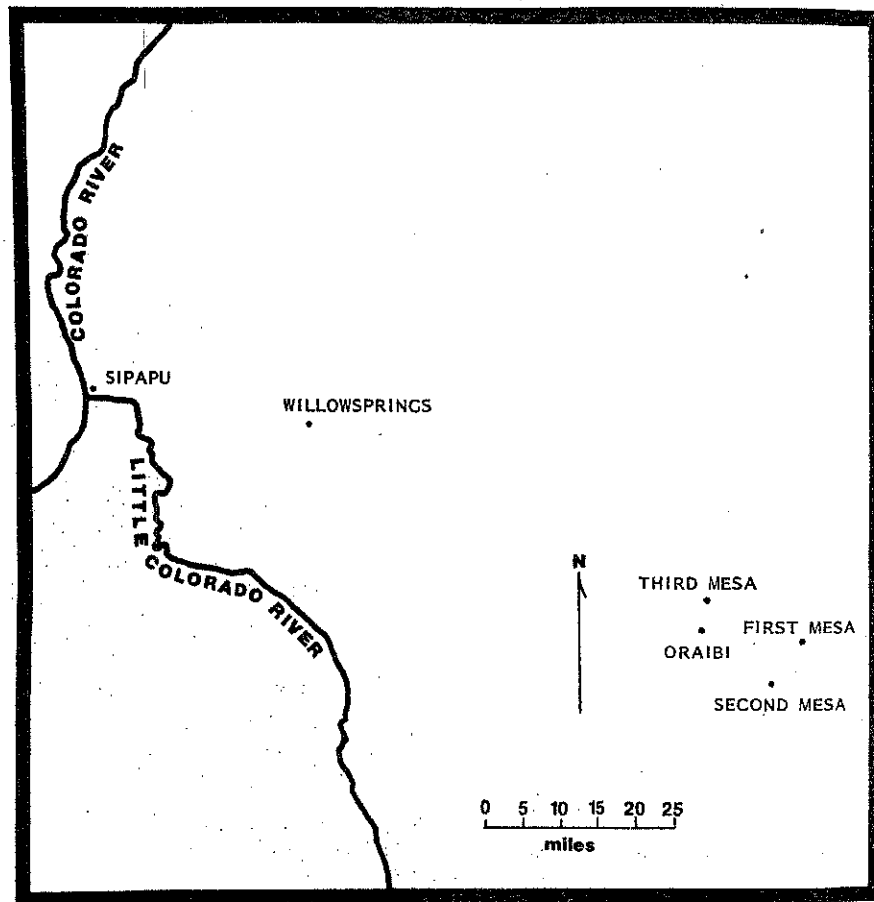


Willowsprings: A Hopi Petroglyph Site

Helen Michaelis



MAP OF CENTRAL ARIZONA WITH SITES AND LOCATIONS MENTIONED IN TEXT.

INTRODUCTION

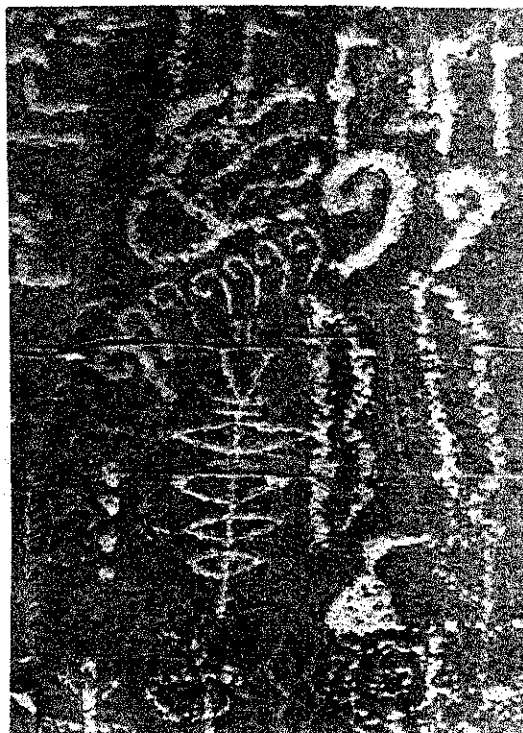
The Arizona desert is rich in rock art sites. One of the most remarkable ones is located between Cameron and Tuba City on the Navajo Reservation. Mallory (1888) quotes G.K. Gilbert of the U.S. Geological Survey of 1878 as having visited a rock art site in Arizona. He names it *Oakley Springs*, but upon comparing the location and the ethnographic reports, it is clear that this is the site now known as *Willowsprings*. Fewkes describes it briefly in 1895, and complete ethnographic analyses are available by Colton in 1931 and Titief in 1937. These

reports indicate that Willowsprings is an early Hopi ceremonial shrine and that it was used by the various clans of this group of peoples on their yearly pilgrimages to obtain salt from the Grand Canyon.

Upon extensive investigation, it was found that aside from the above descriptive literature, no fundamental site report had ever been prepared. Repeated visits to the site in September 1976, October 1977, October 1978 as well as in 1979 and 1980 revealed severe deterioration from weather and human intervention. The worst vandalism occurred in 1978



Willowsprings petroglyph site.



Rock No. 17 in close-up.
Red Ant, Bow, Water Clan.

stone boulders. The designs cover some 40 rocks along the west-facing escarpment, with some of the boulders covered by glyphs on all exposed surfaces. The petroglyphs reach only partway up the ridge and stop quite suddenly.

No signs of early occupation have been observed, no midden, no potsherds. Presumably, the early visitors camped closer to the spring, which is removed from the site.

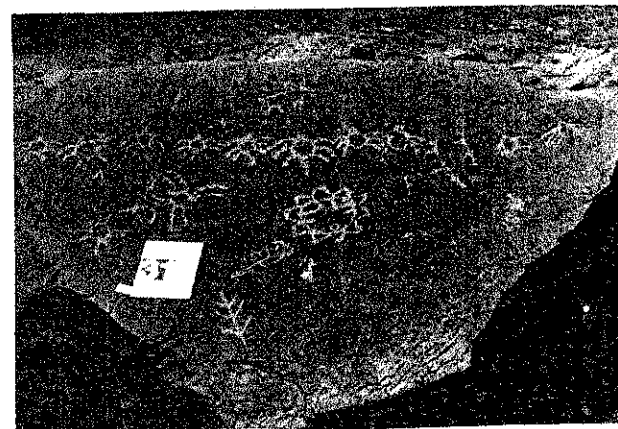
METHODS OF INVESTIGATION

when the very old glyphs on Rock No. 17 were spray-painted with Navajo names and very offensive writings. It was therefore felt that a complete site report was a necessity in order to preserve—at least in this form—this physical evidence that has both prehistoric and historic significance to different groups of people.

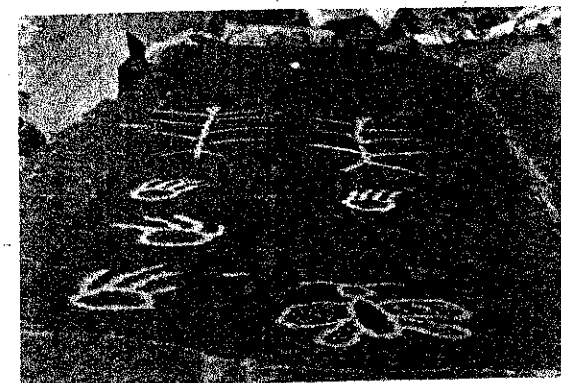
LOCATION

The site, located on the Navajo Reservation, has been assigned No. NA 994 by the Museum of Northern Arizona (U.S.G.A. Map, 7-1/2 minute quadrant, MOA-AVE N/W Arizona 1955). It can be reached by turning off from Highway 160 into a dirt road that leads to Moenavi, and it is 6.4 miles from this intersection of Highway 160 to the site. When the road turns north, the glyphs can be found along the cliffs which run north-south, about 200 yards from the road on a field of Wingate red sand-

During the first two visits, fall 1976 and 1977, about 120 slides (35 mm) were taken. Of these, 42 were printed 3 x 5—all of these slides have been analyzed and the details recorded on 3 x 5 cards. On the third visit, October 1978, all rocks showing petroglyphs were numbered, beginning at the northern edge of the pertinent area and proceeding southward and from front to back. One of the earlier slides showing the site had been enlarged to 20 x 17, and the assigned rock numbers were recorded on a plastic overlay sheet. Altogether, some 40 rocks were found to have been involved in various degrees. Additional photographs were taken showing the assigned rock numbers. A cardboard frame with removable numbers and letters (12 cm x 7-1/2 cm) was used to show the numbers, and no marks were left on the rocks (Nos. 22 and 33 had to be skipped since we failed to provide double numbers). An on-site count of all discernable glyphs was conducted to be later cross-checked against all slides and tallied, resulting in two separate charts.



Rock No. 31. Symbols:
Katchina (Sun), Spider,
Tobacco Pipe with
Initials?



Rock No. 34. Bear,
Corn, and Butterfly
glyphs.

DISCUSSION OF CHARTS AND SKETCHES

CHART I - Numerical Analysis of Glyphs

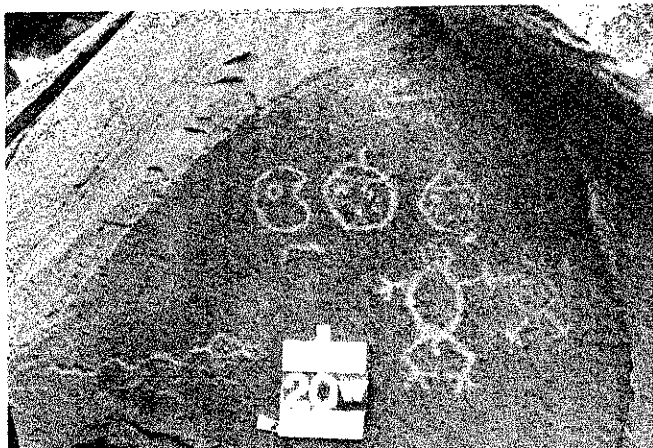
This chart gives a breakdown of the symbols which total 2,178. The total number of glyphs on each rock is then subdivided into the various clan symbols represented.

CHART II - The Clans

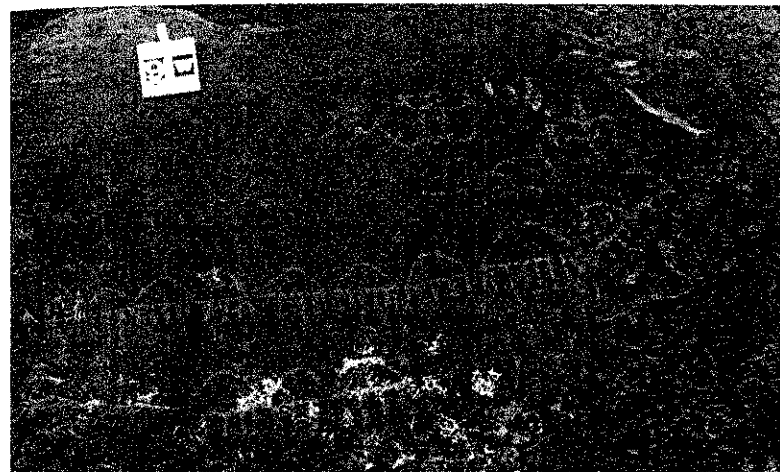
In order to come to terms with the visual symbolism present on the site, it was necessary to investigate clan histories and prepare as complete a list of Hopi clans as possible. Chart II was the result of a study of available literature such as Titief 1944, Colton 1946, James 1976, Lowie 1926, Fewkes 1895. The identity of the Hopi at historic contact was obviously derived from diverse ancestry, but the list of clans (94) seems

excessive for a comparatively small group such as the Hopi. Misha Titief (1944) warns that there are multiple appellations for certain clans. A plausible explanation for such multiplicity is hard to come by. One suggestion has been that since the Hopi conduct a very elaborate ritual calendar, clans may sometimes have combined for the better performance of the ceremonies; identities were merged while different clan names were retained (Dozier 1969). On the other hand, this multiplicity may be the result of the Hopi problem of disunity: with comparing slides taken in 1976 and 1977, it was discovered that the clan symbols of a Katchina clan had been systematically erased and we subsequently learned of a disagreement within the clans, which possibly occasioned this vandalism.

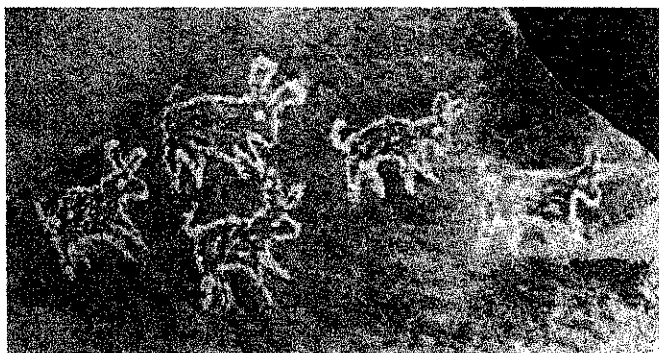
In order to make the analysis as complete as possible, the cl



Rock No. 20 West.
Clan symbols: Snake,
Massau'u, Corn in
germination, figure
form.



Rock No. 9 West.
Clan symbols:
Sun, Cloud
(snow), Coyote,
Bear, Corn
(germination
figure).



Rock No. 23. Rabbit
Clan symbols.

has been elaborated to reflect (where available) Hopi names of clans. Since the Hopi have no written language, some of the spelling is problematic, and each researcher seems to use his own version. Also listed are the affiliated clans, clan symbols, as well as the primary location of the group on the various mesas. A study of the chart indicates that of 94 clans listed, 40 seem to have participated at some time in ceremonial visits to the site, which indicates a high percentage of involvement. The migration notes give information regarding clan migrations as recorded by Ed Nequatewa (1967), James (1976), Di Peso (1974), Yava (1978). It must be stated that while little agreement seems to exist on these semi-mythological clan histories, archeological evidence has in a number of cases confirmed the route taken by some of the clans.

CHART III - Sketches

Drawings have been prepared to show the following:

- Symbols as identified from literature (Colton and Nequatewa), and by discussions with Hopi informants.

- Symbols which have not yet been identified.

These are not drawn to scale since sizes vary greatly.

CHART IV - Analysis of Number of Trips by Same Participant

The first part of these listings shows sketches of all fully pecked elements on this site. As mentioned elsewhere, this design technique was rarely used at Willowsprings, and it was thought that this summary might be useful.

The second portion represents a summary of trips taken by individual participants (see "Ethnographic Record" for detail). It is instructive to note that some men were involved for many years in this particular ceremonial endeavor: 16 years for a Corn Clan man seems to be the record, followed by 12 years by a Strap Clan member (very old and completely repatinated, Rock No. 17), and 12 trips for a Lizard Clan participant. Only one symbol by a Rabbit Brush Clan has been noted on the site (clan extinct).

ANALYSIS OF ARTISTIC TECHNIQUES

As previously indicated, all glyphs have been engraved on sandstone boulders. Most of the pecking has penetrated the bluish or reddish oxidized layer on the rock surfaces, and the light rock underneath shows up well against the surrounding dark areas, but some of the designs are pecked directly into the light sandstone, and then they are very difficult to distinguish.

The vast majority of glyphs are pecked in outline only—the quality of the work varies from exquisite to sloppy. Only half-a-dozen types of designs are fully pecked out, and so of these may not be clan symbols and have not yet been identified. Of the total of 2,178 glyphs, only 1 percent thereof is fully pecked. Ten percent of all symbols remain unidentified in addition to 84 dots and lines.



Rock No. 10.
Clan symbols:
Corn, Bear,
Cloud, Massau'u.

A remarkable feature of the site is the minimum of superimposition that has taken place even on the oldest and busiest areas. Observation seems to indicate that the people, when placing a new glyph, carefully avoided the destruction of earlier writings.

Most designs are rather small, 7-1/4 to a maximum of 37-1/4 cm long, from 3 to 10 cm wide, and generally not too deeply pecked, from 2 to 4 mm. No painted designs are found on this site.

ANALYSIS OF DESIGNS ON MAJOR ROCKS

Three large sandstone boulders that have tumbled down from the escarpment apparently caught the attention of the early visitors who left their designs on all surfaces of these rocks. They have been numbered as follows: No. 5, which has some 266 glyphs; No. 9 with 317 glyphs; and No. 17, with a minimum of 650 glyphs.

Rock No. 5

This rock shows many representations of the Strap Clan—a very old clan and, as far as could be ascertained, long since extinct. It is also the only place with what has been interpreted as Porcupine Clan glyphs. Portions of this rock are flaked off by age and deterioration. Massau'u and Red Ant glyphs are barely visible. The only Rabbit Brush Clan symbol is found here. This clan is also extinct.

Boulder No. 6

Six Oak Clan symbols are pecked directly into sandstone and almost completely repatinated. This clan is extinct and shows up only on two other locations; Parrot Clan is also barely readable.

Boulder No. 9

This is a large hulk of a rock with many very old and repatinated glyphs on all sides. The Bear Clan predominates, but there are various symbols of the Patki (water) Clans. Observation indicates that when a clan signature appears on a specific rock, other members of the clan continue to crowd their symbols on several sides of the same rock and sometimes on no other location on the site.

Rock No. 15

A portion of this somewhat turtle-shaped rock with beautifully executed designs has been split off between 1977 and 1978. The majority of the designs on this rock are plants and, while they have been listed as Corn Clan glyphs, they are somewhat different from other designs of this clan and could possibly be representations of the Spruce or Tobacco Clans.

Rock No. 17

The southern end of the site seems to be the oldest and longest used. In fact, some of the inscriptions are so ancient and faded, it seems reasonable to assume that they have been made by an earlier people than the Hopi and date possibly to Basketmaker-Anasazi days. Many glyphs are repatinated, and the old images are not recognizable as clan symbols by the present-day Hopi. One hundred-seven glyphs

on this rock could not be identified in addition to various dots and lines.

According to Hopi mythology, the first clan to arrive at the Mesas was the Bear Clan. It is still an important and powerful clan, and its members obviously participated frequently in the salt-gathering expeditions, since we find that there are more Bear Clan signatures on this Rock No. 17 than any other: 127 or 19 percent—at the same time, 127 represents 42 percent of the total Bear Clan symbols on the site. It is also observed that this clan shows up on half of all the rocks used on the site, and its 304 signatures on the site give it 14 percent of all glyphs counted. We were unable to count or photograph the glyphs on the top of the rock.

Boulder No. 34

Here is the most beautiful butterfly glyph pecked into blue patination. Only Rock No. 17 has the other representations of this clan.

Rock No. 38

These designs may be of Navajo origin. The technique is different. The glyphs are scratched and not pecked as on other boulders.

Rock No. 41

This rock bears five (six?) coyote symbols—one seems flaked off—and the old Mormon signatures (see Ethnography), T.L. Thayne, H.K. Perkins, May 18, 1873.

Anglo and Other Graffiti

Much of the graffiti on this site seems to be of Navajo origin. Many of these signatures are on separate rocks not showing Hopi glyphs. This is also true of a large sign by the Arizona Department of Highways—and an inscription "Man on Moon 1969"—Rock No. 1 has an Anglo signature "Marbuck." No. 5 shows two names and a date, February 23, 1968, and No. 31 has initials close to a Pipe Clan glyph, which could have been made by the Hopi "TST." One boulder shows "Red Lake" next to the glyphs.

DATING

Chronology presents a difficult problem to resolve on all rock art sites, and this one is no exception. It may, however, be possible to suggest a relative chronology. M. Tittle (1944) gives a founding date for Oraibi as 1150 A.D., and he credits the clans of Third Mesa Oraibi (such as the Bear Clan) as the participants in the salt expeditions. We, therefore, could assume that these clan symbols are later than 1150 A.D. Furthermore, Di Peso (1974) indicates that the water (Patki) clans left Casas Grandes upon its destruction by the Opatas in 1340 A.D. It would be logical to assume that the symbols of these clans (such as the Parrot Clan) would be of a later date. The ceremonial was still performed as recently as 1912, as Don Talayesva (1963) reports in his biography.

As a rule, dating is helped by archaeological finds and Carbon 14 dates of associated artifacts, but this is not the case at

Willowsprings, since no artifacts were located. That some of the glyphs (such as Rock 17) are of great age is evidenced by the almost complete state of repatination and, in some cases, such as Rock No. 4, they are covered by lichen. Since we have as yet no process by which patination or lichen growth can be measured adequately, we can only state that these glyphs are obviously very ancient and much older than all the clan designs.

ETHNOGRAPHIC RECORD

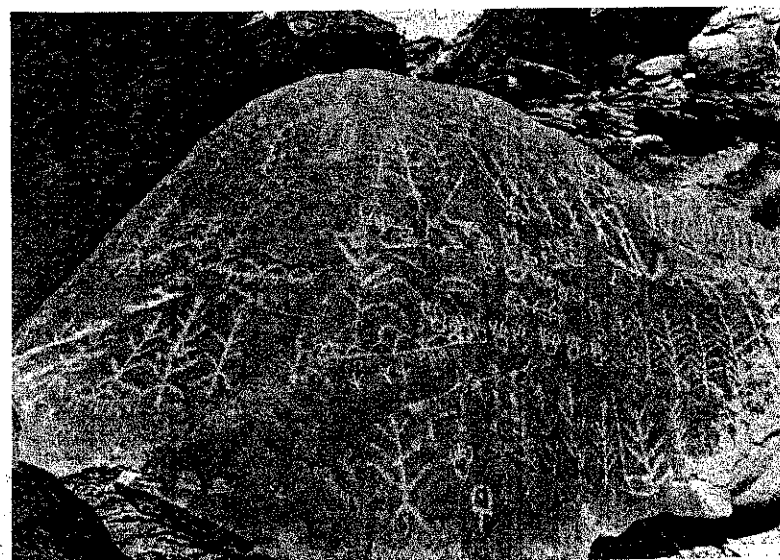
One of the unusual features of this site is the uniformity of symbol content. Here we find a large group of clan symbols exclusively, whereas normally petroglyph sites contain a variety of different signs. Early researchers have been able to reconstruct a fascinating purpose and use of this area as part of a larger story. It appears that the Hopi of Oraibi (on the third mesa) made a yearly pilgrimage trip to the depth of the Grand Canyon in order to procure a special salt and paints for specific ceremonials. On the way, the participants stopped and engraved their clan emblems on a Rock Shrine they named Tuteveni (Writing). On subsequent trips, the same man would repeat his signature to the left of the original sign. This explains the series of identical signs carved one next to the other. A new traveller would start a new line with his symbol. Obviously, not all participants were equally skilled and, through the ages, their renditions of the various emblems changed, sometimes substantially. We, therefore, observe vast variations in interpretation of the same clan symbol and differences in the technical quality of the work.

It seems in order at this point to expand on the pervasive importance of the clans in the life of the Hopi, since this lends credence to the unique quality of this site. "The clan the major grouping in western Pueblo thinking. It has a frequently a central residence known as the clan house, relations with sacred symbols, often control of agricultural lands or other territories" (Eggen 1950). The oldest woman is head of the clan, but the "real" clan leader is her brother her maternal uncle. This man is highly regarded. He stages and directs the ceremonies of the ritual associations owned by the clan. The clan is the repository of all ceremonial and ritual paraphernalia.

Since many of the clan symbols are of animals, they have been referred to at times as "totems." This does not seem entirely acceptable since a totem animal is considered the "brother," he is in a very special relationship with the paternal clan. This is not always observed among the Hopi. The members of the Rabbit Clan, for example, initiate rabbit hunts and freely kill and consume the animals. Coyotes are killed by the Coyote Clan and bears by Bear Clan members. This is in contradiction to most accepted concepts of totem animals, and I have avoided using this term.

The Salt Trail

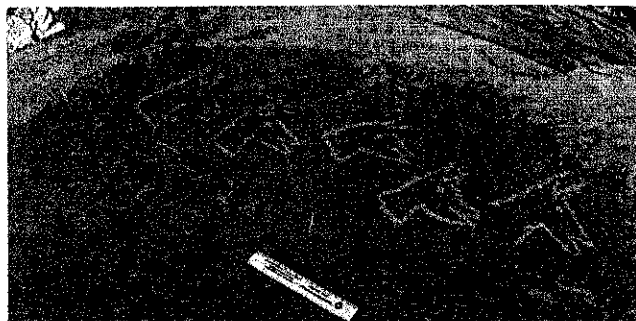
The story of the Hopi trips to the Grand Canyon has been reported by various informants and recorded by researchers since roughly 1878. These salt-gathering trips are undertaken in the fall of the year and before the start of Soyul and the



Rock No. 11 in 1976. Clans symbols: Coyote, Horn, Cloud, Sand



Rock No. 34.
Clan symbols:
Corn, Bear,
Butterfly, and
Agave (?).



Rock No. 40
with five coyote
signs and Mormon
signatures.

whole new Hopi ceremonial calendar. Preparations include the making of Pahos (prayer feathers). This begins during the prior years' Soyal celebration. Sexual abstinence prior to the trip is practiced by all participants. These always include a clan chief, a common member of a clan and a novice (kele) making his first trip. The total number of participants varies.

This is a long and arduous journey, taxing and testing the physical and emotional resources of each man. In Hopi mythology, in the depth of the Grand Canyon is the home of Massau'u, the house of the dead, and therefore a very dangerous place.

The Patron Deities in charge of salt are the Little War Twins, who established all the shrines and ceremonials to be performed on the Salt Trail. Oraibi is some 50 miles from Willowsprings, which was an important stop and one of the established shrines on the journey. From here, the travellers proceed another 25 miles to the edge of the Grand Canyon, stopping at several other shrines where prayer feathers are deposited, cornmeal paths left, and sometimes ceremonial

smoking performed. At one such place, each participant will simulate a sexual act at a smooth vulva-shaped opening in a cleft of a black rock. The last stop before the descent begins takes place at two jutting rocks which represent the images of the War Twins. There is no well-defined path, and the road is hard to follow, so they proceed from one chasm to the next; offerings are made at various shrines. At one such spot, the chief of the party enters a cave in order to communicate with Massau'u, hopefully to emerge with favorable signs for the coming year. A sandy slope descends to the banks of the Little Colorado. The stream is followed to the junction with the Colorado. Soon they approach the "Kiva," the original Sipapu, the place where mankind emerged from the Underworld. After proper ceremonials, the yellow clay deposit (pavisa) is located nearby and a supply is dug up. It is needed for the Soyal ceremonials (used as paint), as is the salt which is not far from this spot. All this is loaded up. Climbing ropes and retracing steps laden with the clay and salt is a hard task. Stops are made again for the necessary rituals along the return trail. When the group finally enters the village, the leader says: "Now we happily enter the houses of the fathers

and mothers. Let us go." They are eagerly greeted at home (Don Talayesva 1963).

It is interesting to note that in 1958 a party of scientists (Eiseman 1959) retraced the trip. They started at the Willowsprings site and the group was able to find most of the shrines, as well as the clay and salt deposits and the so-called Sipapu.

Honeymoon Trail

Willowsprings also acquired a historic significance for the Mormons. After finding and photographing an inscription, "H.K. Perkins May 18, 1873," I was able to ascertain that Mr. Perkins was a member of an early Mormon scouting party, and that later on Willowsprings had become an important stopping place on what is known as the *Mormon Honeymoon Trail* (see Arizona Highways, May 1978). Young couples living in St. John, Arizona, travelled to St. George, Utah, to get married—one of their stops was Willowsprings, and several other early Mormon inscriptions are to be found there.

CONCLUSION

The evidence points to the conclusion that Willowsprings has had a major ceremonial significance for the Hopi Clans over an extended period of time. The continued importance of the site became apparent when the present-day Hopi contacted at once expressed great interest in the research.

At their request, a copy of this report was presented at a meeting of the Board of the Hopi Cultural Center on Second Mesa,

and a lively and stimulating discussion ensued. It is now becoming increasingly clear that while the ceremonial quest for salt is an ongoing Hopi endeavor the journey with all its attendant ceremonial is undertaken at irregular intervals. The suggestion has been made that various villages are travelling differing locations—opening a whole new possibility for further investigation.

Information regarding the steps to be taken to place this site on the National Register of Historic Places was presented to council in the hope that such a step would protect the pet glyphs. However, since this Hopi shrine is located on Navajo land it was felt that now is not a politically opportune time to proceed with the necessary steps—in fact calling attention to the sacredness and importance of the place might further endanger it.

The fascination with this place in a remote spot of the Arizona desert persists and it is hoped that further observation will result in new revelations.

ACKNOWLEDGEMENTS

Special thanks are due my friend James Miller who participated in all trips and research throughout the years and without moral support this work would not have been possible. My gratitude also goes to my Hopi friends for their encouragement and elucidation and for making each trip to the mesas an unforgettable experience. Deep appreciation is also expressed to Dr. Clement Meighan who has been my guiding light. The initial help came from Frank and A.J. Bock who very kindly gave me directions to the site and I am very grateful.

CHART I
NUMERICAL ANALYSIS OF GLYPHS

ROCK NO.	NO GLYPHS	CLAN REPRESENTATION												
		ARROW	BADGER	BEAR HUNT TRACK	BIRD STICK	BOW	BUTTER FLY	CEDAR	CLOUD	CORN PLANT	CORN GERM GOD	CORN COB	COYOTE HD	CROW TRACK
1	53			2	3				5	1			2	1
2	8				4									
3	20			8						7			1	1
4	29			3	4					2			1	1
5	286			23	12				11	34			9	1
6	156			12	6				9	25			7	2
7	4									1		3		
8	2									2				
9	317	5		36	2			3	20	50		1	5	37
10	84		4	20			1		1	9		2	6	3
11	9									1				
12	1													
13	8			1		1								2
14	6									6				
15	134			14		8			13	40		4	3	27
16	39			8					1	4				17
17	650	13	12	126	2	6	8	4	5	44	23			64
18	79	3		4	5	1		1	4	12	2	1	14	1
19	6									1			1	
20	15									2	1	2		
21	34			14		2			3			4		1
23	111	1		8	1				17	21	3	1	2	1
24	22			3						2				
25	12					12								
26	6									6				
27	10			1						1				
28	1									1				
29	25			4						7				
30	4									1				
31	22													
32	10			10						2				
34	8						1							
35	10	1		2										
36	3												1	
37	1													
38	13			6						1				
39	-													
40	1													
41	5											5		
TOTAL	2178	24	16	302	2	43	32	9	4	91	280	30	5	47

CHART I (continued)

	HORN 1 2	KATCHINA MASK	LIZARD	MASAU-U	MOON	OAK	FARROT (MACAU)	FORQU-PINE	RABBIT	RABBIT BRUSH	RED ANT	SAND	SNAKE	SNOW	SPIDER WEB INSECT	STAR
1	1		1									3	2		1	
2																
3			1										2			
4			2	1								1		2		
5	9	3	65		4		8	8		1	2		4	5	12	
6	1	4	12	11		6	5				1			2		
7																
8																
9	1	3	16	19	6				4			6	2	23	12	
10		4	9								2	4	1			1
11							4						5			
12																
13																
14																
15	5		6	4			1									
16		2	2									1				
17	3	5	8	1	3	6	2				36	28	10			11
18		4				6			8				1			
19			1										1			
20				2									3			
21												6				
23		7		5			1		5			3	9			
24																
25																
26																
27							4						5			
28																
29			3		1				2			1	2			
30				4												
31	1	1	10	1												
32																
34																
35																1
36		1											1		1	
37		1														
38		6														
39																
40		1														
41																
TOTAL	11	17	37	136	48	14	16	22	8	19	1	41	53	57	33	26

CHART I (continued)

	STRAP	SUN	SUN FOREHD	TOBACCO PLANT	PIPE	WATER	YUCCA-AGAVE	VARIOUS OTHER			
								NOT IDENTIFIED	VERT. LINES	DOTS	SHAMAN
1	7	5	2			5	5	7			
2		1						1			
3											
4		4	2					1			
5	18	25						5			
6	11	25	2	5		1					
7											
8											
9		16	4					15	15		
10		6						11			
11											
12											
13								2			
14											
15		5	2					2			
16								3			
17	3	24	2			1		107	5	59	
18		3						8			
19								2			
20								5			
21								3			1
22		2						20	4		
23		7						10			
24											
25											
26											
27											
28											
29											
30								5			
31		2			1			5			
32											
33											
34							2				
35											
36								8			
37											
38											
39											
40											
41											
42											
43											
44											
45											
46											
47											
48											
49											
50											
51											
52											
53											
54	54	126	14	5	1	7	7	218	25	69	1

CHART II
HOPI CLANS

CLAN NAME	HOPI NAME	AFFILIATE CLANS	SYMBOLS	FIRST LOCATION ON MESAS	MIGRATION NOTES	FOUND SYMBOL ON SITE SURE POSSIBLE	REMARKS
AGAVE	KHAN		PLANT			X	
ANTELOPE		HORN-DEER GRASS			FROM NAVAJO MOUNTAIN	X	
ARROW			ARROW			X	
BADGER	HONANI	REAL BADGER GREY BADGER NAVAJO BADGER	PAW PRINTS	FIRST MESA		X	FIRST HEALING SOC
BEAR	HONNYAM	BEARS EYE	HUNTING STICK OR PAW PRINTS	SECOND MESA	FIRST CLAN TO ARRIVE	X	FORMER CLAN ASSUMES LEADER-SHIP
BLACK EARTH KATCHINA		ASA		AWATOKI	SEE MUSTARD	-	-
BLUE BIRD	CHOSH-WUNGWA	BLACK BIRD	SMALL BIRD	THIRD MESA		X	
BOOMERANG-HUNTING STICK		ASA	HUNTING STICK		SEE MUSTARD	X	
BOW	AWATA		BOW			X	
BUTTERFLY	FOUNYAM		BUTTERFLY			X	
BURROWING OWL			OWL			-	-
CACTUS FLOREOM						-	-
CEDAR	HONNYAM	CEDAR WOOD FIRE	TREE	THIRD MESA	FROM JEMEZ	X	
CHICKEN HAWK	KELNYAM		HAWK			X	
CLAY							
CLOUD	ONOWUH	CORN-WATER TADPOLE-FROG	RAINBOW LIGHTNING QUICK-FROG TADPOLE	SECOND MESA	MIGRATED FROM CASAS GRANGES VIA ZUNI	X	
COCK CHAPARRAL		ASA			SEE MUSTARD		
COO-GO-KO							
CORN	PIKYAS	CLOUD-YOUNG CORN-MELON WATER	CORN PLANT GERMINATION GOD	SECOND MESA	SEE CLOUD	X	
COTTONWOOD		KATCHINA	TREE			X	
COYOTE		REAL COYOTE WATER COYOTE PINYON	WOLF-FOX-HEAD OF OR WHOLE	THIRD MESA	FROM JEMEZ TO BELYATKI	X	
CRANE	ATOKNYAM		CRANE			X	
CROW	ANDWUCHYAM	RAVEN-KATCHINA	CROW OR BIRD TRACK	SECOND MESA		X	
DEEP WELL							
DEER		ANTELOPE HORN, GRASS	DEER		FROM TOKONAVETO WALK	X	
DUCK			BIRD				
EAGLE	KWANYAM		EAGLE-TURKEY-BUZZARD		FROM NEW MEXICO	X	
FIELD MOUSE		ASA			SEE MUSTARD		
FIRE (FIREWOOD)	KO KOP	FIREWOOD COYOTE, CEDAR PINYON MASAUI	PINYON, JUNPER MASAUI PACE	THIRD MESA	CAME FROM JEMEZ TO BELYATKI	X	
FLUTE		BLUE FLUTE GREY FLUTE		FIRST MESA	CAME FROM KIQNAVI NORTH OF THE COLORADO		
FOX		COYOTE	FOX, COYOTE			X	
FROG	PASUA	SEE CLOUD	FROG-TADPOLE	SECOND MESA		X	
Gopher							
GRASS	AMU-WUNGWA	SPRUCE ANTELOPE DEER, HORN			SEE DEER		EXTINCT

CHART II (continued)

CLAN NAME	HOPI NAME	AFFILIATE CLANS	SYMBOLS	FIRST LOCATION ON MESAS	MIGRATION NOTES	FOUND SYMBOL ON SITE SURE	POSSIBLE	REMARKS
ORABERWOOD						-		
GREASY EYE CAVITIES OF THE SKULL								
HAWK	WIKURU-WUNGWA	SEARSTRAP	HAWK-TURKEY	SECOND MESA	FROM NEW MEXICO	-	X	EXTINCT
HORN		FLUTE	ANTELOPE	FIRST MESA	NORTH OF COLORADO OR WEST FROM CALIFORNIA	X		
HORNED TOAD		ANTELOPE	DEER, GRASS					
KATCHINA (KATCHI)	KATCHINYAM	TORACCO + PARROT	MASK OR SPRUCE BOUGH	FIRST MESA	POSSIBLY FROM CASAS GRANDES MEXICO	X		
LIZARD	KUKUTONYAM		HORNED TOAD, BUKE, LIZARD			X		
MACAW		PARROT	BIRD + BIRD HEAD		SEE PARROT	X		
MAGIE		ASA	BIRD		SEE MUSTARD		X	DESTROYED 1700 AT ANATOSI
MASAUU	MASNYAM	SEE FIRE	FACE	THIRD MESA		X		ODD OF SARTH, LIFE AND DEATH
MILLET	LE					-		
MOLE						-		
MOON		STAR	STAR-MOON CROSS-FULL OR HALF MOON	SECOND MESA	FROM NEW MEXICO	X		EXTINCT
MUSTARD	ASA		BLOSSOM		AFTER 1680 FROM NEW MEXICO AND CANYON, DECELLY TO ANATOSI			TANOAN SPEAKING
OAK			WOODEN STICK ON WHICH MAIDENS HAIR WHORLS ARE MADE		SEE MUSTARD	X		
PARROT	KAGNYAM	MACAW	BIRD WITH CURVED BEAK	FIRST MESA	POSSIBLY FROM CASAS GRANDES VIA ZUNI	X		
PIGEON HAWK			HAWK					
PIYON		SEE COYOTE		SEE COYOTE	FROM JEMEZ			
PIPE		TOBACCO	PIPE			X		
PORCUPINE		BADGER	PORCUPINE	THIRD MESA		X		
PRAIRIE DOG								
PUMPKIN			FLOWER					
RAIN		SEE CLOUD	CLOUD, THUNDER, LIGHTNING, RAINBOW		SEE CLOUD	X		
RABBIT	SIVAP	COTTONTAIL	RABBIT OR EAR OF RABBIT			X		
RABBIT BRUSH	SIVAP WUNGWA	WATER CLANE	BLOSSOM	SECOND MESA	CAME ALSO FROM NEW MEXICO	X		EXTINCT
RAVEN			BIRD				X	
RED ANT			ANT			X		
REDHEADED MAN		MASAUU	FACE			-		
RED	BAKAB	ROAD RUNNER	ARROW, PLANT, ROAD RUNNER				X	
ROAD RUNNER			BIRD			-		
SAMOA		YUCCA	PLANT			-		
SAND	DU WA NYAM	LIZARD	CIRCLE OR SQUARE (WITH CROSS) TRIANGLE			X		

CHART II (continued)

CLAN NAME	HOPI NAME	AFFILIATE CLANS	SYMBOLS	FIRST LOCATION ON MESAS	MIGRATION NOTES	FOUND SYMBOL ON SITE SURE	POSSIBLE	REMARKS
SHELL								
SNAKE	TOUNYAM	ANTELOPE	SNAKE	FIRST MESA	CAME FROM KOONAVI NE OF GRAND CYN & W FROM CALIF	X		
SNOW	NOVA WUNGWA	WATER CLANS	CLOUD WITHOUT DESIGN	SECOND MESA	SEE CLOUD	X		
SNOW BUNTING		ASA	BIRD		SEE MUSTARD	-		
SPIDER	KUKYAN GNYAM	SPRUCE	SPIDER OR WEB	THIRD MESA		X		
SPRUCE	PENTOWA	WOODSTICK	TREE OR BOUGH	HAND FIRST MESA	FROM NEW MEXICO		X	TEWA SPEAKING
SQUASH	PATGNYAM		CRANE BLOSSOM			-		
STAR		SUN, MOON	STAR	FIRST MESA	CAME FROM NEW MEXICO	X		
STRAP	SIA-QUOIS-WUNGWA	CARRYING STRAP	HOPE WITH NOOSE	SECOND MESA		X		
SUN	TAWANYAM	STAR	CIRCLE + FACE	FIRST MESA	FROM NEW MEXICO	X		
SUNFLOWER			FLOWER			-		
SUNFOREHEAD	KALA WUNGWA		RISE SUN HALF CIRCLE	FIRST MESA	FROM NEW MEXICO	X		
SWALLOW			BIRD			-		
TADPOLE		FROG	FROG			X		
TAO						-		
TOCOC						-		
TOBACCO	SISA	PIPE	PLANT OR PIPE		CASAS GRANDES	X		
TURKEY			BIRD		FROM NEW MEXICO		X	
TWO HORN	AL	SEE HORN	HORNED QUADRUPED		SEE HORN	X		
WATER CLAN								
WATER HOUSE	PATKI	YOUNG CORN	CLOUD WITH LIGHTNING	SECOND MESA	SEE CLOUD	X		
WATER PLANT		WILD MUSTARD	MASKS	SECOND MESA	TO CANYON DE CHIBILI, FROM NEW MEXICO LATE ARRIVAL		X	
WARRIOR						-		
KATCHINA						-		
WOMAN CLAN						-		
WAR TWIN		ELDER WAR TWIN				-		
WILD MUSTARD	TANEY AS WUNGWA	WARRIOR KATCHINA		SECOND MESA	SEE WARRIOR	-		
WILD TURKEY			BIRD			-		
WILTED CORN	PIKYAS WUNGWA		CORN				X	
WOLF			WOLF, FOX				X	
YELLOW BIRD			BIRD				X	
YOUNG CORN							X	
YUCCA		SAMOA	PLANT AND FRUIT	WALPI	FROM JEMEZ	X		

CHART III
CLAN SYMBOL DRAWINGS

BADGER



BEAR



COYOTE



HORN



RABBIT



PORCUPINE



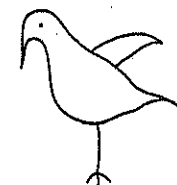
CROW



EAGLE



PARROT



LIZARD



SNAKE



CORN



RABBIT BRUSH



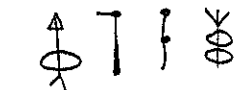
REED



BUTTERFLY



RED ANT



SPIDER

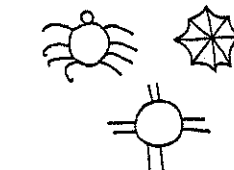


CHART III (continued)

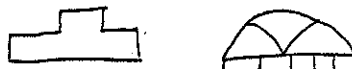
OAK



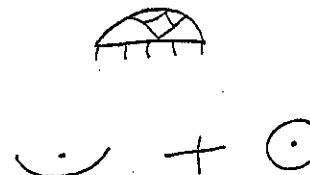
TOBACCO



CLOUD



MOON



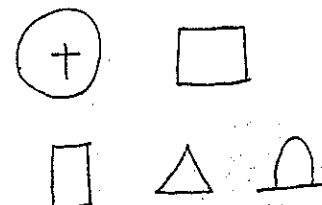
SNOW



STAR



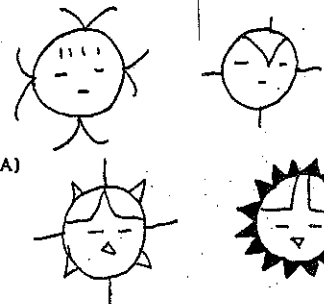
SAND



WATER
(RAIN)



SUN
(KATCHINA)



SUN
FOREHEAD



STRAP



ARROW

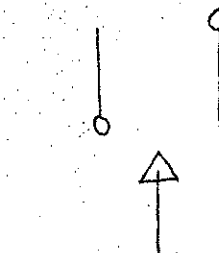
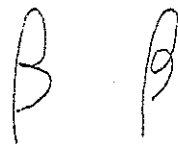
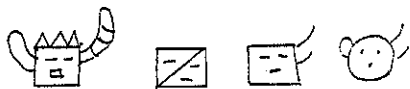


CHART III (continued)

BOW



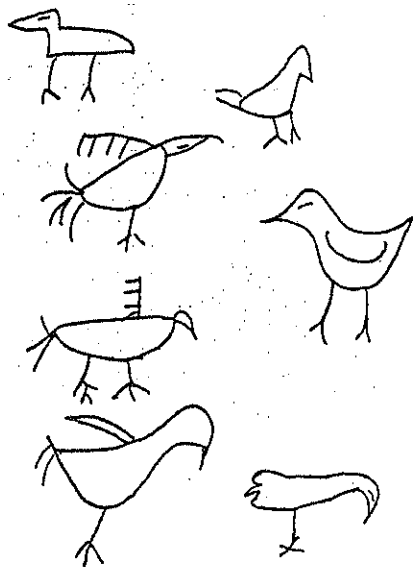
KATCHINA



MASSAU'U



Various other bird clan representations:



Clan symbol drawings unidentified examples

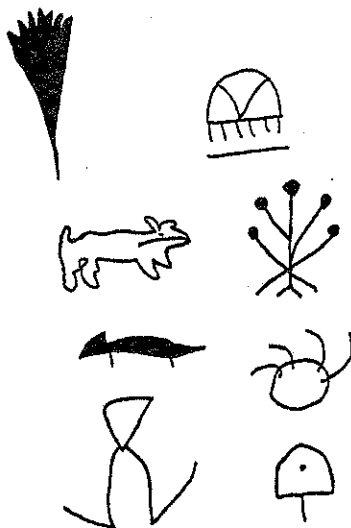


CHART IV
Listing of Fully Pecked Designs

Rock No.	Designs	No. of Glyphs	Possible Identification
1		5	Agave (?)
5W		8	Porcupine
5		5	?
9		3	Lizard
9		6 & 11	?
5		2	Sand (?)
1W & 3E		3	Dog (?)
10 & 17		16	Badger
34		2	Agave (?)
21		1	

CHART IV (continued)

Clan	Max. No. of Trips	Rock No.
Badger	4	17W
Bear	5	6S
	7	9S
	10 & 8	10W
	7	17W
	8	18W
	9	21W
Bow	8	15
	8 & 6	17W
	7	25W
Butterfly	4	17
Cloud	Seesnow	9W
Corn-Plant	7	3
	16	5SW
	5	10W
	8	26
Corn-Germin God	2	20W
	4	23W
Coyote Hd	3	6W
	5	9S
	7	18E
	4	21W
	6	35W
	6	41
Coyote Whole	4	23W
Crow	6	23W
Horn -1 Horn	4	5SW
Katchina	4	10W
	6	23W
Lizard	12	5SW
	8	31







Clan	Max. No. of Trips	Rock No.
Massau-u	4	5S
	5	6S
	7	9S
	4	30
Oak	6	6E
Parrott	11	5S
	3 & 4	6S
	4	27E
Porcupine	8	5W
Rabbit	3 & 3	18W
	5	18
	5	23E
Rabbit Brush	1	
	6 & 7	17W
Red Ant	6 & 7	23W
Sand	6	9S
	3	10W
	6	21W
Snake	5	11E
	5	23E
	4	27E
Snow	7 & 10	9S
		9W
Spider	7	9W

CHART IV (continued)

Clan	Max. No. of Trips	Rock No.
Strap	6 & 6	5W
	12	17E
Sun	4	5SW
	6 & 10 & 3	9W
	4	23N

Sunforehead 2 & 2

Unidentified

	8	9S
	6 & 10	9S
	6	18W
	6	17W
	12	17W
	4	17W
	6 & 3	17W
	6	17W
	6	17W
	6	17W