THE SOUTHEASTERN YAVAPAI

BY

E. W. GIFFORD

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ABBREVIATIONS USED

A	Anthropos.
l'A	L'Anthropologie.
AA	American Anthropologist.
AAA-M	American Anthropological Association, Memoirs.
ArA	Archiv für Anthropologie.
AES-P	American Ethnological Society, Publications.
AGW-M	Anthropologische Gesellschaft in Wien, Mitteilungen.
AJPA	American Journal of Physical Anthropology.
AMNH	American Museum of Natural History—
-AP	Anthropological Papers.
-B	Bulletin.
-M	Memoirs.
-MA	Memoirs, Anthropological Series.
-MJ	Memoirs, Jesup Expedition.
BAE	Bureau of American Ethnology—
-B	Bulletins.
-R	(Annual) Reports.
CNAE	Contributions to North American Ethnology.
CU-CA	Columbia University, Contributions to Anthropology.
FL	Folk-Lore.
FMNH	Field Museum of Natural History—
-M	Memoirs.
-PAS	Publications, Anthropological Series.
IAE	Internationales Archiv für Ethnographie.
ICA	International Congress of Americanists (Comptes Rendus, Proceedings).
IJAL	International Journal of American Linguistics.
JAFL	Journal of American Folk-Lore.
JRAI	Journal of the Royal Anthropological Institute.
MAIHF	Museum of the American Indian, Heye Foundation—
-C	Contributions.
-IN	Indian Notes.
-INM	Indian Notes and Monographs.
PM	Peabody Museum (of Harvard University)—
-M	Memoirs.
-P	Papers.
-R	Reports.
PMM-B	Public Museum (of the City) of Milwaukee, Bulletin.
SAP-J	Société des Américanistes de Paris, Journal.
SI	Smithsonian Institution—
-AR	Annual Reports.
-CK	Contributions to Knowledge.
-MC	Miscellaneous Collections.
UC-PAAE	University of California, Publications in American Archaeology and Ethnology.
UPM-AP	University of Pennsylvania (University) Museum, Anthropological Publications.
USNM	United States National Museum—
-R	Reports.
-P	Proceedings.
UW-PA	University of Washington, Publications in Anthropology.
ZE	Zeitschrift für Ethnologie.

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E. W. GIFFORD

INTRODUCTION

This sketch of the culture of the Southeastern Yavapai of central Arizona is the result of fifteen days' discussion with Michael Burns, a 70-year-old man of the Wikedjasapa band, in latter December, 1929, and early January, 1930. A day was also spent motoring over the Apache Trail highway from Phoenix to Miami via Roosevelt dam and the southerly highway from Miami to Phoenix via Superior. The former traverses the habitat of the Wikedjasapa band, the latter that of the Walkamepa band. These two bands (bachacha) alone comprised the Southeastern Yavapai.

The Yavapai, also called Mohave-Apache and Yuma-Apache, recognize three tribes or subtribes among themselves: Keweyipaya or Wavikopaipa (literally "southern people"), Wipukyipai, and Tolkepaya, here denoted as Southeastern, Northeastern, and Western Yavapai. This paper concerns the first. A brief paper by the late Colonel Corbusier deals with the last two groups.[1]

Yawepe is the Southeastern Yavapai rendering of the tribal name. It was alleged to mean "crooked mouth people," i.e., a "sulky" people, who do not agree with other peoples. This meaning contrasts with "people of the sun," a published meaning,[2] and is perhaps a folk etymology.

The Northeastern Yavapai comprised six bands: (1) Wipukyipai or Oak Creek canyon band, whose name the informant constantly applied to the whole Northeastern Yavapai; (2) Matkitwawipa or upper Verde valley people; (3) Wikutepa or people of the Prescott region; (4) Walkeyanyanhepa (people of the pine tree country) or Jerome tableland people; (5) Wikenichepa or Black mountain people

[1] Wm. F. Corbusier, The Apache-Yumas and Apache-Mojaves, American Antiquarian, 8:276–284, 325–339, 1886.

[2] BAE–B 30, part 2:994.

or people of the Crown King region; (6) Matkitotwapa or people of the southern part of the mountain ridge upon which Jerome is situated.

The Western Yavapai ranged from the western slopes of the Bradshaw mountains to Castle Dome and the Colorado river near La Paz, and comprised an eastern band (Wiltaikapaya) and a western band (Hakehelapa).

EARLY HISTORICAL REFERENCES

The earliest probable mention of the Yavapai is by Luxan of the Espejo expedition, who in 1582–1583 apparently visited only the country of the Northeastern Yavapai.[3]

Herbert Eugene Bolton, in his translation[4] of "Father Escobar's Relation of the Oñate Expedition to California," in 1604, identifies the Cruzados Indians with the Yavapai, apparently the Northeastern Yavapai. These two early accounts reveal the Yavapai (presumably Northeastern) already in their present habitat before 1600.

"In this country there are Indians whom the Spaniards call Cruzados,[30] from crosses made of cane which most of them wear on their foreheads. The origin of this custom is not known, but is thought to have come from Christians,[31] for when there are Spaniards in their country they wear them more commonly. The people are very friendly amongst themselves. They neither plant nor harvest maize nor frijoles, but live on the flesh of deer and wild sheep, for they have the skins of deer and the heads and horns of sheep, although the horns of the latter are very disproportionate in size. Of these there are many in this country, and of deer, from whose skins they make buckskin, with which all the men and women clothe themselves, for it constitutes their ordinary dress. They also eat maguey, tunas, mesquite, and a little fruit which grows on the cedars, of which there are great forests."[32]

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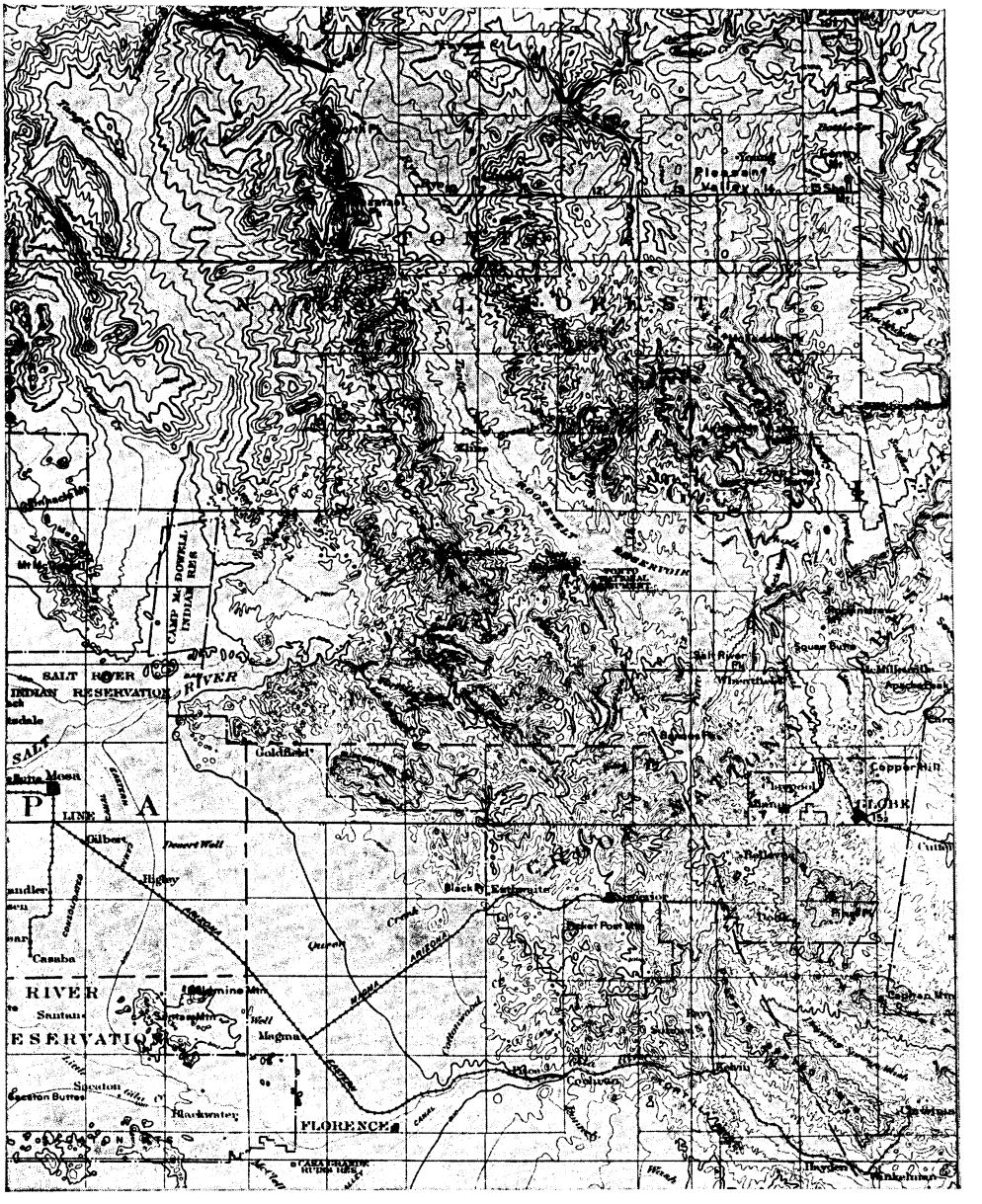
[3] Hammond and Rey, see bibliography.

[4] Catholic Historical Review, 5:19–41, 1919.

"[30] The Yavapai."

"[31] Zárate, writing twenty years later, adds: 'The origin of this custom was not known at that time; subsequently it has been learned that many years ago there traveled through that land a religious of my father San Francisco, who told them that if at any time they should see men bearded and white, in order that they might not molest or injure them they should put on these crosses, as a thing esteemed by them. They remembered it so well that they have not forgotten it.' Ibid., p. 270."

"[32] Zárate adds: 'The men are well featured and noble; the women are handsome, with beautiful eyes, and are affectionate. These Indians said that the sea was distant from there twenty days' journey, such as they travel, which are calculated at about five leagues. It is to be noted that none of these nations was caught in a lie. They also said that two days' journey beyond there was a river of little water [Bill Williams Fork] by which they went to a very large one which enters the sea [the Colorado] and on whose banks there was a nation called Amacava [Mohave], and, a short distance beyond, many nations who plant and gather maize, beans, and gourds.' Ibid., p. 270. The Yavapai women are still noted for their good looks."



Southeastern Yavapai habitat (Mazatzal, Pinal, and Superstition Mountains).

HABITAT OF THE SOUTHEASTERN YAVAPAI

The Southeastern Yavapai were mountaineers. The northerly band called Wikedjasapa inhabited the Mazatzal mountains and the mountains south of the Salt river between Goldfield and Roosevelt dam. At times they dwelt on Superstition mountain (Wikichitauwa), as did also the second band, the Walkamepa, of the Pinal mountains, who ranged into the Mescal mountains and Dripping Spring mountains. In terms of modern towns, the Walkamepa lived between Miami and Superior. In their territory lay Pinal peak (over 9,000 feet high), named Walkame for its abundant pines (wale), and in turn giving its name to the Walkamepa, or Pinal mountain people.

The Wikedjasapa band derived its name from wikedjasa, "chopped-up mountains," in reference to its rugged homeland. Members of this band wandered to the eastern slope of the mountains south of Roosevelt dam and lived for a season in the cliff ruins, e.g., Tonto and adjacent ruins. There they could look across the Tonto basin to the Sierra Ancha (Withikwaval).[5]

The Wikedjasapa and Walkamepa freely visited each other's territory to hunt and gather. A place near Tortilla flat was visited for prickly pears and mesquite beans. In July Superstition mountain was visited for sahuaro fruit. The men watched from the heights for enemies, while the women gathered in the desert lowland. Later in the year acorns were taken on the mountain but there were no pines. Sometimes the Walkamepa ventured south for sahuaro, but had to watch for the hostile Chiricahua Apache. In the Mazatzal and Pinal mountains the nuts of oaks and pines were gathered, and in the Pinal mountains squaw berries. Deer and mountain sheep abounded, the latter especially in the Fish creek region.

The Wikedjasapa had no name for the Gila river, but called the Salt river Ahaketheela (probably meaning "salt water").

THE CAMP AMANYIKÁ

Amanyiká (quail's roost) was the principal camp site of the Wikedjasapa south of the Salt river. Telshe was chief here, Wepotehe

[5] "Th" in Southeastern Yavapai words is a surd interdental spirant, not the separate consonants "t" and "h."

in the Mazatzal mountains north of the Salt. Wepotehe often came to Amanyiká, especially for war councils. In some seasons a hundred houses were there, both Wikedjasapa and Walkamepa, invited by the Amanyiká people, coming for a flax-like seed ripening in spring, prickly pears in summer, rabbits, and woodrats. Jackrabbits and cottontails were numerous on the gently sloping ground where the Apache Trail highway passes on the south side of the valley across from Amanyiká. The scene in plate 34 was taken from the highway. Amanyiká was also a favorite place for dances, games, sham battles, and war councils.

At Amanyiká many quail roosted in the mesquite trees. Springs emerged from the hill, which faces south. Beyond, to the north, were caves inhabited in winter. The little valley in the foreground (pl. 34) leads down to Salt river, perhaps two miles away, where there were many bedrock mortars.

Amanyiká commanded a wide view with an even broader sweep from the heights above. The cliffs along Fish creek and Salt river rendered it difficult of approach by the Maricopa and Pima.

On the highland north of Amanyiká was Witivwa (rock pregnant), a bulging rock with some semblance of human form. A little to the west was Ekonok, so named from its pottery clay, at the base of the hill a little to the left of the locality in plate 34. Eight miles south, lay a valley well wooded with oaks bearing edible acorns.

NEIGHBORS

The generic term for the Apache, the eastern and southern neighbors of the Southeastern Yavapai, is Awache. Apache, "persons," was used by the Southeastern Yavapai of themselves, but became current among Caucasians for both, my informant thought.

Eastern neighbors of the Wikedjasapa band were the Awakaya ("dirty people") or Tonto Apache, of Athabascan speech. Tonto basin belonged to them. The boundary line was the crest of the Mazatzal mountains. Many Tonto Apache were part Yavapai in blood and bilingual.

Eastern neighbors of the Walkamepa band were the San Carlos Apache. The crest of the Pinal mountains formed the boundary between their lands. The Walkamepa intermarried with them and were their allies against the Chiricahua Apache, the Pima, the Papago, and the Americans.

South of the Gila river lay the range of the hostile Chiricahua Apache or Djakupai. The White Mountain Apache were also reputed hostile. Those of Cibecue creek, however, were said to be friends of the Walkamepa and of the San Carlos Apache.

To the southwest were the hostile Maricopa and Pima, separated by intervening stretches of uninhabited country—no-man's-land. This might be visited by either side during a raid or in gathering desert products.

Raids against the enemy were regular occurrences. Not only did the Yavapai fight the Pima, but also their own linguistic relatives, the Maricopa, the Walapai, and the Havasupai. In expeditions against the two latter distant groups, only occasional Southeastern Yavapai took a hand.

The Maricopa were hereditary enemies, to be killed whenever opportunity offered, regardless of sex or age. The Maricopa attitude was more merciful, for occasionally a Yavapai woman was taken to wife and small children were adopted and brought up as Maricopa. The Southeastern Yavapai married no Maricopa or Pima women. The informant said that many so-called Maricopa now residing at Laveen, near Phoenix, are really adopted Yavapai or their descendants. Spier, studying the Maricopa, found a few such.

The Pima were called Ichawa' (enemies); the Maricopa Ichawa-kahama (enemies good), because they spoke a Yuman tongue. Other groups bore the following designations: Papago, Tapa'maya;[6] Cocopa, Kwikapa or Kwipa, cloud people, on account of fogs on the lower Colorado river; Yuma, Kuchana or Harupai, people in water; Chemehuevi, Chemewava; Paiute, Chemewava kwatha (yellow); Mohave, Makhava; Walapai, pine people, or Taukepaya, north people; Havasupai, Havsuapa, blue-green water people; Hopi, Wakmucha; Navaho, Muka;[7] Rio Grande Pueblos, Halawapai, people near water. The word Yuma is not a Yavapai term.

Americans were formerly called Ichawa' (enemies) but are now called Hako[8] ("water holder"?). Mexicans are called Hakohana (true Hako).

[6] Cf. Spier, Halchidhoma and Maricopa Ethnography, MS, tŏxpa âmai' (high Pima).

[7] Suggestive of Moki (Hopi).

[8] Cf. Spier, MS, Havasupai haiku, Maricopa xiko'; Kroeber, Shoshonean Dialects, 73, Mohave haiko, hiiko, Diegueño haiku, Chemehuevi haiku.

WARFARE

The Southeastern and Northeastern Yavapai were close friends. In war they sometimes acted concertedly, holding a council beforehand. In spite of slight subdialectic differences, chiefly "in pronunciation," they felt themselves to be one people when trouble threatened.

Councils (iskwauwi) were held to consider war projects. The men of a camp discussed the proposed campaign and the chief's messengers were sent to other camps to gather allies. Messengers (ichawakakwau, literally "enemy talkers" ?), were appointees of the chief. Each carried an eagle feather as a badge. The warriors from various camps assembled at the meeting place, each group under its chief (mastava). All put themselves under the leadership of the mastava who called them together. A conference settled the time for starting, which was usually three or four days later. Meanwhile a war dance and sham battle were held. In the sham battle the visiting warriors pretended to attack the camp. They ransacked and wrecked the houses and wrestled with the defenders. All was in good nature and no umbrage was taken. While this occurred the women and children were away gathering and preparing food for the feast and also for the war party to take. Mescal was one of the principal foods carried.

At night men and women danced, the women in a separate circle without weapons. The men danced carrying weapons and old scalps. The owner of a scalp carried it on a stick as he danced. Bowmen pulled their bows threateningly. Others poised their steel-pointed lances, or wielded guns, knives, clubs, or stone axes. There was no boasting as to forthcoming exploits.

For three or four nights they danced, fasted, and refrained from sleep, to inure them against the hardships of the coming campaign, and to give them endurance to travel day and night in case they were pursued. Sexual intercourse was taboo, as it brought bad luck. There was no self-torture, except that a warrior might run up to and clasp a sahuaro cactus to demonstrate his bravery.

A warrior equipped with a bow and a well filled quiver of arrows might not carry other weapons. Another carried the thrusting lance, also an axe or a club in his belt, rarely both.

In the mountains stones were rolled on the enemy whenever opportunity offered. Burns relates such annihilation of Pima raiders about 1850.[9]

In raids against the Pima and Maricopa, stored vegetable supplies were not carried away, but horses and cattle were run off to be used for food. Sometimes the latter were driven on foot.

Young warriors, but not old, used the scratching stick on the warpath, lest their hair fall out.

All warriors carried cane tubes, four or five inches long, for drinking. Water was sucked through these, "so as not to drink too much." This developed one's control and made him a better desert traveler.

Sometimes a woman accompanied a war party, leaving her children with their grandparents, usually in the hope of scalping an enemy who had killed a relative. If successful she danced around his body. A woman's only weapon was a knife. Women on a war party helped to carry plunder.

A victorious raid was followed first by a fast and then a celebrating dance at home. Women went to meet the returning warriors and relieved them of plunder and scalps. Prisoners were seldom taken. The warriors and the mastava went to some creek to wash and there they fasted for two days. Their garments were discarded, but not their weapons. Upon their return to camp they feasted and the mastava delivered a brief speech about the victory. "He did not talk much because he was too great a man." Then there was dancing. The warriors did not boast of their exploits, but told about the fight if asked. Thereafter they might go to another camp to dance in celebration of the victory.

The scalps given to the women were placed in the care of the old chief of the camp who had remained at home. After the local celebrations this chief might delegate someone to take the scalps to another camp. Fear that the ghost of the slain person might come was the reason for keeping the scalp some distance from the camp when not being used. It was tied by the hair to the top of an upright pole. There was no food taboo for a scalp handler, but he must wash clean before eating.

Each scalp was preserved as long as possible. It was rubbed with dry earth and sometimes washed. It comprised the whole skin of the head from just above the eyebrows and ears. Once cut around, the

[9] Hoom-o-thy-a, The Legend of Superstition Mountain.

scalp was easily removed from the head except for a little "knot" at the "cowlick." Scalps were not decorated.

If a war party met defeat, one or two warriors returned in advance of the main party. They cried as they approached the camp and told who had been killed. When the whole party had arrived, the families of the slain men burned their houses and belongings, and the camp was moved. The bodies of slain warriors were rarely recovered for cremation. There was no subsequent mourning ceremony for warrior dead, as was held by the Yuman tribes of the lower Colorado river.

The informant related a version of the defeat of the Yuma by the Maricopa, presumably in the classical battle of 1857 or 1858, concerning which various tribes have accounts.[10] No Yavapai now living took part in the battle. The informant's version was from his mother's brother, a participant.

Some time before the Yuma-Mohave campaign against the Maricopa, the Maricopa had sent 100 of their men against the Yuma. None returned. The Maricopa therefore looked forward to a raid by the Yuma, so that they might avenge their kinsmen.

Now the opportunity had arrived. With the Yuma were their allies, the Mohave, the Yavapai (of all three tribes), and certain Apache. [The informant placed the scene of the action near Laveen and the time in the afternoon. Actually it was near Pima butte, between the Gila and Santa Cruz rivers.] The Yuma and Mohave were anxious to press on ahead of their Yavapai allies in the hope of surprising and slaughtering the Maricopa without Yavapai aid. In the morning the allies had destroyed two Maricopa camps. During the fray some of the Yavapai were wounded.

The Yuma warriors numbered 40, the Mohave 75 or 80, and the Yavapai 1500 [*sic*]. Opposed to them were Maricopa, Pima, Papago, and Mexicans, the last armed with guns.

In the afternoon action the Mohave, Yavapai, and Apache took fright and climbed Pima butte (the Avivava of the Yuma and Maricopa). The reason for this debâcle was that their vanguard mistook their rearguard for enemies and were seized with panic, thinking they were about to be surrounded. They therefore fled up the hill and did not attempt to reenter the battle to help the Yuma, who were surrounded.

Perhaps their panic was in part induced by evil omens in the morning, for when the Yavapai warriors were marching down to the battlefield, a deer fell down before them on the desert, bleeding from its mouth and nose without having been shot. This was an omen of disaster and some turned back. The mastava said the cowards should go home, but the remainder should go on. At the river a hawk fell dead before the warriors, and still others turned back.

The Yuma warriors wore distinctive war paint, so that the Maricopa had no difficulty in recognizing them. Their faces were painted black, their bodies red. The Mohave were painted differently. The Yuma had long hair adorned with feathers, and wore red calico around the waist. They were all large handsome

[10] For Mohave, see Kroeber, Handbook, 753; for Yuma, see Gifford, Yuma Dreams, 64, and Forde, Ethnography of the Yuma, 163; for Pima, see Russell, 46.

men. The Yavapai went into battle nearly naked, wearing only the breech clout and no leggings. Very few were painted. The mastava alone wore eagle feathers.

The Maricopa killed all but one of the Yuma warriors. He was struck on the head with a club, wielded by a mounted Maricopa. The blow knocked him into the waters of the Gila, down which he floated to safety. The battlefield was named by the Maricopa to commemorate the annihilation of the Yuma.

No Yavapai were killed, but some were wounded, though apparently very few participated. The wounded lay on the battlefield until dark, then slipped away. Meanwhile, their comrades arrived home and reported them dead. Their houses and property were burned at once and mourning commenced. In two or three days these wounded men arrived to the astonishment of all.

CANNIBALISM

Prisoners were sometimes eaten, not because human flesh was relished, but to vent spite against the enemy in as vicious and terrible a fashion as possible. Hence, women and children were often the victims. The informant accused the Maricopa of eating Yavapai prisoners. The informant had never tasted human flesh, but the older people had told him it did not taste different from venison. No purification was required after partaking of human flesh.

A Halchidhoma informant related to Spier an account of Yavapai cannibalism:

Between 1830 and 1850 some twenty Halchidhoma were surrounded by Yavapai just west of the Estrella mountains. All were killed except a woman and her daughter, whom the Yavapai took to the mountains northwest of Laveen, where they cooked and ate the child. They invited all the tribes to this. In the early evening they made the woman and the little girl dance. Then they dug a long pit, and in it burned logs until they had a bed of coals. They put a deer carcass on this, dragged the screaming girl away from her mother and held her down on the coals until she died. Then each ate a piece of deer flesh and a piece of human flesh. The woman later escaped.

CHIEFS

The term for "chief" or "great man" is mastava, literally "not afraid." He attained his title by daring and bravery on the warpath. He was declared a mastava by the men; he did not merely arrogate the title to himself. To the modern chiefs appointed by the Indian office or its local representatives, the term mayora, of Spanish origin, is applied. There were no female chiefs, nor were there special chiefs for dances and entertainments as among the Colorado river Yumans.

The mastava was primarily a war leader. The oldest mastava was head of the camp. When he became incapacitated by age he remained at home to supervise activities there, and, in case of attack on the

camp, direct its defense. Sometimes spoils were given to him. The younger mastava led the warriors on raids. There might be more than one mastava in a camp, and each might lead a separate band of warriors.

The mastava wore a bandolier (kiswakayatche) of eagle feathers over the right shoulder and under the left arm. The feathers were attached to a buckskin strap by sinew sewing. The first bandolier was bestowed after the flood by the goddess Widapokwi. She bestowed with it the "medicine power" to conquer eagles and great animals.

The mastava also wore three eagle feathers in his hair, attached by string. On his wrist (left or right) was a turquoise bead bracelet, the beads obtained from ruins and strung on a buckskin string. These conferred mana, called ahaniku and explained as "good luck, the power to do anything." Common warriors wore neither feathers nor bracelet.

A mastava maintained himself in dignified isolation at camp. "He is by himself all the time. He does not 'fool' with people nor play games. He is respected."

A man who went out alone and brought back the scalps of four or five enemies was said to have a "big heart" and to be fearless. Someone would give him a turquoise bracelet to wear and call him mastava. He would diffidently say: "I am not worthy to wear that." Thereafter he might lead warriors. The informant's father became a mastava after soldiers had murdered the informant's mother. Thereafter he was continually on the warpath seeking vengeance until his career was cut short in the Skull cave massacre in 1872.

The mastava were of varying rank. One of ripe experience and forceful personality became the leader of the community both in peace and in war. Others never rose beyond the rôle of leaders on the warpath. Examples of mastava who were true leaders of the community both in peace and in war were Telshe and Wepotehe, of the Wikedjasapa band. These mastava had orators who addressed the people for them.

Since prowess was the prerequisite for becoming a mastava, kinship and clanship cut no figure in the transmission of the office. The notable men, i.e., the best fighters, discussed the succession and named the new chief who was to rule the community. Unanimity was usual, but not requisite. Women had no voice in the selection. In the following discussion of individual chiefs there are examples of related consecutive chiefs, but no evidence that the office was truly hereditary.

When all the Southeastern Yavapai were assembled, the Wikedjasapa chief Wepotehe was recognized as the dean of all the chiefs. He belonged to the Hichapulvapa clan.[11] His sphere of influence lay in the Mazatzal mountains. Sometimes his followers and Telshe's followers camped close together but in separate groups.

Two lesser war leaders (mastava) under Wepotehe were Hausuma, also of the Hichapulvapa clan, and Kwatchiyakeyok. They were father's brother's sons of the informant, and Hausuma was a maternal "cousin" of Wepotehe's. They might lead warriors in different directions. For instance, one might raid the Pima at Sacaton, while the other might attack the Maricopa and Pima at Gila crossing. Thereafter they might join forces.

Chugahamge, "hunting hawk," oldest son of Wepotehe, accompanied his father on war parties and doubtless would have become a mastava in time.

Telshe was older than Wepotehe, though contemporary. He was part Tonto Apache in blood. He headed the group of Wikedjasapa living largely south of the Salt river. He was the only Southeastern Yavapai who maintained a garden. He was too old to lead war parties, but had three sons who were war leaders (mastava). These three, together with Telshe, were killed in the Skull cave massacre in 1872.

Other Wikedjasapa mastava living south of the Salt river were Skwalkowala and Pashededap, the latter subservient to Skwalkowala. Others, probably all lesser ones, were: (1) Djakwakwaka, a member of the Yelyuchopa clan and a war leader at times; (2) Pakekaya, also a shaman, member of the Yelyuchopa clan; (3) Ukitkocha or Captain Jim, also a shaman, member of the Amahiyukpa clan.

The Walkamepa, in the informant's time, lived under their chiefs Howaia and Yakekwacha. The former remained at the camp, while the latter conducted raids as far south as Hayden and Winkelman on the Gila river.

Preceding Howaia as chief was Poltalkadapa, hero of "The Legend of Superstition Mountain." He was an old man when he went to live on San Carlos reservation. He belonged to the Iihasitumapa clan.

Another Walkamepa mastava of less distinction was Bakaya, of the Yelyuchopa clan.

CHIEF'S ORATOR

The chief's orator, bakwauu ("person to talk"), was an appointed officer. He addressed the people at the behest of the chief in the evenings before they went to sleep. He stood upon a knoll above the camp, where everyone could see and hear him. He told of the old customs and admonished men, women, and children as to their duties. He told the people that everyone must obey when the mastava called a war council. The informant gave two terms for deliberations, to wit: isiwachakwauu, to discuss war; isibachakwauu, to discuss what to do.

The orator's position was not hereditary. Only an important chief, who was the ruler of a considerable group, had an orator. Young

[11] He was father's mother's brother of the informant.

"chiefs" (mastava), newly appointed because of bravery, had no orators.

The chief's orator did not arouse the people in the morning. The shaman attended to this. The chief himself rarely addressed the people of the camp. He maintained a dignified silence.

From some small eminence the shaman called to the people before sunrise, admonishing them to arise early, to run, to bathe, and to be prepared in case enemies came. Each morning the people ran about half a mile to the east, if the character of the country permitted. It was not necessary to be back in camp before sunrise. This exercise was believed to make one fresh and alert for the day. It was thought that if one failed to run he would be heavy and dull. Often the run was to springs. At one the men bathed, at another the women. However, a daily morning bath was not mandatory.

CHIEF'S MESSENGERS

Official messengers (ichawakakwau) of chiefs did not carry a kipu (knotted string), but carried a six-inch length of cane painted red, with a white eagle feather lashed to it with sinew. The surface of the cane had square depressions cut in it, which adjoined only at their corners, thus forming a checker pattern. This message stick was called tolkepu.

The messenger carried the cane from camp to camp, but the cane itself was not a mnemonic device; it was rather an emblem of office and a confirmation of the oral message. It gave no indication of the days to elapse before a scheduled event. The chief of the camp to which the messenger went showed the stick to his young men as he told them of the invitation.

BANDS AND CLANS

In addition to the two matrilineal bands (bachacha) Wikedjasapa and Walkamepa, there were chiefless, exogamous, non-totemic, matrilineal clans (tiyuche, literally "relatives"). The band names are the names of regions with the stem -pa or -pai or -paya (people) suffixed. Clan names end similarly, but usually refer to some local geographic peculiarity rather than to a region.

When two or three families did not agree with the rest of the band they left the camp. "That is the way the Yavapai got scattered all over the country," the informant said. However, scattering of

families for food-gathering was a necessity. The assembly of all families, even those harboring a grudge, was an annual event at the camp site Amanyiká.

Two instances of patrilineal clan descent were recorded in cases of marriage to Apache women: (1) Sakala, a man of the Yelyuchopa clan, married a Tonto Apache woman; their offspring, John Rice and Kusuai, were counted in their father's clan. (2) Bahasuwa, a man of the Hichapulvapa clan, married Pauline Dickens, a San Carlos Apache woman; their son Iitakyela was counted in his father's clan. Presumably, marriages within the band were more frequent prior to the sixty years of reservation life. With such marriages there was no question of band affiliation of the offspring, since both parents belonged to the same band. Perhaps matrilineal reckoning in inter-band marriages may be a derivative of the matrilineal descent in the clans, plus the possible influence of hypothetical ancient matrilocal residence. Residence was indeterminate and the person marrying into a band was always regarded as an outsider.

The informant was quite certain that the Northeastern and Western Yavapai had no clans. The Southeastern clans suggest Apache influence.

A certain district was regarded as the original homeland of each clan, as with the Apache and Navaho. There was, however, no actual localization within the period covered by the informant's data. Perhaps this putative ancient localization indicates an earlier lineage organization like that of the Cahuilla and Diegueño,[12] but matrilineal instead of patrilineal. There was no clan rule as to matrilocal or patrilocal residence, hence no localization of either men or women of a clan.

The traditional origin places of the clans Amahiyukpa and Atachiopa are in Northeastern Yavapai territory.

Clan exogamy operates for both the eponymous mother's clan and the father's clan. The mother's clan was regarded as more closely related to one than the father's clan. However, there was no word for clan brother. Clansmen, if related, used only the proper terms of consanguinity to one another.

No clan-origin tale was obtained, although the traditional place of origin for each clan was recorded. The nine clans are discussed below. Four were limited to the Wikedjasapa band, one to the Walkamepa band, and four occurred in both bands.

[12] Gifford, UC-PAAE, 14:167–186; AA, 28:389–401, 1926.

Clans limited to the Wikedjasapa band.—Amahiyukpa, "wild-melon people," claimed as their homeland the high mountains on the west side of the Verde river, just north of Lime creek and directly opposite the territory of the Yelyuchopa clan in the Mazatzal mountains.

Atachiopa, "arrowreed people," was said to have originated in the mountains west of Cherry.

Hakayopa, "cottonwood people," is the informant's clan and that of his mother and mother's mother. The homeland of this clan was Sunflower valley, south of Mazatzal peak, high in the Mazatzal mountains, and west of fort Reno in the Tonto basin. There were no caves in that region, so dwellings were huts.

Hichapulvapa, "bunch-of-wood-sticking-up people," was the clan of the informant's father and father's mother. The name of the clan refers to dead wood on a hilltop. The country of the Hichapulvapa was the Mazatzal mountains southward from the East Verde river and westward from North peak and Mazatzal peak.

Clan limited to the Walkamepa band.—Iihasitumapa, "wood-sticking-out-of-middle-of-water people," regarded the Pinal mountains as their original homeland.

Clans represented in both bands.—Iiwilkamepa, "grassy-plateau people," considered the mountainous country between the Superstition and Pinal mountains as their homeland. Superior lies close to their alleged original habitat.

Matkawatapa, "red-strata-country people," refers to the Sierra Ancha. Tradition says the clan originated from Apache men, who came from the Sierra Ancha and married Walkamepa women. The informant realized that this origin was out of harmony with matrilineal descent. Possibly the Apache element from the Sierra Ancha was feminine rather than masculine. There are said to be only one or two individuals of this clan surviving.

Onalkeopa, "rocky-place people." Their original homeland was in the Mazatzal mountains between the lands of the Hichapulvapa and Yelyuchopa clans. Later they moved south into the territory of the Walkamepa band.

Yelyuchopa, "mescal-pit people," claimed as their homeland the Mazatzal mountains between the territories of the Hakayopa and Hichapulvapa clans.

MARRIAGE

The following statistics were derived from the informant by using as a starting point the 1908 census list of Camp McDowell reservation, where Yavapai of all three tribes live. This list was kindly put at my disposal by Mr. George A. Simms, of the Phoenix Indian School.

Recorded marriages in which Southeastern Yavapai were one or both contractants number 50. Of these 19 were intratribal and interclan, 22 were with Northeastern Yavapai, 6 were with Western Yavapai, and 3 were with Apache. Presumably the proportion of intratribal marriages was greater in pre-reservation days.

There was no case of breach of clan exogamy in the intratribal marriages recorded, in which 38 clan members were involved. With 31 extratribal marriages, there were 69 individuals, who were distributed among the nine clans as follows, enumerating first those who made intratribal marriages and second those who made extratribal

marriages: Hichapulvapa 9, 9; Yelyuchopa 9, 3; Hakayopa 5, 9; Iiwilkamepa 5, 1; Onalkeopa 4, 4; Iihasitumapa 3, 3; Amahiyukpa 1, 2; Atachiopa 1, 0; Matkawatapa 1, 0.

Interclan (intratribal) marriages: Amahiyukpa with Hakayopa 1, Yelyuchopa 1; Hakayopa with Hichapulvapa 1, Iihasitumapa 1, Yelyuchopa 2; Hichapulvapa with Iiwilkamepa 2, Matkawatapa 1, Onalkeopa 1, Yelyuchopa 4; Iihasitumapa with Iiwilkamepa 1, Onalkeopa 1; Iiwilkamepa with Onalkeopa 1, Yelyuchopa 1; Onalkeopa with Yelyuchopa 1.

Intertribal marriages (NE for Northeastern, w for Western Yavapai): Amahiyukpa with NE 1 (Walkeyanyanhepa), w 1 (Wiltaikapaya); Hakayopa with NE 3 (Matkitotwapa), w 4 (Wiltaikapaya 3, Hakehelapa 1), S. Ancha Apache 1; Hichapulvapa with NE 7 (Matkitotwapa 4, Walkeyanyanhepa 3), w 1 (Wiltaikapaya), San Carlos Apache 1; Iihasitumapa with NE 3 (Matkitotwapa 2, Walkeyanyanhepa 1); Iiwilkamepa with NE 1 (Matkitwawipa); Onalkeopa with NE 4 (Matkitotwapa 1, Walkeyanyanhepa 3); Yelyuchopa with NE 2 (Walkeyanyanhepa 1, Wikutepa 1), Tonto Apache 1.

This evidence gives no indication of a rule of either patrilocal or matrilocal residence. Regarding Camp McDowell reservation as homeland to the Wikedjasapa band and as foreign territory to all other bands, we find that 14 men and 18 women of other bands were married to Wikedjasapa.

Marriages in which one or both contractants were of the Wikedjasapa band number 42. Of these, 10 were contracted between members of the band, 7 with members of the Walkamepa band, 16 with Northeastern and 6 with Western Yavapai, 1 each with Sierra Ancha, San Carlos, and Tonto Apache. It is obvious that there was no tendency for the two Southeastern Yavapai bands to become intermarrying moieties. On the contrary the 25 extratribal, contrasted with the 17 intratribal marriages, indicate close and friendly relations with the Northeastern and Western Yavapai, no doubt accentuated by reservation life and diminution of their own numbers. The fewness of the marriages with Walkamepa is explainable by the small size of that band and its partial residence at San Carlos instead of Camp McDowell reservation.

The 22 Wikedjasapa marriages with Northeastern and Western Yavapai were chiefly with members of the nearer bands of these tribes. Thus, with Matkitotwapa 8, Walkeyanyanhepa 7, Wikutepa 1, Wiltaikapaya 5, Hakehelapa 1.

There was no marked preponderance of either sex to contract extratribal marriage. Thus in the same 22 marriages, it was 12 men and 10 women of the Wikedjasapa who married foreigners.

Of 14 Walkamepa marriages recorded, 1 was between two Walkamepa, 7 with Wikedjasapa band, 6 with Northeastern Yavapai (Matkitotwapa 2, Matkitwawipa 1, Walkeyanyanhepa 2).

THE FAMILY

KINSHIP SYSTEM

In reference, kinship terms were prefixed by the appropriate pronoun, e.g., nya (my). In the vocative, "my" was not used. In the following lists, where neither "vocative" nor "reference" is indicated by (v) or (r), the term is the same in both. Asterisks preceding terms indicate their occurrence in more than one class of relatives.

The following abbreviations are used: a aunt, b brother, c cousin, ch child, d daughter, f father, h husband, m mother, mn man, nc niece, np nephew, o older, p parent, r reference, s son, sb sibling, ss sister, u uncle, v vocative, w wife, wm woman, y younger, ♂ male, ♀ female. As affixes the following are used: g grand-, l -in-law, x cross-, / half-

Parent Class

tala, f (v).
djitá, m (v), f (r).
djidji, m (r).

hume, mn s.
widje, mn d.
gote, wm s (v).
djenye, wm d (v).
thauwa, wm ch (r).

Grandparent Class

nepo, f f, f p b, gf f.
kwawa, m f.
morda, f m, f p ss, gf m.
kola, m m.
niko, m p sb, gm p.

awa, s ch, sb s ch, s gch.

ko, d ch, sb d ch, d gch.

Sibling Class

akwake, o sb, o/sb.
djili, y sb, y/sb.

djumsi, mn ss, mn/ss (r).
djumsi pataia, mn o ss, there being two or more older than he (r).

Uncle Class

nuwi', f o b.
*nedja, f y b.
nekwe, m b.
nepi, f ss.
nithi, m o ss.
mida, m y ss.

wita, mn y b s.
tepi, mn y b d.
sudja, mn o br s.
*nuta, mn o br d.
wana, mn ss ch.
pi, wm br ch.
wisa, wm y ss ch.
no, wm o ss ch.

First cousins once removed are denoted by terms of the uncle class, as follows:

nuwi', f f b o s, f o ♂ xc.
*nedja, f f b y s, f y ♂ xc.
nekwe, m f b s, m ♂ xc.
nepi, f f b d, f ♀ xc.
nithi, p m ss o d, m f b o d, m o ♀ xc.
mida, p m ss y d, m f b y d, m y ♀ xc.

wita, mn f b y s s, mn y ♂ xc s.
tepi, mn f b y s d, mn y ♂ xc d.
sudja, mn f b o s s, mn o ♂ xc s.
*nuta, mn f b o s d, mn o ♂ xc d.
wana, mn f b d ch, mn ♀ xc ch.
pi, wm f b s ch, wm ♂ xc ch.
wisa, wm m ss y d ch, wm f b y d ch, wm y ♀ xc ch.
no, wm m ss o d ch, wm f b o d ch, wm o ♀ xc ch.

Similarly, second, third, fourth, *et ad infinitum* cousins once removed are denoted by terms of the uncle class. Senior or junior terms are applied according to the relative ages of the connecting second, third, or fourth cousins.

Cousin Class

mike, mn f b s.
maye, m ss ch, p m ss ch ch.
neawa, f b d, wm f b s.
nia, o 2nd c, except p m ss ch ch.

*nedja, wm ♂ xc.
*nuta, mn ♀ xc.
sikave, mn ♂ xc.
baya, wm ♀ xc.
inye, y 2nd c, except p m ss ch ch.

Third cousins who are the children of maye second cousins call one another maye; similarly, fourth cousins who are the children of maye third cousins, *et ad infinitum.*

Third cousins who are the children of nia and inye second cousins call one another nia and inye according to age; similarly, fourth cousins who are the children of nia and inye third cousins, *et ad infinitum.* Nia is applied to the older, inye to the younger. The age of the connecting relatives does not matter.

Step-relation Class

Step-siblings were equated to cousins. Step-parents and step-children were called by no term of relationship except that by which they may have been denoted before assuming the step-relationship.

Spouses of Uncles and Aunts

*honye, u w.
*bamila, a h, w np, w nc.
*konyia, h np, h nc.

Parent-in-law Class

wilhenyi, w f, w u.
komwidemenyi, w m, w a.
wilhekwenia, h f, h u.
komwidekonyia, h m, h a.
kenyia, chl, sb chl.

No terms were applied to the child-in-law's sibling and the sibling's parent-in-law.

Sibling-in-law Class

*bamila, w sb, ss h.
*konyia, h sb.
*honye, b w.

No terms were used for the three-step siblings-in-law: wife's brother's wife, husband's sister's husband, wife's sister's husband, and husband's brother's wife.

Child's Parent-in-law

There was no term for this relationship.

KINSHIP TABOOS

Brother and sister played together until puberty. Thereafter they might live in the same house and converse, but must not play or joke.

Parent-in-law and son-in-law did not talk to each other and especially not the mother-in-law and son-in-law. Mother-in-law and son-in-law tried not to see one another. She might prepare food for him, but had someone take it to him. If she saw him approaching she put a blanket over her head. It was believed she would go blind if she looked at him closely.

Father-in-law and daughter-in-law did not speak to each other, joke, or play. Between mother-in-law and daughter-in-law there was no taboo. They helped one another. A married young man might make his home near his parents.

About joking, the following additional taboos and privileges prevailed. A man and his wife's brother did not joke one another, but he might joke with his wife's sister. A woman would not joke with her husband's brother, but might joke with her husband's sister. Vice versa, a man might not joke with his brother's wife.

Gifts were sometimes made by a man to his sister's husband to cement friendship. In an instance cited the gift was a horse.

MARRIAGE

Marriage to cousins of any degree or to other kin was forbidden; nor could one marry a member of his father's or mother's clan.

There was no term for levirate or sororate, though both customs were practiced.

There were no child betrothals. The girl's parents might have observed the industry of the youth and decided they would like him for a son-in-law. They discussed the matter with his parents; or the case might be reversed and his parents take the initial step. Fourteen was not an uncommon age at which to marry, the girl having reached the menstrual years.

The families of the contractants made reciprocal presents and the clansmen of the couple might help with contributions of food. The young man's parents and relatives first gave buckskins, food, and other things to the girl's parents. Sometimes the father of a boy made a buckskin dress and presented it.

After marriage, the girl's family reciprocated, taking food to the camp of the young man's parents and relatives. It was distributed among his relatives, his parents getting only a small portion. Thereafter, the bridegroom's relatives killed three or four deer, brought them to their camp, then carried them to the girl's parents' camp, where they were distributed among her relatives. The bride and bridegroom might or might not be present. Thereafter whenever the young man's parents had food or other things to spare they gave them to the girl's parents. The latter reciprocated. The gifts were evidently intended as manifestations of mutual esteem and good will.

Anciently a man might have more than one wife. He might marry two sisters if the girls' mother wished it. However, he must be a thrifty man and a good hunter. If such were the case, other parents might bring their daughters to him for brides, for the sake of the gifts they might expect from him, for a son-in-law gave game and horses to his parents-in-law as long as they lived.

If a wife died the widower could not marry for a year. He must not have intercourse with any woman, except his other wife or wives if he had them. Even if he were to marry his dead wife's sister, as was often done, he must wait some time.

If a man's wife died young without issue, he was entitled to her unmarried sister or close female relative without making any special gift. Later he gave occasional presents to her parents. If a man's wife died after issue, he could not remarry and take the children out of his dead wife's family without his mother-in-law's consent. The preferable thing was for him to marry a sister of his deceased wife. If one were not available his mother-in-law might seek another female relative for him. When one was found some of her relatives informed the man. Then he and his kinsmen brought food, blankets, game, and other things to her parents. They reciprocated with food and other things for his parents.

Normally widowers remarried. One with children was more apt to remarry than one without. If a widower chose he might run away to another camp, leaving his children with his dead wife's parents. The wife's parents had far more to do with bringing up the children than the husband's parents. However, orphans might be divided between the parents of the deceased couple, in case the burden were too much for the dead woman's parents. Such a division took place if there were three or more, and only after conference.

Often the married brother of a dead man married the widow, or, if he felt he had enough of a family, he might allow a close unmarried male relative to marry her. In case of the levirate the husband continued to call his adopted nephews and nieces such, instead of calling them sons and daughters. The same was true in the case of the sororate. To call one's stepchildren by the terms for one's own was an insult; also the children must not call their uncle or aunt by the parent terms in the case of the levirate or sororate.

The Southeastern Yavapai sometimes stole Apache wives, the Wikedjasapa taking Tonto and the Walkamepa, San Carlos Apache women. The Walkamepa chiefs Potalkadapa and Yakekwacha had Apache wives.

DIVORCE AND ADULTERY

Marital obligations were exceedingly strict. In the spring dance a married person might not clasp hands with a person of the opposite sex other than the spouse. Only unmarried persons might join hands. The license at that time allowed the unmarried was strictly taboo to the married. If a married man stepped out from the line of dancers with a girl, a quarrel with his wife and a divorce would follow. The injured wife would leave him and return to her own family, taking the children. If a married woman left the dance with a man, her husband might follow and kill one or both. Such a killing would be the beginning of a feud with retaliatory killings which might last for years and which the chief would be powerless to prevent. According to the informant, such feuds led to the scattering of the Yavapai over the country in family groups, a statement that is probably largely rationalization.

POSITION OF WOMEN

Apropos of the selection of a mastava or war leader, the informant said women had no voice in the matter. Then he added: "Women had little to say. They were more like slaves." On the march women walked behind the men.

No doubt the women had plenty of drudgery in food gathering, but the informant's statement as to their low position is contradicted by the divorce customs, by the mother-in-law's control over a widower, and by their exemption from skin dressing and the making of clothes.

EDUCATION

At the age of eight or ten years girls were taught by their mothers to help to gather plant foods, to cut off the leaves of the mescal plants, to prepare the earth oven, and to cook the mescal roots therein.

Boys were taught to shoot the bow when twelve or fourteen years old. Earlier not much instruction was given, though boys played with toy willow bows. Next, boys were instructed how to make moccasins and prepare sinew.

The maternal grandfather in particular was the instructor of his grandson. He took more interest than the paternal grandfather. The same applies to the respective grandmothers. These statements seem to indicate that matrilocal residence was common.

MENSTRUATION

This phenomenon seems not to have inspired fear. There was no seclusion and a woman might continue to prepare the family meals, and even to cook venison, but under no circumstances could she eat it. If she did, the hunter could never kill another deer. His luck would be gone.

Buckskin was worn to staunch the flow; but not as a regular breech clout, which women did not use. It was fastened front and back with a belt.

During menstruation each girl or woman slept on a bed of coals covered with earth and grass. It was believed that if the blood "got cold" it might cause her death. This bed was arranged within the dwelling, either cave or hut. A similar bed was used after childbirth. The scratching stick was used, lest the hair fall out. Meat was taboo, but not salt. A married woman could not sleep with her husband for four nights. It was believed that the menstrual blood would go through his system and make him lazy.

The term awati, said to mean literally "bleed," denoted the first and subsequent menstruations. At her first menstruation a girl gathered wood, food, and water and distributed them to neighboring camps, taking the last load to her own. This was thought to make her industrious throughout life. Not to do it meant she would be lazy. Only during her first menstruation did a girl refrain from washing. No special person supervised a girl during her first menses. She informed her mother of her condition. She was not painted and there was no

singing, dancing, or feasting for her. This contrasted with the four days of dancing and feasting of the San Carlos Apache. Sometimes a girl married before her first menstruation.

CHILDBIRTH

The connection between sexual intercourse and pregnancy was understood as cause and effect. Abortion was unknown.

A pregnant woman walked eastward before sunrise, and pressed her belly with her hands. This was to insure proper birth of the child. Women who did not do so might die in childbirth. Formerly this happened rarely. Shamans had nothing to do with childbirth, except sometimes to sing for the expectant mother, usually concerning the first childbirth by the goddess Widapokwi, and how she bore her child without attendants.

Delivery was out-of-doors. The mother sat with her feet in a pit, her hands on her knees, and leaned backward. A woman held her tightly around the waist, while pressing her knees against her back. Other women might relieve this attendant if delivery were slow. No medicine was given, no matter how difficult delivery was, nor was there resort to cutting.

The placenta was buried. The umbilical cord was cut one and a half inches from the baby's body and tied with a simple knot. A cotton-like plant fluff was put over the umbilicus and remained there until the cord dropped off.

The first washing of the baby was in warm water. The second day, a lather of Spanish bayonet (yucca) root, if available, was used. This root was prepared by pounding on a flat rock with a stone. The mother was washed with it too.

After the arrival of her first child a woman was given a warm decoction from "cedar" leaves to drink. At subsequent births this was omitted.

For four days after childbirth the mother drank no cold water. She lay on a bed of coals covered with earth and herbage in the woods. Her attendants were women. In about a week the mother began to resume her regular duties. No inactivity was enjoined upon the father.

TWINS

The informant averred he had not heard of twins nor the attitude toward them among the Southeastern Yavapai, but knew of them among the Pima and Maricopa.

PERSONAL NAMES

Personal names were largely applied in babyhood before ear piercing, in reference to some peculiarity or incident, and had neither clan nor totemic reference. New names in honor of war achievements were rare. The taboo against naming the dead probably accounts for no name being recorded for two individuals.

The meanings of names, as given by the informant, are here recorded. This list, derived chiefly from the Camp McDowell reservation records, includes also Northeastern and Western Yavapai. N, W, and S indicate the Yavapai tribes.

Males

Athaela: salty sahuaro fruit. S
Awatauwita: whitish head. A name applied in manhood to Chugahamge. S
Bahasuwa: blue-green person. S
Bakaya: fleshy person. S
Bakotel: big man. W
Chamedja: looking over a cliff. N
Chepichu: turtle eyes. S
Chugahamge: hunting hawk. Earlier name of Awatauwita. S
Del: quail. N
Djakwakwaka: brown enemy. S
Djithila: rough, i.e., not smooth. S
Djoka: "cedar" (juniper?). N
Genyanyo: to walk unsteadily from deformation. W
Goda: shaking something in the hand. S
Haaktisiva: tall sahuaro. Specifically stated to be a babyhood name. S
Haikumwada: soft like meal. W
Hakahaka: tied too loosely. N
Hakwa: opened out. S
Hausuma: green. S
Howaia: smoky looking. S
Humothaia: wet nose. S (The informant.)
Ichawachakam: hit his enemy. W
Ichanyé: hunting. N
Ichewaham: enemy crossing the country. N
Iitakyela: round stick. S
Impotwe: dusty. S
Inyavchochavel: trying to outdistance the sun by running. N
Kapalva: soft. W
Kithpila: a species of grass with edible seeds (looks like flax and ripens in latter May). N
Konseka: green leaf. N
Kwalamtalva: red cut. S
Kwalayucha: red all over. N

Kwamichasita: tracking deer. S
Kwatchiyakeyok: lying flat on a desert (as when dead). S
Makwa: Gambel quail crest. N
Mikalawa: big foot, or many toes. S
Minaha: body in water. S
Misakauwa: egg foot. S
Mukauwa: little mountain-sheep. S
Nataha: cottonwood. N
Okwala: a species of tree which grows at high altitudes. N
Pakekaya: fleshy body. S
Palkahadwa: tongue hanging. W
Panayu: great horned owl. W
Pashededap: man with grease spots on his body. S
Pokwahicha: brown hat. S
Poltalkadapa: white forehead man. S
Polpida: hard forehead. N
Sakala: shoulder blade. S
Sakarapa: walking wide, e.g., a bow-legged person. N
Shawatush: spitting out white juice. S
Shinya: rough body. S
Siva: to count. N
Skwalkowala: hunting for hawks. S
Sumkwina: boiling something. S
Surama: something green thrown over him. N
Tayima: throwing at something. N
Tekomna: crumbling to pieces. N
Telkwamaya: running after a ghost. N
Telshe: big rump. S
Thunva: soft. N
Toktoka: tapping sound. N
Uhula: desert mouse. N
Uka.utla: little round nose. S
Ukitkocha: nose tied up. S
Uta: boiling. S
Uvatahacha: tobacco bitter. N (The informant thought this name was applied because of extensive use of tobacco by the family.)
Wachuwilva: measuring it out with the enemy. N
Wahichima: tied up. S
Watapulma: tying something red over him. S
Watsuminima: overflowing. N
Wawachikama: hitting head. S
Wekethaya: wet back. N
Wepolkadap: flat buttocks. S
Wepotehe: broad rump. S
Wilhechavel: old man wounded. N
Wikinya: black rock. N
Woischa: beckoning with hand, fingers down. Dr. Carlos Montezuma of Chicago. S
Yakekwacha: crooked mouth. S
Yatayanya: blackish spot on the small of the back, i.e., probably, Mongolian spot. N
Yu: owl. S
Yukanina: caved-in tooth. S

Yukatanacha: black eye. N
Yukisoche: eating owl. S
Yulkepapa: carrying an owl on the back. S
Yusumyauma: no eyebrows. S

Females

Bavieha: old person (Spanish vieja). N
Chauesedja: wringing out. S
Ditiyandja: round, "roly-poly." N
Djenapuka: a species of ant. N
Djeskolva: raising up. S
Djiavdja: beckoning, fingers down. N
Djihaldja: lying parallel close together, e.g., sticks. S
Djiivcha: gathering up things. N
Hanikasawa: tarantula. S
Hikwishdja: grasping. S
Iitayanya: round stump. S
Kadiyawa: round. S
Katawinba: raking in with the hand. N
Kauwakauwa: broken up. W
Kischalva: scratching. N
Kowidamitula: old woman face, i.e., wrinkled. S
Kwalakaola: red seeds used for necklaces. N
Kwathakiseyava: yellow mountain. N
Laoya: thorn, which appears on plant at a certain season. S
Lidja: leaking. N
Matetavcha: throw on the ground. N
Nokwa: great blue heron. S
Oha: coughing. N
Shaukwitika: folding something white. N
Shemi: foot. S
Shikitina: thick body. W
Shishaya: fat body. S
Sihana: good looking. N
Sikiwoma: first girl. N
Siktayela: flat. S
Sinyaka: black girl. S
Snaidja: tied up. N
Sukeatha: something green spreading out. S
Tabamashi: a small species of cactus. N
Tamocha: scratching. S
Thita: leaves falling from tree. S
Tiachwata: yellow maize. S
Tiudja: bringing out to be seen. S
Wiyela: mescal. S
Wilkitska: off her hip. This person limps. W
Yaecha: "nice me." N
Yapiï: chin. S
Yashuwemdja: turning over. S
Yumidapa: flat belt. S

MATERIAL CULTURE

DWELLINGS

Shallow caves or rock shelters were the favorite winter dwellings of the Wikedjasapa, although rare in the Mazatzal mountains. Near the Salt river they were fairly numerous and many were occupied.[13] Skull cave, 15 feet deep, 60 feet wide (pls. 32 and 33), is a good example. Cliff dwellings were often used, for instance, Tonto cliff dwelling and one in an adjacent canyon.

In winter, caves or rock shelters held heat better than huts. The heat from a fire built about the middle of such a cave rose to the ceiling, circulated back into all the recesses and made the place so warm that often sleepers needed no covers. Living in caves was not induced by the aggressions of the soldiers, but was an ancient practice.[14] The principal inhabited cave, about twice the size of Skull cave, was on the south side of the Salt river near the confluence of Fish creek.

In caves, pottery ollas of food were buried, covered with stone lids, grass, and earth. Acorns, mesquite beans, sunflower seeds, and others were stored. The informant remembered from his boyhood arrival at such a cave and how the women of the party immediately unearthed a storage olla of food, which they cooked.

The Wikedjasapa made no pictographs or petroglyphs, either in caves or elsewhere. In summer the rock shelters were too warm, so people lived under trees, usually without houses.

Where caves were absent, beehive-shaped huts were built for winter dwellings. For thatch, arrowreed was used, also a kind of bear-grass (kenyora) for the outer thatch. This had a longitudinal depression, excellent for conducting off rain water.

The huts were without center post, and resembled the houses of the San Carlos Apache.[15]

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[13] A large rock shelter near the bridge at the bottom of the Fish Creek grade on the Apache Trail highway was not used. The informant could not say what made it unfavorable.

[14] For a spirited account of the killing of the Yavapai in Skull cave, see Bourke, On the Border with Crook, 188 ff.

[15] Cf. Goddard, Indians of the Southwest, 145.

SWEAT-HOUSE

Sweat-houses were constructed beside rivers or creeks. Most inhabited rock shelters lacked sweat-houses in their immediate vicinity because they were remote from streams large enough for bathing pools.

The sweat-house was steam heated, small, dome-shaped, and covered with grass and earth. The doorway was closed with a Navaho blanket. Buckskin would not do, because the moisture would harden it. The capacity of the sweat-house was six or seven men. To one side of the entrance was the pit for hot stones. One man attended to sprinkling the stones with water. When they became cold he called to an attendant at the fire outside to supply fresh ones. These were handled with bent willow tongs or with two sticks.

Sweating was not mandatory for hunting or war. Sweating was for curing as well as the benefit of well persons. Its use constituted a purification. Men only used the sweat-house. Women suffering from ailments for which men sweated did not use it.

MORTARS AND METATES

Bedrock mortars and stone pestles were used. Portable mortars were not used, but sometimes mortars were made in boulders. Bedrock mortars were about a foot deep and ten inches in diameter at the edge. Pestles were shaped by women by pecking with another stone. Whenever available old ones lying at mortar holes were used.

Metates and mullers were of the type in which the motion of grinding is forward and backward, not rotary. They were not carried when camp was shifted, the women relying upon finding others at the next camping place.

FIRE

Fire was bored with a drill of arrowreed and a hearth of split bear-grass stalk, together called okech. The hearth was placed concave side up and a notch cut in one edge to allow exit for the dust. A bit of sand or fine gravel was used in first drilling the hole. Grass, dry and rubbed, served as tinder to catch the pile of dust and the spark from the drill.

Flint, steel, and cottonwood fungus were also used after Caucasians came.

A slow match of "cedar" bark wrapped with Spanish bayonet fiber served to carry fire, and to warm the hands in snowy weather. By blowing it became a torch for night travel, which was infrequent because of the fear of enemies rather than ghosts. Sometimes when a satisfactory stopping place had not been reached by nightfall, travelers went on.

FOOD PREPARATION

The Southeastern Yavapai, like the seed gathering tribes of California, subsisted wholly upon wild products. The outstanding food plants were mescal, sahuaro, tuna, mesquite, acorns, and piñon, probably in the order named. Deer meat was the finest flesh, and perhaps as readily obtained as woodrats and rabbits. Mountain sheep and various carnivora were also eaten. Quails were the most relished birds. Fishes were regarded as unfit for food, "on account of their odor." Creatures found dead were not eaten.

Cooking was by boiling in earthenware pots, stone boiling in baskets or in barrel cacti, parching in baskets (never in pots), baking in earth ovens, frying on hot stones, and broiling in fires. The last two methods were rare.

Baskets were carried by travelers to boil food, while pots were used about habitations. Hot stones were handled with two sticks.

Stone boiling was done at times in the juice of the water or barrel cactus, especially by men traveling with as little equipment as possible. The top was cut off and the meat slashed with a knife. Then the meat was pounded with a long stone picked up on the spot. The meat was scooped out and the process repeated until the cavity was deep enough. The food was placed in the cactus juice and hot stones introduced.

At camp, meat was boiled in an earthenware pot or baked in an earth oven. In the latter, hot stones were laid both under and over the meat, separated from it by layers of green brush. The oven was sealed with earth. No water was poured in to generate steam. Cooking took about six hours. No fire was built above the oven. The earth oven was the sole method of cooking mescal.

Animal food was not broiled in hot coals. Rabbits and woodrats were boiled, often together. Quails were also boiled. Mountain lions, wildcats, foxes, dogs, coyotes, cattle, and horses were cooked in the earth oven or boiled.

No intoxicating drinks were made. Fruit juices were drunk fresh.

WILD PLANTS USED AS FOOD

Mescal

Mescal or agave (wiyela) was the staple, or, as the informant said, "the essential," food. It was obtainable at any season and, after cooking and drying, it kept for years.

The mescal plant in prime condition has a reddish, well rounded base, and plump leaves. The leaves were sawed off with the mescal knife (see elsewhere) until the stalk of the plant had the shape of a cabbage head. When enough stalks had been accumulated they were carried to the cooking place. Usually mescal gathering was by parties rather than by a single woman. Some dug the plants, while other women or men dug the earth oven and gathered firewood and cooking stones.

A digging stick with a wedge-shaped blade was hammered home with a cobblestone to the base of the plant, thus cutting the principal root. Then the plant was loosened by prying upward on the stick.

Each woman trimmed the mescal stalk so as to distinguish her plants when placed in the common oven. One left a projecting point; another cut the stalk diagonally; another cut it square; another notched it; another stripped the outer covering down and tied it in a knot.

The oven pit was dug with a digging stick, and made three feet deep and of diameter to accommodate the plants to be cooked, perhaps six feet or more. A fire was built in it and the stones heated red hot. By sundown the mescal gathering had been completed and the pit was ready.

The mescal "cabbages" were piled on the hot stones, and a covering of brush or grass and earth put over them. Grass better prevented the earth covering from sifting through. The whole cooked for two nights and a day. If steam escaped the opening was carefully closed. During the wait other foods were collected. At the end of the second night every woman was on hand to open the oven.

Certain restrictions were observed, else the cooked mescal would not taste right.

(1) The fire was lit by a girl or boy who had been born in summer. If ignited by a winter-born person it would not heat the stones properly. Flaming brush from the campfire was applied to the fuel at one side of the pit.

(2) Sexual intercourse was prohibited.

(3) No one might scratch his head or body with his fingers. The scratching stick was used. There was no praying, singing, or dancing.

On removal from the oven the mescal was laid on a bed of grass on hard ground. There the bases of the leaves were plucked off and the hard skin stripped off with the fingers. The mescal was placed on a metate and beaten with a pounder shaped somewhat like a mescal knife, but with a blunt edge. This hammering broke down the fibers and prepared the material for drying. The juice expressed was caught at the end of the metate in a small basket. It was later poured over the mescal spread out to dry.

Stick frameworks, about two by three feet, laid across a foundation of two heavy projecting sticks at two sides for ease in handling, were covered with grass. The mescal was spread on these in a layer about an inch thick. Two people handled each loaded drying frame and placed it on a bush. In clear weather two days' exposure sufficed. After twenty-four hours of drying on one side, the slab of mescal was turned over on to another frame and there dried another twenty-four hours. In the wet season drying took longer. The dried slabs were folded and stored on a stick platform, preferably in a cave. Mescal was not stored in pits or laid on the ground. When it was to be used a piece was cut off and soaked in a basket of water. It was chewed to extract the nutriment and the fibers spat out. The decoction in the basket was drunk.

At the time of cooking some mescal was chewed. The kernel of the cooked mescal was a delicacy which was always eaten at once.

The new flower stalk of the mescal plant was also eaten. When older it became tough. The stalk was broken off, the leaves stripped from it, and it was roasted in an open fire, being turned with a stick until well browned. Then it was split open and the pithy interior eaten. It was sweet and banana-like in consistency.

The dead bulbous base of the mescal stalk served as a receptacle once the pith was removed from it. Piñon pitch was gathered in it. It could not be used for cooking.

Acorns

Acorns were a delicacy for which people would travel far, as for cactus fruits. The principal groves of oaks were in the Mazatzal, Superstition, and Pinal mountains.

The oak *Quercus emoryi* (ikmia) bears acorns, some of which are edible without leaching. These ripen about the middle of August. The fallen nuts were sampled until a tree was found which bore sweet ones. The hulled nuts were stored in pottery ollas. With the shells on they would be subject to insect ravages. They were not stored in pulverized state.

The hulls were removed by cracking with the teeth or sometimes by rubbing them with a muller on a metate and then winnowing them on a coiled basketry tray with the aid of the wind. The meats were pulverized on a metate.

Bedrock mortars were used for pounding mesquite pods, but not acorns. This contrasts with the Californian practice of using bedrock mortars primarily for acorns.

The trees bearing edible acorns were often tall, and in order to obtain the nuts, the trunk might be pounded with a stone or the tree climbed and a stick used to knock off the acorns. The men did the climbing, either sex the pounding, and women the collecting.

Sometimes acorns were swept together under a tree with a shrub branch, brushed onto a flat basket, and winnowed roughly to get rid of the principal rubbish. This was quicker than picking them up one by one.

Acorns which were bitter when green, might become sweet when thoroughly ripe. Leaching of acorn meal was unknown, although this process was applied to the seeds of the ironwood tree (*Olneya tesota*). The informant declared this would not work for acorns, because "they would turn black after soaking in water."

Another oak (*Quercus arizonica*), iyika, had larger acorns than the preceding species but invariably bitter. This oak is of low habit and, had leaching been used, would have proved a valuable source of easily accessible food.

Acorn meal was hardly a staple food. It was not cooked alone, but invariably with meat. Water from boiled meat was put in a small pot or basket and acorn meal stirred into it to make a gravy. This mixture was poured into the main pot with the meat.

Pines

The fallen nuts of the piñon, the trees and nuts of which were called kóho, were gathered ripe from the ground, or the ripe cones were picked from the trees and the nuts removed from them. Sometimes green cones were picked, put in a fire to make them open, and

pounded to loosen the nuts. The nuts were eaten after shelling, or were ground whole on the metate without shelling, being reduced to a paste, like a similar paste of sugar-pine nuts made by the Miwok. This paste was eaten at once, as it could not be stored. For storage piñon nuts were left in their shells.

Piñon pitch was gathered in a mescal stem bowl for use in coating basketry ollas.

White pines and yellow pines, both called wale, bore no nuts worth gathering. Yellow pine inner bark was not eaten, and the outer bark was not used for house covering.

Walnuts

Walnuts (*Juglans major*), chutika, were collected in burden baskets from the ground, or sometimes climbed for. They were dumped in a hole near a stream and pounded with a handy cobblestone to break the outer coating, then washed in the stream, and the cleaned nuts spread in the sun to dry. Surplus walnuts were stored in a pit dug in the floor of a cave. The pit was not lined, but a grass and earth covering was placed over the cache.

In preparing walnuts for food they were pounded on a metate to break the shells, then shaken in a coiled basket to separate meat from waste. Sometimes the kernels were mixed with mescal. A pad of dried mescal was cut off from the stored supply, moistened, and spread on a metate. Then walnut meats were laid on the mescal, the pad folded over, and the whole hammered with the muller. The juice expressed during this process was saved. The macerated pad was placed in a watertight basket or pottery jar, and water added. It was stirred, dipped up, and sucked, the decoction being very sweet.

Cactus Fruits

Tuna or prickly pears ripen in September. The plant was called lava, the fruit iste. Some prickly pears were red, some were yellow, when gathered. They were picked with tongs of ash wood and placed in a burden basket. The load was dumped on smooth clear ground, spread out with a stick, and brushed with a bunch of long weedy grass to remove the spines. After being brushed on one side the fruits were turned with a stick and brushed on the other side. This brushing was continued until all the spines were removed, and these were swept away before the fruits were picked up. Then the fruits were carried in burden baskets to the camp.

Prickly pears to be eaten at once were peeled and shaken to rid them of seeds, then eaten raw. If the whole seeds were eaten they caused abdominal swelling and constipation.

Prickly pears for storage were opened, the seeds removed, and the meats dried with the skins on, being laid out on grass or sticks. After drying they were packed in a solid mass, either in a basket kept in a dry place or in a pit in a cave. If in the latter, the bottom and sides were lined with straw, and the cached fruit covered with straw and stones or earth.

Prickly pear seeds were not often saved. If to be eaten, they were ground on the metate after parching in a basket. The meal had a sweetish taste and did not constipate.

The fruit of the sahuaro or giant cactus, a'a, was especially sought. To remove it from its lofty position a hooked pole was necessary. The fruits were allowed to fall on the ground or were caught in a burden basket. They were peeled and carried home in a watertight burden basket. At home the juice was drunk first, diluted with water if too sweet. Additional juice was squeezed from the fruits with the hands. Thereafter they were laid out on sticks and grass on the ground. After a day of drying under the June or July sun they were placed in burden baskets, taken to the storage place, and packed in pottery ollas, which were closed by setting a small pot on top right side up and sealing the junction with clay.

Ripe sahuaro fruit which had fallen naturally to the ground was best, and was sometimes treated separately, being pressed into a cake with the hands. Standing in the sun softened it so that it could be further compressed. The expressed juice was drunk. This cake of thoroughly ripened fruit was added to until of about the size of a large modern layer cake. If stored in a dry place it kept for years, but if moisture reached it a yellow mold grew on it and it became wormy. Preferably such cakes were stored in pits either lined with straw or walled with flat slabs of stone.

When dried sahuaro was to be eaten, a piece of the cake was cut off with a knife or knocked off with a stone. Soaking in a basket of water quickly restored the fruit to a condition resembling fresh fruit. This was sucked for the juice, like the fresh fruit. The fibrous portions and the seeds were spat out.

The seeds were picked out, dried, and stored in sacks of fawn skin. When eaten they were parched in a basket. In testing to determine if parched enough, a few seeds were ground on a metate. If the

meal were whitish, parching continued; if slightly brown, parching ceased. The meal was pressed into a cake, sufficiently solid to permit of slicing.

Water or barrel cactus, maletat, supplied an edible fruit, partaken of after boiling in a pot. Its fruit was smaller than sahuaro fruit, being about the size of a fig. It ripened in June.

The okatilla cactus was called ikumiye. It produced no edible parts. The cholla cactus was also inedible.

Other Vegetable Foods

In latter July, ripe mesquite pods were collected in burden baskets. They were pulverized in a bedrock mortar with a stone pestle. The pulverized mass was moistened in a watertight basket, the juice expressed with the hands into another container, and drunk; or the wet meal was put in the mouth and the sweet juice sucked from it. The solid matter was spat out.

The seeds of the ironwood tree (*Olneya tesota*) were eaten after elaborate preparation. The pods were laid on hard, smooth ground and the seeds beaten out with a stick. (This method is now employed for beans.) The seeds were soaked in water for two or three days and then boiled three or four times to remove the bitter taste. After drying they were parched with coals in a basket. Then followed the cracking of the hulls on a metate, winnowing to remove the hulls, and further soaking of the seeds in cold water to remove any lingering bitterness. The meats became whitish in color. After thorough drying in the sun, they were parched until brown. Then they were ground on a metate and the meal made into cakes which were very greasy.

Paloverde (*Cercidium torreyana*) seeds were eaten.

The "coffee" plant (*Simmondsia californica*), ikasu, yielded a very oily food with cathartic qualities. The berries were parched, then ground on a metate.

The berries charred on coals yielded a greasy charcoal which was rubbed on sores.

Squaw-berries, kitiye, were picked by hand in early May. They were said to ripen in the dark of the moon. They were washed in an openwork basket to remove their salty flavor. As the water ran through more was added and the berries manipulated with the hands. They were spread on clean hard ground to dry and stored in pottery ollas. In the preparation of squaw-berries for food, a quantity was

placed on a metate and crushed with a muller. With the hand a little water was added to facilitate grinding. Close by stood a basket of clear water, into which the pulverized material, together with pounded cooked mescal, was introduced. After mixing, the solid material was wrung out with the hands and the liquid drunk from the basket.

Hackberries (ikwa) ripen in winter. They were collected by running the hand along the stem, and winnowed to get rid of the rubbish. They were ground on the metate and eaten as a meal without cooking. No attempt was made to store hackberries.

Mulberries (bumeya) ripen in July. Sometimes they were climbed for, but usually could be reached from the ground. They were eaten without cooking or other preparation and were not stored.

So-called sunflower (matak) seeds were gathered in October. The flower heads were broken off and tied in bundles with yucca fiber. If the weather was warm two days of drying sufficed. Thereafter the seeds were rubbed off with the hands into a burden basket, carried home, winnowed, parched, ground on a metate, and winnowed to get rid of charcoal. These seeds had no shells like cultivated sunflowers, and were small and black. The meal was very greasy and the nutritive value was evidently high, for this meal was carried on war parties.

Cultivated modern sunflower seeds are parched, pounded in the bedrock mortar, and winnowed.

Certain bulbs and corms, vernacularly "Indian potatoes," were eaten. A white-flowered species appears in January in the çanyon east of Fish Creek inn, also a small grass or lily with a stalk which tastes "something like macaroni." Both of these species were dug with the digging stick.

The wild grape, idjeke, grows in the oak country of the Pinal and Mazatzal mountains, also in cottonwoods along the Verde river. The grapes were eaten raw. The vine was not used for withes.

The berries of the salty plant (*Rhus ovata*), ikiteyel, were washed to remove the salty taste, mashed on a metate, and eaten raw.

Alligator-bark juniper (*Juniperus pachyphlaea*), djokyalka, bears berries which ripen in October. These were collected after they had fallen to the ground, pulverized in a bedrock mortar, soaked in water, put in the mouth by the handful, and the juice sucked. The solid matter was spat out.

"Cedar" (?) or djoka berries were collected from the bush, which is smaller than the "juniper." They were parched to soften them, and eaten without further preparation.

Manzanita (*Arctostaphylos pungens*) was called chumpuka, chempuka, or yempuka. The berries, either fresh or stored, were pulverized in a bedrock mortar, mixed with water, and taken into the mouth by the handful. The solid matter was expectorated after sucking out the juice. Sometimes the liquid was expressed by squeezing the moistened pulverized mass with the two hands. The central Californian method of obtaining the liquid by percolation was unknown.

A species of yucca, monata, produces six or seven banana-like fruits to a stalk. When thoroughly ripe these become soft and drop off. Often the natives did not await this event, but bent over the stalk and plucked the fruit. Ripening of plucked fruit was hastened by putting it on the fire, then placing it in water, and rubbing off the scales, a treatment not necessary for naturally ripened fruit. To dry the fruit it was opened lengthwise and the seeds discarded, but the skin left on. It was sun-dried for two or three days. It was stored, but did not keep well. The stored fruit was soaked in warm water, squeezed out, and the water drunk. Some of the meat would be expressed in this way. The waste part was thrown away.

Greasewood leaves were boiled into a yellowish tea and drunk for coughs and colds. The leaves were also rubbed on the head to relieve a cold in the head.

Jimsonweed (*Datura* sp.), smalkato, grew along the Salt river, but was not used.

Miss Alice Eastwood, of the California Academy of Sciences, kindly identified the plants here discussed.

TOBACCO AND PIPES

Tobacco which grew where pine stumps had been burned was "strong," while that which grew in rocky places was "weak." Tobacco was smoked only in pottery pipes. Cigars, cigarettes, cane pipes, chewing, and the use of tobacco as an emetic were unknown.

Pipes in two forms were made by old men, all other pottery by women. Both pipes possessed conical bowls. One had the stem inserted in the base of the bowl, in the plane of the axis of the bowl. Thus the complete pipe approximated in form the tubular pottery pipes of southern California, and like them had to be tilted upward when smoked. In some examples, this tubular pipe had a lashing of yucca fiber by which it was held when in use. The other form of pipe had the stem entering the side of the conical bowl near the bottom and

at right angle to the axis of the bowl. The stem in both forms was short. In making the hole in the stem a straw was pushed into the soft clay.

SALT

Salt was obtained from a hole in a bluff in Fish Creek canyon, visible in plate 31, high up in the canyon wall in the left background.

DETERGENT

The stem of the yucca was mashed with a stone, then worked with the hands in a basket, or pot of water. The lather produced was used like soap for the body and especially the hair. It was not used after sweating, for the bath after sweating was in a river or creek. Warriors washed with this after a war party, whether an enemy was slain or not.

AGRICULTURE

Agriculture was at a minimum. The informant knew of only one person, the chief Telshe, who planted. This dearth of agriculture was evidently due to lack of favorable localities for cultivation, to an abundance of wild products, to fear of attack by enemies, and to established cultural pattern (tradition).

Telshe lived on the bluff above Amanyiká. He planted, however, on the north side of the Salt river, upstream from the mouth of Fish creek, in a box canyon between two white rocks. The soil was level and kept suitably moist by a spring. The place was inaccessible to aboriginal enemies. The informant knew of no other equally satisfactory place in the rugged habitat of the Southeastern Yavapai.

Telshe asked the people to help him plant. After planting, there was no cultivation. At harvest the produce was shared among the coworkers and with other members of the band. Telshe raised pink (nuta) maize (iyacha), pumpkins, watermelons, and gourds, the last for canteens and shamans' rattles. Muskmelons and beans were not grown. Surplus maize was stored in pottery ollas in rock shelters. Harvesting was the occasion of feasting.

ANIMAL FOODS

The hunter might or might not sweat prior to the chase, but he usually rubbed his body with the pungent, mint-like leaves of a plant called yiwiltausatawacha, to kill body odor. This plant has a single straight stem without branches. On each stem there are pairs of leaves at intervals.

Venison was regarded as superior to the meat of the pronghorn antelope and the mountain sheep. Except for the running down of fawns by dogs, deer were hunted with the bow and arrow by stalking with a deer mask. Snares and nets were not used, and deer were not driven over cliffs.

A slain deer was skinned on the ground. For this animal only was ritual procedure and prayer required. After the hunter had skinned the deer but not yet eviscerated it, he (1) laid the skin lengthwise on the carcass with the head toward the head, (2) laid it lengthwise with the head toward the tail of the carcass, and (3) slapped it crosswise over the carcass and patted it with his hands. The skin was applied wet side down. As he did this the hunter uttered the following prayer: "I hope the same one will come again, so we have plenty to eat."

If a menstruating woman ate venison, it was believed that her teeth would decay and fall out. The deer would be offended, and would cease to come to the hunter who had killed this particular animal, but would still come to other hunters.

The Southeastern Yavapai liken themselves to mountain sheep in their ability to traverse rapidly the rugged country which they inhabited. The sheep, however, could negotiate jumps impossible to human beings. On one occasion the informant's father and father's brother tried to corner a male sheep at the edge of a precipice forty or fifty feet high, but with talus below. Before either could discharge his arrow, the sheep jumped off the precipice, landing on its horns[16] in the talus, then slid down with its front feet braced. At the bottom of the slope it trotted away.

Often three or four men hunted mountain sheep together. No masks for stalking or dogs were employed. There were no taboos prior or subsequent to the hunt. No prayer or special utterance was made at a kill. Dogs might eat of the meat without injury to the hunter's future success.

The horn of the male mountain sheep was not used, being too ponderous. The female sheep's horn was made into a smoother for arrow foreshafts. Holes were burned or drilled through it and the foreshaft screwed through these to smooth it.

The pronghorn antelope (*Antilocapra americana*), moula, did not occur in the mountainous habitat of the Southeastern Yavapai. They knew it only from visits to the territory of the Northeastern Yavapai,

[16] Zoologists regard this feat as purely imaginative.

where they sometimes hunted it. Two places in which it was hunted were the valley at the head of Agua Fria creek, lying between Prescott and Jerome, and Black canyon, twenty-five to thirty miles north of Phoenix. Dogs were not used in antelope hunting, nor were there antelope drives.

The antelope was stalked by a hunter wearing an antelope mask made of the skin from the head and shoulders of the beast. To this was sewed buckskin to complete the covering for the hunter, as the antelope skin was not big enough. The buckskin was painted yellow and red to represent the markings of the antelope. The stalker walked stooped, using two short sticks to support himself. Sometimes the bow served for one stick. As he neared the quarry he struck the bushes with the horns by a sidewise movement of his head, and called like an antelope. Antelopes could be approached from either windward or leeward, as they were not disturbed by scent. The hunter carried his arrows under one arm.

The capture of horses and cattle for food was one of the principal incentives of expeditions. They were driven until the country became too rough and there slain and eaten. Most of the Southeastern Yavapai territory was too rough for rapid riding. Sometimes, in more favorable country, the Southeastern Yavapai rode. Although the Pima rode most of the way in their expeditions to Superstition mountain, they negotiated the rocky country on foot.

The mountain lion was shot with the bow and arrow. It was rarely trapped, because it seldom ate the dead things with which traps were baited.

For wildcats, foxes, and coyotes a bait was arranged in a blind trail, bordered with piled up prickly pear or other plants, so as to insure proper entrance of the animal. Across the trail was a log or stone. Suspended directly above this was another log, weighted at both ends with stones. The bait was a dead squirrel or rabbit, attached to a trigger, and when pulled it released the overhead log. To get the bait the middle of the animal's body came directly under the log, and was crushed between it and the nether log or stone. The suspended log was balanced between two stakes at each end. A little piece of wood serving as trigger was placed at each end to support the log. From these, strings ran to the bait.

The informant had seen his mother's father set such traps.

Standing jackrabbits and cottontail rabbits were shot with the bow and arrow. Running ones were bowled over with either straight

or curved sticks. The curved sticks were not regularly shaped, so evidently the Southwestern boomerang was but little used, if at all. No nets were used in rabbit drives, but a circle of fire, with a ring of people outside, was employed. When the circle was sufficiently reduced the rabbits were clubbed.

Hooked sticks were used to tear to pieces the nests of woodrats. The fleeing animals were shot with the bow and arrow. They were also taken in a trap baited with mescal. The trap was of the figure-4 type, arranged so that a stone slab fell on the rat when the trigger was released.[17]

Gambel's quails were sometimes caught in the woodrat trap. A larger quail without a crest and with a head like a prairie chicken's was caught on the high mesas. Quail eggs were eaten only by old people, who roasted them in ashes. Young people would not eat them for fear of becoming freckled like the eggs, or producing freckled offspring.

Desert tortoises and their eggs were eaten. The tortoise was cooked in the earth oven after the plastron had been removed. Lizards were not eaten.

Grasshoppers were not eaten, but hairless caterpillars (imi'), four inches long and colored yellow, with black longitudinal stripes, were eaten. These were collected in autumn from a sticky grass. The heads were pinched off and the guts pulled out therewith. The bodies were toasted on a hot stone, turned with a stick, and eaten without salt when cooled. They were very rich and greasy.

Honey was obtained from the "nest of a bee," presumably the yellowjacket. The insect was "larger than a wasp," slender in the middle, and had black and yellow transverse stripes. Its nest was underground, where a number of compartments, each the size of a man's fist, contained yellow honey. There was no wax around the honey, so that when dug out it was usually eaten with more or less dirt. The initial step in getting the honey was to build a fire at the entrance to the nest, to smoke the insects to death. It took a brave man to build the fire for the insects stung him.

DOGS

The informant described the aboriginal dog as resembling a coyote. Dogs ran down fawns and wounded deer. They could also run down foxes, but not coyotes. Dogs were directed by motioning with the

[17] See Spier, Havasupai Ethnography, text figure 4 (p. 113).

hand and snapping the fingers. They were allowed to eat scraps of venison or whatever other foods could be spared them. Women sometimes nursed puppies if the dam died. The informant characterized dogs as undesirable, as their barking revealed the location of the camp to enemies.

The characteristic attachment of a boy and his dog is shown in the following anecdote about the one and only dog which the informant possessed as a boy. As he spoke about his dog, although sixty years had elapsed, his eyes were moist.

This dog, which had no name, was a large male, with gray coat, long hair, and prick ears. He was a good hunter and always brought in a rabbit or other small animal. He was the boy's constant companion. At night they slept together. The boy being poorly provided with clothing, slept with one side against the dog for awhile, then turned over and warmed the other side.

During a trip to Fort McDowell to make a "treaty" with soldiers, the Wikedjasapa were short of food. While the boy was away from camp for a brief time, his maternal grandfather clubbed the dog and cooked it in an earth oven. Although the boy cried for days over his loss, he nevertheless partook of the meat.

CARRYING

There was no carrying of loads on the head, such as the Cocopa women's adroit balancing of babies and pots of water. Correlated with this absence was the absence of headrings. A pottery olla was held with both hands. Water was not carried in it, but was poured into it, as it rested on the ground at the camp. A pitched basketry olla was used for water transport.

CONTAINERS

Baskets, earthenware pots, gourds, hollowed-out barrel cacti, the base of the stalk of the mescal plant, animal skins, and dug storage cists, served as containers.

Warriors carried water canteens, made from gourds which grew wild in certain valleys, either escapes from cultivation or a native wild species. A large gourd of water was carried at the back and a small one at the side. Each had an encircling network of strings by which it was carried, suspended by a rope passing over one shoulder and under the opposite arm. The rope was made of fiber from pounded yucca, or dead mescal leaf.

Cradles, burden baskets, and parching baskets were twined. Winnowing and cooking baskets were coiled. Designs were in black and feathers were never used. No soft basketry bags were made.

Coiled baskets were sewed with an awl of yucca or mescal leaf point, or of hardwood. No bone awls were used.

Baskets were made watertight by close weaving, by coating with pitch, by rubbing on the juice from the sticky leaves and stems of a certain desert plant—apparently not a lily—and by application of a boiled decoction of certain seeds over the inner surface of the basket. This last method was applied to burden baskets in which juicy cactus fruits were to be carried.

Two sizes of twined conical burden baskets were made, both carried on the back by a tump-line passing over the head. The larger type was about three feet tall and almost as wide at the mouth. It was used for the gathering of seeds and berries. The smaller was more closely woven and waterproofed as described above.

When people traveled, baskets were carried to boil food in, pots being too heavy. For water transport, gourds and pitched basketry ollas were used. For cooking at camp and for storage, pottery vessels and ollas were used.

In waterproofing the new twined bottle-necked basket, the exterior was first rubbed with pulverized "cedar" leaves mixed with water, sometimes with red clay added. This filled the interstices and made the surface ready for the application of piñon pitch. This substance had been previously gathered by scraping it from the trees with a stick or stone. The pitch was boiled in a pot and applied to the exterior of the basket with a grass brush tied to a stick handle. After the exterior had been coated, molten pitch was poured into the basket, which was revolved so the whole interior would be coated. Many small heated pebbles were next introduced and the basket olla further revolved to melt down any lumps of pitch and to make the surface smooth. The pebbles were poured or shaken out.

The cradle (iyake), made by women, consisted of an oval or elliptical loop of ash stick with pieces lashed transversely across it. The ash branch selected was buried in the earth under a fire to render it more pliable and to make the bark easier to strip off. Thereafter the branch was bent into a loop. Where the two ends were bound together with buckskin, they were first whittled to a smooth junction.

The cross-pieces were made from the dry stems of a pithy shrub called eyuta. The sticks were cut to proper length and split. They were then flattened so they were about the width of a lath, and bound on pith side up. The lashings were of buckskin tied to leave six or

seven projecting loops on each side of the cradle for the buckskin lacing to pass through when the baby was lashed on the cradle.

To support the face covering, one side of a ring of twined basketry was lashed flat across the cradle a few inches below its top, thus forming a semicircular band rising at right angle and transversely to the floor of the cradle. This band had stems of cat's claw acacia for warp and scraped white willow stems for weft. No design was woven into this band to indicate the sex of the child.

Buffalo grass (iwila) pounded with a stone to soften its fibers, formed the bed of the cradle. It was not lashed on, but simply laid in place when needed. Any part of it that the baby soiled was readily replaced. Buckskin served as swaddling clothes for the infant.

The cradle was suspended on the mother's back by a buckskin pack-strap which passed over her head. No basket cap was worn. When the mother worked she did not hang the cradle on a tree but laid it down. In traveling on horseback (in reservation days) she hooked the upper edge of the cradle over the saddle horn.

Not every woman made pottery. Clay was obtained from a place near Amanyiká. The clay was crushed on a metate and winnowed to get rid of gravel. It was then mixed with water, but no temper was added. Probably there was sufficient sand with the clay to give the necessary temper. If red ware were desired, red mineral pigment (face paint) was pulverized and mixed with the clay. No design was painted on the pottery. Thus it resembled that of the westernmost Yuman people, the Diegueño.

The technique of building up a vessel was by coiling without the use of the paddle and anvil. Cylinders of clay held vertically were rolled between the hands. The vessel was started by coiling a roll, not by making a small saucer. The compacting of the coil was done with the fingers. A sherd served as scraper and polisher.

Pots were dried two days in the sun before firing. They were baked in a fire of sticks with the orifices up. Burning sticks fell inside and helped to make the baking more thorough.

No pottery was seen, but the informant described three shapes: a pot for boiling, a bottle-necked olla for water, a bowl for drinking. There were no tray or plate shapes and no parching dishes.

Cooking pots were occasionally carried from place to place in a burden basket, carrying nets being absent. In boiling, the pot was placed on the ground and the fire built around it.

Storage cists were pits dug in dry caves or rock shelters. Usually these were lined with straw, sometimes with flat slabs of stone. The material stored was covered with straw, brush, stone, and earth. Sometimes pottery ollas were buried instead of a pit being used. Cist or olla storage was primarily for foods.

WOODEN IMPLEMENTS

To stir boiling food a plain stick was used, though sometimes the tongs for prickly pears might be used. For the transfer of boiling water from a pot to a smaller receptacle a cottonwood ladle was used. No spoons were made of mountain-sheep horn.

Tongs of ash (kupu) wood were used to pick prickly pears. A young branch of ash was split and bent. Then two notches were cut on the inside of the bend and the piece was placed in the fire to make it more pliable. When sufficiently so, it was bent to shape, lashed, and left tied until thoroughly dry.

Tongs of bent willow were used to handle heated stones for the sweat-house steam pit. Two sticks served as tongs in the process of stone boiling.

A short hooked pole of ash wood, walking-cane length, was used to destroy woodrat nests; a long hooked pole, to collect sahuaro fruits. The skeleton of a dead sahuaro furnished the necessary sticks, which were lashed together with strips of buckskin until the appropriate length was obtained. The uppermost segment of the pole was a "greasewood" (creosote bush?) stalk upside down, so that the junction of a branch with the stalk could be used as a hook for yanking off the fruits. Preferably a greasewood stick with two such "hooks" was used, so that the lower one might be more suitably employed for the fruit of shorter sahuaro.

The digging stick (ta'pala), about the length of a cane, was made of mulberry (bumeya) or of hackberry (ikwa) wood. A branch was sawed with an unretouched fragment of sharp stone until it could be broken off. The distal end of the stick was hacked off until wedge-shaped. It was not fire-hardened, although the walking cane used by an elderly person was. The digging stick was wielded with both hands like a quarterstaff. This implement seems to be the mescal root cutter characteristic of the region and secondarily used for digging.

ADHESIVE AND PAINT

The gum from the base of arrowweed plants, used as an adhesive by the Cocopa, was not so used by the Southeastern Yavapai. Their adhesive was pine pitch (piñon gum ?).

A blue-green paint was used by shamans for the designs on bull-roarers. It was made by macerating especially sticky "cedar" leaves together with the leaves of a tree called wiltoki, which grows at high altitudes. A green juice exudes from the leaves of the latter when squeezed. No pine pitch was mixed with the pigment to make it adhere.

Yellow face-paint was obtained from clay, black presumably from galena, and red also from a mineral source. Both the latter pigments were found in the canyon above the bridge at Mormon flat on the Apache Trail highway.

SKIN DRESSING

Men did the skin dressing and made moccasins and skin garments for men, women, and children.

Brains for skin dressing were chiefly from deer and rabbits. They were partly cooked under hot ashes, wrapped in grass, sun dried, packed in a pot or buckskin or fawnskin bag, and stored in a dry place.

There was apparently only slight use of the stone scraper, the fingers and nails being largely used to remove fat and flesh. In making buckskin, the hair was removed with a beaming tool, which formerly was a sharp-edged deer leg bone (cannon bone?), and latterly a horse rib. Deer ribs were too small. Three or four horse ribs were kept in water when dehairing was in progress. This was to prevent their becoming brittle and breaking. These were sharpened with a steel knife, anciently a flint one. The removal of the hair from the hide of an adult deer was a day's work for one man. Scraping was in the direction in which the hair lay. The skin was draped head-end up over a five-foot post leaned against a tree.

Large deer skins were made into buckskin. Such were used especially for bed covers. After the dehairing, brains were rubbed into the hide and warm water sprinkled over it. Then it was wrung out by attaching it to a small tree and twisting it with a stick.[18] Thereafter, the skin was worked with the hands, being pulled and stretched. Sometimes one end was held with the foot, the operator, either sitting or standing, tugging at the skin. All operations were performed by

[18] Cf. Spier, Havasupai Ethnography, fig. 17.

one man. If still too stiff after this treatment, the hide was buried in moist earth. Thereafter it was worked with the hands to soften it. This was done when no wind was blowing, lest the hide dry prematurely. Sometimes the worker would allow no one to watch him, for fear of bad luck and a poor quality of buckskin. Therefore a hide dresser might work in a secluded spot.

If there were too many hides to permit of their receiving immediate attention, brains were smeared over their inner surface and they were folded and set aside temporarily. This folding was not done under ordinary circumstances.

Care was necessary not to get finished buckskin wet, as it would stiffen. Resoftening required treatment with moist earth, but not with brains.

Fawnskins, hair side out, were used as bags to carry and store acorns and seeds. The fawn was run down by four or five men and killed with a club. The skin belonged to the man who caught it, but the meat was divided between all who participated. The fawn was skinned through a cut made between the hind legs. The mouth and eye openings were sewed up after the skin had been softened.

The fawn skin was dried inside out and boiled brains were rubbed thoroughly into the inner surface of the skin. Then moist earth was applied and the skin worked with the hands to soften it. Coyote hides were similarly treated, except that no brains were applied.

WEAPONS

Mulberry wood was used for bows, willow wood for boys' toy bows. The mulberry wood, stripped of its bark and wrapped therein, was buried in the earth and a fire built above it. After removal from the earth it was bent to form by passing an end between two trees very close together and exerting a leverage on it.

The bow was of the simple type. A man's bow, for each made his own, stood on end should reach to his chest.

The bowstring was of sinew. Sometimes the position of an enemy was revealed in a night attack by the snapping of the bowstring against the wrist guard. This object, called chal'ama (literally "hand around"), was made of skin from the deer's neck.

The arrow release was primary.

War and hunting arrows were of cane with wooden foreshaft and stone point, or in recent times a steel point. Hawk or eagle feathers were attached to the proximal end.

Clean arrows were used for game, poisoned arrows for warfare. The informant recalled the case of a soldier, through whose coat sleeve an arrow passed, inflicting a scratch on his arm. He paid no attention to the scratch, but in two days his arm swelled, then the same side of his body. The result was death.

Arrow poison was made by stuffing a piece of deer's liver with spiders, tarantulas, and a rattlesnake's head. It was then wrapped with yucca fiber, buried in the ground, and fire maintained over it. When rotten, it was exhumed, tied with a string, and hung from the limb of a tree. Because of stench it was hung well away from camp. There it dried for several days, and shrunk to only a fraction of its original size. Next, a part of it was rubbed down with a stone on a flat rock, a little water being added to make a paste. The unused portion was rehung. The paste was applied to the arrowpoints with a stick. One took care not to get the paste under his nails, lest he be poisoned. Arrows thus treated were dried far from camp. The arrows were placed in a special quiver.

The arrows for quail shooting had a wooden point with either two or four small sticks lashed across it at right angle and about one inch from the tip. These were to strike the bird, in case the shot was not accurate enough for the point to strike. Usually quail were shot at night at their roosting place.

Besides the foreshaft smoother of female mountain-sheep horn already described, a shaft straightener of steatite was employed. Its base was flat, its upper surface curved convexly. Two longitudinal grooves with a ridge between were cut in the upper surface. It was flatter and not so thick as the Diegueño implement.[19] When used, the stone was heated and the arrow warmed in the grooves, and bent over the median ridge.

The old style quiver was a bag made of the whole skin of an animal, sometimes mountain lion, more frequently fox or wildcat because the mountain-lion hide was too big. It was made with the head down and a rawhide bottom sewed into it. The hair side was out and the tail left on for ornament. The informant knew of this type of quiver only by hearsay. The only sort he had seen was made of horse hide.

One type of shield was a disk a foot in diameter, made of skin from the mountain-sheep's head and neck, with buckskin on the inner surface. It served to stop arrows and occasionally bullets. It was sometimes painted wholly yellow.

[19] Kroeber, Handbook, pl. 49*e*.

A second type of shield was a buckskin curtain held in the same hand as, and grasped along with, the bow.[20]

At times a warrior wore armor over his buckskin coat. The armor was made of cooked mescal pounded, moulded, and dried into two plates, each about two inches thick. The plates were the width of the warrior's body and somewhat pliable. One was worn in front, one in back. The front plate reached from the neck to below the genitals, and was suspended from the neck by a cord. Behind, a longer plate projected upward so as to protect the head as well as the back. The neck cord for this plate was fastened below the top. A rope around the middle bound the two plates firmly against the buckskin coat.

This type of armor suggests influence from ancient central Mexico where troops wore quilted cotton armor, later adopted for Spanish soldiers in the Southwest. However, it may be a Yavapai invention suggested by the transporting of pads of dried mescal for food. Their virtue as protection against arrows would sooner or later be discovered.

The war club was a stone encased in rawhide and attached to the end of a stick, also encased or partly encased. Such a club was usually limber between the stone and the stick.

No missile clubs were used.

The sling was used for the killing of birds and rabbits and at times in combat.

FLINT FLAKER

The antler flint flaker was about six inches long and without a wooden handle or extension. It was cut to chisel edge with a stone knife, after it had been softened in water.

KNIVES, LANCES, AND AXES

The flake from which the stone knife was made was knocked off the core with a stone. It was retouched with an antler flaker, after warming by the fire to make it more brittle. Then it was held on a piece of buckskin in the palm of the hand, while the chips were pressed off. Arrowpoints were made by the same technique.

White flint, quartz, galena, and occasionally obsidian were used for knives and points. All were found in Southeastern Yavapai territory.

The old style mescal knife was a broad flint blade shaped like that of a pole axe, but without a handle. The cutting edge was three or four inches wide. It was used to saw with rather than to chop. The

[20] Spier, 250.

mescal leaf was held taut in one hand and the knife manipulated with the other. This knife was made by mén but used by women. In the informant's time it had been replaced by a steel butcher's knife or cleaver with convex blade.

Stone knives and lance blades yielded to steel ones long ago. There were no spears for throwing; the lances were for thrusting only. They were not ornamented with feathers.

Sometimes a warrior carried in his belt a flint or greenstone axe. It was flaked and the edge ground down. A shallow groove rubbed into each side made possible the firm attachment of the fifteen-inch split-stick handle, usually of oak. This handle was bound on with green rawhide strips.

DRILL

The flint-pointed drill was not used to manufacture shell, stone, or bone ornaments, none of which were made. It was used to drill mountain-sheep horn. The wood of the handle was split for a short distance, the base of the flint point inserted, and the wood lashed tightly with sinew to hold the point securely in place, without the aid of pitch.

CLOTHING

Small children went naked. At the age of six the informant had a breech clout. His bedding was minimal and he slept with his dog for warmth.

The woven rabbitskin blanket was not made, but the willowbark blanket was. It was woven of two-ply willowbark string, presumably on a horizontal frame. The weaving was by men. An old Wikedjasapa man who lived near Four Peaks was very expert in the art.

No matting from tules or other plants was made.

Coyote skins minus legs were used for capes and robes. Four or five sewed together with sinew string made a robe. The sharp rigid point of a mescal leaf was used to perforate the skin for sewing. The coyote skins were worked soft enough without treatment with brains. Mountain lion skins were used principally for capes.

Rabbit and fox skins, turned inside out and open at each end, were used as muffs in cold weather. Men, women, and children employed them.

Grass skirts and breech clouts were not worn by women. Their dresses, of three types, were of buckskin and were prepared entirely by the men. One was a long dress requiring three or four buckskins,

reaching from shoulders to ankles and provided with sleeves. The second dress comprised a two-piece skirt reaching from the waist to the ankles, plus a tunic or blouse. The third dress was a tubular skirt reaching from the waist to the ankles. Sewing was with two-ply sinew string or buckskin.

The two-piece skirt consisted of front and back aprons hung over a belt from the waist; their edges overlapped. To the bottoms was sewed a three- or four-inch fringe of buckskin. On each tip of the fringe might be attached a fawn's dewclaw, which had been perforated with a burning stick for suspension.

In the fold of each apron over the belt at the waist, the inner fold was long, the outer short. The long fold bore the fringe. Women wore no dress with a suspender neck band.[21]

The buckskin tunic worn by women was a poncho-like affair with a hole for the head and two arm holes. The buckskin about the arm holes was cut into a fringe. A strap around the waist held the tunic in place. It was worn chiefly when cold. The buckskin tunic worn by men fitted tighter. In hot weather people dispensed with their tunics.

The buckskin tunic for men was a coat rather than a poncho. Its construction differed from the woman's tunic, as a seam ran up each side to the arm pit. Two other seams united the sleeves with the shoulders. In front there was a neck opening, so that the head could be thrust through in donning the garment. On some there was a fringe of buckskin at the shoulders and at the cuff. There was a seam down the inside of each sleeve. The sewing was with either sinew or buckskin string, the latter preferred. The shirt was not embroidered or painted, except for the rubbing on of tule pollen. The edges might be fastened together at the neck with a stick passed through holes in each edge like a pin.

The lower garments for men were hip leggings, held up by a belt. The breech clout was of buckskin or of white cloth obtained from the Mexicans.

Women wore no leggings, but boots with uppers reaching nearly to the knees. The height of the upper depended somewhat on the length of the dress. If the dress reached to the ankles the uppers would not reach so high as with a shorter dress. The uppers protected the ankles and calves when walking through brush.

Sandals and snowshoes were not used, but boots (mahanyo) were worn by both sexes, young and adult. Boots had rawhide soles, cut

[21] Spier, fig. 39.

out after marking with charcoal around the foot placed on the piece of seasoned rawhide. The rawhide sole was softened by burying in moist earth, so that it could be manipulated satisfactorily. The edges were folded up slightly all around to serve as buffers. In addition, the toes of some boots had a projecting piece which turned sharply upward. It was about the diameter of a dollar. This projection, formed of the sole and upper, was stuffed with grass and stitched tightly around the edge, including the inner margin which adjoined the boot proper. The alleged purpose was to protect the toes.[22]

In men's boots the uppers reached up the calves well toward the knees. The leggings came down over the uppers. Two spans was the width of the buckskin which would encompass the thick part of the calf. The upper was a single piece of buckskin with a vertical seam on the inside surface of the leg where the two edges joined. Where sewed to the sole it was puckered.

For the uppers of a pair of women's boots a whole buckskin cut lengthwise was needed, because the uppers were folded down at the top over each calf, and thus gave protection like a legging. They were somewhat higher than the uppers of the Havasupai example figured by Spier.[23] If the folded part of the uppers was stretched upward to its full height it reached nearly to the hips. It was always worn folded down below the knee, however. Its lower edge was cut to a fringe and painted with red mineral pigment or green vegetable pigment. The folded uppers were so thick that a rattlesnake could not strike through them.

Porcupine quill decoration was not employed for footwear or buckskin garments.

HAIRDRESS AND ADORNMENT

Men either wore their hair shoulder-length or allowed it to grow full length. It was not worn in pencil-like strings as by the Colorado river Yumans.

Sometimes men parted their hair over the forehead and made a braid on each side. The braids were tied together at the back of the head. A youth might attach a white feather[24] to his braid. Men did

[22] For illustration, see Hatt, Moccasins and their Relation to Arctic Footwear, 199, figure 51.

[23] Figure 43.

[24] In a myth red feathers are mentioned as the hair ornament of a god. Such feathers were not worn by men.

not bang their hair, nor did they wear scalp locks. Sometimes they wore the hair tucked behind the ears. A plain buckskin band might be bound around a man's head to keep the hair from his eyes. There was no special occasion for this. Women did not wear such a band. Neither sex wore hats.

Women banged the hair at the eyebrows. At the back it was worn shoulder-length or longer. Women's ears were concealed by the hair.

To kill lice and to darken the hair it was plastered with mud boiled with mesquite gum, picked up from the ground. This was tied on the head for a day and a night. The mud killed the lice, the mesquite gum blackened the hair. It was believed necessary to wash out this plaster and put on a new application before daylight, lest the sun "burn up the hair and turn it red or yellow." Three or four consecutive applications were used.

A woman's hair was close cropped in mourning, a man's only slightly docked.

Men removed facial hair with their finger and thumb nails used as tweezers. Eyebrow hairs were not plucked by either sex.

Women wore no jewelry of shell, stone, or bone. Among men only a mastava wore the turquoise bracelet.

There was no nose piercing, but the ear lobes of all babies were pierced with the sharp spiny end of a mescal leaf. A bit of wood inserted in the wound kept the perforation open. In adult life men might wear ornaments in or suspended from the opening; for example, a shell bead from a ruin. Such ornaments were not made by the Southeastern Yavapai.

Women were tattooed at puberty, men at any time. After pricking in the design on the face, a green vegetable pigment was rubbed in, followed by charcoal. Neither was washed off. The tattoo needle was a little bundle of cactus or mesquite spines tied with sinew. Pricking was accomplished by pressing it in with the fingers. The patient had to lie very still. He must not laugh at this time lest his face crack.

The common design for men was a cross on the forehead, one on each cheek, and sometimes a dot in each of the four angles of the cross. For women two designs are shown below.

Fig. 1. Woman's chin tattoo. Left, commoner, right, rarer type.

The war paints for men were (1) face entirely blackened, and (2) black horizontal band across the eyes, black forehead and chin, nose blackened (sometimes), and red cheeks.

Women painted horizontal red stripes on the cheeks and vertical ones on the chin. Yellow clay was painted over the cheekbones. Sometimes a black horizontal band was painted across the eyes.

Children's faces were painted red, in spots, or all over. Young women sometimes painted their faces with red pigment mixed with deer grease to prevent sunburn.

MUSICAL INSTRUMENTS

The musical rasp and musical bow were unknown. A one-string fiddle was used. The string was of sinew, fastened over a hollowed length of mescal. It was played by means of a small bow with horse hair string. Rosin was used on the bow string. The name of this fiddle was ikihilahila. In view of the complete absence of true stringed instruments elsewhere in native America, its ultimate European derivation is certain, though the informant thought it was aboriginal.

Deer-hoof, turtle-shell, and split-stick rattles were not made. Gourd rattles were the only type and they were made by shamans. Gourds were cleaned when dry, without the aid of hot water. Sticks were used as probes to loosen the waste matter, so it could be shaken out through the neck. Pebbles were inserted for noise producers, and a stick glued with pine pitch in the neck of the gourd for a handle. No design was painted or engraved upon it.

The bullroarer (igelita), another shaman's instrument, was made of wood from a pine struck by lightning. It was about a foot long exclusive of the cord. A zigzag design in blue represented lightning. On the other side was a representation of the goddess Widapokwi, garbed like a nun.

The drum (amata, a word probably meaning primarily "pot") consisted of a pottery olla wrapped in buckskin, which was stretched tightly across the orifice. It was rendered taut by one man twisting the corners of the buckskin together at the bottom of the olla, while others beat the skin head stretched over the orifice. A small amount of water and some charcoal fragments were in the bottom of the olla. The bigger the olla the more booming was the sound. The drum-stick was a handled loop or ring of oak withe. The skin head of the drum was struck with the edge of the ring. Two or three singers, each provided with a drum-stick, beat the drum together as accompaniment.

The cane flute (taltala) with four holes was played by young men in courtship. Cane whistles were used by masked dancers.

Men did not whistle much in olden times, lest it betray one's presence to an enemy. Women did not whistle at all.

GAMES

Peon (guessing for sticks or bones in the hands) was not played. Cat's cradle was not aboriginal. The informant learned some figures from soldiers. Neither football, foot-cast ball, nor basketball were played.

The hoop and pole game (dulwit) was a popular pastime for men. Two players simultaneously cast ash wood poles at a rolling ash wood hoop about a foot in diameter. The ring had notches painted red, yellow, and other colors. One player's pole might be painted red, the other's yellow. Contact of the pole with a notch of the corresponding color on the ring was necessary for scoring. The winner of each throw rolled the ring for the next throw. People gambled on the result, wagering horses, buckskins, and blankets.

If a large crowd watched the game, an umpire might supervise it. Before the game commenced it was decided to play to a fixed number of points. To win, a player must have that number of points above his opponent's score. The method of scoring was simplified by always subtracting the winner's points from the loser's score. Thus, if A had 5 points and B none, and B made 3 points, the score would stand A 2 points.

Shinny (kotwi) was a boys' game, sometimes played also by girls. The shinny stick was carved at the striking end. The ball was small and of stuffed buckskin. There were two goals.

Foot races were run by boys and men. They ran to a point and back to the starting point, which then constituted the goal.

Wrestling occurred in sham battles, but boxing was not practiced.

A dice game (istokobi) with three sticks was formerly played by men only. Now both sexes play, as among the Apache. Several individuals participated. The stick counters were placed in the middle first, and paid out to the players as they won. When all were gone from the center, they were then passed from player to player.

In the game nowit several men took part on each of two sides. Each team hid a small stone in one of four or five piles of earth. A blanket was held between the two teams during hiding. Then the opponents came and sat in front of the hiders. The seekers clapped

hands and pointed at this or that pile, the while watching the eyes of the hiders to see if they betrayed the location of the stone when the correct pile of earth was pointed to. Finally one of the seekers shoved his hand into an earth pile for the ball. If he made a mistake the hiders hid the stone again. Both teams sang during the game. Two umpires attended to the scoring, which was with twelve or fifteen stick counters. The counters were placed in the middle at the start. After all were won and distributed, they were passed directly from team to team by the umpires.

RELIGION

DISPOSAL OF THE DEAD

The dead were cremated, usually within the dwelling, which was pulled down over the corpse, or on a pile of brush outside if the dwelling were a cave. Personal belongings were consumed in the flames. The camp was shifted. If the person died in a cave, all food stored therein was abandoned.

All members of the family cut their hair in mourning. There was said to be no difference in the amount cut off according to the degree of relationship. The cut-off hair was burned. Thereafter, the hair was allowed to grow without further trimming. Widows did not pitch the face or scar the body; nor did any mourners observe non-washing or food taboos. Widows, however, went naked from the waist up, except for a garment thrown over the shoulders when cold. The name of the deceased became taboo.

Subsequent to the funeral there were no mourning ceremonies or anniversaries.

GHOSTS AND SOULS

Ghosts (miye) traveled in whirlwinds (matsikwita) and were a menace to the living. When a whirlwind approached a person raised his hands in supplication to the goddess Widapokwi. The act of supplication was to place the hands back to back in front of the face and to swing them in an arc downward, and to pray there was nothing ghostly in the whirlwind.

Although some whirlwinds embodied ghosts, the ghost of a newly dead person did not visit the localities of his life in the guise of a whirlwind.

If one were struck by a whirlwind the occurrence was ominous. The person did not undergo purification, but got a shaman to sing over him, on the assumption that a witch had sent the whirlwind.

The informant failed to give a word for soul and very likely the word for heart or for life was the equivalent term. The ghost (miye) was distinct from the soul. Life was called payapaya; the heart yiwaia, and death pi.

The souls of the dead lived in the air all about. This belief doubtless correlates with absence of the belief that shamans or others could visit the land of the dead.

There were not different destinies for the souls of good and evil individuals. The belief that the soul of each individual had existed since the beginning of the world and the theory that illness was caused by soul theft were lacking. Consequently, a shaman had no occasion to dispatch his own soul to bring back that of a patient.

WATER SPRITE

The term hapa (literally, water person) is now applied to a mermaid seen about 1926 by the wife of the policeman Doki of Camp McDowell. Her story has introduced on the reservation a brand-new concept, lacking in the old culture.

The apparition was seen at the artificial Mormon Flat lake on the Salt river. The mermaid had a whitish body, black hair hanging the length of her body, and a fish tail. The woman called her family to see it, but before they arrived the mermaid dived, exposing her fish tail to full view.

Thereafter people told the woman that something bad would happen to her. She kept seeing the mermaid in her mind's eye and in about a year she died. It is now believed on the reservation that if anyone sees a mermaid it is an evil omen for that person.

Inasmuch as the Great Basin concept of the water baby was lacking, it seems likely that this woman's vision was the result of Caucasian influence. She was a literate person.

TRANCES, VISIONS, AND CURING

Warriors and chiefs (mastava) did not dream war omens as did the river Yumans. Shamans' visions came in trances rather than in dreams. A shaman might fall down in a trance and then relate the vision he had experienced.

The generic term for shaman, basamacha, analyzes as ba, person, and samacha (sumacha), "medicine power."[25] This has reference to the power acquired by the shaman while in a trance. Corbusier[26] links the word for shaman with the name of the sun god Semache among the Northeastern Yavapai.

A trance was usually the first intimation that a person was to become a shaman. In the trance the god Amchitapuka, the grandson of the goddess Widapokwi, talked to the novice, taught him songs, told him what to do, what to say, and how to help the sick person. After the trance the novice prayed to Widapokwi.

Sometimes a shaman went into a trance while singing over a sick person. This trance revealed to the shaman whether the sick person would recover or die, the shaman hearing the dictum and instructions from Amchitapuka. All treatment of the patient was at night. The shaman did not talk to the sun, moon, or stars. He used no tobacco in treating the sick.

Shamans did not blow on the affected part, or froth saliva. They sang over the patient, who told the seat of the pain. While singing the shaman saw a flash of lightning (widaukam) to the most painful spot. There he cut a cross with a flake of flint (nowadays glass). When through singing he sucked the cut. He sucked out blood and finally from his mouth produced a wormlike object, which he displayed to the patient as the pathogenic agent. If the patient doubted, the shaman placed the object in the patient's hand. It was a screw-shaped worm covered with blood.

The shaman employed no prayer sticks, but used four eagle feathers, a gourd rattle, and a bullroarer in curing. A fifth feather was worn in the shaman's hair. The patient was placed with his head to the east when the feathers were used. Each was stuck upright in the ground near the patient in the four cardinal directions. While singing, the shaman picked up one after another of the four feathers and touched it to the seat of pain.

The feathers were the whitish axillaries of the eagle or some large hawk. These might be given to the doctor by someone who had killed the bird, or the doctor might kill or buy it. Eagles were killed by any hunter, in spite of the eagle's having "medicine power" (sumacha). Eagle aeries were neither privately owned nor clan owned. Eaglets

[25] Literally "dream," if the word has the same meaning as in other Yuman languages, according to A. L. Kroeber.

[26] P. 333, footnote.

captured and caged belonged to the captor. A captive eagle was kept in a square stick cage and fed on lizards, rabbits, and raw meat. The bird was kept for feather plucking.

The use of feathers in curing was originated in mythical times by the curing of Bat-Woman by the god Amchitapuka.

Sometimes the shaman used his bullroarer. He swung it as he circled many times around his patient's house before he entered. He thus communed with the goddess Widapokwi. If he used it in treating the patient, it was upon her advice. Then he whirled it before or during singing, swinging it vertically.

Women and children might see the bullroarer. It was not used by rattlesnake shamans, or to influence the weather. Weather shamans were lacking.

A sucking shaman was not blamed if his patient died, nor was he blamed for the death of other persons. A shaman usually pronounced the fate of his patient, to live or to die, informing the patient as well as the relatives. He would perhaps say: "I can do nothing more to help him. Perhaps some other doctor can do better. You had better get another doctor." In case a patient died, the doctor returned to the relatives any property they might have given him.

Usually one or more of a party of men using a sweat-house were ill, perhaps suffering from rheumatism. For this, medicine songs, traditionally derived from the goddess Widapokwi, were sung, a shaman in the party leading the singing. Sweating and bathing were done four times consecutively. Sometimes vomiting was induced by drinking a decoction of some plant administered by the shaman. This was to get rid of the "badness" inside. At the end of the fourfold sweating and bathing, some individuals were so weak that they staggered.

The following is an example of the acquisition of shamanistic power:

Awatauwita, earlier called Chugahamge, son of the mastava Wepotehe, became a sucking shaman through the following supernatural experience. As an unmarried young man he lived in the Mazatzal mountains with his father and had been on the warpath. He was ill for a long period and finally he apparently died. As was customary, his relatives pulled down the house over his body and moved away a distance, perhaps a mile. They did not burn his body at once, though this was sometimes done with a corpse, lest coyotes eat it. Next morning two young men came to set fire to the house materials and thus cremate Awatauwita's remains. When they neared the place they saw a person moving about on the edge of the ruins of the hut. They were frightened and moved circuitously through the brush to get a better view. Finally the person, who was Awatauwita, called to them and

told them to have no fear. He told them to burn the house or not, as they liked. They burned it. Then he related to them his wonderful experience after his supposed death.

A white-robed person had descended from the sky to instruct him. This person was a paiyapai or heaven person. He instructed him in many songs for curing, also in the art of sucking the sick person after cutting him with a flint flake. After this instruction, the heaven person disappeared. Awatauwita walked out from the ruins of the hut, which had been parted for him.

Below are listed eleven shamans formerly or now residing at Camp McDowell reservation. Band and clan affiliation are indicated. Only two are women.

1. Athaela: Wikedjasapa band, Iiwilkamepa clan.
2. Awatauwita: Wikedjasapa band, Onalkeopa clan.
3. Haikumwada: Western Yavapai of the Hakehelapa band. Also a chief.
4. Hikwida (Mike Nelson): Northeastern Yavapai of the Walkeyanyanhepa clan. At present he is also a deputy sheriff and game warden.
5. Pakekaya: Wikedjasapa band, Yelyuchopa clan. Also a chief.
6. Sikyuma: Northeastern Yavapai woman of the Walkeyanyanhepa band. Sister of Hikwida. Her shamanistic experiences are colored by her Presbyterian church affiliation.
7. Siva: Northeastern Yavapai of Matkitotwapa band. Also a great warrior.
8. Surama: Northeastern Yavapai of Walkeyanyanhepa band. Presides at Sunday meeting of Roman Catholics. He has had no visions, but has been instructed in curing by a young Apache shaman, Cyrus John, also a Roman Catholic. Surama has not been so successful in curing as his instructor, who had a vision.
9. Tamocha: Wikedjasapa woman of Yelyuchopa clan.
10. Ukitkoche (Captain Jim): Wikedjasapa band, Amahiyukpa clan. Also a chief.
11. Yukatanacha (Mohave Jim): Northeastern Yavapai of Matkitotwapa band.

SPIRIT IMPERSONATIONS

As an aid to curing, the shaman organized masked performances in which spirits called akaka were impersonated. These performances were held at night, usually in autumn if several people were ill. Each mask consisted of a white buckskin bag with holes for eyes, nose, and mouth. This was inverted, drawn down over the head, and tied about the neck. The body was covered with white clay and two small weed aprons, front and behind, suspended by a belt. Before painting, each akaka washed thoroughly, as any odor might injure the sick. Each carried two sticks painted white, one in each hand, and a cane whistle in his mouth, which he sounded frequently.

Only one shaman organized and conducted a ceremony. He selected eight men to impersonate akaka. They must be active persons who could dance and jump around. He had a number of young men construct a diamond-shaped enclosure about fifty feet across. Its sides

were formed with piles of brush. The entrances were at the corners which were at the four cardinal points.

The masked performers dressed in secrecy in the bush. By the uninitiated, they were believed to be spirits or deities. They had no individual names. They were believed to issue forth from cliffs and cliff dwellings where their homes were in holes and crevices. They were believed to possess more supernatural power than a shaman and to be able to control the wind and the weather. They were in no way connected with the dead and were not considered to be ghosts. They were believed to live on very little food, and that a sort of wild cherry, not eaten by human beings, called akakama, "akaka food."

The shaman summoned the akaka to the ceremony by going from the camp some distance and whirling his bullroarer. The akaka approached with a peculiar quick step. They did not talk or sing, but gave an occasional shout.

The eight akaka entered the brush enclosure from the south, passed through it and out the north opening, thence outside the fence to the east entrance, through the enclosure and out through the west opening. Thus they made a huge cross in their two passages across the enclosure. Thereafter they passed around the outside of the enclosure four times. In making turns at the north and east, the akaka turned sharply and each clapped his sticks together. Then each bowed with his hands spread and palms down. Before treating the sick they danced contra-clockwise in a circle within the enclosure. The shaman and his assistant singers stood in the center of the enclosure.

The akaka were so sacred that no layman might touch one. A person who offended against this rule became cramped time and again and no shaman could cure him. To tell about the masked dancers was believed to bring cramps and bad luck to the teller.

The ceremony commenced just after dark and lasted all night. All spectators had to sit inside the enclosure. If one were found outside, the akaka beat him with their sticks. Women and children, as well as men, witnessed the ceremony. Sleeping on the part of the spectators was not objectionable.

Each akaka made a cross of tule pollen on top of the shaman's head before going to treat the sick, and another after treating the sick. All eight akaka visited each patient four times during the night. They kept close together, so that all eight treated each sick person in quick succession. The sick persons lay near one of the four brush fences forming the enclosure.

Each akaka pressed four times at the seat of pain, made tule pollen crosses on the top of the head, on each shoulder, on the chest, and on the seat of pain, and put a pinch of pollen in each patient's mouth. The pollen was carried in a pouch by each akaka. Eagle feathers and tobacco were not used by the akaka; nor did they suck a patient. They departed before daybreak and received no payment. If cures were not effected they were summoned again. In treating a bewitched person the akaka were no better than a shaman.

After an akaka treatment the brush fence was thrown away, not burned. No purifications were required after an akaka performance. The impersonators were under no special restrictions or taboos.

THE SPRING DANCE

The spring assembly at Amanyiká was the occasion for the spring dance (kichima macha) to insure bountiful harvests of wild products. No masks were worn at this dance. Two lines of dancers, of alternating men and women, faced one another and advanced and receded. If unmarried, adjacent males and females held hands; if married the arms were folded over the chest. The dancing was at night. Several fires burned in the camp area, but it was at a large one in the middle that the dancing took place.

The spring dance was an occasion of license for the unmarried. A man sought a partner by scratching a girl's palm. If she accepted, they dropped out of the dance. If a married man or woman stepped out there followed a quarrel and divorce.

The duration of the spring dance was two or three nights. Its purpose was to induce the goddess Widapokwi to provide plenty of food. The prayers were embodied in the songs sung by the chorus of three or four men. They accompanied themselves on a drum (amatá). Only certain persons, not necessarily shamans, knew the songs.

The spring dance was not the occasion for feudists to fight. Their killings were in secret.

Social dances of the same type as the spring dance, but without the religious significance, were held on various occasions when people assembled.

GHOST DANCE RELIGION

The informant knew nothing of any messianic cult about 1870 or 1890, but he did know of the activities of a Northeastern Yavapai shaman (still living at Camp Verde reservation) who in 1887 at San

Carlos agency duplicated in considerable degree the activities of the Apache shaman Nakaidoklini of Cibicue creek in 1881.[27]

An earthquake in the summer was regarded as a portent, which this shaman interpreted as meaning (1) that the world was coming to an end, but (2) that all the Indians would be saved if they did as he instructed, while (3) all the whites would be destroyed by a plague, (4) the land would be given to the Indians, and (5) the dead would come to life. The shaman painted on a buckskin pictures of the people, mammals, and birds which he had seen in his visions.

WIZARDS AND WITCHES

Malevolent shamans of both sexes were called bachapuya, translated as "witch." They were slain for causing death. Their patroness was an evil deity, whom the informant could not name. As it was, he said, she was hearing our conversation and might make us or our relatives ill.

If a patient's illness was from witchcraft, the curing shaman could detect the witch. While he sang with his eyes closed, he saw lightning come from the sky to the witch and thence to the patient. Only occasional illnesses, however, were the work of witches. If a bewitched person recovered, nothing was done to the witch. If he died his relatives slew the sorcerer, which usually started a feud. Love affairs sometimes led to witchcraft. For instance, a jilted woman might bewitch the young man who threw her over.

RATTLESNAKE SHAMANS

The doctor for rattlesnake (elui, ilwit) bites was called eluisamacha (elui, rattlesnake; samacha, medicine power). His familiar was a snake seen in a trance. This snake instructed him to cure, saying: "If you call upon me when someone is bitten, he will be cured." The aid of the sun was not invoked by the shaman.

No suction was employed. Tule pollen was put around the bite, and the flesh pressed on all sides. The pollen prevented the spread of the poison. A bitten person always went home at once and there received treatment. If the patient had any property, he might pay for a cure. Very few persons died, probably because of the regular use of a ligature, as the following instance illustrates:

A number of young men were chasing rabbits near Amanyikâ. A youth was about to seize a rabbit, when it took refuge in a hole under a rock. He reached

[27] Bourke, BAE–R 9:505; also Mooney, BAE–R 14:704.

in for it, and was bitten by a rattlesnake. He called his companions and they ligatured his arm. Then he returned to Amanyiká and had a rattlesnake shaman treat him. The shaman put tule pollen around the wound and pressed gently on the arm. The shaman had no snake with him when treating this youth. He sang songs about the curing. In three days the youth was well and hunting again.

Some rattlesnake shamans were reputed to call a rattlesnake on to their hands, a power derived from the goddess Widapokwi. Such a snake might be taken to the shaman's camp. The shaman, in his singing, called upon the snake to aid him. The snake told the shaman that he did not mean to make trouble, but that the person nearly stepped on him, so he bit. The snake also told the shaman that the person would recover. After his singing the shaman released the snake where he had found it.

No feathers were used by the shaman in handling rattlesnakes.

The rattlesnake spirit might appear to a boy in a trance, as well as to a regular sucking shaman. The first intimation of this unsought visitation was that the novice fell over as if dead. The rattlesnake spirit then instructed the novice. Usually no one was told of the supernatural visitation.

When a shaman saw a rattlesnake he said to it: "I am out here looking about the country and do not mean to harm you. Please do not harm me or my people." Tule pollen was thrown to the snake.[28]

It was deemed inadvisable to kill a rattlesnake, lest later the killer or one of his children or relatives be bitten. No snakes of any kind were killed formerly, although there was no belief about rattlesnake blood being harmful.

In caves old people burned strong tobacco, so that, if any snakes were in the rock crevices, they would not come out. This was evidently done when first occupying a cave.

A tiny "snake" with four rudimentary legs (probably a skink or an alligator lizard) was called madja. Although doubtless non-poisonous, it was believed to be more harmful than a rattlesnake.

LIZARDS

Lizards were sometimes fed to captive hawks and eagles. As lizard killing was believed to make one thin and lean, many boys refrained from killing them, lest they fail to become robust men. An old person who killed a lizard suffered no harm.

Shamans asked Gila monsters (hemthuto) not to bite human beings, for it was believed they never let go. Although not killed, they were

[28] *Fide* Mike Burns, in Bourke, BAE–R 9:504.

skinned alive, and were believed to grow a new skin in four or five days. The skins were used medicinally and magically. Warriors especially carried a skin wrapped in buckskin. If serious injury occurred, especially a broken bone, it could be made to knit in four or five days by charring a bit of Gila monster skin and rubbing it on the affected part.

To skin a Gila monster alive, a cactus spine was run through its lips, pinning it to the ground. The skin was then cut completely around the neck and pulled down to the ends of the tail and digits. Only its head was not skinned. After the flaying the creature was released.

BEARS

Black bears (nuwata) were not molested. When one was encountered, someone called out: "Mother's father, don't come near, don't bother us. You go one way and we'll go the other way."

With this immunity from molestation bears were naturally very tame. The informant recalled one which sunned itself regularly on the rocks above a camp.

It was said bears were like men, except that they could not make fire. Bears ate the same roots and berries as human beings, gathering and storing juniper and manzanita berries, acorns, mescal stems, and prickly pears. For the last product it was asserted that the bear used a grass brush to remove the spines.

There was no belief in bear shamans or in bear people. In the dawn of the world, however, Bear was a great shaman and cousin of Widapokwi, from whom he derived his power. Shamans did not get power from the bear, but only from Widapokwi.

MOCKINGBIRDS

Mockingbirds were not kept captive as by the Kamia and Diegueño. There were no special beliefs or stories about them.

SUPERNATURAL POWERS

Shimach, "to bring down," i.e., to bring down "medicine" or mana, was the generic term for supernatural beings, whether the beneficent Widapokwi or the malevolent patroness of witches.

Mana was called ahaniku[29] and defined as "good luck, power to do anything." Mana as impersonal supernatural power was distinguished

[29] Cf. hanega, Walapai and Havasupai "good."

from michopeka, the help one received from a deity, which was also called akwakwe, "older sibling." The goddess Widapokwi had ahaniku. Her grandson Amchitapuka (see myth) had both mana (ahaniku) and divine help (michopeka). He was regarded as the "older sibling" (akwakwe) or divine helper of every individual. The sun, who was both his father and maternal grandfather, was regarded as god or "father."

Still another term was sumacha, "medicine power,"[30] evidently a term included in the generic word for shaman (basamacha). Eagles were said to have sumacha.

Neither feathers, arrowpoints, tule pollen, nor other offerings were made at springs and waterholes or to the sun.[31] Charms were not worn to protect from thunder and lightning. There was no harm in using wood from a lightning-struck tree.

Mana resided in turquoise, a material which was neither mined nor worked, but obtained at ruined pueblos and cliff dwellings.

The magical power residing in turquoise was derived from the goddess Widapokwi, for turquoise was part of her body. Owners of turquoise objects rarely parted with them. To give away one's turquoise was to give away one's medicine, one's great protector.

A deer hunter might carry a large turquoise ornament. If fresh deer-tracks were found he drew with it a cross on the ground between the tracks. The magic power of the turquoise would cause the quarry to tire quickly. The same principle was involved in the belief that one should never ride a horse if he had turquoise on his person.

MYTHOLOGY

Myths were related on summer nights. To relate them in winter might cause a great storm. Sometimes an old woman would excel the men as a *raconteur*.

After hearing the tale about the dying god everyone got up, stretched, and shook himself. This was for good luck and to keep from getting sick, which was otherwise a consequence of hearing the tale.

The "first people" were human beings with the names of birds and animals. They were transformed to their present animal forms. In their human form they could converse. They got to fighting one another, thus giving rise to the interminable feuds of the Yavapai and Apache with the Maricopa and Pima.

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[30] "Dream" in other Yuman languages, as *ante*.

[31] Bourke quotes my informant, Mike Burns, to the effect that tule pollen was not thrown to the sun. BAE–R 9:504.

The Northeastern Yavapai employ the same names for the goddess Widapokwi and her grandson Amchitapuka as do the Southeastern Yavapai. The Western Yavapai have the same name for the goddess, but her grandson is called Chikatikaamte, "only one person" or Nyapakaamte, "man up above." "He commands everything," the informant said.

At present Widapokwi is equated to the Christian God and Amchitapuka to Christ. The name Widapokwi is said to mean "first person with medicine" (power). Neither offerings nor sacrifices were made to Widapokwi. The informant described her as omnipresent, but this may be due to biblical teachings.

Many Coyote stories were current. Coyote was painted as always holding contrary views, and as responsible for many human disabilities. Tales about Wildcat were lacking.

The Southeastern Yavapai have no stories about displacing earlier inhabitants, in spite of the ruins in their country. Shamans stated that the former inhabitants of the cliff dwellings were "nuns," whom they saw in trances. Some persons, however, were of the opinion that dwarfs must have lived in the cliff dwellings, because of the small size of some of the openings in the inner walls.

Origin Tale

In the beginning people lived in the Underworld. A great tree grew there which pierced the sky of the Underworld. Up this people climbed into this world, but failed to close the hole. Water gushed up through the hole, flooding this world and drowning the people.

Someone had hollowed out a great pine tree, into which a woman (or goddess) named Widapokwi entered and was sealed in with pitch. She took with her food enough for a number of years, also some birds. She was instructed not to look out until the log lay perfectly still.

After a long time (perhaps a year) Widapokwi sent out a dove through a small opening. After two days it returned with a dry bit of plant in its beak. Then Widapokwi knew the flood was over. Thereupon she emerged from her log which had stranded on San Francisco mountain. The water had not gone fully over the mountain because of its great height. She then went south to the red-rock country on the east side of the Verde river, across from Jerome.

There she bore a daughter, begotten by the sun, who had fertilized her in the following way: There was a dripping spring, where she lay in the early morning. Just at sunrise water dripped into her vagina at the same instant that the sun's rays touched it.[82] This happened on two or three mornings and she found herself pregnant. She bore a daughter, who is referred to as the firstborn child in this world.

[82] Cf. Goddard, San Carlos Apache Myths, 30.

When the firstborn child reached maturity, Widapokwi instructed her to lie in the spring at sunrise so that water would drip into her vagina at the precise moment that the first sun's rays touched it. She did as she was told, but the sun would not come up, for he recognized the girl as his daughter. Not to be outdone, the mother bade the daughter go with her to the spring before sunrise. There she made her daughter lie and she lay on top of her. Then the sun appeared and he saw only Widapokwi and not his daughter. As the water dropped at the precise moment of sunrise, the mother slipped to one side, so that the water fell into the girl's vagina. This was done on two or three mornings. The girl became pregnant and bore a son who was named Amchitapuka, "first man on earth."

Two days after the childbirth Widapokwi instructed her daughter to collect wood. While she was out a great eagle swooped upon her and carried her to his rocky aerie, where she was devoured by the eaglets.

Widapokwi then had to care for her grandson, who grew to be a young man. One day he brought material for a bow to his grandmother and asked her to make one for him. Then she told him to get sticks for arrows. With his weapons he now sallied forth. He found a covey of quail and shot at them, wounding a hen in the foot. He caught the wounded bird.

She cried to him: "Dress my wound; do not harm me; and I will tell you a great secret." He was surprised to hear the quail address him, so he obtained some grease from his own chest by rubbing his skin. This he applied to the quail's wound, which healed. Then the quail spoke again.

"Did your real grandmother (Widapokwi) tell you what became of your mother?"

"No," he replied. "I've often wondered why she calls me grandchild. I'd like to have someone tell me what became of my mother."

"Your mother was devoured by eagles, while she was out searching for wood," the quail said.

The young man returned to his grandmother's camp and lay on the ground in silence. His grandmother prepared food and asked him to eat, but he would not respond.

One morning he went out and killed some large birds (perhaps owls) to obtain feathers for arrows. He brought the arrows to his grandmother to straighten. Then they put flint points and feathers on the arrows. He went away from the camp and killed a large animal. He took no meat, but he filled the intestines of the animal with blood.

One day he went away from camp wearing the intestines like a garment. Suddenly he heard a great noise in the air. An immense eagle was swooping on him. When it was close he dodged. Again it struck at him and he fell on his back. The eagle seized the intestines wrapped over his abdomen and tore them. The eagle thought he had torn him open and killed him. The eagle then carried him to the aerie whence his mother had been taken and threw him between the two eaglets which were there, telling them to eat him.

The old eagle flew off to a distant ledge of rock to look for more prey. Soon the eaglets tried to bite the youth, pulling at the wrapping of intestines. After a while the youth sat up and said: "Do not hurt me." The eaglets understood him. Then he asked them where their father and mother sat. They showed him. Thereupon he produced from under his wrappings a bag of pitch, which he poured on the places where the old birds would roost. Then he killed the two eaglets and threw them out of the nest. They made such a crash as they landed at the bottom of the canyon that the old male eagle flew to the aerie and alighted in the pitch. He tried to attack the youth but the pitch held him fast. The youth clubbed him

and threw his body into the canyon. Now the mother eagle heard the crash and flew to the aerie. She alighted in the pitch, was clubbed, and thrown into the canyon.[33]

The youth now found himself trapped in the aerie with no means of descending. He sang the songs his grandmother had taught him, rubbed his chest, spat on his hands, and pressed on the rocks whereon he sat. After he had done this several times the rocks had sunk halfway to the canyon bottom. Then he noted Bat-Woman with a basket on her back on the canyon floor. He shouted to her: "Grandmother, come and get me. I am lost. A great bird brought me up here."

She looked up and saw him and wondered whence he came. "Grandchild, what are you doing way up there?" she asked. "A great bird brought me up here and I cannot get down," he replied.

Then she climbed from rock to rock with her basket on her back until she finally reached him. "Grandchild, what are you doing here?" she asked.

"That great eagle who ate my mother was going to eat me too and brought me up here," he explained.

"All right, grandchild, get into my basket, but do not open your eyes to see where you are going. You may be dashed to pieces if you do."

So the youth climbed into the basket. The old woman was so long in descending that he wondered where she was going and opened his eyes. When he did, Bat-Woman and the basket fell down. He landed safely on soft ground, but she had her bones broken by the fall. Then he rubbed grease from his chest and healed the old woman's injuries with it, so she was whole again.

He bade her follow him to see the dead eagles. She plucked the white down from their bodies and put it around the edge of her basket and in her hair. Then she danced around the bodies, rejoicing, for she had been deathly afraid the eagles would catch her.

Thereafter there were no great eagles that killed people. The youth returned to his mother's mother (Widapokwi) and told her he had learned of his mother's fate and had taken vengeance on her slayers. She told him: "I did not want you to know what had become of your mother."

He became a great man. Some say he became a rock in the red-rock country. His footprints, made in soft mud, turned to rock and are now to be seen.

The Dying God[34]

There was once an old man who was a great chief. Some say he was the first person on earth. He commanded everything.

He became ill, so instructed his people as to what they should do when he died. They were to put wet earth over his heart. From that a marvelous maize plant would grow which would produce food for them at all seasons.

In the crowd of people assembled at the chief's abode was Coyote, whose intentions were evil. When the chief was about to die he instructed the people to send Coyote afar, so he would not be present at the cremation. So someone sent Coyote away on the errand to get something to put over the dying chief.

Coyote departed, but when he looked back from a distant hill he saw smoke ascending. He rightly surmised that the sick chief had died and the people were cremating his corpse. So he ran back swiftly. Everybody was in attendance at

[33] At this point, the informant remarked that the belief is that a windstorm will follow the narrating of this tale.

[34] The informant remarked that the Apache had this story in more perfect form than his own people.

the funeral and they formed a complete circle around the funeral pyre. Some persons were tall, others were short. Badger and Desert Tortoise were short.

Coyote wanted to see what they were assembled around, so he pranced around and cried and tried to climb over the people. Finally he came to Badger and Tortoise and because of their short stature he jumped over them. He ran to the pyre, seized the chief's heart, dashed away with it, and ate it. He was pursued and killed.

Because of Coyote's act there was no heart to put damp earth over, so that the marvelous maize would grow from it. As a consequence maize does not now ripen the year round.

During the chief's long illness he told people how they should count the months. He said that a constellation appearing in the east just before dawn in October would mark the beginning of the year. He said this would be his earring (hismalka). The constellation netudjuta, a ring of four or five stars, would be his hoop for the hoop-and-pole game, the god said. This constellation was to be the sign of the third month. The red star djikuta, which rises just before dawn in the fourth month (January), would be the red feathers he wore in his hair, when going to war.

The following months would have better weather and plants would grow. The god said that people might name these months as they liked. Only the first four months were to be identified by the stars.

Coyote Limits Life

People wanted flowers the year around, but Coyote said: "No, they will come only at one season."

People wanted the dead to come to life again, but Coyote said: "No, when a person dies he will be gone forever."

After a while Coyote raised a family. His daughter sickened and died. He cried around to the various people and asked them to pray for her return to life. They told him to go home, that he had insisted that the dead remain dead, and that it would have to be that way with his daughter.

The people wanted mescal to be ready to eat as dug, but Coyote insisted that it must be cooked.

It was the desire of the "first people" that they remain human, but Coyote insisted that they become animals and live in the wilds.

Continuous daylight was the desire of the people, but Coyote ordered otherwise. "We must have night so we can sleep," he said.

Badger and Desert Tortoise

Badger and Desert Tortoise had a wrestling match. Badger was strong and so was Tortoise. All of the people came to see the struggle between these two strong men.

Tortoise got Badger to his knees. Those who had bet on Tortoise said he had thrown Badger. Those betting on Badger said it was not so, and that Badger was only on his knees. Tortoise's backers said they would not have bet had they known that Badger's backers would take that stand. Badger's backers became angry and said that was not fair.

Then ensued a fight between the two groups of spectators. Since then all living things have been scattered, both desert animals and people. Before that all were one people.

DIRECTIONS, COLORS, NUMERATION, TIME, STARS

Six cardinal directions were given by the informant: matava, north; inyachaauw (where sun rises), east; weve, south; inyadopo (where sun sets), west; miyauwe, zenith; matuweo, nadir.

No compound terms for intermediate directions were used, such as southeast. I could learn nothing of any association of colors with directions.

Seven color terms were recorded: nyumchave, white; nyia, black, dark blue, very dark reddish brown; kwatha, yellow, orange, buff, pale brown; havasuvi, green, blue, purple; awathi, red, reddish brown; walaseki, pink. An alternative term (nuta) was given for pink.

Counting was on the fingers only, not the toes. Arrows were counted frequently, as were also turquoise beads. The latter were not used as money.

The Southeastern Yavapai numeral system was decimal. The words employed were as follows: 1 shiti, 2 kwake, 3 moki, 4 hopa, 5 thadape, 6 tisape, 7 kwaktispe, 8 moketispe, 9 halthuia, 10 wavi, 11 wavshiti, 12 wavkwake, 13 wavmoki, 19 wavhalthuia, 20 kwakwakwavi (2 tens), 21 kwakwakwavi shiti, 30 mokiwavi, 40 hopawavi, 50 thadapewavi, 60 tisapewavi, 70 kwaktispewavi, 80 moketispewavi, 90 halthuiawavi, 100 sihonasiti, 101 sihonasitishiti, 1000 sihonawavi.

Six divisions of the day were recognized: yagi, dawn; inyadjiali, sunrise; inyagatha, noon; inyanali, afternoon; inyadop, sunset; hiba, night.

There were no names for the nights of the moon, but the phases were named, as follows: layachi, new moon in the west; liyaleyale, full moon; lapis, waning moon, nearly gone. During the dark phase of the moon it was thought that the moon was dead. The moon was said to be a person.

The new moon was the symbol of resurrection. When it was first seen each month the old people instructed the children to run and shout for joy. Then they addressed the moon, saying: "We are glad to see you come to life again. May it be the same with us when we die."

When the new moon appeared tilted downward, "looking down," it was said there was to be rain, not here, but on the other side of the earth.

The months were numbered, not named, in a series of ten, beginning in October and ending in July. August and September were

neither numbered nor named; they were "chopped off." The word hala applies to both the physical moon and the lunations. Each month began with the appearance of the crescent moon in the west. December 31, 1929, fell in the third moon.

Four seasons were recognized: winter, achuti ("cold"); spring, buwemi ("little warm"); summer, nyaduwi ("hot"); fall, kichukoyi ("rainy").

The solstices were named yeukasi (directly overhead) and yeumativi (far down). The longest and shortest days were determined by the place of sunrise as viewed from a fixed point such as an inhabited cave. There was no ceremony to insure the return of the sun at the winter solstice. No theories as to the daily and yearly movements of the sun were forthcoming. Similarly, inquiries as to the shape of the earth and the relation to the oceans yielded nothing.

The new year began with the rising of the constellation hismalka (earring) just before sunrise in October. It comprises three stars. Two stars close together are a boy and a girl. The third star, which is red, is another boy who is angry because his girl has been stolen.

The stars hene[35] come in the second month (November). They rise in the early part of the night. Their "first appearance" is said to coincide with the appearance of the new moon (*sic*).

The constellation netudjuta, which is a ring of four or five stars, referred to as the hoop,[36] was the sign of the third month. It rises about midnight in December.

The red star djikuta,[37] referred to as red feathers, rises just before dawn in the fourth month (January). At this time even the ground freezes and leaves and twigs break off.

Netamchute is the morning star in winter. Its appearance also is thought to herald freezing weather.

The widespread Yuman name hecha was applied to a constellation of seven stars. Rising after hecha was the constellation amu, comprising five stars. There was also a constellation called sela (hand).[38]

[35] Walapai hine denotes a crook for gathering sahuaro cactus fruit, and is the name of Ursa Major and of the third month, according to A. L. Kroeber.

[36] Cf. Spier, Havasupai Ethnography, 171; 166, tavadjuda, marking the first month. Walapai (hine-) tivadjuda, (crook) game-hoop, is Corona, according to A. L. Kroeber.

[37] Walapai tci'u't te'udve, eagle feather headdress, given both as red star with a tail (comet?) and as a constellation of 7 or 8 stars in line, according to A. L. Kroeber.

[38] Spier, Havasupai Ethnography, 170.—Among other Yuman tribes, so far as known, according to Kroeber, these three constellations are, respectively: Pleiades; Orion's belt, with or without Rigel and Betelgeuse, or the sword-hilt; the "sickle" of Leo.

The old men had heated arguments as to what star marked the beginning of the year or month. A certain plant was supposed to appear or bloom synchronously with the appearance of a certain star. So to settle the argument the old men might dispatch some young man to look for the plant. After the fourth month stars no longer gave indication of the month, but vegetation did. No constellations indicated the planting season, a correlation with the virtual absence of agriculture.

In the seventh month (April) the seeds of the kispila ripen (the earliest to mature) and the Gambel's quail (axma) calls.

In the middle of the eighth month (May), squaw-berries (kithe) ripen. The roadrunner calls during this month.

CULTURAL POSITION IN THE YUMAN STOCK

Culturally, the Southeastern Yavapai are very un-Yuman if judged by the civilization of the lower Colorado river Yumans and the Maricopa. If judged by the Diegueño and Kiliwi they still appear un-Yuman, though in less degree. Judged by the Havasupai and Walapai, they seem Yuman, except for certain departures, which are presumably acculturations to the Apache civilization. However, since very little is on record concerning Apache culture, it is possible that certain of the un-Yuman Southeastern Yavapai traits will prove to be truly peculiar to them.

Coronados expedition of 1540 passed through apparently uninhabited territory to the east of the present Yavapai habitat. This territory is now occupied, or was recently occupied, by the Apache. If, as implied, the Apache were late comers, then the purely Apache features of Southeastern Yavapai culture are less than four hundred years old.

Some traits lacking among the river Yumans but present among the Southeastern Yavapai are listed below. Those which are Apache traits[39] are italicized: *Bands, matrilineal non-totemic clans,* cannibalism in war, no civil chief, *stringent marital rules, mother-in-law taboo, types of personal name,* naming at birth, non-piercing of nasal septum, absence of agriculture, *non-eating of fish,* absence of wooden mortar, *house type, sweat-house,* curtain shield, mescal armor, Plains type war club, sling, stone boiling, *developed basketry,* pottery made with-

[39] According to Goddard's Indians of the Southwest and Spier's oral statements.

out paddle and anvil and without painted design, arrow poison, non-carrying on head, *buckskin clothing, boots* and no sandals, deadfall traps, complete abstinence from jimsonweed, pottery drum, *drumstick with circle head,* cremation in dwelling, absence of mourning anniversary, soul abode in air, ghosts in whirlwinds, no soul stealing, curing by suction, curing by tule pollen, bullroarer in curing, cross a religious emblem, shamanism through trance not dream, goddess and her grandson as guardian spirits, lightning as aid to shaman, *underworld origin of mankind, mana in turquoise,* Gila monster skin for healing, rattlesnake shamans, absence of weather shamans, numbered months, absence of wildcat myths, importance of sun in mythology, *bullroarer to summon spirit impersonators, masked religious performances for curing,* witchcraft and witch detection.

The Southeastern Yavapai are more like the Diegueño than they are like the river Yuman, even though Diegueño culture is strongly colored by river Yuman culture. Thus they share with the Diegueño dependence on mescal, mesquite, and acorns instead of cultivated plants, the sweat-house although steam-heated, non-totemic localized clans although matrilineal, bedrock mortars, developed basketry, circular house. In most other respects in which they differ from the river tribes they also differ from the Diegueño.

Their nearest non-Yavapai Yuman cultural relatives are the Havasupai and Walapai, to whom they bear close cultural resemblance, except where modified by presumable Apache influence, as for instance in the possession of matrilineal clans, mother-in-law taboo, the use of tule pollen and the cross in curing, and certain other traits.

The above impressions as to the cultural relation of Southeastern Yavapai to other Yuman groups should be replaced by the result of a comparative study of all Yuman groups once their ethnographies become available.

Culturally the Southeastern Yavapai seem not to have differed markedly from their Northeastern and Western congeners. From time to time the informant mentioned minor differences. The outstanding difference was the absence of clans. The non-mention of clans in Corbusier's description of Yavapai culture seems to imply that his information was derived wholly from Northeastern and Western Yavapai.

BIBLIOGRAPHY

BOLTON, HERBERT EUGENE
1919. Father Escobar's Relation of the Oñate Expedition to California. Catholic Historical Review, 5:19–41.

BOURKE, JOHN G.
1891. On the Border with Crook. New York: Charles Scribner's Sons.
1892. The Medicine-Men of the Apache. BAE–R 9:451–603.

CORBUSIER, WM. F.
1886. The Apache-Yumas and Apache-Mojaves. American Antiquarian, 8: 276–284, 325–339.

CURTIS, EDWARD S.
1908. The North American Indian, vol. 2 (The Apache-Mohave, or Yavapai, 103.)

FORDE, C. D.
1931. Ethnography of the Yuma Indians. UC–PAAE 28:83–278.

GIFFORD, E. W.
1918. Clans and Moieties in Southern California. UC–PAAE 14:155–219.
1926. Yuma Dreams and Omens. JAFL 39:58–69.
1926. Miwok Lineages and the Political Unit in Aboriginal California. AA 28:389–401.

GODDARD, PLINY EARLE
1918. Myths and Tales from the San Carlos Apache. AMNH–AP 24:1–86.
1927. Indians of the Southwest (ed. 3). AMNH–Handbook 2.

HAMMOND, GEORGE P., and REY, AGAPITO
1929. Expedition into New Mexico made by Antonio de Espejo, 1582–1583, as revealed in the journal of Diego Perez de Luxan, a member of the party. Published by The Quivira Society, Univ. So. Calif.

HATT, GUDMUND
1916. Moccasins and their Relation to Arctic Footwear. AAA–M 3:149–250.

HODGE, F. W. (editor)
1910. Handbook of American Indians North of Mexico. BAE–B 30, part 2.

HOOM-O-THY-A or MIKE BURNS
1927. The Legend of Superstition Mountain. Published by A. Truman Helm, Phoenix, Arizona.

KROEBER, A. L.
1907. Shoshonean Dialects of California. UC–PAAE 4:65–165.
1925. Handbook of the Indians of California. BAE–B 78.

MOONEY, JAMES
1896. The Ghost-Dance Religion and the Sioux Outbreak of 1890. BAE–R 14.

REAGAN, ALBERT B.
1931. Notes on the Indians of the Fort Apache Region. AMNH–AP 31:283–345.

RUSSELL, FRANK
1908. The Pima Indians. BAE–R 26:3–389.

SPIER, LESLIE
1928. Havasupai Ethnography. AMNH–AP 29:81–392.

EXPLANATION OF PLATES

Plate 29. View from near top of Fish Creek grade on Apache Trail highway. Tortilla flat, a favorite place for prickly pears, lies beyond gap in hills to right of middle of picture. Photo by McCulloch Bros., Phoenix.

Plate 30. Rim of Fish Creek canyon, four miles south of Apache Trail highway, looking northeast. The Southeastern Yavapai spent considerable time in this elevated region. Copyright by McCulloch Bros., Phoenix.

Plate 31. Looking up Fish Creek canyon from Apache Trail highway bridge, about 7 miles upstream from the Salt river. Salt obtained from hole below great vertical rock in middle of background near skyline. Photo by McCulloch Bros., Phoenix.

Plate 32. Skull cave, in region immediately north of Salt river and several miles below mouth of Fish creek. Copyright by McCulloch Bros., Phoenix.

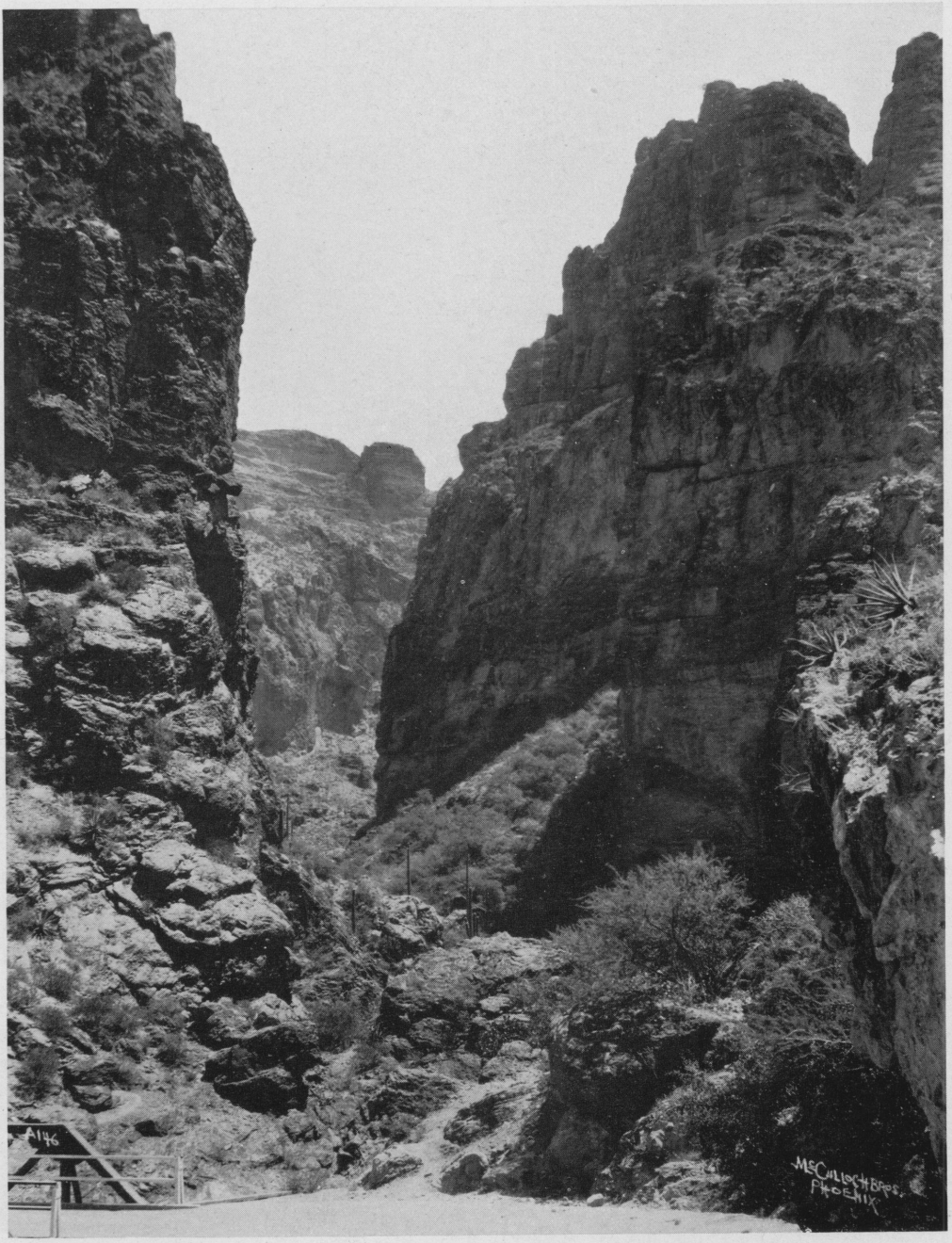
Plate 33. Close view of Skull cave showing bones of massacred Southeastern Yavapai. Note metate of Pueblo type. Copyright by McCulloch Bros., Phoenix.

Plate 34. Camp site Amanyika′ and its background of hills, as viewed from the Apache Trail highway.

Plate 35. Southeastern Yavapai huts, Camp McDowell Indian reservation. Two views of same pair of huts. Flat-topped brush shades were not constructed formerly.

YAVAPAI HABITAT: FROM FISH CREEK GRADE

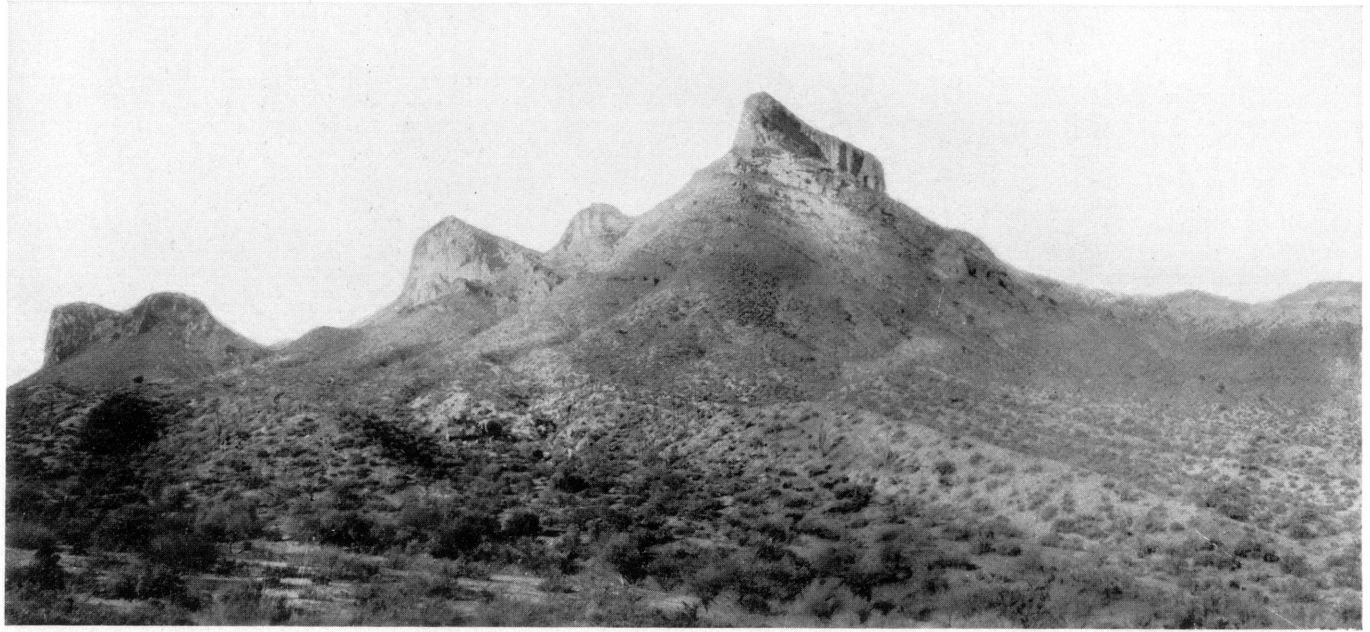
YAVAPAI HABITAT: FROM FISH CREEK CANYON RIM



YAVAPAI HABITAT: FISH CREEK CANYON

YAVAPAI HABITAT: SKULL CAVE

SKULL CAVE WITH BONES



CAMP SITE AMANYIKA′

a

b

YAVAPAI HUTS, CAMP MCDOWELL

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