Choctaw of Bayou Lacomb is the drum (the'ba) a good example of which is represented in plate 7. This is 30 inches in height and 15 inches in diameter. It is made of a section of a black gum tree; the cylinder wall is less than 2 inches in thickness. The head consists of a piece of untanned goat skin. The skin is stretched over the open end, while wet and pliable, and is passed around a hoop made of hickory about half an inch thick. A similar hoop is placed above the first. To the second hoop are attached four narrow strips of rawhide, each of which is fastened to a peg passing diagonally through the wall of the drum. To tighten the head of the drum it is necessary merely to drive the peg farther in. In this respect, as well as in general form, the drum resembles a specimen from Virginia in the British Museum, as well as the drum even now in use on the west coast of Africa. It is not possible to say whether this instrument is a purely American form or whether it shows the influence of the Negro." (Bushnell, 1909, p. 22.) This is similar to the "voodoo drum" of Haiti, a notable example of which is in the United States National Museum. (Cf. Densmore, 1927, p. 57, pl. 23, c.)

the game to bring success to certain groups of players. No other use of the instrument was mentioned by the informants.

CERTAIN PECULIARITIES OF CHOCTAW SONGS

Period formation.—A definite form consisting of several periods recurring in regular order, was first noted by the writer when recording songs of the Yuma Indians, in 1922 (Densmore, 1932). This observation led, eventually, to the study of Choctaw songs in which the same peculiarity was found. The periods, or sections, in these songs are of relative lengths, the second period being much shorter than the first, also higher in pitch and different in rhythm. The first period is usually repeated, but the second is rarely repeated and is followed by a recurrence of the first period, or by one or two other periods. In transcription, these are indicated by the letters A, B, C, and D.

The "period formation" was found, in a somewhat modified form, in songs of the Tule Indians from San Blas, Panama, recorded in Washington in 1924 (Densmore, 1926), and occurred with marked frequency in the songs from Santo Domingo Pueblo, N. Mex. (Densmore, 1938),⁶ and in the songs from Acoma, Isleta, and Cochiti Pueblos.⁷ No evidence of it was found in Nootka and Quileute songs (Densmore, 1939), nor in songs recorded in British Columbia (Anthrop. Pap. No. 27) and in many tribes of Indians in the United States. It was, however, found in a few of the oldest songs recorded among the Seminole Indians in Florida.⁷ Under these circumstances, it seemed desirable to ascertain the distribution of the peculiarity among Indians in the Gulf States. Such a survey was made possible by a grant from the National Research Council and the work began in December 1932. The first tribe visited was the Alabama in Texas. Sixty-two songs were recorded, but none contained this form. The Chitimacha of Louisiana were selected as the next tribe for observation (Densmore, 1943), but no songs remained in that tribe. The oldest man related stories in which songs were formerly sung, but said that he "never was a singer and did not learn the songs."

The Choctaw living near the Choctaw Indian Agency at Philadelphia were then visited and, as usual, the work was begun with the oldest medicine man in the group. Sidney Wesley was asked to record the oldest songs that he could remember, and the period formation was heard in his first song (No. 61). He was encouraged to remember other old songs and the period formation was heard in the fourth, fifth, seventh, eighth, and eleventh songs that he recorded,

⁶ Pages 51 and 52 state that, from the records, this "appears to have been an early custom in Mexico . . . at the time of the Conquest."

⁷ Unpublished material, Bureau of American Ethnology.

as well as in four subsequent recordings. Thus the period formation occurred in 10 of the 25 songs recorded by the oldest Choctaw singer. Next to Wesley in seniority was Robert Henry, who recorded 6 songs, one of which contained the period formation. This did not occur in 27 dance songs recorded by Lysander Tubby and 2 songs recorded by Olman Comby, both being younger singers who recorded only the songs of various dances.

Two periods, designated as A and B, occur in Nos. 11, 12, 40, 41, 45, 46, 48, 49, 51, and 60, and three periods, designated as A, B, and C, in Nos. 56 and 61.

Absence of instrumental accompaniment in certain songs.—This custom was mentioned by informants and noted at the dance attended at Pearl River. The dances without instrumental accompaniment, according to informants, are the War, Tick, Drunken-man, Snake, Steal-partner, and Stomp dances; the songs of the bullet game are also without accompaniment. When listening to the songs at the dance, an effort was made to explain the precision and rhythm without accompaniment. The explanation was found in the manner of singing the songs, especially by the leader. The rhythm was emphasized vocally, and the structure of the melody contributed to the effect. The former peculiarity was afterward heard in the unaccompanied singing of a chorus of Negroes. There was the same throb of a fundamental tone, producing a rhythmic effect not unlike that of an accompanying instrument. Mention may be made here of another mannerism common to Choctaw and Negro singing. This consists in the occasional use of the labial *m*, produced with the lips closed and continuing for the duration of a sixteenth to a dotted quarter note. This was heard also in a few Seminole songs recorded in Florida and in songs of a Makah medicine man, recorded at Neah Bay, Wash., where a company of Spaniards lived for a short time. The Makah singer said this visit of the Spaniards took place during the life of his grandfather's grandfather. The use of the labial may have occurred in the singing of men connected with this expedition, and the Indians may have adopted it, thinking the peculiar sound was connected with "medicine power." This would be in accord with Indian custom. The labial is transcribed with five Makah songs, all being connected with dreams and two being used in the treatment of the sick (Densmore, 1939, pp. 149, 150, 177, 178). The labial in Choctaw singing appears to be without significance, and is not indicated in the transcriptions.

The melodic structure of the Choctaw dance songs is marked by an unusual number of recurrent tones and intervals. The recurrent tone is usually the lowest tone of the melody and its repetition gives a rhythmic effect, like the stroke of a percussion instrument. In

other songs, a recurring interval is followed by a short rest, giving it prominence. This peculiarity cannot be shown in the transcription, but was clearly heard in the repetitions of the songs, at the dance at Pearl River. Examples of songs with recurring tones are Nos. 10, 11, 14, 15, 16, and 17 in the Tick dance songs, No. 37 in the Steal-partner dance songs, and Nos. 45 and 48 in the Stomp dance songs. Examples of songs with recurrent descending intervals are the Snake dance songs (Nos. 31, 32) and the Stomp dance songs No. 46 and Nos. 50 to 54. Thus the leader of the Choctaw singers had a responsibility beyond the actual leading of the songs. He interpreted them by his rendition in such a manner that an accompanying instrument was not necessary.

Striking sticks used as percussion accompaniment.—Indian singers in other tribes have desired some form of percussion accompaniment when recording their songs. The sound of an Indian drum does not record clearly and various substitutes have been used, such as pounding on a pasteboard box, the resultant sound having definiteness without resonance. A Makah singer preferred to pound on the floor with a cane, this sound being clearly recorded. The Choctaw singers did not care for any support to the voice and used the striking sticks only in songs with which they would be used at public gatherings. An exception is the duplicate of the song for success at a ball game (Duplicate of No. 6). This was the first song recorded by Willis, who had not been questioned closely on tribal customs. Lysander Tubby had been recording songs and the striking sticks were in the room, so Willis used them with this first recording.

The striking sticks are described and their use by the Menominee is mentioned on page 117. This form of accompaniment was used with the Bear, Quail, Duck, Terrapin, Turkey, Chicken, and Pleasure dances. (See table 12, p. 187.)

Different "shouts" with each class of dance songs.—These vocalizations, somewhat resembling yells, were rhythmic and preceded and followed the singing of the songs. The leader of the singers began these and the others joined him. The tone was not a singing tone and the shouts cannot be transcribed with any degree of accuracy in musical notation. Two types of these shouts are shown as nearly as is possible in notation, these being the shouts that preceded the Bear dance (No. 42) and those that followed the recording of a Snake dance song (No. 32). This custom has not been observed in northern tribes, though various sorts of yells and vocalizations often precede or follow Indian songs, or may occur during songs at a dance. It may be a form of the "hollering," which is a custom in Negro singing and was designated by that name among the Seminole of Florida.

Swaying effect in melodies of many dance songs.—The rhythmic effect of a dance song is generally due to the spacing of accents and the divisions of the counts, but in many Choctaw dance songs a swaying, rhythmic effect is produced by an alternation of ascending and descending, or descending and ascending intervals. This sequence is repeated throughout the song, and the effect is increased by the repetitions of the song. Among the examples of this rhythmic effect are Nos. 11, 13, 14, 16, 19, 23, 24, 31, 39, 40, 42, 43, and 51.

Indeterminate ending.—The renditions of 2 Choctaw dance songs (Nos. 18 and 19) end on the tone above the keynote. This peculiarity was observed first in a dance song of the Cocopa Indians, living near the southern border of Arizona (Densmore, 1932, song No. 111, p. 182). It was observed next in 8 songs of the Nootka and Quileute in north-western Washington,⁸ and has been found in a few Seminole songs. A tabulated analysis of 1,553 songs recorded among widely separated tribes of Indians shows these 9 songs ending on the second, 1 ending on the sixth, 71 regarded as irregular (without apparent keynote), and the remainder ending on a tone having a chord-relationship to the keynote.

No explanation has been offered for the ending of songs on the tone above the keynote in other tribes, but we note that the duration of certain dances among the Choctaw was said to be the time of dancing around the circle. This would terminate the song arbitrarily. An Indian believed to have been a Choctaw said, "the singing can stop at any time." In view of these circumstances, the ending of a rendition on the tone above the keynote is regarded as an indeterminate ending. It is as though the singer wished to indicate that the singing could be continued through other renditions of the song.

A second voice recorded.—At the suggestion of Lysander Tubby, a second voice, or "part," was recorded with a few of his songs to show the manner in which other voices join that of the leader. Gus Willis was present and consented to sing this "second part," beginning after Tubby and continuing in unison with him. The songs in which he sang with Tubby are Nos. 17, 18, 19, 25, 26, 33, and 35. His voice blended with Tubby's so completely that his entrance could not be discerned on the phonograph record, but notes were made during the performance, stating that Willis entered on the fourth measure in No. 17 and at about the same point in the other songs. During the performance of No. 33, Willis omitted certain single tones, Tubby's voice being heard alone on those tones. Willis also sang the long

⁸ Densmore, 1932, Tabulated analysis, p. 36. The Nootka songs with this ending are Nos. 10, 19, and 20, songs of the potlatch; Nos. 44 and 45, songs of the lightning dance with the Klokali; No. 103, a war song; and No. 172, a Clayoquot song to calm the waves of the sea. The Quileute song is No. 200, used in the treatment of the sick.

tones in this song with a vibrato. From this it appears that the second voice may vary its performance without changing the melody. Willis, as stated, has been a leader of the singers at dances and is considered an authority on the old musical customs.

WAR SONGS

The oldest song⁹ in the present collection is probably the war song recorded by Sidney Wesley. In order to contact this interesting man, the writer went to his house, but he was not at home. The house was difficult to reach, and it was necessary to leave the car, walk through a ravine, and climb a hill on the opposite side. His house was closed, evidently having been unoccupied for some time. Returning to the car, Olman Comby, the interpreter, looked up the valley, and exclaimed, "There comes Wesley." A man was seen at a considerable distance, making his way among the bushes and carrying a pack on his back and a large pail in one hand. As he came nearer, his white hair could be seen, blown back from his face. When he was within hailing distance, Comby called to him and, instead of going up the hill to his house, he crossed the ravine to where we were standing. Evidently he was disturbed about something, which he tried to explain in broken English. This failing, he changed to his native language and told the policeman that he had been trying to live with his daughter but she "would not control her children nor let him reprove them," so he was going back to live alone in his own little house.

After this had been duly discussed, the matter of recording old songs was explained and he consented to sing, suggesting that the recording be done at the home of Mary Hickman, an active old woman living alone, near the Tucker Day School. An arrangement was made with her and the work began on the following day. In plate 16, figure 1, Wesley is seen approaching Mary Hickman's house, bringing a pair of striking sticks, which he has made for use as an accompaniment to his songs.

Mary Hickman is familiar with all the old ways. Her house (pl. 16, fig. 2) has no windows and is warmed by a fireplace. The phonograph was placed on a bench just inside the door and she sat on the porch with her sewing, where she could hear and see all that was said or done, and occasionally she was consulted by Wesley or the interpreter. The house was neat and quiet and the place, with its surroundings of tall pines, was admirably adapted to the work. The open door of the house is seen in the background of her portrait and

⁹ These songs were recorded by Columbia gramophone with special recorders and a specially constructed horn. The speed of the apparatus when recording the songs and when playing them for transcription was 160 revolutions per minute.

that of Wesley (pl. 10, figs. 1 and 2). Thirty songs were recorded by Wesley, 25 of which were transcribed. He selected the songs himself and gave an agreeable variety, which included songs of games, pastimes, and dances, as well as the war song which opens the series.

Sidney Wesley and Mary Hickman danced in the war dances when they were young. There were no wars at that time, but the war dances were held and some of the old songs were sung on those occasions.

Two records of the first song were made, one containing the words "Hispanimi (Spanish) headman I am looking for," and the other substituting "Folance" (French) for the reference to the Spaniards. Wesley did not know the meaning of either of these words, but sang the song as he learned it. The song had two more "verses," each containing the name of a different enemy. One verse mentioned a tribe of Indians that was not identified. A portion of the native name was said to mean horsefly, which was probably a term of contempt. The underscored syllables in the transcription are probably parts of words whose meaning is lost. Both men and women sang in the war dances, and the songs were without instrumental accompaniment.

The contact of the Choctaw with the Spanish, as stated, began about 1540. The French entered the region in the latter part of the seventeenth century and the relations between the Choctaw and the French were friendly until broken by English traders. The eastern Choctaw villages formed an alliance with the English, and war ensued between them and the Choctaw toward the west, who still adhered to the French. From this data it appears that the song originated with the Choctaw in Mississippi and that it is very old.

No. 1. War Song

(Catalog No. 2208)

Recorded by SIDNEY WESLEY

$\text{♩} = 63$

His- pa-ni-mi go yo ho li

*Analysis.*¹⁰—This melody is based on intervals, not on the relationship of tones to a keynote. The principal interval is a whole tone, occurring chiefly between A flat and B flat, next in frequency being the minor third between B flat and D flat. The keynote is regarded as D flat, which occurs as next to the highest tone, and the melody contains only this tone with its second and fifth.

A group of four war songs was recorded by a man who learned them from an older brother. It was said that the first song was sung at the beginning of the preparations for war. No explanation could be obtained beyond the purpose suggested by the title.

¹⁰ These analyses are intended to call attention only to the principal peculiarities of the songs. More detailed descriptive analyses, as well as tabulated analyses, have been submitted to the Bureau of American Ethnology. Small variations in repetitions of songs, if unimportant, are not mentioned in these analyses. The Choctaw singers, like the singers in other tribes, usually sing the major third, perfect fifth, and octave with good intonation, whether as direct or indirect (broken) intervals, and usually maintain the pitch level of a song throughout the renditions. The semitone is the most variable progression in Indian songs.

No. 2. "Begging for Gunpowder" Song

(Catalog No. 2366)

Recorded by LYSANDER TUBBY

$\text{♩} = 69$

Analysis.—A descending fourth followed by an ascending fourth characterizes this song, which is minor in tonality, with the keynote occurring as the highest tone of the compass.

In the next song a man expresses his willingness to go with the war party and his confidence in his protective "medicine."

No. 3. "I Am Going"

(Catalog No. 2367)

Recorded by LYSANDER TUBBY

$\text{♩} = 60$

Free translation

I am going. (Repeated many times.)
My face is painted so they cannot see me.

Analysis.—This interesting melody is based on the minor triad and minor seventh, with the tones occurring in descending order. Slight differences in the repetitions are shown, these occurring in the middle of the song, where changes most frequently occur in the melodic or rhythmic pattern of an Indian song. The transcription is a semitone lower than the pitch of the rendition. As in similar instances, a simpler signature is used when the pitch of the rendition would require six sharps or flats.

Indians of all tribes ridiculed the men who would not go to war. The next song concerns two men who are arranging to run away and evade their duty. One man was to go ahead and wait for the other at an appointed place, after which they would proceed together. The title was given by the singer.

No. 4. "Slacker Song"

(Catalog No. 2368)

Recorded by LYSANDER TUBBY

♩ = 84

♩ = 76

♩ = 84

Fine

Free translation

I will tell you how we are going.
 When you get to that place you must wait for me.

Analysis.—As in No. 2, the keynote occurs only as the highest tone in this melody. The peculiar measure lengths were accurately repeated in all the renditions, also the length of the rests. This transcription contains a plus sign over several notes, showing the tone was slightly above the indicated pitch. This occurs also in Nos. 5, 22, 23, 25, 28, 36, and 38, and is used only when the deviation from pitch is persistent in all the renditions.

The final song of the group celebrates a victory.

No. 5. Victory Song

(Catalog No. 2369)

Recorded by LYSANDER TUBBY

Free translation

Where I went along they saw my tracks,
 After I killed him they saw my tracks and cried.
 My headman told men to kill him,
 I killed him because my headman told me to,
 I hid in the bushes after killing him, but they came near seeing me.

Analysis.—In contrast to the preceding war songs, the keynote of this melody is the lowest tone and is strongly emphasized. This gives an effect of positiveness that has been noted in songs of success in other tribes. A change to minor tonality is indicated by an accidental rather than by a change of signature.

BALL GAME

The playing of the ball game by the Choctaw is a contest of magic power as well as a contest of skill.¹¹ Each group of players has its own medicine men who perform various acts to bring success to them and disaster to their opponents. These men are designated by a word commonly translated "witches," but they will be referred to as medicine men.

¹¹ "In general, in all Indian games, the arrow or the bow, or some derivative of them, is found to be the predominant implement, and the conceptions of the four world-quarters the fundamental idea . . . Back of each game is found a ceremony in which the game was a significant part. The ceremony has commonly disappeared; the game survives as an amusement, but often with traditions and observances which serve to connect it with its original purpose. The ceremonies appear to have been to cure sickness, to cause fertilization and reproduction of plants and animals, and, in the arid region, to produce rain . . . These observations hold true both of the athletic games as well as of the games of chance. The ball was a sacred object not to be touched with the hand, and has been identified as symbolizing the earth, the sun, or the moon" (Culin in *Handbook of American Indians*, 1907, vol. 1, p. 484).

Two men were consulted on this subject. They are considered authorities on the game and live in different localities. Robert Henry lives at Bogue Chitto village and was consulted in his home (pl. 17, fig. 1), and Gus Willis lives at Pearl River. Both men recorded the song that is sung the night before a game, and a comparison of the two renditions is presented with the analysis of the song on page 131. Robert Henry also recorded the sounds of the whistles that are played before and during a game (see p. 129; also Whistle Melody, p. 130). The group at Henry's house included Olman Comby, the interpreter (center), Robert Henry (at his left), members of Henry's family, and informants on the action of the ball game (pl. 17, fig. 2).

Five or six medicine men were attached to each team of players, in former times, and each medicine man had two or three whistles, a drum, and a wand with some small object at the tip. Robert Henry remembered such a wand as having what looked like a red bird at its end. Its use was not described. The whistles are still used and are of different lengths, each having a different mark on one side.

Each player has his own rackets, which are "fixed up" by the medicine men to give success. In old days, the balls were made by the medicine men. It was said, "Some could make a ball that was sure to go straight," and a player would pay a medicine man to make such a ball. This custom has passed away and at present a ball has an ordinary rubber ball as its core. A pair of rackets and a ball were transferred to the writer and are in the possession of the United States National Museum. The ball is covered with a lattice of narrow strips of buckskin. (Pls. 18, fig. 2; 21, fig. 1.)

Before a game the players lay their rackets on the ground and one of their medicine men inspects them. Both Robert Henry and Olman Comby saw this done by an old man named Silwis. A medicine man may put "good medicine" on the rackets of his team of players, and he watches for a chance to put "bad medicine" on the rackets of the opponents, so their balls will "go crooked." A medicine man attached to one side may go to the goal posts of the opponents and "spoil their game," so it is part of the duty of the medicine men to keep the opposing medicine men from coming near their goal posts.

On the night before a ball game, the whistles are blown by the medicine men, there is "talking" in which it is asserted that "You are going to win the game," and the song for success is sung. The whistles are blown during a game, and the medicine men beat on their drums, but there is no singing while the game is in progress. The sound of the whistles during a game was referred to as "the noise made by the witches."

One of the medicine men gives the signal for beginning the game. Each has a ball of a different color and one of them is appointed

to give the signal, which he does by tossing up his ball. The players hold a racket in each hand and are not allowed to touch the ball with their hands. Bob Henry posed with the crossed rackets (pl. 19). Three young Choctaw posed a "scrimmage" in the game (pl. 18, fig. 3). The purpose, as in similar ball games, is to throw the ball between the opponent's goal posts.¹² The details of the play and its score are not of present interest. During a game, the medicine men take turns in standing near the goal posts of their respective teams, to prevent the approach of the opposing medicine men who, it is believed, will cause disaster by means of evil magic.



FIGURE 3.—Design on whistle.

The blowing of cane whistles by the medicine men before and during a ball game has been mentioned. Robert Henry has three of these whistles, which he is accustomed to use at the game, and he recorded the sound of each, playing one after another in rapid succession. Each whistle had its special marking. The first was 12½ inches in length and etched (burned) with the design shown in figure 3. The

¹² "The [racket] game may be divided into two principal classes—first, those in which a single racket or bat is used; second, those in which two rackets are employed. The latter is peculiar to the southern tribes (Cherokee, Choctaw, Muskogee, Seminole), among whom the single racket is not recorded . . . The goals were commonly two sets of posts or poles erected at the extremities of the field, between which the ball had to be driven . . . Among the Choctaw the goals were connected by a pole at the top." (Culin, 1907, pp. 562, 563.)

A variation of this game among the Choctaw of Louisiana was witnessed by Bushnell in 1909 and described by him. "No rackets were used, the ball being caught in the hands and thrown or held while the player endeavored to reach his opponent's goal." (Bushnell, 1909, p. 20.)

second is shown in plate 20, figure 1, and is in the possession of the United States National Museum. This and the third whistle were 11 inches in length. The third whistle was etched with Robert Henry's personal mark (fig. 4). The performance on the second whistle was transcribed, the others being studied and found to contain the same melody. The pitch of the first whistle was a semitone lower than the

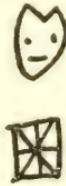


FIGURE 4.—Robert Henry's personal design on whistle.

transcription. The pitch of the third was a whole tone higher than the transcription. The length of the whistle was the same, but the fingerholes were spaced differently. As shown in the portrait of Robert Henry blowing the whistle (pl. 20, fig. 2), the first finger of each hand was placed over a sound hole, the middle finger of the player's left hand being placed between the two sound holes.

Whistle Melody

(Catalog No. 2383)

Recorded by ROBERT HENRY

♩ = 100

♩ = 63

♩ = 126

♩ = 100

The song that was sung the night before a ball game, to give success to the players, was recorded by two men.

No. 6. Song for Success in the Ball Game

(Catalog No. 2263)

Recorded by ROBERT HENRY

$\text{♩} = 84$

Duplicate of No. 6

(Catalog No. 2266)

Recorded by GUS WILLIS

Voice $\text{♩} = 60$ Striking sticks $\text{♩} = 60$

See rhythm of striking sticks below

Rhythm of striking sticks



Analysis.—This melody is almost an incantation, in its simplicity of melody and rhythm. Two renditions are presented, each by a man regarded as an authority on the ball game. The essential rhythm and melody are the same, with a variation that seems permissible among the Choctaw. In both renditions the only descending progressions are whole tones. Both renditions have a compass of a major third. Frequent rests occur in the rendition by Henry, dividing the melody into phrases, but the rendition by Willis, lasting 20 seconds, was sung without a pause for breath, :

The events of the night before a ball game included dancing by both men and women. This is described as follows by Catlin (1913, vol. 2, pp. 142, 143):

The ground having been all prepared and preliminaries of the game all settled, and the bettings all made, and goods all "staked," night came on without the appearance of any players on the ground. But soon after dark, a procession of lighted flambeaux was seen coming from each encampment, to the ground where the players assembled around their respective byes; and at the beat of the drums and chants of the women, each party of players commenced the "ball-play dance." Each party danced for a quarter of an hour around their respective byes, in their ball-play dress; rattling their ball sticks together in the most violent manner, and all singing as loud as they could raise their voices; whilst the women of each party, who had their goods at stake, formed into two rows on the line between the two parties of players, and danced also, in a uniform step, and all their voices joined in chants to the Great Spirit; in which they were soliciting his favor in deciding the game to their advantage; and also encouraging the players to exert every power they possessed, in the struggle that was to ensue.

A group of Choctaw posed with uplifted rackets as shown in the drawing by Catlin (1913, vol. 2, pl. 224), but the action was not explained at the time.

BULLET GAME

Many tribes of Indians have games in which an object is hidden by one group of players, the opponents guessing where it is concealed. In some tribes the object is hidden in a cane tube or wooden container, but the more familiar form of the hidden-ball game is that in which the object is hidden under a moccasin. Among the Chippewa and Sioux this is called the moccasin game. Four moccasins are laid in a row on the ground and a bullet is placed under each moccasin, one bullet being marked. The opponents guess the location of the marked bullet (Densmore, 1929, pp. 114, 115). According to Culin, "the game was borrowed by the whites and played by them under the name of 'bullet'" (Culin, 1907, p. 339). Among the Choctaw this is called the bullet game and the manner of play is similar to the Chippewa moccasin game except that folded handkerchiefs are used instead of moccasins.

Four handkerchiefs of the sort commonly used were obtained and Wesley folded them in the customary manner (pl. 21, fig. 2). The shape is not unlike that of a moccasin and they can be turned or tossed aside easily by the man making the guess. This man holds a long stick with which he turns one after another until he finds the marked bullet. It appears that only one bullet was formerly used by the Choctaw. Wesley said "the old chief dreamed about hiding a bullet under four handkerchiefs; afterward they painted the bullets with different colors." After this had been done, the game probably consisted in locating the bullet of a certain color.

Twenty-four counters or score sticks are used. The manner of keeping the score is apart from present consideration, but it is possible to make four by a correct guess, that number of counters being handed to the correct guesser by the man who hid the bullet. When a correct guess has been made the singing stops. The words of the next song were said to mean, "I will guess so well that I will make four at once." This is an assertion of success, but the words of the song show us the defeated opponent, handing four counters to the successful guesser. The songs of the bullet game are without instrumental accompaniment. There seem to have been few songs with this game, as both Wesley and Tubby said the song they recorded was the only one used during a bullet game.

No. 7. Bullet Game Song (a)

(Catalog No. 2202)

Recorded by SIDNEY WESLEY

$\text{♩} = 144$

The musical score is written in bass clef with a key signature of two sharps (F# and C#) and a 2/4 time signature. The tempo is marked as quarter note = 144. The score consists of five staves of music. The first staff begins with a measure marked (1). The second staff has a measure marked (2) followed by a measure marked (1). The third staff has a measure marked (1). The fourth staff has a measure marked (2). The fifth staff has a measure marked (1). Brackets connect the first and second measures of each staff, and the first and second measures of the fifth staff.

Free translation.—Here are four counters.

Analysis.—The chief interest of this song is in the thematic treatment of the opening phrase. This is evident throughout the melody and is the more interesting as Wesley is not accustomed to singing these old songs at the present time.

No. 8. Bullet Game Song (b)

(Catalog No. 2270)

Recorded by GUS WILLIS

♩ = 144

Irregular in tonality



The next song was intended to confuse the opponents, so they could not guess correctly.

No. 9. Bullet Game Song (c)

(Catalog No. 2371)

Recorded by LYSANDER TUBBY

♩ = 63



Analysis.—The songs of a hidden ball game have been recorded in several tribes and are characterized by a small compass, short phrases, and a style that is somewhat exclamatory. The present melodies are examples of this style.

TICK DANCE

It has been said concerning the Choctaw that, "What they lack in ceremonialism they seem to have made up for in social feasts and dances (Cushman, 1899, p. 221)." The songs of thirteen dances were recorded in connection with the present work and no mention was made of ceremonial action with any of them. This, however, was not a subject of special inquiry.

Bushnell states,

"The Choctaw living at Bayou Lacomb have one dance ceremony, which is in reality a series of seven distinct dances, performed in rotation and always in the same order. [Bushnell, 1909, pp. 20-22, pls. 21, 22.]

These dances are Man dance, Tick dance, Drunken-man dance, Duck dance, Dance Go-and-come, and Snake dance. The songs of the Tick, Drunken-man, Duck, and Snake dances are presented in the order assigned them by this authority. The songs of the three other dances were not recorded, though it is possible that further inquiry might

identify them with recorded songs. At a dance attended by the writer, at Pearl River on the Choctaw reservation, the order of dances was as follows—Tick dance, Steal-partner dance, Bear dance, and Snake dance. These were followed by the Stomp dance, which was given by request. The dancing was outdoors at night, by the light of a fire at one side of the dance circle.

The leader of the singing may dance, if he is a young man, taking his place at the head of the long line of dancers. If he is an older man he "just sings," standing in the middle of the dance circle. The information on the number of singers with all the dances is not entirely clear, but it was said that the leader sings alone in the Quail and Chicken dances, that only the men sing in the Stomp dance, and that everyone sings in the Tick, Steal-partner, Snake, and War dances. The leader begins the song, followed after a short phrase by the others, the women singing an octave above the men. If striking sticks are used, the leader is the only man who provides this accompaniment. The dances with this accompaniment, as stated, are the Bear, Quail, Duck, Terrapin, Turkey, Chicken, and Pleasure dances.

TICK DANCE

Men, women, and children take part in this dance and all join in the singing. Wesley said they form in a long line with the men in advance and move slowly, the step consisting in advancing the left foot, bringing the right foot to a position beside it and standing for a moment on both feet before again going forward. To this description Bushnell adds a statement that—

When they take the forward step they stamp with the right foot, as if crushing ticks on the ground, at the same time looking down, supposedly at the doomed insects.¹³

This dance has many songs, all being sung without accompaniment.

¹³ Bushnell, 1909, pp. 20-22. A song of the Tick dance is presented in musical notation and the action of other dances is described.

No. 10. Tick Dance Song (a)

(Catalog No. 2200)

Recorded by SIDNEY WESLEY

$\text{♩} = 104$

accelerando

$\text{♩} = 126$

Analysis.—The rhythm of this melody is strongly marked, this quality of the melody taking the place of an instrumental accompaniment. The interest of the rhythm centers in the slight variations of the rhythmic unit which produce a swaying effect. The first and second occurrences of the unit begin with a descending progression and the third and fourth occurrences begin with an ascending progression, which produces an effect of swaying. The song has a compass of five tones and contains only the tones of the minor triad and fourth.

No. 11. Tick Dance Song (b)

(Catalog No. 2201)

Recorded by SIDNEY WESLEY

The musical score is written in bass clef and consists of seven staves of music. The tempo markings are $\text{♩} = 132$, $\text{♩} = 120$, and $\text{♩} = 132$. The time signatures are $\frac{2}{4}$, $\frac{3}{4}$, and $\frac{2}{4}$. The score includes two sections labeled 'A' and one labeled 'B'. Section 'A' appears at the beginning and in the middle. Section 'B' appears towards the end. The music features various rhythmic patterns, including eighth and sixteenth notes, and rests. There are also some triplets and slurs indicated.

Analysis.—This song is the first example of the period formation described on page 118. The second period is distinguished by changes of tempo and phrases containing small count-divisions. Two descending, overlapping fourths occur frequently, these being C-G and A-E, but the principal interval in the framework of the melody is the minor third between E and G. A minor third comprises 38 of the 65 intervals.

No. 12. Tick Dance Song (c)

(Catalog No. 2210)

Recorded by SIDNEY WESLEY

$\text{♩} = 63$

Analysis.—This resembles the song next preceding in its period formation. The phrases in period A are long and contain two rhythmic units. Period B contains frequent short rests and no rhythmic unit. A whole tone is the most frequent interval of progression. The pitch was gradually raised a semitone during the singing of this song, a mannerism occurring in no other performance by the Choctaw. It occurs frequently in Pueblo songs and is given extended consideration in *Music of Santo Domingo Pueblo* (Densmore, 1938, pp. 52-54); also in unpublished material on songs of Acoma, Isleta, and Cochiti Pueblos and the Seminole (mss. in Bur. Amer. Ethnol.).

No. 13. Tick Dance Song (d)

(Catalog No. 2215)

Recorded by SIDNEY WESLEY

$\text{♩} = 132$

Analysis.—The emphatic rhythm of this song, together with the rise and fall of the melody, takes the place of an instrumental accompaniment. The song contains no change of measure length, thus maintaining a steady rhythm. Three rhythmic units occur. The second and third units differ in only one tone, but this difference was given with distinctness. The melody lies partly above and partly below the keynote, and contains only the tones of the minor triad and fourth.

Another song of this dance, recorded by Wesley but not transcribed, was difficult to translate. The interpreter first said the words meant, "My friend, this song is going away mocking me," and added that the second word was literally "people," but understood to mean "friend," also that the word translated "mocking" did not carry any unpleasant meaning, but could also be translated "imitating." There was considerable discussion and it developed that reference was being made to the phonograph which would repeat the sound of Wesley's voice. The final translation appeared to be addressed to the phonograph and was as follows, "My friend, when you go away you will sing like I sing." In another tribe a singer referred to the phonograph as a personality saying, "How did it learn the song so quick? That is a hard song."

Lysander Tubby, who recorded many songs of this dance, said that, at a dance, each song is sung three times, this series being called "once through the song," after which another song is started. Tubby is leader of the singers at Pearl River, where the writer witnessed this dance. The leader started each song and after two or three measures the men took up the melody, followed, after about the same time, by the women singers.

No. 14. Tick Dance Song (e)

(Catalog No. 2357)

Recorded by LYSANDER TUBBY

$\text{♩} = 80$

Analysis.—This song has a compass of 11 tones, which is the largest in the Choctaw songs. It is based chiefly on the major triad with an emphasis on E in the lower octave.

No. 15. Tick Dance Song (f)

(Catalog No. 2358)

Recorded by LYSANDER TUBBY

$\text{♩} = 80$

Analysis.—Only the tones of a minor third and fourth occur in this song. The general trend is a descending fourth followed by an ascending and descending minor third. This transcription contains a minus sign over one note, showing the tone was slightly below the indicated pitch in all the renditions. Other songs containing this sign are Nos. 17, 36, and 38.

No. 16. Tick Dance Song (g)

(Catalog No. 2370)

Recorded by LYSANDER TUBBY

♩ = 84
(1)

Analysis.—This melody is based on intervals, not on the relationship of tones to a keynote. As in similar songs, the signature is used for convenience in showing the pitch of the tones, not as an indication of *key* in the musician's use of that term. Three descending fourths form the framework of the melody. In the order of occurrence there are A flat-E flat, B flat-F, and E flat-B flat.

In this and the two songs next following a second singer joined, as the dancers would join the leader in singing.

No. 17. Tick Dance Song (h)

(Catalog No. 2374)

Recorded by LYSANDER TUBBY and GUS WILLIS

♩ = 100

Analysis.—The keynote and fifth are the most prominent tones in this melody. The tone transcribed as G sharp was clearly sung, also the augmented second which follows. Gus Willis joined with Tubby in this song to show the manner in which other singers join the leader. His voice entered on the fourth measure and continued in unison with Tubby's. Other songs in which Willis joined are Nos. 18, 19, 25, 26, 33, and 35. This "second part" is not indicated in the transcriptions (cf. p. 121).

No. 18. Tick Dance Song (i)

(Catalog No. 2375)

Recorded by LYSANDER TUBBY and GUS WILLIS

$\text{♩} = 80$

No. 19. Tick Dance Song (j)

(Catalog No. 2376)

Recorded by LYSANDER TUBBY and GUS WILLIS

$\text{♩} = 63$

Analysis.—With the exception of one tone, each of these melodies lies within the compass of a fifth and its principal tones are those of a major triad. A majority of the intervals are descending progressions, and the performance ended on the tone above the keynote.

The next song was explained as follows: "In this song a man says he has danced so much that he has lost his wife but he don't mind it."

No. 20. Tick Dance Song (k)

(Catalog No. 2352)

Recorded by OLMAN COMBY

$\text{♩} = 66$

Analysis.—This melody as recorded by Olman Comby is more melodious and less rhythmic than the six preceding versions of the Tick dance song sung by Lysander Tubby. Comby is an Indian policeman at the agency and expressed familiarity with Choctaw customs in other localities. The tonality of this song is major but the minor third below the keynote is a prominent interval. The descent to this tone produces a minor triad with minor seventh, the tones being in descending order. In structure the song may be said to consist of two overlapping triads, the upper being major and the lower being minor. The song has a compass of an octave and lies partly above and partly below the keynote.

DRUNKEN-MAN DANCE

No information was obtained concerning this dance among the Choctaw. Several songs of a dance with the same name were recorded among the Seminole in Florida and the Seminole informant said the name did not give a correct impression. He said the dancers acted as though they were happy and exuberant—so happy that they appeared as though intoxicated, but that there was no idea of actual drunkenness in the minds of the Indians.¹⁴ A song of this dance, in musical notation, is presented by Bushnell (1909, p. 21), who describes the dance as follows:

Two lines facing each other are formed by the dancers, who lock arms. The lines slowly approach, then move backward, and then again approach. All endeavor to keep step, and during the dance all sing.

An example of the songs is presented, following this description.

¹⁴ Unpublished material, Bureau of American Ethnology.

No. 21. Drunken-man Dance Song (a)

(Catalog No. 2355)

Recorded by ROBERT HENRY

♩ = 112

♩ = 100

♩ = 112

♩ = 100

♩ = 112

Fine.

No. 22. Drunken-man Dance Song (b)

(Catalog No. 2363)

Recorded by LYSANDER TUBBY

♩ = 96

(1)

(1)

(2)

(1)

(1)

(3)

(2)

(3)

(1)

(3)

(2)

(3)

No. 23. Drunken-man Dance Song (c)

(Catalog No. 2364)

Recorded by LYSANDER TUBBY

$\text{♩} = 100$

The musical score is written in bass clef with a 2/4 time signature and a key signature of one sharp (F#). The tempo is marked as quarter note = 100. The score consists of seven staves of music. Each staff contains a sequence of notes and rests, with various phrasing marks and articulations. The first staff begins with a tempo marking $\text{♩} = 100$. The music is divided into measures by vertical bar lines. Above the staves, there are several horizontal lines with numbers (1), (2), and (3) indicating phrasing or measure groupings. Some notes have a '+' sign above them, and some have a '7' below them, possibly indicating a specific articulation or a measure rest. The score ends with a double bar line and repeat dots.

No. 24. Drunken-man Dance Song (d)

(Catalog No. 2365)

Recorded by LYSANDER TUBBY

$\text{♩} = 96$

The musical score consists of five staves of music in bass clef, 4/4 time, with a key signature of two flats (B-flat and E-flat). The tempo is marked as quarter note = 96. The first four staves contain the main melody, which features a mix of eighth and quarter notes with some rests. The fifth staff contains a double bar line with a first ending bracket over measures 1-10 and a second ending bracket over measures 11-12, both ending with a repeat sign.

No. 25. Drunken-man Dance Song (e)

(Catalog No. 2379)

Recorded by LYSANDER TUBBY and GUS WILLIS

♩ = 96

The musical score consists of eight staves of music, all in bass clef with a key signature of one sharp (F#) and a 2/4 time signature. The tempo is marked as ♩ = 96. The music is written in a single melodic line with various rhythmic values including eighth and sixteenth notes, often beamed together. There are several measures with a '7' below them, likely indicating a specific rhythmic pattern or a common mistake. The score is divided into measures by vertical bar lines, and some measures are grouped by horizontal lines above the staff. There are also some '+' signs above certain notes, possibly indicating accents or breath marks. The piece concludes with a double bar line and repeat dots.

No. 26. Drunken-man Dance Song (f)

(Catalog No. 2380)

Recorded by LYSANDER TUBBY and GUS WILLIS

$\text{♩} = 96$

No. 27. Drunken-man Dance Song (g)

(Catalog No. 2381)

Recorded by LYSANDER TUBBY

$\text{♩} = 96$

No. 28. Drunken-man Dance Song (h)

(Catalog No. 2382)

Recorded by LYSANDER TUBBY

$\text{♩} = 60$

Analysis.—The Drunken-man dance songs (Nos. 21-28) are simple and do not require detailed analysis. A majority of the melodies are based on a

major or minor triad and the count divisions consist chiefly of quarter and eighth notes. A nota legato occurs in Nos. 23 and 26, and a swaying effect is given by the melody and rhythm of No. 26, a melody lying partly above and partly below the keynote. The melodic material of No. 26 consists of a tone (regarded as the keynote) with a minor third above and a whole tone below that tone. In No. 27 the only tones are a keynote with its minor third and fourth. The keynote in No. 28 is F, but the third above that tone does not occur. This song contains a more varied rhythm than other songs of this dance.

DUCK DANCE

The action of this dance appears to consist of two parts, each imitating the ducks. The dancers are in couples, two men holding hands and facing two women who also hold each other's hands. The men raise their hands and the women stoop and pass underneath, this being "like ducks going under water." The women are then face-to-face with two other men who, in turn, raise their hands and the women again "dive" underneath. It was also said that the dancers *slip* their feet back and forth, at first slowly and then faster until the motion is a "fast shuffle." The singer leads in the motion. In songs of the Duck dance and the Quail dance the tempo was gradually increased, to correspond with the motion that has been described. This change is not shown in the transcription. The songs of this dance were accompanied by the striking of sticks. Wesley made these and brought them with him when coming to record songs on the second day (cf. p. 122 and pl. 16, fig. 1).

In describing the Duck dance, Bushnell says (1909, p. 21):

Partners are required in this dance also; they form two lines, facing. The peculiar feature is that two partners pass under the arms of another couple, as shown in plate 21. The dancers endeavor to imitate the motion of a duck in walking, hence the name of the dance.

No. 29. Duck Dance Song (a)

(Catalog No. 2203)

Recorded by SIDNEY WESLEY

$\text{♩} = 76$

The musical score consists of five staves of music. The first staff begins with a treble clef, a key signature of one sharp (F#), and a 4/4 time signature. A tempo marking of quarter note = 76 is placed above the first staff. The music is written in a single melodic line. The second staff continues the melody and includes a triplet of eighth notes. The third and fourth staves feature bracketed phrases, indicating repeated rhythmic units. The fifth staff concludes the piece with the word 'Fine' centered below it.

Analysis.—The principal interval in this song is the major third from G to B, followed by a descent to D in some measures and to E in others. Thus the tonality seems to waver between major and minor. With a single exception the rhythmic unit occurs on one series of tones, suggesting the repetition of a single motion in the dance. The opening phrase is energetic, the rhythmic unit is brisk, and the whole song is lively and interesting.

No. 30. Duck Dance Song (b)

(Catalog No. 2269)

Recorded by GUS WILLIS

Voice $\text{♩} = 132$ Striking sticks $\text{♩} = 132$

See rhythm of striking sticks below

Rhythm of striking sticks

Analysis.—Repetitions of the rhythmic unit constitute this entire melody, with the progressions alike on the second and alternate phrases. These suggest a major triad, while the first phrase and alternate phrases are based on a minor triad. The tone material is that of the fourth 5-toned scale,¹⁵ and about two-thirds of the intervals are whole tones. The striking sticks are in the same meter as the voice, but each stroke slightly preceded the voice, as though hastening it.

SNAKE DANCE

This is last of the dances named in prescribed order by Bushnell, and was fourth in order of the dances seen by the writer. The dance is common to many tribes and has been seen, by the writer, among the Winnebago and Menominee in Wisconsin. Men and women take part in the dance, holding hands in a long line and following a leader.

¹⁵ See footnote to table 6, p. 186.

At first they move in sinuous curves, then in a wide circle that gradually narrows until the dancers are in a compact mass with the leader in the middle. By a series of clever maneuvers, he then unfolds the line of dancers until they are again in a long line. The latter part of this performance differs from the description by Bushnell which represents the custom among the Choctaw at Bayou Lacomb, La.¹⁸ The songs among the Choctaw of Mississippi are without instrumental accompaniment. Snake dance songs recorded among the Seminole were also without accompaniment.

No. 31. Snake Dance Song (a)

(Catalog No. 2204)

Recorded by SIDNEY WESLEY

The musical notation is presented in four staves, all in bass clef with a key signature of one sharp (F#) and a time signature of 2/4. The first two staves are marked with a tempo of $\text{♩} = 66$. The first staff contains four measures, with the first and third measures marked with a circled '1' and a slur above them. The second staff contains five measures, with the second and fourth measures marked with a circled '1' and a slur above them. The third and fourth staves are marked with a tempo of $\text{♩} = 152$. The third staff contains five measures, with the first, second, fourth, and fifth measures marked with circled '1' and '2' respectively, and slurs above them. The fourth staff contains five measures, with the second measure marked with a circled '2' and a slur above it, and the last two measures marked with '1' and '2' respectively, with slurs above them.

¹⁸ In the snake dance "the dancers form in a single line, either grasping hands or each holding on to the shoulder of the dancer immediately in front. First come the men, then the women, and lastly the boys and girls, if any are to dance. The first man in the line is naturally the leader; he moves along in a serpentine course, all following. Gradually he leads the dancers around and around until the line becomes coiled, in form resembling a snake. Soon the coil becomes so close it is impossible to move farther; thereupon the participants release their hold on one another and cease dancing. As will be seen, the song belonging to this dance is very simple, but it is repeated many, many times, being sung during the entire time consumed by the dance, said to be an hour or more" (Bushnell, 1909, pp. 21, 22, and pl. 22). A song of this dance, in musical notation, is presented by Bushnell, also illustrations showing the action of the dancers.

No. 32. Snake Dance Song (b)

(Catalog No. 2373)

Recorded by LYSANDER TUBBY

$\text{♩} = 63$

(1) (1)

(2) (2)

(2) (2)

(2)

Fine 7 times 5 times

Analysis.—These two songs (Nos. 31, 32), recorded by different singers, are practically the same in the first portion but differ in the second portion which was repeated an indefinite number of times in the dancing. The first song is the more interesting and contains a change of tempo. The second song maintains the original tempo and was sung by the customary leader of the dance. The original tempo and pitch are about the same in the two songs. As in many other Choctaw songs, the framework is that of a triad with the third as the highest tone.

The following dances are not mentioned by Bushnell. The Steal-partner, Bear, and Stomp dances were witnessed by the writer.

STEAL-PARTNER DANCE

Men and women took part in this dance, and Wesley said "they dance a long time with the first partner and then change to the second." No further description was obtained. The songs are without instrumental accompaniment.

No. 33. Steal-partner Dance Song (a)

(Catalog No. 2377)

Recorded by LYSANDER TUBBY and GUS WILLIS

♩ = 80

(1)

(1)

(1)

(1)

(2) ♩ = 63 (2)

(3) (1)

(1) (1)

Fine (1)

Translation.—I am stealing from you. You are not trying to get it back.

Analysis.—A change of tonality from major to minor without a change of keynote occurs in this song and is indicated in the transcription. The descending fourth is prominent throughout the melody.

No. 34. Steal-partner Dance Song (b)

(Catalog No. 2359)

Recorded by LYSANDER TUBBY

♩ = 92

(1)

(1)

(2) (1) (2)

No. 35. Steal-partner Dance Song (c)

(Catalog No. 2378)

Recorded by LYSANDER TUBBY and GUS WILLIS

$\text{♩} = 80$

No. 36. Steal-partner Dance Song (d)

(Catalog No. 2360)

Recorded by LYSANDER TUBBY

$\text{♩} = 92$

No. 37. Steal-partner Dance Song (e)

(Catalog No. 2361)

Recorded by LYSANDER TUBBY

$\text{♩} = 92$

Fine

No. 38. Steal-partner Dance Song (f)

(Catalog No. 2362)

Recorded by LYSANDER TUBBY

$\text{♩} = 144$

(1) (1) (2) (3) (2) (1) (1) (3) (1) (1)

Fine

Analysis.—The first song of this group (Nos. 34-38) begins with a minor third and is clearly minor in tonality, but the others begin with a major third, followed by a descent of a minor third completing a minor triad. Nos. 35, 36, and 37 were recorded on the same day, with several renditions of each, and No. 38 was recorded a few days later. On comparing the transcriptions, we note such a resemblance in general form that they might, possibly, be regarded as variants of a single melody. The singer, however, was a man of unusual ability and experience and the Steal-partner dance is a popular dance, employing many songs. Under these circumstances it is possible that close resemblances might occur in the melodies, which he recorded without hesitation. The most elaborate of these songs is No. 38, which contains three rhythmic units, numerous measures in 5-8 time, and several occurrences of nota legato. In Nos. 33 and 35 Gus Willis joined the singer after the first phrase, the voices continuing in unison (cf. p. 121).

No. 39. Steal-partner Dance Song (g)

(Catalog No. 2205)

Recorded by SIDNEY WESLEY

♩ = 116

Part 1

Fine

♩ = 116

Part 2

Analysis.—The two parts of this song were separated by a pause in the recording. The first part is based on the fourth 5-toned scale and if the second part were a tone higher, it would correspond to the upper portion of that series. It is transcribed as sung, and we note that the second part is on a minor third, suggesting the change from major to minor tonality that was noted in earlier songs of this dance. The rhythmic units in the two parts are the same length but differ in count divisions.

BEAR DANCE

This was said to be a "hard jumping dance." It could be held at any time and the dancers were men and women, moving in couples around the circle and preceded by a leader. The songs were accompanied by the striking sticks, carried by the leader who also led the singing and the "yells," which were frequently given between renditions of the songs. Wesley, who recorded the next song, said "when the song goes up higher the dancers step harder and all *holler*." He probably referred to the fourth and sixth long phrases in which the tone D, as recorded, was shouted rather than sung. The pitch of this tone can be indicated only approximately in notation.

No. 40. Bear Dance Song (a)

(Catalog No. 2192)

Recorded by SIDNEY WESLEY

Voice $\text{♩} = 88$ Striking sticks $\text{♩} = 88$

Rhythm of striking sticks similar to No. 30

Analysis.—An interesting change of rhythm occurs in this melody. The divisions of the five counts beginning with the last count in the third measure are the same as in the two preceding measures, but a change of accent produces a different rhythm. A whole tone comprises one-half the progressions, next in frequency being a minor third. This melody contains the period formation, but the form is not so clear as in the song next following.

No. 41. Bear Dance Song (b)

(Catalog No. 2264)

Recorded by ROBERT HENRY

Analysis.—A minor triad forms the framework of period A in this melody. Period B opens with an ascent to the seventh, the melody then descending on the tones of a minor triad and minor seventh, a sequence of tones characterizing primitive music. Period B is in double time in its first occurrence and in triple time in its second occurrence. The melody tones are those of the second 5-toned scale.

The man who recorded the next two songs was formerly a leader in the Bear dance. He said that, in the dance, they sang the first of these songs twice, then changed the step, and sang the second song twice, and then repeated the first song.

No. 42. Bear Dance Song (c)

(Catalog No. 2267)

Recorded by GUS WILLIS

Voice ♩ = 88

Striking sticks ♩ = 88

Rhythm of striking sticks similar to No. 30

No. 43. Bear Dance Song (d)

(Catalog No. 2268)

Recorded by GUS WILLIS

Voice ♩ = 88

Striking sticks ♩ = 88

Rhythm of striking sticks similar to No. 30



Analysis.—The short rhythmic unit in the first of these songs is extended in the second. A major triad forms the framework of the first song and the middle phrase of the second, followed by a distinct change of rhythm and a descent to E, introducing a minor triad and minor seventh with the tones in descending order. The “shouts” with the two songs were different, those which preceded and followed the first song being shown as nearly as possible in the transcription. The second song is in the same tempo as the first. The “shouts” were different and are not indicated. The melody tones of both songs are those of the fourth 5-toned scale and the number of progressions is the same in both songs, comprising 12 descending and 9 ascending intervals. Variety is given to the rhythm of the striking sticks by a change to 2 eighth-note beats on the last count of each triple measure.

STOMP DANCE

This is not one of the dances that are given in prescribed order. On the occasion of the writer's visit, the Stomp dance was given by request, following the other dances. Men and women stood in a circle, facing the center. They were not in couples but in any desired order, and all joined in the songs. The leader of the singing was an old man, who stood in the middle of the circle. As stated, the leader of the singing need not take part in the dancing, though a young man usually leads the line of dancers and sings. The motion of the dance consisted in jumping with both feet at once, the circle of dancers moving in a contraclockwise direction. No instrumental accompaniment was used with these songs.

A general characteristic of the 12 Stomp dance songs under analysis is their rhythmic structure. Five of these songs contain three rhythmic units, 3 have 2 rhythmic units, 3 have 1 rhythmic unit, and 1 song contains no unit in its first rendition and 2 rhythmic

units in its repetition by the same singer. A period formation occurs in 5 of these songs (Nos. 45, 46, 48, 49, and 51). The first 8 songs were recorded by Sidney Wesley and their complicated rhythms were sung with remarkable clearness. The remaining four songs were recorded each by a different singer and are less elaborate than the songs recorded by Wesley. A variation or change in the Stomp dance is the Backward-and-forward dance (cf. No. 56, p. 171).

No. 44. Stomp Dance Song (a)

(Catalog No. 2194)

Recorded by SIDNEY WESLEY

♩ = 72

The musical score for No. 44 consists of six staves of music in bass clef, key signature of three flats (B-flat, E-flat, A-flat), and a 3/4 time signature. The tempo is marked as quarter note = 72. The score features complex rhythmic patterns with triplets and changes in time signature (3/4, 2/4, 3/4). Brackets and circled numbers (1), (2), and (3) indicate specific rhythmic units or phrases within the score.

Analysis.—This melody contains only the tones B flat and D flat except the occurrence of E flat in three measures. The three rhythmic units are in triple time and change to double time, but the count divisions in each are different. Ascending and descending intervals are equal in number, each consisting of 12 minor thirds and 3 fourths.

No. 45. Stomp Dance Song (b)

(Catalog No. 2195)

Recorded by SIDNEY WESLEY

$\text{♩} = 66$

A

(1)

(1)

(1)

(2)

(1)

B

A

(1)

(1)

(1)

(1)

(2)

(1)

(2)

(1)

Analysis.—A period formation characterizes this song, the second period being short and higher in pitch than the remainder of the melody. The most prominent interval is the whole tone between F sharp and G sharp. Except for one ascending fourth, the intervals consist of whole tones and minor thirds.

No. 46. Stomp Dance Song (c)

(Catalog No. 2196)

Recorded by SIDNEY WESLEY

The musical score is written in bass clef with a key signature of two sharps (D major) and a 3/4 time signature. The tempo is marked as $\text{♩} = 66$. The score is divided into two main sections, A and B, indicated by letters above the staves. Section A spans the first six staves, and Section B spans the last two staves. The music features a series of eighth and sixteenth notes, often beamed together. Phrasing is indicated by brackets and numbered labels (1, 2, 3) above the notes. Section A begins with a measure of 2/4 time, which then returns to 3/4. Section B also begins with a measure of 2/4 time. The piece concludes with a final measure in 3/4 time.

Analysis.—In period formation this resembles the song next preceding. The highest tone occurs in the second period, as in a majority of songs with this form. In approaching this high tone, the singer overreached the interval and sang D sharp instead of D. The next note was B, after which he gradually lowered the pitch level until the final tone of the measure was A, as transcribed. This change in pitch level was clearly unintentional and is not shown in the transcription. The second period resembles the third rhythmic unit, but the change in the rhythm of the first count gives emphasis to the phrase.

No. 47. Stomp Dance Song (d)

(Catalog No. 2197)

Recorded by SIDNEY WESLEY

$\text{♩} = 76$

(1)

(1)

(1)

(2)

(2)

(3)

(3)

(3)

Translation.—Tobacco I will smoke, bring me fire (a light?). I am going to dance.

Analysis.—The keynote is the highest tone in this song and does not occur in the lower octave. The song is major in tonality, but about one-fourth of the intervals are minor thirds. The intervals of a major third and major sixth do not occur, and the fourth is a prominent interval. Ascending and descending progressions are about equal in number. The third measure is an interesting phrase and occurs at the close of each rhythmic unit.

No. 48. Stomp Dance Song (e)

(Catalog No. 2198)

Recorded by SIDNEY WESLEY

$\text{♩} = 72$

The musical score is written in bass clef with a key signature of one flat (B-flat) and a time signature of 3/4. The tempo is marked as quarter note = 72. The piece is divided into sections A and B. Section A consists of the first four staves, and Section B consists of the last two staves. The score includes first, second, and third endings, indicated by numbers in parentheses above the notes. A 9/4 time signature change occurs in the second staff. The piece concludes with a double bar line at the end of the sixth staff.

Analysis.—An alternation of ascending and descending phrases characterizes this melody and produces a swaying effect. Attention is directed to the sixth and seventh measures which resemble the second rhythmic unit but are in double instead of triple time. The length of the periods is similar to that in the two preceding songs of this group.

No. 49. Stomp Dance Song (f)

(Catalog No. 2199)

Recorded by SIDNEY WESLEY

$\text{♩} = 138$

A

The musical score is written in bass clef with a key signature of one flat (B-flat) and a time signature of 3/4. It consists of six staves of music. The first staff is marked with a bracket and the letter 'A'. The second staff has a '2' above it. The third staff has a bracket and 'A' above it. The fourth staff has a bracket and 'B' above it. The fifth staff has a bracket and 'A' above it. The sixth staff has a bracket and 'A' above it. The music features a rhythmic pattern of eighth and sixteenth notes, with some rests and accents. The tempo is indicated as 138 beats per minute.

Analysis.—This lively song contains only the tones of a major triad and second. The characteristic interval is a fourth, which comprises almost half the progressions. This occurs generally as a descending followed by an ascending interval.

No. 50. Stomp Dance Song (g)

(Catalog No. 2211)

Recorded by SIDNEY WESLEY

$\text{♩} = 116$

Analysis.—Three rhythmic units occur in this song, the second measure being the same in all. There is no change of measure lengths, which is unusual in Indian songs. The tones are those of the fourth 5-toned scale and the melody is framed chiefly on the descending fourths C-G, and B flat-F, the former being a broken and the latter a direct progression. The descending intervals are more than double the ascending intervals in number.

No. 51. Stomp Dance Song (h)

(Catalog No. 2216)

Recorded by SIDNEY WESLEY

First rendition

$\text{♩} = 63$

A

B

A

Second rendition

$\text{♩} = 72$

(1)

(1)

(1)

(1)

(1)

(2)

(2)

Analysis.—Two renditions of this song, by the same singer, are presented for comparison. It will be noted that the principal phrase is the same in each. This occurs first in the third measure of the first rendition and appears throughout both performances. The first rendition is characterized by a period formation that does not appear in the second. The rhythmic unit of this performance is interrupted by the vigorous phrase designated as period B. The melody tones of both renditions are those of the fourth 5-toned scale and the song progresses chiefly by whole tones and minor thirds.

No. 52. Stomp Dance Song (i)

(Catalog No. 2271)

Recorded by GUS WILLIS

First rendition

$\text{♩} = 66$

Second rendition

$\text{♩} = 66$

Analysis.—Two renditions of this song were recorded and both are presented, the second followed by the first after a short pause. Slight differences occur and will be readily noted. The tones, the tempo, and the pitch of the two are the same, also the use of two rhythmic units. The first rendition contains an introductory phrase which is indicated as a rhythmic unit. This does not occur in the repetition of the song.

No. 53. Stomp Dance Song (j)

(Catalog No. 2372)

Recorded by LYSANDER TUBBY

$\text{♩} = 108$

$\text{♩} = 76$ *ritard* $\text{♩} = 108$

$\text{♩} = 76$ $\text{♩} = 108$

No. 54. Stomp Dance Song (k)

(Catalog No. 2354)

Recorded by ROBERT HENRY

$\text{♩} = 63$

$\text{♩} = 96$ $\text{♩} = 63$

$\text{♩} = 96$ $\text{♩} = 63$

No. 55. Stomp Dance Song (1)

(Catalog No. 2353)

Recorded by OLMAN COMBY

♩ = 69

Analysis.—These songs (Nos. 53-55) are minor in tonality. The keynote is the lowest tone in each, and the principal progression is between this tone and its third. Nos. 54 and 55 contain the tones of the complete triad. The rhythm of these songs is simple, and the rhythmic units in Nos. 54 and 55 contain only one measure. When transcribing No. 53, a sharp sound was heard on the record. This was identified as the barking of Tubby's dog, which was allowed in the room while he recorded his songs.

An additional Stomp dance song recorded by Willis was not transcribed. This melody consists entirely of ascending and descending fourths, repeated rhythmically and forming a brief melodic phrase.

According to Wesley, the Backward-and-forward dance was a "variation or change in the Stomp dance."

No. 56. Backward-and-forward Dance Song

(Catalog No. 2206)

Recorded by SIDNEY WESLEY

♩ = 120

Analysis.—Three periods comprise this melody, each having its own rhythmic unit. The second period begins on a higher tone, but the remainder of the melody contains only the tones A and B.

TERRAPIN, QUAIL, TURKEY, CHICKEN, AND PLEASURE DANCES

The five dances next following may be held at any time. The dancers are in couples, a man and a woman dancing together. They move four times around the circle, moving in a contraclockwise direction, singing one song. After circling four times, they begin another song. The leader of the singing is usually the leader of the dancers, taking his place at the head of the line. However, if he is an old man he is excused from leading the dancers and stands within the circle, singing and beating the striking sticks together to mark the time. The origin of these dances was not ascertained.

No. 57. Terrapin Dance Song (a)

(Catalog No. 2207)

Recorded by SIDNEY WESLEY

$\text{♩} = 132$

$\text{♩} = 152$
ritard

Analysis.—This melody consists of four repetitions of the rhythmic unit. In three of its occurrences it is preceded by an unaccented tone and in the first by an accented half note. The tone material is that of the fourth 5-toned scale and about half the progressions are whole tones. An increase in tempo, customary in the dance, is shown in the transcription.

No. 58. Terrapin Dance Song (b)

(Catalog No. 2356)

Recorded by ROBERT HENRY

Voice $\text{♩} = 72$
 Striking sticks $\text{♩} = 72$
 See rhythm of striking sticks below

Rhythm of striking sticks

Analysis.—The descent of an octave in the first and second measures of this song is interesting and unusual. A long descent occurs four times in the song, each descent being in two measures. The rhythmic unit is modified in the closing measures of the melody.

A characteristic of the Quail and Duck dances (Nos. 29, 30) is a gradual increase in time, possibly associated with the motion of the birds. The leader sang alone in this dance, and the songs were accompanied by the striking sticks.

No. 59. Quail Dance Song

(Catalog No. 2265)

Recorded by SIDNEY HENRY

$\text{♩} = 76$

Analysis.—The principal interval in this song is a major third (A-C sharp), which is followed in the second measure by a descent to F sharp, forming a minor triad, and in the fourth measure by a descent to E, completing a major triad. This form continues throughout the song and has been noted in numerous other Choctaw songs. Two rhythmic units occur, and the melody progresses by 18 ascending and 19 descending intervals. The tempo increased from $\text{♩} = 76$ to $\text{♩} = 92$ in the repetitions of the song.

The step of the Turkey dance consists of a hop with both feet together, first one foot and then the other being placed forward. The song of this dance has words, but their meaning is not known at the present time. It is undoubtedly an old song.

No. 60. Turkey Dance Song

(Catalog No. 2209)

Recorded by SIDNEY WESLEY

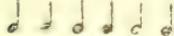
Voice $\text{♩} = 72$

Striking sticks $\text{♩} = 72$

See rhythm of striking sticks below

The musical score is written on six staves. The first five staves represent the voice part, and the sixth staff represents the striking sticks. The music is in 4/4 time and features a melody with a major third interval and a descending line. The score includes two main sections, A and B, with first and second endings marked (1) and (2).

Rhythm of striking sticks



Analysis.—This melody is an interesting example of period formation, the second period being short, higher in pitch than the first and different in

rhythm. A recurrence of the first period closes the song. Two rhythmic units occur, neither being in the second period. The first unit is based on a minor third and the second on the interval of a fourth, these units occurring chiefly in descending progression. Fourths and whole tones are equal in number, which is unusual in Indian songs. A swaying motion, with ascending and descending intervals in rapid succession, characterizes this and has been noted in other Choctaw dance songs.

The Chicken dance is usually the last dance at a gathering, and the dancers do not join in the songs, the leader singing alone.

No. 61. Chicken Dance Song

(Catalog No. 2193)

Recorded by SIDNEY WESLEY

Voice ♩ = 63
 Striking sticks ♩ = 63
 Rhythm of striking sticks similar to No. 60
 Irregular in tonality

Analysis.—This was the first song recorded by Sidney Wesley. After he had recorded a second song, he expressed dissatisfaction with his first performance, saying he had not recorded the entire song and asking that another record be made. This was done, and the transcription is from his second recording of the song. On comparing the two performances, it was found that the first did not contain the third period. This, together with the intricate rhythm of the song, is an evidence of musical ability on the part of the singer. An entire change of rhythm occurs in the second period which is made emphatic by an accent on a sixteenth note. Four rhythmic units are shown in the transcription. The fourth unit begins with an unaccented tone, the next measure comprising

the latter portion of the third rhythmic unit. About half the intervals are whole tones, and the fourths and major thirds are equal in number.

In the Pleasure dance the men are in one row and the women in another row, facing them. They move their hands up and down, as though shaking corn in a basket, all moving their hands together. The word *yoha* means "shift," and the men said, "yoha," the women responding "ha." The syllables transcribed with the song are probably adaptations of these words.

No. 62. Pleasure Dance Song

(Catalog No. 2214)

Recorded by SIDNEY WESLEY

Voice ♩ = 69

Striking sticks ♩ = 69

Rhythm of striking sticks similar to No. 30

Yo - bi - hi - ya yo - bi - hi - ya yo - bi - hi - ya

ya - be - hi - ya yo - bi - hi - ya yo - bi - hi - ya ya - be - hi - ya

Analysis.—The opening phrases of this song contain two descending fourths followed by two ascending fourths. In the fourth and fifth measures are found three consecutive ascending fourths with a slight prolonging of the highest tone. The tempo of the striking sticks was not maintained steadily, sometimes being slightly faster than the tempo of the voice.

HUNTING SONG

The blowgun was formerly the weapon used by the Choctaw in hunting small animals and birds. Robert Henry demonstrated the use of this weapon when the writer visited his home. He knelt on one knee, threw back his head, held the blowgun high in the air, and shot the dart a long distance.¹⁷ A blowgun and two darts from the Choctaw of Louisiana, is in the possession of the United States National Museum. The darts are wrapped with ravelled cloth at the base and are 18 inches in length. The blowgun shows "long use and wear," and is 87½ inches long.

¹⁷ "The primitive blowgun was used until recently in hunting squirrels, rabbits, and various birds. Only one specimen was found at Bayou Lacomb; this was said to have been made some 10 years ago. . . . The blowgun . . . is about 7 feet in length; it is made of a single piece of cane . . . formed into a tube by perforation of the joints, which was given a smooth bore of uniform diameter throughout. The darts . . . are made of either small, slender canes or pieces of hard yellow pine, sharpened at one end; they are from 15 to 18

A very old hunting song was recorded by both Lysander Tubby and Robert Henry. The words of the two renditions were the same except that Henry omitted the second line. His rendition was transcribed and studied, but lacks the clearness of Tubby's, which is presented. Henry's was a simpler version of the melody, and it will be recalled that his version of the song for success in the ball game was simpler than that of Willis (cf. No. 6).

No. 63. Hunting Song

(Catalog No. 2272)

Recorded by LYSANDER TUBBY

The musical score is written in bass clef with a 2/4 time signature. It consists of several staves of music. The first staff has a tempo marking of $\text{♩} = 84$. The second staff has a tempo marking of $\text{♩} = 100$. The third staff has a tempo marking of $\text{♩} = 84$. The score includes various performance instructions such as *accelerando* and numerical markings (1, 2, 3) indicating specific measures or phrases. The music features a mix of eighth and sixteenth notes, with some rests and dynamic markings.

Translation

Go and grind some corn, we will go camping,
 Go and sew, we will go camping,
 I passed on and you were sitting there crying.
 You were lazy and your hoe is rusty.

inches in length. The lower end is wrapped for a distance of 4 or 5 inches with a narrow band of cloth having a frayed edge, or a piece of soft tanned skin is used. The effect of this band is to expand and fill the bore of the gun, a result that could not possibly be secured by the use of feathers, as in the case of ordinary arrows" (Bushnell, 1909, p. 18).

Analysis.—The entire performance of this song was transcribed and occupied 2 minutes. In tonality the song is minor, the tones being those of the second 5-toned scale. A slight change in tempo occurred, the change being gradual, and the original tempo resumed after a few measures. This change took place in each rendition. Phrases in the latter portion of the song were sometimes sung in a slightly faster tempo, but the change was not clear enough to be indicated in the transcription. Probably these changes in tempo were connected with the words of the song.

SONGS CONNECTED WITH PASTIMES

A pastime entitled "Rabbit in the Garden" was accompanied by a song of the same name. In describing the occasion for singing this song, Wesley said the women held hands forming a circle. This represented a garden and the women were the fence around it. In the middle of the circle were a boy and girl, representing rabbits, who tried to get out, but were prevented by the women. The words are evidently sung by rote as the terms "ladies' chain" and "putting in the garden" are used without meaning and the word "chain" was pronounced "chan." The word was identified by the interpreter.

This is evidently the song of an old folk-play, learned by the Indians from white settlers and handed down for several generations. A song, entitled "Rabbit in the Hollow," with a description of the action, is found in a book of folk games and dances (Hofer, 1907, p. 23). The words are in German and are translated "rabbit in the hollow sits and sleeps." The meter of these words is exactly the same as the meter of "rabbit in the garden, can't come out" except that, in one instance, two eighth notes take the place of one quarter note. There is a resemblance in the meter of the remainder of the song.

An inquiry was made of Dr. John R. Swanton as to whether the Choctaw were ever in contact with German settlers, and he replied as follows:

Colonies of Germans were planted here and there in various parts of the South, Germany being then a people but not a nation, but I recall none in or near the Choctaw country. There was one such colony, Les Allemands, on the lower Mississippi, and a colony of Salzburgers from the Palatinate about Ebenezer Creek on Savannah River. . . . It occurs to me that there may be some connection between this song and the story of how Brer Rabbit deceived the little girl and got out of the garden. This is widely spread in the South and was used by Joel Chandler Harris.

No. 64. "Rabbit in the Garden"

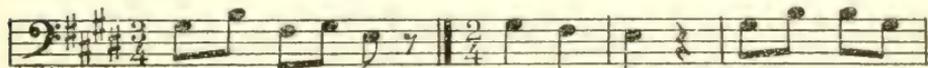
(Catalog No. 2212)

Recorded by SIDNEY WESLEY

♩ = 88



O some la-dies chain rab-bit, put-ting in the gar-den, can't come out.



O some la-dies chain, O O O O some la-dies



chain, rab-bit put-ting in the gar-den, can't come out O some la-dies chain



O O rab-bit. O O O O some la-dies chain, rab-bit



put-ting in the gar-den, can't come out. O some la-dies chain,



O some la-dies chain, rab-bit put-ting in the gar-den, can't come out.



O some la-dies chain, O O O O some la-dies chain rab-bit,



gar-den, gar-den ... can't come out I bet you five dol-lars, can't come out.

Words as recorded by the singer.—O some ladies' chain, Rabbit putting in the garden, can't come out. I bet you five dollars can't come out.

Analysis.—This melody is short and its repetitions are transcribed because of the interest in the words. The structure is clear and comprises five phrases with practically the same rhythm. There is a peculiar quality in the rhythm that would make possible the continuance of the song for a long time. The tones are those of the fourth 5-toned scale, the entire melody lying above the keynote.

A familiar scene of the hunt is dramatized in the second pastime. Only two players take part, one representing a dog and the other

a raccoon. The dog chases the raccoon, which runs among the spectators, followed by the dog until it escapes. Meaningless syllables interspersed with a few words were sung with the melody, as shown in the transcription, and the words "Look out, dog, coon's gone" were spoken after the rendition of the song. These words were followed by a repetition of the song.

No. 65. A Dog Chases a Raccoon

(Catalog No. 2213)

Recorded by SIDNEY WESLEY

$\text{♩} = 88$

Shoo da did-dle um a shoo da did-dle um a

shoo da dee you ma you coon shoo da did-dle um a

shoo da did-dle um a shoo da dee you you got be-hind her

(Spoken)
Look out dog, coon's gone Shoo da did-dle um a

shoo da did-dle um a shoo da dee you ma you coon.

Analysis.—The structure of this melody is freely melodic. The song is based on consecutive descending fourths, these being C-G and B flat-F. A minor third occurs in the fourth measure and a minor triad in the measure before the spoken words. These progressions suggest G as the keynote of the song. A slow rhythmic unit and a steady rhythm characterize the song which contains no suggestion of a chase. Instead it seems to reflect the mood of an observer, as indicated by the words. The song contains 10 ascending and 9 descending intervals.

COMPARISON BETWEEN THE ANALYSES OF CHOCTAW SONGS AND THE ANALYSES OF SONGS RECORDED IN CERTAIN OTHER TRIBES¹⁸

In previous books of this series, the songs of each tribe have been compared with the total number of songs recorded and analyzed in other tribes. This method is discontinued, and the present comparison is based on observation of the preceding work, attention being directed to resemblances or differences that are important to an understanding of Indian music. The purpose of these and previous comparisons is to determine the characteristics that are general and those that are peculiar to tribes and regions. When the latter are determined, it is often possible to trace the peculiarities to influences in or near the region. Certain bases of analysis have been discontinued when the results were practically the same in all the tribes under analysis, others have been discontinued for other reasons. Only 12 tables of analysis are here presented, although 22 tables were used in *Teton Sioux Music*, published in 1918. These are believed to include the most important melodic and rhythmic characteristics of the songs.

Table 1. Tonality.—The Choctaw songs contain 51 percent with major tonality, this being approximately the average in all the songs under analysis. The Menominee songs contained 66 percent and the Sioux contained only 39 percent that were major in tonality, while the cumulative analysis of 1,553 songs¹⁹ contained 53 percent with this tonality.

Table 2. First note of song; its relation to keynote.—Tribes differ widely in this respect. The Choctaw group contains 47 percent beginning on the keynote, while the cumulative series contains only 13 percent with this beginning. In the Menominee songs only 5 percent begin on the keynote while 30 percent begin on the fifth above the keynote.

Table 3. Last note of song; its relation to keynote.—A feeling for the keynote is evident in this as in the preceding table, 59 percent of the Choctaw songs ending on the keynote. There is an interesting uniformity in this ending, the Sioux, Papago, Menominee, and Yuman and Yaqui groups each having 54 percent ending on the keynote. Tribes that differ widely are the Pawnee, with 72 percent, and the Mandan and Hidatsa, with 37 percent, ending on the keynote.

¹⁸Chippewa, Sioux, Mandan, Hidatsa, Northern Ute, Pawnee, Papago, Yuman, Yaqui, Menominee, Nootka, and Quileute, and several Pueblo groups, these being analyzed in tables. The songs of the Cheyenne, Arapaho, Alabama, Tule of Panama, Winnebago Indians of Santo Domingo, N. Mex., and Indians of British Columbia were not analyzed in tables.

¹⁹Cf. Densmore, 1939, pp. 35-41. Songs are classified according to the tribe recording them. Songs of another tribe are occasionally recorded, this being mentioned in the text, but not considered in the tabulated analyses.

Table 4. Last note of song; its relation to compass of song.—The final note is the lowest in 47 percent of the Choctaw songs. In the cumulative group 68 percent, and in the Chippewa songs 88 percent end on the lowest tone of the compass. In songs having the final tone immediately preceded by a lower tone the most frequent approach is by means of an ascending minor third, 12 percent of the Choctaw and 5 percent in the cumulative group having this approach to the final tone.

Table 5. Number of tones comprised in compass of song.—The Choctaw songs are characterized by a small compass, only 19 percent having a compass of 8 or more tones. About 68 percent of the songs in the cumulative analysis have this compass. The Nootka and Quileute have only about 22 percent while the Pawnee have 72 percent and the Sioux songs have 94 percent with a compass of 8 or more tones. The Ute, Chippewa, and Mandan and Hidatsa, have respectively 89, 88, and 87 percent, and the Papago, Menominee, Yuman, and Yaqui a slightly smaller percentage of songs with this compass.

Table 6. Tone material.—This is an interesting test of Indian songs but far from conclusive. It is necessary to use the terminology of a system that is familiar to us but foreign to the Indians. Measured by this standard, we note that 29 percent of the Choctaw songs are on the "major and minor pentatonic scales"²⁰ and 21 percent lack only one tone of being based on these scales. Only four of the 65 Choctaw songs contain all the tones of the diatonic octave. In the cumulative analyses, 28 percent are on the second and fourth 5-toned scales.

Table 7. First progression, downward and upward.—In the Choctaw songs 57 percent begin with a downward progression. The total number of intervals in the cumulative series of 1,553 songs shows the downward trend of Indian melodies, 60 percent of the progressions being downward, yet the percentage of songs beginning with a downward progression, in this cumulative series, is only 41 percent. In the Nootka and Quileute songs only 41 percent begin with a downward progression, while 70 percent of the Chippewa and 71 percent of the Pawnee songs have this opening interval. Fifty-one percent of the Mandan and Hidatsa songs being with a descending interval, the percentages in the Papago, Yuman and Yaqui, Menominee, and Sioux being, respectively 61, 62, 63, and 69 percent.

Table 8. Part of measure on which song begins.—A direct attack is shown by the fact that 88 percent of the Choctaw songs begin on the accented count of the measure. Only 55 percent in the cumulative group have this beginning. In the various tribes the average is about

²⁰ See footnote p. 186, after table 6.

60 percent, though the Yuman and Yaqui have only 49 percent of the songs beginning on an accented tone.

Table 9. Rhythm (meter) of first measure.—Double time is preferred by the Choctaw for the beginning of their songs, 83 percent having the first measure in 2-4 time. This would be expected, as a majority of recorded Choctaw songs are dance melodies. In other tribes the songs are more varied, an attempt being made to have about the same proportion of each class of songs in a tribe. The percentages of songs beginning in 2-4 time are remarkably uniform. This percentage is 50 in the Chippewa, 54 in the Sioux and Papago, 55 and 57 in the Mandan, Hidatsa, Yuman, and Yaqui, 62 in the Pawnee, 64 in the Ute and Menominee, and 66 in the Nootka and Quileute. The percentage in the cumulative series is 60 percent.

Table 10. Change of time (measure lengths).—In the Choctaw songs 62 percent contain a change of time. This is the smallest percentage in the songs under analysis and we note again that a majority of the recorded Choctaw songs are connected with dances. Next are the Pawnee, and Yuman and Yaqui, 74 percent of the songs in each of these groups containing a change of time. The Sioux and Papago groups contain the highest percentages of songs with a change of time, these being respectively 92 and 91 percent. This shows a change of measure lengths, as indicated by accented tones, to be a prevailing characteristic of Indian songs.

Table 11. Rhythmic unit of song.—The rhythmic character of the recorded Choctaw songs is indicated by the presence of one or more rhythmic units in 88 percent of the songs. The next percentage is in the Menominee group with 87 percent having a rhythmic unit. The least rhythmic songs are found among the Nootka and Quileute, only 55 percent of these songs containing a rhythmic unit. The Pawnee group contains 84 percent and certain other groups contain 68, 70, and 76 percent of songs with rhythmic units. A large majority of these songs contain only one rhythmic unit, but others have two, three, four, or five rhythmic units.

Table 12. Rhythm (meter) of striking sticks used as an accompaniment to songs.—A limited number of Choctaw songs were recorded with the accompaniment of striking sticks, four rhythms being noted. The accompaniment was continuous, not interspersed with rests as in the Yuman and Yaqui songs (cf. Densmore, 1932, p. 208). In a compilation of 366 Chippewa and Sioux songs, 40 percent contained a drumbeat in unaccented eighth notes and 34 percent contained a drumbeat in quarter-note values, each beat preceded by an unaccented beat corresponding approximately to the third count of a triplet (cf. Densmore, 1918, p. 36). The latter occurs with 6 percent of the Choctaw songs.

Intervals of progression in Indian songs.—In tribes analyzed prior to and including the Yuman and Yaqui, a tabulation was made of the intervals in ascending and descending progression. The intervals in 36 Choctaw songs were tabulated as a test of that tribe. The total number of intervals in these songs is 1,474, of which 855 (59 percent) are descending and 619 (41 percent) are ascending progressions. This shows that the general trend of the Choctaw melodies is downward, as in other Indian songs. The largest group of intervals consists of 612 whole tones and 430 minor thirds, showing the general melodic structure to be similar to that of the other tribes under analysis.

MELODIC AND RHYTHMIC ANALYSIS OF SONGS BY SERIAL NUMBERS

MELODIC ANALYSIS

TABLE 1.—*Tonality*

Classification of song	Serial number of song	Number	Percent
Major tonality ¹	2, 3, 5, 6, 7, 11, 14, 17, 18, 19, 20, 22, 25, 30, 31, 32, 33, 39, 40, 42, 43, 46, 47, 49, 56, 57, 58, 59, 60, 64, 65.	31	48
Minor tonality ²	9, 10, 12, 13, 15, 21, 23, 24, 26, 27, 29, 34, 35, 36, 37, 38, 41, 45, 48, 50, 51, 52, 53, 54, 55, 62, 63.	28	43
Third lacking.....	1, 4, 16, 28.....	4	6
Irregular in tonality ³	8, 61.....	2	2
Total.....		65	

¹ Songs are thus classified if the third is a major third and the sixth, if present, is a major sixth above the keynote.

² Songs are thus classified if the third is a minor third and the sixth, if present, is a minor sixth above the keynote.

³ Songs are thus classified if the tones do not have an apparent keynote. In such songs the tones appear to be arranged with reference to intervals rather than with reference to a keynote, many being based on the interval of a fourth.

TABLE 2.—*First note of song; its relation to keynote*

Classification of song	Serial number of song	Number	Percent
Beginning on the—			
Sixth.....	2.....	1	2
Fifth.....	12, 18, 19, 21, 29, 35, 37, 38, 39.....	9	14
Fourth.....	3, 5, 14, 16, 50, 62.....	6	10
Third.....	9, 13, 20, 34, 36, 41, 42, 51, 52, 54, 55, 57, 58, 64.....	14	22
Second.....	30, 56.....	2	2
Keynote.....	1, 4, 6, 7, 10, 11, 16, 17, 22, 23, 24, 25, 26, 27, 28, 31, 32, 33, 40, 43, 44, 45, 46, 47, 48, 49, 53, 59, 60, 63, 65.	31	47
Irregular in tonality.....	8, 61.....	2	2
Total.....		65	

TABLE 3.—*Last note of song; its relation to keynote*

Classification of song	Serial number of song	Number	Percent
Ending on the—			
Fifth.....	1, 2, 4, 7, 16, 17, 20, 28, 30, 32, 47, 60, 65.....	13	20
Third.....	9, 11, 21, 35, 38, 39, 41, 50, 57, 58.....	10	15
Keynote.....	3, 5, 6, 10, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 29, 31, 33, 34, 36, 37, 40, 42, 43, 44, 45, 46, 48, 49, 51, 52, 53, 54, 55, 56, 59, 62, 63, 64.	38	59
Indeterminate ending.....	18, 19.....	2	2
Irregular in tonality.....	8, 61.....	2	2
Total.....		65	

TABLE 4.—*Last note of song; its relation to compass of song*

Classification of song	Serial number of song	Number	Percent
Songs in which final tone is—			
Lowest tone in song.....	1, 4, 5, 6, 7, 10, 11, 15, 17, 19, 20, 22, 24, 25, 27, 28, 30, 32, 36, 37, 38, 42, 44, 52, 53, 54, 56, 57, 58, 64.	30	47
Immediately preceded by ¹ —			
Fourth below.....	13, 16, 34, 46, 47, 49, 61, 62.....	8	12
Minor third below.....	3, 21, 35, 39, 40, 41, 50, 59.....	8	12
Whole tone below.....	18, 26, 45, 48, 51, 55.....	6	9
Songs containing lower tones than final tone.	2, 8, 9, 12, 14, 23, 29, 31, 33, 43, 60, 63, 65.....	13	20
Total.....		65	

¹ This shows the approach to the final tone. Many songs in this group contain other tones lower than the final tone.

TABLE 5.—*Number of tones comprised in compass of song*

Compass of song	Serial number of song	Number	Percent
Eleven tones.....	14.....	1	2
Ten tones.....	60.....	1	2
Eight tones.....	12, 13, 16, 20, 28, 32, 33, 57, 58, 63.....	10	15
Seven tones.....	3, 23, 25, 35, 38, 41, 43, 46, 47, 48, 56, 62.....	12	18
Six tones.....	2, 5, 7, 11, 17, 18, 19, 29, 30, 31, 34, 39, 40, 49, 50, 51, 53, 55, 59, 64, 65.	21	32
Five tones.....	1, 4, 8, 9, 10, 21, 22, 24, 26, 35, 36, 37, 45, 52, 54.....	15	23
Four tones.....	15, 27, 42, 44.....	4	6
Three tones.....	6.....	1	2
Total.....		65	

TABLE 6.—*Tone material*

Tonality of song	Serial number of song	Number	Percent
Second 5-toned scale ¹	7, 17, 20, 30, 39, 43, 51, 63.....	8	12
Fourth 5-toned scale.....	23, 24, 29, 41, 50, 53, 55, 57, 59, 60, 64.....	11	17
Major triad and one other tone.....	18, 22, 31, 49.....	4	6
Minor triad and one other tone.....	9, 10, 13, 15, 34, 36, 37, 38, 52, 54.....	10	15
Octave complete.....	32, 33, 46, 48.....	4	6
Other combinations of tones.....	1, 2, 3, 4, 5, 6, 8, 11, 12, 14, 16, 19, 21, 25, 26, 27, 28, 35, 40, 42, 44, 45, 47, 56, 58, 61, 62, 65.....	28	44
Total.....		65	

¹ The 5-toned scales considered in these analyses are two of the 5-toned scales according to Helmholtz, described by him as follows:

"To the *Second Scale*, without Second or Sixth, belong most Scotch airs which have a minor character

"To the *Fourth Scale*, without Fourth or Seventh, belong most Scotch airs which have the character of a major mode" (Helmholtz, 1885, pp. 260, 261).

TABLE 7.—*First progressions; downward and upward*

Progression	Serial number of song	Number	Percent
Downward.....	1, 2, 3, 4, 5, 11, 12, 14, 15, 16, 18, 19, 21, 23, 29, 30, 33, 34, 35, 36, 37, 38, 42, 46, 47, 49, 50, 51, 52, 54, 55, 56, 57, 58, 62, 63, 65.....	37	57
Upward.....	6, 7, 8, 9, 10, 13, 17, 20, 22, 24, 25, 26, 27, 28, 31, 32, 39, 40, 41, 43, 44, 45, 48, 53, 59, 60, 61, 64.....	28	43
Total.....		65	

RHYTHMIC ANALYSIS

TABLE 8.—*Part of measure on which song begins*

Beginning of song	Serial number of song	Number	Percent
On unaccented part of measure.....	3, 4, 5, 8, 20, 39, 52, 61.....	8	12
On accented part of measure.....	1, 2, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 60, 62, 63, 64, 65.....	57	88
Total.....		65	

TABLE 9.—*Rhythm (meter) of first measure*

Rhythm first measure	Serial number of song	Number	Percent
2-4 time.....	1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 37, 39, 40, 41, 42, 43, 44, 45, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 62, 63, 64, 65.	54	83
3-4 time.....	2, 14, 19, 35, 36, 46, 47, 48, 49, 61.....	10	15
5-8 time.....	38.....	1	2
Total.....		65	

TABLE 10.—*Change of time (measure lengths)*

Songs	Serial number of song	Number	Percent
Containing no change of time...	3, 5, 6, 8, 9, 10, 13, 14, 15, 17, 22, 23, 24, 25, 26, 28, 30, 34, 37, 42, 50, 56, 59, 60, 62.	25	38
Containing a change of time....	1, 2, 4, 7, 11, 12, 16, 18, 19, 20, 21, 27, 29, 31, 32, 33, 35, 36, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 51, 52, 53, 54, 55, 57, 58, 61, 63, 64, 65.	40	62
Total.....		65	

TABLE 11.—*Rhythmic unit¹ of song*

Songs containing—	Serial number of song	Number	Percent
No rhythmic unit.....	9, 15, 20, 24, 28, 35, 41, 64.....	8	12
One rhythmic unit.....	1, 2, 3, 4, 5, 6, 8, 10, 11, 14, 15, 17, 19, 21, 25, 27, 29, 30, 36, 37, 39, 40, 42, 49, 51, 53, 54, 57, 58, 62, 65.	31	48
Two rhythmic units.....	7, 12, 16, 18, 26, 31, 32, 33, 34, 43, 45, 55, 59, 60, 63.....	15	23
Three rhythmic units.....	4, 13, 22, 44, 46, 47, 48, 50, 52, 56.....	10	15
Four rhythmic units.....	61.....	1	2
Total.....		65	

¹ For the purpose of this analysis a rhythmic unit is defined as "a group of tones of various lengths, comprising more than one count of a measure, occurring more than twice in a song, and having an evident influence on the rhythm of the entire song."

TABLE 12.—*Rhythm (meter) of striking sticks used as an accompaniment to songs*

Rhythm of striking sticks	Serial number of song	Number	Percent
Eighth notes unaccented.....	62 (also 6 Duplicate).....	1	2
Eighth notes accented in groups of two.....	58.....	1	2
Quarter notes unaccented.....	60, 61.....	2	2
Quarter notes, each beat preceded by an unaccented beat corresponding approximately to the third count of a triplet.	30, 40, 42, 43.....	4	6
Recorded without accompaniment.....		57	87
Total.....		65	

BIBLIOGRAPHY

BUSHNELL, DAVID I., JR.

1909. The Choctaw of Bayou Lacomb, St. Tammany Parish, Louisiana. *Bur. Amer. Ethnol. Bull.* 48.

CATLIN, GEORGE

1913. Illustrations of the manners and customs of the North American Indians. 2 vols. London.

CULIN, STEWART

1907. Games of the North American Indians. 24th Ann. Rep. *Bur. Amer. Ethnol.*, 1902-03, pp. 1-846.

CUSHMAN, H. B.

1899. History of the Choctaw, Chickasaw and Natchez Indians.

DENSMORE, FRANCES

1910. Chippewa music. *Bur. Amer. Ethnol. Bull.* 45.
 1913. Chippewa music—II. *Bur. Amer. Ethnol. Bull.* 53.
 1918. Teton Sioux music. *Bur. Amer. Ethnol. Bull.* 61.
 1922. Northern Ute music. *Bur. Amer. Ethnol. Bull.* 75.
 1923. Mandan and Hidatsa music. *Bur. Amer. Ethnol. Bull.* 80.
 1926. Music of the Tule Indians of Panama. *Smithsonian Misc. Coll.*, vol. 77, No. 11.
 1928. Uses of plants by the Chippewa Indians. 44th Ann. Rep. *Bur. Amer. Ethnol.* 1926-27, pp. 275-397.
 1929. Chippewa customs. *Bur. Amer. Ethnol. Bull.* 86.
 1929 a. Papago music. *Bur. Amer. Ethnol. Bull.* 90.
 1929 b. Pawnee music. *Bur. Amer. Ethnol. Bull.* 93.
 1932. Menominee music. *Bur. Amer. Ethnol. Bull.* 102.
 1932 a. Yuman and Yaqui music. *Bur. Amer. Ethnol. Bull.* 110.
 1936. Cheyenne and Arapaho music. *Southwest Mus. Pap. No.* 10. Los Angeles.
 1937. The Alabama Indians and their music. *In* *Straight Texas*. Publ. Texas Folk-Lore Soc., No. 13, pp. 270-293.
 1938. Music of Santo Domingo Pueblo, New Mexico. *Southwest Mus. Pap. No.* 12. Los Angeles.
 1939. Nootka and Quileute music. *Bur. Amer. Ethnol. Bull.* 124.
 1943. A search for songs among the Chitimacha Indians in Louisiana. *Anthrop. Pap. No.* 19, *Bur. Amer. Ethnol. Bull.* 133.

HELMHOLTZ, HERMANN LUDWIG FERDINAND VON

1855. On the sensations of tone as a physiological basis for the theory of music. Transl. by A. J. Ellis. 2d English ed. London.

HODGE, FREDERICK WEBB

1907. Handbook of American Indians north of Mexico, pt. 1. *Bur. Amer. Ethnol. Bull.* 30.

HOFER, MARI REUF

1907. Popular folk games and dances. A. Flanagan Co., Chicago.

ROYCE, CHARLES C.

1899. Indian land cessions in the United States. 18th Ann. Rep. *Bur. Amer. Ethnol.*, 1896-97, pt. 2.

SWANTON, JOHN R.

1911. Indian tribes of the lower Mississippi Valley and adjacent coast of the Gulf of Mexico. *Bur. Amer. Ethnol. Bull.* 43.
 1922. Early history of the Creek Indians and their neighbors. *Bur. Amer. Ethnol. Bull.* 73.
 1931. Source material for the social and ceremonial life of the Choctaw Indians. *Bur. Amer. Ethnol. Bull.* 103.



1. SIDNEY WESLEY.



2. MARY HICKMAN.



1. LYSANDER TUBBY.



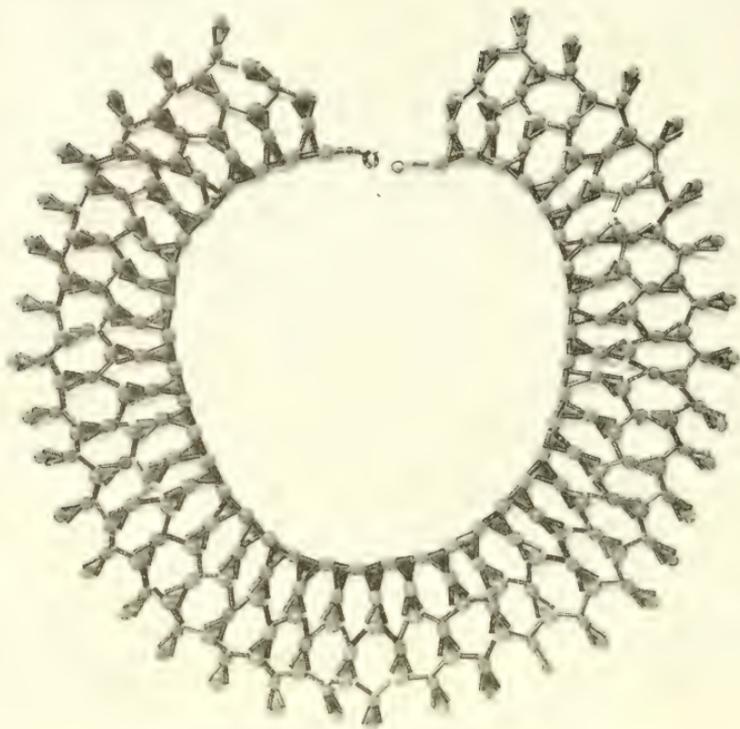
2. OLMAN COMBY.



1. MAGGIE BILLIE IN NATIVE DRESS (1933).



2. MAGGIE BILLIE'S DRESS AND APRON.



1. MAGGIE BILLIE'S BEAD COLLAR.



2. MAGGIE BILLIE'S FANCY COMB.



CHOCTAW CHILDREN IN NATIVE DRESS (1933).



1. MAN'S HEAD BAND OF PIERCED SILVER.



2. MAN'S BEAD COLLAR.



1. SIDNEY WESLEY APPROACHING THROUGH THE WOODS.



2. MARY HICKMAN'S HOUSE, WHERE SONGS WERE RECORDED.



1. ROBERT HENRY'S HOUSE. WHERE SONGS WERE RECORDED.



2. GROUP AT ROBERT HENRY'S HOUSE WHEN SONGS WERE RECORDED.



1. MAN'S BEAD NECKLACE.



2. RACKET USED IN BALL GAME.



3. SCRIMMAGE IN BALL GAME



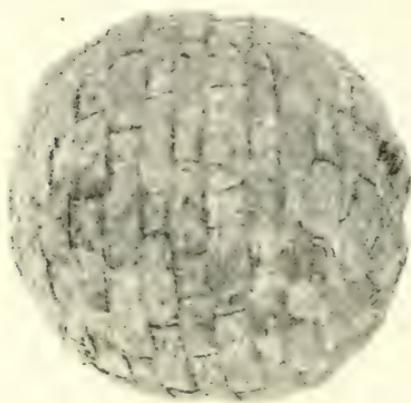
BOB HENRY HOLDING RACKETS IN POSITION FOR PLAY.



2. ROBERT HENRY BLOWING WHISTLE.



1. WHISTLE.



1. BALL USED IN BALL GAME



2. FOUR HANDKERCHIEFS FOLDED FOR USE IN BULLET GAME.

SMITHSONIAN INSTITUTION
Bureau of American Ethnology
Bulletin 136

Anthropological Papers, No. 29
Some Ethnological Data
Concerning One Hundred Yucatan Plants
By MORRIS STEGGERDA

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SOME ETHNOLOGICAL DATA CONCERNING ONE HUNDRED YUCATAN PLANTS

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INTRODUCTION

During the last 9 years the author has spent considerable time among the Maya Indians of Yucatan and has become increasingly aware of the fact that the primitive life of these people is in constant intimate relation with nature. Not only do they depend upon the plant kingdom for their food, shelter, and clothing, but they rely upon it for many of their so-called cures. Consequently the ethnobotany of the region is rich in detail and color, offering a fertile field for the investigator who is interested in the Maya, their beliefs and customs, and their use of plants. This paper presents information collected by the author on 100 plants in the vicinity of Chichen Itza, where the Carnegie Institution of Washington maintains a base for its investigators.

There have been at least three important publications pertaining to the flora of Yucatan (Roys, 1931; Standley, 1930; Carnegie Publ. No. 461, 1936).¹ The study by Dr. Ralph L. Roys entitled "The Ethnobotany of the Maya" is primarily a translation study and comparison of the seventeenth- and eighteenth-century Maya medical texts. P. C. Standley's *Flora of Yucatan* is a classification of plants sent to the Field Museum in Chicago by various collectors. Both of these studies list ethnological data concerning the Maya. Botany of the Maya Area, a compilation of technical papers on plants, seldom considers the ethnobotanical significance of the plants included. None of these publications lists all the plants of the Maya area or all the uses ascribed to them by natives. It is hoped that the present report will add significant information on this interesting subject.

At the beginning of this study approximately 225 species of plants were collected, and all their uses as given by several native informants were recorded. Two sets of the plants were brought to the United

¹ For other references to plant life of Yucatan, see bibliography.

States, where they were identified by Dr. P. C. Standley, of the Field Museum of Natural History, and Dr. H. A. Gleason, of the New York Botanical Garden. The author gratefully expresses his thanks to these two men for their assistance.

Much of the material gathered in this manner duplicated that which has already been published. For 125 of the plants collected nothing new was learned, the information merely verifying that which is found in the literature. For the remaining 100 plants some new ethnological data were discovered, and it is the purpose of this paper to present only the new material. In a few instances facts appear which have already been published; they are added merely to make the picture more complete. It can be said, though, that for each of the plants described below some new information is published for the first time.

The spelling of most of the scientific names was taken from the book by Standley, while the Maya and Spanish spellings were checked from Roys' study. Page references are given to the works of these authors immediately following the scientific names of the plants considered, and the reader is referred to them for additional information.

The Maya names for plants often include prefixes describing the color or some other noticeable feature of the plant. The reader will benefit by knowing the most common of these. Chac in Maya means red: yax green; ya yax blue; zac, white; kan, yellow: and ox, black. The letter X before a word indicates the definite article. Che means tree, and cambal means a small, low bush. Xcambal, then, means "the small, low bush."

The 100 plants are arranged alphabetically according to their scientific names. Then follow the Maya and the Spanish names, a brief description of the plant, and the previously unpublished ethnological material. An alphabetical list of the plants arranged according to their Maya names appears at the end of the description of plants (p. 218).

DESCRIPTION OF PLANTS

1. *Abrus precatorius* L., X-oco-ak (Maya), Pionía (Spanish). Standley, 289; Roys, 296.

This climbing vine has purplish flowers and red and black seeds. The latter are used as beads to make eyes for Maya dolls. Babies who suffer from diarrhea, called ojo and caused by an "evil eye" or an "evil wind," are bathed in a decoction of the leaves of this plant. The leaves may also be roasted, ground, and made into a salve, which is applied to the heads of babies so afflicted.

2. *Abutilon trisulcatum* (Jacq.) Urban, Zac-xiu (Maya). Standley, 345; Roys, 307.

In Maya this plant is also called Zac-mizib, meaning white broom. Several branches of the shrub, which has small yellow flowers, are tied together and used as a broom. Medicinally, the leaves are crushed and rubbed on canker sores of the mouth. They are also ground and mixed with water and given to children suffering from asthma, the dose being two spoonfuls every hour.

3. *Acacia Collinsii* Safford, Zubin (Maya), Cornezuelo (Spanish). Standley, 275; Roys, 312.

The Zubin is a thorny tree whose leaves and flowers begin to appear in early April. There are no leaves on the tree during the dry season. The aromatic roots, eaten by moles, are used as bait in traps, especially constructed to catch the animals. Each large, hollow thorn is inhabited by a colony of red ants, which enters through a hole at the top of the spine. There is always just one hole in each pair of thorns, and two or more ants inhabit each pair. Wasps commonly hang their nests from the branches of this tree.

- 3 a. *A. Milleriana* Standl., Chimay (Maya). Standley, 276.

This is another species of *Acacia*. It is also armed with stout spines and grows on very poor soil called Tz-kel (Maya). The wood is used for the larger upright poles in the side walls of Maya houses and is further employed in making axles for carts and for planting sticks. In the dry season deer eat the fruit of this tree. Medicinally, the leaves are used in a concoction for coughs and colds.

4. *Achras Zapota* L., Ya (Maya), Zapote (Spanish). Standley, 378; Roys, 297.

The thick, white sap of this large, uncultivated tree furnishes the chicle of chewing gum. The fruit is round like an apple and has a rough skin; the fleshy part is a dark-orange color and is eaten by birds, wild mammals, and man. The wood is fine-grained. As a medicine the thick, rough bark is boiled and drunk for diarrhea. The gum is mixed with salt and held in the mouth for toothache.

5. *Acrocomia mexicana* Karw., Tuk (Maya), Cocoyol (Spanish). Standley, 217; Roys, 288. See plate 22, figure 1.

These palm trees are found in great numbers in Yucatan. The trunk and fronds of the palm are armed with long, black spines. Because these spines are very difficult to remove from the flesh, they often cause infection and as a consequence are thought to be poisonous. Rosaries and rings are made from the seeds, and people of wealth put gold inlays into the rings, thinking that they will bring good luck. The fruits resemble small coconuts and are eaten raw or cooked in honey, sugar, or molasses. The bark of the tree is some-

times used as a foundation for Maya elevated gardens called canche. Soil is placed in the bark container and vegetables are grown in it.

6. *Adenocalymna fissum* Loes., Ak Xux (Maya). Standley, 417.

Ak Xux is apparently a local name for this plant. Roys does not mention it and Standley lists the scientific name with several different Maya names. The words "Ak Xux" may be translated as vine basket. This vine, which grows only in the high bush, is used by the Maya in making their harvest baskets.

6 a. *A. punctifolium* Blake, Zac-bach (Maya). Standley, 417.

This is another species of the vine, the bulbs of which are used by the Maya in the treatment of asthma.

7. *Aloe vera* L., Hunpedz-kin-ci (Maya), Sabila (Spanish). Standley, 227; Roys, 246.

This stemless perennial herb, native of the Mediterranean, resembles a small henequen plant and grows abundantly in Yucatan. The leaves are made into soap which is an excellent shampoo and may be bought in the Merida market. The pulp from the leaves is applied locally for headache and neuralgia or it may be thoroughly washed and boiled with the roots of the Put Xiu (*Lepidium virginicum* L.), resulting in a concoction which is said to be good for coughs and colds.

8. *Alvaradoa amorphoides* Liebm., Bezinic-che (Maya), Palo de ormidas (Spanish). Standley, 312; Roys, 217. See plate 22, figure 2.

This tree grows 10 to 15 meters tall, has lacelike leaves, and grows abundantly in the Chichen Itza bush. It has small greenish flowers in long racemes. A decoction of the bark of the tree has been used consistently for skin diseases. One modern yerbatero (herb doctor) uses the leaves of this plant in the treatment of urinary disorders. Another mixes the leaves in warm water and prescribes the mixture as a bath for those suffering from rheumatism, while still another advocates giving a concoction of the leaves, honey, and corn silk to a patient with a hemorrhage.

9. *Annona Cherimola* Mill., Pox (Maya), Cherimoya (Spanish), Custard apple (English). Standley, 266; Roys, 279.

This large tree, cultivated for its fruit, grows high and has soft wood and rough bark. The round, thorny fruits have a strong smell and when ripe are of brown and yellow color. The sweet, yellow pulp is full of filaments between and around the seeds. Although the fruit is edible, the Maya believe that if one eats too much of it one will contract malaria. In Yucatan the pulverized seeds are used as an insecticide. A decoction of the leaves is mixed with deer's tallow and smeared on the feet of those suffering from fever.

9 a. *A. squamosa* L., Dzalmuy (Maya), Saramuyo (Spanish). Standley, 268; Roys, 313.

This species is a smaller tree which has narrow leaves. The heart-shaped edible fruits, known as sweet sops, are white when ripe and are sweet and pulpy. In Yucatan the seeds are ground to a powder and used to kill lice on human beings.

10. *Bauhinia unguolata* L., Chac-dzulub-tok (Maya), Pata de venado (Spanish). Standley, 283; Roys, 233.

Near Chichen Itza this rather small tree is called Chac-dzulimtok. It has red flowers and reddish-brown leaves. Because of their pliability, the young trees are used to bind together the upright poles which form the walls of Maya houses. A decoction of the leaves is said to alleviate urinary disorders and cases of diarrhea.

10 a. *B. divaricata* L., (Zac-dzulub-tok (Maya), Pata de vaca (Spanish). Standley, 282; Roys, 308.

This species of *Bauhinia* is also a small tree and grows abundantly in the Yucatan bush. An herb doctor of Piste says that dry coughs are cured by drinking a decoction of the flowers of this plant mixed with sugar. Boiled leaves are said to be good for complaints of the liver and kidney.

11. *Bignonia unguis-cati* L., Ek-kixil-ak (Maya). Standley, 418; Roys, 241.

This black, woody vine spreads over the ground. It has pointed, hooked tendrils and large, dark-green leaves. Since it is very durable, it is used commonly to tie beams and rafters in thatched Maya houses and to make wicker-work dcors. The most tender vines are used to make the Maya baskets, which are called xaac. As a medicine the tender stems and leaves are cooked and the water is drunk for cases of bronchitis and catarrh. Crushed raw leaves are applied to cuts or wounds to stop bleeding.

11 a. Another species of *Bignonia*, known locally as Zac-ak, is used for tying bundles of wood. The water in which the leaves and stems are boiled is used in a bath for cases of muscle twitching. Neither Roys nor Standley lists this plant.

12. *Bixa Orellana* L., Kuxub (Maya), Achiote (Spanish). Standley, 359; Roys, 260.

This moderately tall bush has large, oval leaves and white flowers. It grows wild but is occasionally cultivated. The orange-colored seeds, which grow in prickly husks, are used as a flavoring for stews and also as a coloring for Maya food. The independent reports of five local yerbateros regarding the medicinal value of this plant show that two use the leaves to alleviate headaches; two prescribe washing the seeds in warm water and giving the water to patients in the first stages of measles (this, they believe, causes the measles to develop

quickly); and one adds that this water is also good for patients suffering from asthma or stomach ache.

13. *Blechnum pyramidatum* (Lam.) Urban, Akab-xiu (Maya). Standley, 422; Roys, 214.

This is a small herb or weed which grows abundantly in the Chichen Itza area. In colonial times it was prescribed for coughs, snake bites, chills and fever. Today three herb doctors boil the leaves and use the water to bathe children who sweat unduly at night. The natives tell that often babies sweat so much that their skin appears to have salt on it. In such cases the leaves of the Akab-xiu are applied, either boiled or raw.

14. *Blepharodon mucronatum* (Schl.) Dene., Xhulkin Xiu (Maya).

This is a small vine which never attains a length of more than 1 meter. Its sparse, paired leaves have a biting, antiseptic quality. The older leaves have a purple undercolor, whereas the young leaves are dark green above and light green below. In the region of Dzitas the plant is known as Chac-cancel Xiu. The entire plant is crushed and the juice applied as an antiseptic. The crushed leaves are used for snake bites and to reduce swellings. Neither Standley nor Roys lists this plant.

15. *Bourreria pulchra* Millsp., Bacal-che (Maya). Standley, 395; Roys, 215.

This is a common tree which has a straight trunk and very thick bark. The scraped bark has the color of iodine and is applied to sores and wounds as an antiseptic.

16. *Bromelia Karatas* L., Chom (Maya), Piñuela (Spanish), Wild pineapple (English). Standley, 221; Roys, 238. See plate 22, figures 3 and 4.

This plant has large leaves along whose edges are hooked thorns which do not all point in the same direction on a given leaf. Thus one might find four or five thorns pointing downward and the next two or three curving upward. Consequently the Maya are particularly cautious when in close contact with this plant. The plant bears a cluster of blue flowers. Eaten raw, the fruits are irritating to those with delicate tongues and palates, since the fruits are covered with very small nettles. The Maya rub these nettles off on the ground, believing that if they are blown off the fruit becomes sour. When cooked, the fruits are agreeable in taste. Commonly they are cooked in the same kettle with corn, giving the Chom a special flavor. The skinned fruits are cooked with sirup and served as a dessert. There is a popular Maya riddle about the Chom. "Guess, guess, if you can, boy. A slothful man has cornered in the bush." Answer: The Chom plant, because the appearance of the fruits as they grow on the plant closely resembles the appearance of the stacked corn and corn-crib.

17. *Bryophyllum pinnatum* (Lam.) Kurz, Zizal-xiu (Maya), Siempreviva (Spanish). Standley, 274; Roys, 310.

This is a common plant which is exceedingly hardy. It will grow well if given water and soil even after remaining in a dry botany press for as long as 6 months. The cup-shaped flowers are in bunches and are used widely for ornamentation. The Maya believe that if a baby plays with the flowers of the Siempreviva he will have ill luck with raising chickens when he grows older. The flowers, they believe, leave an invisible stain on the hands which later affects the eggs.

18. *Bursera Simaruba* (L.) Sarg., Chacah (Maya), Palo mulato (Spanish). Standley, 313; Roys, 227.

The red bark of this common, large tree is thick and scaly. Its wood is soft and the sap produces an aromatic gum. The wood is used in making match sticks and boxes and for preparing a pib (underground fireless cooker). The charcoal obtained from the Chacah is mixed with gunpowder and used in assembling fire bombs and rockets. Fire can be made from the friction caused by rubbing together two pieces of this wood. The leaves are used to clean out the inside of beehives. The gum was formerly burned as incense in ceremonial rites. Because it burns slowly, the Chacah is often used on Maya hearths to keep a fire burning.

19. *Byrsonima bucidaefolia* Standl., Zac-pah (Maya), Nancen agria (Spanish). Standley, 314.

This is a small tree which grows wild in the Yucatan bush. Its fruit, eaten both by people and by deer, is extremely sour, but the Maya like it with salt or dipped in vinegar or aniseed liquor. Some cook it in sugar and make a dessert of it.

20. *Caesalpinia pulcherrima* (L.) Swartz., Chac zinkin (Maya), Flor de camaron (Spanish). Standley, 284; Roys, 232.

This is a small hardwood tree or shrub, the branches of which are armed with sharp spines. Various parts of this tree have been widely used in medicine for dysentery, ulcers, amenorrhea, and venereal diseases. One modern herb doctor prescribes drinking the liquid from the boiled root of this tree as a purgative. Another advocates a decoction of the flowers to be used for bronchitis and lung trouble. Still another mixes the leaves with water and uses the liquid in cases of diarrhea.

- 20 a. *C. platyloba* Wats., Chacté (Maya). Standley, 284; Roys, 232.

This species is also common. The hard, red wood is employed chiefly for corner posts or cross and horizontal poles in the construction of Maya houses.

21. *Callicarpa acuminata* HBK., Zac-puc-yim (Maya). Standley, 399; Roys, 306.

This small, spreading tree is common in the thickets of Yucatan. It has white, sweetly scented flowers and small black fruit. The leaves are crushed, mixed with water, and drunk in cases of dysentery. There is another variety of this tree, called Kan-puc-yim, which has yellow flowers. The leaves of this tree are crushed in cold water and drunk to cure diarrhea.

22. *Calocarpum mammosum* (L.) Pierre, Chacal haaz (Maya), Mamey (Spanish). Standley, 379; Roys, 228.

The Mamey is a large, spreading tree with soft, flexible wood, thick bark, and white sap. The leaves are sometimes more than a foot in length. The fruit is borne on the tree throughout the entire year and is eaten raw or made into preserves. The seeds of this fruit are roasted and ground into powder which, when mixed with water, is given to a sufferer to stop vomiting. The Maya have a riddle concerning the fruit of the Mamey. "Guess, guess, if you can, boy. A black man is lying in blood." Answer: It is the Mamey fruit, the pulp of which is red, and the seed, black.

23. *Capsicum frutescens* L., Max-ic (Maya), Chile del monte (Spanish). Standley, 408; Roys, 264.

This species of chile, growing wild in Yucatan, has very small pods and is extremely "hot." It is used as a seasoning when the species called X-muc-ic is not available. Birds eat the seeds of this plant. Although it was used widely in colonial times for medicine (see Roys, 1931), modern yerbateros do not use it. It is common knowledge to both doctors and yerbateros that the root is highly poisonous, and it is said to be used sometimes for purposes of deliberate poisoning.

24. *Casearia nitida* (L.) Jacq., Ixim-che (Maya). Roys, 249.

This is a low, spreading tree, the fruit of which is eaten by birds. Its bark is scaly, and in the dry season the tree sheds its leaves. The wood is used in house construction. It is said that there are two kinds of Ixim-che, one with small leaves and another with large leaves. For bile disorders and diseases of the spleen, the Maya bathe in water in which Ixim-che leaves have been boiled.

25. *Casimiroa tetrameria* Millsp., Yuy (Maya). Standley, 306; Roys, 301.

This tree has a thick trunk and soft, light wood which is used especially when burning limekilns. Its green or yellow fruit is eaten by human beings, birds, and deer. Wild bees produce a very sweet honey from the nectar of its small, greenish flowers. The trees are usually hollow and bees commonly build their hives in them.

26. *Cassia emarginata* L., X-tu-ab or X-tu-habin (Maya), Barba de jolote (Spanish). Standley, 286; Roys, 287.

This medium-sized tree has hard wood, thick branches, oval-shaped leaves, and yellow flowers. The wood is used in the building of Maya houses. Medicinally, the leaves are shredded and inhaled by those having a nosebleed. This is believed to stop the hemorrhage.

26 a. *C. villosa* Mill., Box-zal-che (Maya). Standley, 288; Roys, 308.

The leaves of this tree are considered to be efficacious in the treatment of skin irritations and fungus growths. The treatment calls for toasting the leaves in hot ashes, crushing them in salt, and applying them to the affected area.

27. *Cecropia obtusa* Trécul, X-koch-lé (Maya), Hoja de higuierilla (Spanish). Standley, 244; Roys, 256.

This is a tree 5 to 10 meters high which grows in black soil. The leaves are broad and resemble those of a horse chestnut. One yerbatero prescribes grinding the leaves with salt and applying them to the white spots developed on the skin in Pinto disease. He says that the spots will disappear in 3 days. Another herb doctor boils the flowers with sugar and gives a dose of 2 teaspoonfuls of this concoction to patients with colds. Four applications are usually sufficient to break up a cold.

28. *Cedrela mexicana* M. Roem., Kulche (Maya), Cedro (Spanish). Standley, 310; Roys, 258. See plate 23, figure 1.

The Kulche is a large tree with thick bark and medium-hard wood which furnishes perhaps the most widely used lumber of Yucatan. Its numerous small white flowers expel a pungent odor. The sticky sap is used by the Maya as mucilage. The fruits open up when dry, and Maya children make toys of them. There are no leaves on the tree during the dry season. When the leaves appear in May, it is a signal for the Maya to plant corn. They tell that many trees begin to send forth their leaves with the first rains in March and April, but not the Cedro, for it does not put forth its leaves until the real rains begin.

29. *Ceiba aesculifolia* (HBK.) Britt. & Baker, Piim (Maya), Pochote (Spanish). Standley, 352; Roys, 276.

The trunk of this large tree bears conical spines. The cotton surrounding the seeds is used for making pillows. The Maya believe that as the cotton is blown about by wind at noon, it is set on fire by the hot sun, and that if this blazing cotton falls on a thatched house, the house will burn. The boiled young fruits are eaten as a vegetable; the roasted seeds are also eaten. It is said that the young shoots were eaten in ancient days as a "hard times" food. Maya mothers object to their baby boys playing with the fruits of the

Piim; they think it will make them effeminate and have large breasts. They have the same belief concerning the fruit of the Yaxche tree (29 a).

29 a. *C. pentandra* (L) Gaertn., Yaxche (Maya), Cibo (Spanish). Standley, 352; Roys, 298.

This tree is also known as the Kapok tree.

30. *Celtis iguanaea* (Jacq.) Sarg., Zidz-muc (Maya). Standley, 242; Roys, 311.

This vine has alternate branches which are covered with spines. Its flowers are white and its yellow fruits are eaten by man and birds. The juice of the plant is used for sore eyes, but too much of it aggravates the condition and even causes blindness. The leaves are boiled and the water is used as a bath to reduce fever.

31. *Cereus undatus* Haw., Chac-uob (Maya), Pitahaya roja (Spanish). Standley, 367; Roys, 232. See plate 23, figure 2.

This large, spiny vine bears edible red-skinned fruits in July and August. The vine is crushed, put into cold water, and used as a shampoo by the Maya. There are two varieties of this plant, one called Chac-uob and the other, Zac-uob. In checking the Maya spelling, the informant insisted that it should be spelled "uo" instead of "uob."

32. *Chlorophora tinctoria* (L.) Gaud., Kanklische (Maya), Mora (Spanish). Standley, 245.

In Yucatan this is a common tree, often bearing long spines. The strong, hard wood is customarily used for the pestles of chocolate mixers. The sap is applied to cotton and put into a decayed tooth to relieve toothache.

33. *Cissus rhombifolia* Vahl, X-tab-canil (Maya). Standley, 342; Roys, 281.

This is a large, woody vine with red or green flowers. The fruits are small, black berries. The vine is not tough like other lianas and is, therefore, not used in house construction. Occasionally, the medicine men use it to construct their tables for temporary ceremonies. Medicinally, the bark, crushed in water, is used to wash wounds and sores. When the wound is thoroughly clean, the crushed bark is applied.

34. *Citrus Aurantium* L., Zudz-pakal (Maya), Naranja (Spanish). Standley, 307; Roys, 273.

Like all citrus fruits, sour oranges are of Spanish importation. Although extremely sour and unappetizing, these fruits are sometimes eaten raw or are used in washing game meat and fowl to remove the game taste. The sour juice is used as vinegar.

34 a. *C. sinensis* Osbeck., Chuhuc-pakal (Maya), Naranja de China (Spanish), Standley, 308; Roys, 239.

From the flowers of this sweet orange a distillate is made which is used widely in Yucatan for flavoring refreshments. A refreshing beverage is also made from its leaves. Another citrus fruit called X-mek-pakal (Maya) has a unique flavor not unlike that of the tangerine. The fruit is rough-skinned, as if infected with disease.

35. *Clusia flava* Jacq., Chunup (Maya). Standley, 358; Roys, 240.

This large, hardwood tree is frequently found in Yucatan. It has large, thick leaves, yellow flowers, and fleshy fruit. It is useful as a shade tree. The Maya heat the leaves of the Chunup and apply them to a protruding navel.

36. *Coccoloba Schiedeana* Lindau, Bob or Bob-che (Maya). Standley, 253; Roys, 217.

This is a large, tall tree with thick leaves and white flowers. Its large leaves are used to wrap tortillas and the Spanish candy, Melcocha. Its fruit is eaten by birds. After the removal of the bark, the hard wood is used in house construction, particularly for the center beams.

37. *Colocasia esculenta* (L.) Schott., X-cucut-macal (Maya), Macalito (Spanish). Standley, 224.

This is an annual plant which is planted during the rainy season. It has very large leaves and an edible root, which is cooked and eaten with honey. The Maya believe that a man who owns setting hens must not eat this plant, for if he does the eggs will not hatch. However, if the hen itself is fed a peeled and cooked macal, the eggs will hatch.

38. *Corchorus siliquosus* L., Chichibe (Maya), Malva bisco (Spanish).

This plant has many seeds, and it ranges from 3 centimeters to 1 meter in height. Its small, pointed leaves are eaten by chickens, turkeys, and pigs. It is used by modern Maya to relieve the bite of a pic bug (*Triatoma dimidiata*). This plant, also called Xmichiyuc by some Maya, is not listed by either Roys or Standley.

39. *Cordia globosa* (Jacq.) HBK., Hau-che (Maya). Standley, 397; Roys, 244.

This shrub has a woody root, strongly scented white flowers, and red fruit. Because the leaves are utilized solely as a seasoning in the cooking of the armadillo to remove its peculiar, disagreeable smell and taste, the plant is called oregano uech, which is half Spanish and half Maya meaning, literally, "seasoning the armadillo."

40. *Crescentia Cujete* L., Luch and Huaz (Maya), Jicara (Spanish). Standley, 418; Roys, 262.

There are two varieties of this small tree, both of which have thick bark. One variety is called Luch and the other, Huaz. The former is the cultivated variety, which bears round fruits. The latter is the wild variety, bearing oval-shaped fruits whose pulp has a stronger odor than that of the Luch. Both varieties belong to the species *Cujete*. When cut in half, the gourd is called a jicara and is employed as a dish or bowl. The Maya believe that the Luch must be planted on the 24th of June for St. John the Baptist; if planted on any other day, the fruits will fall off. If the tree does not bear, the Maya beat the tree (this holds true for other fruit trees as well) with a bejuco, nine lashes, on the 24th of June; it must not be beaten any other time. The Maya also hang the heads of horses, the horns of cattle, and pigs' heads in the Luch tree to make it ashamed of itself for not bearing fruit.

41. *Croton humilis* L., Ic-aban (Maya). Standley, 321; Roys, 247.

This low, slender, aromatic shrub is commonly found in Yucatan. The natives say that it is a poisonous plant possessing such a strong scent that it causes the eyes to water. If cows or horses hit its branches with their heads, their eyes become sore, and they will be blind unless their eyes are washed with salt water. Ticks breed in its white flowers. It is used as a broom to sweep the fleas from Maya homes.

42. *Dalbergia glabra* (Mill.) Standl., Cibix (Maya). Standley, 293; Roys, 225.

This common vine has small, white flowers. The Maya use its strong and flexible bark as rope to bind together the heavy beams in their thatched houses and, instead of chains, to lift water containers from norias (wells). The roots are believed to have a beneficial effect in the treatment of dysentery.

43. *Diospyros cuneata* Standl., Silil (Maya). Standley, 377.

This tall tree grows chiefly in the southern part of Yucatan and its fruit is eaten by birds, particularly parrots. The wood is burned on the hearths and in limekilns. It is rarely used for house construction, as it disintegrates very rapidly.

44. *Diphyssa carthagenensis* Jacq., Dzudzuc (Maya). Standley, 294; Roys, 316.

This tall tree, which has light-yellow flowers, grows abundantly in the bush near Chichen Itza. It has been used consistently throughout Yucatan history for sores and open wounds, and independent statements from five Indian herb doctors stress the value of the sap of this tree in such cases today. One adds, "Nine drops of the raw juice from the leaves of this plant when taken in a small amount

of water are good for red dysentery." Another says that five or six applications of the sap of this tree will cure the chiclero ulcer.

45. *Ditaxis tinctoria* (Millsp.) Pax & Hoffm., Pixton ojo (Maya). Standley, 323.

The Maya boil the leaves of this small herb and in the resulting water they bathe their babies who are believed to have been bewitched by the "evil eye" of a drunken person. This plant is especially efficacious on Mondays and Fridays. Babies who have just been weaned are also bathed in such water.

46. *Dorstenia Contrajerva* L., X-cambalhau (Maya), Contrayerva (Spanish). Standley, 245; Roys, 222. See plate 23, figure 3.

This small perennial plant has large, deeply lobed leaves and grows abundantly in sahcab holes (limestone pits) around Chichen Itza. It has been used consistently over a long period to alleviate disorders of the alimentary canal, especially the stomach, and may be bought as a root or extract in the Merida drug stores. In early times X-cambalhau was prescribed for a great variety of ailments, including colds, pain in the heart, insect bites, diarrhea, dysentery, indigestion, childbirth, irregular menses, blood-vomit, liver complaint, sores, gout, tumors, skin diseases, and infected gums (Roys, 1931, p. 222). Today the plant is known to modern doctors in Merida as an antidote for all poisons and is employed as a stimulant tonic and diaphoretic in fevers, dysentery, diarrhea, and indigestion. Among the herb doctors the plant is used chiefly to cure digestive disorders and to treat poisonous snake bites. For digestive disorders the root is generally cooked with sugar or honey and the concoction taken by the spoonful. Sometimes the root is toasted and then ground into a powder and mixed with pozole or coffee.

47. *Ehretia tinifolia* L., Bec (Maya), Sancó (Spanish). Standley, 397; Roys, 217.

This very large, hardwood tree, known commonly by the Spanish name Roble as well as by those given above, is common in Yucatan forests and grows profusely in white soil (sahcab). It has thick bark, and its wood is sometimes used to make furniture—benches and tortilla tables. The Maya say that the wood must be cut by the full moon to prevent its decaying. During the entire dry season some leaves remain on this tree. Orange shoots may be grafted onto the trunk of the Bec with success. For pyorrhea the leaves of the Bec tree are cooked and the liquid used as a mouth wash. The treatment calls for three or four applications a day. Baths for sores and wounds are prepared by boiling the leaves of this tree. The fruits are eaten by birds and mammals.

48. *Elytraria squamosa* (Jacq.) Lindau., X-cabal-xaan (Maya). Standley, 423; Roys, 221.

This small, common weed has short, leafy stems and purple spike flowers. It is called X-cabal-xaan because it resembles a small palm tree. The Maya say that a whole plant boiled in a half quart of water is given to women suffering from venereal diseases.

49. *Erythroxylon brevipes* DC., Ici-che (Maya). Standley, 304.

This is a small, spreading tree which has tiny, white flowers and beanlike fruits with black seeds. The hard wood is used widely in house construction for the roof poles which support the thatch.

50. *Eupatorium odoratum* L., Tok-aban (Maya). Standley, 444; Roys, 286.

This is a rather uncommon shrub in the vicinity of Chichen Itza. In colonial times it was used in the treatment of gonorrhoea and malaria. One modern herb doctor uses a decoction of the leaves in cases of stomach ache and kidney trouble. Another uses the root boiled in salt water as a purgative, and two others emphasize the value of the cooked leaves in the treatment of kidney trouble.

51. *Euphorbia hirta* L., Xanab-mucuy (Maya), Yerba de pollo (Spanish). Standley, 325; Roys, 293. See plate 23, figure 4.

This small, common weed, also known as Golondrina in Spanish, spreads over the ground along the roadsides in Yucatan. Its leaves are small and the light-red stems contain a milky sap. It has been used consistently from colonial times to the present to alleviate sore eyes. Four of the six modern herb doctors consulted stated that they use the juice of this plant to reduce inflammation of the eyes. One added that the boiled leaves are used in cases of dysentery and still another said that three or four of the plants should be boiled and the liquid drunk as a diuretic for bladder and kidney trouble, adding that this liquid dissolves "the sand in the kidneys."

52. *Ficus cotinifolia* HBK., X-Copó (Maya), Alamo (Spanish). Standley, 245; Roys, 226. See plate 24, figure 1.

This is a very large tree with aerial roots (see pl. 24, fig. 1). It is one of the first trees to appear on dirt-covered stone ruins in Yucatan and its spreading roots, after taking hold in the ground, soon cover the entire mounds. The milky sap contained in the branches is said to be good for healing cuts and bruises.

53. *Gliricidia sepium* (Jacq.) Steud., Zac-yab (Maya), Madre de cacao (Spanish). Standley, 295; Roys, 307.

This tree is commonly found in Yucatan. It has showy, pinkish flowers and extremely hard wood which is used for many purposes, especially for the corner posts of Maya houses. The Maya relate that the wood is so hard that axes are often broken when used to cut down these trees.

54. *Guettarda elliptica* Sw., Cib-che (Maya), Arbol sabroso (Spanish). Standley, 249.

Cib-che is a small tree which was employed in colonial times (Roys, 1931, p. 224) as an antidote for spider and snake bites and to alleviate cases of dysentery. Today it is no longer used medicinally, according to the four yerbateros consulted. Another tree, *Myrica mexicana*, or wax tree, is also known as Cib-che and is listed as such by Roys (1931, p. 224).

- 54 a. *G. Combsii* Urban, X-tez-lob (Maya). Standley, 429.

This tree does not attain a great circumference but it does grow tall. It has broad, rough leaves and a very thin bark. It is used in the construction of houses, especially for the slanting poles which support the thatched roof.

55. *Hamelia patens* Jacq., X-kanan (Maya). Standley, 429; Roys, 250.

This small tree has red, acid fruits which are sometimes eaten by man. The leaves are toasted over a fire, crushed, and applied to hands having blisters. This is believed to harden the blisters. The treatment is also used for sores, wounds, and cases of eczema.

56. *Helicteres baruensis* Jacq., Zutup (Maya). Standley, 355; Roys, 313.

This shrub is about 2 meters high and bears red flowers. Its hard and woody fruit is spiral in shape. If a Maya child is slow in learning to talk, the fruit is twisted over the baby's tongue, after which the Maya say that the baby soon will begin to talk. This method was used on the brother of the author's informant. It is said that this boy did not learn to talk until he was 5 years old, however.

57. *Indigofera suffruticosa* Mill., Choh (Maya), Añil (Spanish), Indigo (English). Standley, 296; Roys, 238.

The Choh is a common weed with a stiff, gray stem and dark blue-green leaves. The fruits hang from the stem in short pods in clusters of 12 to 15. Indigo was formerly made from the plant and extensively cultivated for exportation, but this practice has been discontinued. The bluing extracted from the small oval leaves was used as a bleaching agent. The Maya sometimes used this material to make blue marks on the foreheads of children suffering from stomach trouble caused by an "evil eye."

58. *Ipomoea Nil* (L.) Roth., Tzotz Kabil (Maya). Standley, 391.

This greenish-yellow vine is thin and hairy and has blue, pink, or purple flowers. It causes much trouble in the milpas. It is gathered like Ramon, *Brosimum Alicastrum* Sw., for horse feed.

- 58 a. *I. Batatas* (L.) Lam., Iz (Maya), Camote (Spanish), Sweetpotato (English). Standley, 390; Roys, 249.

The sweetpotato is not widely cultivated by the Maya. The leaves of the vine are said to be used in the treatment of snake bites.

59. *Jatropha aconitifolia* Mill., Chay (Maya), Chaya (Spanish). Standley, 328; Roys, 234.

The Chay is a small tree or shrub with soft wood, thick, soft bark, and milky sap. It bears white flowers. The green leaves, which are armed with nettles, are boiled with salt and eaten by the Maya as we eat spinach. The sap is used as mucilage. It is also said to be used in the treatment of urinary diseases. The Maya believe in evil spirits called Uays. For example, Uay Uacax is an evil spirit which takes the form of a cow, and Uay Keken is an evil spirit in the form of a pig. For a sheep, it is Uay Taman; for a goat, Uay Chivo. To beat these Uays, the Maya use the branch of a Chay bush. They believe that the more you beat with it, the stiffer the Chay becomes. They have also a snake called Chay Can which is thought to eat the leaves of the Chay bush. This snake is said to have two tails and is thought to pursue nursing women. The Maya say that this snake sucks the breasts of the women, and while doing so, inserts the two tails into the nostrils of the woman, causing her death.

59 a. *J. Gaumeri* Greenm., X-pomol-che (Maya), Piñon (Spanish). Standley, 329; Roys, 278.

This shrub, which grows 2 or 3 meters high, is very common in the dry forests of Yucatan. It has soft, thick bark, very milky stems, and large leaves. The hollow stems are used by children for blowing soap bubbles, and the branches are used for making whistles. The herb doctors use the ground root of the plant in the treatment of snake bites. The water in which the leaves of the plant have been boiled is said to reduce malarial fever.

60. *Krugiodendron ferreum* (Vahl) Urban, Chim-tok (Maya). Standley, 341; Roys, 237.

This is a tall tree, known only in Yucatan (Standley, 1930, p. 342). Its hard wood is used in house construction. Because of the hardness of the wood the milperos, when cutting their fields, often leave the Chim-tok standing. The bark and roots have been used in Yucatan from colonial times to the present as a mouthwash for toothache and gum trouble. One yerbatero adds that the roots of this tree can be boiled and the liquid drunk as a purgative. He warns, however, that while using this medicine, the patient should not eat chile, pork, or any form of lard.

61. *Lagenaria siceraria* (Molina) Standl., Lec (Maya). Standley, 435; Roys, 261.

This large vine, a cultivated plant of Yucatan, is planted annually in May and is not to be found in the dry season. Its large leaves have a disagreeable smell. It has showy, white flowers, and dry, hard, fruitlike gourds. These gourds are used by the Maya as dippers. Medicinally, the leaves are applied to stomachs of babies with diarrhea.

62. *Lasiacis ruscifolia* (HBK.) Hitchc., Zit (Maya). Standley, 204; Roys, 310.

The Maya refer to this coarse, woody shrub with grasslike leaves as Zit. Standley and Roys list it as Mehen Zit. The fruits are like small bullets. The stems are knitted into carpets by Maya women. The hollow reeds are used as whistles by Maya boys and also for sucking up water from a low haltun (shallow water hole).

63. *Leucaena glauca* (L.) Benth., Uaxim (Maya). Standley, 278. See plate 24, figure 2.

This tree is found frequently in Yucatan growing in black soil. It grows rapidly and has white flowers and lacelike leaves. It is said by the Maya that when horses eat the leaves of the tree, the hairs of their tails fall out. Don Juan Martinez, an eminent Maya scholar, said that all Maya people believe this to be true, although there is no scientific proof to substantiate the belief. He adds that they are as convinced of this as they are that a guava tree will grow where an apple seed is planted. The Maya do not burn the wood of the Uaxim tree in their fires, because the Maya women use wood ashes to soften water, and ashes from the Uaxim tree mixed with water are very irritating to the skin.

64. *Lonchocarpus longistylus* Pittier, Balche (Maya). Standley, 296; Roys, 216.

This is a rather large hardwood tree having purplish flowers. Much has been written about the intoxicating drink, Balche, made from the bark of the tree (Standley, 1930, pp. 296-297; Roys, 1931, p. 216). The Maya have various mythological beliefs concerning the tree: e. g., they believe that if a man has setting hens he must not drink Balche, for then the eggs would not hatch, the chicks dying in their shells.

65. *Lucuma hypoglauca* Standl., Chooch (Maya), Zapote blanco (Spanish). Standley, 380; Roys, 238.

This medium-sized tree has large leaves and fruit with a thick, hard, brownish-green husk. Its acid pulp has a pleasant flavor. Concerning the fruit of the Zapote blanco, an informant says that when ripe it is not edible, because it has fermented. However, just before it is ripe, the Maya will pound it and roll it in hot wood ashes, saying each time until it becomes soft:

Ocen takan
Hoken Cheche
Ocen takan
Hoken Cheche.

Then it is broken and eaten and is said to be delicious. The meaning of the first Maya phrase, "Ocen takan," is "Go out, greenness," or "Come into maturity." "Hoken Cheche" means, "Ripen, please."

and don't stay green any more." The Maya believe that the words make the fruits edible.

66. *Malmeca depressa* (Baill.) Fries., Box elemuy (Maya).

Medium in size, this hardwood tree has thick bark and medium-sized leaves. The wood is used in house construction and for ax handles. Medicinally, the root is cooked with corn silk and the water drunk by those suffering from gonorrhoea. It is also drunk to alleviate kidney and bladder trouble. Neither Standley nor Roys lists this plant under either the common or scientific name.

67. *Metastelma Schlechtendalii* Dene., Chimes ak (Maya). Standley, 389.

This slender vine, with its whitish flowers, is frequently found in Yucatan. The root is boiled and the liquid used to rinse the mouth in case of canker sores. The rinse may be repeated several times, but one must not swallow the liquid.

68. *Metopium Brownei* (Jacq.) Urban, Box chechem (Maya), Palo de rosa (Spanish). Standley, 334; Roys, 234.

This is a large tree which has hard wood and small, round leaves. Its flowers are white, its fruits purple. Bees produce black-combed honey from the flowers. The wood is poisonous when in contact with the skin. To counteract this poisonous action, urine is applied to the skin. In addition to this use of urine, the Maya use it in the following ways: (1) Maya people often put urine in their bath water to stave off a cold. (2) If the placenta is not forthcoming when a Maya woman is in labor, she is given a cupful of urine (generally from the father). When the woman coughs or tends to vomit because of the urine, she expels the placenta with the same force. (3) Fever patients are washed with urine to cool their brows. (4) When making poultices of leaves and plants, urine is often used as a solvent. (5) If children have earache, urine is poured into the ears and it is said to cause immediate relief. The urine of small boys is said to be most effective.

69. *Mimosa hemiendyta* Rose & Robinson, Zac-catzim (Maya), Pepinillo blanco (Spanish). Standley, 279; Roys, 303.

This tree, which grows about 3 to 5 meters high, has pink flowers, small leaves, and trunk and branches armed with short spines. The hard wood is used in Yucatan for the corner posts of thatched houses. This plant was used in colonial times to cure coughs and colds. (Roys, 1931, p. 303). Today the yerbateros use it in the same manner. One says that the bark of this tree is boiled with salt and the liquid drunk at night for coughs and colds. He adds that the other species, Box-catzim (69 a), can also be used but that it is less effective.

Another yerbatero adds that it is just as effective for a patient with a cold to chew the bark.

69 a. An unidentified species of *Mimosa* is called locally Boxcatzim (Standley, 1930, p. 279). The dry limbs of this tree are always used for starting milpa fires and as torches by the Maya when traveling over a trail at night. The wood is used in house construction and for making husking pins at corn harvesting time. It also produces good charcoal.

70. *Morinda yucatanensis* Greenm., X-hoyoc (Maya), Piñuela (Spanish). Standley, 430; Roys, 245.

X-hoyoc is a slender vinelike shrub with small leaves and white flowers which grows in the bushlands of Yucatan. Its fruits are eaten by chachalacas (birds like pheasants). The fruit, although spherical, is divided into many segments. It has the appearance of sore eyes, according to the Maya. The Maya call granulated eyelids "X-hoyoc," and the juice of this plant is used for its treatment.

71. *Musa sapientum* L., Haaz (Maya), Guineo (Spanish), Banana (English). Standley, 235; Roys, 244.

The banana tree was probably brought to Mexico shortly after the arrival of the Spaniards. There are at least five varieties to be found in Yucatan. Their names in Spanish are Blanco, Morado, Manzano, Barbaro, and Curro. The fruits are generally smaller than those grown in the West Indies.

72. *Neomillspaughia emarginata* (Gross) Blake., Zac-itza (Maya). Standley, 254; Roys, 304.

In the brushlands and low forests of Yucatan this is a common tree with large and tough leaves. Its white flowers, from which bees make honey, grow in clusters. The straight-grained wood is used for the handles of the Maya machetes and for parts of the looms on which cotton cloth and sabucans are woven. However, its extensive root system causes a great deal of trouble in the milpas. The leaves are boiled and the liquid drunk for coughs and colds.

73. *Ocimum micranthum* Willd., X-cacal-tun (Maya), Albahaca (Spanish). Standley, 406; Roys, 221.

This small, annual weed is aromatic and very common in Yucatan. It has a tiny stem and branches, and small, white flowers. The curly whitish leaves are rubbed on horses to prevent the bites of horseflies. The Maya plant this weed near graves and also put it in a flowerpot and on the altar of the church. The whole plant is boiled and the liquid drunk to cure cases of dysentery.

74. *Persea americana* Mill., On (Maya), Aguacate (Spanish), Avocado, or alligator pear (English). Standley, 269; Roys, 271.

This tall tree, a native of Central America, is used especially for its fruit. It has soft wood and oval, fragrant leaves and grows wild in the dry cenotes (water holes) or in cultivated gardens. In Yucatan

it flowers in March, and the edible fruit ripens in August. In case of fever, fresh leaves from this tree are applied to the feet of the patient. Very young and tender leaves may be boiled with sugar and the liquid used as a cough medicine.

75. *Petrea arborea* HBK., Opp-tzimin (Maya), Bejuco de caballo (Spanish).

This vine has rough, thick, sandpaperlike leaves and purple-blue flowers in clusters. These flowers are very attractive for ornamentation. Horses feed on the plant.

76. *Phaseolus vulgaris* L., Buul (Maya), Frijol (Spanish). Standley, 300; Roys, 218.

There are several varieties of beans in Yucatan. The Buul, or common black bean, is used extensively for food, as is another small black bean, called X-pelon in Maya.

76 a. *P. lunatus* L., Ib (Maya), Frijol (Spanish), Lima bean (English). Standley, 300; Roys, 247.

The lima bean grows both wild and cultivated in Yucatan. The Maya believe that the pods of the Ib are poisonous to pigs. A variety called Ib ceh has brown seeds. The Maya say that a disease called X-cel imil which affects only women and begins in the breast, causing first pain followed by chills and fever, can be stopped in 2 or 3 days by applying Ib ceh leaves to the breasts. If this plant is not found and used, pus soon develops and a severe illness ensues. The pain is said to resemble that caused by the bite of a tiger ant.

77. *Phyllanthus glaucescens* HBK., Ppix-thon (Maya). Standley, 332; Roys, 276.

This shrub, called Ppix-thon-ojo by the Maya of Piste, bears round fruits with hard shells and has large, oval leaves. The Maya believe that the plant is efficacious, especially on Mondays and Fridays, for bathing babies who have diarrhea. They recommend it as a curative for illnesses caused by evil eyes. When a Maya child is weaned, it is given a ceremonial bath in the liquid from the boiled leaves. The Maya children make a plaything of the fruit. The leaves are cooked and used as a bath in cases of pellagra.

78. *Phytolacca icosandra* L., X-tel-cox (Maya). Standley, 262; Roys, 284.

This is a large, juicy herb with a thick root and purple berries. It has big leaves and light-pink flowers. The fruits of the plant are boiled and the resulting liquid is drunk to cure smallpox. The informant related that this medicine caused the pox to "break out," for if it remained "inside," the patient died. The raw leaves of this plant are crushed and rubbed on pimples and sores.

79. *Piscidia communis* (Blake) Harms., Habin (Maya). Standley, 301; Roys, 242.

In the dry forests of Yucatan this tree is commonly found. Its large, fragrant, pinkish flowers grow in clusters, and its hard brown-

colored wood is very durable, making it excellent for the construction of doorframes, railway sleepers, corner posts of Maya houses, and corner floors. It is very attractive when inlaid with cedar and other softwoods. The bark is cut off the tree and shaped to hold the Maya jicaras. To cure coughs and colds, a cough syrup is made by boiling nine tender leaves with sugar.

80. *Pisonia aculeata* L., Beeb (Maya), Uña de gato (Spanish). Standley, 261; Roys, 217.

Common in the thickets of Yucatan, this shrub or thick-stemmed vine has long and drooping branches which are armed with stout spines. The wood is soft. The club-shaped fruits and the white flowers secrete an exceedingly sticky substance. Modern herb doctors recommend that the root of the shrub be ground to a powder and mixed with that of *Hybanthus yucatanensis* (Zac-bacal can) for local application in cases of snake bites. Small plants are boiled and malaria patients bathe in the resulting liquid to reduce their fever. A use for Beeb branches is to place them over the open parts of chicken coops so that bats become entangled in the thorns, which are so strong and peculiarly hooked that the Maya also use them to retrieve buckets that have fallen into wells.

81. *Plantago major* L., Yanten (Maya), Llanten (Spanish). Standley, 425; Roys, 298.

This is a perennial herb with small, green flowers and large, thick, leathery leaves. The young leaves are boiled and the liquid used as a medicine for diarrhea. It is considered an excellent medicine for babies.

82. *Pleiotoma diversifolium* (HBK.) Bur. & Schum., Ne-maax (Maya), Rabo de mico (Spanish). Standley, 398; Roys, 269.

The Maya use the term "Ne-maax" for two plants—*P. diversifolium* and *Heliotropium angiospermum* Murr. The plant called Ne-maax in this description refers to *P. diversifolium*. It has wrinkled leaves, and its long spine of fruit resembles a monkey's tail—hence its name Ne-maax. According to one herb doctor, the leaves of this plant are boiled with honey and the liquid taken four times a day by women to stop premature labor in childbirth. According to three other yerbateros, it is said to alleviate dysentery. Still another herb doctor uses this liquid as an enema.

83. *Pluchea odorata* (L.) Cass., Chal-che (Maya), Santa Maria (Spanish). Standley, 451; Roys, 233.

This is a tree or shrub which grows about 5 meters high in the region of Chichen Itza. It grows in towns and rarely in the dense bush. Its flowers are pink and appear in clusters; its fruits hang in bunches; its large leaves are aromatic. It has been used consistently for aches and pains, for complaints of the womb, and to

regulate the menstrual flow. The six yerbateros consulted regarding the medicinal uses of this tree are from various parts of Yucatan, and since their prescriptions are so varied they all are given below, along with the names of the yerbateros and their locations in Yucatan.

Benito Cauich (Piste)—The leaves of the Chal-che and the leaves of the sour orange are cooked together with honey. This concoction is used as a tonic, for an aching chest and stomach, and to regulate menstrual periods in women. The prescription calls for 1 tablespoonful every hour. When using this medicine the diet also must be regulated; for example, no pork, lard, or cold water may be used; beef is permissible.

Marcelino Cante (Pencuyut)—The leaves and branches of this tree are cooked, and an individual who is troubled with twitching muscles is told to bathe in this water for relief. This twitching of the muscles is thought to be caused by evil winds of the woods.

Louis Zapata (Chapab)—About an ounce of the leaves of this plant are cooked with some honey and given in three doses to women suffering from amenorrhea.

Epifanio Ceme (Chan Kom)—For bad cases of rheumatism the leaves of this tree are warmed and applied to the legs, and then wrapped on securely with cloths.

Martiniano Dzib (Piste)—The leaves of this tree are boiled, and the water is used to give the Maya woman her first bath after childbirth. Sometimes the leaves of the sour-orange tree are also used.

Pedro Castillo (Dzitas)—The leaves are used for relieving fever by covering them with tallow which has been mixed with ground coffee and binding them tightly over the soles of the feet. A decoction of the boiled leaves is given to women in labor.

84. *Plumeria alba* L., Zac-nicte (Maya), Flor de Mayo blanco (Spanish). Standley, 383; Roys, 306. See plate 24, figure 3.

This medium-sized tree, extensively cultivated in Yucatan, has soft wood and white sap. It has grayish-white bark, large leaves, and brilliant white or red flowers in bunches. The Maya believe that the Uay, or witches, use these flowers in their ceremonies. The sap of the red-flowered tree is used to reduce swellings.

85. *Portulaca oleracea* L., Xucul (Maya), Verdolaga (Spanish), Pusley (English). Standley, 263; Roys, 296.

This common, low-spreading weed has tiny, yellow flowers and small, oval leaves. Since chickens, turkeys, and pigs eat it, the pusley is sold in the Merida market for them. One modern herb doctor says that a decoction of this plant is an efficacious remedy for worms.

86. *Psidium Sartorianum* (Berg) Niedenzu., Pichi-che (Maya). Standley, 373; Roys, 276.

The Pichi-che is a tall tree nearly 20 meters high frequently found near Chichen Itza, and it is not to be confused with the Pichi or guava (see No. 87). It has smooth, gray bark and juicy red or greenish-yellow fruit which has a spicy flavor. The fruits are small and not edible for man but are eaten by the wild pig. The hard wood is used for the poles of Maya houses and for machete handles. There

have been no consistent medicinal uses for this plant. In colonial times, "The leaves [were] boiled and the decoction given for epilepsy or employed as a bath. The toasted leaves [were] squeezed into the ear to cure earache" (Roys, 1931, p. 276). Today two herb doctors prescribe a decoction of the leaves as a bath for pimples and skin eruptions. Another uses the decoction as a bath for relieving night sweats. One herb doctor says that the roots are cooked and the liquid is drunk by those suffering from dysentery.

87. *Psidium Guajava* L., Pichi (Maya), Guayaba (Spanish). Standley, 373; Roys, 276.

The Pichi, one of the most common fruit trees of tropical America, grows to be 5 to 7 meters high and has hard wood and smooth, shiny bark of medium thickness. It bears white flowers. There is also a wild guava tree which the Maya use for house construction. The leaves of this variety are placed in bath water and are said to induce perspiration. A further use for the water is to soothe skin irritations.

88. *Psychotria microdon* (DC.) Urban, Bacelac (Maya). Standley, 430.

This is a stout shrub bearing long, greenish-white flowers. The leaves are boiled and the water is used for bathing babies having diarrhea.

89. *Rauwolfia heterophylla* Roem. & Schult., Cabal-muc (Maya). Standley, 385; Roys, 220.

This plant is also known as X-cambal-muc. It is a common low shrub about 1 meter high, containing a milky sap and bearing white odorous flowers from which bees gather nectar to make honey. The fruits are nearly black at maturity. The bark is used by tobacco farmers to give odor and color to tobacco. In Yucatan the juice of this plant has been used consistently since the colonial period in the treatment of sore eyes. Care must be taken, however, that only a small amount be used, for too much causes blindness. The directions call for only one application a day. One yerbatero adds that the root of this shrub is ground to a powder and applied to open wounds in which fly maggots have already appeared.

90. *Ricinus communis* L., X-koch (Maya), Higuierilla (Spanish), Castor-bean (English). Standley, 332; Roys, 255.

This soft-stemmed herb, very common in Yucatan, produces the castor-bean from which castor oil is made. It has large, slender leaves and reddish beans. Oil from the seeds is used as a purgative. To prepare castor oil, the natives roast the beans in the husk and then shell the beans and grind them. This material is boiled and the oil which rises to the surface is skimmed off and used. When a woman desires to stop her flow of milk in weaning her baby, she selects 13 small twigs of the X-koch tree and ties them about her neck.

91. *Ruellia tuberosa* L., X-cabal-yaxnic (Maya), Yerba de la calentura (Spanish). Standley, 425; Roys, 221.

This is a perennial herb with small, blue flowers and opposite leaves. The leaves are boiled and the liquid is drunk for chronic chest colds, called Postemas. Maya mothers, when annoyed by their children, say, "Hach postema ech," which means, "You are just a chest cold."

92. *Sesamum orientale* L., Zicil-puuz (Maya), Ajonjoli (Spanish). Standley, 416; Roys, 309.

This plant, a native of the East Indies, has white or pink flowers. The seeds, which are very tiny, round, and flat, are used to thicken broth and for sweetmeats. One of the rich Maya dishes, papa-Dzul, is prepared with these seeds. Mexicans also prepare a rich dish called mole with the seeds. The seeds are ground, mixed with masa, and given to nursing mothers to increase their milk flow. The seeds of the Ramon tree (Ox in Maya and *Brosimum Alicastrum* Sw., scientifically) are used more extensively for this purpose.

93. *Smilax mexicana* Griseb., X-co-ceh (Maya), Zarpaparilla (Spanish). Standley, 229; Roys, 225.

This thorny vine is common in the Yucatan bush. It has a hard, thorny stem and long, flexible, thorny leaves; the small flowers are purplish brown; the fruit is a black berry. From this plant the Maya make the crown of thorns for the figures of Christ which are found in some of the churches.

94. *Spondias purpurea* L., Abal-ac (Maya), Ciruela (Spanish). Standley, 335; Roys, 213, See plate 24, figure 4.

The Abal is a small, very common tree with few thick branches. Its red or purple flowers produce small red or green fruits, varied in size and shape, which ripen in April and resemble plums. When eaten raw, they remind one of preserved green olives because of their size and large seeds. The plums are boiled with meat in stews. There are several varieties of the Abal, for example: hantunil abal, Campech abal, Tuxpana abal, Zabac abal, Tuxile and Houen abal. Our slang expression for a beautiful girl is "peach." In Maya, the people say, "Bey chiabale," which implies, "She's very pretty—nice, fat, and smooth."

95. *Thouinia paucidentata* Radlk., Kan-chunup (Maya). Standley, 340; Roys, 251.

This is a tall tree which, according to Standley, is endemic in the Yucatan Peninsula. Its hard wood is used in the construction of Maya houses. The bees make very sweet honey from the nectar of its whitish flowers. The Maya believe that the tree contains a charm against bad or evil winds. A modern yerbatero recommends boiling its bark for treating snake bites. For a severe cough, the bark of this tree is boiled in salt water and a half cup of the liquid drunk

at night. The leaves of the chunup are also used for healing the chiclero ulcer, or the sap may be applied directly to the wound.

96. *Tragia yucatanensis* Millsp., Ppoppox (Maya), Ortiguilla (Spanish). Standley, 333; Roys, 278.

This is a climbing vine with small leaves. The stems are armed with nettles. The Maya formerly used this plant to whip their children when they were naughty, especially if they were inclined to run away from home. Rubbing the leaf on an aching part of the body causes an irritation which feels good. The boiled roots are said to be used in the treatment of gonorrhoea. The roots are boiled and the water is drunk to relieve stomach ache.

97. *Urera caracasana* (Jacq.) Griseb., Laal (Maya), Ortiga de caballo (Spanish). Standley, 248; Roys, 261.

This shrub, frequently found in Yucatan, is covered with nettles. Its green flowers produce small, red fruits. The plant is used widely for medicinal purposes. The roots are boiled with honey and the liquid is used for stomach ache and as a vermicide. The leaves are also boiled and crushed for their juice, which is mixed with the juice of 9 or 13 oranges. The mixture is then heated and the resulting concoction given to babies with diarrhoea. The leaves, wrapped in a cloth and tied on the head, are said to be good for headache.

98. *Viguiera dentata* (Cav.) Spreng. var. *helianthoides* (BHK.) Blake, Tah (Maya), Romerillo de la costa (Spanish). Standley, 455; Roys, 281.

This common weed is tall and branching. The stems are used for sky rockets, and in Pencuyut they are used to make corn bins by tying the stems together in the form of a mat.

99. *Zea mays* L., Ixim (Maya), Maize (Spanish), Corn (English). Standley, 210; Roys, 249.

In Yucatan, maize grows tall, sometimes as high as 5 meters, and often produces two or three small ears on each stalk. The kernels are rather soft and generally white or yellow in color. The Maya cultivate maize by a method known as "milpa culture," which consists of cutting and burning the bush and planting the maize in the unplowed field. The corn plot is used for only 2 or 3 years, after which it is allowed to revert to the bush and a new area is selected. Maize is the chief source of food of the Maya, comprising 75 to 85 percent of their diet. They hold maize in very high esteem, calling the growing corn "Chichpan gracia," which may be translated as "beautiful grace" or more freely "beautiful gift." They believe that if one is not careful about preserving loose kernels of corn, one will soon come to misery.

100. *Zuelania guidonia* (Swartz) Britt. & Millsp., Tamay (Maya), Volador (Spanish). Standley, 362.

The Tamay is a tall tree with thick bark and large pointed leaves. It bears small, greenish-white flowers in dense clusters, and its berry-

like, fleshy fruit is edible. The fruits are roasted before being eaten. Its wood is used in house construction. One herb doctor said that the leaves of this tree are boiled with the leaves of the X-taben-tun tree and the water is used as a bath to reduce fevers.

ALPHABETICAL LIST OF MAYA NAMES OF PLANTS IN THIS STUDY

Maya name	Scientific name	Plant No.
Abal-ac	<i>Spondias purpurea</i> L.	94
Akab-xiu	<i>Blechnum pyramidatum</i> (Lam.) Urban	13
Ak Xux	<i>Adenocalymna fissum</i> Loes	6
Bacal-che	<i>Bourreria pulchra</i> Millsp	15
Bacclac	<i>Psychotria microdon</i> (DC.) Urban	88
Balche	<i>Lonchocarpus longistylus</i> Pittier	64
Beeb	<i>Pisonia aculeata</i> L.	80
Beec	<i>Ehretia tinifolia</i> L.	47
Beznic-che	<i>Alvaradoa amorphoides</i> Liebm	8
Bob or Bob-che	<i>Coccoloba Schiedeana</i> Lindau	36
Box-catzim	<i>Mimosa</i> sp.?	69 a
Box chechem	<i>Metopium Brownei</i> (Jacq.) Urban	68
Box elemuy	<i>Malmeca depressa</i> (Baill.) Fries	66
Box-zal-che	<i>Cassia villosa</i> Mill	26 a
Buul	<i>Phaseolus vulgaris</i> L.	76
Cabal-muc	<i>Rauwolfia heterophylla</i> Roem. & Schult	89
X-cabal-yaxnic	<i>Ruellia tuberosa</i> L.	91
X-caecal-tun	<i>Ocimum micranthum</i> Willd.	73
X-cambalhau	<i>Dorstenia Contrajerva</i> L.	46
X-cabal-xaan	<i>Elytraria squamosa</i> (Jacq.) Lindau	48
Chacah	<i>Bursera Simaruba</i> (L.) Sarg	18
Chacal haaz	<i>Calocarpum mammosum</i> (L.) Pierre	22
Chac-cancel Xiu	<i>Blepharodon mucronatum</i> (Schl.) Dene	See 14
Chac-dzulub-tok	<i>Bauhinia unguolata</i> L.	10
Chaeté	<i>Caesalpinia platyloba</i> Wats	20 a
Chac-uob	<i>Cereus undatus</i> Haw	31
Chac zinkin	<i>Caesalpinia pulcherrima</i> (L.) Swartz	20
Chal-che	<i>Pluchea odorata</i> (L.) Cass	83
Chay	<i>Jatropha aconitifolia</i> Mill	59
Chichibe	<i>Corchorus siliquosus</i> L.	38
Chimay	<i>Acacia Milleriana</i> Standl	3 a
Chimes ak	<i>Metastelma Schlechtendalii</i> Dene	67
Chim-tok	<i>Krugiodendron ferreum</i> (Vahl) Urban	60
Choh	<i>Indigofera suffruticosa</i> Mill	57
Chom	<i>Bromelia Karatas</i> L.	16
Chooch	<i>Lucuma hypoglauca</i> Standl	65
Chuhuc-pakal	<i>Citrus sinensis</i> Osbeck	34 a
Chunup	<i>Clusia flava</i> Jacq	35
Cib-che	<i>Guettarda elliptica</i> Swartz	54
	<i>Myrica mexicana</i>	See 54
Cibix	<i>Dalbergia glabra</i> (Mill.) Standl.	42
X-co-ceh	<i>Smilax mexicana</i> Griseb	93
X-Copó	<i>Ficus cotinifolia</i> HBK	52
X-cucut-macal	<i>Colocasia esculenta</i> (L.) Schott	37

ALPHABETICAL LIST OF MAYA NAMES OF PLANTS IN THIS STUDY—Continued

Maya name	Scientific name	Plant No.
Dzalmuy	<i>Annona squamosa</i> L.	9 a
Dzudzuc	<i>Diphysa carthagenensis</i> Jacq.	44
Ek-kixil-ak	<i>Bignonia unguis-cati</i> L.	11
Haaz	<i>Musa sapientum</i> L.	71
Habin	<i>Piscidia communis</i> (Blake) Harms.	79
Hau-che	<i>Cordia globosa</i> (Jacq.) HBK.	39
X-hoyoc	<i>Morinda yucatanensis</i> Greenm.	70
Huaz	<i>Crescentia Cujete</i> L.	40
Hunpedz-kin-ci	<i>Aloe vera</i> L.	7
Ib	<i>Phaseolus lunatus</i> L.	76 a
Ib ceh	<i>Phaseolus lunatus</i> L., variety	See 76 a
Ic-aban	<i>Croton humilis</i> L.	41
Ici-che	<i>Erythroxylon brevipes</i> DC.	49
Ixim	<i>Zea mays</i> L.	99
Ixim-che	<i>Casearia nitida</i> (L.) Jacq.	24
Iz	<i>Ipomoea Batatas</i> (L.) Lam.	58 a
Kan-chunup	<i>Thouinia paucidentata</i> Radlk.	95
X-kanan	<i>Hamelia patens</i> Jacq.	55
Kankliche	<i>Chlorophora tinctoria</i> (L.) Gaud.	32
Kan-puc-yim	<i>Callicarpa</i> sp.?	See 21
X-koch	<i>Ricinus communis</i> L.	90
X-koch-lé	<i>Cecropia obtusa</i> Trécul.	27
Kulche	<i>Cedrela mexicana</i> M. Roem.	28
Kuxub	<i>Bixa Orellana</i> L.	12
Laal	<i>Urera caracasana</i> (Jacq.) Griseb.	97
Lec	<i>Lagenaria siceraria</i> (Molina) Standl.	61
Luch	<i>Crescentia Cujete</i> L.	40
Max-ic	<i>Capsicum frutescens</i> L.	23
X-mek-pakal	<i>Citrus</i> sp.?	See 34 a
Ne-maax	<i>Pleonotoma diversifolium</i> (HBK.) Bur. & Schum. or <i>Heliotropium angiospermum</i> Murr.	82
X-muc-ic	<i>Capsicum</i> sp.?	See 23
X-oco-ak	<i>Abrus precatorius</i> L.	1
On	<i>Persea americana</i> Mill.	74
Opp-tzimin	<i>Petrea arborea</i> HBK.	75
Pichi	<i>Psidium Guajava</i> L.	87
Pichi-che	<i>Psidium Sartorianum</i> (Berg) Niedenzu.	86
Piim	<i>Ceiba aesculifolia</i> (HBK.) Britt. & Baker.	29
Pixton ojo	<i>Ditaxis tinctoria</i> (Millsp.) Pax & Hoffm.	45
X-pomol-che	<i>Jatropha Gaumeri</i> Greenm.	59 a
Pox	<i>Annona Cherimola</i> Mill.	9
Ppoppox	<i>Tragia yucatanensis</i> Millsp.	96
Ppix-thon	<i>Phyllanthus glaucescens</i> HBK.	77
Put Xiu	<i>Lepidium virginicum</i> L.	See 7
Silil	<i>Diospyros cuneata</i> Standl.	43
X-tab-canil	<i>Cissus rhombifolia</i> Vahl.	33
Tah	<i>Viguiera dentata</i> (Cav.) Spreng. var. <i>helianthoides</i> (HBK.) Blake.	98

ALPHABETICAL LIST OF MAYA NAMES OF PLANTS IN THIS STUDY—Continued

Maya name	Scientific name	Plant No.
Tamay	<i>Zuelania guidonia</i> (Swartz) Britt & Millsp.	100
X-tel-cox	<i>Phytolacca icosandra</i> L.	78
X-tez-lob	<i>Guettarda Combsii</i> Urban	54 a
Tok-aban	<i>Eupatorium odoratum</i> L.	50
X-tu-ab or X-tu-habin	<i>Cassia emarginata</i> L.	26
Tuk	<i>Acrocomia mexicana</i> Karw.	5
Tzotz Kabil	<i>Ipomoea Nil</i> (L.) Roth	58
Uaxim	<i>Leucaena glauca</i> (L.) Benth.	63
Xanab-mucuy	<i>Euphorbia hirta</i> L.	51
Xhulkin Xiu	<i>Blepharodon mucronatum</i> (Schl.) Dene	14
Xucul	<i>Portulaca oleracea</i> L.	85
Ya	<i>Achras Zapota</i> , L.	4
Yanten	<i>Plantago major</i> L.	81
Yaxehe	<i>Ceiba pentandra</i> (L.) Gaertn.	29 a
Yuy	<i>Casimiroa tetrameria</i> Millsp.	25
Zac-ak	<i>Bignonia</i> sp?	11 a
Zac-bacal can	<i>Hybanthus yucatanensis</i>	See 80
Zac-bach	<i>Adenocalymna punctifolium</i> Blake	6 a
Zac-catzim	<i>Mimosa hemiendyta</i> Rose & Robinson	69
Zac-dzulub-tok	<i>Bauhinia divaricata</i> L.	10 a
Zac-itza	<i>Neomillspaughia emarginata</i> (Gross) Blake	72
Zac-nicte	<i>Plumeria alba</i> L.	84
Zac-pah	<i>Byrsonima bucidaefolia</i> Standl.	19
Zac-puc-yim	<i>Callicarpa acuminata</i> HBK.	21
Zac-uob	<i>Cereus undatus</i> Haw.	See 31
Zac-xiu	<i>Abutilon trisulcatum</i> (Jacq.) Urban	2
Zac-yab	<i>Glireschia sepium</i> (Jacq.) Steud.	53
Zicil-puuz	<i>Sesamum orientale</i> L.	92
Zit	<i>Lasiacis ruscifolia</i> (HBK.) Hitchc.	62
Zidz-muc	<i>Celtis iguanaea</i> (Jacq.) Sarg.	30
Zizal-xiu	<i>Bryophyllum pinnatum</i> (Lam.) Kurz	17
Zubin	<i>Acacia Collinsii</i> Safford	3
Zudz-pakal	<i>Citrus Aurantium</i> L.	34
Zutup	<i>Helicteres baruensis</i> Jacq.	56

DISCUSSION

The reader is reminded that in the main the material presented herein is new and does not include the abundant data which have already been published on the flora of Yucatan except for isolated pertinent facts which are necessary for descriptive purposes. As a result of careful editing and the omission of reiterative material, this study comprises only 100 plants; but the uses accredited to them by the Maya are great in number and diversified in nature. On the practical side these plants include woods used for various parts of

house construction and for furniture, toys, torches, skyrocketes, ox-carts, ax handles, and animal traps. Some of the plants are employed in making common household articles such as soap, shampoos, and mucilage, while others are used for ornamentation in the form of rings and similar jewelry. A number of them provide food for man, wild animals, birds, and insects. Their most prevalent use is to cure diseases, 46 of which are said to be efficaciously treated by 60 of the plants herein listed.

The art of healing among the Maya is a precarious procedure at best, for the Indians know little or nothing of modern medical practices, and their own brand of medicine is a mixture of folklore, superstition, and herbal concoctions. Ordinarily geographically far from and often mentally indifferent to scientific medical assistance, the Maya resort to treatment by their native *yerbateros* (herb doctors) or medicine men (or women), who have no scientific training but recommend treatments which they have learned from practice, from other herb doctors, or from their own parents. Their remedies are prepared and administered with a maximum of supernatural rites. Certain numbers they consider important, nine especially. Many concoctions call for nine leaves of a plant, or nine drops of a medicine comprise a dose. A *yerbatero* is not always called in to treat a patient, for the Maya mothers have "home" remedies which they administer independent of the herb doctor.

Whether or not there is a pharmacological science involved in medicinal uses of plants by primitive people is often questioned. It is sometimes suggested that such studies be assigned entirely to the sphere of folklore. It is true that folklore is the prevailing influence in native medicine, and it is the author's opinion that a large percentage of such prescriptions have no curative value whatever other than their psychological effect upon the patient.

There seem to be four categories into which the Maya practice of cures can be divided. The first is that of pure superstition, based on taboos and necromancies, with no recognition of symptoms or specificity of treatment. The uses of *Abrus precatorius* L., and *Indigofera suffruticosa* Mill. (plants Nos. 1 and 57) are proofs of this point. They are used in the treatment of disorders caused by the "evil eye" or bewitchment.

The second category includes those diseases which are recognized definitely and are not accredited to any supernatural causes. Unfortunately, the cures prescribed are not often efficacious. For instance, the Maya recognize diabetes and its symptoms. They know that diabetic urine contains sugar, for one informant explained that ants gather around a container of diabetic urine to eat the sugar. Yet their cure for this malady is not to go to the hospital for insulin, but

to use the roots and fronds of *Acrocomia mexicana* Karw. (plant No. 5). Samples of the roots were analyzed by the Squibbs Institute of New Brunswick, N. J., and were found to be inert as far as a cure for diabetes was concerned.

The third group includes those diseases which involve a simple or an elaborate curative process, but where the end results seem to depend upon the psychological factors involved. An interesting example of this is to be found in the Maya method of inducing or inhibiting human milk flow by the use of plants Nos. 90 and 92. *Brosimum Alicastrum* Sw., or Ox in Maya, a plant not considered in this study, is employed even more widely for inducing the flow of milk by both Maya and Spanish women. Stories are told by responsible persons of women, some as old as 60 years, who, by the use of vapor baths and additional feeding, are able to produce enough milk to supply nourishment for newly born babies. One such case the author has no occasion to doubt. It concerns the death of a young mother 3 days after her child was born. The child's grandmother, who was about 60 years old, began to nurse the child and at the same time to eat nourishing food made from squash seeds, chaya leaves, and the seeds of the Ox tree. In a few days she began to produce "good thick milk" in sufficient quantities to nurse her grandchild until the child was 2 years old.

Seeds from the Ox tree were tested by Dr. Robert W. Bates, biochemist at the Carnegie Institution of Washington at Cold Spring Harbor, N. Y., and were found to be inert as far as the crop-gland reaction in pigeons was concerned. The author believes that the Ox seeds have very little to do with the production of milk by the Maya women. It seems more plausible that the combination of nourishing food, vapor baths and massaging, and the tremendous desire on the part of the women to produce milk when it is desperately needed, are enough to start the flow of milk in some women. The nursing child is probably responsible for the increase in the amount and for the continuation of the milk output.

The fourth group of diseases includes those which are recognized by the Maya and for which remedies are used that appear to have some therapeutic value. Certain purgatives are prepared from plants and are efficacious. The leaves of *Valleriana*, a plant used by the Maya for smelling salts, does have a pungent, sharp smell which has a stimulating action similar to our ammonia. A ginger tea is used as a sudorific and for stomach trouble, much in the same manner as we use it.

In summarizing the medicinal uses of plants, it can be said that 60 percent of the plants in this study have therapeutic properties ascribed to them by the Maya. They are used to treat a great variety

of diseases, including canker and other sores, insect bites, blisters, headaches, muscle twitching, vomiting, fevers, skin diseases, ulcers, and digestive, respiratory, and reproductive disorders. The diseases mentioned in this study and the numbers of the plants described in the text which are used to treat them are shown in the following alphabetical list.

Diseases treated by plants and other specific uses of plants in human hygiene, as mentioned in this study

Diseases treated and other hygienic uses	Plants used (indicated by Nos. assigned in text)
Amenorrhea and other menstrual disorders	20, 83.
Asthma	2, 6 a, 12.
Coughs, colds, bronchitis, and catarrh	3 a, 7, 10 a, 11, 20, 27, 69, 72, 74, 79, 91, 95.
Diarrhea and dysentery	1, 4, 10, 20, 21, 42, 46, 51, 61, 73, 77 a, 81, 82, 86, 87, 97.
Fever, night sweats, and malaria	9, 13, 30, 59, 74, 80, 83, 86, 100.
Headache	7, 12, 97.
Hemorrhage and nose bleed	8, 11, 26.
Liver, kidney, and urinary disorders	8, 10, 10 a, 24, 50, 59, 66.
Miscellaneous:	
Antidote for poisons	46.
Protruding navel	35.
Muscle twitching	11 a, 83.
Disease of the breast	76 a.
Blisters on hands	55.
To stop vomiting	22.
To induce milk flow	92.
To stop milk flow	90.
Measles and smallpox	12, 78.
Purgatives and stomach ache	12, 20, 50, 57, 60, 90, 96, 97.
Rheumatism	8, 83, 96.
Skin diseases, eczema, pimples, and pel- lagra.	8, 26 a, 27, 55, 77, 86, 87.
Sore eyes	30, 51, 89.
Snake and insect bites	14, 38, 58 a, 59 a.
Toothache and pyorrhea	4, 32, 47, 60.
Veneral diseases	20, 48, 66, 96.
Vermicides and insecticides	9, 9 a, 85, 97.
Wounds, sores, and ulcers	2, 14, 15, 20, 33, 44, 52, 55, 67, 78, 89, 95.

The economic importance of the native vegetation is great to the Maya, for trees and plants are used in all phases of house construction and in making household furniture. The Maya follow a definite pattern in building a bush house, using special trees for each step. Thus, the Zubin (No. 3), the Zac-yab (No. 53), the Zac-catzim (No. 69), and the Habin (No. 79) are used for corner posts because they are

hard and durable woods. The small, upright side poles are generally made from the Pichi-che (No. 86), while the poles supporting the thatched roof are from the Ici-che (No. 49). Certain vines or lianas are used to bind the upright poles of the houses, and the center beams and doorframes are constructed from trees whose wood is suitable for such purposes.

Household articles and utensils are likewise made from specific plants. The customary broom for sweeping Maya houses consists of a bundle of the tough branches from the Zac-xiu (No. 2), whose leaves do not drop off readily. Another type of broom is made from the Ic-aban (No. 41), which has such a strong scent that it causes the eyes to water. It is this type which is used to sweep the fleas from Maya homes.

Because of the differences in the burning properties of various types of wood, the Maya select the soft, quickly burning Silil (No. 43) for cooking and for burning limekilns. Another tree, the Chacah (No. 18), contains a gummy sap which renders the wood slow to burn. Consequently it is used on the hearths to keep a fire going when no cooking is being done. The Zac-catzim (No. 69 a) is employed for torches with which the milperos light the fires in their cornfields. Other selective uses of wood are to be found in the making of sky-rockets, the manufacture of mucilage, and the fashioning of baskets, toys, and crowns of thorns for the images in the Maya churches. There are even special leaves which are crushed and rubbed on horses to keep away bothersome horseflies.

In the raising of maize, the chief source of food of the natives, the Maya wait until the Kulche (No. 28) puts forth its leaves. Trees with very hard wood are left standing in the milpa, for to cut them down would mean arduous work for the milpero. The Chechem tree (No. 68) is also allowed to remain in the milpa, because its wood is poisonous when in contact with the skin.

As some American children become greatly excited when they see a dragonfly, which they believe "will sew up mouths," so do the Maya have certain unfounded beliefs about the relation of certain plants and animals. For example, they believe that the seed pods of *Phaseolus vulgaris* L. (No. 76 a) are poisonous to pigs and that another plant is poisonous to parrots. The long spines of *Aerocomia mexicana* Karw. are said to be poisonous, but it is the author's opinion that these spines are so long and sharp that they penetrate deeply into the flesh, causing infections which are interpreted as poisons by the Maya. If the Luch tree (No. 40) fails to bear fruit (which when dried supplies the dishes used on the Maya table), it is beaten with nine lashes on the 24th of June. Many other examples of these beliefs are given in the text, but these suffice here to show that the Maya

are steeped in superstition concerning the plant life around them. In fact, nature is an integral part of the lives of these people. At times it may bother and even terrorize them, but from nature they also receive some of their greatest comforts and satisfactions.

EXPLANATION OF PLATES

PLATE 22

1. *Acrocomia mexicana* Karw., Tuk (Maya), Cocoyol (Spanish). The trunk and fronds of this common palm tree are armed with long, black spines which, upon entering the flesh, sometimes cause infection and are, therefore, thought by the Maya to be poisonous.
2. *Alvaradoa amorphoides* Liebm., Bezinic-che (Maya), Palo de ormigas (Spanish). A decoction of the bark of this tree has been used consistently since early times by the Maya to alleviate skin diseases.
3. *Bromelia Karatas* L., Chom (Maya), Piñuela (Spanish). The wild pineapple has large, slender leaves with hooked barbs along the edges and bears blue flowers in a palmlike stem.
4. The long, pointed fruit of the wild pineapple (*Bromelia Karatas* L.). Juice may be sucked out of the end of the fruit. Ordinarily it is boiled, for the fruit is covered with nettles which are irritating to the mouth.

PLATE 23

1. *Cedrela mexicana* M. Roem., Kulche (Maya), Cedro (Spanish). Legs of the Kulche (Spanish cedar), which furnishes perhaps the best lumber of Yucatan. The tree has a very sticky sap, which is used by the Maya for mucilage.
2. *Cereus undatus* Haw., Chac-uob (Maya), Pitahaya (Spanish). This spiny, vinelike cactus, shown growing on a wall, also grows in trees. Crushed in cold water, it is used as a shampoo by the Maya.
3. *Dorstenia Contrajerva* L., X-cambalhau (Maya), Contrajerva (Spanish). This plant grows abundantly in limestone pits. It has been used consistently to alleviate disorders of the alimentary canal. Modern doctors employ it as a stimulant tonic and diaphoretic.
4. *Euphorbia hirta* L., Xanab-mucuy (Maya), Yerba de pollo (Spanish). The milky sap of this weed has been used since colonial times to reduce inflammation in sore eyes. The boiled leaves are believed to cure dysentery.

PLATE 24

1. *Ficus cotinifolia* HBK., X-Copó (Maya), Alamo (Spanish). The leaves of this huge tree furnish fodder, and its sweet fruit is edible. Note the hanging roots which have taken hold in the ground.
2. *Leucaena glauca* (L.) Benth., Uaxim (Maya). This is a rapidly growing tree which bears white flowers. The Maya believe that if horses eat the lacelike leaves of Uaxim trees they will lose the hairs from their tails.
3. *Plumeria alba* L., Zac-nicte (Maya), Flor de Mayo blanco (Spanish). This medium-sized tree, extensively cultivated in Yucatan, bears exceedingly beautiful red flowers, which are used as decorations. The sap of the tree is used to reduce swellings.
4. *Spondias purpurea* L., Abal-ae (Maya), Circuela (Spanish). This small tree has no leaves during February and March. It bears small fruits which resemble plums and are commonly eaten by the Maya.

BIBLIOGRAPHY

CARNEGIE INSTITUTION OF WASHINGTON

1936. Botany of the Maya area. Misc. Pap., 1-13. Publ. No. 461.

CUEVAS, B.

1913. Plantas medicinales de Yucatan y guia medica practica domestica. Merida, Yucatan, Mexico.

1913. a. Ilustraciones de la obra "Plantas medicinales de Yucatan." Merida, Yucatan, Mexico.

GODMAN, F. D., and SALVIN, O., EDITORS

1879-1888. Biologia Centrali-Americana, vols. 1-5, London.

LANDA, F. DIEGO DE

1937. Yucatan before and after the conquest, with other related documents, maps and illustrations. Trans. with notes by William Gates. Baltimore.

LUNDELL, CYRUS LONGWORTH

1933. The agriculture of the Maya. Southwest Review, vol. 19, No. 1, p. 65.

1934. Preliminary sketch of the phytogeography of the Yucatan peninsula. Appendix. The grasses of the Yucatan peninsula, by Jason R. Swallen, Contr. Amer. Archeol., vol. 2, No. 12, Carnegie Inst. Washington Publ. No. 436, pp. 255-355.

MARTINEZ, MAXIMINO

1933. Las plantas medicinales de Mexico. Mexico D. F.

MILLSPAUGH, CHARLES FREDERICK

1895. Contribution to the flora of Yucatan. Field Columbian Mus., Publ. 4, Botanical Ser., vol. 1, No. 1.

1896. Contribution II to the coastal and plain flora of Yucatan. Field Columbian Mus., Publ. 15, Botanical Ser., vol. 1, No. 3.

1898. Contribution III to the coastal and plain flora of Yucatan. Field Columbian Mus., Publ. 25, Botanical Ser., vol. 1, No. 4.

ROYS, RALPH L.

1931. The ethno-botany of the Maya. Tulane Univ. Middle Amer. Research Ser., Publ. No. 2. New Orleans.

STANDLEY, PAUL CARPENTER

1930. Flora of Yucatan. Field Mus. Nat. Hist., Publ. 279, Botanical Ser., vol. 3, No. 3.

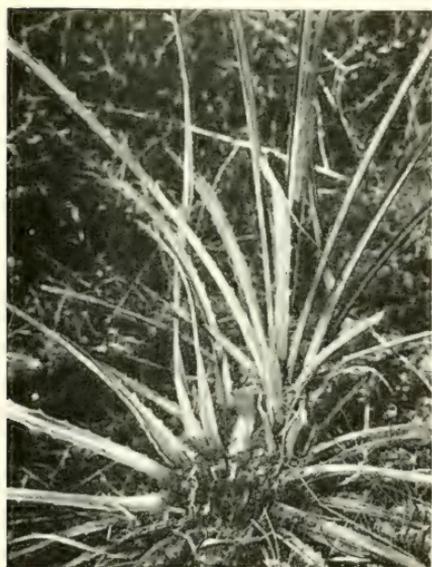
SWALLEN, JASON R. See LUNDELL, CYRUS LONGWORTH, 1934.



1. *Acrocomia mexicana* Karw.



2. *Alvaradoa amorphoides* Liebm.



3. *Bromelia Karatas* L.



Fruit of *Bromelia Karatas* L.



1. *Cedrela mexicana* M. Roem.



2. *Cereus undatus* Haw.



3. *Dorstenia Contrajerva* L.



4. *Euphorbia hirta* L.



1. *Ficus cotinifolia* HBK.



2. *Leucaena glauca* (L.) Benth.



3. *Plumeria alba* L.



4. *Spondias purpurea* L.

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A Description of Thirty Towns in Yucatan, Mexico

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A DESCRIPTION OF THIRTY TOWNS IN YUCATAN, MEXICO

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At the present time, there are no written descriptions of Yucatan towns with the exception of a few in specific studies by scientists. Chan Kom, for instance, is described in a large sociological study (Redfield and Villa, 1934); Ebtun (Roys, 1939) and Chumayel (Roys, 1933) are mentioned in connection with the historical documents which were found there; the past and present of Piste is described in a book by the author (Steggerda, 1941); Merida is described in tourist literature; and a few Yucatan towns are mentioned in a Spanish geography (Martinez, 1937). Other than these, very little has been written about Yucatan towns. Information for travelers concerning the relative size of the interesting towns in Yucatan, their industries, cenotes¹ (see pl. 26, *a*), ruins (see pl. 26, *e*), and the percentages of Indians or mestizos among the population is not available as yet. The author describes here briefly 30 towns chosen from a list of approximately 100 which he visited during the course of a 10-year investigation.

Towns in Yucatan are similar in the respect that they center around a square plaza on which one generally finds a large colonial church (see typical interiors, pl. 27, *a* and *b*, and exteriors pl. 27, *c-f*). Another of the main buildings on this plaza is called a cuartel, which is the town meeting house. The church and the cuartel are built of stone. The other houses surrounding the plaza are also usually of stone, plastered over with mortar and often decorated with painted designs. These plastered homes are occupied by Spaniards, mestizos, and influential Indians. The common folk live farther from the plaza and generally in thatch-covered bush houses (see pl. 28, *a* and *b*). The streets are bounded with stone walls, and each yard is littered with limestone rocks (see pl. 26, *c* and *f*). The average family keeps

¹In Yucatan most of the drinking water is obtained from natural water holes called cenotes.

chickens, one or more dogs, a few cows, and perhaps a horse. Most towns are built around one or more natural water holes, which are called cenotes.

The towns described here are arranged in alphabetical order and can be located on the map shown on plate 25.

AKIL

Akil is a mestizo town located along the railroad between Merida and Peto. Akil is situated at the foot of a range of hills called in Maya the "Puc." In this region there is an abundance of soil, and, because of this, fruits and vegetables grow luxuriantly. There is a large church in the village under the jurisdiction of Oxkutzcab, and the patron saint of Akil is St. Agnes. The school in the town is taught by two teachers. Several Akil families make pottery utensils, which they invariably bake on Fridays, while others occupy themselves by weaving hats from "huano" leaves. The Indian town of Pencuyut, located about 7 kilometers to the northeast, uses Akil as its railroad center.

CAUCEL

This village is located 14 kilometers northwest of Merida. It is estimated to have a population of 400 working men or approximately 2,000 inhabitants. There are no cenotes in the village, and the nearest one, Chen Ha, is located about 3.5 kilometers from Causal. In front of the large Spanish church there is a large grass-covered plaza with 2 cypress trees which, in 1938, were more than 40 feet high. The school here has about 50 children and 2 teachers. Previous to 1939 only a cart trail led to the village, but at that time a new road between Causal and Merida was opened to automobile traffic. There is also a narrow-gage track on which a gasoline car, formerly a streetcar in Merida, operates between Merida and Causal.

The town has no particular industry other than cattle raising, which seems to be the chief source of income. One man in Causal has as many as 350 cattle, and there are others who have over 100 head. Chickens, turkeys, and vegetables are raised in large numbers for the Merida market. Most of the inhabitants have numerous fruit trees, which provide a succession of fruits throughout the year. The extra produce of these trees is sold in Merida. In the church there were 3 Maya drums (tunkuls), which were used formerly by the Maya.

CHAN KOM

Chan Kom is an Indian town of approximately 200 people and is located about 12 kilometers south and a little east of Chichen Itza. It was established by people from Ebtun who arrived between 1880 and 1900. In 1910 the first school was established, and by 1926 the

community was an active and enterprising pueblo. The men most active in establishing the modern town of Chan Kom are Epifanio Ceme, Eustaquio Ceme, Eleuterio Pat, Ignancio Batun, Guillermo Tamay, Transito Tec, and Tiburcio Caamal. They built the town around a large open cenote, and the most influential citizens built stone houses in the Spanish style, plastered smooth on the outside and decorated inside with painted ornaments. In 1938 there were at least a dozen of these stone houses, and two of them are two stories high. The town has an excellent school building and has had some remarkable school teachers, one of whom was Alfonso Villa, who has collaborated with some of the Carnegie Institution investigators.

In 1932 Chan Kom's overambitious Commissario led his men in building a straight road from Chan Kom to the Castillo of Chichen Itz. Unfortunately, owing to its impracticability, most of this road was abandoned after a few years. In 1936 the same leader secured for the town the right to become a municipio (similar to our county seat). In that year several members of the town embraced the Protestant faith, thus causing a rift in the town's harmony with the result that many of the inhabitants moved from the village.

Chan Kom is a young and rather prosperous community. Often one can count as many as 50 cattle on the plaza, not to mention horses, mules, and donkeys. Fat pigs, an exception in Yucatan, are found on the Chan Kom plaza mingling with an unusually large supply of chickens, turkeys, and ducks (see pl. 26, f).

Within the town limits there are ancient Maya ruins, and at a short distance can be found the larger ruins of Cosil, Tontzimin, and Kochila. For an excellent and detailed account of the founding and history of Chan Kom, the reader is referred to the book, "Chan Kom, A Maya Village" (Redfield and Villa, 1934).

CHAPAB

In 1935 the town of Chapab had a population of 1,865 persons. It also had an excellent schoolhouse with about 125 pupils. There are cenotes and caves in the vicinity as well as ancient Maya ruins, while approximately 15 kilometers to the northwest is a very large aguada, called Polol. This aguada, which might well be called a lake, has a circumference of about $2\frac{1}{2}$ kilometers. The Spanish church at Chapab was built in the early sixteenth century and was formerly under the jurisdiction of Mani. The patron saint of this town is St. Peter.

CHICHIMILA

Chichimila, an Indian town located about 5 kilometers south of Valladolid, has about 2,000 inhabitants, who are chiefly Maya, although the town leaders are mostly mestizos. There is a large church

facing a small plaza (see pl. 27, *e*) and on the north side of this church a small plaza of green grass can be seen. The church itself was built in 1609, and St. Francis of Assisi is the patron saint. Hammock and zabucan (bag) making are the town's chief industries. The bush (trees and undergrowth) in these parts is very short, and the corn yield is often as small as 6 almudes per mecate, which is about 8 bushels to the acre. There is an experimental agricultural college for the training of school teachers in Chichimila.

CHUMAYEL

Located north of Teabo, Chumayel is of historic interest, since the early colonial book called "The Book of Chilam Balam of Chumayel," translated recently by Ralph Roys of the Carnegie Institution, concerns the history of this town.

Its large Spanish church, located on the town's plaza, is not oriented from east to west, as is customary for Catholic churches, but rather from north to south with the church facing south. Each year the town celebrates a festival to the Holy Cross which ends on May 3. The Virgin Mary is the patron saint of the village. In colonial times this church was under the jurisdiction of Teabo.

The town has a large cuartel and an excellent schoolhouse. There is a beautiful Spanish-made well on the plaza which should be noted. This community is chiefly agricultural at present, although hat and hammock making are also carried on.

CUNCUNUL

Cuncunul, which is 11 kilometers from Valladolid, has a colonial church which is now in ruins. Although it is not certain just when the church was built, it was probably around 1581. In 1938, the town began again to complete the arches for a new roof—only a chapel is in use at present. John the Baptist is the patron saint of the village. On the large, rocky plaza in front of the church is the cuartel. There is also a small formal park (garden) located on the plaza. This town is relatively large, having about 325 men, the majority of whom are mestizos.

DZAN

Dzan is a mestizo town of about 450 men, whose chief occupations are the raising of corn and tobacco. Hats are made here, but not to a commercial extent. There are no cenotes within the village, but there are more than 25 Spanish-made wells. One of these, located on the plaza, shows markings in the stone from the ancient Maya well ropes. These were worn into the rock before the pulley was introduced. There is an ancient Maya pyramid located very near the

present Spanish church which dates back to 1754. Some of the round columns from nearby Maya ruins were used in the construction of the present cuartel (town hall).

DZITAS

Dzitas, an ancient town founded by the Ah Canuls (a division of the Yucatan Maya before the Conquest), is a municipio and at present is considered a mestizo town. It is located on the railroad 140 kilometers from Merida, and before the Merida-Chichen Itza highway was built (1935) Dzitas served as railroad station for the Chichen Itza visitors. The town had, at that time, several automobiles, which carried tourists to the ruins 25 kilometers south. There is no outstanding industry in Dzitas. The town has a Presidente (mayor), two school teachers, and a Registro Civil. There is a small plaza on which is built a concrete platform similar to the one in Merida. Many of the Dzitas people are milperos (corn farmers), but some earn their living by cutting firewood for the railroad.

The Spanish church in Dzitas was built in 1619 and, at that time, belonged to the jurisdiction of Cenotillo. The patron saint is St. Ines.

ESPITA

Another large mestizo town is Espita, located about halfway between Dzitas and Tizimin on the railroad. The estimated population is between 5,000 and 6,000 persons. Consequently, the town has 3 schools, 2 of which have about 300 children in each; the third one has an enrollment of 138. The patron saint of this village is St. Joseph. There is a large church, built in 1612, which was formerly under the jurisdiction of Calotmul. In 1938, this church was in perfect repair and very neatly decorated. Moreover, there is a cuartel with a public clock; the town also has a park and a market place. Since Espita is in the center of the lumber industry, it has several sawmills; a large proportion of railroad ties are obtained from this region. In colonial times, cotton and sugarcane were raised here in large amounts. Now, oranges grow in such numbers that they are exported from the community. An owner of one orange grove in Espita said that it was not necessary to treat the orange trees for scale insects as is commonly done in the United States. Cattle and horses are also exported from this area.

Formerly, the town had two theaters—one called Progreso y Recreo (Progress and Recreation), which was founded on September 16, 1870, by Col. Meliodoro Rosado Erosa, and was destroyed by a hurricane on August 25, 1938; and a second, called Libertad (Liberty), which was established by Lazara Peniche in 1916, and was still being used.

In 1938 there were still no automobiles in Espita, but two horse-drawn coaches acted as taxis and were kept busy most of the day. On the other hand, there are four corn-grinding mills in town, two of which are run on gasoline power and two by power generated from charcoal.

EKPEDZ, CHIKINDZONOT, TIXCACALCUPUL, AND OTHER INDIAN
VILLAGES SOUTH OF CHICHEN ITZA

The following account was taken from the author's log, which describes not only these towns but also the smaller hamlets through which he traveled. The trip was made on horseback with Dr. Ralph Roys, and, from the time recorded at each landmark, the reader can estimate roughly the distance covered between the various points. (See map, pl. 25.)

March 15, 1937.—Left Chichen Itza (see pl. 26, c) at 8 a. m. and arrived at Chan Kom at 11:05 a. m. Leaving Chan Kom at 12:30 p. m., we arrived at the Cosil Cenote in about 20 minutes. Twelve years ago there were six families living at this place, but today there are none.

Arrived Tontzimin at 1:30 p. m. Visited the bottom of a dry cenote in which cocoa was formerly grown.

Arrived at Xanla at 3 p. m. Here we found a beautiful dry cenote. The bush houses are rectangular in this pueblo. There are a well, a cuartel, a church, and a schoolhouse with no side walls on the plaza.

Left Xanla at 3:20 p. m.; reached Xmax, which is due south of Xanla, at 4:15 p. m. At Xmax there were only three or four houses. Men wore only trunks, and the families that we saw were resting and looked very contented.

At 5:10 p. m. we arrived at Pochilchen.² Here we saw eight houses. Women at the well were drawing their evening supply of water. The village of Chan Chichimila, which was our destination, was still 7 kilometers away.

The next village, or rancheria, was Hobonha. A few houses, a ruin, a cenote, and a large Yax che tree were all we could find. It was nearly dark when we left there at 6:10 p. m. Soon it became quite dark and we slowly wound our way over the bush-trail with a flashlight, dodging branches and hoping that the horses would not stumble.

Arrived at Chan Chichimila at 7:45 p. m. Sought out the school teacher and tried to get comfortable in the open-air schoolhouse. Built a fire on the schoolhouse floor, ate supper, swung our hammocks, and went to bed. Had covered 10 leagues (35 kilometers) from Chichen Itza. Chan Chichimila is a small town of perhaps 100 inhabitants, all of whom are milperos.

March 16, 1937.—Left Chan Chichimila at 8:30 a. m. and went due south for 7 kilometers to Chikindzonot. Passed through high forests of quite a different type from those in the Chichen Itza area. Both Chan Chichimila and Chikindzonot are relatively pure Indian towns. Chikindzonot is a much larger town, with perhaps 1,000 inhabitants. Only now is the town being repopulated, having been deserted during the War of the Castes in 1847. The church and convent we found to be large and interesting (see pl. 27, a). The schoolhouse is two-storied. The cenote at Chikindzonot is large and has four openings.

² These and other small hamlets are not shown on the map, plate 25.

At noon we left and traveled to Ekpedz, $6\frac{1}{2}$ kilometers to the east. This town of 40 families, chiefly Indian, has an interesting church and 2 cenotes. It was made famous during the War of the Castes, for both rebel and government troops used Ekpedz as a base when attacking the village Tihosuco. Furthermore, it was in this region that the rebellion began.

At 3:30 p. m., we went on, in a northeasterly direction, to San José, where we spent the night. We traveled 21 kilometers today. Again the schoolmaster allowed us to use his building for sleeping quarters. All the townfolk were in fine spirits. One hundred and two people, representing 18 families, live in this village. A Flor de Mayo tree was in bloom. There is only 1 store.

March 17, 1937.—Left at 7 a. m., having experienced a fine attitude among the townfolk. The road between San José and Tixcocalcupul is very long, tiresome, and actually of little interest.

At 8:07 a. m. there was a road on the right which seemed to lead to Itz Mool, which was said to be 2 kilometers distant. There were several trails turning off from the main road, but they led to milpas and not to inhabited places.

At 10:30 a. m. we arrived at the Kancab Cenote, and 1 kilometer farther we came to Dzui, where there is another cenote. Near there we saw a stone cross at which Indians still worship, and to which a well-trodden path leads (see pl. 26, *b*). Saw a moan bird (*Micrastur semitorquatus naso*) at the cenote. After an hour or more we came to a very large ancient Maya city in ruins, composed of at least six huge mounds. The name of this ruin was not determined.

At 2:15 p. m. we passed the ruins of a Spanish hacienda. On the way we saw a sight which is typical of the migrating Maya—a Maya woman carrying a chicken on her arm and a baby on her back. Then came a dog, followed by a man driving a pig; on the man's back was his pack, on top of which sat a girl of about 4 years of age. The man also carried a lantern.

At 3:10 p. m. we crossed the Sac Be (ancient Maya road). The road was very well preserved at this juncture.

At 3:25 p. m. we passed a large cenote on the left of the road, just outside of Tixcocalcupul.

Reached Tixcocalcupul by 3:50 p. m.—7 or 8 leagues from San José (see pl. 26, *d*). The town plaza of Tixcocalcupul is very much like that of Chichimila in that there is a small plaza in front of the church and another alongside of it. The Spanish church is large, and people had recently worshipped there for candles were still burning. (NOTE.—This was the period during which the Mexican churches were closed.) As I tried to open the huge wooden door, several pigs scampered out of the side door. The Apostle St. James is the patron saint of the village: and in colonial times this town was a parish by itself, though it is under the jurisdiction of Valladolid today. Took photographs of the church, inside of which was an image of a black Christ. It was originally white but had been painted recently. The baptismal fountain was large but not as beautifully carved as the one in Chikindzonot. There are 150 workmen in Tixcocalcupul—chiefly Indian.

Left at 4:45 p. m. for Ekal, a small town to the west and slightly south. Road fine for most of the distance. Passed through Xyat at 5:30 p. m. and arrived at Ekal at 6:00 p. m. This is a rancheria (small ranch) with three houses. That night I attended a Maya prayer meeting where Catholicism was obviously mixed with paganism. Catholic chants and prayers were being offered in singing fashion before six bowls of pozole (corn gruel) placed on an altar. One bowl for the departed souls hung in the doorway. After the prayers were over, there was the repetition of numerous buenas noches (good-

nights), and then the pozole was drunk. Unfortunately, there were many fleas in our house, and pigs came in during the night and ransacked our belongings.

March 18, 1937.—Gave the children candy, balloons, and other presents. Paid a peso (about 30 cents) for six eggs, a peso for feed for four horses, another peso for our tortillas, and 3 pesos for the house. Everyone was happy. Left at 7:35 a. m. While traveling in the State of Yucatan, it is possible to purchase food from the natives. This food consists chiefly of chicken eggs, beans, tortillas, and chocolate.

At 8:00 a. m., having traveled 2 kilometers, we struck a crossroad which led from Tekom, southwest to Chan Chichimila. There was another road going due south to Xnuc Kaucab, which was only 6 mecatas (120 meters) away.

At 8:10 a. m. we left the road for a trail to the west and at 8:45 a. m. we were 2 kilometers due south of the village of Sacal. Everything went well until 9 or 9:10 a. m., when our guide lost his orientation and our troubles began. Upon several occasions our horses rubbed trees which held wasp nests. Near confusion was caused by the fact that the horses reared in their hurry to escape the wasps. Everyone in the party had numerous wasp stings, with Martiniano, our interpreter, counting as many as 16 on his body. The bush trail was very narrow. Finally, we crossed the Sac Be again and our guide took us over it for half a league, cutting a trail as we went. Needless to say, this was hard work for him and for us, too, since we had to walk over a very rough road. We finally arrived at Sacal, which was only about 1½ leagues from Ekal.

Left Sacal at 10:45 a. m. and passed through Chebalam at 11:45 a. m. Traveling at a steady pace, we reached Tzeal by 12:25 noon. From there, Pamba was 1 kilometer, Nyat was 1 kilometer, Bohom was 3.5 kilometers, and Chan Kom was 7 kilometers distant. Saw the Maya ruins at Tzeal and proceeded on our way at 2:10 p. m.

At 3:14 p. m. we passed a road on our left which led to Dzonotaban. Three mecatas (60 meters) further on the Chan Kom road, we came to two crossroads at the edge of the town of Bohom. We left Bohom at 3:50 p. m. and arrived at Chan Kom at 4:55 p. m., resting there until 5:20 p. m., when we started off for Chichen, which we reached at 8:15 p. m.

This diary was inserted to give the reader an idea of travel along the Yucatan trails. The towns which were previously described, as well as those which follow, were reached by train, automobile, cart, horseback, or on foot (see pl. 28, *d* and *e*).

HOLCA

In 1938 this little town, located at kilometer 82 on the Merida-Chichen Itza highway, was fast increasing in population. The village is chiefly Maya, and all of the 200 adult male inhabitants are milperos. The cenote on the plaza is called Holca, and another, located within the boundaries of the town, is called Chinan. The town has no Spanish church; therefore, it may have been first settled after the Independence of Mexico in 1810. School is held in the town's only public building, and here about 100 school children are taught by 2 teachers. The original population came chiefly from the towns of Tibolon, Cacalchen, and Hoctun.

Twelve years ago, a large migration, starting from Yaxcaba and Libre Union, settled in Holca. An interesting point is to be noticed in the recent dating of a billiard hall in Holca; the date inscribed by the builder is 9-15-937 (representing September 15, 1937), thus leaving off the number 1 signifying thousand. This type of abbreviation, made by the modern builder, may also have occurred in ancient times, rendering the reading of some of the dated glyphs difficult.

The town has two mills for grinding corn, but the owners agreed to operate on alternate weeks, thus solving the problem of competition.

IZAMAL

Izamal is one of Yucatan's large cities, having a population of 5,550 inhabitants. The town was built on the ruins of an ancient Maya site called after "Zamna" or "Izamna," one of the Itza rulers who founded many towns in Yucatan.

The Spanish church and convent in Izamal were built, in 1549, on a raised platform, constructed originally by the ancient Maya. This is true also for the present public market place. St. Anthony of Padua is the patron saint of Izamal. Several mounds and pyramids within the limits of the present town speak for the size of the ancient Maya city. Izamal is also noted for being the home of the famous historian, Diego de Landa, the first bishop of Yucatan.

In modern times, an American doctor, George F. Gaumer, settled in Izamal and founded a laboratory from which he dispensed many medicines made from local plants. His son, Dr. George J. Gaumer, carried on the medical practice after the death of his father.

MAMA

This town of 1,800 persons is famous chiefly because it was the mestizo. The town has a square plaza, a cuartel, and a schoolhouse which takes care of 172 children. It is an old town, having about 100 Spanish wells, the water levels of which are at 25 meters. We visited the town on February 26, 1935, and on that date some milperos were already burning their milpas. There are several persons who are "deaf and dumb" in this town and one woman has four such deaf children. The chief occupation of the people is farming, although some hammocks and some pottery are made here. The church was built in 1612, and the patron saint is the Virgin Mary.

MANI

This town of 1,800 persons is famous chiefly because it was the home of the old Maya chief, Tutulxiu. Here it was that the first Franciscan missionaries established their monastery. The church was built in 1549, and the Archangel St. Michael is the patron saint. At one time during that first century after the Conquest, 4 of the

Catholic priests were to be burned by the Indians, but a Maya boy, who had been taught by the priests, warned them to escape for their lives, which the priests refused to do. They sought aid, however, from Montejo's troops, who arrived just in time to release the priests and capture the leading Indians, who were in turn taken to Merida ("T-ho") and sentenced to death. The 4 priests, however, pleaded for the lives of the Indians, and their request was granted. Because of this, the church won many converts. On the plaza of Mani, Bishop Landa ordered the burning of all available Maya books and idols—a tremendous loss to our knowledge of the ancient Maya civilization.

There is a beautiful cenote in the town called Cabal Chen. The church is large and in perfect condition. The town appears to be chiefly mestizo in population, the principal occupation being farming. As is true for other towns in the region, the natives estimate the corn yield as 1 carga per mecate (approximately 20 bushels per acre; 1 carga equals 94.8 pounds) for the first-year milpa, and 9 almudes ($\frac{3}{4}$ carga) for a second-year milpa.

MERIDA

Merida, a city of 95,000 inhabitants, is located 36 kilometers south of Progreso, which is the port of entry for Yucatan. Merida was founded in 1542, by Francisco de Montego, Jr., on an ancient Maya site called "Ich-can-zi-ho," which is often abbreviated merely to "T-ho." Most of the stones remaining from this ancient city have been used to build the present city of Merida; however, one can still see some of the remains of a Maya pyramid behind the modern market place. One of the outstanding characteristics of Merida is its cleanliness. The streets are kept unusually clean for a large city, and the people are well-kept and tidy. The main plaza, surrounded by a magnificent cathedral and other public buildings, is always thronged with both Indians and mestizos. The city's limited central water system is not widely used, and the town resorts to the use of American-made windmills, of which there are more than 7,000, all privately owned.

Merida has one large, central market place and several smaller ones. The city is modern in that it has two good hotels, daily airplane service to Mexico City and weekly service to the United States, two daily newspapers, a historical museum, a public library, and an air-conditioned theater. Good roads lead from Merida to Progreso, to Uxmal, the beautiful Maya city about 70 kilometers south of Merida, and also to Chichen Itza, some 125 kilometers to the southeast. Merida is in the center of the henequen industry, and within its limits are several factories and storehouses which deal in Yucatan's chief export.

MOTUL

Also built on Maya ruins, called Mutul, Motul is located on the railroad 46 kilometers from Merida. Motul was the home of Felipe Carrillo Puerto, a former governor of Yucatan. While governor, Felipe Carrillo developed one of the town's beautiful cenotes into a bathing park, which was equipped with electric lights and a concrete causeway to the water. After his death, a monument was erected to his memory, but the park soon fell into decay through lack of appreciation. The Motul church was built in 1567, and the patron saint of the church and town is St. John the Baptist.

OXKUTZCAB

This town, located on the railroad to Peto, is 80 kilometers from Merida and has a population of 3,500, most of whom are mestizos. In this region there is deeper soil than in the rest of Yucatan, owing to the erosion from the range of hills just south of the town. Because of this deep soil, many vegetables, as well as tobacco, cotton, melons, squash, and chile are grown. It is said that, in these fertile fields, corn can be grown for as many as 10 successive seasons. This is indeed remarkable when it is remembered that in the rest of Yucatan, corn is generally grown in the same field for only 2 seasons. Estimates were given showing a yield of 3 cargas per mecate for the first-year bush and 2½ cargas per mecate for second-year bush. Delicious citrus fruit is also grown in the yards of the townspeople.

The derivation of the town's name, Oxkutzcab, may refer to some of the agricultural products raised in this area, thus: "Ox"—ramon, the leaves of which are fed to horses and cattle; "kutz"—tobacco; and "cab"—honey. These three agricultural products are cultivated on a large scale in the present vicinity of Oxkutzcab. The town contains a beautiful old Spanish church built in 1581, and St. Francis of Assisi is the patron saint.

PENCUYUT

Pencuyut was thought by the author to be the town most predominantly Indian in population in the thickly settled area of south-central Yucatan. Although it is true that there are many mestizos in the town, and that names like Castillo and Carrillo abound, there are, nevertheless, many Indians in residence. About 1 kilometer from the plaza an interesting marker was found, indicating a point of boundary, dated February 28, 1557, thus verifying the printed record that Pencuyut was a town even at that early date (see pl. 28, *f*). The name of the cenote in the town plaza is Chi-chi, and it is estimated that the water level at Pencuyut is 18 meters from the surface.

In a census taken by the author in 1936, there were 246 men, 223 women, and 94 children living in this town. The men are chiefly agriculturists, raising corn, beans, and squash. Pencuyut is located 8 kilometers from the railroad to which all products are taken by pack mule, since the road is so rocky that carts cannot pass over it.

The Spanish church here was never finished, though recently it was roofed with tin. A convent, which had six rooms, lies in ruins. The patron saint here is St. Barnaby, and the church falls under the jurisdiction of Tekaz.

PROGRESO

The town site of Progreso is old, and only in the last 50 years has it taken on the appearance of a modern city. In 1892 the present lighthouse was built, and Progreso became the chief port of entry for the State, an honor which was held formerly by the small port of Sisal. Progreso now contains the State customhouse and all Government offices connected with exports and immigration. Since 1900 the town has grown rapidly and is now the second largest town in the State, having a population of 11,400 inhabitants. It is built chiefly along the sand dunes of the beautiful north coast. As a study in contrasts, it should be noted that only a short distance inland are the low areas with malaria-infested swamps. Progreso is known by many as Progreso de Castro, because of the efforts of one Juan Miguel Castro, the founder of Progreso, to make Progreso a town such as it is. The church of Progreso was built in 1872, and St. Joseph and the Virgin Mary are the patron saints.

TEABO

This is a large mestizo town of perhaps 3,000 individuals, 600 of whom are estimated to be milperos, with about 100 businessmen in the town. There is a large Spanish church which was built in 1609, and the patron saint is the Apostle Peter. In addition to the church, there is a convent which is now in ruins. The plaza is level and green, and on one side is a large, well-kept town hall. In the vicinity there are several henequen haciendas and cattle farms, but many of the men and women weave hats, and some hammock making is done to add to their living.

TEKIT

Tekit is a mestizo town with an estimated population of 800 men—perhaps 4,000 people. It is located far from the nearest railroad, and the roads in this region are entirely unimproved, making cart passage exceedingly slow and rough. There is a large church with the customary cypress trees in front of it, and the patron saint of the town is St. Anthony of Padua. Formerly, the church was under the jurisdiction of Mama; now both Tekit and Mama are under the

jurisdiction of Acanceh. Tekit has a park with modern seats and benches. There is a town hall, which contains the village clock.

In the village there are no cenotes; the nearest one, about 1 kilometer distant from the plaza, is called Chac Tela. The community is chiefly agricultural, although numerous cattle are raised. In early colonial times, this area was almost entirely cattle country.

TICUL

In ancient times this city was called merely "Cul" which, translated from the Maya, means "settled" or "stationed." It is located at the base of the Puc, on which hills are the ruins of the ancient cities of Kaba, Labna, Sayil, and Uxmal. Since Ticul is located in a fertile region, this may have been an agricultural city associated with the large ancient towns which are now in ruins.

The present city of Ticul is the third largest city in Yucatan, having a population of 7,520 inhabitants. It is located on the railroad connecting Merida with Peto. The chief industry of Ticul is pottery making, although basket and hat making also supply labor for many of the inhabitants. Near Ticul are many tobacco fields, so that many cigarettes and cigars are produced in this vicinity. Shoes are also manufactured here. Ticul has a park called Octavio Rosado, and although the town has no cenotes, it is located not far from a beautiful cave called "Yotholim." There is a large Spanish church located in Ticul which was constructed in 1591. A Catholic convent belonging to the church can be seen also. The patron saint is St. Anthony of Padua, as is true also for Tekit.

TINUM

The town of Tinum is located on the Valladolid branch of the railroad, 165 kilometers from Merida, and only 16 kilometers from Valladolid. Formerly Tinum belonged to the political jurisdiction of Valladolid, but now it has become an independent municipality.

The colonial church and convent of Tinum are in ruins. Church services, however, are held for the present-day parishioners in one section of the convent. St. Anthony is the patron saint. There is a large cuartel, or town hall, part of which is used as a school, which in 1931 had 3 teachers. Tinum is located in an agricultural community, and many cattle are raised in this section. Some people derive their income from cutting firewood for the trains and ties for the tracks, but there is also a considerable amount of huano palm cultivation—the palm being used chiefly in basket and hat making. The town boasts 350 men. From the author's 1931 diary, the following is quoted:

In Tinum we stayed in the town's guest house, which was an ordinary Indian house so far as size and shape are concerned, except that it had a con-

crete floor and plastered walls. The rounded walls had panels on which were painted various scenes. One was that of a legendary "Uay-pop" (see pl. 28, c), who as a peddler lives only for 7 years. He steals all the strange things he sells, by going at midnight into houses in foreign countries, where he makes himself as small as an ant so that he may enter. He takes what he desires, sometimes even babies, and returns by 2 o'clock. He flies by means of wings.

The walls (3 feet thick) of the old and beautiful abandoned Spanish monastery were crumbling. In them were small depressions, where we saw the remains of human skeletons. There were several beautifully carved stone bowls which had been used for Holy Water. Part of the church is still used, but priests come very seldom to this small town. There were many other Spanish ruins in the town, and in another ruined church there were many human skeletons.

TIXHUALAHTUN

The word Tixhualah-tun means "there stones stood up"; the word "ualah" is the past tense of the verb "to stand." This place may have been one where natives placed stones on top of one another to commemorate a passing event. It must be added, however, that no one in the present town is aware of the existence of any such pile of stones.

Tixhualah-tun is a town of approximately 100 men, with a school of about 30 pupils, who are taught by 1 teacher; in 1938, the teacher was José Dolores Duarte. The town is located about 5 kilometers southeast of Valladolid. Since the unimproved road is exceedingly rough and rocky, it seems incredible that any automobile could pass over it.

Twelve leagues to the east are the ruins of the Maya city of Coba, but there are no ruins in Tixhualah-tun itself. Not even miscellaneous Maya cut stones are to be found in the church walls. The Spanish church is in ruins, with only the sacristy being used today for worship. Two church bells are to be found near the church—one is dated 1678 and was dedicated to the church in 1720. In the room now used for worship is a black Christ. The saint's day for Tixhualah-tun is El Santo Cristo de la Exaltación, and the feast day is September 14.

The plaza is triangular in shape, the base lying toward the south where the church is situated. The two other sides of the isosceles triangle merge into a point on the north, forming the road to Valladolid.

TIZIMIN

The Maya formerly called this place "Tzimin," which referred to a large quadruped, perhaps an antelope; but with the coming of the Spaniards, the word was pronounced "Tizimin."

This town, located at the end of a branch line of the railroad which runs from Dzitas, is important as a lumbering center for Yucatan, and several sawmills are located here. Lumber and heavy timbers of mahogany and cedar are exported to various parts of Yucatan and Mexico. The soil in this region is excellent and the milperos are said to gather from 2 to 3 cargass of maize from each mecate, though, because of the richness of the soil, they are obliged to weed these fields two or three times a season. The Tizimin region is also noted for its production of beans; it produces more beans than any other region in Yucatan. Yucca, from which starch and tapioca are obtained, is also grown abundantly in this area, as well as plantains, bananas, and oranges.

Snakes abound, and it is told that, upon one occasion, collectors gathered as many as 30 rattlesnakes from a 4-mecate field. In the bush, there are tigers, monkeys, and parrots. When the author visited the town in 1933, one family kept a large Yucatan tiger in a cage behind the house.

The town boasts some 5,000 inhabitants and is the municipal center for 21 localities. There are cenotes in the region but the water is rather stagnant, so the villagers secure their water supply from wells which average about 12 feet in depth.

Perhaps the outstanding feature of the town is its religious significance, for the church and old convent located here were built in 1563 and contain images of its three patron saints, the three oriental kings, Melchor, Gaspar, and Baltazar. The people of Yucatan hold these saints in great reverence and pilgrimages are made to Tizimin each year, especially on the feast days, December 30 to January 9. At this time, the church is crowded with these pilgrims who bring gifts of flowers, candles, and amulets, which are always offered in triplicate, one for each saint. The people believe that these saints can perform great miracles, and, during the religious celebrations, the church hums with prayers and chants offered by the hundreds of pilgrims. The fact that Tizimin is located in eastern Yucatan may have some significance in the choice of the three kings from the East as patron saints.

UAYMA

The town of Uayma is under the jurisdiction of Valladolid. Its large church, built in 1581, lay in ruins in 1932, the roof having caved in and the heavy side walls having cracked the front wall of the church (see pl. 27, *f*). Trees and wild vegetation are overgrowing the church property, and there are also the remains of a Spanish convent. This church (region) is at present under the jurisdiction of the Sisal church of Valladolid. The patron saint of Uayma

is Santo Domingo. Near the church is a cave from which the clay for the famous Uayma pottery is obtained.

The town is located on the railroad, 8 kilometers from Valladolid, and many inhabitants of the town earn their living by selling firewood to the railroad for the wood-burning engines. The pottery, in which gray and red clay are used in equal proportions, is distinctive and can readily be distinguished from that of other Yucatan towns. The potters from Uayma use a wheel which is 6 inches in diameter and is propelled by foot and toe action. Uayma may be classified as an Indian town. It has a population of 300 men.

VALLADOLID

In Yucatan, Valladolid is referred to as the "Suitness of the East" by the mestizos, and by the Indians as "Saci," which was the name of an ancient Maya city located where Valladolid now stands. The present city was founded soon after the conquest by Francisco de Montego, the nephew of the Conqueror of Yucatan.

The population of Valladolid is now about 5,600, mostly mestizos. Primarily an agricultural community, its chief crop is corn, since only a small amount of henequen is raised. From this town each year a number of expeditions leave for various chicle camps in Quintana Roo. Valladolid was one of the colonial towns taken by the rebellious Indians in 1847, and much of the town was destroyed at that time. Valladolid has 6 large colonial churches. The largest, located on the plaza, is consecrated to the Holy Redeemer. The second is Candelaria, in or near which a commercial fiesta is celebrated each year. A third church, called Sisal, was built in 1553, and it has a large convent, 2 stories high, which contains numerous rooms, many of which are in good condition even today. Under the church floor, there is an opening into the Sisal cenote. The church of Santana also has a cenote nearby, which is used today as a swimming pool, with an admission charge of 5 centavos collected from each swimmer. The cenote is called Ximha. On one of the side walls there is yellow clay, which boys rub on their bodies in place of soap. The 2 other churches are San Juan and Santa Lucia.

XOCENPICH

This agricultural town is located 9 kilometers from Dzitas on the road to Chichen Itza. It had a population of 378 persons in 1935, most of whom were Indian.

The Spanish church located in the center of the town is dated 1815. The side walls and front were completed, but the concrete roof was never finished and only a thatch roof covered the structure. The poles supporting this roof are still standing inside the present church

walls. The building fell into decay and was reconditioned in 1916, at which time the present schoolhouse was built. The church was in use until about 1923, when it was abandoned. In 1937 the Protestant element in the town built as a church for themselves a neat stone structure, whereas the Catholics, who are their bitter religious and political enemies, do not have a place of worship. The town has a school of about 30 children and 1 schoolmaster. There is a cuartel made of stone and a large level plaza, which is covered with green grass. The present plaza of Xocenpich, however, is not the original one, which was located east of the present cuartel. The Spanish church is located in the center of the old plaza.

The town has 2 stores, one owned by Gonzalo Chan and the other by Cesareo Chi. There are no cenotes within the limits, but 14 Spanish wells supply the town with water. The cenote of Anik is 1½ kilometers to the northwest; another, Chich, is about the same distance to the southwest; and still another, called Tzoc, is 1½ kilometers to the southeast. The town has no particular industry, since most of its inhabitants are milperos.

During the revolution of 1919-24, the town provided a haven for the political refugees from Pisté. Throughout the eight seasons (1931-38) that the author has carried on his anthropological work in Xocenpich, it has been a seat of political unrest; the two political factions in the town feel extremely bitter toward each other.

SUMMARY

From the descriptions of these 30 towns the reader will learn that they resemble each other in pattern yet differ in many respects. Thus, the region of Tizimin supports a heavy growth of trees, and lumber is the most important product. In this region of high trees, jaguars, snakes, and birds are the dominant fauna. When the bush is cleared beans are commonly grown in this area, in contrast to the more arid parts of northwestern Yucatan where henequen dominates. In regions where clay is to be found, such as in Uayma and Ticul, the industry of pottery making is the chief means of support. The towns along the railroads are supported largely by industries connected with the railroad, such as cutting wood for the wood-burning trains and wood ties for the tracks. Many of the towns described are built on the ruins of ancient Maya cities, as, for example, Merida, Valladolid, Motul, and Izamal. Mention is made of the historic towns of Mani and Chumayel, famous for their associations during the Spanish colonial times. Some of the less important Indian towns are described so that the reader may become acquainted with the mode of life in the agricultural communities.

BIBLIOGRAPHY

IANDA, DIEGO DE

1937. Yucatan before and after the conquest. With other related documents, maps, and illustrations. Translated with notes by William Gates. Maya Soc., Baltimore.

MARTINEZ, VICTOR M.

1937. Geografia Moderne de Yucatan. Merida.

REDFIELD, ROBERT, and VILLA R., ALFONSO.

1934. Chan Kom, a Maya village. Carnegie Inst. Washington Publ. 448.

ROYS, RALPH L.

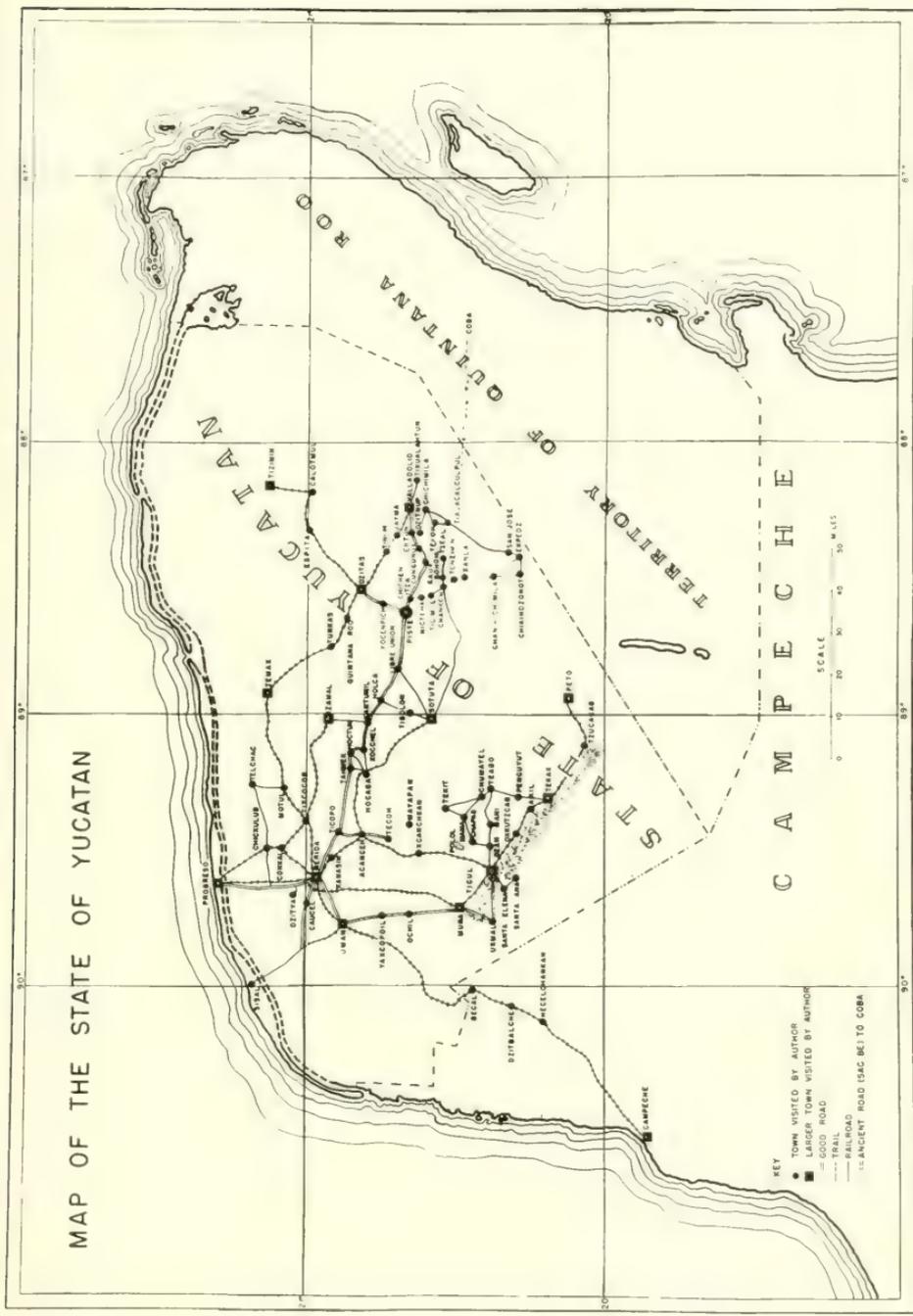
1933. The Book of Chilam Balam of Chumayel. Carnegie Inst. Washington Publ. 438.

1939. The Titles of Ebtun. Carnegie Inst. Washington Publ. 505.

STEGGERDA, MORRIS

1941. Maya Indians of Yucatan. Carnegie Inst. Washington Publ. 531.

MAP OF THE STATE OF YUCATAN

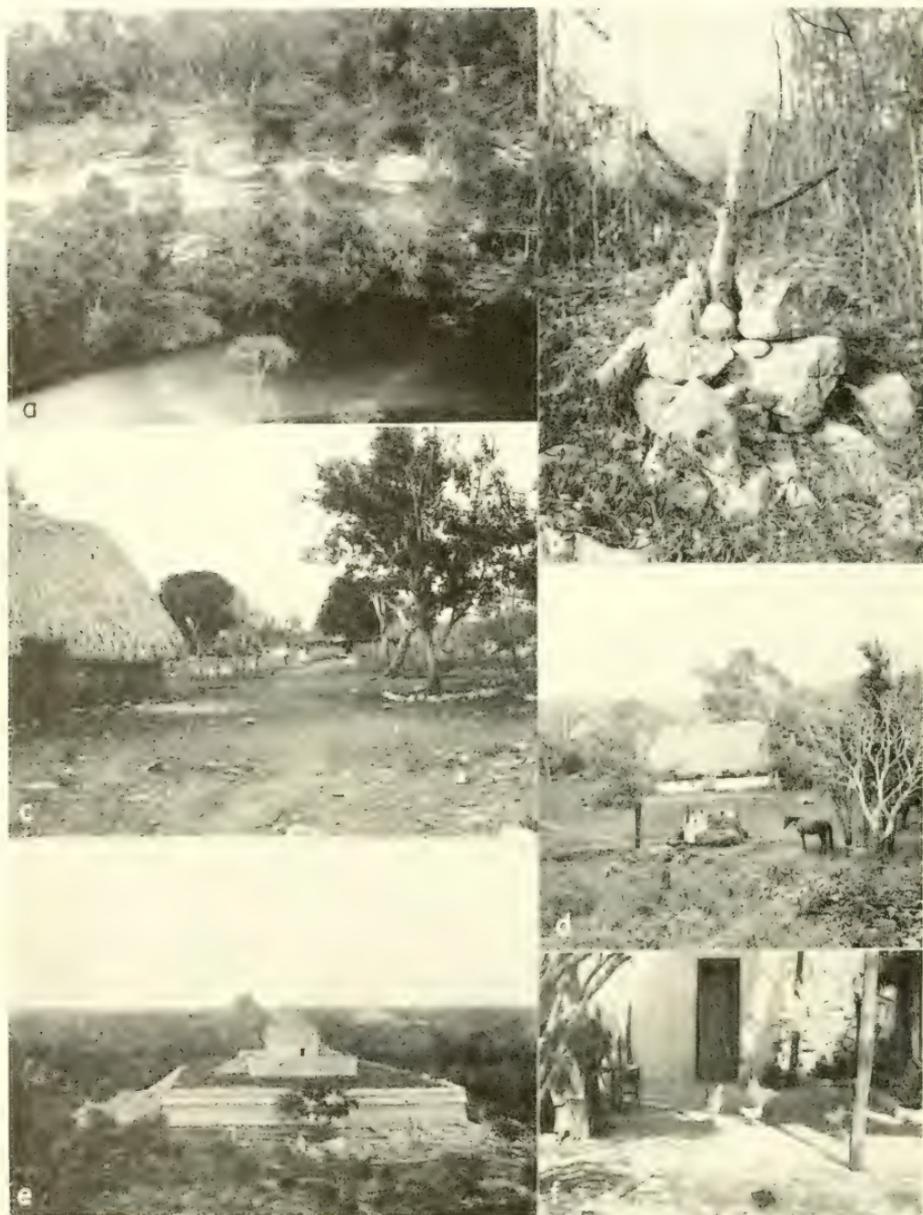


- KEY**
- TOWN VISITED BY AUTHOR
 - LARGER TOWN VISITED BY AUTHOR
 - GOOD ROAD
 - TRAIL
 - RAILROAD
 - ANCIENT ROAD (SAC BE TO COBA)

SCALE
0 10 20 30 40 50 MILES

YUCATAN
O H O H
STATE OF
CAMPESHE

MAP OF THE STATE OF YUCATAN.



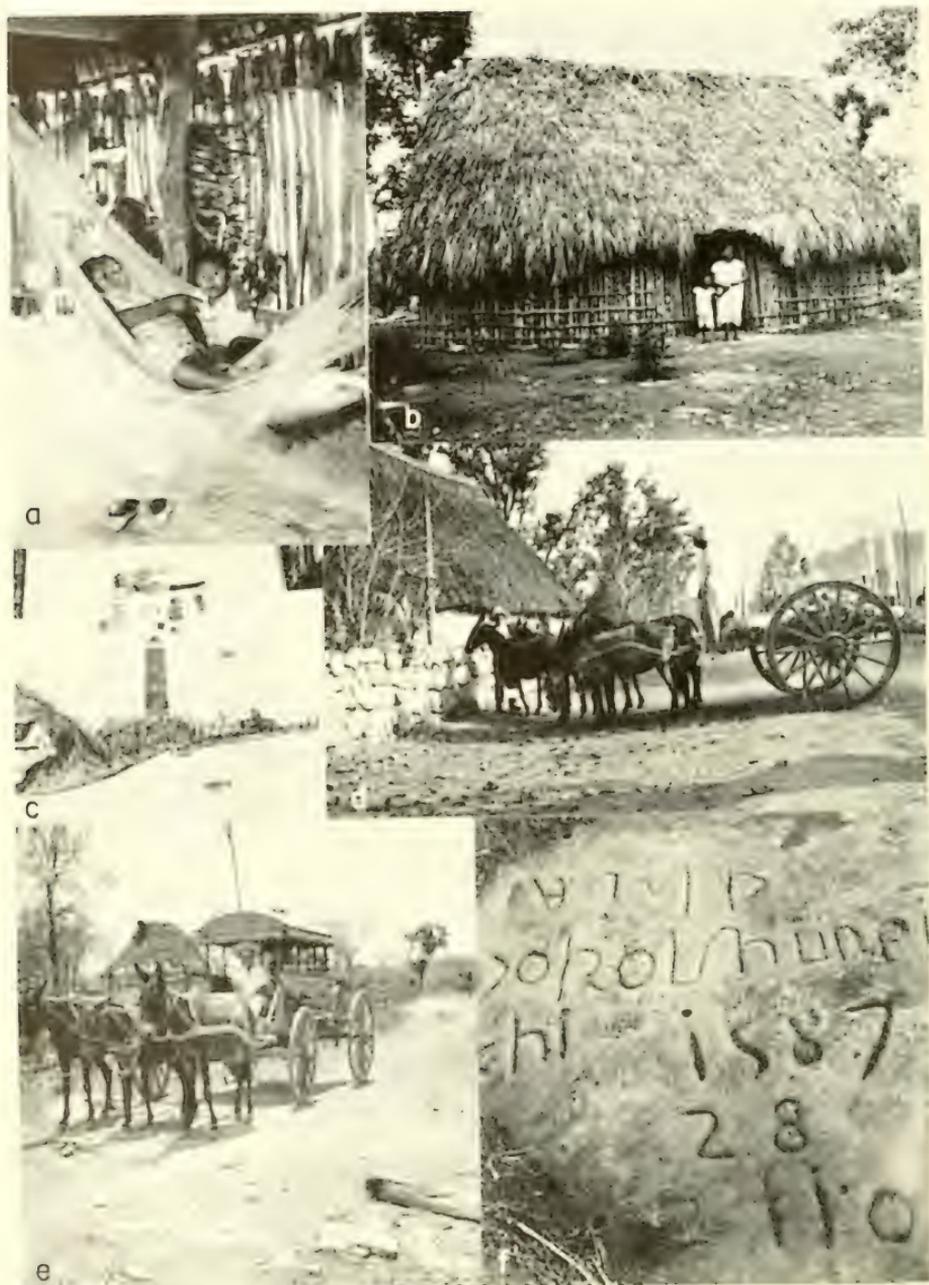
TYPICAL SCENES IN YUCATAN.

a, A typical cenote, at Poxil, near Pisté. *b*, Cross on a road, marking the boundary of a small town. *c*, A yard scene in Pisté. *d*, Plaza at San José; note the women at the well and the open-sided schoolhouse in the rear. *e*, A general view at Chichen Itza. *f*, A typical Maya doorstep in Chan Kom.



SPANISH COLONIAL CHURCHES.

a, A thatch structure built within the ruins of the church at Chikindzonot. *b*, Interior of Piste church.
c, Typical Spanish church at Piste. *d*, Church at Tekax. *e*, Chichimila *f*, Church at Uayma.



SCENES OF NATIVE LIFE IN YUCATAN

- a*, Interior scene in a typical bush house. *b*, Exterior of a newly constructed bush house in Pisté. *c*, Uay-pop, a mythical creature drawn on a wall panel in a Maya bush house. *d*, A six-mule cart; these are used chiefly in transporting maize. However, passengers are also transported on them. *e*, Volan, a carriage swung by leather straps for the comfort of the passengers who travel over the rocky roads. *f*, A boundary marker at Pencuyut, dated 1587.

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Some Western Shoshoni Myths
By JULIAN H. STEWARD

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SOME WESTERN SHOSHONI MYTHS

BY JULIAN H. STEWARD

INTRODUCTION

These myths were procured from several Shoshoni of Nevada and eastern California and from one Northern Paiute during 6 months' ethnographic field work¹ in 1935. They by no means exhaust the western Shoshoni mythological repertory, but, as this enormous area has heretofore been a blank on the ethnographic map, any material from it should be recorded.

The myths were recorded from the following localities and informants: Saline Valley, between Death Valley and Owens Valley, Calif.; Patsie Wilson, Shoshoni (now at Lone Pine), age about 50, informant; Andrew Glenn, interpreter. Panamint Valley, Calif.; George Hansen, age about 90. Upper Death Valley, Calif.; Bill Doc, Shoshoni (now at Beatty, Nev.), age about 70. Beatty, Nev.; Tom Stewart, Shoshoni, age about 70. Ash Meadows, Nev., where Shoshoni and Southern Paiute were somewhat mixed, but myths claimed to be Shoshoni; Mary Scott, age about 80. Lida, Nev.; John Shakespeare (now living at Cow Camp, near Silver Peak, Nev.), Shoshoni, age about 80. Big Smoky Valley, Nev.; Jenny Kawich (now living at Shurz, Nev.), Shoshoni, age about 65; these myths poorly remembered and very synoptic. Smith Valley, Nev., Tom Horn, Shoshoni, age about 60. Elko, Nev.; Bill Gibson, Shoshoni, age about 60. Winnemucca, Nev.; Charlie Thacker, Northern Paiute (now living at Owyhee, Nev.), age about 70. One myth is from the Gosiute (who are really Shoshoni), procured in 1936 while doing field work for the Bureau of American Ethnology; informant, Miiidiwak, age about 60.

There are few tales in this collection that are actually new. The themes, episodes, characters, and style are very similar to myths from Owens Valley and western Nevada Paiute, from Owens Valley Shoshoni, from Ute and Southern Paiute, and from the Northern Lemhi Shoshoni.² Novelty lies only in local combinations of widespread

¹ This work was financed by the Department of Anthropology, University of California, and a grant-in-aid from the Social Science Research Council.

² Steward, J. H., *Myths of the Owens Valley Paiute*, Univ. Calif. Publ. Amer. Archaeol. and Ethnol., vol. 34, No. 5, pp. 355-440, 1936. A few Shoshoni myths are recorded in the same, pp. 434-436. See also, *Ethnography of the Owens Valley Paiute*, same series, vol. 33, pp. 323-324, 1933; also, Lowie, R. H., *Shoshonean Tales*, Journ. Amer. Folk-Lore, vol. 37, pp. 1-242, 1924, and *The Northern Shoshone*, Amer. Mus. Nat. Hist., Anthropol. Pap., vol. 2, No. 2, pp. 233-302, 1909; also, Sapir, Edward, *Texts of the Kaibab Paiutes and Uintah Utes*, Amer. Acad. Arts and Sci., Proc., vol. 65, No. 2, pp. 297-535, 1930.

elements and in local embellishment. Therefore, as the most interesting feature of Shoshonean mythology is local variation, an effort was made to obtain different versions of the same tale. From this standpoint, I was most successful in the Origin of People, procuring seven variants from as many localities. The Theft of Fire, the Theft of Pine Nuts, Coyote Learns to Fly, and Cottontail Shoots the Sun are also popular, wide-spread themes. The Race to Koso Hot Springs is an Owens Valley Paiute favorite. Other myths were collected at random.

Personal songs, sung by prominent myth characters, as in Owens Valley tales, seem to have been a general, though not important, feature of Shoshoni myths, but no effort was made to collect them.

THE THEFT OF FIRE

(Saline Valley, California. Shoshoni)

A long time ago, the animals were people. They had no fire in any part of this country.

Lizard was lying in the sunshine. He saw a tule ash, blown by the south wind from a long way off, fall to the ground near him. All the people came over to look at it and wondered from where it had come.

They sent Hummingbird up into the sky to find out. They watched Hummingbird fly up. Coyote said, "I can see him. He is high in the sky." Lizard said, "I can see him sitting up there." They saw that Hummingbird looked all over to see from where the ash had blown. Coyote was watching him. He saw that Hummingbird looked to the south and saw something. Hummingbird came down and told the people that there was a fire in the south.

They all started toward the south. On the way, Coyote stationed the different animals at intervals. They went on until they could see the fire. The people there were having a big celebration and dance. Coyote made himself false hair of milkweed string. He joined the people and danced with them. As he danced he moved close to the fire and leaned his head over so that his hair caught on fire. As soon as it was lighted, he ran away. The fire in the camp went out, and the people began to pursue Coyote to recover their fire.

Coyote ran to the first man he had posted and passed the fire to him. This man ran with it to the next man, and in this way they passed it along. Every time the pursuers caught one of Coyote's people they killed him. There were fewer and fewer of them left, but they kept the fire.

At last only Rabbit remained. As he ran with the fire, he caused hail to fall to stop the pursuers. Rabbit cried as he ran. Rat, who was living alone on the top of a big smooth rock, heard Rabbit crying and went down to meet him. As he ran toward Rabbit, he tore the

notch in the mountains near Lida. Rat took the fire from Rabbit and ran with it to his house, which was on the summit at Lida.

The pursuers gathered around his house, but could not get into it. They all died right there. They can be seen now piled on a mountain nearby.

Rat scattered the fire all over the country.

THE THEFT OF FIRE

(Panamint Valley, California. Shoshoni)

The birds and animals were men. At one time there was no fire in this country.

Lizard was lying in the sun to keep warm. As he lay there he noticed something falling slowly from the sky. When it came to the earth, all the people ran over and looked at it. They said, "What is this?" Coyote said, "Don't you know what this is?" They said, "No." Coyote said, "This is an ash from a fire in another country. What are we going to do about it? Somebody must go far up in the sky to find out from where it came. Who can go?" Hummingbird said, "I can go."

Hummingbird started up in the sky, while everybody watched him. Coyote tipped his head and squinted one eye, watching him with the other. When Hummingbird was far up in the sky, Coyote saw him look toward the north, then turn and look toward the east. Then he looked toward the south, and, finally, turned toward the west. He continued to look a long time toward the west. Soon he came down.

When he was on the earth again, everybody gathered around him. Coyote said, "What about it? What did you see?" Hummingbird said that he had seen a big body of water in the west. There were many people on the shore, dancing around a huge fire. Coyote said, "We must go over and get the fire."

They started toward the west. On the way Coyote stationed the people at intervals. When they got near the fire, Coyote made himself false hair out of string. There were many people dancing around the fire. Coyote joined them and began to dance, but they did not recognize him. All night as he danced, Coyote tried to catch the fire in his false hair. When it was nearly morning, he caught the fire and fled. The people had now lost their fire, and began to chase him.

Coyote ran to the first man he had posted and passed the fire on to him. This man ran with it to the next man, and in this way it was relayed from one to another until it was passed to Jackrabbit. Jackrabbit put it on his tail, making his tail black.

Rat had a house on the top of a tall rock with a smooth, vertical face. He sat in his house, while Jackrabbit was coming with the fire. The pursuers made hail fall. This hurt Jackrabbit so that he squealed as he ran. Rat heard this and came down to meet him. He took the fire from Jackrabbit, dodged his pursuers, and scrambled up to his house. The fire burned a red place on his breast.

The people below said, "Catch him, but do not kill him. We want the fire." Rat remained in his house and put the fire into a large pile of brush. The people below pleaded with him to give them some fire. Rat threw the brush in all directions. The brush now has the fire in it. You can get it out by making a fire drill of the brush.

THE THEFT OF PINE NUTS

(Saline Valley, California. Shoshoni)

The people in this country had no pine nuts. They talked about going off toward the north to get some.

They started off toward the northeast. Coyote was among them. They went to a big camp where there were many people gathering pine nuts. Soon after they arrived, they began to play the hand game against these people. But the next day, they did not know whether they had lost or won. They went on to another place where there were also people who had pine nuts. Here they played a game of shooting at a small round target with a bow and arrow. They bet their lives in this game; the losers were to be killed by the winners. When one side missed the target, its opponents took its arrow. Crow was shooting and had only two arrows left. Coyote watched him. When Coyote saw him losing, he walked around and shouted and wondered what to do. Crow was about to shoot at the target again. Coyote said to him, "Why don't you hit the target?" Crow shot and missed. He had only one arrow now. When he shot this one, he hit the target. Then he began to win. He won back everything they had lost and then won everything the other people owned. Finally, their opponents even bet their pine nuts, and lost them.

The people did not want to give up their pine nuts. They hung them on a tall tree which had no branches, so that no one could climb up. During the night they slept under the tree to prevent anyone getting the pine nuts. Cottontail began to play his flute, "tu hu du du du . . ." Some old women who were helping to protect the nuts knew that they were going to lose them and began to cry for help. Early in the morning, while the people under the tree were still asleep, Coyote and the others started to get the pine nuts. Coyote said, "What do these old women make a noise for? Why don't they go to sleep?" He poked their eyes with a stick and

blinded them. Woodpecker (a red woodpecker) flew up in the tree and took the pine nuts.

When Woodpecker brought the pine nuts down, Coyote and the people took them and began to run for home. The others pursued them and caught those who became tired while they were running. They killed every one they caught. Although many people started out, nearly all were killed before they got home.

When nearly all the people were dead, Woodpecker gave the pine nuts to Crow. Crow went on with them. He hid them under his feathers, behind his ear, and in other parts of his body. The pursuers knew he would hide them this way and tried to hit him. They struck his leg and knocked it off. It went a long way through the air. Then they struck Crow and brought him to the ground. They said, "Now we will wait and take a rest."

After they had rested, they went on to where Crow had fallen and searched his body for the pine nuts. They found that Crow had left his feathers behind [i. e., shed his skin] and gone on, taking the pine nuts with him. They looked and a long way off saw where his leg had fallen, but Crow was far beyond, still carrying his pine nuts. They saw pine nut trees all over the mountains, where the nuts had fallen from Crow's leg when it was knocked through the air. They saw smoke coming up through the trees, where the people were already out picking the pine nuts. Crow was flying about crying, "Caw, caw, I have had my pine nuts with me all the time."

All this happened up by Lida.

THE ORIGIN OF PEOPLE

(Smith Valley, Nevada. Shoshoni)

All the birds and animals were men. Yellowhammer and the others went to where some people up north had pine nuts. They had put their pine nuts in a deer-skin bag, hung high up on a white pine tree. Coyote's people played the hand game and other games with them. They played for many days and nights. They wanted the pine nuts. Mouse hunted, hunted, and hunted for the pine nuts, but did not see any. The people still played the hand game. Finally, Mouse found the deer-hide bag full of pine nuts hanging in the tree.

That night all the owners of the pine nuts went to sleep. During the night, Coyote and his people tried to get the pine nuts down. Coyote jumped, but he could not jump high enough. All the others tried, but none of them could jump high enough. Then Coyote asked Woodpecker to try. Woodpecker jumped, but he, too, failed to reach the bag of pine nuts. Then all the Woodpeckers took off their long beaks. Woodpecker took all these beaks and placed one

upon another.³ The next time he jumped, he ripped open the deer-skin bag and all the pine nuts fell down.

Coyote's people ate and ate. Finally, there was only one pine nut left.

An old man went to the owners of the pine nuts and cried, "Wake up! Wake up! Someone is stealing your pine nuts!" They jumped up and ran after the others. As they caught each one of Coyote's people, they killed him. They killed many of them, but they did not find the pine nut. Coyote's people had relayed it along to the fastest runners. Coyote said, "Give me the pine nut. I can run fast." They gave it to Coyote. He carried it for a short distance and gave it to Crow.

Crow took the pine nut and bit the end off it. Then he hid it in his leg and ran. The pursuers were gaining on him. They shot him and killed him. When they came up to him, they kicked him, but his leg ran on by itself, making a track to the mountains. All of Coyote's people were dead now.

By the time the pursuers arrived at the mountains, the pine nut trees had already grown. They grew all over the mountainsides. This was a long time ago. There are no pine nuts on the mountains up north where Coyote's people stole them. Only junipers grow there now.

THE THEFT OF PINE NUTS

(Elko, Nevada. Shoshoni)

At one time there were no pine nuts in this country. All the pine nuts were up north, where Crane kept them on a high pole.

One day Crow, Coyote, Frog, Snake, Mouse, and all the other animals and birds were lying on a hill, looking down at some boys who were playing a game. Suddenly a puff of wind blew from the north and they could smell pine nuts cooking. They asked each other what the smell was. Coyote said, "It is pine nuts cooking." Crow said, "We will go up north and get them."

All the people started from somewhere south of Beowawee and traveled toward the north. They went past Owyhee and could smell the pine nuts in the north. On their way, they planned how they would get them. They traveled and traveled, many days. Some of the people got tired and stopped. Frog, Rattlesnake, and several others got tired and could not go any farther. But the long-legged persons kept on going toward the north into what is now Idaho.

When Crow and the others got to Crane's place, where the pine nuts were, they suggested that everybody have a round dance. They all began to dance; they danced all night, until sunup. The girls at

³ They evidently made one long, composite beak.

Crane's place talked about the different men. They said, "Look at Coyote. He is a bad man. He is ugly. Look at Skunk." They turned Skunk over and said, "He is a pretty boy. White Mouse and White Weasel are pretty boys, too." Everybody did the round dance. After a while they stopped to eat. When they did this, Weasel and Mouse went away to hide; they went to sleep.

When morning came, all the people played the hand game. They played for bows and arrows, feathers, and other things. They played all day. Weasel and Mouse did not join the game because they were sleeping.

That night all the people did the round dance again. Mouse and Weasel came to the dance, but, after the people had eaten, went away to sleep. Everyone danced the round dance for 5 nights and played the hand game every day. By the time it was all over, they all went to sleep.

An old woman had been guarding the pine nuts. Mouse and Weasel tried to get the nuts, but they were tied on the top of a high pole and could not be reached. They took two woodpecker beaks, tied them together, and shot them at the pine nuts. All the pine nuts fell down. Crow and his people took the pine nuts and ran toward the south. When this happened, the old woman hollered, clapping her hand over her mouth. Crane woke up, and told his people to chase the thieves. They could see them running in the distance.

Crow saw that Crane and his people were pursuing them. A small bird among Crow's men tried to carry the nuts, but they were too heavy for him. Crane's people overtook Crow's people and killed them. Only Crow and Coyote remained. Coyote took some of the nuts. While he ran, he chewed them up and spit them out everywhere. Pine nut trees grew up wherever he spit. Crow also took some and put them in his leg. Then he sat down on the saddle of a hill. Crane saw Crow put the pine nuts under his arm and in his leg, and, when he came up to Crow, kicked and killed him. When he kicked Crow, the nuts were scattered all over the mountains. Then Crane looked and saw that the mountains were all black with smoke from places where the people were roasting pine nuts.⁴

Crane took his two children to a place where there was smoke, hoping to get some pine nuts to eat. It was Crow's mother's camp. When she saw Crane coming, she said, "I will give Crane all the wormy ones." When Crane came up to her, she said, "I will open some good, fresh pine nuts for you." She opened one and it was full of worms; the next one had worms too. She opened one after another and they all had worms.

⁴ B. G. believes that because of Crow's part in procuring pine nuts, crows should not be killed today.

Crane gave up trying to get pine nuts and said, "I will go down by the river and stay there." When Crane flew away, Crow's mother tried to strike him, but only knocked off his tail. That is why cranes have short tails.

Ka₇gwüsi gwëak: ⁵ (Woodrat's tail, pulled off).

THE THEFT OF PINE NUTS ⁶

(Winnemucca, Nevada. Northern Paiute)

The north wind was blowing and Coyote could smell pine nuts. Coyote said, "It smells good. I will find the pine nut eaters." He traveled to where people were eating pine nuts. They were making mush of them. The people said, "Don't make the mush too thick. Put plenty of water in it. There is a stranger here. We don't know what he wants. Don't put coarse nuts in the mush. He may steal them."

Coyote came back and told his own people about it. He said, "Those people have fine food. I ate some soup. They made me some thin mush without any whole pine nuts in it, so I could not steal them. Hurry, pack up and we will go after them."

Coyote and his people started out to steal the pine nuts. Everybody—Chipmunk, Magpie, Chickenhawk, Mouse, Hawk, Skunk—everybody went. They were all people. [When they arrived] they gambled with the people in the north. Coyote said, "Mouse, you look for the pine nuts, while we play the hand game. They are hidden." Coyote told him to find the whole ones. Mouse was small and could get into small places. While they were playing the hand game, Mouse found the nuts under a house and started to run home with them. All Coyote's people ran to help him.

The northern people followed. They killed Coyote first. Then they killed the others. They cut each person open to find the pine nuts. [But before each person was overtaken] he had relayed the nuts to another. Finally, Rotten-legs (Hawk) was the only person left. He had the pine nuts in his leg. They cut Rotten-legs open, but did not find anything. His leg stunk so bad that they threw it away toward the south.

The people saw smoke in the hills.⁷ The pine nuts [which had been scattered when the leg was thrown] grew fast. There used to be pine nuts in the north, but now they are all gone. They grow around Winnemucca now.

⁵ The conventional myth ending, meaning, in effect, "It is finished."

⁶ Although this story is known throughout the Basin, it is here told at the northern limit of pine nuts. The people to the north actually do not have pine nuts in their territory and it may well be in such a place that the story originated.

⁷ This smoke was presumably from the fires of people cooking pine nuts, though it is not explicitly explained in this myth.

THE ORIGIN OF PEOPLE

(Panamint Valley, California. Shoshoni)

The earth was covered with water. The water dried up quickly. At this time the birds and animals were men.

Coyote was walking along the Panamint Mountains, when he saw a very beautiful woman who had very white skin. Her name was pabon' posiat, "tan louse." She was carrying a jug of water. Coyote followed her, and when he came up to her, he said, "I am very thirsty. Give me a drink of water." She pointed to a place (about one-half a mile away) and told him to go over there, and she would give him a drink. Coyote did so. When she came up to him, she again pointed to a distant place and told him to go there. In this way she continued to put him off until they reached her home.

The girl lived with her mother. The mother said to her, "Where did you get him?" Coyote went to some water and started to drink. While he was drinking the girl tried to strike him several times, but Coyote dodged each time. Then she said to him, "You go into the house," pointing to a big hole in the house. Coyote went in, and saw many bows and arrows around the walls of the house.⁸

During the night Coyote's advances toward the women were frustrated⁹ . . . In the morning Coyote asked the woman who owned the bows and arrows. She told him to take them and to hunt some ducks. That day Coyote killed ducks and caught fish, which he brought back to the house.

In the evening the women cooked the ducks. They ate some and disposed of some . . .

That night Coyote made advances to both the girl and her mother . . . By morning the girl's belly was large. She began to bear children, putting them into a large basketry water jug. She told Coyote that they were his babies. When Coyote was ready to leave, the girl said to him, "Carry the babies in the jug. These babies will cry for water, but you must be careful. If you give them water, open the stopper only a little or they will get out." She showed him how to give them water.

Coyote started out carrying the jug, which was very heavy. As he went along, the babies cried, "I want water. I am dry!" Coyote said, "They are thirsty; maybe they will die." Coyote opened the

⁸ The inference is that these weapons belonged to men who had previously visited her and whom she had killed.

⁹ In this and in subsequent versions of this tale, the familiar vagina dentatum theme is used to explain the failure of Coyote's amorous advances. Coyote remedies the situation by using a piece of wood or mountain sheep neck. The theme also is made to account for the disposition of part of the food eaten by the women. Deletions of this material are indicated by dots.

jug, and the babies all ran out. They went in all directions.¹⁰ The boys fought among themselves with bows and arrows. These people became the different Indian tribes.

THE ORIGIN OF PEOPLE

(Death Valley, California. Shoshoni)

Coyote had a home. He hunted rabbits to make a rabbit-skin blanket. When he had a great many skins, he started to make the blanket in his house. While he was working on his blanket, he saw a shadow pass the door. He went out of the door to see what it was, and saw a woman running. She had a rabbit's tail on her buttocks. He chased the woman, and she ran toward the west. Coyote ran fast, but could get no closer to her. He chased her to the ocean.¹¹

At the edge of the ocean the woman stopped and sat down. She said, "I will lie on my back and swim across and carry you over." They started across, the woman carrying him. When they had gone a little way, Coyote moved down on her. The woman dumped him off into the water. Coyote had already decided that, if she put him off into the water, he would turn himself into a water skate ("some little long-legged insect that runs on the water"). When she pushed him into the water, he turned into the skate and crossed the ocean. He reached the other side before the woman.

When Coyote got to the other side he found a tree and made himself a bow. He took green stringy stuff from the water, which he put on the back of his bow instead of sinew. He made the bow string of the same thing. Then he found some cane, made arrows, and began to shoot ducks. He took the ducks to the woman's house.

There were two women living at this house, the woman he had followed and her mother.¹² The women were sitting outside their house. They told Coyote to go inside and sit down. When Coyote went in, he saw quivers made of fox skin hanging all over the wall.¹³

The women started to cook the ducks. They ate the ducks; both women ate. Coyote was singing. He made a hole in the house and watched the women. After eating the meat, the women disposed of the bones. . . . Both of them did this.

They went into the house to sleep. Coyote made advances to the woman he had pursued. He was frustrated . . . In the morning, Coyote went out and got a hard stick. It was a kind of hard sage

¹⁰ G. H. added that some paper was lost at this time, implying that the Indians had known how to write, but that the art was lost when Coyote opened the jug.

¹¹ The informant's English term. The Shoshoni word would probably be translated "large water," i. e., "lake."

¹² They were given no names.

¹³ No mention here is made of the owners of the quivers.

brush. He hid it by the house . . . The next morning, Coyote hunted mountain sheep. He killed a small one and took the bone from its neck. He put the neck bone by the house in the same place he had hidden the stick. . . . He made successful advances that night . . .

In the morning, both women were large in the belly. The older one started to weave a basketry water jug. She finished making the jug. Both women put their babies in the jug. When they had finished, they told Coyote to go back home and to take the jug full of babies with him. Coyote started. When he came to the ocean, the old woman put a flat stick across it and Coyote walked over on it. He came toward his home. He went to Owens Valley.

While he was carrying the jug, he heard a noise. He wondered what it was. He pulled the stopper out of the jug. Indians came out; many Indians. When only a few were left inside the jug, he put the stopper back. The woman had told him to pull it out when he came to the middle of the world, but he had pulled it out when he heard the noise. He put the stopper in again and came on to Death Valley. In Death Valley he pulled it out again, and the remaining Indians came out. They stayed here. That is why there are Indians here now.

THE ORIGIN OF PEOPLE

(Beatty, Nevada. Shoshoni)

Every day Coyote met a girl. The girl lived with her mother, who said, "Why don't you bring that Coyote here? He will hunt game for us. Bring him home."

When Coyote met the girl again, he became amorous. She said, "All right, but I shall go a little way ahead. Then you come." The girl went some distance toward the east and stopped. When Coyote came up to her he said, "This is the place." She said, "No, it is farther." She went ahead again, and when Coyote came to where she was, the same thing happened. Every time he came up to her, Coyote made advances. Thus, they went from place to place and crossed a high mountain.

While crossing the mountain, they came to a cliff. What Coyote discovered while climbing the cliff . . . frightened him. Coyote continued to follow the girl, and they went toward the east, where the girl and her mother had a house.

Coyote and the girl reached the house. That night the girl's mother, an old woman, cooked all kinds of food for them to eat. She said to Coyote and the girl, "You go and make a bed outside." Coyote . . . knew what to expect . . . He was frustrated.

In the morning the old woman said to Coyote, "You go and hunt ducks. There are a lot of arrows out there. Take them with you. Hunt all day and kill many ducks."¹⁴

Coyote hunted all day and brought back a great many ducks. The old woman plucked them and boiled them in a pot. She and her daughter ate the meat. Coyote sat to one side. He could see how they disposed of the bones . . .

That night Coyote's advances were frustrated . . .

In the morning the old woman said to Coyote, "You go and hunt again. Hunt mountain sheep. There are arrows outside. Take them with you." Coyote said, "I am a great hunter. All right. I will go and hunt."

Coyote walked up into the mountains. Coyote was a smart man. Halfway up the mountain, he saw a mountain sheep. It was young and small and had short horns that were still soft and weak. Coyote went after the small sheep and killed it at once. He shot it. He butchered it and prepared it. He wanted a piece of the neck, because the neck is strong. He cut off a piece of the neck and said, "I do not want to give this to those women." He hid it.

Coyote went back to the women's house that night. The old woman met him and took the sheep. She looked it over and said, "Coyote, what did you do with that neck?" Coyote said, "I threw it away." The old woman said, "It is good to eat." The old woman and the girl boiled the meat. They ate it, and when they were through it was dark.

The old woman said, "You two make a bed." The girl made a bed. Coyote was still lustful. The girl was very fine; she was a good looking girl . . . Coyote went to where he had hidden the mountain sheep's neck. He returned bringing it with him . . . He visited both the girl and the old woman . . .

In the morning, Coyote went out to hunt ducks. He brought back a great many ducks for the women to eat. The women plucked and boiled the ducks. They ate off the meat, then pulverized the bones with a rock.

That night Coyote again visited the women.

The old woman made a basketry water jug, a very large jug. She worked on it for several days. Coyote stayed with the women. Every day he hunted.

After a few days, the old woman said to him, "You must go home. Carry that jug with you. Don't open it while you are traveling. Don't open it anywhere. When you come to the middle of the country, open it."

¹⁴ T. S. did not know the source of these arrows, but supposed that the old woman had made them.

Coyote started out carrying the jug, but it was too heavy. He said, "What is in this jug? It is too heavy. I want to open it and see what is in it." He decided to open it. He took a rock and hammered open the stopper. At once people jumped out. Many people jumped out. Nearly all the people jumped out. There were young men and young women. These were fine looking men and women. This happened near Saline Valley.¹⁵

When only a few people remained in the jug, Coyote put the stopper back in. He carried the jug on his back and went on toward his own country. When he had gone half way, he opened it again. This was at Owens River.¹⁶ Old and homely people came out. A great many people came out. Then Coyote threw away the jug.

That is how men and women were made.

THE ORIGIN OF PEOPLE

(Ash Meadows, Nevada. Shoshoni)

One day, Coyote went out to hunt rabbits. While he was hunting, he saw a large naked woman in the distance. This excited him. He said to himself, "Whew, I have never seen a woman like that. I will follow her." He followed her for a long time, but could not quite overtake her. He followed her over many mountains. When he came to White Mountain [Fish Lake Valley], he was very thirsty. He saw that the woman was carrying a tiny basketry water jug, and he asked her for a drink. She gave him the little jug, and he drank and drank, but still there was water left in it. Then she walked on, and he followed her.

Finally, they came to a large lake of water. The woman said, "My home is over there." She crossed the lake on top of the water. Coyote said, "I cannot do that. I will walk around." The woman turned and gave Coyote the legs of a water bug [skate?] that runs on the top of the water. Coyote followed her over to her house.

The woman lived in a house with her mother, who was called *tsutsip*^u, "ocean," *maa'puts*, "old woman." She was like Eva, the first woman. Eva had never seen a man before. In the morning, Eva got up very early and began to weave a fine, big water jug. Coyote stayed with the women for several days.

One day Coyote went hunting for deer. He wondered what was the matter [with the women] . . . He asked his stomach, his ears, his nose, and his foot what was the matter. None of them could tell him. Then a white hair on the end of his tail said, "You are just like a little boy. Take a neck bone . . . and use that."

¹⁵ These are Shoshoni.

¹⁶ These are Northern Paiute.

Coyote did this . . .

Coyote went out to hunt. The old woman had nearly finished her big water jug. The two women told each other that they were pregnant. When the jug was finished, they gave birth to many tiny babies, all like little dolls, and put them in the jug.

When Coyote returned, they said to him, "Maybe your brother, Wolf, is lonesome for you. We want you to go back home." Coyote said, "All right, I will go." Eva then said to the children, "You have no home here. You must go with Coyote." She put the basket of children on Coyote's back, and told him to carry it with him. It was very heavy, but Coyote said that he had carried deer down from the mountains on his back, so that he was strong and did not object.

The women instructed Coyote about the jug. They said, "When you come to Saline Valley, open the stopper just a little way, then replace it quickly. When you come to Death Valley, open it a little more. At Tin Mountain (Charleston Peak) open it half way. When you are in Moapa, take the stopper out all the way." Coyote said he would do this.

Coyote carried the jug along, but soon became very tired and could scarcely hold it. When he arrived in Saline Valley, he opened the stopper a little way. Tall, dark, handsome men and girls jumped out and ran away. These were the best looking people in the jug. This frightened Coyote, but he put the stopper back, and picked up the jug. In Death Valley, he opened it again. Here, more handsome people jumped out and ran away. The girls all had long, beautiful hair. When he came to Ash Meadows, he opened it. The Paiute and Shoshoni came out. These people were fine looking, too. At Tin Mountain, Coyote let some fairly good people out of the jug. When he opened it in Moapa, very poor, short, ugly people came out. The girls here had short hair with lice in it. All the people had sore eyes. That is the way they are now.

This is the way Eva had her first children. Coyote was the father.

THE ORIGIN OF PEOPLE

(Big Smoky Valley, Nevada. Shoshoni)

Wolf had a big water jug. He said to his brother, Coyote, "Coyote, don't touch or open this jug. Be careful!" Then Wolf went away. Coyote said, "What is the matter with my brother? What is in that jug? Why did he tell me not to open it? I am going to open it." Coyote pulled out the stopper.

Many people came out and flew away.¹⁷ He replaced the stopper,

¹⁷ "Flew away" is probably the informant's confusion, rather than part of the native tale. In fact, this legend is not only synoptic, but probably incomplete.

while a few remained. The good ones had come out and had flown away like flies.

Wolf told Coyote they were going to move. He told Coyote to carry the big jug. They went to Smoky Valley. Wolf did not know that Coyote had opened the jug. He thought all the people were still in. When they came to Smoky Valley, Wolf said, "Open that jug!" Just a few Indians came out. They are the Shoshoni.

THE ORIGIN OF PEOPLE

(Skull Valley, Utah. Gosiute)

Two women, a mother and her daughter, lived on an island in Great Salt Lake . . .

Sinav and Coyote lived in Skull Valley. After the girl had killed all the men in the world, she came to get Coyote. Sinav told her that there was no [such person as] Coyote.

Sinav went with the woman toward her home. It was very hot and they had no water. After a while the woman wanted to rest under a tree but Sinav knew better [than to let her stop]. He said, "No, we must go on." They went on to Great Salt Lake. The woman walked across on the water to the island. Sinav stayed near the shore, standing in the water. The girl's mother said to her, "Why don't you bring him over?" The girl made a path of earth through the water. Sinav walked over to the island, the water closing in behind him all the way.¹⁸

Sinav went hunting and brought back deer. The women ate the meat and disposed of the bones . . . Sinav killed two mountain sheep, an old one and a young one. He first used the neck of the old one . . . Then he used the neck of the young one . . .

For several days Sinav hunted and brought in two deer each day. Each night he visited the women. Each woman bore a baby daily and put it in a large basketry jug. The jug became larger each day.

Finally, the older woman told Sinav to go South and take the jug with him. She made a path of dirt across the lake to the shore. Sinav crossed, and the water closed in behind him. At first, as he walked along, the jug was light and easy to carry. It became heavier. After a while, he had to set it down. He went on again and set it down again. Each time he went a shorter distance before he had to set it down. This happened five or six times.

Sinav heard a buzzing noise like a bee inside the jug. He wanted to look. When he began to open it, men jumped out and made a lot of dust. They knocked him over and ran away. Three times

¹⁸ This is probably Antelope Island, which, in years of exceptionally low water, is joined to the mainland.

he removed the stopper and people came out. He watched them. They ran in all directions. They were the Shoshoni, Ute, Paiute, and other tribes. The last man to come out was all covered with dust. He was the Gosiute.¹⁹ He is tougher than other people; he is bullet-proof.

THE RACE TO KOSO HOT SPRINGS

(Death Valley, California. Shoshoni)

At one time many people lived at Koso Hot Springs. These were animals who were then people. Even Sun was a person. Bear and all kinds of animals were there.

The people were going to have a race. In this race they bet themselves [that is, their lives]. Two of them made a fire to cook those who lost the race. One of the firemakers was Mudhen.²⁰

Every one went south to a place where there were some willows. Coyote was with them. Many people, who were going to race, gathered there. When the race started, Coyote walked off to the willows and began to eat a white sugar [sap] on the stems. Frog went to Coyote and struck him. Coyote came out of the willows and found that all the people had gone. He started to run; he was way behind them. As he ran he saw Frog ahead of him, sitting down. Coyote stopped and urinated on Frog. Then he went on. Soon he saw Frog ahead of him again sitting down. Again he urinated on Frog and ran on. The people were getting close to Koso Hot Springs. While they ran, Frog jumped over Coyote and urinated on him. The people were near Koso Hot Springs. Frog got there first and won the race. After the race, the firetenders threw the losers into the fire. Only Bear and Sun remained. When they started to drag Bear to the fire, he roared, but they threw him into it. Only Sun was left. The people started to talk about Sun. They said, "We had better leave him so that there will be light." Coyote, who was chief, said, "If he had beaten me, he would have thrown me into the fire. We must throw him in." Coyote took hold of Sun. When he did this, Nighthawks, Chipmunks, and all the other people ran for the house.²¹ Coyote dragged Sun to the fire. His friends were afraid that it would be dark; they ran to the house. When Coyote was ready to throw Sun into the fire, he looked to see which way he would have to run to get to the house. Then he pushed Sun into the fire and all went dark. Coyote ran toward the house but

¹⁹ The literal translation is Gossip, "dust," and Ute, from the fact that the Gosiute live in the very dusty, alkali deserts south of Great Salt Lake.

²⁰ Possibly hell-diver, a bird which has a red eye, said to have been caused by making the fire. B. D. doesn't remember who the other firemaker was.

²¹ In other versions, Coyote had allowed his people time to build a house before throwing Sun into the fire.

could not find it. He ran around looking for it and shouting. The people in the house heard him, but would not answer. Coyote looked all around, shouted, but heard no answer. He found a flat stick, a kind of paddle, and knew that he was near the house. He said to himself, "I am here." He had climbed over the house many times before, but had not known where he was.

All this had happened in the fall, and Coyote had traveled around all winter looking for the house. He became thin. In the spring he was still looking for the house. While he was looking, the people inside talked about him. They said, "We had better tell him to come here. He is smart. He might tell us what to do." After this, they answered Coyote when he shouted. Coyote went inside the house. While he was crawling in, Chipmunk sat by the door. Coyote put his hand on Chipmunk and said, "I am putting my hand on my brother-in-law." He went on into the house.

Owl and Nighthawk went out into the darkness to get green plants to eat. They did not give any to Coyote. Coyote heard them chewing, and said, "What are you people eating?" They put some of it into Coyote's mouth. Coyote said, "I don't want you to do that." They said, "We have been eating that kind of stuff (tuhuvida)."

Coyote started to talk. He said, "We had better start to make the sun. There are a lot of different kinds of people here. Some of us ought to know how to make the sun." The people said, "That is fine." Some of them started to shout, and a little light appeared. Nighthawk wanted it all dark, because he traveled at night. All the people were there. Coyote said, "When I shout, the sun will come out." Coyote shouted and it became completely dark again. Woodpecker and Mallard Duck were there. They shouted, and the sun came out. After this, the people came out and found that there were many green plants everywhere.

Coyote started to eat *tuhuvida*. Coyote said, "I am going to make it sweeter," and urinated on it.²² After this, some of the people tasted it. It had been sweet before, but Coyote made it salty and bitter.

THE RACE TO KOSO HOT SPRINGS

(Saline Valley, California. Shoshoni)

All the animals were down south somewhere (*pitiwana*). All of them—Crow, Badger, Lizard, Coyote, the birds—were racing against Sun. Frog was in the lead, and reached Koso Hot Springs before Sun. When he got there, he waited for the other animals to arrive.

When all the animals had arrived, they built a large house for all the people. They all went into the house and left Coyote to throw

²² *Tuhuvida*, some kind of plant with yellow flowers. It was sometimes eaten by Shoshoni, but has an unpleasant flavor for which Coyote is held responsible.

Sun in the fire. Before Coyote did this, he looked carefully to see where the house was. Then he threw Sun into the fire and all became dark. This is why the springs are hot now.

Coyote set out for the house in the darkness, but could not find it. He searched all over for it. He wandered around for a year. He was very thin by this time.

The people in the house began to talk about Coyote. They said he was the smartest of them all; they wanted him. They began to look for him, and found him close by. It was springtime. Coyote was very thin. The people brought him into the house and gave him a corner in which to rest.

The people wanted Sun back. They asked each other how they could get Sun again. Mallard Duck said, "Quack, quack, quack," and every animal made his noise, trying to bring Sun back. When Mallard quacked, a little light, like dawn, began to show. They asked Coyote to make his noise; when he did so it went dark again. Duck quacked again, and it began to get light. The third time Duck quacked, Sun came out. The people saw that it was springtime; everything was green. They went out of the house.

Sun was close to the earth. They killed him, took his gall out, and threw it high in the sky.

COYOTE LEARNS TO FLY; THE ORIGIN OF PEOPLE

(Saline Valley, California. Shoshoni)

Coyote had a house in Saline Valley where he lived alone. He decided to make a basket and he went out to gather willows. He did this for many days. While he was gathering the willows he heard a sound but did not know what caused it. He said, "Oh, what was that noise I just heard?" There were green blowflies all over Coyote. The flies buzzed so loudly he could not hear the noise. . . . He killed them. After he had killed all the flies he knew what the noise was. It was somebody singing. Then Coyote began to sing and dance, carrying all his basket willows. He said, "Maybe I am going to be a doctor."

While he danced, he heard someone laughing at him. He looked up in the air and saw that Geese were laughing. He said, "What are you fellows, my brothers, doing up there?" Geese said, "We are going to eat eggs." Coyote said, "I think I will go along with you fellows." He dropped the basket willows and ran along under the Geese.

After a while, the Geese rested on the ground to wait for Coyote. They said, "We had better give some feathers to Coyote." When Coyote overtook them, each one gave him a feather. After this, they pointed to a mountain some distance off and said, "You fly

around that hill and try your feathers." Coyote put on the feathers, and flew away saying, "Wo' wo' wo'." The Geese told Coyote to land on a certain mountain top and face them. But he lighted on it, with his back to them. The Geese did not like to have Coyote's back to them. It made them angry.

Coyote left the mountain and walked back to the Geese. They were angry and killed him. They smashed his head with a rock. Then they flew away toward the east (Hauta). Coyote lay dead.

When Coyote came to life again, he stretched and placed his hands behind his head. His fingers felt his brain, which was running out of his skull. He said "My brothers have left me something to eat," and he began to eat, thinking his brains were food they had given him. Then he got up and found that he had been eating his own brains. He said, "I was eating my own brain," and vomited.

Then Coyote looked for the Geese. He saw them way over the mountains, toward the east. Coyote picked up some rocks and put them into his head, in place of the brains he had eaten, and started after the Geese. He went to the top of the mountain where he had seen the Geese, and saw that they were over the next mountain to the east. He went on to that mountain, and saw that they were over the next one to the east. In this way, Coyote kept going until he came to the shore of the ocean.

Here he saw many people, lying scattered on the shore, with their faces down. They were all dead. He turned over each one to look under him for eggs, but the Geese had eaten all of them.

One woman was lying at some distance from the others; she had one egg. Coyote cut her open, and found a girl baby. He said to the baby, "You are going to be my sister." Then he said, "You are going to be my baby." Coyote got himself some clay and made himself like a woman, with all the parts. He built a fire and steamed himself, as women do after childbirth. After this he drank only warm water. In this way Coyote made himself into a woman to nurse and care for the baby.

Coyote started back for her old home, carrying the baby on her back. While she traveled along, the baby became bigger each day. As the girl rapidly grew bigger, Coyote began to remove the clay which he had used to make himself into a woman. He changed himself back into a man, for the girl had grown very large. He said to her, "You will be my wife." But the girl said to him, "When you first cut open the woman and found me as a baby, you called me sister." Coyote said, "No, I called you my wife then." The girl said, "No you didn't, you called me sister." Coyote said, "No, I called you my wife." Coyote liked that girl.

Coyote and the girl stayed together that night. She became pregnant at once. They traveled on toward this country. A baby was born on the trail. Coyote began to weave a water jug. When he finished it, he put the baby inside. His wife disappeared, and Coyote came home alone, carrying the jug with the baby inside.

When Coyote arrived in his own country, he set the jug down. Out came dozens of boys and girls, fully grown, walking by themselves. The first to come out were fine looking, but they had no bows and arrows. They started off toward the north, running and raising a big dust. Coyote shouted, "Wait! I want to pick some of the best ones for my people." Fine looking people without bows and arrows also ran across the mountains to the west. Those that went toward the east (siivü watü nüümü) were scrubby people, and carried bows and quivers full of arrows. Those who went south were also scrubby, and had bow and arrows. These were Coyote's people, the Shoshoni. Those who went north, settled at different places along Owen's Valley. They were the Northern Paiute.

If Coyote had not found a live egg on the shore of the ocean, there wouldn't be any people.

COYOTE LEARNS TO FLY; COYOTE BECOMES A MOTHER

(Ash Meadows, Nevada. Shoshoni)

Wolf's younger brother was Coyote. One day Coyote was hunting on the other side of the hills, east of the Armagosa Desert. Near Manse he saw a man going south and began to follow him. After a while he came to a place where there are rows of rocks which look like white geese resting on fine, white earth. These were Swans who were sitting and smoking.²³

When Coyote came to the Swans, he said, "I want to go with you fellows." The Swans offered him some of their feathers. They put them along his arms and legs, and told him to try them out. They said, "You fly to that little hill. Don't go too far. Go around it once and come back." Coyote agreed to do that. They asked him how he felt. He said, "I feel fine." He flapped his new wings, shouted, and commenced to fly. He flew around the hill twice. This made the Swans very angry; they scolded him when he returned. They smashed his head with a large flat rock, then flew away to the west.

When the Swans were over the mountains to the west, Coyote woke up and said, "Where are those men? There is no one here." He saw only the white rocks on the ground. Then he saw the Swans in the sky over the mountains to the west, and began to follow them.

²³ It is not clear whether the rocks were swans, or whether there was a swan opposite each rock. Probably these were geese, not swans.

When he reached the top of the mountains where he had seen them, they were over the mountains bordering Saline Valley. He went on, but by the time he came to those mountains, the Swans were over the Inyo Mountains. He continued to follow them, but when he came to the Inyo summit, they were over the Sierra Nevada range.

When Coyote reached the summit of the Sierra Nevada Mountains, he saw no one. To the west there was nothing but water. He walked around wondering what to do. He saw some people camping near the edge of the water. He went down to see them and found that they were all dead. There were dead men, women, and babies. They had been killed by the Swans.

While he was looking at the dead people, he found a woman with a baby part way out of her chest. The baby was crying. Coyote pulled the baby all the way out, and said, "What am I going to do?" He asked his stomach what to do, but his stomach said nothing. He asked his ears, but they merely straightened up. He asked his nose, but it said nothing because it only had a big hole at the end. He asked his mouth, but it merely drew back into a grin. He asked his foot, but the toes pinched up together. He said, "Hurry up! Tell me, the baby is crying. What shall I do?" He asked his tail. The tail straightened up, and a white hair on the tip of it stood up, and said, "You are foolish! Fix that baby! Make a fire and heat some water. Wash the baby and tie up its navel, or the blood will all run out. Tie it up with buckskin. Get some white clay, Coyote, and make yourself breasts and nipples. Steam them in the fire and they will become full of milk. Then give some to the baby. Tonight dig a hole and build a fire in it. Heat five little rocks and put them in it. Cover it up with brush and earth, then lie on it. That will be good for your blood. Later on, people will do this way. In the morning, wash the baby. Stay here 5 days, and then the afterbirth will come out." Coyote did as he was told. He stayed there 5 days and took care of the baby.

After this, Coyote decided to go home to his brother. He carried the baby on his back, and went home the way he had come. While he traveled, the baby grew fast. She grew to be a girl, and Coyote wanted to marry her. When Coyote got home he said to Wolf, "This girl is my wife." Wolf, who knew everything, said "Shame on you. That is your daughter, not your wife." Coyote said, "Oh, yes, she is my daughter. I was just fooling."

In the morning, Wolf said, "Let us go and kill some fresh meat for the girl." Coyote said, "All right." They went out to a high place in the mountains, where they killed a deer. Wolf said, "You skin it right here. Do it yourself, and don't ask the girl to help you." Coyote said, "All right. Oh, yes, I will do it myself." He

started to skin the deer, and then called the girl to help him. He told her how she should cut through the skin and fat. While she was cutting it, she shook some blood from her knife. When Coyote saw this, he said, "Oh, you are bleeding. You shouldn't eat meat. It will make you old and wrinkled. You should work hard and carry lots of wood, then you will live to be old. Now go off and get some wood." This scolding made the girl angry, but she said, "All right, I will get some wood." She went off and did not return.

Wolf came to Coyote, and said, "Where has the girl gone?" Coyote said, "Oh, she has gone after some wood." Wolf said, "I know. You scolded her. You wouldn't let her eat any of her meat. Now she is angry and has gone away and left you." Coyote said, "Yes, that is right, I scolded her." Wolf said, "She has gone way up in the mountains to the north." He told Coyote where she had gone. He said that she had met Mountain Sheep, who was a handsome young man, and he had taken her to live in a cave in the mountains.

COYOTE LEARNS TO FLY

(Lida, Nevada. Shoshoni)

Coyote and his brother Wolf had a camp in the Shoshoni Mountains. They had no baskets. Wolf asked Coyote to get some willows and make a basket. Coyote found the willows, cut them down, and rolled them up in a bundle. He heard a noise like singing, but he did not know where it came from. He looked and looked for the source of the singing. He put his willows on his back and departed from Wolf's camp.

Coyote soon began to dance with the willows on his back. He said, "Now I am a doctor." He asked some seeds on the ground, "How do I look while I am dancing?" He still heard the singing. Finally, he looked up in the air and saw some Geese who sang as they flew. Coyote called to them, "Which way are you going? Wait, boys, I want to go with you." But the Geese said, "No; we cannot take that Coyote along." Coyote continued calling to them to wait for him, but they started to fly north. Coyote then took the willows from his back and followed them, singing as they sang.

The Geese tired of having Coyote follow them. They stopped to wait for him to see what he wanted. They sat on some little round hills and waited. Soon Coyote came up to them, panting and sweating. He said, "I am tired. Each of you, give me one of your feathers and I will stick them in my arms and fly as you do." Each gave him one of his feathers, and he stuck them along his arms.

The Geese said to Coyote, "When you fly, go down to that little hill and stop there. Be sure to sit down facing away from us." Coyote said, "All right, I will."

Coyote ran along the ground, flapping his wings. His feet rose from the ground a little way. Then he rose higher and higher in the air. He was flying. He flew down to the little hill the Geese had indicated, but when he lighted on it, he faced the Geese. At this they became angry. They went to Coyote and smashed his head with rocks. Coyote died.

When Coyote awoke, he was lying on his back. He stretched himself and as his hands passed over his head he felt something soft near his head. He thought the Geese had left him mush to eat. He ate it with his fingers. Then he sat up. He felt his head and found that there was a large wound in it, and that he had eaten his brains, thinking they were mush. He vomited.

Coyote stood up and saw that the Geese were far away over the mountains. He said to himself, "I will travel on." He followed the Geese to the mountains, but when he arrived at the summit, he found that they had crossed the next range and were still far ahead of him over another range. He followed them to that range, and saw that they were over the summit of the Sierra Nevada Mountains. When he came to the summit of the Sierra Nevada Mountains, he could not see the Geese anywhere.

Coyote started down into the valley, but at the canyon mouth he saw many Indians lying dead. He looked at them all but every one was dead. He saw one woman with a large belly, but she too was dead. He took his knife and cut her belly; inside, he found a little baby girl. He said to this girl, "You are my sister. Yes, you must be my little sister."

Coyote made a willow cradle for the baby. He tied her to it, and told her, "We are going to my brother's camp." He carried her on his back, and started out. On the journey the girl grew very fast. Coyote called her his sister all the time. The girl was walking before they reached Wolf's camp.

When Coyote arrived at Wolf's camp he left the girl, who was now a young woman, outside the camp and went in to see Wolf. Coyote said, "I have a wife. I left her outside the camp." Wolf said, "That is not your wife, that is our sister. Bring her into camp." Coyote said, "No, that is not our sister. That is my wife." Wolf said, "She is our sister," and he went out and brought her in. He gave her a place to sit.

The girl stayed for a little while, and then wanted to go back home. As she was leaving, Wolf gave her a stick painted white. He said to her, "Take this stick and when you are a short distance from camp, throw it over your head. Then turn around and look and you will see something." The girl put the stick on her back, and walked away. When she had traveled a short distance, she threw

the stick over her head. She turned around to look and saw that it had become a little boy. This was her brother. She took him with her and they returned to their home.

When they had been there a little while, the girl cut some willows and made two baskets. One was very good and finely woven. The other was a poor basket. The girl gave them to the young boy and told him to take them back to Wolf's camp. She told him to give the good basket to Wolf and the poor one to Coyote. She also told him not to go into any caves. This boy was Coyote and Wolf's nephew (nadabu, "sister's son").

While the young man was traveling to Coyote's camp, a heavy rain started to fall. He saw a cave ahead. He said, "I am not going to sleep out tonight and get wet." He went into the cave, and spent the night there. In the morning he stood up and bumped his head on the roof of the cave. He found that he had two big horns. He said, "I am a mountain sheep." He left the baskets in the cave, and jumped out on top of some big rocks by the cave. He said, "Now I know I am a sheep." He found two other sheep. They went with him to Coyote's and Wolf's camp. This Mountain Sheep, Wolf's nephew, had some beads around his neck.

When the Sheep approached the camp, Coyote said, "We must go out and kill that ram." Wolf said, "No, that is our nephew." Wolf saw the beads around Mountain Sheep's neck.

There were two brothers, also Wolf's and Coyote's nephews, who lived in the air, directly above the camp. They, too, saw the Mountain Sheep. The younger brother said to the older, "We must kill that ram." The older said, "No, that mountain sheep has beads around his neck. That is Coyote's nephew." The younger brother did not believe this, and continued to talk all day, asking the older brother to help him kill the ram. The older brother finally became tired of hearing the younger talk, and said, "All right. Go down and kill him." After the younger brother had killed Mountain Sheep, he saw the beads around his neck. He was sorry, because he knew then what he had done.

The younger brother said to the older one, "I am dry as a fish.²¹ I want some water." Both went down to the spring to get a drink. Wolf asked Spider to make a fire. He asked Spider to put heavy rocks in it, so that they would get hot. Spider did as he was told. While the two brothers from the sky were drinking at the spring, Spider hit both of them with the hot rocks from the fire. Then he crawled inside them and killed them.

²¹ The simile is not obvious; and almost certainly is not native.

Wolf was singing, "Our nephew has been killed. Dig a hole and bury him there." Coyote said, "What kind of brush shall I use?" Wolf cried, and, finally, Coyote cried.

COYOTE LEARNS TO FLY

(Big Smoky Valley, Nevada. Shoshoni)

Goose said to Coyote, "I'll give you wings. See those two sharp mountains? One is farther away. If I give you wings, you can fly up to that hill." Coyote said, "All right."

Goose pulled some of his feathers out and stuck them along Coyote's arms and said, "If you fly, sit on that mountain and wait for me. Don't go away. I will watch you." Goose sat down to watch. Coyote said, "All right," and went, saying "Wa' wa' wa'." He felt good. He said, "I don't want to sit on that hill. I feel good." He flew a long way and fell down.

Goose was watching him and found him. He went to Coyote and broke his head. Coyote's brains ran out and he died.

When he came to life he felt his brains and said, "My nephews gave me some mush." He ate some. Then he found that his head was broken and that he had been eating his own brains. He vomited. Goose came and found him and said, "You are bad, adabu!" He took his wings away from Coyote and left him.

Coyote cried. He did not know what to do.

COTTONTAIL SHOOTS THE SUN

(Saline Valley, California. Shoshoni)

Cottontail (Rabbit) and his old mother lived in a house in Saline Valley. One day Cottontail went out to kill Sun. He took all the arrows he could carry. He started off toward the east and slept on a hillside that night. When Sun came up next morning, it poked Cottontail on his back to tease him. That is why Cottontail's back is yellow.

Cottontail saw that Sun had come up on a mountain farther to the east. He went over there. Next day he saw that Sun had come up on a mountain still farther to the east. He went over there. In this way Cottontail continued to go toward the east until he came to the edge of the ocean. He saw that Sun came up from the ocean and jumped up into a tree.

Cottontail went to the tree, and stayed under it to watch for Sun. He looked around for wood that would not burn (presumably to make his arrows). He was afraid that he would get burned and made a hole to hide in. Then he killed Sun with his bow and arrow, and jumped into his hole. When Sun fell to the earth, everything was burned.

After awhile, Cottontail reached out and felt the ground. It was still hot. He said, "tcuwa, tcuwa" and went back into his hole. He stayed there a long time.

When the ground was cool, Cottontail came out. He killed Sun, took its gall out, and threw it high up in the air. As Cottontail traveled home, people would tease him and say, "Look at Cottontail. He is a big man. He has killed Sun." They laughed at him. This made Cottontail so angry that he killed everyone he met.

Cottontail walked for many days and finally arrived home in Saline Valley where his mother was waiting for him. They lived in a big brown rock which today is called "Cottontail's house."

COTTONTAIL SHOOTS THE SUN

(Elko, Nevada. Shoshoni)

At one time the sky was too low; it burned everything. The people would say "üdü üdü üdü, it is too hot."

Cottontail said that he would kill Sun. He and Sand Rabbit walked toward the east. They went over mountains, mountains, mountains, mountains. Always the Sun came up over the next mountain to the east. They went over many mountains. Finally, they came to the big water and could go no farther. Here they stopped.

Cottontail told Sand Rabbit to make a tunnel, to make the tunnel twist in every direction, to make it go down, and go this way and that way and up and down. Sand Rabbit did not listen to his brother and made the tunnel his own way. He made it straight. Cottontail made a tunnel that twisted in all directions.

Cottontail and Sand Rabbit stayed in their holes all day. Sun came up but they did not come out. They stayed in their holes for 7, 8, or 9 days.

Cottontail had many arrows that he was going to shoot at Sun. When Sun came over, he made ready to shoot. He shot at Sun and then jumped back in his hole. But the arrow burned up before reaching Sun. He had plenty of arrows and shot them all; but they all burned up and did not hit Sun. Then Cottontail took a roll of sage bark (i. e., slow match) that was about as long as from his fingertips to his elbow. He shot this at Sun. Sun fell down dead. When Sun came down there was a great conflagration. Everything caught fire and water boiled all over the earth. Cottontail had jumped back into his hole and kicked dirt behind him to keep out the fire. Just enough fire got to him to burn his neck, wrists, and ankles. Sand Rabbit had only dug down about 6 inches under the ground in his straight hole. He was roasted to death.

Cottontail wished to make a new Sun. He cut out Sun's gall and tried to make a new Sun of it, but it had green spots on it, so

he made the moon out of it. Then he took Sun's bladder and made a new Sun of it. It had two holes in it where he had shot through it, but he patched them up and made a fine, new Sun. Sand Rabbit lay dead while Cottontail made the new Sun. Sand Rabbit had burned to death.

Cottontail pushed the sky up with his head and then threw the new Sun up to it. The sun was no longer too hot.

The sun went west and Cottontail started west, too. He was lonesome. He was ashamed and kept his head down.

After a while, Cottontail came to some people who had no mouths. They had a fire, and leaned their faces over it to inhale grease through their noses. Their noses were all black. Cottontail took a piece of flint and cut a mouth on one of them. After this, they all took flint and cut each other's mouth. They all began to talk.

Cottontail left these people and went on alone toward the west. After a while, he heard someone yelling and shooting. There was snow. He made tracks in it under rose bushes. Then he made a long hole, about 300 feet long. One person said, "Here are Cottontail's tracks." Another one said, "There are his ears. I can see them sticking up out of that hole." They all made fun of him. One said, "I am the best shot. Let me shoot him." They quarreled about who was to shoot him. Someone aimed at Cottontail, but as soon as he released the arrow, Cottontail jumped down his hole. They looked everywhere for him, but could not find him.

Cottontail went on toward his home. His sister was there. When he arrived, he asked her for some of the paint that she used on her face. He wanted to paint his own face. He took the paint and made stripes around his eyes. Then he went into a house where there were some girls. He sat opposite the door. When the girls' brothers came home, they looked in the house and saw Cottontail with the paint on his face. They were afraid to come in, and said, "ünü üünü üünü üünü." Then the girls said, "Take that paint off your face and let our brothers come in. Wipe it off."

The boys came in and pushed Cottontail around toward the door. He took the girls on his lap and held them.

They all roasted cottontail rabbits in the fire, a big fire in the middle of the house. Each person had a cottontail rabbit. After the rabbits had cooked for a while, Cottontail took a piece of rye grass and shot it into his roasted rabbit's head. He dragged the rabbit out of the fire. The others shot, as Cottontail had done, and dragged their rabbits out. When Cottontail started to cut open his rabbit, he wished that all the fat on the other rabbits were on his own. When he cut open its belly, the fat was fine and thick. When the others cut their rabbits open, they were skinny without any fat.

After this, all the people remained around the fire and sang until late in the evening. Then they all tried to go to sleep, but Cottontail sang, "Tu, tu, tu, tu, tu, tu," in a squeaky voice. The girls said, "You keep still and let our brothers go to sleep."

The girls were lying by the door. The boys were lying on the other side of the house. When everyone was asleep, Cottontail tied the long braids of each boy to those of the boy next to him. Then he set fire to the house and carried out all the girls under one arm. The girls said, "You are no good. You have burned up our brothers." This made him angry, and he threw the girls into the fire.

Cottontail came on from that place. He came along and along and along. He found an old woman making a basketry water jug. He said to her, "Mother, let me try that. Old Lady, let me try." He took the basket; then he gave it back to her; then he took it again. They exchanged it every few minutes. Cottontail wove the jug with the woman inside. He left her there. She died, and he went on his way.

Cottontail was lonesome. As he traveled along, some people looked at him and laughed. They said, "Oh, look at Cottontail. He killed Sun. He is a funny little short fellow. He killed Sun!" Cottontail looked up and saw that there were some pretty women in the rocks above him. He went up toward the rocks, and the women said, "Cottontail is ugly. He is coming up here." They all ran into cracks in the rock. Cottontail was angry. He found some brush and put it in all the cracks. He set fire to it. The women called, "Cottontail"; but none of them came out. Cottontail said to them, "You will be good to eat. You will be groundhogs. My people will eat you when you turn into groundhogs."

Cottontail went on. He thought, "What am I doing? I have no friends. I am all alone." He kept on traveling and saw many snow birds (gaim). He killed 8 or 10 of them. After this he came to Coyote. Coyote said to him, "Where did you get the birds? I am hungry. I want some." Cottontail said, "I pulled out my hair here" (indicating his pubic hairs) "and tossed them out. They turned into birds and I got them. Do not try to get too many." Coyote pulled out a few hairs, and they turned into birds. He picked them up. Then he tried to get some more, but pulled out his guts and killed himself.

Cottontail went on. He walked slowly; he was coming away, coming away, coming away, coming away. He found two girls digging roots (nap:). He made himself small, like a water baby, and walked toward them. He staggered. The girls said, "Look at this." They picked him up, and held him close in their arms, like a baby, to keep him warm. They fed him and were very good to him. That night they kept him between them to keep him warm. He felt at their

breasts to try to get milk. He tried all night to nurse them. In the morning they cooked roots (nap:) for him, but it was too hard and he could not eat it. He wanted to nurse the girls; he wanted milk. He felt them again, but there was no milk. The next night Cottontail tried again to get milk from the girls, but they did not have any.

The girls' camp was near a spring with a hill behind it. In the morning Cottontail said, "Where is your digging stick? I want to dig some roots. Give me your big stick." The girls said, "It is too heavy for you." Cottontail said, "No." He dragged the big stick along; he was not strong. He fell over trying to drag it. He pulled the stick out of sight over the hill, and began to dig a ditch. He dug it all the way around the camp and then turned the ground [i. e., the entire camp] over and killed the girls.

Cottontail came on toward the west. He came a long way. He was coming in this direction. He crossed a hill and met some men whose hair was all shaved off except on their pates ["like Chinamen"]. He said to them, "Friends. You are my friends." He did not stop with them, because he thought that he must be good to them. He went on past these men and did not harm or kill them.

Cottontail continued to come west. He came to where there were Rattlesnakes. He saw them, but went on past. Rattlesnakes tried to shoot him. Cottontail became angry and killed them. He roasted them in a fire, and said, "You will be rattlesnakes, out in the hills, but not in the valleys."²⁵

Cottontail went on and found two boys camped by a creek. The boys said, "Here is our brother coming." They called him *ǎngata-sump*: [*ǎnga*, "red," + *tasump*:, "a plant"], a flattering name. They said to him, "We are having a difficult time with this water here. It fights us. The wood fights us and drops on us. The willows make trouble for us." Cottontail said, "You try them again and I will see." The boys tried to get water, but it turned into ice. Cottontail shot it. They tried to get willow sugar (*suhuviha*), but the willows dropped on their heads. Cottontail remedied that. These boys were Hummingbirds. Cottontail said, "That is a good name they called me. It is the first time I have been spoken to pleasantly."²⁶

Kaṅgwusi gweak: (Wood rat's tail, pulled off).

THE LENGTH OF WINTER; COYOTE IS BITTEN

(Saline Valley, California. Shoshoni)

Coyote, Owl, and Whippoorwill (To'ovego) were making the year. Coyote was fixing the length of winter. Coyote said, "It should

²⁵ B. G. said that he had probably omitted one or two episodes in this portion of the story.

²⁶ B. G. regarded this as the Shoshoni classic, the one important myth that explained everything, the "Shoshoni bible."

have as many months as the hairs on my back." Owl said, "No, it should have as many months as my feathers." "No, there are too many feathers and hairs," Whippoorwill said, "it should be 4 months." He flew away singing, "Watsa mu'a (4 months)."

Coyote became angry, and ran after Whippoorwill, but could not catch him. While Coyote was following Whippoorwill, he came to some red berries (puhupuhya). As he sat eating them, a rattlesnake bit him. He wanted to tell somebody that he had been bitten. He found a man, and told him to tell the people. The man went a short distance and came back. Next time he went farther and came back. He kept doing this until he finally got tired. Coyote died while the man was going back and forth.

HAWK AND THE GAMBLER

(Saline Valley, California. Shoshoni)

Hawk (Tuhu'ni) and his sister-in-law, Snow Bird (Takandado'a), were the only people left in the world. Everyone had gone to Panamint Valley (Hauta) to gamble, but none of them had come back. All the animals—Coyote, Wildcat, Bear, Crow, and others—had gone and had been killed.

Hawk lived alone. He asked his sister-in-law to come and live with him, but she refused. She would not go near his house.

One day Hawk disappeared. When he did not return Snow Bird went to look for him. She looked in his house and found that he had jumped out through the hole in the roof. She walked around and around looking for his tracks. When she found them, she began to follow him. She followed him a long way and finally caught up with him.

When Snow Bird overtook Hawk, he said, "Why do you follow me? I am going over where I will be killed. You had better go back." She said, "No, I will go with you." Hawk asked her if she were brave. He asked her to sing. She began to cry, singing "Hovía, hovía, pasáqwai yumákan?". Hawk said, "What power have you to protect you from danger?" She said, "You see that mountain with snow on it?" The snow was clear like ice. "That is my power. It will help me." Hawk said, pointing to a mountain, "That is tuhu toyavi" (tuhu, "black,"+toyavi, "mountain"). "That mountain is my power and will help me."

She went close to him, and they walked along together. He sang, "Tuhukini nuwu pasai yani pasai yani," and repeated it again and again.²⁷ Snow Bird also sang her song. They went along toward the home of the Gambler singing their songs.

²⁷The tune is nearly identical with that in the Owens Valley Paiute versions. (See footnote 2, Steward, J. H., *Myths of the Owens Valley Paiute*, p. 438, 1936.)

The Gambler (Pano'waz¹) had killed all of Hawk's and Snow Bird's people. He lived with his many daughters and with two Gophers, who were Hawk's mothers-in-law.

Late in the afternoon, Hawk and Snow Bird came near to the place of the Old Man, the Gambler. Gophers saw them coming when they were far off and started out to meet them. Gophers took them to their house. While traveling to the Gambler's place, someone had warned Hawk and Snow Bird that the Old Man would offer them food, but that they should not take it, because it would be poisoned. All night Hawk stayed awake, because the Old Man waited to kill him. The Gambler would say, "Is he asleep?" Hawk would hear him, and say, "No, I am not asleep."

In the morning the Gambler's daughters began to grind acorns. They ground a great many acorns so that they could have mush. The old man said, "Grind them well, because we are going to have mush with Hawk meat for breakfast."

Hawk and the Gambler began a kick-ball race.²⁸ They kicked their balls around a long course. Gambler took the lead and remained ahead. The two old women, Gophers, were going to help Hawk. They made holes in the course, so that the Gambler stumbled and fell in them. Meanwhile, Hawk had made one of his eggs into a ball, and used it instead of the one given him by the Gambler. The Gambler did not see him exchange the balls. With the help of Gophers, Hawk beat the Gambler.

Near the goal they had built a big fire in which to burn the loser. When the Gambler was beaten, he said, "You have beaten me. Take my money and everything I have." Hawk said, "No, I did not agree to that." He wanted to kill the Gambler and all his people. Hawk said to the Gambler, "Sharpen your knife well and kill your people." The Gambler was rubbing the dull edge of his knife on their throats, saying, "Hwi, hwi," in a squeaky voice. Then Hawk took the knife from him and killed the old man and his daughters.

During the race, Snow Bird had been sitting close to the fire. After the Gambler and his people were killed, Gophers went to Snow Bird to carry her away, but she had grown roots so that if the Gambler had won the race and had attempted to throw her into the fire, he would have fallen in, instead. The old women continued to lift, and after a while, pulled up Snow Bird, roots and all.

Hawk saw all his own people piled up. They were dead and Coyote was among them. They had lost their arms, legs, heads, or other parts of their bodies. Coyote said, "Make a leg for me right away, before you fix anybody else." Hawk restored all the people.

²⁸ This is the only record of this game. Informants denied that these Shoshoni had ever played it.

THE FLOOD

(Saline Valley, California. Shoshoni)

At one time the world was filled with water. Only the Inyo mountains were left above it. All the people went to the summit of these mountains. (Probably New York Butte.) The water ran off toward the south.

RAT AND MOUNTAIN SHEEP

(Saline Valley, California. Shoshoni)

Rat (Kawa) had a home on the top of a mountain,²⁹ where he was building a dance corral. When he finished the corral, he went out to hunt Mountain Sheep.

Rat stood on a mountain, calling in his own language, "Nikadawa piwiavi, nikadawa piwiavi," inviting the Mountain Sheep to come join his circle dance and have a big feast. The Mountain Sheep answered "Hoho' °." That night the Sheep came to his dance. When they arrived, Rat began to sing his circle dance song in a monotone:

Ka - wá	ad - a	tsu - na	(I am rat),	ka - wá	ad - á	tsu - ná,	
p̣	p̣	p̣	p̣	p̣	p̣	p̣	p̣ (1½)
hū'	wí'	wi - a,	z	hū'	wí'	wi - a.	
p̣	p̣	p̣	p̣	p̣	p̣	p̣	
			(3/8)				

He picked out the largest of the Mountain Sheep and said to him, "You are my friend. I want to dance close to you." Then he said to all the Mountain Sheep, "Carry your babies with you on your backs while you are dancing." He told them all to shut their eyes while they were dancing. Rat sang his dance song and they danced all night. When it was nearly morning, while the people had their eyes shut, Rat stabbed the big Mountain Sheep that was dancing next to him. He killed him. Then Rat shouted, "Who killed that man? It must have been a Wavitc."³⁰ The people opened their eyes and looked around. They all began to cry. Rat leaned his head on his hand and said, (crying in a falsetto) "Tana ho nano ho' budi." Then Rat said to the people, "Well, you people can go home now. I'll put this man into a fire and burn him up. After that, I will go home."

The Mountain Sheep went home. When they were gone, Rat, who was left alone, skinned Mountain Sheep and dried all the meat.

When Rat had eaten all his meat, he went out again and called the Mountain Sheep as before. Again they answered and came down to

²⁹ Tucki Mountain, southwest of Bungalow City, according to W. P.

³⁰ The Indians to the south of the Shoshoni; Wavitc="tough."

his dance that night. He told the biggest one to dance close to him and the others to dance with their babies on their backs and their eyes closed. But this time the Mountain Sheep said, "It is probably Rat who is doing this. Tell the children to watch him while we dance." The children watched Rat while they danced and saw him stab the Mountain Sheep next to him. Then Rat ran for his bow and said, "Where is the Wavite who is doing this stabbing?" After the people had left, Rat cooked the Mountain Sheep he had stabbed.

When Rat had no more meat, he went into the mountains and called the Mountain Sheep as before. They answered and came down to his dance. Again he asked the biggest one to dance beside him and told the others to carry their babies and keep their eyes closed. But while they were dancing, the Mountain Sheep next to Rat stabbed him in the belly. Rat ran away and the people ran after him. They looked for him in his hole but could not find him. While they were looking, they found Mountain Sheep meat that he had dried.

COTTONTAIL AND WIND

(Saline Valley, California. Shoshoni)

Cottontail lived with the people on the side of Olancha Peak. The people had no wind; there was none in the whole valley. They could hear it up on the top of the mountain, but it never came down.

Cottontail said, "I can bring the wind down the valley." He took a flute and went way up on the mountain side, blowing it "tu hú du dù du dù, mi áh" and singing "tavotsikita wo bü hai yuvü" (in effect, "I am Cottontail").³¹

By means of his flute playing and his singing, Cottontail brought the wind down to the people in the valley.

THE DEER STEALER

(Death Valley, California. Shoshoni)

Many people had houses at a camp where they were hunting deer and all kinds of animals. All the animals were people at that time. There were Eagle, Bullet Hawk (Kini³¹), Red Tail Hawk (kwiyo³⁰), Crow, Coyote, and all kinds of birds and animals.

The people were hunting deer. Each night they brought home meat. When they brought it home they saw that a small kind of fly (Pakü'wund)³² stole it. They went hunting again and brought home a whole, unbutchered deer. Paküwund came back. He flew along, lit on the the deer, and flew away with the whole thing. The

³¹ The tune is approximately that of Cottontail's song in "Coyote and Cottontail." by T. S. (See footnote 2, Steward, J. H., *Myths of the Owens Valley Paiute*, p. 437, 1936.)

³² "Something like a small animal."

next morning they went hunting again. When they came home, they tied two deer together by their legs and laid them side by side. Pakūwund returned, lit on the deer and carried both of them away. The people went hunting again the following morning. That night they tied three deer together by their legs. Again Pakūwund came, lit on them, then carried away all three.

Coyote spoke. He said, "Some of you had better watch that thing and see where it goes." Hawk (tuhun:) started to follow it. He walked over the hill and when he was out of sight pursued Pakūwund. He saw him go toward the South and followed him to some clay hills. Pakūwund went into a hill. Hawk knew then where his home was. He started back home. He lit on the other side of the hill from his people's camp, so that they would not see him, and walked into the village. He told them that he had followed Pakūwund into the clay hills. The people said, "That is all right."

Coyote, who was chief, started to talk. He said, "We'll see about this in the morning." In the morning, all the people went south to the clay hills. They stopped there. There was a little hole in the top of the hill. The Pakūwund was inside, but the people were not sure of this. They decided to smoke him out and began to gather wood. They built a fire and blew the smoke to drive it into his house. They did this all day. Coyote said, "Let me try." He blew, ran out of breath, and fell down the hill. After a while he blew again, ran out of breath, and fell down the hill. He did this again and again. After this the people began to dig. They thought they had killed Pakūwund. When they had dug deep enough, they reached in to their deer meat and began to pull it out. Some of them said, "We had better leave it alone. He might not be dead. He might come and kill us." They came back from the place and left Coyote there alone.

Coyote said, "I shall go in and see him myself." Coyote started to dig. He reached in to the house and found that Pakūwund's children were all dead. Pakūwund came out carrying a stone pestle (paku'u) in his hand. He came out to where Coyote had reached into the hole. Coyote jumped to the top of the hill, where they had started to dig. Pakūwund jumped after Coyote and struck at him, but Coyote dodged and he missed. Pakūwund swung again, and Coyote said, "I am not going to dodge the same way every time. I will jump the other way." Pakūwund knocked Coyote down and killed him. He chased the other people. First he caught Lizards and Snakes and the others that were running slowly. He killed them. He killed each of them as he came along. The birds were faster, but

he caught and killed them. He killed Crow, Panzaya [some kind of hawk that catches ducks] and Kwiyo" (?). Then he killed Eagle. There were only two persons left. They said, "We had better go faster to our house." Pakūwund chased them. Hawk (Kini') said, "I cannot go much farther. I am tired." Pakūwund killed him. There was only one person left, also Hawk (Tuhun:). He started to sing. He was on the other side of the Sierra Nevada mountains, west of Lone Pine. He said, "I am going to where my pond is." He headed for the water, darted into it, and then out again. Pakūwund did the same thing, close behind him. Hawk made a turn, dove into the water again and came out. Pakūwund dove in after him and out close behind him. Hawk said, "I am going to my house." He started toward his house, which was in a rock. This rock was Mt. Whitney. He went through his house and out the other side. When Pakūwund could not get through the rock, he struck it with his pestle, broke it, and continued to follow Hawk. Hawk made a turn, then pulled a short feather from the upper part of his wing, near his shoulder. He put it in front of his house, then passed through and looked back. He could not see Pakūwund, who had been caught between the feather and the rock.

Hawk went up on top of Mt. Whitney and spread his wings to rest. He was very tired.

Hawk had sung his song while Pakūwund was chasing him.

THE SKY BROTHERS

(Death Valley, California. Shoshoni)

Many people had camps where they were hunting mountain sheep. Their chief went ahead and made fires (when they hunted).

There were two brothers in the sky (tugumbi, "sky"; duwite, "boys"). They traveled along shooting arrows in competition with someone.³³ Doing this, the brothers lost all their arrows.

The brothers went to the camp of the sheep hunters; they went to the fire. When they arrived they had no arrows because they had lost them all. The people gave one arrow to each of the brothers, and said, "When you see a mountain sheep, the older of you must shoot it." All the people went hunting. The brothers went along together. They saw a sheep. The younger said, "I had better shoot him." The older one said, "No." The younger disagreed with him, and they argued. Finally, the older one yielded and said, "All right, shoot." The younger brother shot at the sheep, but did not hit

³³They threw a bunch of willows ahead, over a bush where they could not see it, and shot to try to strike nearest to it.

it squarely, and the sheep ran away. When the people had given them the arrows they had said, "If you do not kill the sheep, do not chase it. You might get into trouble." The brothers argued. The younger said, "We had better track it." The older said, "They told us not to do that because we might get into trouble." The younger had his way, and they started to track the sheep. They followed its tracks. They came to a pool of water that was near somebody's house. The brothers went to the pool and took a bath. While they were bathing, they saw a sunshade built near the spring. After their bath, they went to the shade where some people lived. This was Snake's home. Snake said to them, "Tell me who you are." The brothers did not want to tell him. They said, "We heard that our grandfather lived here," though they really had no grandfather.³⁴ Snake said, "What are you two doing in this place?" The brothers said, "We have killed a sheep near here." Snake said, "All right, but you two must go back at once." Snake had two wives. He said, "If you don't go back right away, my wives will kill you."

Snake's wives were gathering berries (hu:pi). One of them began to sing. . . . She said, "I believe someone has come to our house." The other said, "You had better go on with your work." The first went on singing and said, "I tell you, someone has come to our house." She stopped picking berries and stood still.

Snake said to the brothers, "Where did you boys kill the sheep?" They said, "We killed it right there," and showed him the place. Snake said, "You must get a stick and throw me to where the sheep is. I will get it." They threw Snake with a stick and he landed by the sheep. Snake brought back the sheep. The boys went away. While Snake was carrying back the sheep, he covered up the boys' tracks so that the women would not see them when they came home. The boys went away to the sky. They sat there.

Snake used the mountain sheep's feet to cover up the tracks the brothers had made around the spring. Then he went to his house. The women were still gathering berries and one of them sang. After a while the other began to sing; they both sang. They said, "Someone came to our house."

The women returned to the house. As they came near it, Snake had his head out of the house, looking toward the spring. The women knew that Snake was trying to deceive them. They said, "Someone gave him a sheep." Snake said to them, "Don't talk loudly. Some mountain sheep are watering at our spring." The women said, "Someone else killed this sheep." The women went to the

³⁴ But compare below.

water to bathe. They found a long hair in the water. It had become tangled around them. They compared the hair with their own and found that it was longer. They knew what had happened. They said, "Someone has come to our place." They sang . . . After their bath, the women walked around and around the spring to find the tracks of the person who had come. The brothers were above in the sky, watching them. The younger brother thought, "I hope one of them will look up and see us." The women looked up and saw the brothers sitting there. Then the women lay on their backs and sang. They said, "You had better come down." The younger brother said, "We must go down." The older said, "No, we will be killed." The two women had long knives. The brothers argued about it and at last the younger had his way. The older said, "You go down . . . and come back alive." The younger said, "I will go down . . ." He started down while the women watched him. When he came to them, they cut off his head. The older brother was very sorry when this happened, and said, "I, too, must go down and die." He went down and the women killed him. After they had killed the brothers, the women stayed there that night.

The next morning the people at the sheep hunting camp were talking. Bat had had a dream and told them about it. He said, "I dreamed last night that there was blood on the sky." Bat was the boys' grandfather, and when he said that he cried. He knew the boys had been killed.

That morning the women began to track the boys to see where they had come from. They followed the tracks to where they had shot the sheep, and then to where they had built a fire. They went on to the hunting camp. The people had their houses in a hollow. The women approached and looked at the camp from behind a ridge. Bat saw them looking toward the camp. When the women saw that Bat was looking at them, they went around the hill to another place and watched. Again they saw Bat looking toward them. Then they went around to another place. While they were doing this, they split juniper trees into small pieces with their knives. The pieces became people. They went toward the camp and the women accompanied them. The hunters saw them coming.

Coyote said, "Maybe they are going to have a fight with us. I am going to be out in front of everyone." He ran out in front of the hunters. The people came closer; Coyote was the first to have his head cut off. The people came on and cut off everyone's head. When they were through killing the hunters and were standing there, the women noticed that Bat was absent. They said, "Where is Bat, who was looking at us?" They searched for him among the dead people, and heard a noise like a mouse inside a mountain sheep carcass. They

went to the sheep and found Bat hanging on the inside of the body. They took him out, and said, "This is our pet. We must take him home." Then they said, "Our husband might kill us. But our little Bat is pretty." They held him in their hands and made him fly. He flew around and lit on their heads. They said, "Our little pet is very good and pretty." They continued to do this. Bat flew around and lit on all parts of them. This made them angry and they tried to stab him with their knives but missed him. They continued to strike at him but stabbed themselves and died.

When the women were dead, Bat cut a piece out of each of them with a knife. He put both of the pieces around his neck like necklaces and started out for Snake's house. When he came to Snake, Snake said, "I know that you are wearing pieces of my wives." Bat said, "No, I won these a long time ago when I made a trip to the north. You were small at that time. You were in that cradle and I rocked you." Snake said, "No." He was angry and bit at a rock. Bat seized the shin bone of a deer and struck a rock with it. It made a red flash. He said, "I will do this to you, too." Snake became angrier. He was coiling, drawing himself higher and higher. Bat picked up a pebble and he flipped it into the air with his fingers. The pebble went high and as it fell became larger and larger. It fell on Snake's head and killed him.

Bat went back to where his dead grandsons were. He put a stick under one of them and threw him into the air. He came back to life. He did the same to the other boy, and he returned to life. He went back to his hunting camp and did the same to all the people who had been killed. They all came back to life. He did not do this to Coyote. Some people said, "We won't bother about Coyote. He always gets into trouble. We won't bring him back to life." But others said, "He is smart. He might tell us something." They threw Coyote up into the air with a stick and he came back to life. Coyote arose and said, "I have been sleeping."

ORIGIN OF DEATH

(Big Smoky Valley, Nevada. Shoshoni)

Wolf said, "When people die, they must die twice." Coyote said "That isn't right. I don't want people to die twice. They must die once and be buried."

Wolf bewitched Coyote's boy and wished that he would die. Coyote knew that he had done this. The boy died. Coyote went to Wolf crying. He said, "Oh, brother, you said when people died they should get up and die again. When will my boy get up?" Wolf said, "Don't you remember saying they should die only once?"

COYOTE KILLS WOLF'S WIVES

(Big Smoky Valley, Nevada. Shoshoni)

Coyote hunted rabbits with the Indians. Coyote's brother, Wolf, had a wife. Coyote and Wolf hunted. When they returned home they found mush in baskets for them. Wolf's wife had left it for them, but Coyote could not see her. Coyote said, "What is the matter? Where is my brother's wife?"

Wolf had a rabbit skin blanket. He slept under it. Coyote said, "Why does my brother leave that blanket there?" One day when Wolf and Coyote were hunting, Coyote sneaked back to the camp and saw a big Frog, Wolf's wife, under the blanket. It was she who had made the mush. Coyote said, "Oh, my, look what my brother has!" He killed her with a stick.

He went back to hunt. When Coyote and Wolf returned to camp, they found no mush in their baskets because Coyote had killed Wolf's wife. Coyote said, "Oh, what are we going to eat, brother?"

Wolf and Coyote went hunting again. Wolf said, "We are going to move some place. Take everything. We will go to a place with water." They moved camp to a place where there was water. Coyote and Wolf hunted. When they returned home they found mush in baskets. Wolf's wife had made it, but Coyote could see no woman. Coyote said, "What is the matter with my brother, talking to himself." Coyote sneaked back after they had started to hunt one day and saw the woman in the house. The woman went around the house and threw everything on top of it. Coyote said, "She is a pretty woman. I am going to catch her. She is my brother's wife." He seized her. There were tiny red ants [evidently the wife or wives] going around the house. Coyote pinched them with his fingers and killed them.

Coyote went back to hunt with Wolf. When they returned to camp they found no food. All the women had been killed. Coyote cried because he was hungry. He said, "Oh, what are we going to eat, brother?"

BADGER, COYOTE, AND THE WOODCHUCKS

(Lida, Nevada. Shoshoni)

Badger lived alone in his camp. He had lived there a long time. On a hill close by his home were some rocks. In these rocks were the houses of many Woodchucks (Yaha).³⁵

³⁵ J. S. explained that these Yaha were like rats or mice, but that he had never seen any of them. Actually Yaha are woodchucks and, though an important food farther north, are unknown in this region.

Badger thought, "These must be very good to eat. I am going to try them." He sharpened a big stick on both edges; he had some kind of knife. Then he climbed up to the Yaha holes in the rocks. He found a flat place below the entrance to the houses and lay down there with his stick close beside him. He thought, "I will sing a song and pretend I am singing in my sleep." He started singing:



He sang this song two or three times. Then he sat up and looked up to the rocks where the Woodchucks had their homes. A few had come out to look when he started singing. He thought "Maybe more will come out." He lay down again and continued singing. He thought, "I'll sing once more. Then I'll look again."

He sang the song twice more and then cautiously looked up. Many Woodchucks had come out to listen to him. They said, "Who is that singing? We will go down and see who is singing." Badger lay still with his head on the ground, and continued to sing. The Woodchucks said, "He has a very short tail." "What is that singing?" "His legs are very short, too." "Come and see what this is!"

Finally, many had come down to see Badger. Badger kept singing all the time. He didn't move at all. He kept his head down on the ground. He kept on singing. He held his stick down with his hand. The Woodchucks called up to those who remained on the rocks, "Come down and see what this is!" "He has very short ears." "It is hard to see his eyes. They are very small. He has a white spot on his nose." Badger continued singing all the time.

When all the Woodchucks were around him, watching him, Badger thought, "Now I have enough. I will knock them down with my stick." He jumped up quickly and began knocking the Woodchucks on the head with his sharp stick. He killed many of them. Only a few escaped, and ran back to their homes in the rocks. Badger thought, "I have plenty. I have enough."

He carried them on his back down to his camp and skinned them. They were very fat and good to eat. He dried the meat and made jerky of it. While he was skinning them he thought, "I have a lot of meat. These will be good to eat when they are dry."

When his meat was nearly all used up, Coyote came to see Badger. Badger had just made a stew of his meat. When it was cooked he gave Coyote some. Coyote said, "That is very good." He ate more; it tasted good. Coyote asked Badger, "What kind of meat is in that stew?" Badger answered, "That is not meat. I just pick them out of the rocks. They have a place up there. That is where I get them." Coyote said, "I am going to try to get some. How do you do it? Do you shoot them, or what?" Badger explained, "You just knock them down with a stick." Coyote said, "I'll bet I can catch more than you did. What kind of stick did you use?" Badger said, "Any kind of stick will do. It doesn't matter." Coyote said, "I am going to try it myself. I am going to lie up there, too."

Coyote made a stick for himself and then asked Badger, "What do you say to them while you are lying there?" Badger told him, "I sang a song, that is all." Coyote asked, "What kind of song? Can you give me the same song?" Badger gave him the song and Coyote practiced it. His voice was deep and hoarse and ugly. After he had practiced until he knew it, he went up to the rocks. He looked around for a place to lie. He saw the holes of the Woodchucks and what he thought was a good place near them.

Coyote lay on his back. He started to sing Badger's song. It sounded bad. He only sang it once and then raised his head to look at the holes. There were no Woodchucks in sight. He sang once more and then looked again. No Woodchucks had come out. He thought, "I have been too impatient about looking up there." He sang the song two or three times and then looked. Some little Woodchucks had come out in front of their holes. They looked down to where Coyote lay. They said to the others, "Come out and look at this. It is a long one." Some of them went down to see better. They said, "This is a long one. What is it? It has a long tail." They called to the others to come and look. More of the Woodchucks came down. Coyote had not stopped singing. They said, "He has a very sharp nose." "His ears are pretty long." More Woodchucks came out to look. Coyote thought, "I have plenty," but he wanted more to come down. He kept on singing.

The Woodchucks said, "We will touch him with our hands to see how that fur feels." They gathered around Coyote and put their hands on him to feel the fur. This tickled Coyote and he began to laugh. He frightened the Woodchucks and they all ran away. Coyote jumped up, grasped his stick and tried to hit them, but he missed every one. They were too far away. He didn't get one.

Coyote said, "I will try once more." He lay down again in the same place. He started to sing again. He sang the song twice and looked up. There was not one Woodchuck outside his hole. Coyote

continued singing. He thought they would come out again. He sang the song five or six times, but no one came out to hear it. He thought he had better stop.

He got up and went to Badger's place. Badger saw that he had no meat. Coyote told Badger that the Woodchucks were too wild and had all gotten away. Badger said, "Yes?"

Coyote went home.

COYOTE AND THE BEAR CUBS; THE DEATH OF WOLF

(Ash Meadows, Nevada. Shoshoni.)

One day Wolf said to his brother, Coyote. "I would like some seeds. I like them better than meat. Go to your aunt's place and get some for me." Coyote said, "We have no relatives." Wolf said, "Yes; we have. You go over there and see."

Coyote went out to find the seeds and met two girl cousins, two bear cubs. They looked like twins. They were gathering seeds. Coyote talked to them for a little while. Then he choked both of them; they died.⁵⁶ He laid them side by side and covered them up with a rabbit-skin blanket. Then he started to gather seeds.

About sundown, Coyote's aunt, Bear, came to where the girls were. She was carrying seeds. She said, "What are you doing there, sleeping at this time?" She walked over to them, and pushed and pinched them, trying to wake them up. When they didn't move she looked under the blanket and saw that they were dead. This made her angry. She ran to Coyote and clawed all the meat off his back with her fingers. Coyote howled, "Wheeeeee." Then he ran away.

Coyote covered his back with a blanket and went home without his seeds.

When he arrived at his home, Wolf asked for the seeds. Coyote said, "I did not see any." Wolf, who knew everything, said "Yes, you did. Why do you cover your back? I know you killed those girls and your aunt clawed you." Coyote admitted that this was so.

Wolf wished Coyote asleep. He had this power. Wolf then went out hunting and killed a very small fawn. He cut the meat off its back in thin strips. It was very smooth and tender. When he got home, Coyote was still curled up asleep. Wolf slipped Coyote's blanket off and mended his back with the fawn's back muscles. He made it smooth, just like new.

In the morning, Coyote stretched himself and felt his back. He said, "My back meat has returned. Last night it was gone and there were just bones back there, but now it has come back. It is fine and smooth!"

⁵⁶ M. S. intimated that the girls rebuffed Coyote's amorous advances, which caused him to kill them.

Wolf said to Coyote, "Now you be good. You are always fooling me. Don't go back and bother your aunt. But, if you do, be sure to skin her and cut up all the meat and bring it home. Don't leave any of it."

Coyote said he would not go back, but he went nevertheless. He met Bear and cut her throat. He skinned her and cut up all the meat and wrapped it in the skin, but he forgot a piece of tripe. On the way home he remembered the tripe, and what Wolf had said about bringing all the meat home, so he went back for it. The Tripe had moved to the north. Coyote chased it but could not catch it. He asked, "What are you doing?" Tripe said, "I am well now. I am going to tell my people what you have done to my daughters." Coyote said, "Go ahead. I am glad."

When Coyote returned to the camp with the meat, he told Wolf he had brought it all home. Wolf said, "No you didn't. You had better watch out. When you see your people, you will find out why." Coyote said, "There are no people here. What is the matter?" Wolf only said, "In a few days you will see."

In a few days Wolf said to Coyote, "Stand away from the fire and look to the north." Coyote said, "Why should I? It is cold." But he looked, and in the north there was a crowd of people. They looked black in the distance. There was lightning. Finally Coyote said, "It looks like people coming closer. I can see arms and legs. You look, Wolf." Wolf would not look, but he said to Coyote, "You had better pack everything, and move away." Coyote said, "Why should I move?"

Wolf went out to see the people coming. The men in the crowd shot Wolf and he died. Then they skinned him, and taking the skin with them they went back to the north. Coyote was afraid, but he followed their tracks until he came to a big camp. The people had made things ready for a circle dance around a fire.

Coyote didn't dare go into the camp, but stayed on the outside, watching them. An old woman came up to him there and said, "Maybe you are Coyote." Coyote said "What is this Coyote?" The old woman said, "He lives at Tin Mountain (i. e., Charleston Peak). Coyote said, "What is he, a bad Indian?" She said, "I think you must be Coyote." He said, "I come from the north, but my grandfather told me about Coyote's brother, Wolf, who lives on Tin Mountain. Have you ever heard of him?" The old woman said, "Yes, my son has killed Wolf. My people have Wolf's hide. At sundown we will dance all night." The old woman then told Coyote that during the dance she tended the children of the dancers. She gathered them all around her and covered them all up with Wolf's hide. She said that was why she was crying. She told him that during the night

while the children slept she, too, could dance a little, but in the morning the children would cry, "Mama, mama, come and take care of me."

When Coyote heard this, he had an idea. He killed the old woman. He beat her and beat her and broke all her bones. He then made a little opening in her skin and pulled all the bones out and made a sack. He climbed into this sack and looked just like the old woman. He took her stick and hobbled into the camp. The children all cried, "Grandma is coming." After sundown, the people all said, "Mama, look after the babies while we dance."

While the people were dancing, Coyote quietly choked the children to death. He held their noses, and choked them. The people thought the children were asleep and they asked him to dance. Coyote said, "All right." Then he jumped out of the old woman's skin and put on Wolf's hide. He ran out of the house shouting, "I am the man you killed," and then fled from the camp.

The people followed him, but he ran, ran, ran, ran, and finally came to a wooded mountain. Here the people lost the track and returned home. Coyote walked back to the place where Wolf had been killed. Wolf's carcass was all dried up and stiff like wood. Very carefully, he fitted Wolf's skin over the carcass.

In the morning he went out to look and saw that the nose had moved a little and was slightly wet. The next morning Coyote was awakened by hearing Wolf howl. He got up to look, but found that Wolf had gone to the northeast. Wolf was alive but he was very angry.

He left Tin Mountain and never came back. That is why there are no wolves or bears on Tin Mountain now.

POLE CAT, TAKADOA, AND HAWK

(Elko, Nevada, Shoshoni)

Night Owl (Mumbite) lived with his wife and boy who was 6 or 7 years old. His wife, Takadoa,³⁷ carried the boy around on her back.

Night Owl went hunting for rabbits. While he was stamping his feet in the snow, he stepped on a piece of bone that was sticking up and drove it into his foot. He came home and asked his wife to pull it out. She wanted to marry Skunk, so she pushed the bone in farther and Night Owl died.

Takadoa went to Skunk's place and talked to his grandmother. She told her that she wanted to marry Skunk. The grandmother said that Skunk was strong, but was no good. She began to cry. Takadoa went away carrying her son. Skunk came home, and said to his grandmother, "What are you crying about, Grandmother? Tell me what is

³⁷ A black-headed bird that comes in the spring time.

the matter." She said, "Oh, I am just crying because my son has died"; she referred to Owl. Skunk said, "How do you know that he died? You must know something." He smelled her. He said, "You are too old to smell this way." He smelled all around and knew that somebody else's smell was there. Then he found a string that had belonged to some stranger. Now he knew who had been there. He said, "Why didn't you tell me who was here?"

Skunk started to follow the woman, Takadoa. He followed her tracks. The woman thought, "I wish a lot of roses would grow up so he can't get through." A lot of dry roses grew up and Skunk became stuck in them. Then Skunk looked up and saw an enormous alkali flat [i. e., *playa*] that had no end. Skunk let out his smell. It overtook the woman and her boy and killed both of them.

Badger, Coyote, Hawk (Kini), and their friends were camped on the other side of the flat. Badger restored Takadoa to life. She wanted to marry Hawk. She went to the camp and found that all the men were out hunting rabbits. Hawk's mother was alone. Takadoa saw only one bed in her house, but there were many rabbits there. After a while, Coyote came back with four rabbits. He gave them to Takadoa and her boy, but Takadoa would not marry him. She wanted Hawk, but could not find him. Hawk was staying in a round hole up in the rocks.

Every evening someone brought a great many rabbits to Hawk's mother's house. Takadoa said, "Who brought all these rabbits?" Hawk's mother said, "My boy brings them." Takadoa looked all around and in the bed for Hawk. Hawk's mother said, "What do you want? Do you want my boy? After I die you want to marry him? No, you might make him trouble. You would scare him so that he could not hunt rabbits any more."

That night, after every one was asleep, Takadoa went to Hawk's place in the rocks to sleep with him. She went in the middle of the night. No one knew that she was going. When she arrived, she got in bed with him and called, "Kinini, kinini, kinini." When Hawk woke up and found somebody in bed with him he was frightened.

In the morning Hawk got up and sat on a rock with his feathers all ruffled. He looked funny. He went hunting for rabbits but only got one. His luck was spoiled. He had been the best of all hunters, but after being frightened by the woman, he was no good.

Kāngwasi gwēak: (Woodrat's tail, pulled off).

COYOTE LIBERATES GAME ANIMALS; WOLF IS KILLED AND RESTORED

(Winnemucca, Nevada. Northern Paiute)

Wolf was our father. Coyote was Wolf's brother. Their home was in a cave south of Humboldt City. It is called "Wolf's house."

Wolf had a hole [probably cave] in which he kept deer, sheep, buffalo, and antelope.

When Coyote went hunting he never found any game, but Wolf brought game home every time he went out. Coyote asked Wolf, "Where do you get game so quickly? Every day I look in the mountains but I do not even see tracks. Tell me, brother. Tell me how you get game so quickly." Coyote begged, begged, begged. Wolf said, "I keep the animals in a hole." "All right," Coyote said, "I will go and catch some." Wolf said, "Kill only one and then shut the hole up well." Coyote said, "I will."

Coyote went to the hole. But instead of doing as his brother had told him, he threw the door of the hole open and the deer, buffalo, elk, and others ran out. They ran, ran, ran. Coyote shot, shot, shot at them, but they ran past him. He could not kill any. The last animal to come out was a little fawn. Coyote killed that one.

Wolf looked out from his house and saw dust all over the mountains. All the game was gone. He knew that Coyote had let them escape. Coyote came back bringing his small deer. Wolf was very angry and lay down. He would not speak. Coyote said, "Brother, I have tender meat for you." Wolf would not speak.

Another tribe that lived in the north saw the dust in the hills and went after the animals. Wolf sent Coyote to get cane to make arrows. Wolf made the arrows very quickly. When they were finished, he put Coyote in the house and said, "I am going to fight [these people] alone. Don't look out of the house until I return." Wolf fought alone. He had told Coyote not to look out. Coyote did as he was told and waited. But after a while he looked out and Wolf was killed. The people from the north took Wolf's hide with his scalp inside it and went back toward the north. Coyote followed them. He saw where the people had put Wolf's scalp on a stick in the middle of their dance ground.

Finally, Coyote went over to the people. He cried when he saw his brother on the pole. He told the people, "The smoke from the fire follows me around and makes me cry." He told them that they should dance for 5 nights without sleeping. The people said, "All right." They did not sleep day or night [during this time]. When everybody slept after the dance, Coyote took Wolf's hide and returned home. No one followed him because everyone was asleep.

On his way home, Coyote buried the hide in damp ground [each night when he camped]. On the third night he heard someone speaking. The voice said, "Coyote, make a fire." Coyote looked around but could see no one. He [went on and] camped again. In the morning he heard the voice say, "Coyote, make a fire." Coyote said, "My brother, my brother!" But he saw no one. When he was

near home he heard the voice say, "Coyote, make a fire." Coyote said, "Brother, brother, brother." He caught Wolf's soul and brought it back. Wolf came back to life again.

THE ICE BARRIER

(Winnemucca, Nevada. Northern Paiute)

Coyote and Wolf went to the north to fight. Many people went with them. Coyote had been to the Snake River alone [before this]. He gathered the people and went back there. Ice had formed ahead of them, and it reached all the way to the sky. The people could not cross it. It was too thick to break. A Raven flew up and struck the ice and cracked it [when he came down]. Coyote said, "These small people can't get across the ice." Another Raven flew up and cracked the ice again. Coyote said, "Try again, try again." Raven flew up again and broke the ice. The people ran across [or through?]. They ran across. Coyote was the last person over.

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By LESLIE A. WHITE

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NEW MATERIAL FROM ACOMA

BY LESLIE A. WHITE

SUPPLEMENTARY DATA ON ACOMA

The following data were obtained after the publication of *The Acoma Indians* in 1932. I am greatly obliged to the late Dr. Elsie Clews Parsons, who read the entire manuscript and made many helpful suggestions; a number of the footnotes are hers. The new material here presented is arranged topically. Diacritical marks are noted only in the first use of a term or in terms quoted from published sources.

PRIESTS AND OFFICERS

The cacique, in addition to being called *ha'a'ctiteani* (*ha'a'cti* means pueblo), may be called *ti'amõn'i*¹ because "he is supposed to know all about what was done at Shipapu." The cacique "has power [authority] over the *tciaiyi* (medicine men) and the kiva chiefs. He is the head of the *katsina*. But he has nothing to do with the *Kacalu* (Koshare) or the *Opi* (Warriors' society)."

*Tcrai'k'ats'*².—"A long time ago there used to be four *teraikatsi* at Acoma, but they did not keep it up. Finally there were only two. The last one died about 50 years ago; then they let it drop." Apparently one of the *teraikatsi* was the head of the group. They served for life. "The *teraikatsi* had more power than the cacique."

¹ In Sia mythology Utset designated a man to be *ti'amõni*; he was to take her place on the southward migration (Stevenson, 1894, p. 40). The cacique at Sia and at Santo Domingo is called *ti'amõni* (Stevenson, 1894, p. 16; White, ms., *The Pueblo of Sia*; White, 1935, p. 35). At Laguna the cacique is called *ti'amun'i* because he led the people from the place of emergence (Boas, 1928, pt. 1, p. 288).

² At Santo Domingo (1934) the cacique's helper is called *uicte'k'a* (bow) or *teraikatsi* (White, 1935, p. 37). At Sia the cacique has three helpers called *teraikatsi* (White, ms., *The Pueblo of Sia*). At Santa Ana the cacique himself is called *teraikatsi* (White, ms., *The Pueblo of Santa Ana*). At Laguna "the hunt is in charge of *Caiyai'k'a*, *tcrai'k'ats'e*, and *trai'k'ats'e*. They are not shamans but representatives of beings of the same name in the lower world who are the protectors of game. . . . The *tcrai'k'ats'e* helped the cacique in his preparation for the ceremonial rabbit hunt" (Boas, 1928, pt. 1, pp. 296, 297). At Cochiti, "the officers of the *Cikame* society [identical in membership with the Hunting society] are called by the same name as the supernaturals in charge of the hunt (*caiak*, *djaikatse*, *dreikatse*)" (Goldfrank, 1927, p. 46). Compare Dumarest, 1919, p. 197. At Acoma, the ten "little chiefs" are sometimes called *tciaikats'* (White, 1932, p. 51). Bandler states that the Keresan cacique has two assistants, one called *Uisht-Yakka*, the other *Shay-katze* (Bandler, 1890, p. 278).

This means, I assume, that the *teraikatsi* had (or was able to wield) more supernatural power than the *cacique*. "He was the head of the war chiefs, too."

"Long ago at Acoma the *teraikatsi* had four underground chambers underneath the *cacique's* house. He [i. e., the head of the *teraikatsi*] had an altar in one of these rooms. No one was allowed to go in these rooms, not even the *cacique*, except the *teraikatsi*."

The *teraikatsi* "worked" [supernaturally] for the good of the whole pueblo. Their chief function seems to have been increasing the food supply. The informant spoke, for the most part, of their "working" for wild plants and for game, but he said that they worked for crops, too. "It was very hard work."

Each year the *teraikatsi* would select a few wild plant foods and game animals upon which they would concentrate their efforts to bring forth an abundance. They would alter the list of plants and animals somewhat from year to year. Before a hunt the *teraikatsi* would "take a bowl of deer, rabbits, and quail—all made of corn husk, like paper dolls—out of the pueblo, early in the morning. They would scatter these husks. That would make lots of game for the hunters."

Inasmuch as the office of *teraikatsi* became extinct at Acoma only 50 years or so ago,³ the following account of how one came to be *teraikatsi* might be expected to be more satisfactory. It was secured from a man over 70 years old.

"When someone was to be made *teraikatsi*, the head would ask the people who they wanted. He would ask the *cacique* first, then he would ask the war chief, then the medicine men, and then the *kiva* chiefs. After they had all expressed themselves [and, it seems, they merely said "yes" or "no" with respect to the individual who had been named originally by the head *teraikatsi*]⁴ the head *teraikatsi* would call a meeting of all the people in *Mauharots* (the "head *estufa*," or *kiva*). He would tell them that so-and-so had been chosen to be *teraikatsi*, and ask them if they were willing to accept him. The people would say that it was all right. Anyone who was selected for *teraikatsi had to take it.*"⁵

³ It is of great interest to students of mythology that no reference to this important office is made in the Origin Myth of Acoma. With the lapse of the office, the tradition authenticating it also lapsed.

⁴ At *Sia*, after the *ti'amon* has decided, in consultation with the war priest, upon the men for offices in the yearly "elections," he asks the "theurgists of the secret cult societies" for their concurrence. "This is always given, the consultation with the theurgists being but a matter of courtesy" (Stevenson, 1894, p. 18).

Recent data from *Santa Ana* also indicate that this is the customary method of appointing (or "electing") officers among the *Keres* (White, 1942 a, pp. 109-114).

⁵ The informant seemed to feel sure of the *way* in which a candidate was presented for acceptance. But he was vague and indecisive about *how* this candidate was selected. At one time he said that when the head *teraikatsi* died, the helper who had been *teraikatsi* longest took his place. At another time he said that a *teraikatsi* might be succeeded by his sister's son.

Kiva chiefs.⁶—There are four officers, called *sicti G'ai'ya*, in each *kiva*. They are appointed by the *cacique* and serve for life. They are officers in the *katsina* organization; they paint and refurbish the masks (White, 1932, p. 71).

KACALU (KACALE OR KOSHARE)

By one informant I was told that there are no more *real* *Kacale*; men merely "act like *Kacale*" on occasion. Another informant said that there were "only a very few" *real* *Kacale* left. At any rate, it is necessary to have men act like *Kacale* on such occasions as a *katsina* dance or the *scalp* dance. *Kacale pro tem* are secured for this purpose in this way: The war chief takes tobacco to the head of *Hictianyi* (*Flint*) *tcaianyi* with the request to recruit men for *Kacale*. *Hictianyi nawai*, in turn, gives the tobacco to a *Shiwana tcaianyi* with the same request. The latter goes through the *pueblo*, selecting men to whom he offers a smoke. If the man accepts the smoke, *Shiwana tcaianyi*⁷ tells him to report to the house of *Hictianyi tcaianyi* at a specified time to practice. The man is obliged to act like *Kacale* in the forthcoming ceremony.⁸

QUIRAINA

Among eastern *Keres* there are two complementary secret societies, the *Koshare* and the *Quiraina*. At *Acoma*, the *Koshare* were present, but the *Quiraina*, *as a society*, were absent (see White, 1932, p. 71, especially *ftn.* 57; also p. 75). Instead, all persons who had been initiated into the *katsina* organization were called *G'uiraina tcaianyi*.⁹ Thus, one feature, which appears to be an integral part of *Keresan* culture at *Santo Domingo*, *San Felipe*, etc., seems to have been lacking at *Acoma*. The fact that at *Acoma* the term "*Quiraina*" was applied to the *katsina* organization instead of to a small secret society seems to indicate an incomplete participation of *Acoma* with what one might call typically *Keresan* culture. Their use of the term "*Quiraina*" might seem to suggest that the word came to them from the East, and that they attached it to an already existing organization instead of forming one that would be homologous to the *Quiraina* societies of the eastern *Keres*.

Subsequent information, however, seems to indicate that *Acoma* is not quite so anomalous and divergent as had been previously supposed. Although no formal and permanent society of *Quiraina* was

⁶ These correspond to the *sicti nawai* (head) of *San Felipe* (White, 1932 a, pp. 15-16), and *Santo Domingo* (White, 1935, pp. 48-49).

⁷ The term, if not the group, is of comparatively recent use or development in *Laguna* and *Acoma*.—E. C. P.

⁸ Same practice at *Santo Domingo* (White, 1935, p. 53).

⁹ At *Sia*, the *Quiraina* society had charge of initiations into the *katsina* organization and of the masked dances (Stevenson, 1894, p. 116).

ever organized at Acoma according to informants, there were occasions when a group of men dressed and acted like the Quiraina of the eastern Keres. To outward appearances, then, Acoma had the Quiraina society. But it was only appearance;¹⁰ the actors merely "acted like" Quiraina; they had no "power." Any one who had taken part in the Kopictaiya ritual (White, 1932, pp. 86-88) was eligible to act like Quiraina.¹¹ They were recruited for this service in a manner similar to that of recruiting Koshare pro tem (see above). These Quiraina never attended the shiwana when they came to dance at Acoma (i. e., they took no part in the masked dances).

OPI AND THE SCALPS

In the old days, the Opi (Warriors' society) took care of the scalps. They used to feed them matsi'n'i (wafer bread) dipped in stew of rabbit or deer meat, and give them water to drink. The last of the Opi took the scalps "out somewhere" and buried them.¹² If they had not done this "the scalps would have become hungry and thirsty" since there would have been no one to tend them. As a consequence, sickness would visit the pueblo and plagues of grasshoppers would devour the crops.

"They used to always want to have a scalp dance in the old days because it was an occasion of rejoicing."¹³

CAIYAI'K^A (HUNTERS' SOCIETY)

Members of this society, like the curing societies, received their power from supernatural animals: the curing societies received their power from the animal doctors, bear, badger, wolf, etc.; the Caiyaik, from birds and beasts of prey (White, 1932, p. 101). The chief supernatural patron of the Caiyaik was the mountain lion (mo'k'aite^{ra}; *Felis concolor*). Others were wolf (k'ak'ana; *Canis nubilus*), bobcat (dya't'y^u; *Lynx rufus*), cro'hona ("an animal larger than the bobcat, but looks like one") (see Stirling, 1942, p. 23), eagle (dya'mi; *Aquila chrysaetos*), black-footed ferret (mai'dyup¹; *Mustela nigripes*, an important animal Caiyaik), western redbtail hawk (cpi'yai; *Buteo borealis calurus*), sharpshinned hawk (i'tsa; *Accipiter velox*), and Cooper hawk (cti'ti; *Accipiter cooperi*).

¹⁰ However, we should consider the fact that in the hair of the deceased townsman was placed a sparrow-hawk feather, which is the characteristic Quiraina feather. Compare Stirling, 1942, p. 55, fn. 30.—E. C. P.

¹¹ The Kopictaiya come in winter, we recall, and the Keres generally consider the Quiraina to be winter people.—E. C. P.

¹² Scalps are still kept in Santo Domingo (White, 1935, p. 60), and in San Felipe (White, 1932 a, p. 13). They are attended not by Opi, since they have become extinct, but by Flint medicine men (who have numerous functions associated with war; see White, 1935, p. 61; Stevenson, 1894, pp. 121-123).

¹³ For accounts of the scalp dance (ck'atse-ta), see White, 1932, pp. 96-101; White, 1932 a, pp. 53-54; Parsons, 1918, p. 165 ff.

K'ABI'Nα TC'AIA'N'YI¹⁴

When Kapina tcaianyi came out from Shipap, Iatik^u gave him two corn ear fetishes, exactly alike. The first one to be made by Iatiku was called Tsama.ya; the other was called Tsamahi'ya (see Stirling, 1942, p. 37). Each fetish consisted of a completely kernalled ear of corn (k'oto'nα), wrapped with cotton and beads and decked at the tip with feathers. The butt end was wrapped with buckskin.¹⁵ Kapina tcaianyi were the only ones to have this kind of fetish. They did not cure sickness. They used to give power to men who were going to war.¹⁶ During the World War, Kapina tcaianyi held a 4-day ceremony every month to give power to the American troops who had gone to France; other medicine societies joined Kapina in these ceremonies.

"TRAPPING"

When a medicine society is initiating new members, the tcaianyi go out at night, for four consecutive nights, to visit "places" (shrines?) north, west, south, and east of Acoma. If anyone meets a medicine man on one of these nocturnal tours and steps aside from the trail to let him pass, the medicine man will take hold of him, stroke his hair with his hand, and call him "my son." This person will now be obliged to become a member of the medicine man's society. Since no one wishes to be trapped and compelled to join, one has to be very careful: "You've got to stand your ground there until the tcaianyi goes by, even if it takes hours."¹⁷

Medicine men sometimes dye owl feathers red, blue, or green (why, I was not able to learn), and wear them on their heads. If anyone else dyes owl feathers, medicine men can compel them to join a medicine society. Anyone who paints a snake on a rattle may be compelled to join a medicine society.

KATSINA

Conata (White, 1932, p. 79) is the katsina nawai of the Corn clan. Parsons equates Conata (and Shoradja) with Shulawitsi of Zuñi (Parsons, 1920, p. 101, ftn. 1; 1920 a, p. 69). My informant admits that some Acoma masks have been "copied from Zuñi," but declares

¹⁴ The Acoma informant said he thought K'ab'Inα means, or connotes, "good strong heart." A Santo Domingo informant said that it meant "eat too much" (White, 1935, p. 67; see also Stirling, 1942, p. 37).

¹⁵ From the description of these fetishes, I can see no difference between them and the i'ariko corn-ear fetish of the other curing societies.

¹⁶ It was Kapina tcaianyi who whipped the war chiefs at their installation (White, 1932, pp. 48-49). It was my former understanding (White, 1932, p. 107), however, that Kapina undertook cures, although it was said by one Acoma informant (White, 1932, p. 117, ftn. 15) that Kapina joined the Flint society in its curing ceremonies.

¹⁷ Compare a like practice by the Hopi Snake society. If anyone encounters Snake society men on their 4-day hunt, he must be initiated into the Snake society.—E. C. P.

that Conata was not among them: "they've always had Conata at Acoma."

The katsina name Ma'tsitsai'yackati'ta means: matsi, "blood"; tsaiya, "giving"; ckatita, "doing it"—"he gives blood to children when he comes" (White, 1932, p. 80).

The katsina name g'auwatcəg'aiya (White, 1932, p. 79) means: "tongue hanging out" (wa-təvni, "tongue"; g'aiya, "hanging down, or out").

g'auayackətəkətsita katsina (White, 1932, p. 77) is so called because he carries a bunch of feathers (g'auayackətəkətsits). When, in the songs, he raises his voice, he raises the bunch of feathers above his head, whereupon they "open out like an umbrella."

The katsina name I-panikaodaockonaiya (White, 1932, p. 78) means: i-pani, "cactus"; kaodaockonaiya, "hanging on end of a stick."

A'aik'ani (White, 1932, p. 78) katsina was so named because he cries "Ai! Ai!" (k'ani, "acting that way").

Mictcaikoros (White, 1932, p. 78) katsina means: mictcai, "ashes"; koros, "dusting with."

The names of the two heads of the Kopicaiya, Dziu'kar and Ko'kar (White, 1932, pp. 79, 86), allude to their performance of miracles: "just like Jesus with the loaves and fishes."

On the west side of the Acoma mesa there is a column of rock rising to the level of the top of the mesa. This column is joined to the mesa by a narrow stone bridge (a natural formation). This "bridge" is called Gotitca'nc; nc means "people". The katsina name, Gotitca'nicame, therefore, means "people of Gotitca'nc" (White, 1932, p. 76).

Tcainok'ana-tca katsina (White, 1932, p. 76) are also called Storo-ka,¹⁸ a name which alludes to their cry or call which is "like a flute." Although dressed in female attire, Tcainokanataca is a male katsina "because he wears a papa-na Dyutsats," (papanana, "white and sewed up"; dyutsats, "manta").

Tsətk'atsame (White, 1932, pp. 77, 168) means "person of the deep pool of water." (On top of a big rock, a short distance west of Acoma, there is a deep pool of water; tsətk, "full of water"; katsi, "deep;" me, people or person).

Ts'i'ts'inits¹ (White, 1932, pp. 72-74, 79) katsina was so called "because his teeth are showing."¹⁹

¹⁸ Cf. Laguna, Parsons, 1920, p. 98; Gunn, 1917, pp. 172-175. The Kyanakwe of Zufii who have been equated with the Storo-ka are referred to as the White katsina.—E. C. P.

¹⁹ In a Laguna tale he takes a girl to his home as his wife; she leaves him when she discovers that his bread is mixed with human blood (Gunn, 1917, pp. 127-133). He whips the children at the katsina initiation.

Sa'rombia and Cura'tca (White, 1932, p. 79) were "copied from Zuni."²⁰

He'mic katsina (White, 1932, p. 75, pl. 5, *d*) was so called because he "came from Jemez."

The deal become katsina.—"First they go to Shipap; then they go on to Wenima (place in the west; the home of most of the katsina), and become katsina" (White, 1935, pp. 198-199).

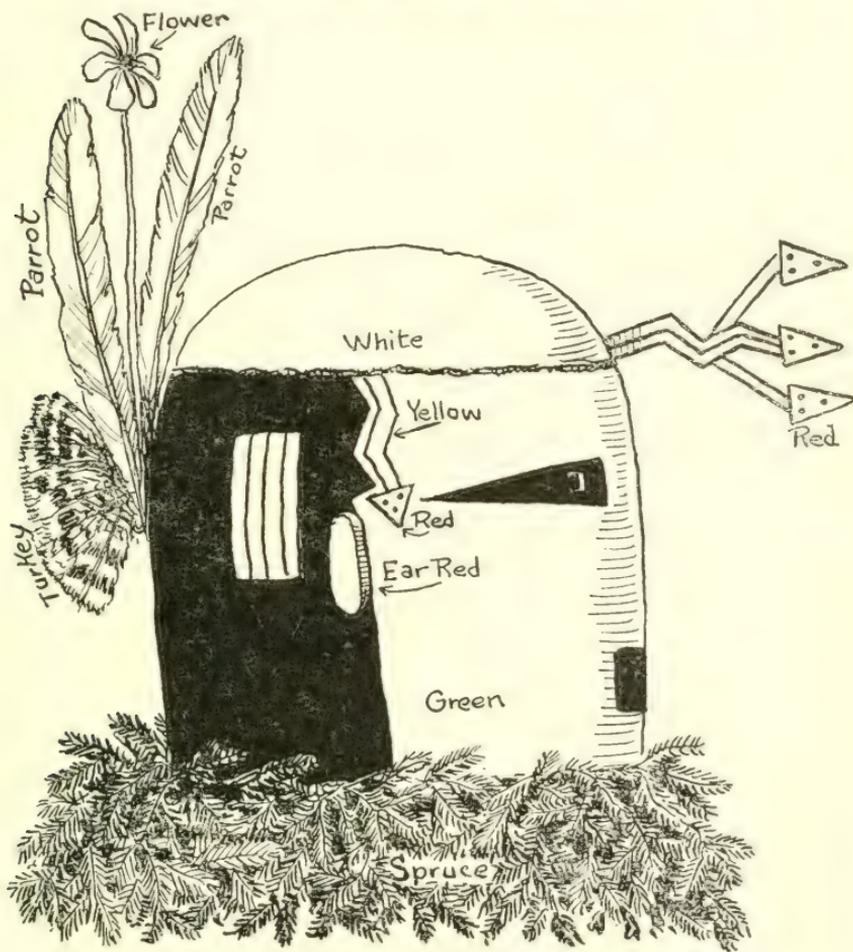


FIGURE 5.—He'mic katsina.

SYMBOLISM IN MASKS

Signs and symbols, usually of meteorological phenomena, are frequently found in masks of the katsina. The white dome of He'mic katsina (fig. 5) represents clouds "piled up"; the black portion of the back of the mask is a storm cloud, which contains rain—the vertical lines inside the white rectangle. The spruce collar represents a wak'ai'-

²⁰ Sa'rombia is evidently the Zuni Sallmopla.

anc: "When it's raining a long way off you can see a straight [horizontal] line on the bottom of the rain clouds, with the rain coming down from that line. That (line) is a wak'ai'anc." Lightning, shown with eyes and mouth, protrudes from the front and side of the head.²¹

MASKED DANCES

In addition to the summer katsina ceremony, *Natyati* (White, 1932, pp. 82-84), a masked dance is held in *Mauharots* (the head kiva), at night, at the summer and winter solstices (White, 1932, pp. 84-85). Also, a masked (katsina) dance is held "8 days after the *Laguna* feast" on September 19.

THE G'O'MAIYAWACI²²

This word is translated "scout," as a rule, by informants, but "messenger" seems to be more appropriate. One informant told me that one could call a telegram messenger boy *Gomaiyawaci* "if he came on foot."

The *Gomaiyawaci* live at *Wenimats*, the home of the katsina, and like the katsina they are impersonated in masks. On the fourth day preceding the date set for an appearance in the pueblo of the katsina or of the *Kopictaiya*, four *Gomaiyawaci* bring the news to *Acoma*. About 5 days before the ceremony, the cacique gives *Masewi* (the war chief) a handful of corn meal, wrapped in a corn husk, and tells him to take it to one of the kiva chiefs, whom he names, and to tell him to bring the message of the forthcoming ceremony to the pueblo. *Masewi* delivers the message. The kiva chief who receives the meal gets the other three chiefs of his kiva to help him. The four dress themselves as *Gomaiyawaci* and go to the plaza on the evening of the fourth day preceding the ceremony. Two *Gomaiyawaci* remain in the plaza; the other two go to *Mauharots*, where they are admitted by the cacique and *Masewi*. The cacique asks them to sit down and gives them a smoke. Then the cacique and the war chief each puts a *Gomaiyawaci* on his back²³ and carries him out of the kiva to the plaza where they join the other two messengers. One of the *Gomaiyawaci* gives the war chief a string with four knots in it:²⁴ this means that the katsina (or *Kopictaiya*, as the case may be) will come to visit *Acoma* 4 days hence. The war chief makes

²¹ Cf. Parsons, 1920, p. 99, fig. 7. These lightning sticks at *Laguna* had to be made by the *Shiwana* *tealanyi*.

²² See White, 1932, p. 79.

²³ *Koyemshi*, Zuni counterpart of *Gomaiyawaci*, is carried on the back of a katsina in a Zuni ceremony (Parsons, 1939, p. 979).

²⁴ Cf. the Zuni calendar strings of *Shalako*, one of which is kept by Father *Koyemshi* (Parsons, 1939, p. 979).

this announcement to the people (who will have gathered in the plaza for the message of the Gomaiyawaci), and tells them to make prayer sticks.

After further "sign talk," the Gomaiyawaci say goodbye. Two of them give the long deerskins which they wear to the cacique; the other two give theirs to the war chief. They leave the pueblo by the south trail and "go back to Wenimats," their home in the West. After dark, the *sicti gaiya* (kiva chiefs) reenter the pueblo, put their costumes away, and go home.

SANTIAGO AND TCAPIYÓ

A man representing Santiago "rides" a little black wooden horse on San Estevan's day "every once in a while."²⁵ Santiago is accompanied by a drummer (who beats a snarelike drum with two sticks, i. e., a Spanish type of drum), and preceded by Teapiyó. Teapiyó is a bogey mask said to have come from El Paso, and is used to frighten children for disciplinary reasons. He is found in many pueblos (see Parsons and Beals, 1934, p. 498).

Santiago is impersonated because of a vow.²⁶ That is why he does not appear every year. It takes the impersonator months to get everything ready. He has to visit a number of pueblos and in each collect seeds of various cultivated plants, bits of horse and sheep manure, etc. These he keeps in a bag and eventually distributes among his own people (presumably during the ceremony) "to make them rich in crops and stock." The impersonator must provide himself with a complete outfit of new clothing for his appearance: shoes, hat, suit, shirt, silk kerchief (which is worn over the face, just below the eyes), etc. All these things at the conclusion of the ceremony the impersonator must distribute. One informant said that the impersonator might give them away in the pueblo, to his friends or relatives, presumably. Another informant said that he must "take them out somewhere and give them to Santiago," i. e., deposit them at a shrine, for the saint.

During the day on which Santiago appears, a Flint society man or a Fire society man must remain in his society's house all day.

CLAN CEREMONIES

There were four clans (only) at Acoma which were custodians of ceremonies, or possessed ceremonial prerogatives: The Corn clan

²⁵ Actually, of course, the "rider" carries the horse (through which the rider's body passes), suspending him with a strap across the rider's shoulders. (See White, 1935, pp. 150-151, fig. 42; 1942; 1942 a, pp. 256-257.)

²⁶ Cf. White, 1942 a, p. 258. Santiago with hobby horse is a common impersonation in Mexican saint's day dances. One dance is called "Los Santiagos." Participation in any saint's day dance in Mexico is often because of a vow, *por promesa*.—E. C. P.

had the Curatca ceremony (White, 1932, p. 94), the Pumpkin and Parrot clans jointly shared the salt-gathering ritual (White, 1932, p. 139), and the Antelope clan provided the cacique and was "the head of the katsina" (White, 1932, p. 41). Only these clans had "clan houses" in which they met for ceremonial purposes, and in which they kept whatever ceremonial paraphernalia they might possess. The other clans "had nothing to meet about."

One can speak of clan "heads" at Acoma only in a general way. The eldest male of a clan may be called *nawai* (head or elder), but, except for the clans which possess ceremonies, this "headship" is virtually meaningless, since the head has no functions. The head of the Corn clan is the man in charge of the Curatca ceremony. The heads of the Pumpkin and Parrot clans were in charge of salt gathering (but it was the cacique and the war chief who made the prayer sticks which they took with them to the lake). The cacique is the head both of the Antelope clan and of the katsina ceremonies. These heads of the four ceremony-possessing clans are assisted by two or three men (how chosen I was unable to learn), one of whom succeeds to the office.

Origin of the Corn clan ceremony.—Curatca lived in the north, somewhere. He built fires on the mountains all around. Conata, Komitina, and Co-ma'acka (all katsina) joined Curatca. Kaupat joined him, too, as he was a great fire builder. (It was Kaupat who built the fire that produced the lava beds near Grants; White, 1932, pp. 165-168; Boas, 1928, pt. 1, pp. 76-82.) When Curatca and the other katsina got close to Acoma, they met the *nawai* of the Corn clan. "What are you doing and why?" the *nawai* asked Curatca. "This is my work," said Curatca. "I do this every 5 or 10 years. I am not doing this to burn (i. e., to destroy) the world, but to heat Mother Earth to make her more fertile (*diwa'coititan sinaiya ha-atsi*)." Then the head of the Corn clan said to Curatca, "I am glad to receive you and welcome you. I want you to belong to the Corn clan. I want you to be our *nawai*."²⁷ So the katsina stayed with the Corn clan at Acoma. But after a time they went to Wenima, and the Corn clan made masks to represent them. That is why the Corn clan has the Curatca ceremony today (White, 1932, pp. 94-96).

The Antelope clan.—This clan "wanted the katsina" when the people were living at White House. That is why they are the head of the katsina today. (Cf. White, 1932, pp. 154-156; Boas, 1928, pt. 1, pp. 35-38; Gatschet, 1891; Parsons, 1917.)

²⁷ This is out-and-out Hopi pattern.—E. C. P.

LAND TENURE:²⁸ THE COMMUNAL FARM

All the land at Acoma "belongs to the cacique." Land for farming is allotted by the cacique to men who ask for it; the cacique goes to the land and marks off its boundaries. In the old days, when a man asked the cacique for land, it was the custom to give him a present of a blanket or buckskin, or some flour. Nowadays, the cacique "asks for the present—just like the (Catholic) priest at baptism."

When land has been allotted to a man it "belongs" to him and his family. At his death his widow and daughters inherit it. Land was transmitted, as a rule, from mother to daughter, but if there were no daughters, a son could inherit the land. Although in theory the "title" to all land remained permanently in the cacique's hands, custom would not permit him to deprive a family of farming land that they were using; it was theirs as long as they continued to use it. But, should a family discontinue the use of a field or garden, the cacique could reassign it to someone else. When the cacique allotted land to a family he received no rent for its use (but see below).

Grazing, timber, and hunting lands were open to all; anyone (i. e., any Acoma Indian) was free to use or exploit them. There were no "clan lands."

Near the Acoma mesa, on the west side, is a tract of 10 or 15 acres of farming land which is, in effect, a communal farm; it is worked by all the people of Acoma and the crops are devoted to communal purposes.²⁹ The war chief has charge of this farm; under his direction the people plant and till the fields and harvest the crops. Only corn is grown in these fields. The crop is stored in the war chief's house.

When a communal ceremony (such as a masked dance) approaches, the "little chiefs" (i. e., helpers of the war chief) (White, 1932, p. 51) at the direction of the war chief, call unmarried girls and boys to the war chief's house to shell corn from the communal store. After the shelling, the little chiefs take the corn to various houses in the pueblo to be ground. When they go to a house the woman there brings out a basket which the little chiefs fill with shelled corn. (Thus, by the size of her basket a woman regulates the amount of work she is willing to do.) When the women have ground the corn they take the meal to the war chief's house, where the cocineros (cooks) (White, 1932, p. 51) receive it and pile it on a wagon sheet

²⁸ See White, 1932, pp. 34, 42; Parsons, 1917, p. 173.

²⁹ This farm is, no doubt, the equivalent of the "cacique's fields" in other Keresan towns. (See Stirling, 1942, p. 105.)

on the floor. When the cooks return a basket to its owner, they give her a small quantity of meal to "pay" her for her work.

Now the little chiefs take the meal around the pueblo to the houses of skillful wafer-bread makers to have the meal made up into wafer bread. The women make the bread in the morning. At noon the little chiefs go to each woman who has made bread and give her a little rabbit stew to pay her for her work. The women take the bread to the war chief's house and deliver it to the cooks (the cocineros). The bread will be used to feed the katsina or the Kopicitaiya in the forthcoming ceremony.

If a family has had a very poor harvest and needs help, they may apply to the war chief, who will give them some corn from the communal store.

The war chief works in his fields in addition to supervising the communal fields. The cacique works in his own fields,³⁰ but occasionally he draws upon the communal stores for corn.

RITUAL CORN GRINDING

There used to be three corn-grinding groups among the women of Acoma. One group used Zuñi songs; another used Ga'cputi (meaning obscure, apparently connected with the Koshare) songs and ritual (these were introduced by a Laguna woman who married into Acoma); and the third group used kaca'ri songs, which "have always been at Acoma."

The women who used the Laguna songs were organized into a group which had a head called naiya (mother). Any woman could join this group, but, once a member, she could not withdraw. When the women wanted to grind, the "mother" set a date 4 days in advance. All members of the group were obliged to attend. They would meet at the house of one of their number shortly after midnight. Six of the women would grind at the six bins [one for each of the six directions?]. As is not uncommon in grinding, each woman would smear some flour on each cheek.³¹ The women who were not grinding would sit out in front and sing grinding songs.

One of the grinding groups would "hire" men to sing for them while grinding. Two or three men would play flutes (o'kaiyatan), the others would beat time with a stick upon pieces of buffalo hide. (Cf. Laguna, Parsons, 1923, p. 216; general, Parsons, 1939, pp. 380-381.) The men got their breakfast and dinner as their "pay." The women would bring their best meat and bread along to eat. They

³⁰ This contradicts previous data (White, 1932, p. 42). To be sure it has been reported that the people only harvested for the cacique (Parsons, 1918, p. 173).

³¹ I have frequently seen women, grinding alone or with another woman, with their cheeks smeared with flour, but I never learned why they do it. Cf. Parsons, 1939, p. 294, fn.

were obliged to grind all of the grain that they had brought before they quit. Sometimes they had to work until 9 or 10 o'clock at night to finish.

KICK-STICK RACE

Kick-sticks are made in four different sizes. The smallest size is called *icto'a* (arrow) *hame g'a'aca* (of that size) *atcawai'y_i* (kick-stick); it is the size of an arrow shaft. The next size (larger) is called *wacg'a'aca* (next, or second size) *atcawaiy_i*; the third size is *g'a'atca* (large size) *atcawaiy_i*; the largest size is called *na'wak'^a* (over all) *atcawaiy_i*. The first and second sizes are the ones used most. The largest size, the *dawak*, is not used very much: "it makes the boys run too fast."

The races are run by two teams, each chosen from a kiva group. (There are no clan races.) The number of men constituting a team might vary, and also, apparently, one team might have more members than the other. If they were going to run a great distance they would have four men (or boys) on a team; if the distance to be run were not very great, the teams might be composed of only two or three runners each. Long ago, when the men and boys used to spend a great deal of time in the kivas during the wintertime, these races used to be much more frequent than they are now.

While the runners were getting ready, the members of their respective kivas would be arranging wagers. The betting was voluntary and conducted individually. A man who wished to place a bet would bring whatever he wished to wager—arrows, buckskin, belts, leggings, mantas, bows, etc.—to a meeting place in the plaza. There he would seek a man in the other kiva group who wished to bet. When they had come to terms on the value of their respective wagers, the articles were tied together and placed in a pile on the ground; these articles were watched by a man who belonged to neither kiva represented in the race. The runners themselves did no betting; they remained in their respective kivas until all wagers were arranged. (Cf. Culin, 1907, pp. 668-669; Parsons, 1923, p. 219, and 1939, p. 821 ff.)

The runners come out of their kivas. They wear only a breechclout. The war chief gives one kick-stick to each team. The sticks have been made by the war chief who takes pains to have them of equal size. Each team paints its kick-stick. First they are whitened with *ha-ck'a-ny_i* (isinglass; this material was formerly used for window-panes, and even today there are some houses with panes of isinglass): they rub the isinglass in a groove on a flat rock, spit on the powder thus formed, making a paste which is smeared thinly over the entire surface of the sticks. When the coat of white has dried on the sticks, one team paints both ends of its stick black; the stick is then called *g'a'ci*, white. The other team paints a black stripe around the middle of its

stick; it is then known as tso'yo. Two of the four tubes in the game of hidden ball (White, 1932, p. 138; Culin, 1907, p. 351) are named a'a'ci and tso'yo. The informant said he did not know the meaning of these names, but a Sia informant told me that tso'yo means "tied around the middle."

The teams, together with a great crowd of men and boys now go down to the foot of the mesa to a sand pile on the west side, where the race is to begin. The war chief starts them. One runner in each team kicks the stick as far as he can. Another runner, called ga'oyokai (watcher), runs up to where the kick-stick has come to rest and points it out to his team mates with a stick which he carries, crying, "Do'sinu," (right here!). Then he runs on ahead to locate the stick after it has been kicked again. Each team kicks only its own stick, of course.

They start below the Acoma mesa on the west side. They run toward the west, then south, east, north, and west again, returning to their starting point. All of the men and boys in the pueblo who are able to do so, usually run along after the teams (except, of course, the cacique, war chiefs, medicine men, etc.). There is great enthusiasm during these races. The course varies in length from 2 or 3 to 8 or 10 miles. The war chief remains at the starting point; it is he who judges the winner. When the teams have returned, the war chief takes both the kick-sticks and "goes out to pray with them."

The purpose of the race is, like so many pueblo ceremonies, "to bring rain."³² "The katsina use kick-sticks when they come bringing the rain. If you watch the water coming down off of a mesa during a rain, you will see that it does not flow evenly; it comes in spurts. That is because the katsina are running along, kicking their atca-waiyi." It is said, also, that these races serve to "make the boys good runners."

The pile of articles, laid as wagers, are distributed to their respective winners at the end of the race.

BIRTH

At birth, the sister of the new-born baby's father comes, bathes the baby, and cares for him for 4 days. On the morning of the fourth day, before sunrise, a medicine man and his wife take the baby out to present him to the sun and to give him a name (White, 1932, pp. 132-135). The medicine man paints "lines, or bird or animal tracks" underneath the eyes of baby boys, on their cheek bones; the faces of girls are smeared with corn pollen and corn meal.

³² A kick-stick is deposited, as a prayer stick, for rain (White, 1932, p. 127, pl. 15, r; Stirling, 1942, p. 45.)

TWINS

They are called *tso-k'o* (pair). "Maybe they are caused by the deer or antelope" (because these animals bring forth their young in pairs). (Cf. Zuñi, Parsons, 1939, p. 90; see, too, Parsons, 1918, p. 176.) No special power is attributed to twins, as at Laguna or among Hopi. (See Boas, 1928, pt. 1, p. 298; Parsons, 1939, p. 1055.)

NAMING

Names are of common gender; the same name might be given to a girl or a boy. As among Hopi, the name of the child frequently alludes to the name of his father's clan. For example, a child whose father belongs to the Eagle clan might be named *cpai'ak'ia*, a short, fluffy eagle feather, frequently worn at the crown of the head (White, 1932, p. 153). One whose father was a member of the Corn clan might be named *ya'pac* (cornsilk). If the father was of the Oak clan, the child might be called *masa-n'vi* (leaves).

CEREMONIAL ADOPTION

When a child is to be initiated into the *katsina* organization, his father selects a man to "take care of him" during the initiation. This man belongs to the same clan as the father, as a rule, but he may be selected from another clan. This sponsor selects another man, usually a close relative, to assist in the initiation ritual by tying a feather in the hair of the novice and giving him a new name (White, 1932, pp. 71-75). After the initiation, the head of the novice is washed by the wife of the sponsor and her sisters. If the sponsor and the-one-who-ties-on-the-feather belong to a clan other than that of the novice's father, the novice will thereafter address them as *naidia*, father, and their wives as mother. (If these two men belonged to the same clan as the father, the child would call them father because of this fact, apart from the initiation.) But the novice would not extend the use of relationship terms to clansmen of those he addresses as "father."

ADOPTION BY CURING

If one is sick and wishes to join a curing society, he selects one of the doctors to be his "father." This man teaches the novice, provides him with clothing and paraphernalia upon being initiated, and gives him his new name. Thereafter they address each other as father and son. (There is doubt in this instance whether or not the new member would address all men in his "doctor father's" clan as father and their respective wives as mother.)

BEHAVIOR OF RELATIVES ³³

A mother might "whip" her child; a father "should not."³⁴ A boy is usually taught such things as hunting, moccasin making, names of birds, animals, etc., by his father, although his mother's brother may instruct him in these matters, too. One informant said that it was his mother's father who used to tell him "the stories about long ago." Sacred lore concerning Shipap, the katsina, and so on, are told to the boy by the cacique at the time of initiation into the katsina organization (White, 1932, pp. 74-75). A young man might be advised regarding his contemplated marriage by his father and mother and by their brothers and sisters; a girl might be similarly advised. It is the father's sister who comes at childbirth, bathes the baby, and cares for him until after he has been named on the fourth day. The father's sister is accorded the same treatment as the mother's sister; "you are supposed to be good to her." Both father's sister and mother's brother may call upon a boy to work for them; if both ask simultaneously, preference would be given to the father's sister "because she is a woman and needs it more." The mother's brother advises boys, telling them what is right, wrong, etc.; but he does not whip his sister's children. A man is called *etanawai'ici* (our head) by his sister and her children: "he is the head of that family." All cousins, whether on the mother's side or on the father's, are treated alike. Grandfathers frequently take care of small grandchildren while their mother is working. Older sisters have to take care of their younger brothers and sisters. "A man works for his wife and her family."

One is buried by his close relatives; no relative has any special duty in this matter, so far as I could discover. An old man or woman, who had no brothers or sisters, children or grandchildren, would be buried by the clansmen of his or her father.

Joking relationship.—This exists between grandfathers and grandsons and between grandmothers and granddaughters (reciprocal relationship terms are employed by these relatives). A boy might ridicule his grandfather (either paternal or maternal), for example, saying: "I can chop wood better than that," upon seeing him chopping. A girl might say to her grandmother, "I could grind corn better than that," or "I could make better tortillas than that." "The

³³ The following notes are statements made by informants. There was little opportunity to study correlation between them and actual practice.

³⁴ But actual whipping seems to have been very rare. The usual disciplinary device is to frighten the child with the threat that a bogey (usually *Tcapiyó*) will get him. A man told me that once one of his sons, in play, put a slipnoose around the neck of his younger brother and drew it tight. "He nearly choked him to death. I ran out and took the rope off and called to his mother. She ran out and got the little boy. Then she whipped the big one."

boy helps out his grandmother against her husband; the girl helps out her grandfather against his wife." This custom is said to encourage children to "do their best, to do more and better work, so they will be better than their elders." But, "they don't joke as much at Acoma as they do at Laguna." One never jokes with his parents nor with their brothers and sisters, nor with the relatives of a spouse.

RECEPTION OF A FOREIGN SPOUSE

When a man, bringing his foreign bride home, nears the Acoma mesa the war chief (who would have been advised of their approach, of course) comes down to the foot of the trail on the south side to meet them. He leads them up the trail, making hi'amón'ti (a "road" of corn meal) for them. When they near the top of the mesa, the war chief calls out to the cacique, who has come out to greet them, telling him that a girl of the ——— clan from ——— (naming clan and pueblo) is coming to Acoma to live. "Hima'na! (Welcome!)" the cacique cries, "Dy'vpi'iana (Let her come up!)" The war chief asks for permission to admit the stranger, asking four times,³⁵ and as many times the cacique bids her enter and be welcome. Then the party goes up on top of the mesa. The cacique embraces the newcomer saying, "You are my daughter. You are now under my arm (or, on the top of my head)."³⁶ Then the war chief takes the couple to the house of the groom where his father and mother greet them. The groom's mother washes the heads of both bride and groom. If the clan of the adopted girl is represented at Acoma, all of the women of that clan come and wash her head: each woman puts a bit of suds on the girl's head, then the "mother" (naiya, i. e., the oldest woman of the clan) finishes the washing. The girl keeps her own name; she is not given a new one. Should her clan be lacking in Acoma, given descendants she would become the founder of a new clan there. If she had been a medicine woman at her former home, she would have to join one of the Acoma medicine societies, the one most like her own.

A foreign bridegroom would be received at Acoma in the same manner as a foreign bride. Any Indian spouse would be given this

³⁵ This is the customary procedure, faithfully reported in myths and tales. At this point I asked the informant, "Why do they always ask questions like this four times?" "Because they think that makes it more complete."

³⁶ "Under my arm" is a metaphor similar to "under my wing." (See Stirling, 1942, p. 91). The houses of Acoma pueblo rest upon the top of rocks called ya-k'a (corn) k'oto'na (the perfect, completely kernalled ear of corn). G'ana'atruetca (? on the top of), i. e., the houses rest on the top of a perfect ear of corn, standing erect on the butt end. The cacique is the earthly representative of the mother, Iatiku, who is represented by a perfect ear of corn. Thus the ear of corn may stand for the cacique. Hence, these rocks are as the cacique, and the pueblo is on the top of his head.

reception, but no white, Negro, or Mexican spouse would be so received.

DEATH AND BURIAL

Before burial a medicine man paints on the faces of boys or men the designs that were painted on their faces when they were presented to the sun on the fourth morning after birth; and, consistently, the faces of deceased girls or women are smeared with pollen. To the crown of a woman's head her husband (or the nawai, head, of her clan, if she has no husband) ties a cpai'ak'^a (short, fluffy eagle feather).

The hair of the deceased is cut before burial.³⁷ A man's hair is cut in front so that it reaches the eyebrows, and on the side it is cut on a level with the chin. "This is the way Iatik (the mother of the Indians) wears her hair" (it is also the way the men at Santo Domingo, but not at Acoma, wear their hair). The hair of deceased women is cut in front and on each side on a level with the mouth, parted in the middle, and tucked behind the ears.

After the body has been taken out for interment, a stick that has been used to poke and stir the fire (baiyakani) is laid in the place where the dead one lay. This poker represents the body of the deceased. A flint arrowhead, representing the heart of the deceased, is placed by the poker. These are kept there for 4 days. A bowl of water is placed by them to supply them with drinking water, and they are "fed" at each meal (i. e., a bit of food is placed on the floor beside them).

On the fourth day after burial, a medicine man takes the poker, flint, bowl, food (that has been "fed" to the stick and the flint), and a prayer stick out to the north side of the pueblo, where he buries everything except the flint "heart"; this he returns to the relatives of the deceased.

ALL SOULS' DAY ³⁸

On the evening of November 1, the souls of the dead return from Shipap to visit their relatives; they spend one night and then return to Shipap. On the afternoon of the first, the governor, or the bickale, has someone ring the church bell about 3 o'clock; it is rung continuously until midnight. About dusk, women of the various households take food to the church; they put it down on the platform in front of the church (the dead are buried in the churchyard in front of the church). First they pray, then they put down some wafer bread, then they put the stewed meat on top of the bread; this food is

³⁷ This may be one explanation for the extreme opposition in early days to cutting the hair of schoolboys.—E. C. P.

³⁸ Cf. Dumarest, 1919, pp. 170-172; White, 1935, pp. 148-149.

for the dead. They light a candle and leave it by the food. One of the bickale is there to get the candles; he extinguishes them and keeps them for the Catholic priest. Later on in the evening, "some boys and old folks" come and get the food; they either eat it there or take it home to eat.

In the evening, after dark, groups of people who know how to pray in Spanish go from house to house singing Catholic hymns. When they come to someone's house they call out "Sare'mo, sare'mo!"³⁹ The women of the house have to give them bread. The medicine men make prayer sticks for the dead.⁴⁰

At Acomita (a colony of Acoma some 12 miles away), the procedure is the same. "Before they had the church at Acomita, they used to take the food out toward the north." Many Mexicans come to Acomita on this night to get bread. "They come in wagons. You've got to give it to them."

PRAYER STICKS

Any male at Acoma may make prayer sticks (h'a'tcamīnyi) (White, 1932, pp. 125-129, pls. 13, 14, 15) after he has passed through the katsina initiation; females make wabanyi (feather bunches) instead of prayer sticks.

VARIOUS NAMES AND TERMS

G'au'watsaicoma; a pit in the floor on the north side of a kiva, or a pit in the wall where people put prayer feather bunches, prayer sticks, or prayer meal. The war chief gathers these and takes them out to one of the four Gauwatsaicoma of the cardinal points, near Acoma. When men go out hunting, they deposit their prayer sticks in these Gauwatsaicoma. The hole in the earth at Shipapu, through which the Indians emerged into this world, is called Gauwatsaicoma (it is the *real* Gauwatsaicoma).

³⁹ We had surmised that this term was from *salvemos*, "(?) let us taste" (Parsons, 1939, p. 856), but it is probably from *oremus*, "let us pray." Mexican children going from house to house sing:

"Oremos! Oremos! Angelitos
Somos del cielo venimos
A pedir limosna, y si no nos
Dan, puestas y ventanas
Quebraremos!
Oremos! Oremos!

"Hear us! [?] Hear us! Little angels are we
Who from Heaven have come
To ask for alms,
And if we are denied,
Doors and windows we will break!
Hear us! Hear us!"

(Otero, 1936, p. 71-72).—E. C. P.

⁴⁰ The curing societies at Santo Domingo and at Cochiti hold meetings at this time.

G'o'wawaima is a place at the foot of the Acoma mesa on the west side; it is the home of hi'ctianyi k'o'asvt, "flint-wing creature."⁴¹

Tsi'mait: "Earth"; a design made on the floor with colored sands and corn meal; represents naiya ha'atsi (mother earth). Tsimait are made at communal cures and at childbirth (White, 1932, p. 133, pl. 16), but are not made at initiation into the katsina organization.

Tsica'ata Dyaoma'wa: supernatural power.

Maia'nyi: These are spirits, or supernatural powers, such as the sun, the moon, stars, the kopictaiya, the rain makers of the cardinal points, tsa-tsⁱ (soul or breath), the katsina, airplanes, clouds, Masewi and Oyoyewi, Nautst. "Maianyi⁴² are anything that we don't know."

Sicti: "any common person;" one who has been initiated into the katsina organization is sicti tciaianyi. But one is not sicti while wearing a katsina mask. Medicine men, Koshare, and officers (while in office only) are not sicti (cf. White, 1935, pp. 167-168).

COLOR-DIRECTIONS

<i>Direction</i>	<i>Color</i>
North (tidya'ma)-----	k'otcni (yellow).
West (bvnami)-----	k'o'ick ^a (blue).
South (k'o'wami)-----	kvk'an (red).
East (h'a'nami)-----	stcamits (white).
Zenith (gyi'nami)-----	mctits ("black"?).
Nadir (nik'ami)-----	tsi'ck' ^a (gray?).

MEN-WOMEN

In 1851, Wm. A. Hammond, a medical officer in the United States Army (who later became Surgeon General in the Army, professor of diseases of the mind and nervous system in the New York Post-Graduate Medical School, and president of the American Neurological Association) examined a man-woman at Acoma, and described him as follows:

There was no remarkable development of the mammary glands; the pubis was devoid of hair; the penis was greatly shrunken, not being over an inch in length when flaccid, and of about the circumference of the little finger. The testicles apparently consisted of nothing but connective tissue, as no pain was experienced on strong pressure being applied to the soft flat masses, about the size of a kidney bean, which lay at the bottom of the scrotum.

⁴¹ See White, 1932, p. 172-178; Boas, 1928, pt. 1, pp. 111-118. At Santo Domingo, Gowawaima is a "place in the south" where certain "shiwana" (who may be seen by white people) come from (White, 1935, p. 114). Go'hawaima is mentioned in a Cochiti version of the emergence as a place in the south toward which the migration proceeded (Benedict, 1931, p. 250).

⁴² Boas renders maianyi "vapor" in speaking of the return of the spirits of the dead: "they eat only the maianyi of the food set out for them" (Boas, 1928, pt. 1, p. 299).

There was no genital deformity of any kind whatever. The limbs and the whole body were full and rounded, and there was not a sign of hair anywhere except on the scalp. The voice was shrill and weak. As he stood naked before me, the whole appearance was more that of a woman than of a man. When he put on his woman's dress, it was impossible to discover any mark of difference between him and the women among whom he lived.⁴³

On several occasions I endeavored to secure information about men-women at Acoma. "They dress, talk, and live like women because they want to, and in their body they are men," sums up the information I have received. Most informants were reluctant to talk about them; one old man positively refused, saying that it was "a shame."

⁴³ Sexual Impotence in the Male, p. 164 ff. I am indebted to Mr. E. D. Cumming, of Scarsdale, N. Y., for this reference.

AUTOBIOGRAPHY OF AN ACOMA INDIAN

INTRODUCTION

Autobiographies of North American Indians are not numerous. It is especially difficult to secure them from Pueblo Indians of the Southwest. This is due to the peculiar mentality of these people. They are not individualists; they are not given to reflective introspection and analysis. They do not conceive of human experience as something dependent upon an intimate and personal encounter and compact with a supernatural being, a guardian spirit (as do the Plains Indians, or the Winnebago). Rather they conceive of the world (cosmos) as a vast, intricate, yet well-ordered machine, which, properly tended, will run smoothly and forever. It is not exactly a machine, in the mechanical sense, but rather an organization and integration of beings and powers whose behavior conforms to a fairly uniform pattern, and upon whose regularity one can depend.

Life to a Pueblo Indian is analogous to a great ocean liner at sea. The Pueblo Indian fits into the pueblo as a member of the crew fits into the ship's company. The crew must run the ship, they must know how to control it, to articulate it with the forces of the sea and the heavens. They must know how to manipulate such paraphernalia as sextants and barometers, and must know formulas of triangulation and barometric pressure. As there are navigators, stokers, helmsmen, and deckhands, so there are sun watchers, priests, and ordinary folk (the *sicti*) among the Pueblos. And as the personal and subjective experience of the individual is irrelevant to the conduct of the ship, so is the personal and subjective experience of the Pueblo Indian irrelevant to the conduct of pueblo life.

The nature of the Pueblo Indian's world is known to him from mythology. He knows that to live with his people and his gods he must behave according to a pattern that is laid out for him. Whether he be a priest or an ordinary common person, it is all the same: he must know what to do and how to do it. This means that almost all of life is formalized, ritualized. One cannot even pray except upon specified occasions and with set formulas. One's individuality is the individuality of a unit in a textile pattern, repeated over and over again.

I have tried numerous times to secure autobiographies, but without much success. The Indian tells of his initiation into the organization which impersonates gods with the same impersonality and detachment

that he tell of his birth. The autobiography of a Pueblo Indian is about as personal as the life story of an automobile tire.

The following autobiographic sketch is presented with full realization of all this, and with an appreciation of its many shortcomings. Still it is the best that could be obtained. It presents a number of snapshots of a Pueblo Indian, which have some value, as well as illuminating a few passages and points in Acoma history and sociology. The narrator is about 73 years old (1941).

AUTOBIOGRAPHY

The church was there [at Acoma] when I first opened my eyes. A priest lived there all alone. Before that time there used to be judges and constables living there with the priest. Everybody had to go to church then. If a man or woman did not go, the judges or constables came and got him, or her, and took him to the church. They tied him to a post and whipped him, or her, until he said "yes." If a husband or a wife ran around with someone else, the wife or husband could tell the judges. They decided what to do. If they decided that the accused was guilty they took him to the *Komanira* [the house in which "council" meetings are held]⁴⁴ and whipped him.

The people had to supply the priest and the judges and constables with food and wood. The *Bickale* [fiscals] had charge of that. Every family had to contribute. The unmarried girls and boys had to work in the church and the school and in the quarters of the priest, judges, and constables. They had a school in those days; they taught the children to read and write Spanish and they taught the Catholic religion. Whenever they had *katsina* dances at Acoma the priest and the constables had to stay in their rooms or leave the mesa.

But when I was a little boy only the priest lived at Acoma, alone. I don't know why the teachers and judges left. Someone told me that they had a quarrel with the Indians and the Indians were going to kill them. When I was a little boy the convento was in good shape and very pretty. We used to have Mass every morning and on Sunday, too.⁴⁵

In the house where I first opened my eyes lived my mother and father, my mother's mother and father, three brothers and two sisters of my mother, and my mother's mother's mother. One of my *sanawε* (mother's brother), the oldest, was married and lived at

⁴⁴ White, 1932, pp. 30, 60, fig. 1; Stirling, 1942, fig. 1, T. The term may be derived from the Spanish *comunidad*.—E. C. P.

⁴⁵ The priest no longer lives at Acoma. He comes there once a year on San Estevan's Day (September 2) from Old Laguna or San Fidel. He performs Mass occasionally at Acomita. (See White, 1932, p. 32.)

his wife's house. My mother's eldest sister was married; her husband lived there with us. I was the oldest among my brothers and sisters.

In those days there were no doors on the first floor of the houses. There were little isinglass (h'a-ck'a-ny¹) windows. There was no air except, perhaps, through a little hole in the window. Whenever there was any hollering [specifically, announcements of the war chief or governor] in the streets, my mother would listen at this hole, or else look out. Indoors we spent most of our time on the ground floor in wintertime. In summer we lived on the second (or third) floor. We slept on sheep pelts [as many do today].

I used to play with a boy about my size who lived next door. He was not a relative. We used to hunt squirrels and birds with bow and arrow, both on top of the mesa and at the bottom.

My mother's mother (sapapa) and mother's father (sanana), he especially, used to tell me stories. I used to spend a lot of time with them.

We didn't have any wagons or kerosene lamps then. We had some two-wheeled carts with solid wooden wheels. For light we had a bowl with sheep fat in it and a wick. We never had any matches; we made fire with a fire drill (a-^{ty}'tcó'me). There were only a few guns in the pueblo, mostly flint locks. Most hunters hunted with bow and arrows and clubs. Some people had a few Mexican dishes, but most of the families had only [Indian] pottery bowls. At that time no one did any farming in the Acomita valley. There were only a few houses at Acomita; they belonged to people who used to graze their sheep down there.

When I was very small my mother's father and mother went to Laguna to sell some pottery and buy some things. They brought back some wheat. That was the first time I ever saw it. Once in a while they got some coffee and sugar. Poor Mother! She was very fond of coffee. But we were very poor and never had much.

My father was a medicine man: he was the head of the Fire Society. These tciaiyi used to perform their ceremony⁴⁶ twice a year. My mother and I used to go with them. Everybody had to wait on top of the k'a'atc [kiva; chamber where the society held its meeting] until the tciaiyi sang the song for us to come down. When they sang the song for us to come in, one medicine man would come up and remove the line of ashes with his flint.⁴⁷ We were all eager to get in first in

⁴⁶ Solstice ceremonies? (See White 1932, pp. 84-85.)

⁴⁷ During initiation ceremonies medicine societies lay down lines of ashes on the ground around the front of the house. No one is allowed to cross this line, under penalty of becoming a member of the society (White, 1932, p. 112). The same custom is observed at other Keresan pueblos.

order to get the good seats. Women with small children went into a room on the west side of the curing chamber.

There used to be lots of medicine men, more than there are now. When we would come in, the tcaianyi would have their ya-baicm [wooden slat altar] up. The head man would be sitting in front of the sand painting by his two medicine-bowls. These bowls were made of gypsum (Spanish, yeso; Keresan, ba't^u) hollowed out; they had terraced sides, and pictures of snakes, clouds, lightning, etc., painted or carved on the sides.

[Here the narrator went into a detailed account of the paraphernalia and ritual; how the medicine man gathered, dried, and ground the herb medicine, etc. It was difficult to get him to tell about his *own* experiences.] I used to get scared at these ceremonies. The tcaianyi used to tell us about witches, and how they went around killing people. When they would look through the ma'caiyoyo [the quartz crystal that gives second sight] (see White, 1932, p. 110; 1932 a, p. 47; 1935, p. 127; Densmore, 1938, p. 60; Parsons, 1920, p. 119; Dumarest, 1919, p. 156) to find the witches, they would yell and scare us. My mother and I and my sisters used to have to stay after the ceremony was all over, as my mother had to pack up my father's things and take them home. My father had three or five yaya (honani, corn-ear fetich); one was made for him at the time of initiation, the others he had received at the death of society members.

There were no American doctors anywhere near Acoma in those days. The tcaianyi (medicine men) were all we had. But there were lots of them: we had Hakanyi (Fire), Hictianyi (Flint), Kapina, and Sii (Ant) tcaianyi.

When I was 5 I was "whipped into katsina" (see White, 1932, pp. 70-75). They were very strict about the katsina in those days—not like it is now; everyone had to join and take part [i.e., in the masked dances]. I was pretty scared when they initiated me. I thought Tsitsinits (the katsina whipper) was real. They didn't show us the masks until 2 or 3 years afterward, when we got to be old enough to know about such things.

We didn't have any fights with the Navahos when I was a boy. When I was about 7 years old a bunch of Indians from Cochiti, Domingo, and other pueblos near there, about 40 of them, passed through Acoma on their way to California. They were going out there to work in sheep camps or do some other work so they could buy some horses and bring them back. They stopped at Acoma over night. After supper they went through the streets singing, "California omi'aro'tsi, wiya heya," etc. It was a Comanche song saying, "California, I am going out there." One of the earliest of the "California, here I come" songs. Next morning they left early. One of

my mother's brothers went to California and stayed more than 10 years.

When I was about 10 years old there was a shortage of food. The crops weren't good, and we didn't have enough to eat. We had to eat prickly-pear cactus and "wild potatoes." We used to boil them with pure pottery clay and eat them. We sure had a hard time.

I went to Albuquerque when I was about 12 years old to attend the Mission school there. There was no school at Acoma. I couldn't talk either English or Spanish. When we got to Albuquerque we had to cross the river by boat, as there was no bridge there then. We left our burros on the west side and crossed on a flat boat.

I stayed at the Mission 3 years without going home. Sometimes some men from Acoma would come down to the Mission to see their sons.

They were building the railroad into Albuquerque at that time. Sometimes we went down to watch the men work on it. When we first saw the locomotives we nearly fainted, we were so scared. We thought it might swallow, burn, or run over us.

At the end of 3 years we went home. They had the railroad completed as far as McCarty's [a station on the Santa Fe railroad 85 miles west of Albuquerque, with a colony of Acoma, also called McCarty's] and we rode out on a flat car. It took all day to get home. The people at Acoma thought the engine and train were supernatural. They used to make prayer sticks for the engine and put them under the ties or rails and ask the engine for what they wanted of it. When they got courage enough to come up close to the engine, they used to throw prayer meal on it.

At the end of the summer we went back to school in Albuquerque; we rode again on a flat car. I had learned to speak English during my first 3 years at school. I got my English name at school, too. My parents never learned to speak English. When we got back in the fall we helped build a new school; we helped make and burn bricks. There were some Ute boys there at school. They were "tough guys"; they would not allow their hair to be cut. I got my Bible at that time—1883. I've still got it.

I didn't go to school in 1885-86. The Mission was Presbyterian, and my folks didn't like that; they thought I ought to go to a Catholic school. So in 1886 I went to the Catholic school at Santa Fe, this time on a passenger train. My father died in August 1887, and my mother's sister's husband came up to bring me home. He was the war chief at Acoma. He came on horseback, leading another horse for me.

On the way back to Acoma we stopped at Domingo. My "uncle" [mother's sister's husband is called *naicdia*, "father," in Keresan, but the narrator spoke of him as "uncle"] had a brother who had mar-

ried in Domingo and was living there with his wife and children. They were glad to see us. The Domingos believe that Acoma and Zuñi are close to Wenima, the home of the katsina or rain-makers. Consequently, when an Acoma or a Zuñi Indian comes to Domingo they believe that it is sure to rain because they live near the katsina.

The next day they had a katsina dance at Domingo. They danced Tsaiyaityuwi katsina⁴⁸ with six pairs of side dancers. They danced all morning. At noon, the side dancers made everyone go into his house and close the door while the katsina ate their lunch; no one was even allowed to see the old ladies carrying food to the dancers.⁴⁹

After lunch we went back to the plaza. The side dancers were very strict. They wouldn't let people watch the dance from the housetops. You had to stay down in the plaza. And you had to *stay* there, too; you were not allowed to leave until the dance was over.⁵⁰ If you had to relieve yourself, you had to use a pottery bowl. During the afternoon a little boy ran across the plaza. The side dancers hollered and chased him. The tsatyao hotcani ["outside chiefs," i. e., war chiefs and their helpers] came out and held the katsina back with their yapi [staffs of office]. If they had not done this, the side dancers could have killed the little boy, or severely beaten him, and no one could have blamed them. They could do this to anybody. One of the tsatyao hotcani picked the little boy up and took him back to his mother.

Late in the afternoon it clouded up and rained, hard. The katsina kept on dancing. We all had to sit out there in the rain until they finished.

That night we stayed at my "uncle's" house. There was a girl there who took a fancy to me. She wanted me to stay there in Domingo and be her husband. I stayed with her that night (at her invitation) but the next morning I left with my "uncle." She went along with us until we got out of the pueblo about a mile. She was nice and pretty, but I did not think I was old enough to get married yet.

I never went to school again after my father died. My mother moved to the house of one of her sisters to live. I had to take care of the fields and the sheep.

But when I went back to Acoma to stay, I didn't take part in the ceremonies and their religion. I didn't want to go to the estufa

⁴⁸ A very important katsina at Santo Domingo today (White, 1935, pp. 97, 107, 172, fig. 22; see also Stirling, 1942, p. 48, fn. 22).

⁴⁹ "At Acoma they aren't that strict. The katsina eat back of the church. No one can go back where they are except the old ladies carrying food. But anyone is allowed to see the food being carried to the dancers."

⁵⁰ A Santa Ana pueblo man once told me that he did not care to attend katsina dances at Santo Domingo because "they make you stay right there in the plaza until the dance is over."

[Spanish for oven; name applied by early Spaniards to kivas], make prayer sticks, etc. I believed in the Bible. When they were going to have a ceremony, like a katsina dance, I would go out to sheep camp while they were getting ready, and then come back to Acoma on the day of the dance. The old men and officers didn't like this. They had a meeting to talk about it. They decided to make all the young men who had learned some American ways take part in all the ceremonies and Indian religion.

One afternoon when I was out in the sheep camp some men came up. Two were Bickale, one was a tsatyao hotcani. They told me I had to go back with them. "What is it all about?" I asked them. "When you get back you'll see," they told me. When we got back to Acoma they let me go to my house. When my mother saw me she threw her arms around me and cried and cried. After a while some of the "little chiefs" [helpers of the war chiefs] came and took me to Mauharots estufa. This was the "head" kiva. There were lots of people inside. When you got to the entrance [in the roof] you could feel the steam [from their bodies] coming up.

The little officers took me down inside. It was stifling hot and close in there. They took me over where some other [pro-American] boys were. It was crowded in the estufa; the cacique, war chiefs, and all the medicine men were there. José Poacanti, the acting governor, was talking in a loud voice about moving Kawecpima [mythical mountain of the north where Cakak, the supernatural who sends snow, lives. Sometimes identified with Mt. Taylor]. Some young men had been asking such questions as, "How can medicine men make dead people alive?" and other skeptical questions. José Poacanti was talking about the powers of the medicine men and about moving this mountain.⁵¹

I sat down by the ladder. Some people said to the little officers, "Why don't you make them come into the middle?" and, "Why don't you make them kneel down?" The Bickales made us go out into the middle of the estufa. Then the old men asked us if we had said this and that. Then José Poacanti took a big Mexican-made horse-whip and began to whip us. There were about 20 or 30 of us. José would strike first one and then another. Then they made us kneel down. Some men pulled up our shirts and José Poacanti whipped us on our bare backs. He was mad [insane] when he was doing this; he was foaming at the mouth. After they whipped us they asked us if we would go to kiva, make prayer sticks, dance katsina, etc. I didn't say anything. My two sanawε [mother's brothers] were there. They tried to persuade me to go the old way. In fact,

⁵¹ Medicine men sometimes perform marvelous "feats" of magic to demonstrate their powers. (See White, 1932, pp. 122-124.)

one of my sanawε was one of the men who had reported my leaning toward American ways to the medicine men.

This went on all night and all the next day. After all the boys accused of pro-American ways had been brought into the estufa in the afternoon, the war chief had ordered the ladder to be pulled up so no one could leave. We stayed in there all evening, all that night, and all the next day.

After they got through whipping us, José asked us, "How is it going to be—good? Huh?" Then the war chief made a long talk; then the cacique, then the heads of the medicine societies, then *each* medicine man.⁵² They all said, "We've got to be one people, believe in the medicine men, in the katsina, etc." They all cried [wept] for pity.

That evening they let us go home. When I got home my mother, her sisters and brothers cried. They formed a group with me in the middle with their arms around each other and wept. My mother cried *so loud*. Then I began to cry. I didn't cry in the estufa, but now I felt sorry for my mother and her brothers and sisters. My back was raw and bleeding. My mother put lard on it to help it heal. I couldn't sleep for 3 nights. Afterward the skin peeled off my back in strips.⁵³

After that I used to go to the estufa, make prayer sticks, dance in the katsina dances, and take part in their ways. None of my brothers or cousins had been whipped. But they never scolded me or made fun of me. Some time after the whipping, I went out to sheep camp; I used to stay out in sheep camp a lot. I didn't know which way to go [i. e., whether to stay Indian or become Christian-American].⁵⁴ I used to read the Bible a lot. I let my hair grow long. I carried corn meal [in the leather pouch to pray with].⁵⁵

This was the only time they ever whipped the boys like that. Some people [James Miller, a progressive, who died about 1930, was among them] didn't like the way the boys were whipped. They had José

⁵² Eighteen or twenty hours was not too much for all this speech-making.

⁵³ During all this account the informant had made virtually no mention of his own thoughts and feelings. Upon being questioned directly about these, he had practically nothing to add. He experienced intense pain during the whipping; he felt sorry and wept when he got back home, and no more. This is not to be attributed to a faulty memory, I believe, for the experience was profound and seemed to remain vivid in his memory. This neglect of the subjective phase seems to be due to a prevailing lack of habits of self-analysis among Pueblo Indians.

⁵⁴ But the informant did not tell how he debated the question to himself.

⁵⁵ The informant was, apparently, "going both ways" at this time. Outwardly he was conforming to Indian ways by participating in ceremonies, letting his hair grow long, and by carrying a pouch of prayer meal. But, in response to a direct question, he said that when he prayed with the sacred meal that he prayed to God! And he continued to read his Bible. He eventually became a Christian and broke with the "old ways."

Poacanti arrested and put in prison in Albuquerque for 10 years [1889-99, estimated].⁵⁶

When he got back they had a meeting in the Komanira. José talked to them. He wept and told them he had done wrong and asked them not to feel mad or hard toward him, etc. After that the old men let the younger men wear trousers, shoes, etc. They could advise and urge them to remain Indian, but they couldn't whip people any more who did lean toward American ways.⁵⁷

MY INITIATION INTO KACALE

One evening my mother said to me, "The Kacale are coming to get you sometime this evening—after dark." My father had given me to the Kacale when I was a little boy; now they were coming to get me to put me in [i. e., initiate me].

After dark two Kacale came to get me. First they prayed; then they led me over a "road" [a line of meal drawn on the floor] that they made for me. When we got to the Kacales' house they told me to sit down and fold my arms. They were going to get some others [to be initiated]. One of the head Kacale was a Flint medicine man. After all of the boys to be initiated had been brought in, the head Kacale told us why we were there, what we would have to do, etc.

Then three Kacale started making the meal painting. They brought all their things—honani, medicine bowls, beads, fetiches, hawk-tail feathers, etc.—and arranged them on the altar. The head Kacale took some yakatca [red ocher] and put a spot on the head and breast [in the region of solar plexus] of each one of us. They then began to sing. They brought us up to the altar. The head Kacale dipped the hawk-tail feathers into the medicine bowl and sprinkled all of us, the altar and everything. There was one old lady Kacale there; she brushed our hair. Then they sang *Gacpeti* songs until almost midnight, when we went home.

We had to go to their house each night for 4 consecutive nights. On the third night they gave us the mush to drink.⁵⁸ After we had drunk the mush, they gave us a cigarette which they lighted from

⁵⁶ José was only the willing hand with which the priests and medicine men wielded the whip.

⁵⁷ This episode is characteristic of the career of Pueblo culture subjected to the inroads of American culture. Two factions—pro-American and anti-American—develop and become more distinct and antagonistic as time passes. (See Parsons, 1939, p. 1132 ff.)

In 1931 an Acoma Indian woman told a U. S. Senate subcommittee, during a discussion of political factions at Acoma: "I am with the majority. I am supposed to be a reactionary." Senator Bratton: "You are a reactionary?" Mrs. Lola Garcia: "Yes, sir; that is what they call me." The other "party," the minority, she called the "Progressives." Hearing before a Subcommittee of the Committee on Indian Affairs, U. S. Senate, pt. 19, p. 10166. Washington, 1932. (See also White, 1932, pp. 61-62.)

⁵⁸ This mush is a mixture of corn meal and water in which are mixed the nastiest, most repugnant things they can think of. (See White, 1932, p. 100.)

a stick of glowing [dead] cactus wood. We smoked. On the fourth night the head Kacale brought us some wabani⁵⁹ [prayer feather bunches]. We went out to the east with them singing this song:

I am going to ask
 Ye-a, ye-a
 I am going to ask.
 I am going
 Toward the east
 On the shell trail
 Toward the east
 Where the water of life lies
 Where the sun rises
 Bringing life, health, and happiness
 To the earth.

When we got to the eastern edge of the mesa we prayed, "got the breath," and went back to the Kacale house. When we got back the Kacale swept up the meal-painting and put their things away. They put the meal away in corn husks and stored them away. We used them afterward in the estufa to make "roads" every morning and evening. On the fifth night we started to get ready for the nakats [scalp] ceremony. (See White, 1932, pp. 98-101.)

A HUNTING TRIP

After I got back from school, in the fall of 1887, they were going to have a hunting trip. They were going to go down south of Acoma to hunt antelope and deer. Seventy-four hunters went in this party. They took 4 men to cook for them and 8 men to herd the burros. They took lots of burros along to bring back the meat. I went along as interpreter. My sanawe [mother's brother] brought 2 guns with him when he came back from California. He let me use one of them.

We went down south to a place called Ho'ck'anyk'o't (the Mexicans call it Datil). A white man was living there. There was a post-office, too. We asked for permission to camp there, near a spring. "All right, but don't camp too close," he told us. So we camped there. The burro tenders built a big corral for the burros and our horses. The cooks built a fire and cooked an antelope for our supper.

The war chief told us that we should all be in camp that evening, as we were to sing our hunting songs. After supper, the boys built a big fire. The war chief put down two honani [corn-ear fetiches], one belonged to the cacique (who did not come) and one belonged to a medicine man who was in the party. Each hunter had a caiyaik⁶⁰

⁵⁹ These had something to do with the Opi, but just what the connection is I did not learn. The Opi are very close to the Koshare. (See White, 1932, pp. 97-101; Stirling, 1942, p. 87, fn. 87.)

⁶⁰ A stone animal fetich representing a mountain lion. Medicine men who have power over game animals are called caiyaik. Birds and beasts of prey are the "real" caiyaik, however, and, among these, the mountain lion is foremost. (See Stirling, 1942, p. 23.)

in a buckskin bag, together with corn meal, beads, etc. The hunters put their fetiches down in front of the honani. They all sang hunting songs until about midnight.

At daylight everyone was up, and as soon as they had eaten they started out to hunt. The hunters wore an antelope costume: a stuffed antelope head worn on the head, the face painted, and maybe some kind of shirt to make them look like antelope. I went out with my sanawe. After we got a few miles from camp we saw lots of antelope—like a big herd of sheep. The hunters killed 744 on that one day. One man killed 34 by himself. When a man shot one, he didn't stop to skin it but went on and killed some more. After the first day they started skinning the antelope and cutting up the meat to dry.

When a man would start to skin an antelope he would take out his heart and dip his caiyaik in its blood to feed him; then he would put the fetich back in his pouch. If the antelope were female, the hunter would take out her stomach, cut it open, and then place her vulva in the stomach and sprinkle them with pollen. If the antelope were male, his penis and testicles were similarly placed in the stomach and sprinkled with pollen. Deer are treated in the same way. No meal is put in the animal's mouth.

We stayed out there about 2 weeks. We spent a lot of time cutting up the meat and drying it. We hunted a little, too, but we didn't kill much after the first day. When we were about ready to leave we found we didn't have enough burros to carry the meat, so the war chief sent some boys back to Acoma to get some more.

While we were waiting for the burros we used to hunt. One day I was out in the hills with a man. He was a Kapina tciaiyi. Late in the afternoon we came to a small hill. We sat down to rest for a while. "I'll go down this way and you go that way," my partner told me, "and we'll meet down there." "All right," I said. So he went away. I sat there for a while. Pretty soon I heard something coming, making cracking noises. It was a bear. He was eating acorns—you could hear him cracking them. He came up close, but he didn't see me. I was scared. I had never seen a live bear before. I didn't know what to do, whether to run away or shoot the bear. Finally I shot the bear. She jumped up high in the air and ran around. I ran away as hard as I could. I called to my partner, or to anyone who might be near. My partner came running up. "I shot a bear," I told him. "Where? Did you shoot him good?" "I don't know."

Then we began to trail the bear; every now and then we'd find a spot of blood. Sometimes the bear lay down to rest. After a long time we overtook her; she was lying down in a sort of a cave. I was still scared. "I'm going to shoot her again," I said. "No!" my

partner told me. He took a long pole and poked the bear. I had my gun ready, but she didn't move. She was dead. My shot had hit her in the back and gone through her liver and lungs.

Then we started to skin her. My partner told me not to skin below the bear's "elbow." I asked him if we were going to take off the maci'nyi.⁶¹ "Yes." We skinned her. Under her skin she had a thick coat of fat. Then my partner took out the bear's stomach. Then he started to take out her heart. He told me to go away. I could not see what he did with the heart and stomach. Those tcaianyi alone know how to do those things; nobody else can watch them. After a while he called me and told me to come. The heart and stomach were gone.⁶²

We cut the bear up. She was greasy and very heavy. We took only the skin and two pieces of ribs back to camp. The medicine man began to cure the macinyi. He would fill them with hot sand to dry them out. He stuffed grass in them before we left. The next morning we went after the rest of the bear. Bear meat is good to eat. It's just like fresh pork.

The boys had returned from Acoma with the burros, so we packed up our meat and started back. When we got home I gave the bear skin to a Fire medicine man [his father, we recall, had been head of this society]. He would use it to cover a stool for the Opi to sit on in the nakats [scalp] ceremony. My partner, the Kapina tcaianyi, kept the macinyi.

⁶¹ Macinyi are the bear-leg skins used by Keresan medicine men in curing patients and in fighting witches. They are eagerly sought, as well as entire bear skins. In a Sia myth, Masewi and Oyoyewi, the war god twins, killed a bear and skinned him in the same manner as this medicine man did—removing the skin from the paws, with claws attached, and cutting them off from the rest of the skin (Stevenson, 1894, p. 47). Taos Indians usually sell the bears they kill to the Domingo Indians or to some other Keresan people. (Evidence that Taos people, as they say, have no bear medicine.—E. C. P.)

⁶² The bear is the most important of the animal supernaturals from whom the medicine men receive their power. (See White, 1932, p. 110, fn. 2.)

TWO ACOMA TALES

BASITYAMUTI (BUSHY HAIR YOUTH)⁶³

A long time ago the people lived down at the bottom of the Acoma mesa on the south side. There was one man named Kowai'coteroro.⁶⁴ He was the best hunter of them all. He used to trap deer and antelope; he always killed lots of deer. He was a good man, but the people did not like him. But he always treated them very nice. Whenever they came to ask for meat Kowaicoteroro's wife always gave them some. Then Kowaicoteroro took his wife and family—they had some daughters and one son—and went to Tsi'a'ma to live. Tsiamas was southwest of Acoma.

Kowaicoteroro's son was named Basityamuti (Bushy Hair Youth). He was a brave youth. He wore very ugly clothes and an ugly mask. Whenever he went out he always wore this mask. But when he came back home he would take it off.

Then Kowaicoteroro died. Basityamuti and his mother were all alone. No one liked Basityamuti because he was so ugly. When they had katsina dances at Acoma, Basityamuti and his mother always used to go and watch the dances, but they never talked to anyone because the people did not like them. Basityamuti was always lucky with his crops; he always had plenty of corn, beans, and pumpkins. The other people did not always have enough food. Sometimes they would go to Basityamuti and ask him for some food. He always gave them some. Sometimes they would come to trade buckskins, mantas, etc., for food; Basityamuti always had lots of these, and beads, too.

Basityamuti's father and mother believed very much in the katsina. At each meal⁶⁵ the mother would take a little bowl and

⁶³ These Acoma tales were recorded in 1934 from the same informant from whom the variants were recorded in 1928 by Mr. Stirling. The first tale, Bushy Hair Youth, was not told Stirling as part of the Origin myth except perhaps as an afterthought, and so Stirling's version has been included here as a variant of the tale told in 1934. The second tale of pursuit by the ghost girl was also told Stirling and was included in the Origin myth, just as its Zuñi parallel is included in the Emergence myth of Zuñi; but the ghost girl tale was given White as an independent tale. The variability or flexibility of the narrative art of the Pueblos has been commented upon repeatedly; in these tales as told by the same person at different times we have another example.—E. C. P.

⁶⁴ This is the name of a dart which is thrown, in a game, at pumpkins. The main piece and shaft is a corn cob. It has a sharp pointed stick in one end and two feathers in the other. (See Stirling, 1942, pl. 16, a.)

⁶⁵ Informant's note: "At this time the people used to eat a late breakfast and then only one other meal a day."

put a bit of each kind of food into it. Then she would go up on the roof. She would stand facing Wenima, where the katsina live, and pray to them for anything that she wanted to get. Then she would put some guayaves [wafer bread] in the drain trough and then pour the stew, or whatever she had, onto the guayaves. Basiyamuti and his mother never *knew* whether this food ever got to the katsina at Wenima or not. But they believed in them [i. e., the katsina] so much in their hearts that they always offered them food in this way. This is the way they lived.

Tsatsyao hotcanyi [the war chief] lived in Acoma. He had four daughters. Three of them were married. There was only one left. She was the prettiest one of all. All the people liked her. Lots of young men asked her to marry them. Cakak⁶⁶ and other spirits used to bring all kinds of clothes for her and for her mother and father and try to marry her. Her parents used to say, "All right, we accept you, but I don't know what our daughter will say." Then the man would ask the daughter to marry him. She would say, "I like you all right, but I don't know what my sister will say. Come in this room and we will ask her." So she would take the man in the next room. She had an abalone shell fixed in the plaster on the wall. Down below, on the floor, was a pile of corn meal covered with a white manta. "Take some corn meal," the girl would tell the suitor, "and throw it against my sister [i. e., the shell]. If she accepts you the meal will stick to the shell, but if she does not, the meal will fall to the floor." All of the men would try but always the meal would fall to the floor instead of sticking to the shell. So the girl would not marry them. So the men would take their presents back and go home.⁶⁷

Now Basiyamuti decided that he would try to marry the war chief's daughter. He began to prepare, to make all the presents that he would need for the girl's father and mother and for the girl. He worked on these for a long time. His mother used to ask him what he was doing. "I am getting ready to marry Tsatsyao hotcanyi's daughter," he would say. "What is the use of trying?" his mother would ask. "Many men have tried to get her—even Cakak, even Maiyotcuna⁶⁸—and they can't do it." "But I am going to get her," Basiyamuti would say.

Finally Basiyamuti had everything ready. Then one day he set out. He told his mother to wait for the girl to come back with him. "All right! I'll be waiting," she said. Basiyamuti went to the pueblo and through the middle of the plaza. All the people saw

⁶⁶ The spirit of the North.

⁶⁷ For meal test, compare Zuñi, Benedict, 1935, p. 182 ff., p. 377.

⁶⁸ The spirit of the South.

him coming. They all laughed at him and made fun of him. Basiyamuti got to the war chief's house. He stood at the bottom of the ladder for a while; maybe he was praying. Then he went up. "Kaiya! I'm coming," he said, "Let me come in." "Yes; come in!" the war chief called out. Basiyamuti went in. He laid his bundle on the floor and began to talk. He asked for the girl. The mother and father said all right. The girl was in the next room. They called her in. She spoke pleasantly to Basiyamuti. "Yes," she said, "I'll accept you if you have everything for my father and mother and for me to wear." Basiyamuti undid his bundle and started to hand out the presents. "This is for you, Naicdia [father]," he said, "and this for you, Naiya [mother]." And he gave the girl her presents. Everything was complete.

So then the girl said, "All right, Basiyamuti, you have everything that is necessary. But I will marry you only if my sister is willing." Then the girl took Basiyamuti into the next room where the shell was. She told him to throw some corn meal against the shell. "If my sister is willing for you to marry me the meal will stick to the shell," she said. Basiyamuti threw the meal onto the shell. It stuck. The girl took the meal off the shell and put it into her basket of meal. Then she took her basket of meal in to her mother and told her mother and father that she was going to marry Basiyamuti. They were glad. "All right! I'm so glad you have accepted him," they said.

Then the girl's mother got a big basket. On one side she put inawi (corn flour) and on the other side she put ckaiotsa hati⁶⁹ and itya hati (made of prickly pear cactus). (When a girl took a basket like this to a boy's mother and father it meant a marriage.) Then Basiyamuti went out to go back to his home. The girl followed. When the girl had gone down the ladder two steps she paused and her mother put the basket on her head on a mack⁷⁰. Basiyamuti went back to his home followed by the war chief's daughter.

It was almost noon when Basiyamuti and the girl got to his home. Basiyamuti's mother saw them coming. She was very glad. When Basiyamuti got to the foot of the ladder he stopped and called up, "Dnyu! Upstairs!" "He-o!" his mother answered. She came out. "My son, are you bringing the girl?" she said. "Yes." Basiyamuti went up the ladder. The girl followed. Basiyamuti's mother came close to the ladder. When the girl got to the top, Basiyamuti's mother took the heavy basket off her head and took

⁶⁹ See p. 349.

⁷⁰ Ring of plant fiber placed on head to carry a heavy water jar or basket. (See Stirling, 1942, pl. 9, fig. 2.)

it inside the house; she set it down on the north side next to the doorway. Basiyamuti went in the house and into an inside room. After Basiyamuti's mother had put the basket of meal down she went to the girl. She hugged her and said, "You are my biyai [relative by marriage]; I am so happy that you have come to live with us."⁷¹ Then Basiyamuti came out. He had taken off his mask and his old ragged clothes. The girl did not recognize him. He came up to her and embraced her. The girl was scared. She thought she was doing wrong to let him hug her. But Basiyamuti told her not to be afraid. "I only wear that mask and those old clothes when I go out every day," he said. Then he took her into the inside room and showed them to her. The girl was relieved when she saw them. She laughed. "This is my costume," Basiyamuti said. Basiyamuti was very handsome. His skin was very fair because it was always covered up—no sunshine on him. The girl was so happy because she had such a handsome husband.

Meanwhile Basiyamuti's mother had taken a handful of each kind of meal and put them into her little bowl. She went up onto the roof and offered the meal to the katsina at Wenima. When she came back she got dinner ready and they ate—deer meat.

The girl lived there happily with Basiyamuti and his mother. The people at the pueblo did not like it. They talked about⁷² her and about Basiyamuti too. When the girl's father, Tsatyao hotcanyi, would go to the kiva the men would tease him about his son-in-law. He didn't like it. He got so that he did not like to go to the kiva any more.

Basiyamuti used to hunt. When he would get a deer he and his wife would take some of the meat to the pueblo for the Tsatyao hotcanyi. Basiyamuti always wore his mask and his old clothes when he went out. The girl never had said anything about him wearing a mask so no one knew about it. One day when Basiyamuti and his wife had gone to the Tsatyao hotcanyi's house to take him some meat he told them about how the men had been talking about them and how they had been teasing him about Basiyamuti. He said that it made him feel very bad to have the people talking about them like that. "Don't feel like that," the girl told him, "I've got a very handsome husband and he is very nice to me." Then the girl asked Basiyamuti to take off his mask and his old clothes. When he had done this, they saw he was a very handsome man. Tsatyao hotcanyi and his wife hugged Basiyamuti, they were so

⁷¹ The old custom was for the man to live with the bride in her house, but the reverse is here necessary to the story.

⁷² No one likes to be "talked about." Pueblo Indians are extremely sensitive about it.

glad. "That's just his costume," the girl told her parents, "When he comes inside he takes them off."

The men kept teasing the Tsatyao hotcanyi about his son-in-law. But he never said anything about the mask and the costume. Now the men in the kiva began to plan for a dance. They were going to have a katsina dance; two kivas were going to dance. They were going to have all kinds of fruit. They were going to make melons of buckskin and paint them to look real to throw to the people. The men were making a plan to make the girl ashamed of Basityamuti so that she would leave him. They were going to try to humiliate Basityamuti by requiring something of him at the dance that he could not do. Then the girl would get so ashamed of him that she would leave him. That's the way they planned. They told Tsatyao hotcanyi to tell Basityamuti what might happen to him. Tsatyao hotcanyi got scared. He urged Basityamuti to do his best so his wife would not be ashamed of him. Basityamuti became worried. He wondered what he could do at the dance—how he could dress, how he might sing and dance, what he could throw to the people. He worried. He couldn't sleep well.

Basityamuti went out hunting. He was going to get a lot of meat to throw to the people. He was very sad. He hunted for 3 days but could not kill a thing. On the fourth day, early in the morning, he was out on a mesa toward the west, hunting. He met a katsina. But he did not see him, as he had his head down. The katsina spoke to Basityamuti: "Samuti [my son], are you out hunting?" "Yes," Basityamuti said. "You are not going to hunt today," the katsina told him; "I have come to take you to Wenima. The katsina hotcanyi has sent me to get you." It was early in the morning. Basityamuti said, "All right, I will go with you." The katsina had an arrow of ocbiorots⁷³ (cane, bamboo). He took the arrowhead off. Then he told Basityamuti to sit down. He put the end of the hollow arrow shaft on Basityamuti's head and sucked him inside. Then he put the arrowhead back on and shot the arrow toward the west. The katsina followed the arrow, running. The katsina shot the arrow toward the west four times. When the arrow came down the fourth time it was at Wenima—near the village. The katsina came up and let Basityamuti out of the arrow shaft. Then the katsina led him through the fields into the village, to the plaza and then to the kiva where all the katsina were waiting for them.

The katsina and Basityamuti went up the ladder on top of the kiva. The katsina gave Basityamuti some advice about what to say

⁷³ Boas translates oya'·cpi'rvts' "reed whistle" (Boas, 1928, pt. 2, p. 332, line 2). Reed grass (*Phragmites communis*) and "cane" (*Arundo donax*) are sometimes called "bamboo" in the Southwest at the present time. The former is indigenous; the latter of European origin.

when he got inside. At the entrance to the kiva the katsina called out, "We are coming in!" "All right! Come in!" They went in. There were lots of different kinds of katsina there. They gave Basityamuti a stool to sit on and had him sit in the middle of the kiva. The katsina hotcanyi [chief] came over and sat close to him. Katsina hotcanyi told Basityamuti that the katsina knew all about what was happening to him back at Acoma. They knew about how the people talked about him and planned against him. They knew about how the people teased his father-in-law and how they wanted to have his wife leave him. "We don't like that," katsina hotcanyi told Basityamuti. "We like you very much," he said, "because you have always remembered us and have sent us food every time you had your meal. So we are going to help you so that those people will not get the best of you. We will give you everything you need."

Basityamuti sat up straight. He was so happy to hear this. "Now we are going to give you eight songs which you are to sing in the kiva at the dance," the katsina hotcanyi told him. Then they gave him eight songs. Basityamuti learned these songs, just the way the katsina wanted him to sing them. Some of the songs were beautiful and there were some sad ones. Then the katsina made a mask for Basityamuti, a very beautiful mask, more beautiful than any of the katsina. Some of the katsina brought in some sweet corn, roasted (tsaterɔc), four ears of each kind. They also brought in peaches, melons, and all kinds of nice clothes for himself and for his wife. They told Basityamuti to wear these fine clothes when he danced but to throw them to the people when the dance was over. His wife was to do the same.

"Now we are going to put this corn, melons, peaches, and clothes into a bundle for you to take back to your home," the katsina told Basityamuti. "When you get home go into the fourth room and untie the bundle and take the things out." So they made up the bundle. About this time Basityamuti's mother was having supper at home. She went up on the roof as usual to pray and to offer food to the katsina. The food went to Wenima at once and came into the kiva where Basityamuti was. Basityamuti saw it for himself. "Here is the food that your mother has sent us," katsina hotcanyi said to Basityamuti. Then the katsina began to eat. Basityamuti and the katsina ate all they wanted and there was still some food left.

Now it was time for Basityamuti to go back home. Katsina hotcanyi told the katsina who had brought him to take him back. Basityamuti took up his little bundle and got ready to leave. He made a speech to katsina hotcanyi and all of the katsina. He told them how happy he was that they had brought him to Wenima, how grateful he was to them for their help, and how much he appreciated it. "I will remem-

ber you all the rest of my life," he told them. Then he asked for permission to go. Katsina hotcanyi gave him permission. "We will be waiting here to see how you come out," he told Basityamuti, "to see how you are going to win out over those people." Basityamuti and the katsina left the kiva. The katsina put Basityamuti in the arrow shaft and shot him as before. Pretty soon they were near Basityamuti's home. The katsina let him out of the arrow shaft. Basityamuti thanked the katsina and said goodbye to him. Then he went on to his home.

Basityamuti got to his home before sundown. He was smiling, happy. His wife asked him why he looked so happy. Basityamuti went inside and took off his mask. Then he went into the inside room, into the fourth room. He told his wife to come in with him. "And you, too, naiya," he said to his mother. They went inside the fourth room with him. Basityamuti told his wife and mother that he had been in Wenima that day and had spent the day with the katsina. His wife and mother got scared. "Don't be afraid," Basityamuti told them. Then he told them about how he had met the katsina while out hunting and how the katsina had taken him to Wenima. He told them about how he had gone into the kiva where all the katsina were sitting and how they had told him about the people's plans to injure him, and how they were going to help him. Then he showed his mother and wife the little bundle of things that the katsina had given him. His mother undid the bundle and started to take the corn, melons, peaches, and clothes out. As she took them out they multiplied many fold. The mother put them in piles on the floor. Basityamuti told his wife and mother about how the food that his mother had offered to the katsina came into the kiva while he was there and how it was more than enough for all of them. The mother and daughter were delighted. They were so glad that the katsina were going to help Basityamuti win out over those people. And they were glad to know that the food that they sent to the katsina really got there.

Basityamuti began to get ready for the dance. He practiced his songs and got his costume and food ready. His mother and wife were to dance with him. They got their costumes ready, too.

The night of the dance came. Tsatyao hotcanyi came to Basityamuti's house and asked him how he wanted it. Basityamuti said, "Let them dance first. Then we will go out from here [to the kiva for our dance]." Tsatyao hotcanyi saw the pile of fresh corn and fruit. Basityamuti told him about how he had gone to Wenima and about how the katsina were going to help him and how they had given him this fruit. Tsatyao hotcanyi was kind of scared. He wondered what kind of a man Basityamuti was. Basityamuti let the war chief eat all the fruit and corn that he wanted. Then Tsatyao hotcanyi went back to his home. He was very happy.

That night all the people went to the big kiva to see the dance. The men dancers came in. They were dressed like katsina. They danced very well. They had their imitation fruit and melons, made of buckskin and painted, which they threw to the people. They danced twice, then they went out of the kiva. Then Basityamuti and his wife and mother came. He was dressed like Kanatca katsina and talked like him. The people heard him coming. He got to the top of the kiva. They asked him to come in (by shaking their rattles). Basityamuti went in, his wife and mother came after him. They were carrying lots of corn, melons, and fruit in big baskets. As soon as they got in the kiva the odor of the fresh sweet corn spread around as if it had just come out of the oven. They put their baskets down and started to dance. The people crowded around. Other people stood up so they could see. After the first dance, Basityamuti began to throw his presents to the people. He kept on throwing his gifts until some people had more than they could carry and still there were things left in the baskets. Then Basityamuti and his wife and mother began taking off their fine clothes and throwing them to the people. Some of the dancers who had gone out before Basityamuti came in, came back to watch. Then they went out and got the rest of the dancers to come in and watch Basityamuti. The dancers became ashamed and wanted to quit. One of the *teukacac hotcanyi* [little chiefs] was sent to Basityamuti to tell him that the other dancers were not coming back and that he would have to finish. Basityamuti was willing. He did his best. He went back to his home and brought more fresh corn, fruit, melons, buckskins, and beads. Each time he came back he used another song that the katsina had given him. Then he would distribute more presents to the people. He did this all night. Then it was all over.

From that time the people respected Basityamuti. When his father-in-law died the people made him war chief. Basityamuti came back to live in the pueblo. He continued to wear his old clothes and his ugly mask, but the people never made fun of him any more. Basityamuti and his wife raised some children. Everybody liked the children because they thought that Basityamuti was some kind of a spirit.

VARIANT ⁷⁴

A war chief had two daughters. The youngest was liked by everybody. All the young men wanted her for wife. They went to her home to try to win her love by bringing presents of clothes for her and for her father and mother and other sister. The man would bring these and say to the girl, "I bring you these presents because

⁷⁴ Recorded by M. W. Stirling in 1928.

I love you and because I am interested in you." It happened that she had a large shell (*wapñi'*, "abalone") which was plastered on one of the walls of her home and when a man came she always answered him by saying, "I will not consent yet, let us ask my sister (the shell). If she consents then I consent also. If this corn meal, when you throw it, sticks on the shell, it means that she consents." So she gave some of the meal in a bowl and the man would take some and throw it against the shell and she would look to see if any stuck on. Many tried and failed.

There was one very poor man, who lived at a distance. His name was *Kasewat*.⁷⁵ He always wore an ugly mask and clothes when he went out and was the joke of the town. The people would joke with the girl saying, "You will marry *Kasewat*." But in the house with his mother he would take it off. But every one knew he was a great hunter. This man was a great friend of the *katsina*. He got everything from the *katsina*, clothes etc., complete for every member of the girl's household. As her father was war chief he required extra things, like a quiver and certain kinds of bows and arrows. He was instructed by the *katsina*, so one day he went out hunting. He was a fine hunter.

While out on the hunt he was met suddenly by a *katsina*. He was frightened, for it was the first time he had ever met a *katsina*. The *katsina* asked him, "Are you hunting?" He said, "Yes." So the *katsina* said, "Leave your hunt. You are not to hunt today, as I have been sent to bring you to *Wenimats*, the home of the *katsina*, to the chief *katsina*." Though afraid, he consented to go. The *katsina* told him to come and stand in front of him. This *katsina* had arrows made of reeds. He placed one over the top of his head and sucked him into the arrow. The *katsina* let this arrow fly in the direction from which he came. The *katsina* recovered it and let it fly four times before it reached the place. The fourth time it landed just at the boundary of the eastern fields of *Wenimats*. Then the *katsina* blew him out of the arrow. The *katsina* instructed him to follow.

There were many other *katsina* on guard in the fields and they played with *Kasewat* in passing and his guide told him not to fear. They went in a western direction. There were many wonderful things growing in the field. The trail was laid with abalone shell. They finally came to a *kiva* (*kaach*; in the ground). They said the name of the chief *katsina* was *Tsitsanits*. He was the father in the

⁷⁵ Cf. White, 1932, pp. 172-180, where *Kasewat* is associated with *Flint Wing* and a giantess. The *Laguna Flint Wing* story has as hero *pasts'mi'tʔ*, "Shock-of-Hair-Youth" (Boas, 1928, pt. 1, pp. 111-118).

kiva. When they arrived at this hole the katsina yelled down the hole saying, "Down below, I have brought Kasewat. Will he be allowed to enter?" They answered, "Yes, let him come down." So the katsina who brought Kasewat told him, "When you get to the bottom say, 'Koatsi (how do you do!), mothers and your spirits. You are passing this far in a day.' When you get to the bottom go to the right, to a dua'watsi'ish shrine and pray, spreading corn." Kasewat did as instructed and after finishing his prayer he saw many katsina sitting around waiting for him.

One of them stood up and caught him by both hands. Along the north side of the room the floor was laid with turquoise and there was a loose bear skin laid out there where he was told to sit. After he was seated the leader sat in front of him and asked him, "Have you come, my son?" He said, "Yes." "I have called you here because you love her [the war chief's daughter]. Every day we get an offering from you of food. Every time you sit down to eat you have offered us part of your food, which we have always received. All of this food you have raised or killed yourself. We have always been thinking of you and we know that you are thinking of wanting this girl. We think of helping you because you have been single and have been living poorly. We want you to have her and so we will help you if you wish. We are going to tell you how to win her. We are going to give you complete clothes for all of them in her house and for herself. You know many men have come to her house, but they all always left out the uaishtiakayani⁷⁶ which symbolizes the rainbow, the rainbow which won the first woman in the world at Shipapu. This will be included in the gifts you are to take to her. This is the reason we have called you here." They put all the clothes etc. in a bundle for Kasewat and told him to go there. "I am also going to give you some herbs; blow them in the direction of the pueblo. I will teach you a song which you are to sing:

Today I will be lucky
 Here comes a bird boy (himself).
 The girl in the east,
 I have come to bring gifts
 With which to stir your emotions and heart.
 (Repeat four times.)"

Kasewat started home. He repeated the song over and over till he got to the south end of the village. The herb he was to chew was to move the emotions of the whole family of the girl. The war chief told his daughter that someone great was to visit them, "So when anyone comes, welcome him. I have noticed that you have never felt much regard for anyone coming to call on you." The

⁷⁶ Woman's hair frame. (See Stirling, 1942, pl. 13, fig. 1.)

girl did not say anything. As soon as Kasewat got to the east end of the village, he spit the medicine. He woke them up. When he stepped into the plaza many people saw him and they laughed at him and made fun of him because they knew he was going to this girl's house as a suitor. Some of them told him, "You will have no luck, for a man that looks like you would never be wanted in any house." He paid no attention.

Kasewat went home. When he got there his mother felt pity for her son and said, "You did not kill any game today." He answered and said, "I did not hunt as I went out to do this morning. A katsina took me to Wenimats." His mother was much excited but he did not tell her what happened there until the next day. Then he told her, "I am going after a maiden, the war chief's youngest daughter." The mother said, "I sympathize with you, as I do not think the girl will like you. Do not think of doing such a thing." But Kasewat insisted and told his mother not to worry but to wait for the girl. The mother had much faith in her son, so she believed him and started to prepare a meal for the couple. She let her son go, saying, "I will wait for you both in a happy mood." So Kasewat set out for the war chief's house.

He came to the foot of the war chief's house, he said, "Dini" (upstairs, upper rooms). The oldest daughter came out. She said "Yes." "Am I allowed to come up?" The girl said, "Yes; come up." He came up and greeted them, "Koatsi, saochanyi, my officer [chief]."

So the war chief welcomed him, told him to be seated, and asked him if there was anything he could do for him. Kasewat said, "Yes. I came in like a man who doesn't obey rules (like a criminal), but I came in because I want to ask for your younger daughter. I want to ask if you will give her to me to live with." So the war chief said, "There she sits, if she wants it is for her to say." The girl thought a moment and said, "I guess so, but have you brought a complete clothing outfit for my father, mother, sister, and for myself?" Kasewat said, "Yes, I have brought what I think is complete for all of you."

His bundle was very small and did not seem to have much, but when he untied it, it was large; so he sorted out the presents to each, placing the presents of each in separate groups. After he finished the last, the war chief's pile, he laid a quiver made of lion skin that was very new. War chief noticed that this had never been brought by other men. On the top of the girl's pile Kasewat laid the rainbow comb. They were all interested. The war chief stood up and said, "Look at what he has brought me," holding up the quiver and putting it on. The girl was very glad and showed her gladness for the first time by her expression.

It was known that Kasewat always had plenty to eat, but in other ways he was poor. The girl stood up and was thankful, so she called Kasewat into the room where the shell was placed. She brought some corn meal in a heap in a special basket which was wonderfully well made. She told Kasewat to take some and throw it against her "sister" (the shell). "If any sticks you are going to take me to your house." Kasewat took some of it and threw it against the shell. It all stuck to the shell. Everyone outside was waiting, interested to know what would happen. They expected him to lose. So the girl told her parents, "I guess this is the man I have been waiting for, for my sister has consented. I am going with him to his house to live with him."⁷⁷

She put on her clothes and gave the others their presents. It happened that her costume fit her perfectly. So Kasewat said to the war chief and wife, "I am very thankful, but I do not think it is only by myself I have won her. I want to be thankful to the spirits because they have caused my success. I will allow your daughter to visit you sometimes and you will always be welcome to our house, whenever you wish. I am going to take your daughter now."

The girl's mother placed corn meal into a large basket, four different kinds of flours. One [was] made of kashaish (white corn meal), [and one of] shekaiuoisa hatí (meal of sweet corn, roasted in earth and then ground). On the other side was hati. (Corn prepared by soaking corn in a pot. When it sprouts and has soaked up the water in the pot it becomes sweet. It is taken out and dried in the sun, then ground up into sweet yellowish flour.) On the fourth side was prickly pear meal. (When ripe and soft they are picked, the thorns are brushed off and the seeds taken out and the meat is dried. Then it is ground up.) The corn and food were a return for what this man brought. Feather down was placed on top of this flour. This represented the plume on the girl's head used when she dances. So the girl placed a pot-rest on her head; her mother and sister helped her place the basket of flour on her head. After they helped her with the basket they said, "Let us go (nekämü)."

The people were much astonished to see Kasewat win out with the chief's youngest daughter. Some said, "So, that is the kind of a man that girl has been waiting for! There have been many more handsome men come for her and she has turned them away." They were surprised that she had consented to go away with Kasewat. When they reached the ground they started in the direction of his house. The girl felt embarrassed because the people were making fun

⁷⁷ Today it often happens that a girl will see a man she likes and will invite him to her house and announce that she wants to marry him. Formerly the girl went to live with the man [according to the tales].

and laughing at them. In her heart she was rather sorry. But she decided that as her "sister" had consented she would go.

Kasewat's mother had been waiting for them. Every once in a while she went out and looked in the direction she expected the two to come from. They finally arrived. When they reached the bottom of his house, Kasewat called, "Mother, I have brought you a daughter." So she greeted both of them, "You are both welcome into my house. I have made an open trail with my prayers for both of you. This is going to be your house." When they reached the doorway they climbed up; the girl was helped by her mother-in-law in taking off her basket. The mother-in-law took the basket of flour into the fourth and farthest room in the house. The girl stopped in the first room, Kasewat went into the second room, where he took off his mask. Because it is customary that the daughter-in-law does not sit down or find a place until asked by her mother-in-law, the girl waited.

When the mother-in-law came back she embraced her daughter. (The newcomer puts his right arm over the left shoulder and the person greeted does the same.) This embrace is held on such an occasion while the mother-in-law gives a prayer. "Thank you, my daughter, I am very thankful that the spirits have consented by placing breath and thought (?) and that you have not felt ashamed of us. I take you in as a member of my household. From now I will be your mother and you will be my daughter. Druwicats."⁷⁸ Then the mother-in-law said, "Sit down and make yourself at home." The girl found it a much better house than she expected. She saw the floor was covered with rugs of buffalo, lion, and bear skins and many other skins.

While this greeting was going on, the boy was in the next room taking off his every-day clothes and his mask. There was no one in the world who knew him without this costume. When he came back in the first room the girl was astonished to see one she thought was a stranger coming into the room. She did not know him for he was very handsome, but the boy said, "Don't be astonished. I am Kasewat (matted hair)." But she did not believe him. But the mother said to the daughter, "Yes; he is the one whom you married." To prove it they took her in the second room and showed her the outfit he wore outside his house. She was convinced then, and was very glad, and they always lived happy from then on.

⁷⁸ Informant's note: This word is like "amen," at the close of a prayer, or "goodbye," when one is leaving: "Go with a happy thought." It is only a greeting prayer like this that is so closed. It is used both at parting and at greeting.

MASEWI, OYOYEWI AND THE K'O'O-K^{70 79}

A long time ago Masewi and his brother Oyoyewi were very powerful against all kinds of animals; no animal could get the best of them. They were also great fighters among the people; they would go around just killing people for nothing. The ckaupictaiya,⁸⁰ or great spirits such as Cakak, Maiyotcuna, Tspina, Tsanokai,⁸¹ and some others—perhaps some katsina—did not like the way Masewi and Oyoyewi were doing. So they got together and held a meeting at the Middle of the Land (sīnatdyeica haatsi). They talked about how Masewi and Oyoyewi were going around killing people for nothing. Then they thought of a plan to put a stop to this.

The ckaupictaiya sent some of their number to a graveyard and had them dig up the corpse of a woman and bring the body to the meeting. The spirits brought the body of an old woman to the gathering. She had been dead a long time and was very repulsive looking. But the spirits brought her back to life. They changed her into a young and beautiful girl. They gave her fine clothes and buckskins to wear and lots of beads and jewelry. Then they told her what to do.

Upon orders from the spirits, the girl went to Acoma. She went up on top of the mesa to where Masewi and Oyoyewi lived, on the east side. She went to their house. Masewi and Oyoyewi invited her to come in. When they saw how beautiful she was, they invited her to live with them. She agreed to do this. Masewi and Oyoyewi each wanted to sleep with the girl. Finally the girl said, "Why can't we all sleep together? I will sleep in the middle." So that was the way they arranged it. But the boys did not sleep; first one and then the other would make love to the girl. Finally they became tired and fell asleep.

When the girl saw that the twins were asleep, she changed into a kooko. Instead of a plump, beautiful young girl she became a skinny, dirty, repulsive old woman. Her fine clothes changed into filthy old rags. After a while Masewi woke up and pulled what he thought was the girl over to him; it was the kooko. Then Oyoyewi woke up and pulled her over to his side. They noticed in the dark that her body was bony. Her hair seemed to be matted with blood. One of the boys got up to stir the fire so he could see what was wrong. When

⁷⁰ See Stirling, 1942, p. 83; Zuñi (Benedict, 1935, vol. 1, pp. 62 ff., 289).

⁸⁰ See Stirling, 1942, p. 86.

⁸¹ Spirits of the Mountains of the Directions. (See Stirling, 1942, p. 14.)

the fire blazed up they saw that it was the kooko. They scrambled to their feet and started to run out of the house as fast as they could go; they were very scared. "What is the matter?" the kooko called to them: "You love me, I love you. Why are you running away?" But the boys ran out of the house.

Masewi and Oyoyewi left in such a hurry that they did not take their weapons with them. "Where shall we go to be safe?" one of them asked. They joked a little bit: "You go back and sleep with that girl." They could not decide where to go. Finally they decided to go to Kawecdimā (Mount Taylor) in the north. They went to Cakak's house. "Who's there?" Cakak called out. "It's us, Masewi and Oyoyewi," they answered. Cakak and Uttsiti⁸² said to each other: "I bet that the kooko is after them." Then Cakak called out: "All right! Come in; lie down and sleep." So the boys went in and lay down exhausted. They fell asleep. Soon the kooko arrived at Cakak's house. "Are Masewi and Oyoyewi in there?" she called out. "Yes; they are in here. Come in." The kooko came in. "Ah, there you are, my love," she said to the boys, "I'll lie down and sleep with you." But the boys woke up and dashed out of the house.

This time Masewi and Oyoyewi went toward the west. They were very tired. It was daytime now, but the boys had to sleep. They lay down under a tree, but soon the kooko came up and they had to run off again. Finally, they came to Tspina's house in the west—near Flagstaff Mountain. They asked Tspina if they could come in. "Yes; come in and lie down." But no sooner were they asleep than the kooko came up. "Are Masewi and Oyoyewi in there?" she called out to Tspina. "Yes." "I want them to come out," the kooko said. "No. You come in here and get them yourself," Tspina told the kooko. So she went in. She tried to lie down with the war twins, but they jumped to their feet and rushed out of the house.

This time they ran to the south. They were very tired and they had had nothing to eat. Although it was daytime, they would try to get a little sleep under trees. But always the kooko would come up and they would have to go on. Finally they came to Maiyotcuna's house, at Dautyuma (South Mountain). They arrived at midnight. "Guatzi!" Masewi called out. "Dawai-eh!" Maiyotcuna replied. They asked if they could come and rest. "Yes; come in and lie down," Maiyotcuna told them. But again the kooko came in just as they had fallen asleep and drove them forth again.

Masewi and Oyoyewi ran toward the east. Finally, they came to Ktcana kot (a steep, white mountain in the east). Tsanoka lived here. But Tsanoka would not let Masewi and Oyoyewi come in. He

⁸² See Stirling, 1942, p. 1.

told them to go back to see Kaukaputerame:⁸³ "Perhaps he might help you," Tsanoka told Masewi. So the war twins set out for the home of Kaukaputerame. When the kooko arrived at Tsanoka's house he turned her away, too. "We can not use you here," he told her.

Masewi and Oyoyewi returned to Acoma where Kaukaputerame lived, down at the bottom of the mesa on the southwest side. The kooko kept following the twins. When Masewi and Oyoyewi got to Kaukaputerame's house they called out "Guatzi!" "Who is it?" Kaukaputerame asked. "Masewi and Oyoyewi." Kaukaputerame asked them to come in. Masewi told him about how the kooko had been chasing them. "Is that so?" said Kaukaputerame. "Well, we'll see what we can do." So Kaukaputerame got out his baby's head. It was like a ball and full of blood. (He used this head to win from people when they came to gamble with him.) He wrapped the head in a piece of buckskin.

Pretty soon the kooko came up. She came in Kaukaputerame's house. When she came in, Kaukaputerame threw the baby's head at her and hit her in the chest. When it hit her, the head cried out like a baby and the blood splashed on the kooko. This blow killed the kooko, and her body disappeared "like dust."

Now Kaukaputerame said to Masewi and Oyoyewi: "You have been going around the country killing people for nothing. This is wrong. Now if you want to be safe you've got to fast. You must not eat meat or salt, and you must not have anything to do with women for 30 days after you take a fresh scalp." Masewi and Oyoyewi took his advice. They went back to their home at Acoma. The next day they began to count the days; this day was number one. They had to do this by themselves. They told the people, "This will be the rule from now on for all people who kill a person. It is not right to kill for nothing. You've got to scalp and fast for 30 days after killing."

Eight days before the 30 days fast was to be over, Masewi and Oyoyewi began to practice for a scalp dance. Masewi and Oyoyewi were the head of all the people at Acoma. They asked the Koshairi to come from Hakoaikute [the place of the sunrise] and to help them, to initiate people into Koshairi. The Koshairi called the people into the kiva. In the scalp dance, the mother of Masewi and Oyoyewi took the part of the kooko. But she was dressed up in fine clothes, not rags. At the end of the 30-day period they danced the nakats [scalp dance] for 2 days.

⁸³ Kaukaputerame was "a gambler all over the world." At his shrine below the mesa, people pray to him when they wish to gamble, race, or play ball.

ACOMA NAMES OF BIRDS⁸⁴

Most of the following identifications were secured from pictures, colored plates, and descriptions in *Birds of New Mexico*, by Florence M. Bailey; some, however, were made from live or from mounted birds.

In many instances, in the following list, the name of one species only is associated with an Acoma bird name. But this does not mean that the use of this Indian name is restricted to this species; it might, or might not, be applied to other species. The scope of applicability of each term is not known. As a matter of fact, the nature of Acoma ornithological nomenclature is not well known.⁸⁵ Some terms, apparently, are restricted to a species, as in the case of hawks; there is no one term for hawk so far as I could discover. Other terms seem to be names of what we might call "kinds" of birds: there is one word for woodpecker, although we have two different genera represented. All hummingbirds are called miter^a.⁸⁶

Some of the names appear to be onomatopoeitic.

LIST OF ACOMA BIRD NAMES

- Canada goose (*Branta canadensis canadensis* L.), cu'ta.
 Duck, wai'oca.
 Turkey vulture (*Cathartes aura septentrionalis* Weid), ma-caw'^l.
 Cooper's hawk (*Accipiter cooperi* Bonaparte), cti-t'^l.
 Sharp-shinned hawk (*Accipiter striatus velox* Wilson), i-tsa.
 Western goshawk (*Astur atricapillus striatulus* Ridgway), G'a-wa.
 Western red-tailed hawk (*Buteo borealis calurus* Cassin), epi-yai.
 Desert sparrow hawk (*Falco sparverius phalaena* Lesson), Tc'it'ik'a.
 Dusky grouse (*Dendragapus obscurus obscurus* Say), cro'terok'a.
 Quail (*Colinus virginianus texanus* Lawrence), ck'ack'a'ok'a.
 Turkey (*Meleagris gallopavo merriami* Nelson), Tsi'n'a.
 Sandhill crane (*Grus canadensis* L.), cu'k'ako.
 Killdeer (*Oxyechus vociferus vociferus* L.), ctowictowik'a.
 Greater yellowlegs (*Totanus melanoleucus* Gmelin), wai'ctcapa.
 Mourning dove (*Zenaidura macroura marginella* Woodhouse), ho'o'k'a.
 Road-runner (*Geococcyx californianus* Lesson), ca''ack'a.

⁸⁴ There are lists of bird names in White (1935, pp. 204-205; and 1932 a, pp. 62-63). *Ornithological Vocabulary of the Moki Indians*, by Edgar A. Mearns (1896), presents quite a complete list of Hopi bird names. Tewa names may be found in Henderson and Harrington (1914, pp. 33-46).

⁸⁵ "Much more important than mere nomenclature is the idea of which nomenclature is but an attempted expression" (Henderson and Harrington, 1914, p. 9). They also state that "Indian nomenclature as a whole recognizes differences, not relationships" (p. 8).

⁸⁶ The Hopi, also, designate all hummingbirds by one term, but they have different names for various kinds of hawks (Mearns, 1896).

"Night owl," k'o'k'op.

Burrowing owl (*Speotyto cunicularia hypugaca* Bonaparte), h'ana'kan'i.

Poorwill (*Phalaenoptilus nuttalli nuttalli* Audubon), cpyu'k'a.

Nighthawk (*Chordeiles minor*), also called cpyu'k'a.

White-crowned sparrow (*Zonotrichia leucophrys* J. R. Forster), k'aiya-k'atu.

Hummingbird (family Trochilidae), mi'ter^a.

Natalie's sapsucker (*Sphyrapicus thyroideus nataliae* Malherbe), cpi-k'a.

Rocky Mountain hairy woodpecker (*Dryobates villosus monticola* Anthony), cpi-k'a.

Arizona woodpecker (*Dryobates arizonae arizonae* Hargitt), cpi-k'a.

Red-shafted flicker (*Colaptes cafer collaris* Vigors), kauwa-ta.

Ash-throated fly catcher (*Myiarchus cinerascens cinerascens* Lawrence), k'abo'm^o.

Desert horned lark (*Otocoris alpestris leucolaema* Coues), si'ya.

Long-crested jay (*Cyanocitta stelleri diademata* Bonaparte), croi'siya.

Arizona Pyrrhuloxia (*Pyrrhuloxia sinuata sinuata* Bonaparte), k'vk'ane croi'siya.

Barn swallow (*Hirundo erythrogaster* Boddaert), sese'ek'a.

Woodhouse's jay (*Aphelocoma californica woodhousei* Baird), hi-tsu.

Magpie (*Pica pica hudsonia* Sabine), dya'akaiya.

Western crow (*Corvus brachyrhynchos hesperis* Ridgway), steu-ta.

Gray titmouse (*Baeolophus inornatus griseus* Ridgway), cti'tsitsi.

Meadowlark (*Sturnella neglecta neglecta* Audubon), stea'na.

Canyon wren (*Catherpes mexicanus conspersus* Ridgway), cuti.⁸⁷

Rock wren (*Salpinctes obsoletus obsoletus* Say), sv't^l.

Western mockingbird (*Mimus polyglottos leucopterus* Vigors), cpa'ati.⁸⁸

Green-backed goldfinch (*Spinus psaltria hesperophilus* Oberholser), Tssetsek'a.

Western blue grosbeak (*Guiraca caerulea interfusa* Dwight and Griscom), h'a'tyaiya.

Say's phoebe (*Sayornis saya saya* Bonaparte), mo-t.

Sonora red wing (*Agelaius phoeniceus sonoriensis* Ridgway), mai'yairotv.

Brewer's blackbird (*Euphagus cyanocephalus* Wagler), ck'ock'otsu (the o is almost aw).

Bullock's oriole (*Icterus bullocki* Swainson), wi'ik'a.

Cooper's tanager (*Piranga rubra cooperi* Ridgway), wai'yo.

⁸⁷ The head war chief at Acoma is called cu-timīti, literally "canyon wren boy" (White, 1932, p. 45; cu-ti was not identified in that report).

⁸⁸ The second war chief at Acoma is called cpa'atimīti, "mocking bird boy" (White, 1932, p. 45).

ACOMA NAMES OF ANIMALS ⁶⁹

Identifications were made from living and mounted animals, and from pictures, colored plates, and descriptions in *Wild Animals of North America*, by Edward W. Nelson (1918). Most of the remarks concerning ornithological nomenclature will apply here. The use of the Acoma names is not necessarily restricted, in every case, to the species with which they are associated respectively in the following list. Any species of fox, I believe, would be called má'ctya; any species of deer Dya'nyí (although the Arizona white-tailed deer is called "sweet corn" deer). There is an interesting aspect to their names for squirrels. The California ground squirrel (*Citellus beecheyi*) is not called by the same term as the striped ground squirrel (*Citellus tridecemlineatus*), which is of the same genus, but is called by the same term as the gray squirrel (*Sciurus carolinensis*), which is of a different genus. The striped ground squirrel is called by the same term, however, as the antelope chipmunk (*Ammospermophilus leucurus*), which is of a different genus. But, in appearance, the striped ground squirrel resembles the antelope chipmunk more than it does its closer relative, the California ground squirrel. The Kaibab squirrel (*Sciurus kaibabensis*), although belonging to the same genus as the gray squirrel, is called by a different name. The general appearance of the animal seems to play a major role in terminological classification.

LIST OF ACOMA ANIMAL NAMES

Buffalo (*Bison bison*), mocal'itc^{7a}.

Bear (family Ursidae), ko'haiya.

Grizzly bear (*Ursus horribilis*), ko'haiya Tsicka'tsic.

Deer (family Cervidae), Dya'nyí.

Arizona white-tailed deer (*Odocoileus couesi*); Tsits (water) Dya'nyí, or cpi'nyínyí ("sweet corn") Dya'nyí.⁶⁹

Antelope (*Antilocapra americana*), kí'ts.

American elk (*Cervus canadensis*), Dyuca.

Rocky Mountain sheep (*Ovis canadensis*), ck'a'ack⁷⁰.

Mountain lion (*Felis concolor*), mo'k'aite^{7a}.

Bobcat (*Lynx rufus*), Dya't⁷¹.

Beaver (*Castor canadensis*), G'o'o'o.

⁶⁹ A list of animal names may be found in White (1935, pp. 202-203); see, also, Hender-son and Harrington (1914), for Tewa animal and reptile names.

⁷⁰ cpi'nyínyí is said to mean "popped corn" at Santo Domingo (White, 1935, p. 137). Dumarest speaks of Rshpenini, in a list of secret dances at Cochiti (1919, p. 184), but does not translate the word. Bandelier recounts a San Felipe legend about a dwarfish people called Pinini (Bandelier, 1892, pt. 2, p. 188; White, 1932 a, p. 7).

- Badger (*Taxidea taxus*), Dyup¹.
 Gray timber wolf (*Canis nubilus* Say), k'a'k'ana.
 Coyote (*Canis mearnsi*), Tso'ck'i.⁹¹
 Raccoon (*Procyon lotor*), Tsiya'k'aiya'ctu.
 Skunk (subfamily Mephitinae), G'ai'cate⁰.⁹¹
 Porcupine (*Erethizon dorsatum*), i'ica.
 Prairie dog (*Cynomys ludovicianus*), nī'ti.
 Red fox (*Vulpes fulva*), ma'act^{7a}.
 Jack rabbit (*Lepus californicus*), pe'tc^{7a}.⁹¹
 Cottontail rabbit (*Sylvilagus floridanus*), Dyε't^{7a}.⁹¹
 Muskrat (*Fiber zibethicus*), Tsits (water) Tsv'na (rat).
 Rat (*Rattus norvegicus*), Tsv'na.
 Mouse (*Mus musculus*), Siya'na.
 Wood rat (*Neotoma albigula*), G'o'ts Tsvna (this may be G'o'ti, "mountain" rat).
 Gray squirrel (*Sciurus carolinensis*), si't^{7a}.
 Kaibab squirrel (*Sciurus kaibabensis*), G'ai'yam^a.
 Flying squirrel (*Glaucomys volans*), G'ai'yam^a G'aiyana'nic.
 Antelope chipmunk (*Ammospermophilus leucurus*), Beri'na.
 Striped ground squirrel (*Citellus tridecemlineatus*), Beri'na.
 California ground squirrel (*Citellus beecheyi*), si't^{7a}.
 Pocket gopher (*Geomys bursarius*), Teu'na.
 Kangaroo rat (*Dipodomys spectabilis*), k'a'tsa.
 Painted chipmunk (*Eutamias minimus pictus*), G'ai'yac⁰.
 Black-footed ferret (*Mustela nigripes*), mai'Dyup¹.⁹²
 Bat (family Phyllostomidae), piki'ki.⁹¹

MISCELLANEOUS ACOMA NAMES

- Snake, cro'wi.
 Lizard (one that looks like "he is wearing a necktie"), Tsa'acty.
 Bull frog, Dao'rak.
 "Small frogs," wa'ckv^{tcv}; "they make that kind of noise."
 Horned toad, Dabi'nock^a.
 Toad, cka'tcv.
 Fish, ck'a'ac^a.
 Turtle, he'yati.
 Housefly, tsa'pi.
 Mosquito, stco'yo'na.
 Grasshopper, sta'ti.
 Bumblebee, stco'mv.
 Butterfly, Borai'k'a.

⁹¹ There are many differences between the Acoma-Laguna vocabularies and those of the eastern Keres. For the latter (as represented by Santo Domingo): Coyote, cro'tsna, skunk, k'a'wit^{7a}; Jack rabbit, Gya'na cottontail rabbit, le-k^v; bat, sta'namak^a.

⁹² Great difficulty has been experienced in identifying this animal, which is one of the most important of the Caiyaik (supernatural animal hunters). Stevenson identifies it as shrew (*Sorex*; in Stevenson, 1894, pp. 69, 73, 128). At Santo Domingo, it was identified from a well-mounted specimen as *Sorex personatus* (White, 1935, p. 203). In a list of Tewa animal names is a name which Henderson and Harrington (1914, p. 30) translate "earth mountain lion," but which they could not identify zoologically. It appears to be the mai'Dyup¹: he is the "sacred beast of the nadir" (as *Sorex* is at Sia), and is described as a "small animal which burrows in the earth."

BIBLIOGRAPHY

- BAILEY, FLORENCE M.
1928. *Birds of New Mexico*. Washington.
- BAILEY, VERNON
1931. *Mammals of New Mexico*. U. S. Dept. Agric., Bur. Biol. Surv., North American fauna, No. 53.
- BANDELIER, A. F.
1890, 1892. Final report of investigations among the Indians of the southwestern United States, carried on mainly from the years 1880 to 1885. Pts. 1 and 2. *Pap. Archeol. Inst. Amer., Amer. Ser., Nos. 3 and 4*.
- BEALS, RALPH L., and PARSONS, ELSIE CLEWS. *See* PARSONS, ELSIE CLEWS.
- BENEDICT, RUTH
1931. *Tales of the Cochiti Indians*. *Bur. Amer. Ethnol. Bull.* 98.
1935. *Zuñi mythology*. *Columbia Univ. Contr. Anthrop., vol. 21*.
- BOAS, FRANZ
1928. *Keresan texts*. *Publ. Amer. Ethnol. Soc., vol. 8, pts. 1 and 2*.
- CULIN, STEWART
1907. *Games of the North American Indians*. 24th Ann. Rep. *Bur. Amer. Ethnol., 1902-03, pp. 3-846*.
- DENSMORE, FRANCES
1938. *Music of Santo Domingo Pueblo, New Mexico*. *Southwest Mus. Pap. No. 12*. Los Angeles.
- DUMAREST, NOËL
1919. *Notes on Cochiti, New Mexico*. *Mem. Amer. Anthrop. Assoc., vol. 6, No. 3*.
- GATSCHE, A. S.
1891. *A mythic tale of the Isleta Indians, New Mexico*. *Proc. Amer. Phil. Soc., vol. 29*.
- GOLDFRANK, E. S.
1923. *Notes on two Pueblo feasts*. *Amer. Anthrop., n. s., vol. 25, pp. 188-196*.
- GUNN, JOHN M.
1917. *Schat-Chen; history, traditions and narratives of the Queres Indians of Laguna and Acoma*. Albuquerque.
- HAMMOND, W. S.
1883. *Sexual impotence in the male*. New York.
- HARRINGTON, JOHN PEABODY. *See* HENDERSON, JUNIUS.
- HEARINGS BEFORE A SUBCOMMITTEE OF THE COMMITTEE ON INDIAN AFFAIRS, U. S. SENATE.
1932. Pt. 19.
- HENDERSON, JUNIUS, and HARRINGTON, JOHN PEABODY.
1914. *Ethnozoology of the Tewa Indians*. *Bur. Amer. Ethnol. Bull.* 56.
- MEARNS, EDGAR ALEXANDER
1896. *Ornithological vocabulary of the Moki Indians*. *Amer. Anthrop., vol. 9, pp. 391-403*.
- NELSON, EDWARD W.
1918. *Wild animals of North America*. Washington.

OTERO, NINA

1936. *Old Spain in our Southwest*. New York.

PARSONS, ELSIE CLEWS

1917. The Antelope Clan in Keresan custom and myth. *Man*, vol. 17, No. 12, pp. 190-193.

1918. Notes on Acoma and Laguna. *Amer. Anthrop.*, n. s., vol. 20, pp. 162-186.

1920. Notes on ceremonialism at Laguna. *Anthrop. Pap. Amer. Mus. Nat. Hist.*, vol. 19, pt. 4.

1920 a. Notes on Isleta, Santa Ana, and Acoma. *Amer. Anthrop.*, n. s., vol. 22, pp. 56-69.

1923. Laguna genealogies. *Anthrop. Pap. Amer. Mus. Nat. Hist.*, vol. 19, pt. 5.

1939. *Pueblo Indian religion*. 2 vols. Univ. Chicago Press.

PARSONS, ELSIE CLEWS, and BEALS, RALPH L.

1934. The sacred clowns of the Pueblo and Mayo-Yaqui Indians. *Amer. Anthrop.*, n. s., vol. 36, pp. 491-514.

STEVENSON, MATILDA COXE

1894. The Sia. 11th Ann. Rep. Bur. Ethnol., 1889-90, pp. 3-157.

STIRLING, MATTHEW W.

1942. Origin myth of Acoma and other records. *Bur. Amer. Ethnol. Bull.* 135.

VOTH, HENRY R.

1905. Hopi proper names. *Anthrop. Ser., Field Mus. Nat. Hist.*, vol. 6, No. 3.

WHITE, LESLIE A.

1932. The Acoma Indians. 47th Ann. Rep. Bur. Amer. Ethnol., 1929-30, pp. 17-192.

1932 a. The Pueblo of San Felipe. *Mem. Amer. Anthrop. Assoc.*, No. 38.

1935. The Pueblo of Santo Domingo, New Mexico. *Mem. Amer. Anthrop. Assoc.*, No. 43.

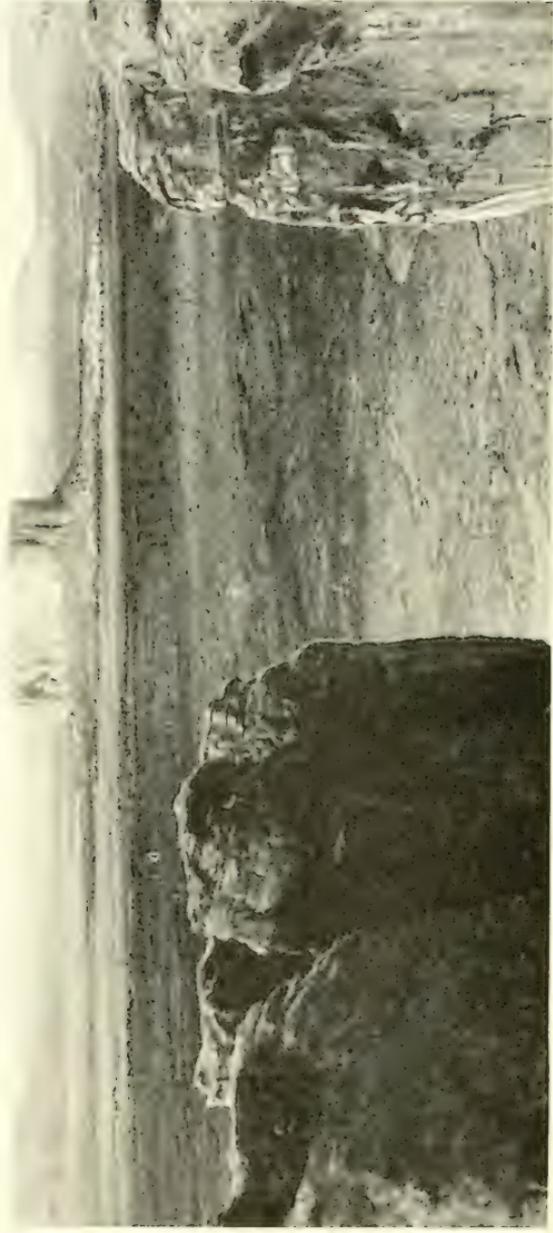
1942. The Impersonation of Saints among the Pueblos. *Pap. Mich. Acad. Sci., Arts, and Letters*, vol. 27 (1941), pp. 559-564.

1942 a. The Pueblo of Santa Ana, New Mexico. *Mem. Amer. Anthrop. Assoc.* No. 60.

MS. *The Pueblo of Sia*.



PUEBLO OF ACOMA, NEW MEXICO: A STREET VIEW.
(Photograph by Vroman.)

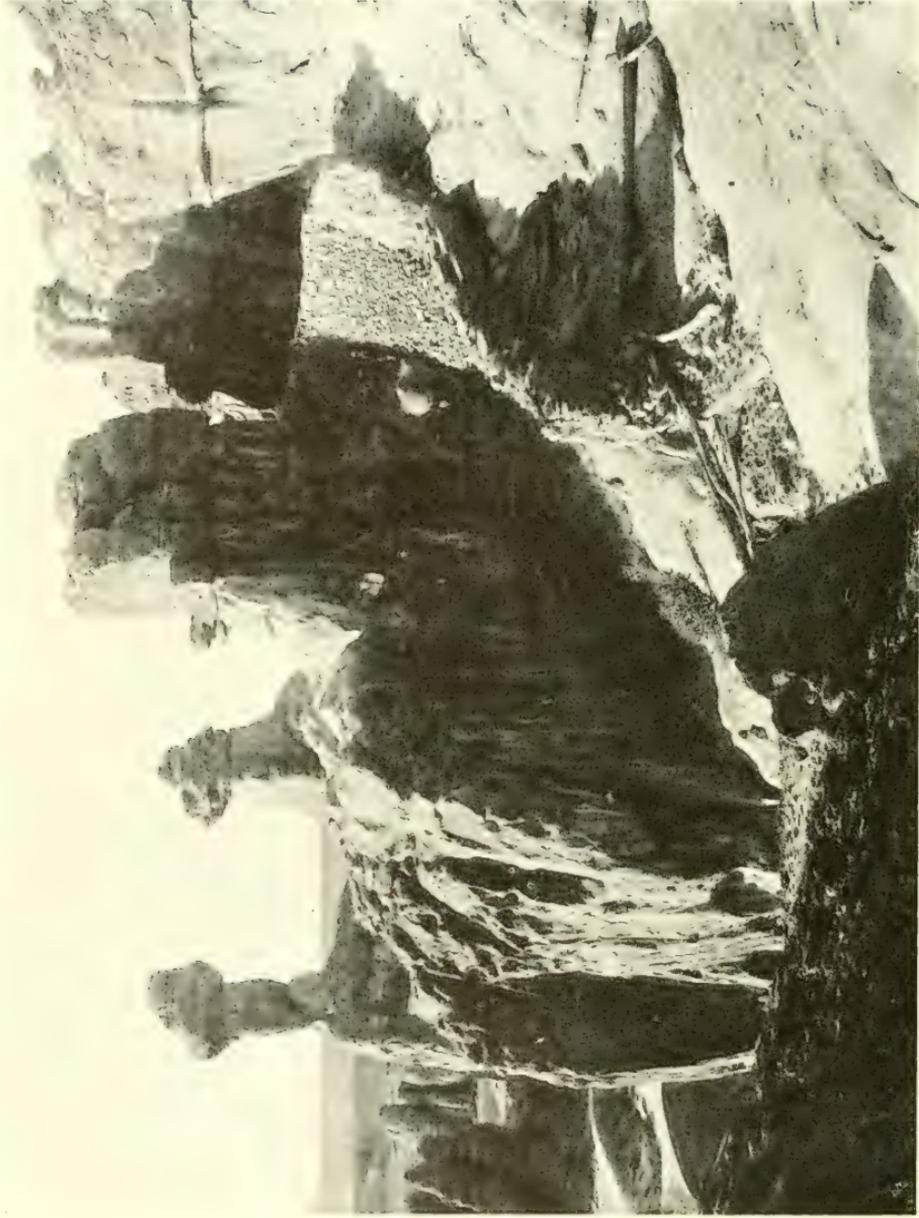


KATZIMO, OR THE ENCHANTED MESA, AS SEEN FROM ACOMA.
(Photograph by Vroman.)



ANOTHER VIEW OF THE ROCK OF KATZIMO, OR THE ENCHANTED MESA, NEW MEXICO.

(Photograph by Vroman.)



THE LOWER END OF THE HORSE TRAIL, PUEBLO OF ACOMA, NEW MEXICO.

(Photograph by Vroman.)

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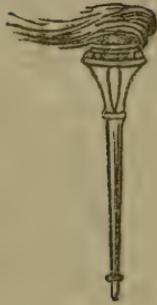
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