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ROCK ART

in the Navajo Reservoir District

by Polly Schaafsma

*Museum of
New Mexico Press*

number 7

*Museum of New Mexico
Papers in Anthropology
Santa Fe, 1963*

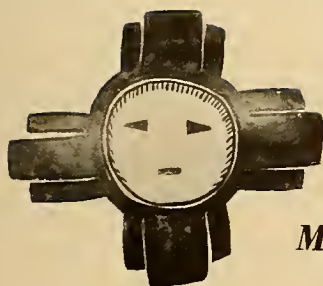
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Museum of New Mexico Press

A Salvage Archaeology program conducted by the Museum of New Mexico in co-operation with the National Park Service, Region Three, Department of the Interior, in the Navajo Reservoir District of the Upper Colorado Storage Project.

Edited by
RICHARD WORMSER
and
FRANK W. EDDY

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PREFACE AND ACKNOWLEDGEMENTS

The following report, Navajo Project Studies VI, concerns an analysis made of the pictographs in the Navajo Reservoir District, as part of a larger salvage archaeology project in the Navajo Reservoir conducted under a contract between the Region Three of the National Park Service and the Museum of New Mexico.

The Navajo Reservoir District is located along the San Juan River and the lower reaches of its tributaries, the Piedra and the Pine, in northwestern New Mexico and the adjacent portions of Colorado. This District, limited by salvage archaeology considerations to the area to be inundated by Navajo Dam, is described in Navajo Project Studies I and II (Dittert, 1958; Dittert, Hester and Eddy, 1961).

In this latter report, preliminary mention is made of the "graphic representations" from the Pueblo and Navajo Periods (Dittert, et al, 1961, p. 230, 238-242). Although this term has been used in previous publications concerning the Navajo Project research, (see Dittert, et al, 1961, and Schaafsma, 1962) it will now be dropped in favor of "pictographs" or rock art, as an all-inclusive term for all representations on rocks. "Rock-paintings" will be used as the specific term to differentiate painted figures from "petroglyphs", figures pecked or incised into the rock surface.

A site survey of the entire Navajo Reservoir District was completed in the summer of 1959. During the survey picto-

graph sites were located and noted for further study. Some preliminary recording by the survey crew took place at this time at the sites just above the dam, near the junction of the Pine and the San Juan Rivers. This was primarily in the form of photographs and tracings on plastic of isolated figures or figure groups.

I want to express my thanks to Harry Hadlock of Farmington, New Mexico, who in the summer of 1962, took me and my husband to significant Navajo pictograph sites in Largo Canyon, a section of the Gobernador District. These sites aided in seeing the Reservoir material in better prospective.

In addition to the field work, many people gave assistance during the writing of this report at the Laboratory of Anthropology in Santa Fe. The Museum of Navajo Ceremonial Art, with the cooperation of Evelyn Dahl, contributed research on the Navajo aspect of this report. I would also like to express my appreciation to James J. Hester, Patricia Bryon Vivian and Beth L. Dickey for the use of their unpublished manuscripts and photographs for study. Drawings for this project were done by myself; lettering and charts by Phyllis Hughes. Photography was done by Richard Leonard, and typing by Mary Glover, Fay V. McCullough and Consuelo O. Gonzales. Finally, Frank W. Eddy and Alfred E. Dittert, Jr. have given me much helpful criticism and direction in the writing of this paper.

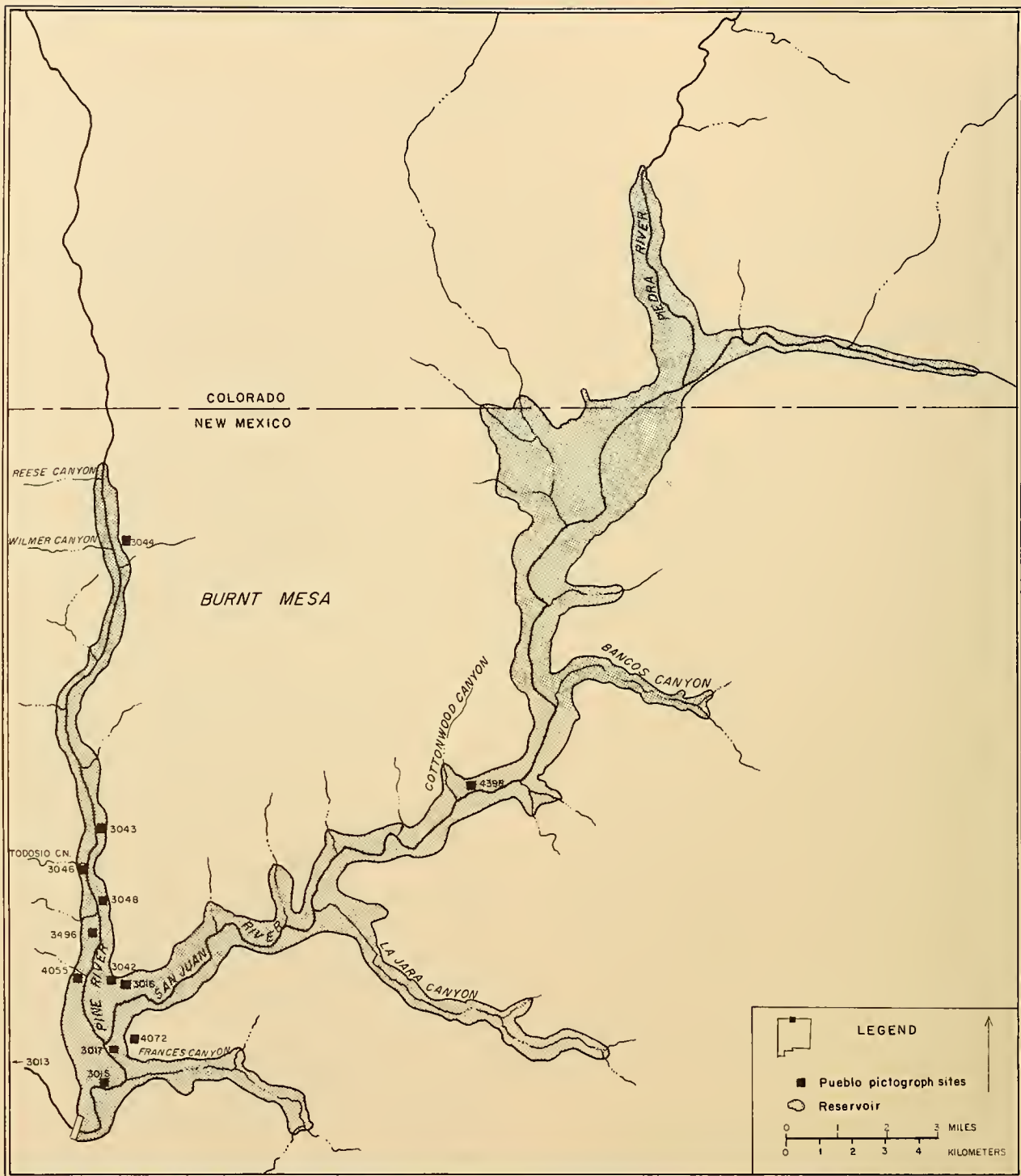


Fig. 1. Map of the Navajo Reservoir District showing locations of Pueblo pictograph sites.

CHAPTER I

INTRODUCTION

SETTING

The Navajo Reservoir District lies in the canyons of the San Juan River and the lower reaches of its tributaries, the Pine and the Piedra. These canyons run through the pinyon and juniper covered mesas of northwestern New Mexico and the adjoining parts of Colorado; here are the remains of Pleistocene (?) benches, cut into the sandstone bedrock and capped with alluvium. On these terraces are habitation sites of Pueblo people and the more recent Navajos. Above and below the terrace surfaces are cliffs of Tertiary and Cretaceous sandstone on which are the pictographs which concern us here. Most of the pictographs discussed are on the lowest cliffs in the canyons.

Within the Reservoir, the Pine River Canyon and the lower half of the San Juan Canyon are fairly narrow and deep and the vertical cliffs are close to the inhabitable benches. In the upper sections of the Reservoir along the San Juan and Piedra the canyon widens and the lower cliffs disappear. Significantly, the only two pictograph panels found from Bancos Canyon north are on talus boulders (Figs. 1, 2). Most of the pictographs are in the Pine River Canyon and in the area where this river joins the San Juan. One site, LA 3013, was outside the Reservoir, two miles below the dam.

CULTURAL SUMMARY OF THE DISTRICT

The prehistoric periods and phases have been defined for the District by Dittert, *et al* (1961) as follows: 1) A Paleo-Indian Period (represented by one Folsom point); 2) a Lithic Period with a time range estimated from 3000 to 500 B. C.; 3) the Los Pinos Phase A. D. 1-400; 4) the Pueblo Period A. D. 700-1050; and 5) the Navajo Period, dating from about A. D. 1550 to 1775 (Dittert, *et al*, 1961, pp. 218, 220, 245). The first two periods will not concern us here. The Pueblo Period is broken down into the Rosa, Piedra and Arboles Phases, which are roughly equatable with Basket Maker III - Pueblo I, Pueblo I and Pueblo II respectively, in terms of cul-

tural attainment. The preceding Los Pinos Phase is culturally and temporally Basket Maker II. At the time of the Navajo Reservoir survey publication (Dittert, *et al*, 1961) it appeared that there was a cultural break between the Los Pinos and Rosa Phases. During the last part of the field season in 1960 and in the season of 1961 a Sambrito Phase, intermediate in time between Los Pinos and Rosa, was defined on the basis of two sites. Such transitional sites show a developmental continuum between the Los Pinos and Rosa Phases. Also, the Rosa, Piedra and Arboles Phases are clearly aligned in a developmental sequence.

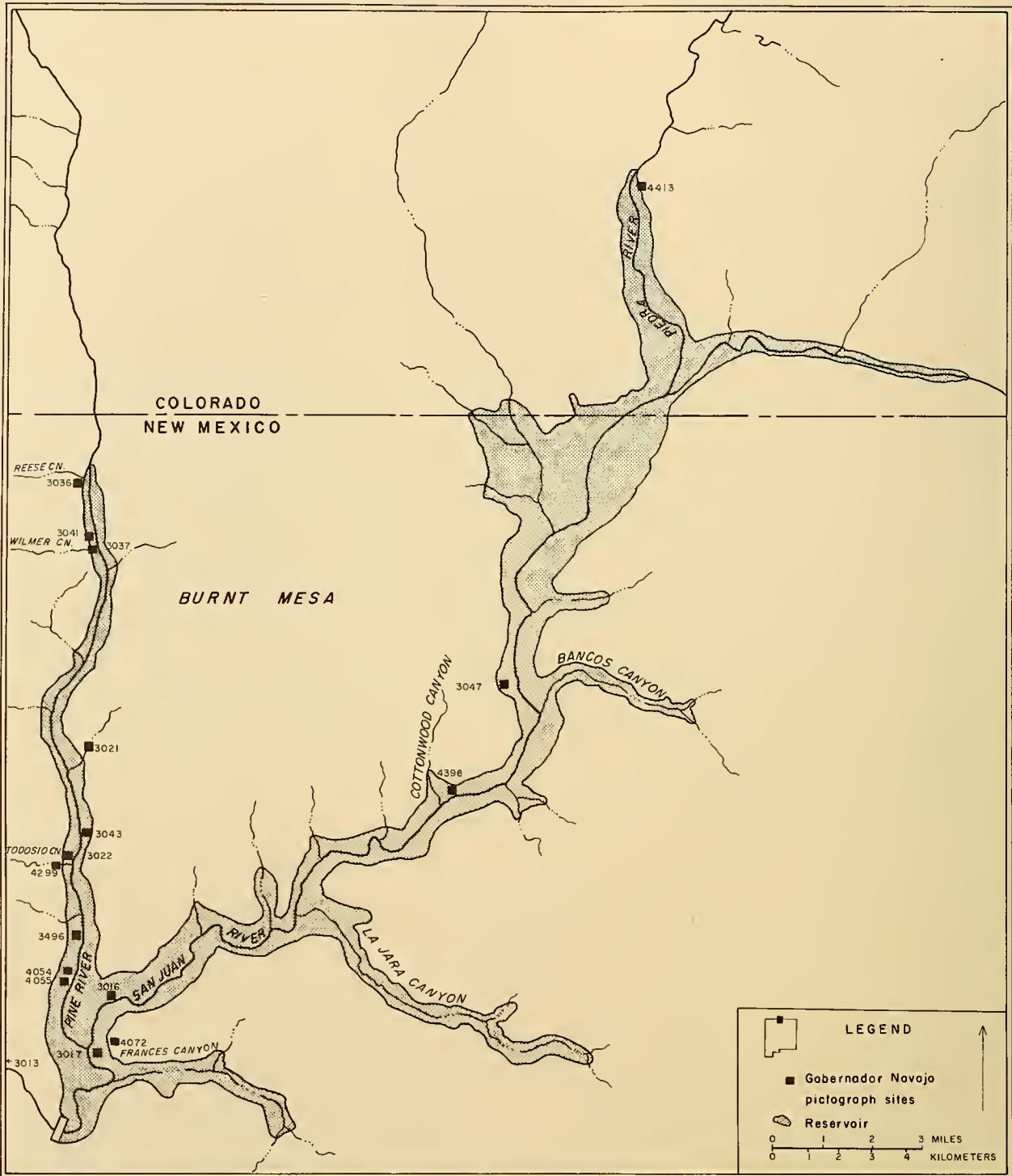


Fig. 2. Map of the Navajo Reservoir District showing locations of Navajo pictograph sites.

The Navajo Period is sub-divided into two phases: 1) the Dinetah, a pre-Pueblo contact phase from A. D. 1550(?) - 1698; and 2) the Gobernador Phase during which heavy acculturation occurred from 1698-1775. After this the Navajos left the District in a south and westward migration (Dittert, et al, 1961 p. 245).

One more phase, defined by the above authors for the Navajo Reservoir District, is the Lucero Phase of Spanish-American occupation, which continues until the present time. There are some pictographs in the Reservoir of Spanish-American origin, but they will not be

dealt with in this paper (see Dittert, et al, 1961, Fig. 77).

Current studies indicate that all of the pictographs considered in this paper were made by either the earlier Pueblo groups or Navajo people of the Gobernador Phase (see Chronology and Areal Distributions, Chapter V). Of the twenty-two sites studied, five contained only Pueblo figures, seven only Navajo, and ten had figures from both cultures. Though the term "Pueblo" is used in this paper, some of the figures may be within the Pueblo tradition, but of Basket Maker origin.

PURPOSES OF STUDY

Studies of the Navajo Reservoir pictographs have been carried out past the point of merely recording data destined to be lost. Since the work in the Reservoir is all salvage work, we are fortunate to have surveyed 454 sites and carried out intensive excavation of more than sixty. As it is assumed that, for the most part, the dwellers in the canyons were also the authors of the pictographs, one of the purposes of the study is to make as close a correlation as possible between the pictographs and the culture phase which produced them. Although the Pueblo occupation lasted close to a thousand years, both internal and comparative evidence suggest a more limited period for the production of the Pueblo work. One of the methods used in this paper is a stylistic analysis of the Pueblo pictographs. The human figure, a dominant theme in Pueblo art, is broken down and divided on the basis of stylistic differences in an attempt to see if these differences are

culturally significant. In addition, it is hoped that such a style definition or the establishment of a type may help in establishing a base for comparative work in other areas.

As much of the subject matter of the Navajo pictographs is religious and supernatural, it is hoped that these paintings and petroglyphs will contribute significantly to the knowledge of the eighteenth century Navajo religion.

Stylistic analysis of the Navajo art work is equally important. As the same artistic tradition is followed today, the Reservoir pictographs offer a glimpse of the same style at an earlier stage of development. Closely allied to this will be the attempt to discover the importance of the Pueblo element in Navajo art in the seventeenth and eighteenth century when the Navajos were undergoing Pueblo acculturation.

RESEARCH PROCEDURES

Field records of the pictographs were made in various ways, usually when the figures were either shaded or during cloudy weather, the time of best visibility. Photographs were made with Kodacolor film as well as with black and white and 35 mm. Kodachrome.

High, inaccessible panels and those with little level foreground had to be photographed at an angle, thus distorting the figures to some degree. For this reason all accessible panels were drawn as well as photographed. In order to record large panels of petroglyphs in their totality, a string grid of 0.5 foot squares were set up as a guide for drawing on graph paper. As an aid to copying, many of the petroglyphs were chalked in outline before drawing. In this way, shapes were more accurately determined in vague cases and the small details were brought to the attention of the recorder.

It was more expedient and accurate to make tracings with crayons on plastic sheets taped to the cliff over isolated or very small groups of figures and the many-colored and complex rock paintings. Colors of the paintings were matched in the field with pastels.

In addition to the drawings, field notes were taken on technique, weathering and patination, site situation, and other pertinent factors. Samples of the pigments of the paintings were obtained and brought back to the laboratory for analysis.

In the laboratory the rock paintings were duplicated in pastels whose color and texture could accurately reproduce the pictograph paint. Permanent drawings in India ink were made of the petroglyphs.

CHAPTER II

DESCRIPTION OF PUEBLO PICTOGRAPHS

In this chapter a description is given of each Pueblo pictograph site. Frequently Navajo figures are interspersed among Pueblo ones, but the former will be considered in the next chapter. Often one site number covers several panels in a locality; in important cases, each panel will be discussed separately. It should be

noted that a panel is not necessarily composed as a unit, but more often is made up of a number of apparently unrelated elements. There are, however, some compositional groups in which a relationship between the figures is obviously intended.

SITE DESCRIPTIONS

LA 3013

This site is on the north side of the San Juan River about two miles below the dam. It is the only site beyond the Reservoir District proper (Fig. 1). It is composed of several petroglyph panels strung out along the cliff for several hundred yards, and both Pueblo and Navajo work are present. Broad-shouldered men of various kinds are a strong Pueblo theme at this site.

PANEL 1

Panel 1 is an isolated figure low on the cliff (Fig. 3, left). The figure is crudely executed, and lengths of the extremities are somewhat vaguely defined.

PANEL 2

This group of three on the edge of a rock shelter in the cliff is somewhat protected from weathering, so that there is little patination (Fig. 3, right).

PANEL 3

These figures make up a large and scattered panel of broad-shouldered anthropomorphs high on a heavily oxidized and reddened cliff face (Fig. 4). The base of the panel is about twenty feet above the talus slope and apparently there has never been any shelf or rock which might have served as an access ledge. All the figures show signs of weathering, but patination is heaviest at the base, where forms have

been modified to nearly the color of the original rock surface. An overhanging ledge above seems to offer some protection to the higher figures. These Pueblo men have basically the same form, done with neatness and precision and, technically, are the finest in the District. Several figure outlines are purposely emphasized. This is particularly well illustrated in the case of the largest man, whose body outline, head and extremities have been pecked deeply and solidly into the rock surface. In the center of the body, pecking is sparse but even; most of the original rock surface is left. The effect is one of contrast and variety in surface texture. Note that some figures are grouped holding hands. Other interesting details are the chignon-like or feather headdress on the large figure and the toes and chest ornaments of the largest figure in the lower right-hand group.

PANEL 4

This panel is low on a section of considerably darkened and weathered cliff. The figure with the headdress and possibly the animal to his right (a horse?) are of Navajo origin (Fig. 5, lower). The unidentifiable figures on the extreme left (upper) bear some resemblance to Navajo petroglyphs at LA 3043. The Lucero Phase is represented here by the inscription.

Among the Pueblo figures, pecking varies from even work in the central figures to uneven edges and half-pecked surfaces in the large figures on either side (Fig. 5, upper). All of the large broad-shouldered men are somewhat crudely rendered in comparison with their neighbors down the cliff

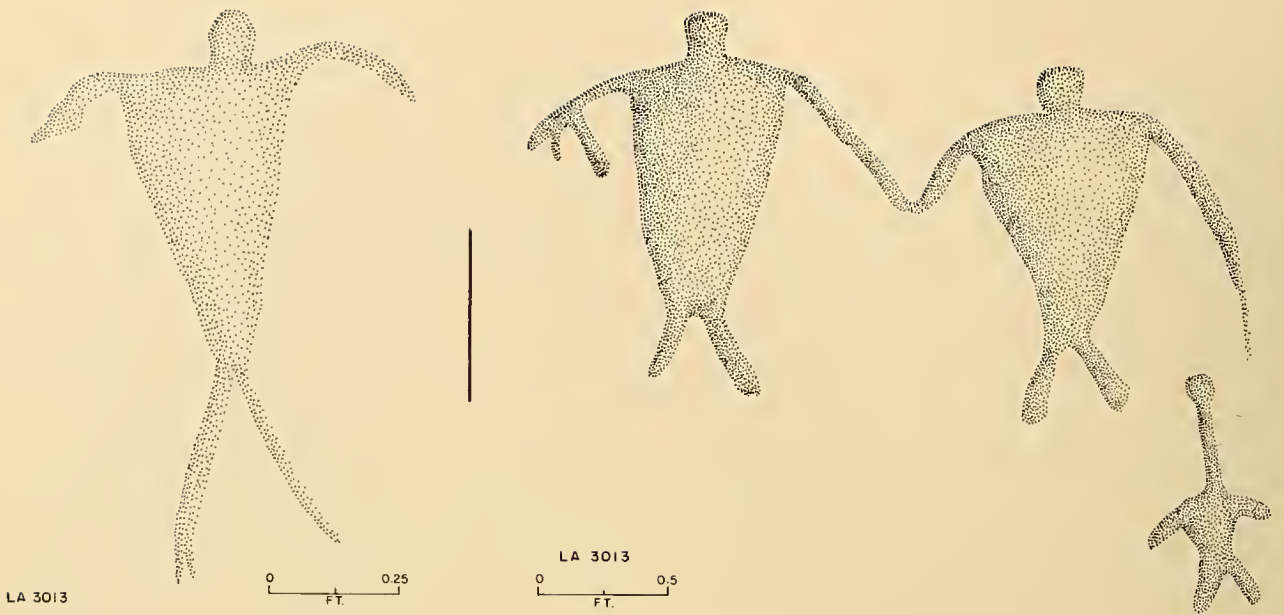


Fig. 3. Petroglyphs of broad-shouldered men, LA 3013. (Left) Single figure, Panel 1. (Right) Three figures, Panel 2.



Fig. 4. Pueblo petroglyphs of broad-shouldered men, LA 3013, Panel 3.



Fig. 5. Petroglyphs at LA 3013, Panel 4. (Upper) The first broad-shouldered figure from the left is two feet high. (Lower) The largest figure is 2.2 feet high.



Fig. 6. Pueblo figures, LA 3013, Panel 5.



Fig. 7. Pueblo hunting scene in rock shelter, LA 3015, Panel 1.

(Panel 3), yet again the sparsely pecked figures have a tendency towards solid pecking in the extremities and head and shoulder outline. Feathers on the head, hands with fingers, and feet with toes also appear here in some instances.

PANEL 5

The figures in this panel, except for the snake, are crudely pecked with long jab marks (Fig. 6). The snake figure is rendered in dull round marks. The figures are moderately heavily weathered.

LA 3015

LA 3015, like LA 3013, is a petroglyph site composed of numerous panels stretching out several hundred yards along the first cliff north of the San Juan River, about 1.5 river miles above the dam. All panels vary from low on the cliff to those accessible only by climbing on higher ledges. The hunting scene is in a shallow rock shelter (Fig. 7).

PANEL 1

This is one of five Pueblo hunting scenes in the Reservoir (Fig. 7). The back of the rock shelter in which these figures are located is heavily patinated, but the figures themselves are only moderately weathered. The figures are small and executed by pecking, often crude. Heads and spots in chests are frequently emphasized by deep ground-in round areas. Incising instead of pecking is used for small details such as birds' feet and deer antlers. Some of the figures have single feathers in the hair and some have humpbacks. The use of the bow and arrow here is noteworthy, as is the naturalistic side view of some of the figures.

PANEL 2

This panel is on a smooth, heavily patinated reddened cliff surface (Fig. 8). Figures here are moderately to heavily weathered. They are pecked deeply into the rock surface; heads, hands and feet are given emphasis. Outlines are even and clear.

PANEL 3

Close to Panel 2, these figures, dominated by broad-shouldered men, are on a protruding and heavily patinated part of the cliff (Fig. 9). The two large figures which dominate the panel are neatly pecked with emphasized outlines. The body section of the smaller of the two is neatly finished, but the large figure has less even pecking in this area and much of the original surface is left. All figures are very heavily weathered.

PANEL 4

This group of "leaping" figures is near the base of the cliff on a darkly weathered surface (Fig. 10). They are rendered in heavy pecking

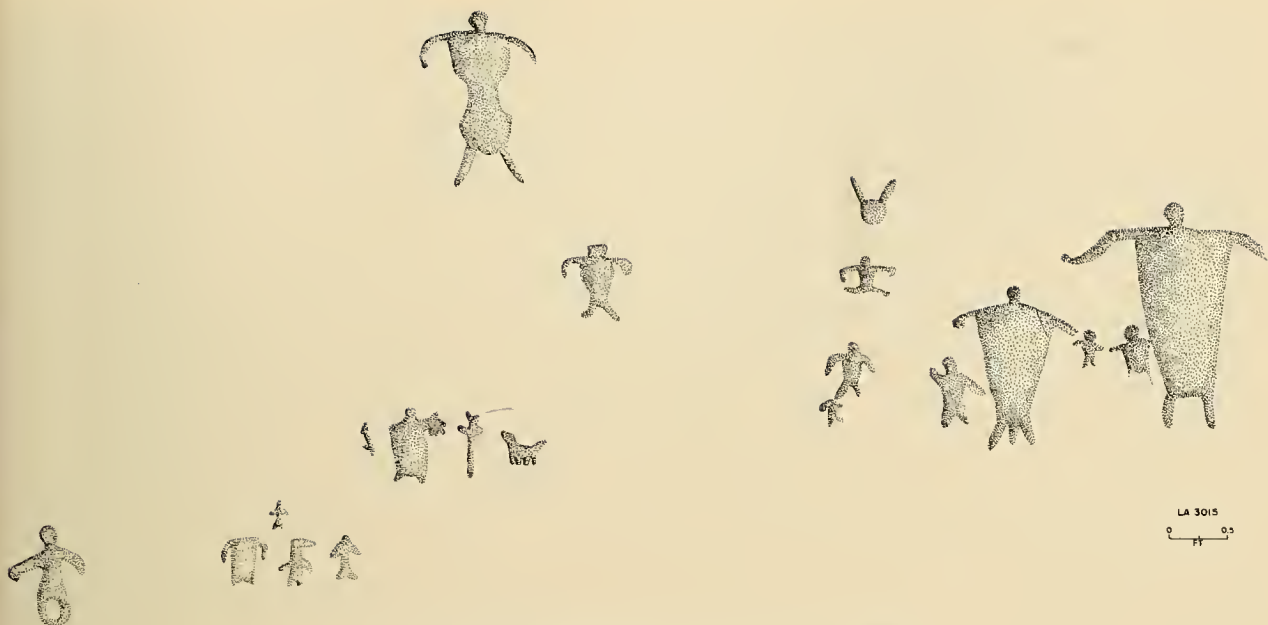


Fig. 8. Pueblo petroglyph figures, LA 3015, Panel 2.



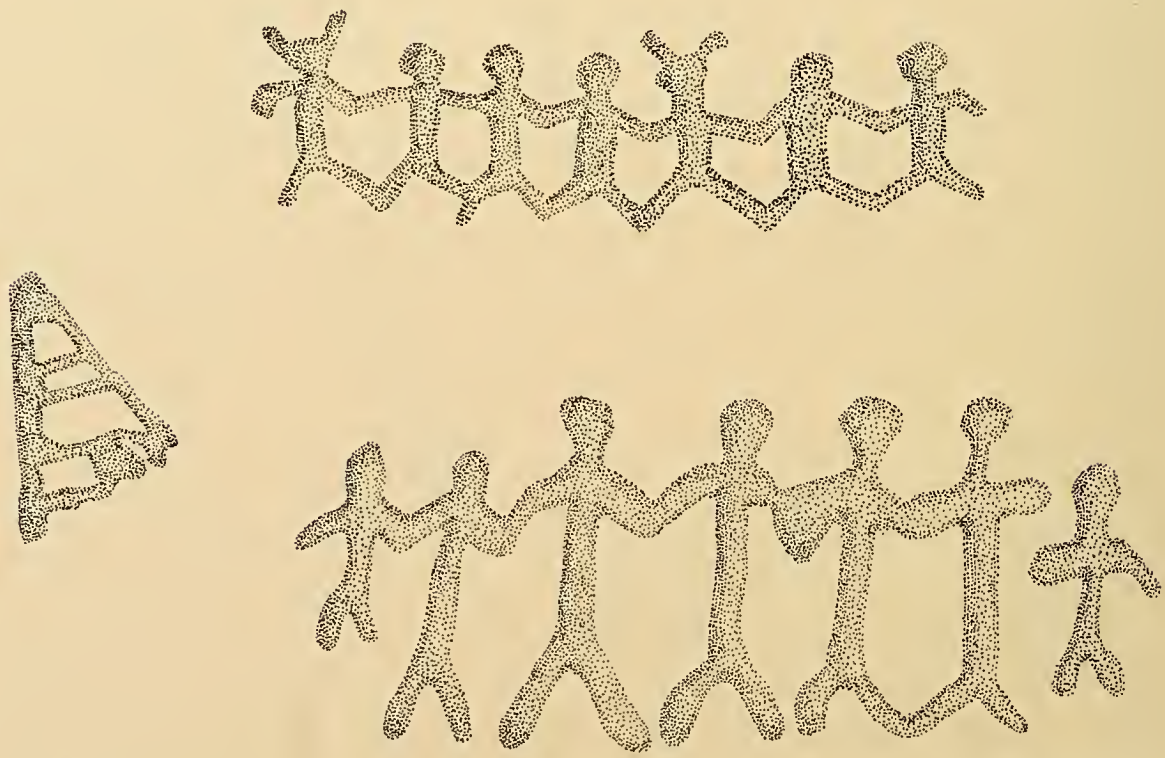
LA 3015

Fig. 9. Pueblo figures, LA 3015, Panel 3.

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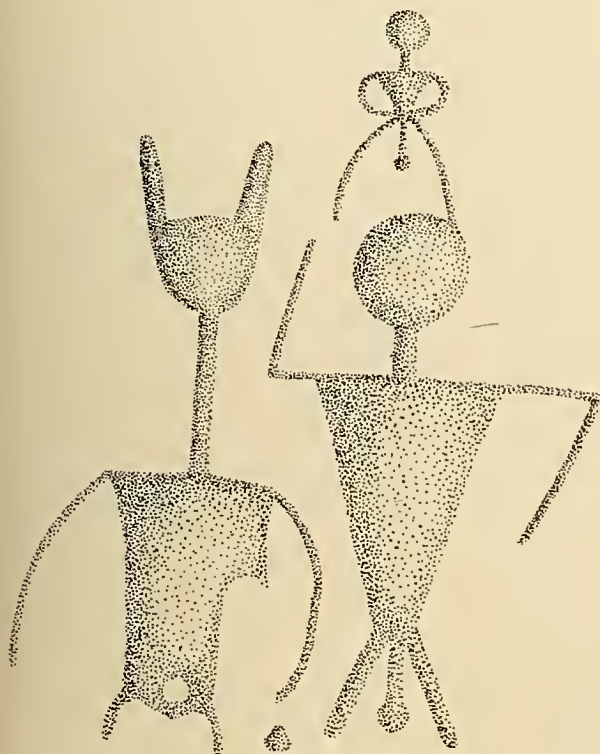
Fig. 10. Pueblo Panel 4, LA 3015.



LA 3015

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Fig. 11. Hand-holding anthropomorphs, LA 3015, Panel 5.



LA 3015

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Fig. 12. "Family group" petroglyph, LA 3015, Panel 6.

and some of the figures are ground quite deeply into the surface of the cliff. Heads, and sometimes feet and hands, are especially emphasized in this way. Weathering on the figures varies from moderate to heavy and several figures on the left are almost obscured.

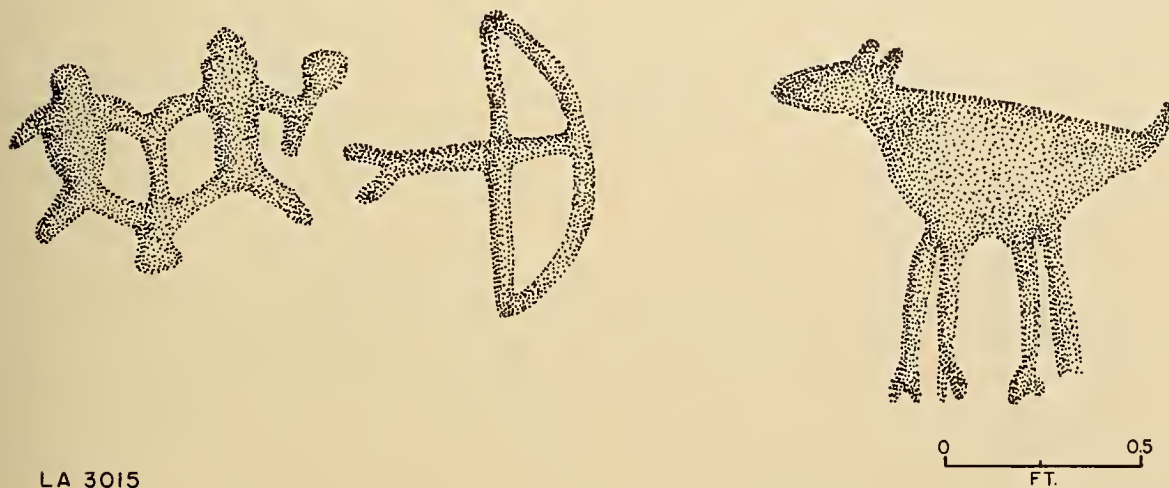
PANEL 5

This panel, composed of small hand-holding figures, is on a protruding and somewhat outward slanting portion of the base of the cliff, quite exposed and heavily weathered (Fig. 11). These groups seem to show a combination of grinding and pecking. In some of the deeper figures it appears that the figures were first ground into the rock and then pecked over. Again heads are given added depth. Note that two figures in the upper group have headdresses.

PANEL 6

This panel seems to have been composed as a unit. It shows a "family scene" of a man, woman, and male child. Similar headdresses occur on two of the figures in Panel 5. This group is finely executed, with even outlines (Fig. 12).

Following is a small hunting group, animal tracks, and other miscellaneous figures from this site (Figs. 13, 14).



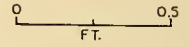
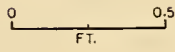
LA 3015

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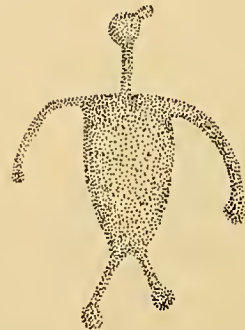
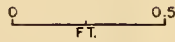
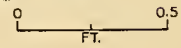
Fig. 13. Small Pueblo hunting group, LA 3015.



LA 3015



LA 3015



LA 3015

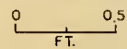
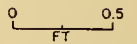


Fig. 14. Miscellaneous Pueblo figures, LA 3015.

LA 3016

This site, on the cliff face of the third bench above the San Juan River, consists of one panel of petroglyph figures (Fig. 15). The cliff face is heavily patinated. Most of the figures are of Pueblo origin; the broad-shouldered anthropomorph displays a chest ornament. The deer and the two longish figures to the right are less weathered than the rest and may be Navajo:

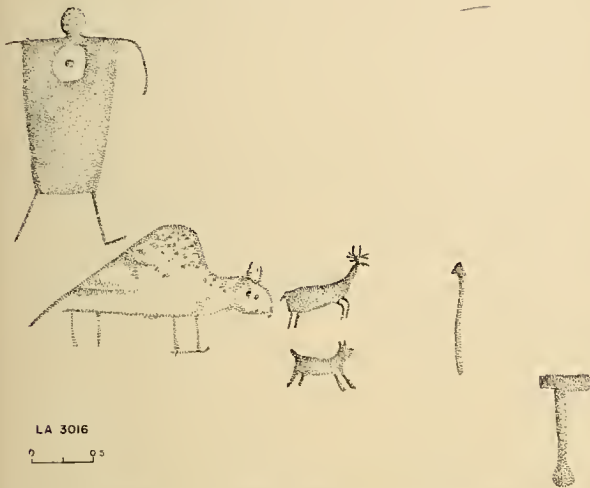


Fig. 15. Petroglyph panel with both Navajo and Pueblo figures, LA 3016.

LA 3017

The panels composing this site are on a low cliff on the east side of the San Juan River about 0.5 miles south of its confluence with the Pine. Commonly known as the Twin War Gods site, these painted Navajo figures dominate the cliff at one point. Like LA 3013 and LA 3015, this site is extensive. There are two large complex major panels and several smaller ones.

Although this site is best known for its Navajo material, the Pueblo petroglyphs should not be overlooked. There are some Pueblo figures below the Twin War Gods, heavily weathered and in the stylistic categories of Types I, III and IV. (Chapter III, Stylistic Analysis). Further upriver is Panel 1, illustrated in Figure 16. Two large, weathered, broad-shouldered men can be seen above the small line of figures.

LA 3042

The two petroglyph panels of this site are on the east side of the Pine River Canyon, in the junction area on a low cliff, separated from the river by a wide alluvial plain.



Fig. 16. Pueblo petroglyphs, LA 3017, Panel 1. The small lower figures have been chalked in while the large broad-shouldered anthropomorphs above are not.

PANEL 1

These figures are pecked into a heavily patinated vertical face close to the base of a portion of cliff which served as a back wall for some of the corals of a Lucero homestead. Patination of the figures is only moderate. They are rendered in shallow but coarse pecking (Fig. 17a).



Fig. 17a. Pueblo petroglyphs, LA 3042, Panel 1

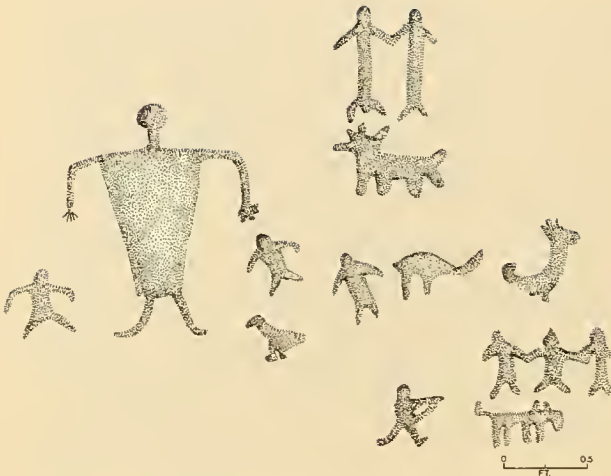


Fig. 17b. Pueblo petroglyphs, LA 3042. Panel 2.
Note the flute player at the lower right.

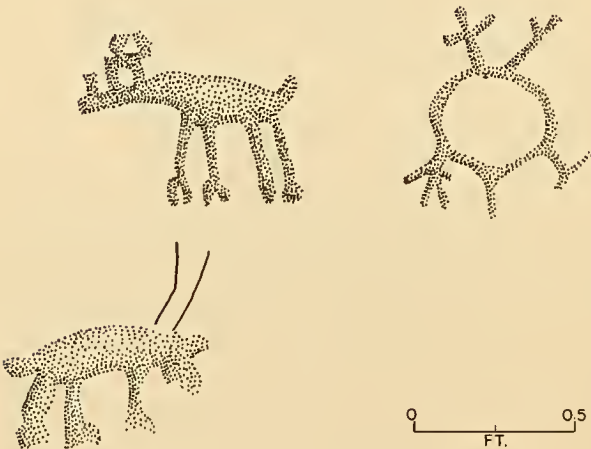


Fig. 18. Figures of unknown origin, LA 3043.



Fig. 19. A string of Pueblo figures, LA 3043, Panel 1.

PANEL 2

This panel is on the same cliff, downriver from the first (Fig. 17b). The figures are heavily patinated. The large man, the two smaller ones on either side, the flute player and the animal on the lower right are almost obscured.

The pecking technique used on the large figure is more shallow and even than in the other figures. Outlines of the neck, arms and legs may have been incised first to achieve a very clear definition of the edges. The fingers on the largest figure's right hand are incised.

LA 3043

LA 3043 is well into the Reservoir about half way up the Pine River Canyon on the lowest west-facing cliffs above a slight talus slope and consists of three significant groupings of figures. The largest and lowest of these is of Navajo origin. The cultural association of one group of four figures is unknown (Fig. 18). The string of hand-holding men about fifteen feet above the talus slope is unmistakably Pueblo (Fig. 19).

PANEL 1

All the figures in this group are rendered in direct round blows or peck marks, so heavily weathered that parts of the figures are wholly obscured. In spite of this the usual emphasis on outlines, especially in the shoulder area, is evident in some of the figures.

Other isolated or small groups of Pueblo figures are scattered on the cliff surface.

LA 3044

This petroglyph site is on the east side of the Pine River Canyon in the upper reaches of the Reservoir, where the lower cliffs do not outcrop on the east side; LA 3044 is situated on the next higher set of cliffs above a long, steep talus slope at the mouth of a small side canyon. The site consists of one large panel on a heavily patinated portion of the cliff.



Fig. 20. Pueblo petroglyphs, LA 3044.

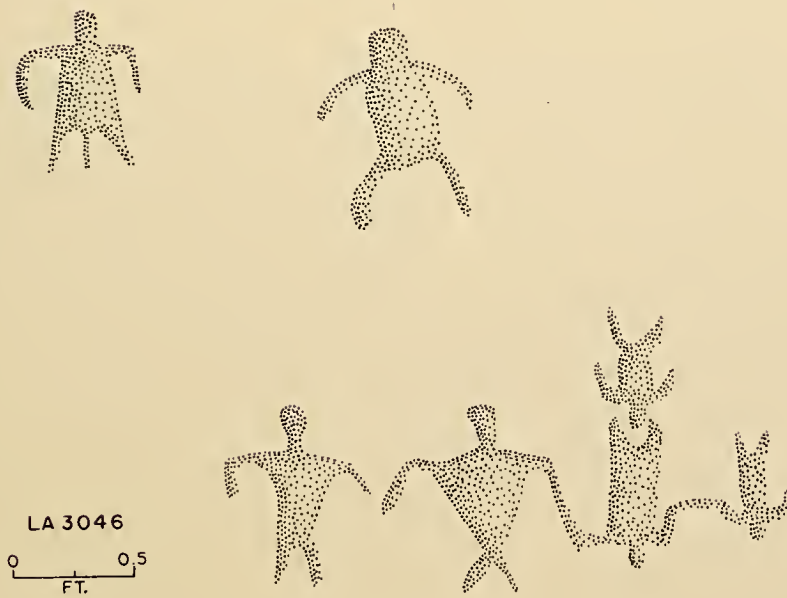


Fig. 21. Pueblo anthropomorphs, LA 3046.



Fig. 22. Pueblo petroglyphs, LA 3048. Later over-pecking is indicated by the darker areas.

A high overhang offers some protection to the figures, but most of them are heavily weathered, especially at the base of the panel, which receives the least protection.

The technique in which the figures are rendered shows some variation. The broad-shouldered men on the right-hand side of the panel (Fig. 20) are all very evenly executed with smooth surfaces. The outlines seem to have been incised first to get an even edge, as evidenced by pecked-over grooves on the edges of some of the figures.

LA 3046

LA 3046 is on the west side of the Pine River on the south side of Todosio Canyon (Fig. 21). The lower cliffs here are broken up and the figures are on soft unpatinated sandstone. The petroglyphs consist of a group of five human figures, of which at least four are arranged as a composition. Two other pecked figures are separated from the main group.

All the figures are shallowly pecked into the rock surface with dull round marks.

LA 3048

This petroglyph panel, on the east side of the Pine, is on a low cliff not more than forty feet from the river (Fig. 22). The vertical cliff face on which it is found is blackened by heavy patination.

The pecking work here was done at two different times. The older, the figures themselves, are pecked moderately deep and somewhat coarsely. This work is very heavily patinated, being only a shade or so lighter than the blackened rock surface, and often hard to distinguish. Over these figures fresher, moderately weathered peck work occurs anywhere, but most frequently over hand, feet, heads and center of bodies. Such areas also occur alone, scattered between figures.

In contrast, the four figures above the main panel are executed in fine shallow pecking with an even effect, but heavily weathered and almost obscure.

LA 3496

These Navajo and Pueblo petroglyphs make up a panel on the west side of Pine River on a cliff behind an old Lucero Phase homestead (Fig. 23). The panel face, which is from six to ten feet above the ground, is accessible from a small ledge in which a toe hold has been cut. The cliff surface here is heavily weathered, but the figures are somewhat sheltered by an overhang and stand out clearly.

As usual, the Pueblo forms are largely human figures. The largest broad-shouldered figure is very neatly executed, other forms less carefully done. Some of the narrow-bodied forms have very smooth recessed centers that look ground into the rock and pecked afterwards. The kilt over the horned-winged figure was scratched in secondarily.

LA 4055

At this pictograph site in a rock shelter on the west side of the Pine River about a mile above the junction with the San Juan, the petroglyph of the hand-holding figures is Pueblo (Fig. 24), but other petroglyphs from this site are believed to be of Navajo origin. The origin of the paintings is unknown (Fig. 25). Both Rosa and Gobernador materials were excavated from the rock shelter fill (Dittert, *et al*, 1961, p. 161 Table 2).



Fig. 24. Pueblo petroglyphs from rock shelter, LA 4055.

LA 4072

This petroglyph site is a long panel at the head of a small arroyo on the second set of cliffs above LA 3017 in the junction area. The pictographs are about fifty feet from a walled-up rock shelter which is part of this site (Dittert, *et al*, 1961, p. 59, Table 1). The figures are on a tan surface somewhat blackened by water streaks.

Both Pueblo and Navajo work is present and, in some cases, hard to distinguish. All the figures



Fig. 23. Petroglyph panel with both Pueblo and Navajo elements, LA 3496. The large anthropomorph is two feet in height.



Fig. 25. Red and yellow painted figures from rock shelter, LA 4055. Their origin is unknown.



Fig. 26. Navajo and Pueblo petroglyph panel, LA 4072. Pueblo flute players and hunters are found with Navajo bison and other quadrupeds of Navajo origin. Lower panel follows upper in sequence across cliff, left to right.



LA 4398

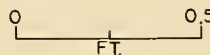


Fig. 27. Small Pueblo petroglyph figures, LA 4398, Panel 1.

in the panel are rendered in round peck marks, generally somewhat deep. Distinctions may be made primarily on the basis of style and, to a lesser degree, by differences in weathering and superimposition.

In Figure 26 (upper) all the forms except the quadruped on the extreme lower right are presumably Pueblo. The quadruped is less weathered and is clearly superimposed over the Pueblo flute players (Fig. 26, lower). The style is consistent with other Navajo figures (Stylistic Analysis, Chapter V).

In the left-hand section of the lower drawing a difference in weathering is noticed in the less patinated and lighter surfaces of the bison and the two nebulous forms above it. The upper central quadruped is done in an obvious Navajo style, and again shows less patination. The origin of other quadrupeds is more difficult to distinguish.

Stylistically, all the human figures in this panel are similar to those in other Pueblo panels in the Reservoir. The Pueblo humpback hunters suggest a Pueblo origin, but, on a stylistic basis, the animals are much more dynamic than other Pueblo animals in this District.

LA 4398

This site is comprised of a number of panels of both Pueblo and Navajo origin which vary from complex exhibitions to simple lay-outs of only a few figures. Petroglyphs and painting are the work of both the Navajos and the Pueblos. The site is on the low cliffs on the right bank of the San Juan River northeast of Cottonwood Canyon.

PANEL 1

This panel is on a heavily patinated cliff face (Fig. 27). The figures are darkly weathered and in places nearly obscured. The figure on the extreme right is a little fresher in appearance and the pecks

in it are elongate and sharp, unlike the dull round marks which make up the other Pueblo petroglyphs of this group.

PANEL 2

This group consists of three figures eight to twelve feet above ground level on a heavily patinated red vertical surface (Fig. 28). The pecking is somewhat coarsely done and some of the original surface is left in the body area. The square on the chest of the lowest figure is the untouched original surface.



Fig. 28. Photo showing the situation of Navajo Thunderbird and Pueblo Panel 2, LA 4398. The lowest figure in Panel 2 is 1.5 feet high.

PANEL 3

Figures comprising this panel are both petroglyphs and rock paintings situated under a protective six-foot overhang (Figs. 29, 30). The panel, which is spread about ten feet across the cliff, is on a tan-gray surface. The pecked figures are weathered to almost the color of the original rock surface. The lower anthropomorphs seem to have large helmet-type headdresses. There are traces of red paint in the areas designated, but they are dull and very obscure.

The human figures and upper zig-zag are orange and have a greater brilliance than the lower red zig-zag and the human hands; except for the defacement (see below), they would be in a good state of preservation. The red figures are much more weathered, but it is impossible to tell if this is a function of time or a difference in paint binder. The hands are so weathered it is difficult to tell whether they are painted or stamped on the cliff. This panel is attributed to Pueblo peoples on the basis of the similarity of the anthropomorphs to other Pueblo humans in the Reservoir. If this identification is correct, this is the only Pueblo painted panel in the District. Its very protected location would account for its preservation.

These figures have been defaced in recent times. Fresh peck marks have been made with a sharp instrument over the brightest painted areas. In addition, sections of the panel have been broken off and removed from the area.

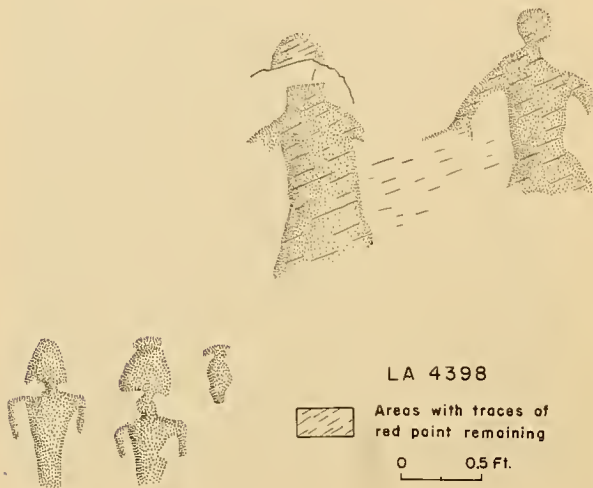


Fig. 29. Petroglyphs associated with rock paintings, LA 4398, Panel 3.



Fig. 30. Paintings of probable Pueblo origin, LA 4398, Panel 3. Human figures and the upper zigzag are bright orange. The hands and lower zigzag are dull red.



Fig. 31. Petroglyphs of Pueblo, Navajo and Spanish-American origin, LA 4398, Panel 4. Lower follows upper panel in cliff sequence, left to right.

PANEL 4

These petroglyphs comprise a long panel of figures under a high overhang (Fig. 31). The Spanish-American inscription is less weathered than the other

figures. The Navajo horned face and surrounding circles are pecked with a sharp instrument, the other figures evenly pecked with a dull instrument. Figures such as the lizard, "wheel" and dots may also be of Navajo origin.

SUMMARY

Location and Situation

Figure 1 shows that the majority of the Pueblo pictographs are in the lower part of the Reservoir, particularly around the junction of the Pine and San Juan Rivers and in the lower half of the Pine River Canyon itself. LA 4398 is the only Pueblo site located upstream along the San Juan, and LA 3044, at the upper end of the Reservoir on the Pine, is also separated from the main concentration of sites in the lower Reservoir.

Although some of the Pueblo pictographs are on surfaces modified only by moderate weathering, the preferred sites for pecked figures seem to be cliff faces reddened or blackened by heavy patination. Many panels are below small overhangs. The nature of the strata makes the occurrence of rock shelters infrequent in the Reservoir, and they are seldom suitable for human habitation, so that such locations contain Pueblo pictographs only rarely.

Except for LA 3016, LA 3044, and LA 4072 all the known and recorded Pueblo pictograph sites are on the first set of cliffs above the alluvial plain of the rivers. This is reasonable, as in many ways these cliffs are the most accessible. It should be pointed out, however, that the survey concentrated attention on the lower cliffs, which would fall below the water level of the dam.

Techniques

All of the Pueblo figures in the Reservoir District are petroglyphs, with the exception of the rock paintings at LA 4398.

It is possible that the lack of paintings from this cultural group is more apparent than real. Those at LA 4398 are extraordinarily well protected, and it is probable that other Pueblo paintings in more exposed locations were lost over the centuries.

At LA 4195 evidence of paint pigment has been found for every horizon of Pueblo occupation for the Navajo Reservoir. Red and yellow ochre lumps are especially common; malachite, low grade turquoise, azurite and pink sandstone also occur and were probably used for paint pigment. In addition palettes and manos and other hand stones bear traces of pigment (Dickey, MS).

It has already been mentioned that the Pueblo hand prints are too eroded to discern whether they were painted or stamped upon the cliff.

The petroglyphs are executed in different qualities of pecking, sometimes with preliminary grinding and incising. Deep preliminary grinding occurs in some of the smaller figures which are pecked over, usually coarsely. Pointed hammerstones of hard rock were probably used for the direct execution of most of these figures.

Some of the broad-shouldered men exemplify the finest Pueblo technical work in the District. These figures are shallowly and evenly pecked in small marks with attention given to the fine surface texture. Such evenness could have been achieved with a fine hammerstone. Outlines of some of these figures are very precise and there is evidence that they were either incised first or outlined with an indirect percussion technique to insure a clear edge; the high degree of control exemplified by the very thin arms and legs of some of these figures indicates that antler tools, as chisels, might have been used in indirect percussion. Antler, especially elk, is fairly common as a tool material on Pueblo sites in the Reservoir.

Ground edged abraders used for incising have been found at LA 4195, but with no horizon designation (Dickey, MS).

Subject Matter

The predominant element in the Pueblo panels consists of human figures, commonly made as isolated entities, but sometimes grouped in various ways. Human figures are frequently paired, or pictured in long strings of hand-holding groups. A "family group" is depicted once at LA 3015. There are also figures dancing or leaping across the cliff. At LA 3046 and possibly at LA 3015 (Fig. 13) hand-holding figures occur upside down. Humans are also grouped with animals in hunt scenes.

Various details depicted with the basic human form are fingers, toes, sex organs, headdresses and a chest ornament or decoration. In hunting scenes accoutrements such as flutes, a possible

club, bows and the rain-symbols accompany the humans.

Like humans, animals occur singly or in groups. As groups they most frequently are found in hunting scenes. The deer is the only animal that can be identified with any certainty. In addition to quadrupeds, birds are found at LA 4072 and LA 3015 (Panel 1). Most of these are of the long-necked wading variety. Long snake-like forms are found occasionally.

Animal tracks are depicted in a couple of instances and human hand prints are painted at LA 4398. Geometric figures are rare. Probably the zig-zags at LA 4398 are Pueblo. Spirals occur in a couple of instances and irregular curved and looped lines are in association with human figures at LA 3048 and LA 3044.

CHAPTER III

ANALYSIS OF PUEBLO PICTOGRAPHS

The Pueblo panels will be analyzed from the point of view of style, place in time and culture and the data that can be brought to bear on these aspects; and finally, in terms of what they disclose about the people and culture by which they

were produced. The stylistic analysis precedes the chronology as it is important to see what significance style has to Pueblo culture phases in the Navajo Reservoir District.

STYLISTIC ANALYSIS

It is the intention here to discuss the Pueblo panels from two points of view. The first is to group the anthropomorphs into certain basic types. Only the human figures will be so typed, as they are by far the most frequent and the only figures that show enough variations in form to merit such treatment.

It should be clearly understood that the "types" set up in this paper do not necessarily have cultural and temporal connotations at this time, although this is eventually desirable.

Secondly, it is desired to look at the style of these panels from an artistic point of view to see what elements of expression the Pueblo artist was concerned with and the effects he achieved as a result.

Typology

Since human figures are the most common and show a variety of forms, they can be divided into several different groups (Fig. 32). It is to be understood that the types that follow are ideal, and variations away from these forms are found in individual cases. The typological

scheme presented in an earlier article (Schaafsma, 1962) is modified here.

TYPE I

Broad-shouldered men are usually very large and dominate any panel of which they are a part. They are usually from two to over three feet in height, although occasionally they may be less than a half foot tall, as at LA 3044 (Fig. 20). These smaller figures do not show the variation and details present in the larger figures. Most variations that occur in body form are depicted in dotted lines in Figure 32 (I). Fingers and toes may also appear. This is the only type in which body designs are present; the chest "ornament", and interior mottling with heavy outlines are found here. Greater size may influence this latter factor. These figures often reach technical excellence in execution, making possible the very narrow linear limbs that often contrast to the wide flat body area.

Anthropomorphs of this type are commonly found isolated, holding hands or in sequence across the cliff.

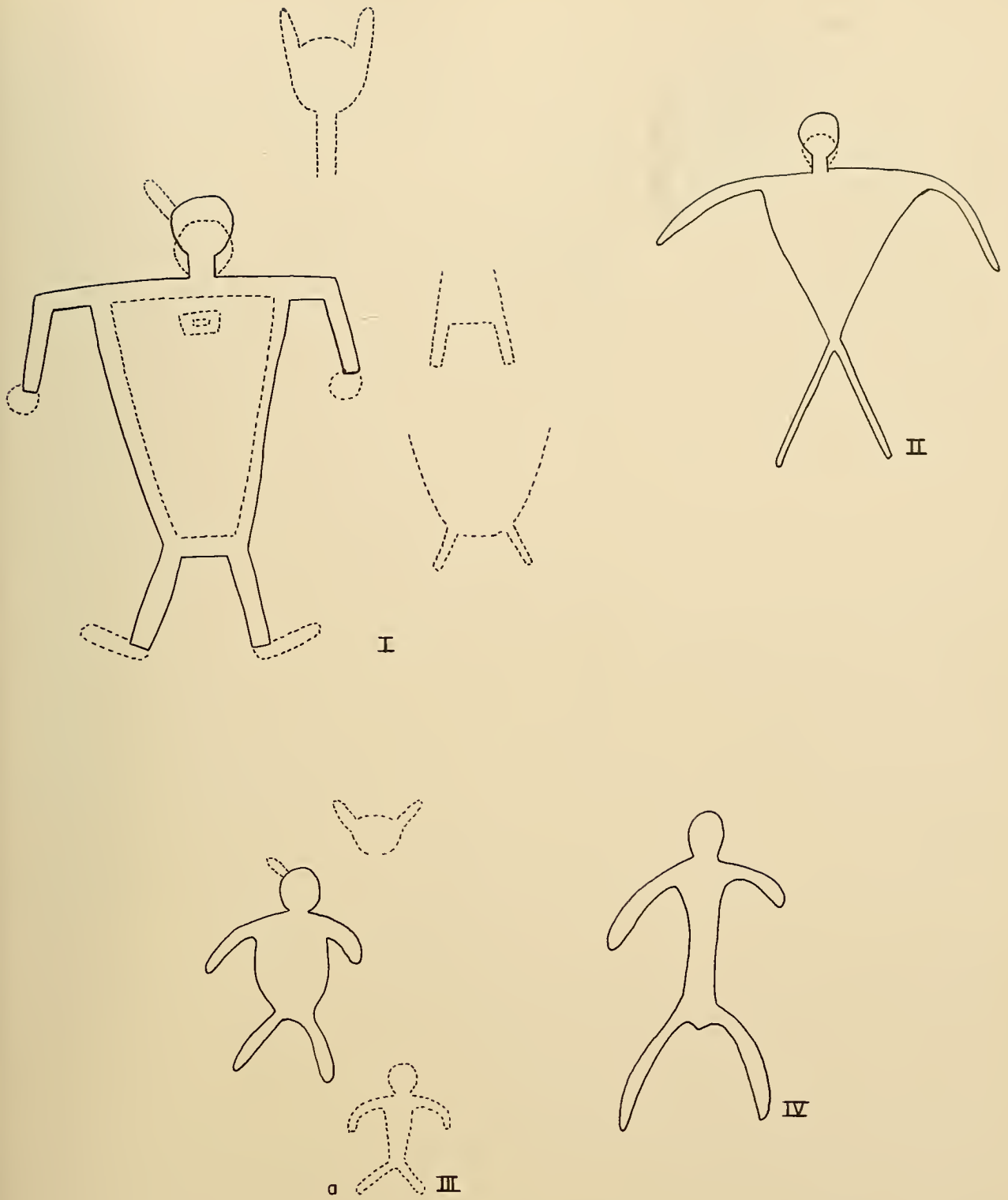


Fig. 32. Chart showing style divisions of Pueblo anthropomorphs in the Reservoir.

TYPE II

These broad-shouldered men are distinguished by "crossed legs" formed by the crossed extensions of the lower apex of the triangular body. These figures also tend to be large in size, averaging from one to two feet in height. They show some technical excellence, such as smooth texture of the body area and neat outlines, but they may be crudely pecked as well. Arms and legs on these figures tend to be long. They may have necks, but no other details. The complete lack of details on these figures makes them distinct and not just a variant of Type I.

TYPE III

This type embraces most of the small anthropomorphs in the Pueblo panels. A basic variation in form is shown in Figure 32, (III a). These figures never exceed a foot in height and are usually somewhat smaller. Outlines are more curvilinear than the more rigid geometric forms of Types I and II, and a little more naturalistic in feeling. Necks, hands, feet and sex organs are depicted and a few have single feathers or "rabbit-eared" head-dresses. Figures heretofore discussed are always in frontal positions, but men in Type III category are often shown sideways in hunt scenes. It is these figures that are equipped with bows and flute and may have bent legs and humpbacks. In addition to being in hunt scenes, they may be found singly or in strings of hand-holding groups.

TYPE IV

This type is somewhat a variation of Type III, but the body is always narrow and long. Figures of this sort compose the dancing or running group, Panel 4 at LA 3015, and they are shown in the hunting scene at LA 4072.

The types established above can be regarded as repeated forms in the Navajo Reservoir pictographs, but there are transitional figures which bridge the gap between the idealized types. Thus, the

types are only reference points from which to work within a tradition and perhaps even within the expression of a single culture phase, as there are many instances in which figures in a hand-holding line, obviously conceived of as a group, exhibit both transitional and different established types. At LA 3046, the hand-holding group includes figures of Type II and Type III and others with Type I affinities, with transitional ones in between. At LA 3044 small and unelaborate Type I figures occur with figures approaching Type II in appearance. Their placement on the cliff makes them probably contemporary (Fig. 20, right-hand side). These are only two examples in which transitional figures are found in contemporary relationship with established types or in which elements of several types are present in one figure. This has important implications for the relative dating of these figures (section on Chronology and Cultural Associations).

In addition, all the human figures in the Reservoir Pueblo panels hold certain things in common. They are all solidly pecked with the exception of some large Type I figures. Details occur sporadically. Nearly all figures are depicted in frontal positions with arms curved downward either in an arc or bent stiffly at the elbows or shoulders, as in certain Type I and Type II figures. Side views are rare, occurring only in hunting scenes in order to show the bow, humpback or a flute. At LA 4072 two humpback hunters have bent knees, but all other human forms depicted in the District are stiff-legged.

Pueblo quadrupeds in the Reservoir also tend to be rather stiff creatures with unbent legs. These may be short or long, but for the most part all four are usually shown at equal intervals from the base of the body or with just a tendency towards actual pairing. An exception is found at LA 4398, where the figures are rather abstract in form and only one leg of each pair is depicted (Fig. 31). Ears, tails, and antlers of deer are the only other details commonly included, although hooves are suggested in a couple of instances.

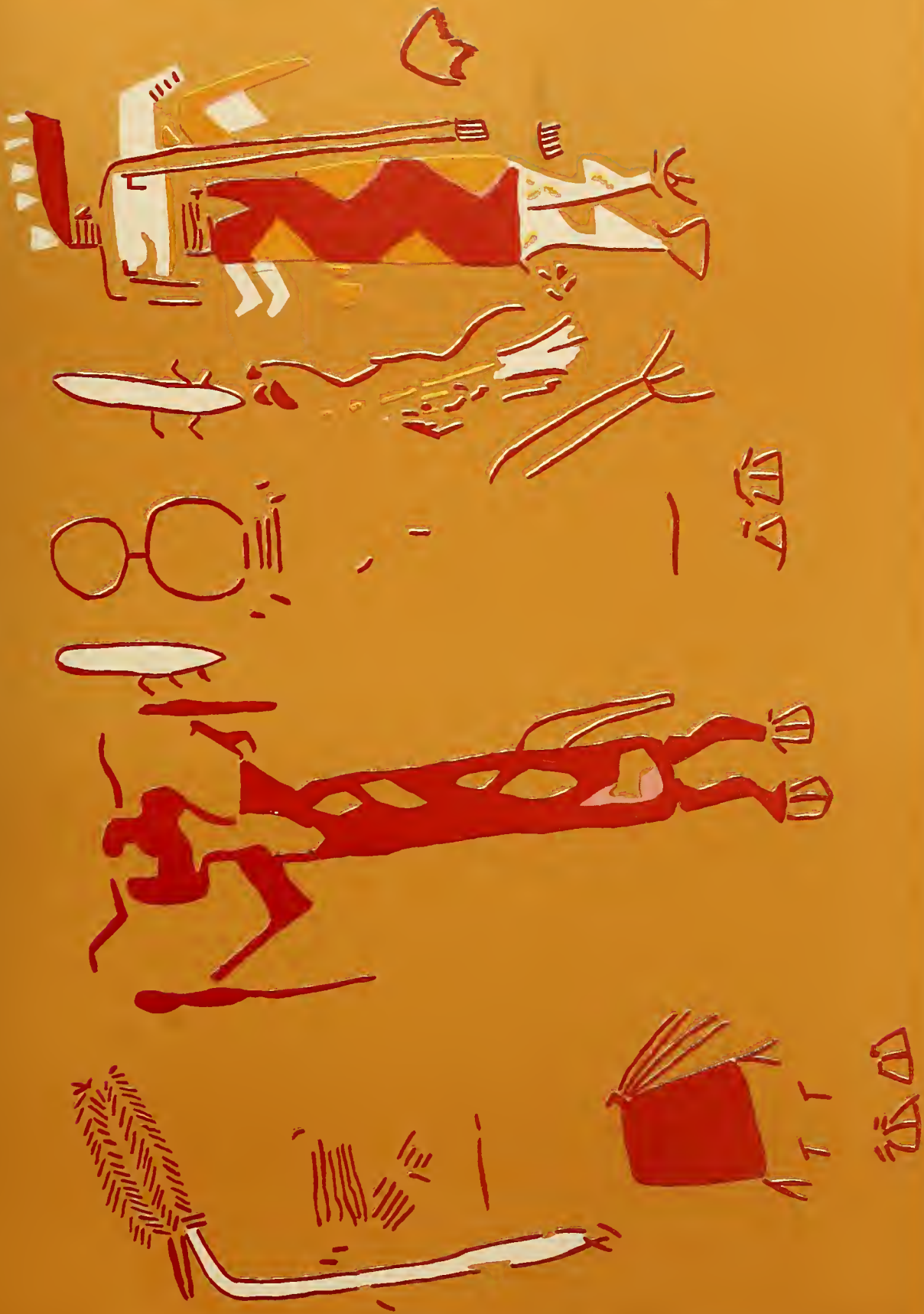


Plate I. Painted yeis, LA 3022, Panel 2. The figure on the right is 1.5 feet high.

Style

From the analysis above it becomes apparent that the human and animal figures in the Pueblo art of the Navajo Reservoir District are reduced to the essential elements of the artists' concept of form, with details being added only occasionally. Within this basic framework, two major kinds of human forms are found. The large figures with large body areas tend to stress a geometric concept of the human body. This is followed out in the greatest degree in the family scene (LA 3015, Panel 6), where triangles and circles contrast with linear appendages (Fig. 12). Such figures are highly stylized, making decorative but immobile designs on the cliff surface. Occasionally, however, long and curved arms and legs give these figures a bit of vitality and the feeling of potential movement. The smaller figures of Types III and IV, although still conventional and reduced to essentials, have flexible bodies arranged in a variety of life-like positions. Pictured in hand-holding strings, they possess a gaiety of form and a movement due to the repetition of shapes that give them a dancing effect. In hunting scenes, they handle bows, arrows and flutes with facility. They are rendered easily in side positions. In one instance legs are bent at the knees to show movement (Fig. 26). On the whole, it may be inferred that these figures were less standardized in the minds of the artists and could be used to show a variety of action.

The contrast of the two major anthropomorphic figure styles here parallel observations made by Kidder and Guernsey on pictographs in Northern Arizona. They comment that "They approach true realism particularly in the hunting scenes, the isolated or single examples being usually rather conventional" (1919, p. 194).

Animals, like the smaller men, are more or less naturalistic. A tendency for greater conventionalization and abstraction is found only at LA 4398 (Fig. 31), where rows of animals are made immobile and stiff by reduction of their form to minimal lines. Most of the Pueblo quadrupeds do tend to be a little rigid, however; the legs are almost never jointed and often come straight down from the body. Some action is portrayed by hitching the legs to the body at an angle and more naturalism is sought by pairing the legs instead of placing them at even intervals or curving them slightly.

A few things ought to be mentioned about the panels as a whole. The concept of space employed in all cases is strictly two-dimensional, all motion being lateral across the cliff surface. There is no attempt to indicate depth. It follows that there is no baseline or setting for the figures involved in a panel. Furthermore, not all figures were necessarily made at one time. Panels composed of isolated and often decorative yet static elements could have grown sporadically as well as have been done as a complete panel (Figs. 8; 17, right). Other panels attempt to indicate progression across the cliff either by action in the individual figures, as discussed above, or by linear arrangement, or both. The deer at LA 4398 presumably move across the cliff as a group. The figures however, are so stiff that the effect is basically static and movement is implied, not felt. However, Panel 4, at LA 3015, shows a group of humans progressing rhythmically in leaps (Fig. 10). A strong sense of motion and rhythm is achieved by outstretched arms and the leaping position of the legs and the repetition of these figures arranged in progression.

CHRONOLOGY AND CULTURAL ASSOCIATION

As mentioned in Chapter I, one of the aims of this study is to attempt a correlation between the pictographs in the Navajo Reservoir and the cultural groups which inhabited the Reservoir canyons. Though analysis of the material at hand indicated no hard and fast conclusions about the cultural phase affiliation of the Pueblo pictographs, both the internal and external evidence point in certain directions and in some case establish a temporal limitation upon the figures.

Although pictograph panels need not be located near habitation sites, it is reasonable to suppose that one might find the greatest concentration of them in the general living area of a sedentary people. It has been mentioned above that the majority of the Pueblo pictographs are on cliffs in the junction area and in the lower part of the Pine River Canyon, an area that contains forty-two Rosa Phase habitation sites, as few as four Los Pinos habitation sites, three Piedra and no Arboles Phase habitation sites (Dittert, et al, 1961, Figs. 60, 66, 67, 68).

The relatively few Pueblo habitation sites and the single Pueblo pictograph site on the lower reaches of the San Juan are not diagnostic. In the upper San Juan and Piedra area, where habitation sites of all Pueblo phases are concentrated, pictographs are almost totally lacking, probably because outcropping strata are less common and more or less remote from settlements.

Thus it may be concluded that since there is a strong correlation in space between the Pueblo pictographs and Rosa Phase settlement there is also one in time, which points to the Pueblo sites as being of Rosa Phase origin, dating between A. D. 700 and 900.

Some of the internal evidence from the panels themselves, often used to plot relative time sequences, is absent in the Reservoir panels. Differences in weathering

and patination of figures is of little significance. Only occasionally may differences be observed between the much later Navajo and Pueblo figures, depending on the situational circumstances. Cases of superimposition, frequently very helpful in the establishment of temporal relationships, are almost completely lacking in the Reservoir. When they do occur, it is between Navajo and Pueblo panels or within Navajo panels. Pueblo figures almost never impose upon each other on the cliff surfaces.

Most important of the internal evidence is the presence of the bow and arrow used in the hunting scenes with small figures of Type III. As the bow is not believed to have been introduced into the Southwest until late Basket Maker III - Pueblo I times, this would limit the production of these panels to roughly the 350 year period from A. D. 700, or the early Rosa Phase, to the end of the Arboles Phase when the Pueblo occupation ended in A.D. 1050. It should not be overlooked that there are no panels of figures in the Reservoir illustrating hunters using the atlatls and darts which are believed to have been used in the earlier Los Pinos Phase (Dittert et al, 1961, p.219).

Style is the final important guide post in placing the Pueblo panels in time and culture. The stylistic analysis of the Pueblo figures in this chapter has indicated that while the figures may be differentiated on the basis of type, they all have certain similarities, so that the type classification, while useful for establishing varieties of figures within the Reservoir, has no clear boundaries and is blurred by the occurrence of transitional figures from one type to another. Furthermore, different types are sometimes found in association with one another, in a composition which indicates contemporaneousness. Contemporary associations between figures with Type I, II and III affinities have already been pointed out in this chapter (see Stylistic Analysis). At LA 4398, one painted man fits the Type IV category, while another is

similar to Type I (Fig. 30). Such association and transitional figures could mean only two things: either all of these figures date from the same period, or a continuous developmental change through time has taken place and older figure types are carried on into a later period. For example, the large broad-shouldered men with elaborate detailing (Type I) may stem from an earlier date. Yet men of this basic form, perhaps smaller in size and without the elaborations, could have been carried over into later periods. It is impossible to say which of these two possibilities is correct.

At the beginning of this study, it was hoped that the types of figures found on the cliffs might be duplicated in the pottery decoration from the District, thus allowing a neat correlation of forms which would date the pictographs. Unfortunately, few pots with life figures were recovered from Reservoir excavations. One Rosa-Piedra Phase pot from LA 4195 displays the figure illustrated in Figure 33. In turn, the geometric designs of the pottery do not appear on the cliffs.



Fig. 33. Figure from a Bancos Black-on-White vessel fragment, LA 4195. This is an excavated habitation site on the San Juan River in the Reservoir.

A sherd from Chaco Canyon of Basket Maker III origin bears a close resemblance to the broad-shouldered figures at LA 3013 (Panel 3), (Roberts, 1929, p. 121). The figure has a strongly petroglyphic look, with heavy body outline and dots, looking like marks, in the center.

Since systematic studies of pictographs in adjacent districts have not been made, a comparison between the Pueblo figures in the Reservoir and those elsewhere is difficult. In conjunction with chronology and cultural associations, however, two things ought to be mentioned.

First of all, the large broad-shouldered figures, frequently found in connection with Anasazi sites in the Southwest have in most instances been found to have an association with Basket Maker II habitations. These are usually painted figures which may have elaborate body designs.

Kidder and Guernsey (p. 198) first report such an association in a 1919 paper in which they state that the large broad-shouldered figures seem to have a Basket Maker II origin "because we found them on the walls of the strictly Basketmaker Cave II and because at Ruin 4...they and their attendant hand prints are obviously older than the Cliff-house structure." They report further broad-shouldered men and Basket Maker II material associations in later excavations (1921, pp. 34, 38), and Guernsey mentions this again in his 1931 report (p. 14). On the basis of the work of these men, De Harport assigns the broad-shouldered figures in Canyon de Chelly to a Basket Maker II origin (1951, p. 39). In an analysis of the pictographs in Painted Cave, northeastern Arizona, Haury (1945, p. 68) attributes the broad-shouldered, square-bodied figures to a Basket Maker II source from Kidder and Guernsey, supported here by their being the oldest in cases of superimposition. This cave, incidentally, contained only Basket Maker II, Pueblo III and Navajo habitation material. On the other hand, Roberts (1929, p. 122) claims to have found these figures in Southeast Utah as petroglyphs associated with Basket Maker III sites.

If the figures of a similar sort in the Navajo Reservoir were to be consistent with most of the findings further west, they too date from Basket Maker II days. One halting bit of evidence, in addition to the Chaco sherd (which might be only a copy of



Plate II. Painted yeis, LA 3022, Panel 5. The red figure is about 1.5 feet high.

an older pictograph) comes from the definitely Basket Maker II caves north of Durango, Colorado. All of the figures in these caves are very small in size and the very large square-shouldered figures characteristic of Basket Maker sites farther west are notably absent (Daniels in Morris and Burgh, 1954, p. 88). Since the Los Pinos Phase in the Reservoir is believed to be much the same as the Durango sites, a similarity in pictographs including the broad-shouldered figures might (although not necessarily) be expected. Furthermore, within the Reservoir there is no particular correlation of the occurrence of broad-shouldered men with Los Pinos habitation sites.

It must be concluded from the above that the pictographs of the Pueblo peoples in the Navajo Reservoir cannot as yet be neatly placed in any particular cultural

phase or phases. The presence of the bow and arrow in some of the hunting scenes indicates that the small figures must have been made between A. D. 700 and 1050, when the area was abandoned. Settlement data tend to restrict these figures to the Rosa Phase people. The large broad-shouldered anthropomorphs seem to pose a greater problem. As throughout the Southwest they tend to occur early in Pueblo history, it is safe to assume that in the Reservoir they belong to the Los Pinos, Sambrito or Rosa Phases. As surface indications of Sambrito sites are obscure, the pattern frequency of occurrence of this type of site in the Reservoir was not determined. Settlement data and their lack in Durango again point to a Rosa Phase or Basket Maker III-Pueblo I origin for these figures as well as the rest; stylistically they could also fit this category.

INTERPRETATIONS

What do pictographs tell us about their makers, and their culture and why were they made in the first place? Here, as often elsewhere, answers are difficult.

One of the needs met by all art is the human propensity for aesthetic expression. Art for art's sake may have been only a secondary and unconscious aspect in the making of pictographs, but this factor plays a role. Within the Reservoir the Pueblo choice of the dark red patinated rock surfaces undoubtedly reveals an aesthetic appeal. Many of the large broad-shouldered anthropomorphs are executed so carefully, with so much attention lavished on the fine edges and pecked surface texture, that the Pueblo artist must have been very concerned with the appearance of his finished figures. These figures with their thin extremities and large, flat, evenly pecked or mottled bodies contrast nicely with the dark red original surface of the cliff on which they are rendered.

Thus, if the aesthetic intent in many of these figures is obvious, the primary reason for their execution, and there probably was another reason, is less apparent. Within the broad-shouldered type the family group (Fig. 12) has obvious fertility implications. Besides the prominent sexual organs of these figures, the headdress resembling rabbit-ears on the female figure may be associated with fertility. The fertility associations of the humpback flute player in the Southwest are well known and according to Lambert, a stone humpback figure from Pecos once had rabbit ears attached (Lambert, 1957, p. 101). She goes on to say that this is interesting "in connection with the many petroglyphs of north central New Mexico showing the humpback figure with animal ears or long ear-like appendages attached to their heads" (Lambert, 1957, pp. 104-5). It should also be kept in mind that these ear-like appendages may represent feathers. Flute players in the Reservoir do not have these "rabbit-

ear " appendages, but many of the human figures do, as discussed in the early part of this paper.

One can only hazard a guess that these figures and other phallic ones in the Reservoir were done with some kind of magical purposes which it was believed would promote reproduction. Thus there may have been a general concern for the increase of the human population.

The hunting scenes and animal tracks may also have been rendered for magical purposes. The presence of the mythical flute player and/or humpback hunters at three out of four hunting scenes in the Reservoir, lends support to this interpretation (Figs. 7, 17a, 26). The flute player or humpback is commonly associated with hunts in other Southwest pictographs (Lambert, 1957, p. 101; Hawley, 1940, p. 646). The flute player or humpback's role in the hunt is not incompatible to his fertility significance, as abundance is implied in either case.

Another figure found in the Reservoir with possible magical significance is the little man with the rake-like object, which may be a rain symbol, in his hand. If so, the possible magical implications are obvious.

If the assumptions made above are correct and certain figures were for magical purposes, one can infer that they manifest the usual human need to obtain power of some sort over the outside world, and to a limited degree at least control nature for human economic benefit and otherwise. The repeated ceremonial use of such sites as shrines probably did not exist, as they show no sign of intensive use and reworking of the cliff face by smoothing and superimposition, such as we get at Navajo shrine sites which date from a much narrower span of time. This leaves us curious as to why magic associated with agriculture was not stressed more heavily among agricultural people. Perhaps such practices existed in other media.

The above analysis of the significance of the material at hand largely ignores the bulk of the Pueblo material, human figures without any of the specific attributes already discussed. If it was not for the sake of art alone the primary reason for their rendition seems to have been lost in the depths of time. The strings of hand-holding figures, however, may possibly represent dance groups. At the present day pueblo of Jemez very similar rows of figures have been made on cliffs to commemorate a particular dance (Dittert, 1962 personal communication).

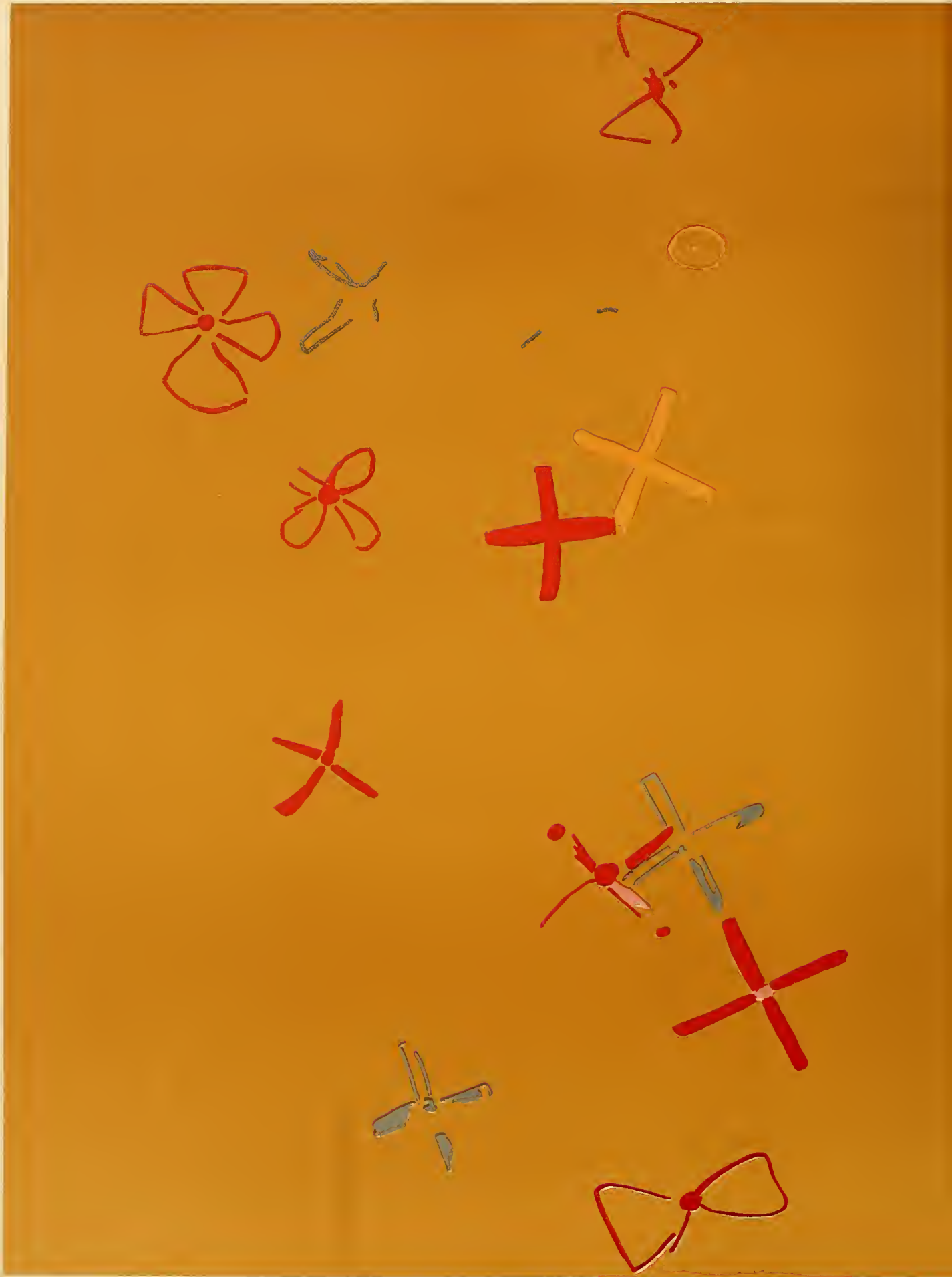


Plate III. "Planetarium" of star and flower forms, LA 3022, part of Panel 6.

CHAPTER IV

DESCRIPTION OF NAVAJO PICTOGRAPHS

Pictograph sites with Navajo material are slightly more numerous than those containing Pueblo figures. About half of the Navajo sites contain Pueblo material already discussed, while the rest are at new locations. The same site terminology used with the Pueblo sites will apply to the Navajo pictographs.

The term "yei" is used for yei-bich-ai, the Navajo word for ceremonial, religious or god-like figures.

Following is a description of each site, followed by a summary of situation and location, techniques and subject matter at the end of the chapter.

SITE DESCRIPTIONS

LA 3013

This site has been described in Chapter II in conjunction with the Pueblo petroglyphs. In addition to the Navajo figures in Panel 4 already mentioned, there are four other panels of Navajo origin.

PANELS 6 and 7

These are both on heavily patinated surfaces. Panel 6 is on an upright portion of the cliff, while Panel 7 is below on a rock slab resting at a 45 degree angle. These figures are pecked into the rock in deep, even, wide lines and are only slightly weathered (Fig. 34, upper left and lower).

PANEL 8

This anthropomorph with a feather headdress is low on the cliff close to the ground. It is sketchily rendered in discontinuous peck marks and is heavily weathered (Fig. 34, upper right).

PANEL 9

The three figures in this group are situated on the opposite edge of the rock shelter from Pueblo Panel 2. The figures are all faint and shallowly rendered. The two shield-like figures are pecked and the larger has an incised border not indicated in the drawing (Fig. 35). The incised feathers may have been added at a later date.

LA 3017

This site was mentioned previously in regard to the Pueblo material. Panel 2 contains both Navajo and Pueblo pictographs; Panel 3 is entirely Navajo. That this site has been used until recently as a Navajo shrine is known from ethnographic sources (Dittert, et al, 1961, pp. 238 and 242).

PANEL 2

The large red and white circle figures of the Twin War Gods dominate this panel (Fig. 36). Although the paint has eroded at the base, where there is less protection from the overhang, there is no indication that they were ever more complex in design.

Below are Navajo petroglyph figures interspersed but less weathered than the Pueblo ones. The corn stalk and horses (Fig. 37, upper right) are among these. There is also a sparsely pecked bison.

PANEL 3

This large panel is situated downriver about sixty feet from Panel 2. Pecked and painted yeis; fifteen bison, ten with heartlines and two shot with arrows or medicine wands; horses, some with riders holding reins; deer; an owl; an eagle; and a coiled snake make up this group. Some of the figures are illustrated in Figure 37 (upper left and lower right).

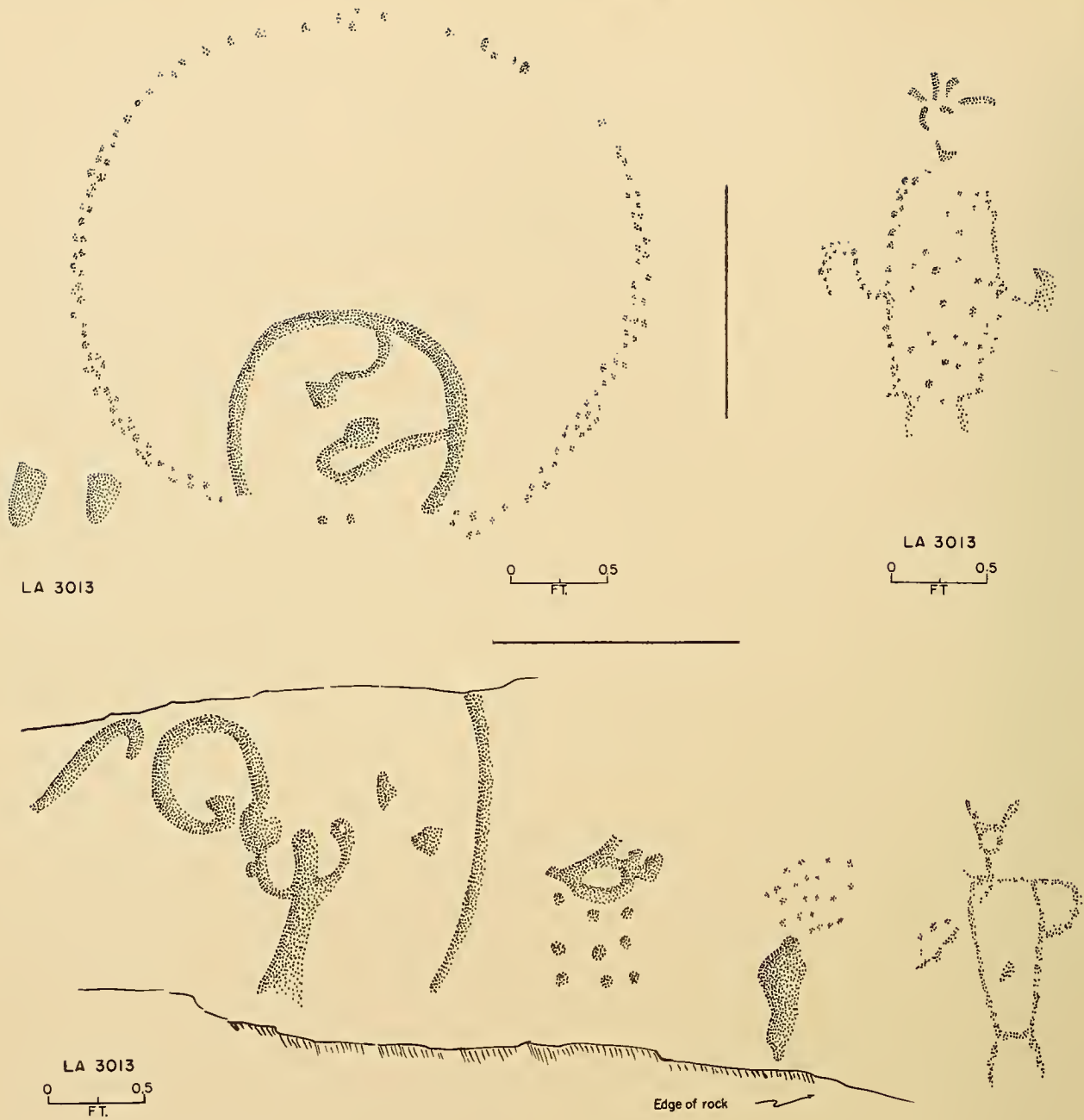


Fig. 34. Navajo petroglyph panels, LA 3013. (Upper left) Panel 6; (Upper right) Panel 8; (Lower) Panel 7.

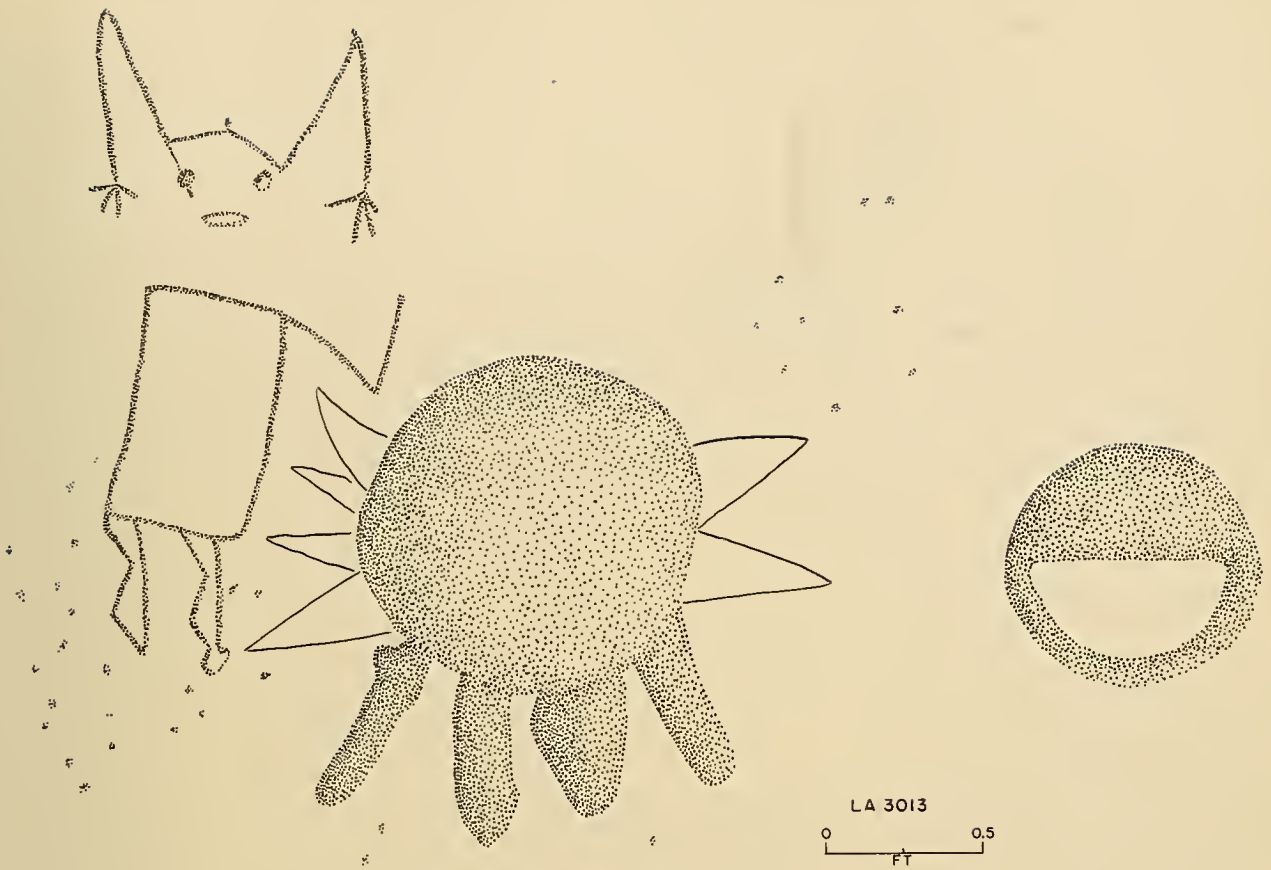


Fig. 35. Navajo figures, LA 3013, Panel 9.

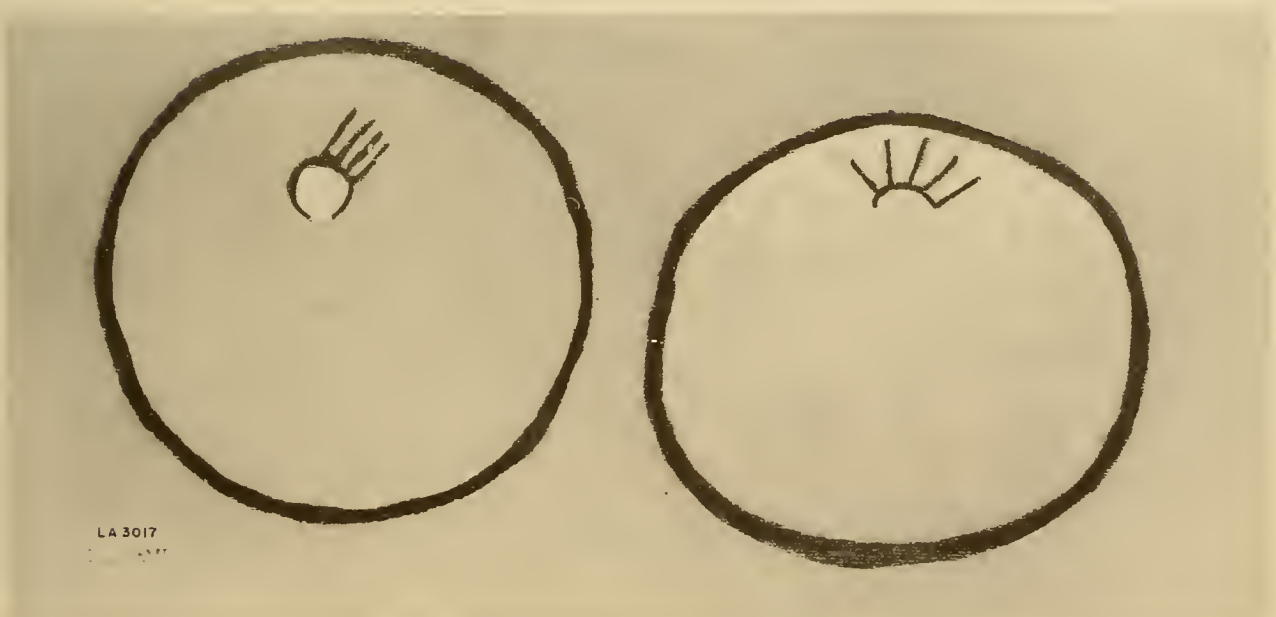


Fig. 36. Twin War Gods rock painting, LA 3017, Panel 12.



Plate IV. Painted yeis, LA 3041. The right hand male figure is 1.7 feet high.

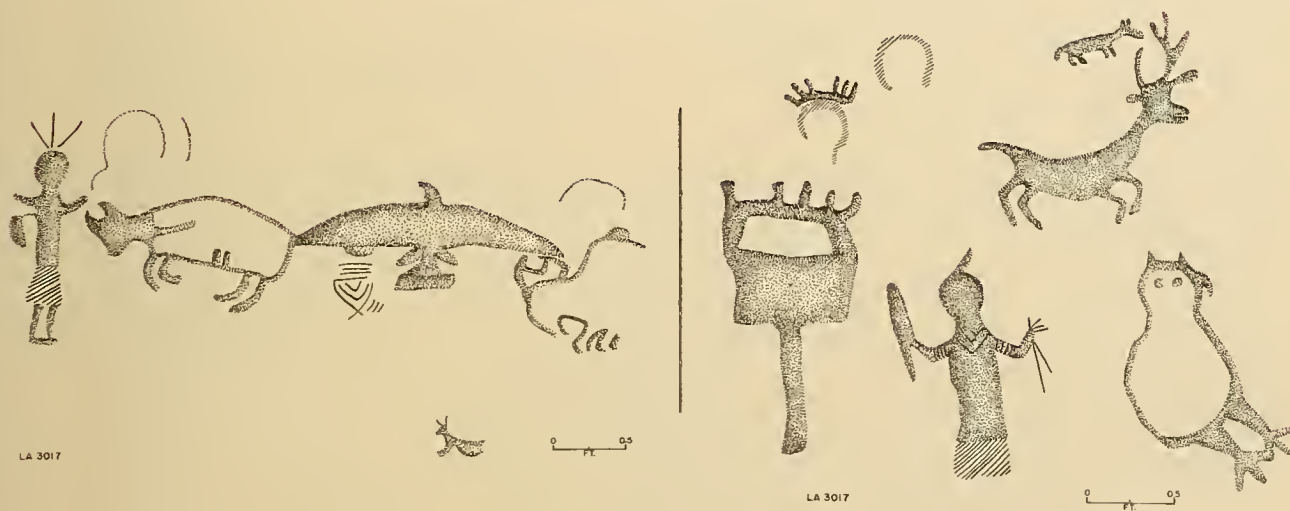
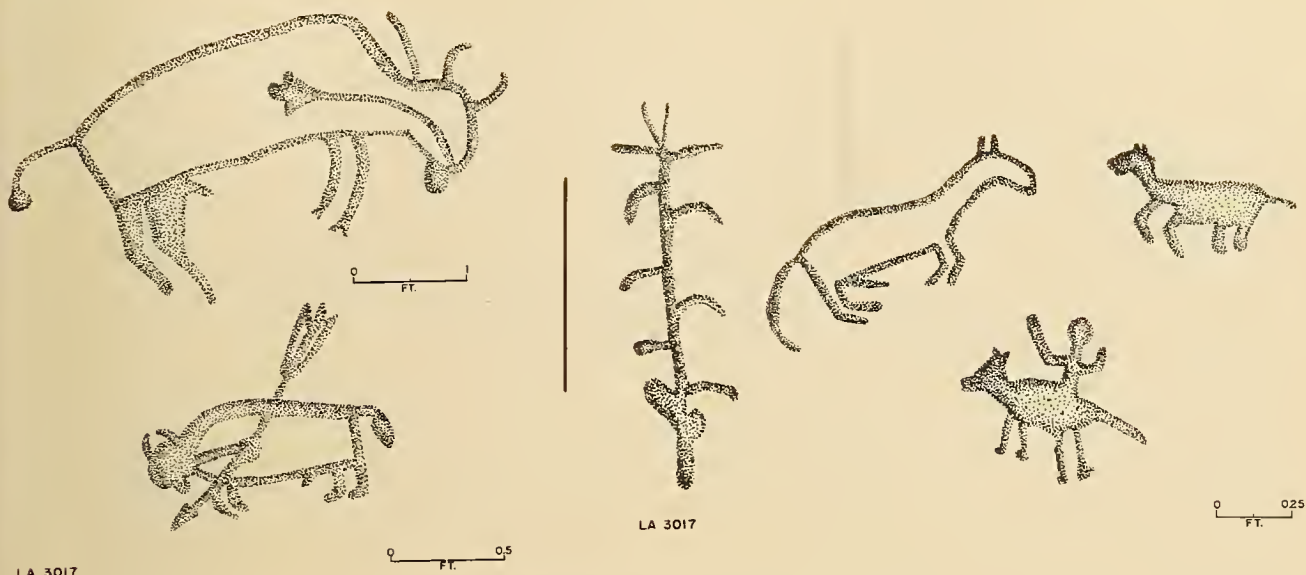


Fig. 37. Miscellaneous Navajo figures from Panel 3, LA 3017. Naturalistic yeis, bison with heartline, the deer, owl and eagle are among the figures represented.

and left). Details have been made at different intervals at this panel, as the red outline of yei heads and red feathered headdresses are frequently superimposed by pecked bison figures (Fig. 37, lower left). The figure of the yei at the left may not be contemporary with the bison. Bison are frequently arrayed in a progressive sequence across the cliff. They occur in a variety of techniques. They may be pecked solidly or in outline, as illustrated. One figure is pecked solidly into the rock and the heartline is left raised to give an almost sculptured effect. The pecking on this figure and some others is very fine and the edges are precise. Pecking was done with a blunt instrument, except for the owl, executed in sharp jabs. Weathering varies from heavy to moderate, depending on degree of exposure.

LA 3021

This site is in a side canyon on the east side of the Pine River Canyon, in a rincon which forms a rock shelter straddling the canyon. A Navajo habitation area, with forked stick hogans still standing, occupies the west side of the shelter. The pictographs across from there consist of four figures in various shades of adobe or thin mud, somewhat heavier than the usual paint pigments. Three of the figures are humpback flute players (Fig. 38). The first figure is white, the second and fourth yellowish-tan, and the third one is gray. The adobe has tended

in all cases to flake away leaving only splotchy areas to define the figures.

LA 3022

The pictographs at this site consist of both petroglyphs and rock paintings of religious nature. The site is along the lower cliff north of the mouth of Todosio Canyon.

PANEL 1

A petroglyph panel, with cloud and lightning symbols as the dominant theme is on a red patinated cliff face on the north corner of the junction of Todosio and Pine River Canyons (Fig. 39). The figures, clear, and only moderately weathered, are pecked evenly and deeply into the rock in well-defined grooves.

PANEL 2

This panel and those following are upriver about one hundred yards from Panel 1. They are all in close association under a protective overhang on which the star forms (Panel 6) are situated.

Panel 2 is a group of four yeis painted in red and white (Pl. I, p. 29). Orange is also used in small amounts on the right hand yei. Much of the design is



Fig. 38. Adobe pictograph of Navajo humpback flute players, LA 3021.

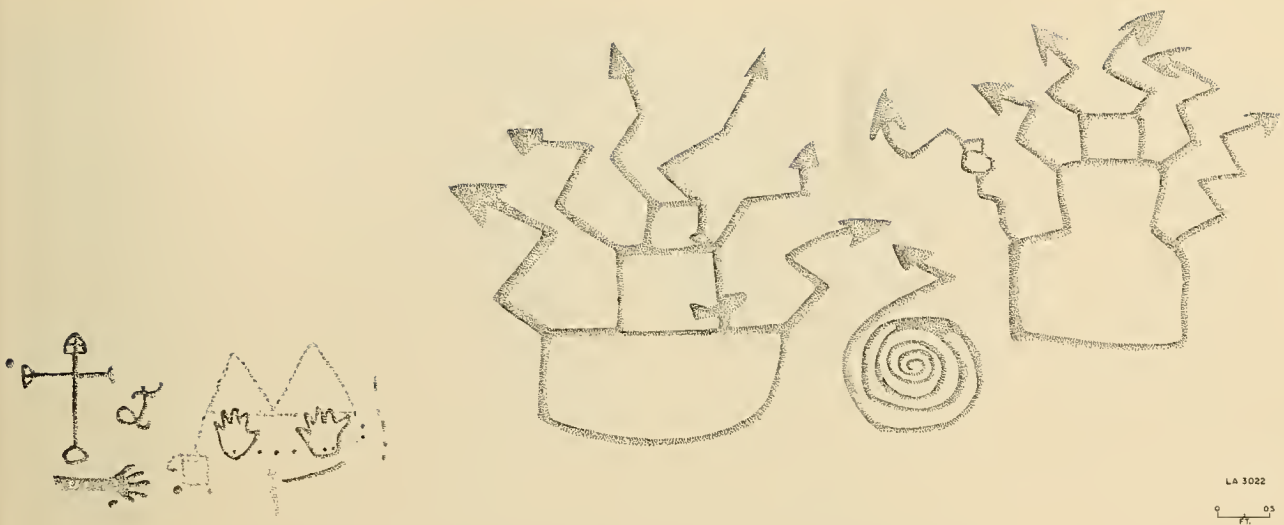


Fig. 39. Navajo petroglyphs at Todosio Canyon, LA 3022, Panel 1.

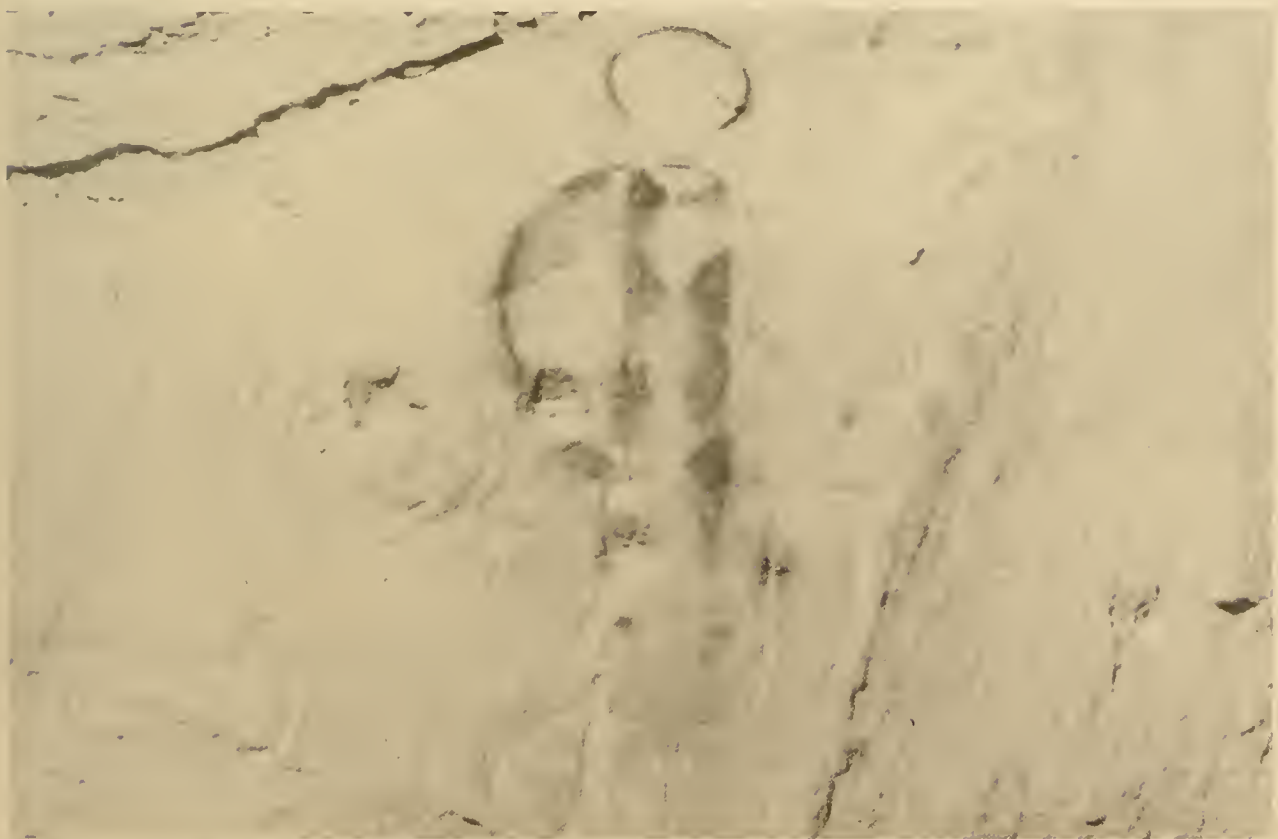


Fig. 40. Painted red Navajo figure at Todosio Canyon, LA 3022, Panel 3. Below the painting are petroglyphs smoothed over by repeated scraping of the cliff surface.



Fig. 41. Red painted mask, LA 3022, Panel 4.

lost, as the paint has eroded away, but a fair amount of detail remains. All figures are frontal except for the right-hand end one, which is rendered in side view, defined by positions of the arms and headdress. This figure is female, indicated by the rectangular mask and dress form as opposed to the kilt of the left hand figure. There is an orange pollen line across her chin. The first figure carries a feathered wand, the next probably dance paddles, and the third has an ear of white corn in each hand. The horns, circle and feathered headdresses seem to give little clue as to the identification of these yeis.

PANEL 3

This figure is on a portion of the cliff which gives the impression of having been worn down by repeated rubbing of the surface. Figure 40 shows some smoothed over Pueblo petroglyph figures. The large Navajo figure painted in red is another hump-back yei (see site LA 3021). The details have been lost, as the red paint is smeared and the outlines unclear. The red circle for the head, the arc of the hump, and the triangles which make up the body design can still be discerned. Above, not shown in the photograph, is the red outline of the head and the wand of another figure.

PANEL 4

The red painted mask that makes up this panel is crudely executed and the paint may have been

smudged, so details are lost (Fig. 41). Features are roughly chipped into the surface. In addition, the face is scratched over with fine lines.

PANEL 5

Three yeis comprise this group; two are under a green and red rainbow (Pl. II, p. 33). As in Panel 2, some of the original paint is now gone. Nevertheless, the details that remain are clear and the intricacies of costuming can still be studied. The figures are painted in red, green and white. The necklaces of the yeis under the rainbow are incised and painted white. As with the area around Panel 3, the rock surface here has been smoothed off time after time so that it now has a very worn and used appearance.

PANEL 6

This panel of figures is on the underside of an overhand which runs for about thirty feet above the portion of the cliff where Panels 3, 4 and 5 are found. It consists of star and flower-like forms painted primarily in red, orange and red and, rarely, in black and blue. Colors are bright and outlines sharp (Pl. III, p. 36 and Fig. 42). Only the main concentrations of these figures have been photographed and drawn, but star and petalled forms are scattered beyond these major groupings. The surface on which they are painted is fresh and not worn over by repeated usage as are the painted cliffs below.



Fig. 42. "Planetarium" of star and flower forms at Todosio Canyon, LA 3022, part of Panel 6.

LA 3036

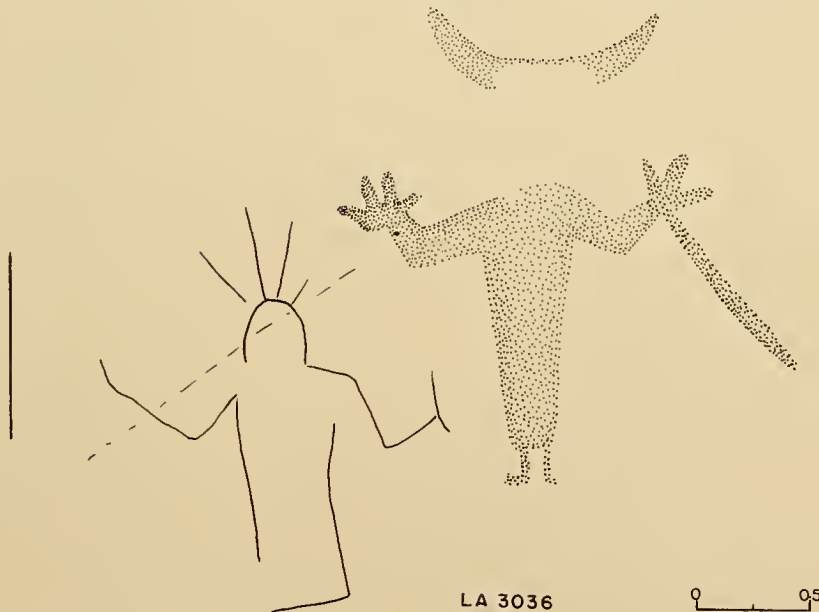
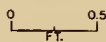
Site LA 3036 is in the extreme northern part of the Reservoir on the west side of the Pine River just south of the mouth of Reese Canyon. The figures are strung out beneath a slight overhang, along a cliff above a high talus slope which drops steeply to the river. The two panels of any significance are described here.

PANEL 1

This is a large single figure composed of widely-spaced dots about 0.5 inches in diameter



LA 3036



LA 3036

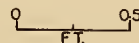


Fig. 43. Navajo petroglyph yeis, LA 3036. (Left) Panel 1. (Right) Panel 2.

(Fig. 43, left). The "horns" are done in finer, more closely spaced marks. The figure is heavily weathered and difficult to discern.

PANEL 2

About seventy feet downriver on the same cliff are two figures (Fig. 43, right). The one on the left is incised and very difficult to see, as it is heavily weathered. The figure on the right is pecked shallowly and sparsely, leaving small areas of the rock surface in between the worked areas. An even, mottled surface results. This figure is a little less weathered than the left hand one.

LA 3037

The two figures at this site are at the north corner of the confluence of Wilmer Canyon and the Pine, about two miles south of LA 3036 (Fig. 44). Under a wide overhang, they can be reached by climbing up a small ledge.

The figure on the right is a fat yei painted in red and white and pecked shallowly and coarsely. He wears a pointed red cap, necklace with pendant, red kilt and wide sash and carries ceremonial objects in his hands. Facial features and sash decorations are ground into the rock. The outlines of the painted areas are unclear, as the paint has faded.

The left hand figure, in the same faded red paint, has suffered a certain amount of defacement. The head region has been thoroughly pecked over

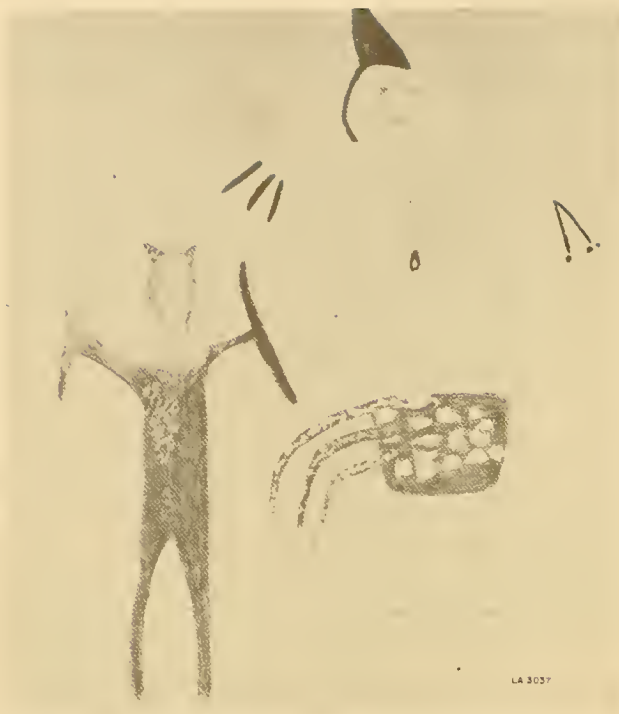


Fig. 44. Yeis at the entrance to Wilmer Canyon, LA 3037.

with a sharp instrument and this area is less weathered than the rest of the pecked areas, which are darkened moderately.

LA 3041

These figures are about one hundred yards north of LA 3037, in a small rock shelter cut deeply into a solid cliff, offering the figures a good amount of protection from both sun and rain. The panel consists of four brilliantly painted yeis superimposed over a faint background of inverted blue triangles (Pl. IV, p. 40). The yeis are painted in six colors. Gray-blue, dark red, orange-yellow and cream are most frequent, while a pale blue-green is used for three masks and some dress decoration. A rose shade is used in one dress and kilt. Details of dress and other paraphernalia are clear. Close examination shows that most areas of color were applied first and outlined later on. Sometimes, however, the reverse is the case.

Far to the left of the main panel is a small plant figure in red. The splotches or holes left blank in the drawings indicate gouges of recent defacement. They are not weathered and apparently were done with a sharp flat bladed instrument like a chisel.

LA 3043

The Pueblo figures at this site on the Pine River have already been discussed (Panel 1). The large panel of figures of Navajo origin (Panel 2) is lower on the cliff on a dark weathered surface (Fig. 45). There are two Pueblo figures on the upper left. Patination of the figures is fairly heavy and equal for all. Pecking is deep and resembles that of Panels 6

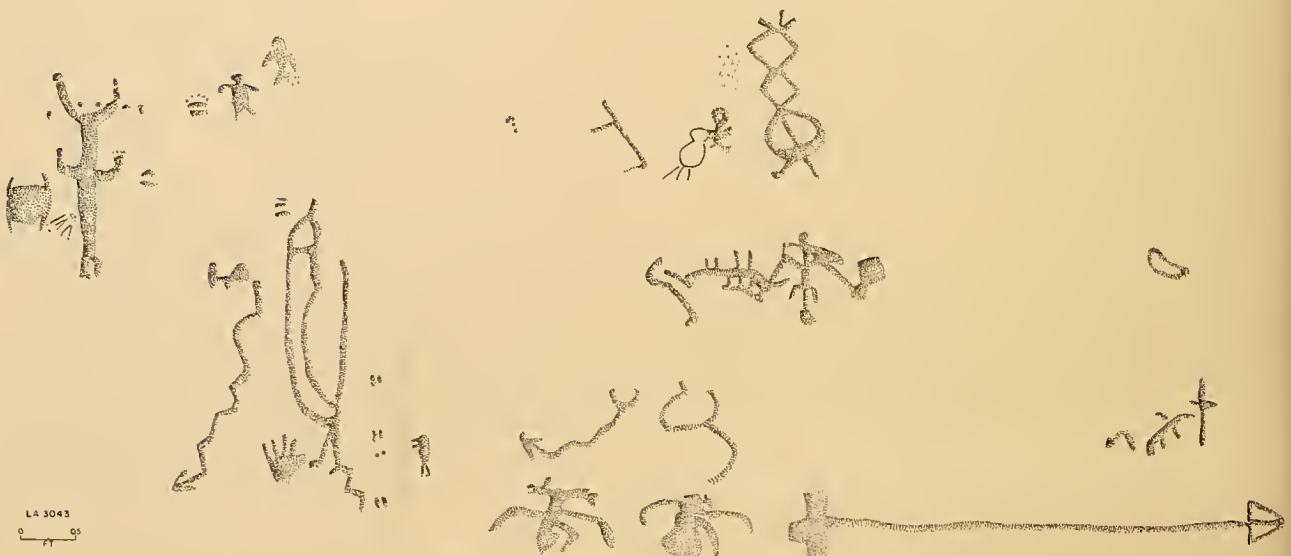
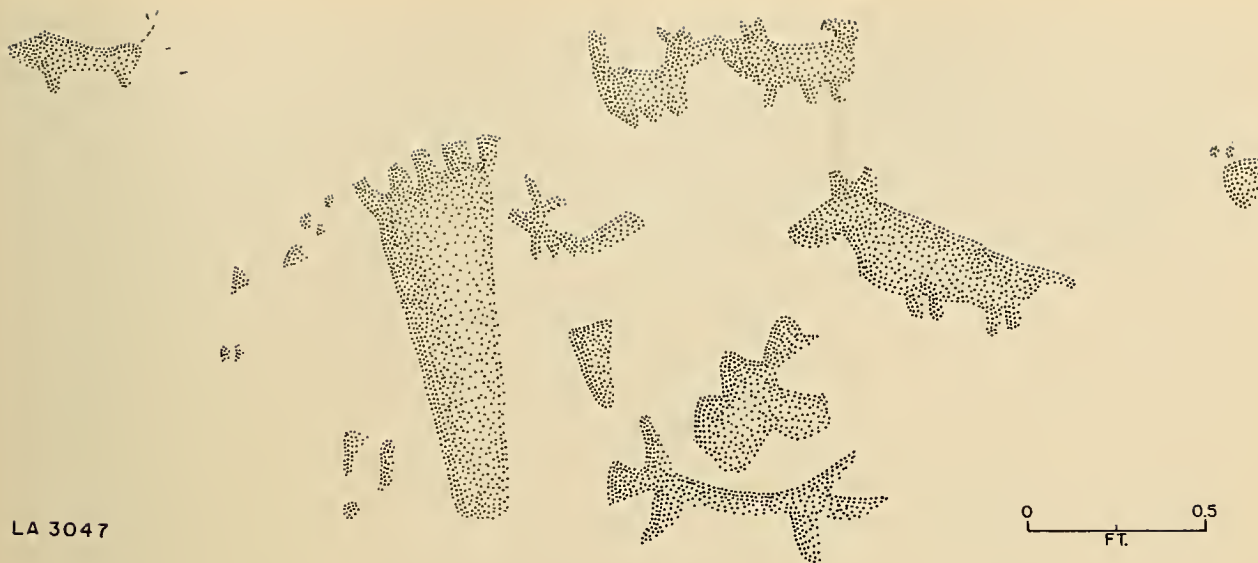


Fig. 45. Navajo petroglyphs, LA 3043.



LA 3047

Fig. 46. Petroglyphs of probable Navajo origin on talus boulder, LA 3047.

and 7 at LA 3013 and that of Panel 1 at LA 3022. In all cases the lines are wide, solid and deep. The kilt on the strange horned yei (?) and the bird are incised.

LA 3047

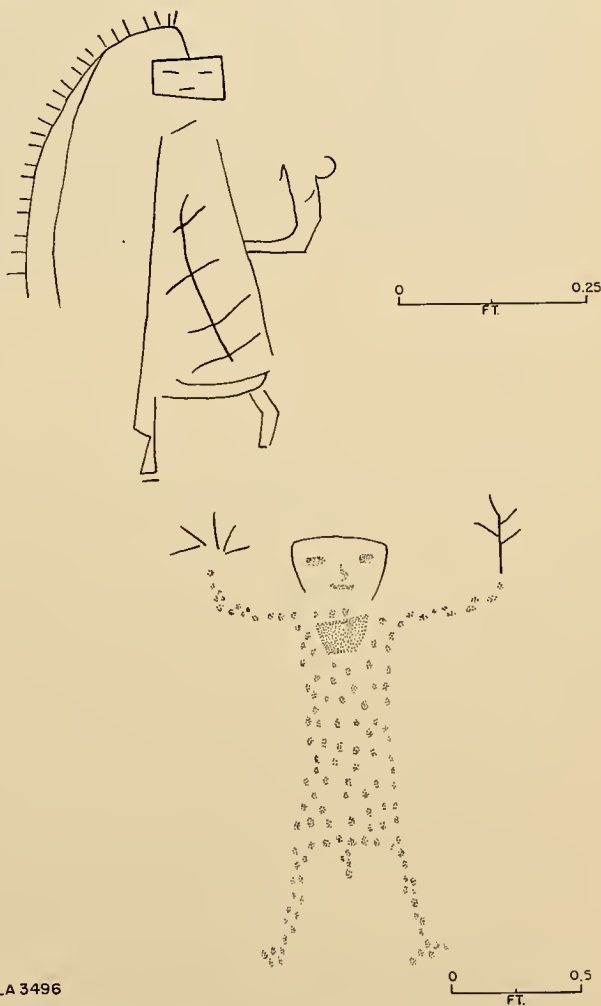
This, one of the few pictograph sites along the San Juan River, is at the back of a rock shelter in a large talus boulder on the upper end of a bench opposite Bancos Canyon. The shelter itself shows signs of having been occupied and the roof has been blackened by smoke. Excavation has revealed a Navajo occupation.

The figures on the back wall are shallowly pecked petroglyphs (Fig. 46). The pecking is even and spaced just enough to leave some of the original surface, producing a smooth, mottled effect. This same technique was used at LA 3036 for the right-hand figure in Panel 2. Patination varies from moderate to heavy enough to obscure parts of the figures.

It must be admitted that the cultural attribution of these petroglyphs was made purely on the basis of feel and technique, although technique is not, by any means, always a safe diagnostic criterion. The short-legged quadrupeds are much more Pueblo than Navajo in style; Navajo animals usually have long bent legs. On the other hand, none of the ever present diagnostic Pueblo men are depicted here, and more important, no Pueblo figures have been found rendered in this particular pecking technique. Excavations also support a Navajo origin.

LA 3496

The Pueblo material at this site has already been described in Chapter II. The three figures which are definitely Navajo are of interest. One is a large bison executed in widely spaced peck marks



LA 3496

Fig. 47. Isolated petroglyph figures, LA 3496.



Fig. 48. Adobe pictographs in a rock shelter, LA 4054.

(Fig. 23). It is interesting to note that these marks are more concentrated and finer on the lower part of the body and in the legs and horns, as if the artist desired to achieve a shaded effect.

In the center of the panel is a Navajo figure with a Plains or long, feathered headdress. He is pecked into the rock deeply and solidly, like the surrounding Pueblo forms. In form, however, he is distinctly Navajo.

To the left of the main panel is a rather charming Navajo *yei* figure faintly scratched into the rock (Fig. 47, upper).

A fourth figure south of the main panel may be of either Navajo or Spanish-American origin (Fig. 47, lower).

LA 4054

These are tan adobe pictographs in a small rock shelter near the mouth of the Pine River (Fig. 48). The work gives the impression of being done very casually, stamped or smeared on thickly with

the fingers. The figures consist of many unintelligible marks as well as animals and small hand prints.

LA 4055

LA 4055 is in another rock shelter just downriver from LA 4054. The Pueblo figures and paintings here have already been discussed. The footprints and eagles (Fig. 49) are believed to be of Navajo origin.

LA 4072

The figures of this panel were discussed in Chapter II, where it was brought out that the separation of Navajo from Pueblo elements here poses some difficulty. At that time the quadrupeds of definite Navajo origin, distinguishable on the basis of style and technique in execution, were pointed out. The bent-legged dog superimposed over the base of the flute players, the bison and other quadrupeds in outline form are Navajo (Fig. 26). The bison shows very close resemblance to the Navajo bison figures at LA 3017 on the cliffs below.



Fig. 49. Navajo eagle and footprint petroglyphs, LA 4055.

LA 4299

This site is on the high second set of cliffs above the Pine River on the south side of the mouth of Todosio Canyon. There is a Gobernador Navajo habitation site here in a rock shelter and a pictograph which may be reached by following a ledge walled with rubble masonry several yards south. The figure is protected by a six foot overhang.

It consists primarily of a somewhat weathered red and white painting of what might be termed "an unidentifiable ceremonial object" (Fig. 50). To the left of this the surface has been scraped and rubbed over like the surfaces at LA 3022 nearby. In this scraped area a nebulous form seems to show additional rubbing and smoothing. To the extreme right of these figures are the slight remnants of other painted designs in dark blue.

LA 4398

The Pueblo panels at this site at the junction of Cottonwood Canyon and the San Juan River have already been discussed. Both petroglyphs and paintings occur in the Navajo work.

PANEL 4

This petroglyph panel is predominantly Pueblo in origin, as discussed in Chapter II. The large horned face, however, is typically Navajo, and this and the surrounding circles are executed in sparse elongate peck marks (Fig. 31).

PANEL 5

This group is on a heavily patinated portion of the cliff face next to the Pueblo Panel 1. The Thunderbird dominating the group is pecked in narrow lines of sparse dots (Figs. 28, 51). The Pueblo type men at the eagle's left wing give the appearance of having been depicted contemporaneously with the eagle, as weathering of this whole group is slight, especially when compared with Panel 1 on the same section of the cliff.

PANEL 6

The painted crosses or stars of this panel are located on the underside of an overhang about thirty feet above the ground between Panels 2 and 3 (Fig. 52). The panel is inaccessible from below, although

Fig. 50. Navajo painted figure, LA 4299.

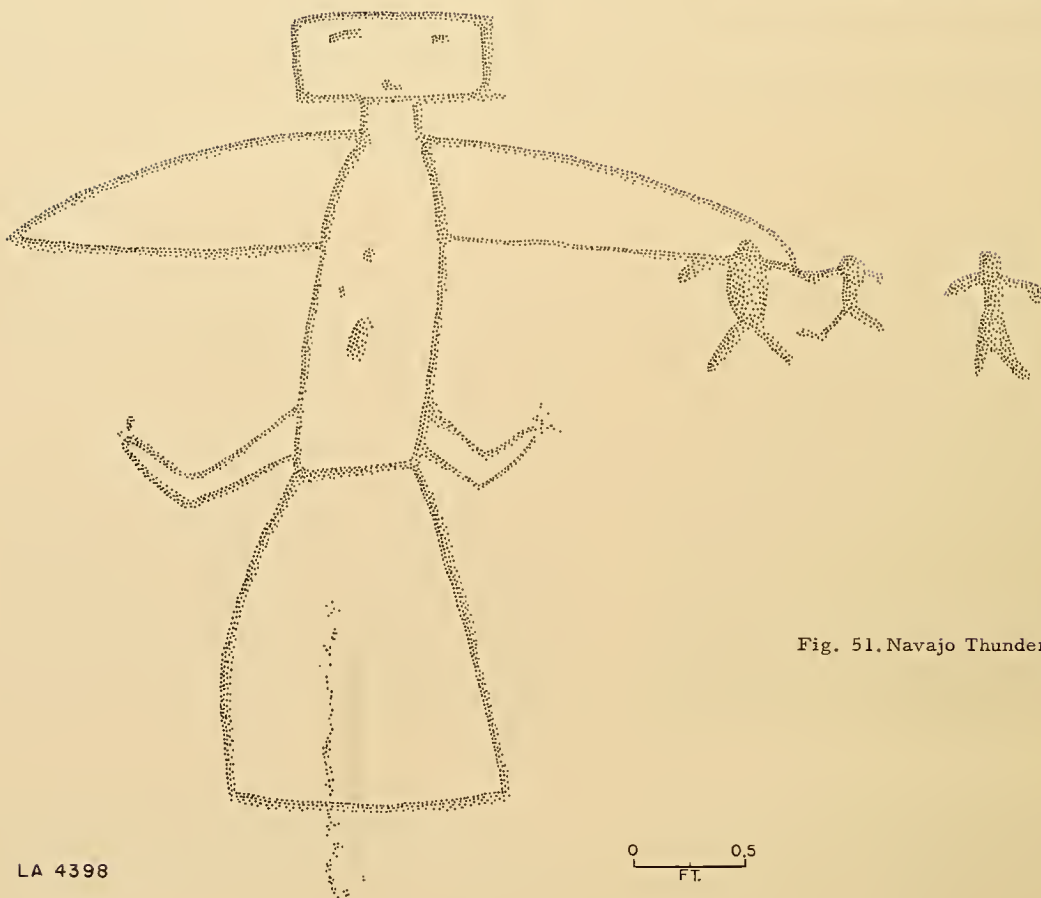


Fig. 51. Navajo Thunderbird, LA 4398.



Fig. 52. "Planetarium", LA 4398.

there is a very narrow ledge about ten feet below it. The figures vary in color from orange to orange-red to red. Two stars are dark gray or black. The colors are brilliant and clearly or precisely depicted.

LA 4413

These petroglyphs are just beyond the eastern edge of the northern part of the Reservoir along the Piedra River (Dittert, *et al*, 1961, Fig. 71, lower). The two groups of figures at this site are on adjacent talus boulders on top of a low hill.

PANEL 1

These figures on the vertical face of one boulder are weathered to the natural color of the rock and would be impossible to detect were it not for the fact that they have been pecked so deeply into the rock's surface (Fig. 53). Among the figures depicted here are three yeis, a deer, a corn plant and a horseback rider. The border decoration at the base of the panel is an unusual feature.

PANEL 2

On the more or less horizontal, exposed surface of the adjacent boulder is Panel 2. Figures consist of a human hand print, a coyote track, bear track and miscellaneous geometric designs pecked deeply into the rock. These are also nearly completely obscured by weathering.



Fig. 53. Navajo petroglyphs on a boulder along the Piedra River, LA 4413.

SUMMARY

Situation and Location

Like the Pueblo pictographs, a large number of the Navajo sites are located in the lower parts of the Pine River Canyon and around the fork of the Pine and the San Juan (Fig. 2). Navajo sites show a slightly more even spread in the Pine River Canyon, and two more Navajo than Pueblo sites are found on the San Juan and Piedra. Scarcity of both Navajo and Pueblo sites in the upper reaches of the San Juan and its tributaries may be accounted for by the fewer outcroppings of cliff-forming sandstone in this part of the Reservoir. Then, too, when they do occur the canyon is wide and cliffs are less apt to be in close proximity to habitation sites, as they always are in the Pine River Canyon. Still, this does not account for the lack of Navajo pictographs in the lower San Juan, where Navajo habitation sites are plentiful and the same topographic conditions prevail as in the Pine River Canyon.

As with the Pueblo pictographs, the majority of the described Navajo panels are on the lowest cliffs in the canyons. Sites LA 4072 and LA 4299 are on the next highest cliffs and in both cases are associated with other activities—a walled-in rock shelter in the first case, and a habitation site in the second. Two sites in the upper parts of the San Juan area are on talus boulders. The Navajos made a little more use of rock shelters than did the earlier Pueblo artists and seem to have had a slightly greater preference for cliff faces with overhangs, although both groups made use of such locations frequently.

Techniques

Like the Pueblo figures the techniques in which the Navajo petroglyphs are rendered show variation. Incising is used occasionally for small figures and for details of larger ones. Figures may be sketchily pecked or rendered deeply in solid lines or forms. Animals such as the

bison at LA 3017 may be pecked for the most part in outline, with specific areas, like the head, pecked solidly. Other large figures, such as the bison at LA 3496 and the horned yei at LA 3036, may be executed in widely spaced dots. Figures at LA 3036 and LA 3047 are rendered in shallow round peck marks, which produce a smooth but textured surface.

The tools used in the execution of most of these figures would seem, on the basis of the appearance of the finished product, to have differed little from Pueblo tools. Exceptions may be found in figures made by sharp jabs, like the owl at LA 3017 and the horned face at LA 4398, which could have been rendered with a metal tool. No metal artifacts, however, have been found thus far in Navajo sites of this District. Pointed hammerstones were probably applied directly to the rock surface, and ground edged abraders may have been used for line incising. The even edges and fine detail on one of the bison at LA 3017 suggests that perhaps the Navajo, too, used an indirect pecking technique, which would allow the control necessary to produce such fine work.

Paintings make up an important number of Navajo pictographs in the Reservoir. Red is the most common color encountered in these paintings; white is used frequently; and light green, blue, orange, yellow, cream and pink are found at times. Pigments obtained directly from the paintings in the field have not yet been analyzed. It has already been mentioned, however, that lumps of yellow and red ochre and hematite are commonly found in Navajo habitation sites. When ground the red ochre becomes orange red or dark red-brown paint and both shades occur in the Navajo paintings. An orange color could be obtained by a mixture of these ochres. Kaolin and malachite may be the source of white and green paint respectively.

As far as can be told, paint pigment was, in most cases, applied to the

rock surface with a brush or similar implement. No actual brush strokes are visible in any of this work, but the fine lines in the LA 3041 and 3022 yeis and the crisp edges on the planetarium figures indicate that something of this nature must have been used. Brushes made of strips of yucca leaves, the edges of which have been chewed to get rid of the pulp, are used on Pueblo pottery painting and it has been suggested that they were used in the fine work of the murals from Pueblo IV (Smith, 1952, p. 31). Tschopick (1941, p. 15) discusses brushes used in Navajo pottery painting. These are also yucca, but the end is not chewed and the hard yucca does not make even lines.

It is possible that brush work may have been used in the pictograph for outlines and details only, and that solid areas were painted with the finger or with a strip of corn husk bent over the finger. This latter practice is again Puebloan (Smith, 1952, p. 31). It has already been mentioned that, in the complex yeis where outlining occurs, the lines are usually put on after the solid areas have been painted. In some instances, however, the reverse is the case.

The different techniques of pecking and painting are not always used separately. Incised necklaces, painted white, occur in the paired yeis at LA 3022, Panel 5. Yeis at LA 3017 have red painted kilts while the rest of the figures are pecked. The fat yei at LA 3037 combines pecking and painting in the same figure in a more complex way (Fig. 44).

Subject Matter

The subject matter of the Navajo rock art may be said to fall roughly into three groupings. The first is composed of elements which have direct counter-

parts in the outside world. Of all the Navajo art figures in the Reservoir, there are few seemingly earthly human beings represented. One is the figure with the horse at LA 3013 (Fig. 5); others on horseback are found at LA 3017 and LA 4413. More common are the representation of animals. Many of the quadrupeds are not identifiable, but among those most frequently recognized are the bison and deer. In the hunting scene at LA 3017 the bison have heartlines and are depicted with arrows or possible medicine wands sticking into them (see Interpretations). An owl is also represented at this site, and eagles occur even more often.

In addition animal tracks are fairly numerous. Human hands are depicted at two sites and a human footprint at another. Bear, coyote and other carnivore and deer tracks are also found.

Corn and possibly other plants are represented at LA 3017, LA 3041, 3043 and 4413.

The panels of stars, or the so-called planetariums, lightning arrows, snakes and rainbows, feathered shields and the unidentified figure at LA 4299 comprise a second group of representations which, interpreting from ethnographic data, may have some mythical or supernatural significance. More will be said on this subject in Chapter V.

The third large group of Navajo figures are the yeis and other mythical beings. These occur more frequently than any other single subject. Common attire for these figures are kilts with sashes or dresses, depending on whether the figure is male or female, masks, feathered headdresses of various kinds, necklaces, and moccasins. Humpback deities occur in three sites. Horned figures are also depicted.

CHAPTER V

ANALYSIS OF NAVAJO PICTOGRAPHS

The purpose of this chapter is to place the Navajo rock art of the Reservoir in its chronological setting and to analyze it from the point of view of style to see how it relates to the development of the Navajo art tradition. In addition, the

contents of the pictographs is studied to explore the culture of the time it was produced and the part the pictographs themselves played in the culture of the 18th Century Navajos.

CHRONOLOGY

The Dinetah Phase is represented in the Reservoir by only six habitation sites, and no pictographs can be identified from this phase. The Navajo pictographs in the Reservoir are believed to date from the Gobernador Phase of Navajo occupation from A. D. 1698 to 1775 (Dittert, et al, 1961, p. 245). Style and form vary from comparable modern Navajo art forms to support this view. During the Gobernador Phase, the Navajos were undergoing strong acculturation from the Pueblo Refugees with whom they were living in close proximity, due to the Pueblo Revolt. The great majority of Navajo pictographs have religious or supernatural and mythical subject matter which shows Pueblo influence in form and style as well as a great likeness to modern Navajo religious art.

According to Hester, the contact between the Navajo and the Pueblos can be divided into two periods: that of Initial Contact in the Dinetah Phase, and that of the Pueblo Revolt around the last of the 17th and early 18th centuries. During the Initial Period, the Navajos obtained agriculture and the reinforcing agricultural ritual from the Pueblos. This ritual was

only partially integrated, with some loss of form and meaning. During the period following the Pueblo Revolt, Pueblo acculturation became much more intense, as both groups were living side by side, with intermarriage occurring between them. In a short time under these conditions, the Navajo adopted many Puebloan traits including much in the way of religious paraphernalia and ritual (Hester, 1962). In summary:

The first half of the 18th Century may be described as a period of Navajo-Pueblo fusion with dominance of the Pueblo culture, at least in material culture. The last half of the 18th Century saw a simplification of the introduced Puebloan traits with considerable loss in form. This fact may possibly be interpreted as a reassertion of traditional Navajo values (Hester, 1962).

Areal Distribution

The Navajo Reservoir District on the Upper San Juan is on the northern edge of the range of Gobernador Phase Navajo

culture. This culture phase has been defined in the Gobernador and Largo localities immediately to the south of the Reservoir (Farmer, 1942; Hall, 1944). Further south and east it has been described in Big Bead Mesa and Chaco localities by Keur (1941) and Vivian (1960). However, the Gobernador Phase began and ended in the Upper San Juan and Largo Canyons (1696-1775) twenty-five to forty years earlier than it did in the Big Bead Mesa and Chaco localities (1739-1800) (Hester, 1962). A thorough study of pictographs has not been made from these other places, but visits to Canyon Largo and communication with

Harry Hadlock of Farmington, New Mexico indicate without question that this canyon and its tributaries contain many more Gobernador Phase Navajo petroglyphs and rock paintings than does the Reservoir District. These pictographs are done in a similar style to those in the Reservoir, with both similarities and variation in the specific figures represented (Hester, 1962). The profusion of these figures in Canyon Largo suggests that this may have been a center for the development of early Navajo art, as well as for the Refugee Pueblo art from which the Navajo concepts were derived.

STYLISTIC ANALYSIS

The 18th Century Navajo Pictographs

The Navajo pictographs will be discussed first on a stylistic basis in terms of themselves and then compared with Pueblo painting and Navajo dry painting preceding and following them in time respectively.

One of the greatest differences between the Navajo and the much earlier Pueblo pictographs in the Reservoir is the much greater complexity and dynamic quality in the Navajo material. Again the concern is with the two dimensional field of the cliff surface. In Navajo work, much movement is portrayed on this surface; this is accomplished in several ways. One of the most common is the representation of figures in a linear sequence of progression. Of such figures, the quadrupeds are the most dynamic. At LA 3017 the bison are represented as running upward on the cliff and the legs are bent in running position to indicate movement. This is not to say, however, that all Navajo quadrupeds show such motion. At LA 4072, a short, stiff-legged bison is as static as most of the Pueblo figures.

Linear progression is used a little less dramatically with groups of yeis. At

LA 3022 (Pl. I) figures progress from right to left. This action is indicated not only by the conventional methods of feather and arm and leg direction as in modern Navajo sandpaintings, but also by the slant to the whole thing, this time downhill. The flute players at LA 3021 (Fig. 38), in addition to a downhill direction, have bent legs and slightly tilted feet to animate the figures. These groups contrast somewhat to the four yeis at LA 3041. Shown to be moving through conventional means, but with less motion in their bodies, they remain static as total entities.

The concept of motion is not confined to progressive movement. The yeis at LA 3017 (Fig. 37) are so simple yet naturalistic they give the impression of having the ability to step off the cliff if they so desire. At LA 3037 varied arm positions, the almost three-quarter view as expressed by cap and facial features, and the bold lines of the sash make the large yei a lively one (Fig. 44). In other instances (Fig. 47, upper) expressive line is used effectively to communicate animation in the figures. Decorative movement in the panel of yeis at LA 3041 is achieved in the use of complex painted geometric forms outlined in contrasting colors. Lighting arrows zig-zagging in all directions,

as in Figure 39, and bold curved designs also portray movement.

The balance and symmetry achieved in modern Navajo sandpainting is suggested in the rock art of the Reservoir, but less regularly expressed. This is perhaps due as much to a difference in the nature of the medium and function as to stylistic development. The arcs and snakes at LA 3013, however, are most sandpainting-like in quality, and symmetry and balance are perfectly maintained, although a set of tracks has been added to one side. The paired Twin War Gods and groups of four yeis are again balanced compositions. Bilateral symmetry is expressed often in the arm position and kilt and dress design of the figures themselves. Many panels, however, even though they have been arranged as a composition, do not express a symmetrical arrangement.

What may be considered to serve as a base line or point of reference occurs only in one instance. This is at LA 4413 (Fig. 53), where a decorative border runs along the base of the panel. The rainbow over the painted yeis at LA 3022 (Pl. II) probably has symbolic significance, but it also serves as a decorative tie-in or frame, emphasizing the figures inside.

It is suggested in the above paragraphs that the figures vary between naturalism and stylized representation. Both realistic representation and decorative effect concerned the Navajo artist of the 1700's. Quadrupeds have a tendency to express naturalism in general form, especially when compared with those in later Navajo sandpaintings (see section on Stylistic Affinities). The bison at LA 3496 is even done with a concentration of pecks in the lower areas and legs and head as if it were desired to indicate shading or three dimensions. Bison, in particular, show a tendency to be conventional in general form, with flat body bases, lowered heads, and somewhat stiff inward bent legs. Their general outlined figures, with selected parts pecked in solidly and a heartline, are decorative in total feeling. Other animals pecked in outline at LA 4072 have outward

bent front legs, effective in design but unnatural.

Figures of yeis vary tremendously in this respect. The naturalism in the LA 3017 yeis, with their solidly pecked animated bodies as contrasted with the decorative forms at LA 3041, has already been pointed out. In the latter case, a flat decorative surface with color patterning and contrasts is emphasized in dress design and in the patterns of the additional ceremonial paraphernalia.

The development of emphasis on design and pattern is combined with a certain amount of abstraction. The right end female yei at LA 3022 (Pl. I) combines a frontal head and body view with a side view of arms, legs and headdress. Frontal yeis are shown with legs sideways to indicate direction. Such a representation of the legs is also more decorative, and these conventions are always employed in modern Navajo art. The owl at LA 3017 is portrayed sideways with beak in profile, but the eyes and ears are shown frontally.

At the confluence of the Pine and San Juan Rivers, the Twin War Gods are represented by two red circles which contain inside headdresses of smaller figures (Fig. 36). Another similar set of Twin War Gods circles comes from Jasis Canyon in the Canyon Largo complex to the south. This method of depiction of these gods is a curious one, for which an explanation is suggested by an examination of other war figures from various other places and cultures.

In pictographs from various areas figures carrying arrows, bows and other war equipment have the larger part of their body covered with a huge round shield. Such figures are reported from Wyoming and eastern New Mexico (Renaud, 1936, pl. 14 and 1938, Pl. 7). Similar figures from the Fremont culture have horns (Wormington, 1955, Figs. 61, 62, 63, 64, 65). Shielded figures occur in Pueblo IV kiva murals in the Southwest from Pottery Mound, New Mexico, and Awatovi, Arizona (Vivian, 1961, Figs. 18, 19, 24, 29, 34,

35, 41, 42; Smith, 1952, Fig. 52 (b) and 54 (a)). In Johnson Canyon in the Largo, there is a similar Navajo figure with horns covered by a large shield and surrounded by spears or arrows. In the nearby Jasis Canyon one of the Twin War Gods mentioned above has a set of horns attached to the top of the red circle. These figures suggest that the circle forms of the Twin War Gods are derived from the round shield form; that they are, in essence, simplified or abstracted to this essential element so that mere circles become symbols for these figures rather than a depiction of them.

Stylistic Affinities

It was mentioned earlier that nothing is yet known about pre-Gobernador Phase Navajo art. Thus we know little about the base upon which alien influences like the Pueblo worked.

Recent studies indicate that the Athapascan groups that eventually entered the Southwest came in from the Plains (Hester, 1962). Although some general similarities do exist between the Navajo and Plains groups in the general cultural context, specific analogies between the two seem to be lacking. Stylistically, also, specific resemblances between Plains pictographic art and that of the Navajos are unrecognizable, since in vast areas of North America, pictographic art holds so many stylistic characteristics in common that the source of some of these elements in Navajo art would be impossible to pin down. Some Plains traits seem to occur, however. It has been suggested (Dittert, 1962, personal communication) that the Athapascans brought the use of the heartline with them into the Southwest as either an Athapascan trait or one which they picked up from Plains groups. Its frequent depiction in Pueblo art is a relatively recent phenomenon. It is rare even in the Pueblo IV murals. So far it seems to occur only once in a bison from Kuaua, a panel which may well post-date Athapascan contact. Bison with heartlines are found in pictographs of High Plains areas, but

it is not known from what period (Renaud, 1936, Pl. 16, Fig. 3).

A specifically Plains characteristic of the Navajo art in the Reservoir and adjacent districts is the Plains, long, feathered headdress that occurs on some of the female yei figures (Figs. 23, 47, upper).

Navajo pictographs in the Reservoir also show some striking resemblances to paintings of probable 19th Century Apache origin from near Santa Rosa and in the Sierra Blanca Mountains of New Mexico (Gebhard, 1957, 1958). In addition to the heartline, the stepped figure and horned mask are also found in the Reservoir. Some of the characteristics in this Apache art would seem to come, ultimately, from Pueblo contact.

Many of the elements seen in Navajo work have affinities with the art of Pueblo IV murals of the 15th and 16th Centuries. The close association of the Navajo and Pueblo at the time the Navajo were inhabiting the Reservoir District has already been mentioned. Archaeologically, items of Pueblo and Gobernador Navajo ceremonial paraphernalia have been found in the same caches (Hester, 1962). It is well known that the Navajos were heavily influenced by the Pueblo in their total religious complex, and it is reasonable to suppose that the Navajo would show Pueblo influence in the style and content of their religious art. It is thus hypothesized that differences between styles of modern Navajo sandpainting art as it has been known since it was first recorded by Matthews (1887) and Stevenson (1891) and the 18th Century pictographs may be at least partially accounted for by a strong element of Puebloan influence in the earlier work. It is felt that a comparison between styles of the pictographs and sandpainting figures is valid as both are from a religious context dealing with similar subject matter, and show great similarity in form and detail.

The greatest difficulty in making a comparison between Pueblo and Navajo art styles is that there is little known or reported on Pueblo kiva art from the 1700's;

and few pictographs have ever been dated. Pueblo art underwent a florescence in Pueblo IV times in the 1400's and early 1500's and research has been carried out on the murals of this period from three sites: Pottery Mound, south of Albuquerque, New Mexico (Vivian, 1961); Awatovi, Arizona (Smith, 1952) and from Kuaua, just north of Albuquerque on the Rio Grande (Dutton, in press). After this period, Pueblo art seems to have declined, at least so far as mural painting is concerned, although in the 1900's we again learn something about the kiva murals from ethnographic records. Thus, in making analogies with Pueblo art, these time discrepancies must be kept in mind.

Students of southwestern art have pointed out resemblances between Pueblo IV kiva murals and the sandpaintings of the Navajo (Tanner, 1957, p. 28). Figure 54 illustrates comparable figures abstracted from these sources as well as from the 18th Century Navajo pictographs, which, in many respects, fall into an intermediate position. Navajo yeis and ceremonial figures from the kiva murals are frequently represented in the same position, frontal with arms held up in a flexed position. Direction is indicated by showing the legs in side view. Yei feet are usually frontal and the Pueblo ones may be in correspondence with the legs, but this is not always so. Other features shared between figures from all three sources are kilts with tassels; tasseled sashes; occasional arm bands; choker and dangling necklaces, usually looped, among the Pueblos, with a pendant in the pictographs. Masks may occur among all three groups. Also the practice of outlining areas of solid color with a contrasting color is held in common. Specific items of ceremonial gear such as relatively elaborate feathered headdresses, the outlining of the head in red, the sashes hanging from the wrists and some items of hand paraphernalia such as aspergils are shared primarily between the two Navajo groups.

Perhaps the greatest differences occurring between these three groups of

figures are stylistic ones, as illustrated in Figure 54. The Pueblo figure shows some attempt at naturalism, with natural curves maintained for the shoulders and the legs. Faces rather than masks may also be shown. Proportions in general are natural. The Navajo pictograph yeis show some tendency to slim down the "human" form, but with the natural proportions maintained. Arms may be a little more geometric, with the natural curves gone; the legs follow this same trend with a more pronounced division between the top and the lower part of the leg. The kilts do not flare out at the corners as they do in the Pueblo art.

Considerable changes take place between the pictograph yeis and the sandpainting ones in the way of style. In the sandpaintings all traces of the natural body curves are lost and figures are rendered in strictly angular geometric forms. The necks and bodies of the figures grow disproportionately long to create a total effect that is one of suspended power embodied in a being remote from human experience. In Figure 54 the moccasin is illustrated separately to emphasize its transformation from a simplified form in the Pueblo figure through a slightly more elaborate one in the pictograph yei to a purely geometric design with no resemblance to a moccasin at all in the sandpainting yei.

Simpler, more naturalistic figures from both the kiva murals and the Reservoir pictographs are also depicted on the chart to illustrate their similarity. These do not occur in the modern sandpaintings. Below these are the bison to illustrate increasing stylization of this figure into two humps, with the legs more stiff and the snout elongated; if it were not for the presence of tiny horns, recognition as a bison would be impossible.

Stepped forms, arrows and coiled snakes may come from all three sources but they are so geometric that there is little difference in style.

In summary, we can say that it is evident that the Navajo Reservoir ceremonial



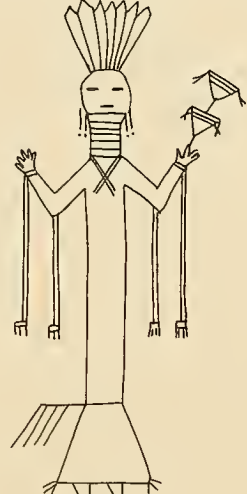





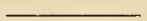

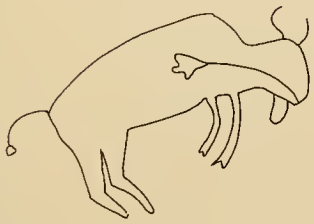
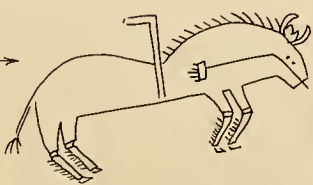
CULTURAL PERIODS FIGURE STYLES	PUEBLO IV MURALS Ca. 1400-1600	18 th CENTURY NAVAJO PICTOGRAPHS 1698 - 1775	PRESENT NAVAJO SANDPAINTINGS Ca. 1800- PRESENT
ELABORATE CEREMONIAL FIGURE			
MOCCASIN			
SIMPLE CEREMONIAL FIGURE			
BISON			

Fig. 54. Chart showing probable developmental relationships of 18th Century Navajo figure styles to those in Pueblo IV murals and modern Navajo sandpaintings.

figures fall somewhere in between two extremes of variations on a similar theme. The elongated style characteristic of later yeis is only suggested in some of these figures and is lacking in others. They are closer to the Pueblo in their naturalis-

tic proportions and in some of the curved body elements that have been maintained. The sense of divinity and awesomeness found in later yeis is lacking and an air of familiarity similar to that expressed by the Pueblo figures is approached.

INTERPRETATIONS

In this section an attempt will be made to identify as many of the Navajo mythological figures and symbols as possible. On the basis of these identifications and other ethnological data suggestions will be made as to the purpose and significance of the Navajo pictograph sites in the Reservoir District. Finally, we will try to see what these sites reveal about Navajo culture in the 1700's, in regard to religion and art; development of Navajo tradition; and contacts with other cultures and areas.

Identification of Figures

As already mentioned, a large number of the figures in the pictographs of the Navajo Reservoir are yeis, animals and symbols resembling those in modern sandpaintings. Differences in ceremonial trappings, arrangements and other details, however, between the pictograph and sandpainting figures have made the identification of most of the pictograph yeis difficult or impossible.

Specific yeis can be identified from only two sites. The Twin War Gods at LA 3017, Panel 2, have already been mentioned. Although they are not represented by the circle abstraction in sandpaintings, their identity is known through ethnological sources (see below, Function of Pictograph Sites in Navajo Culture, myth references). Other yeis from this site (Panel 3) cannot be identified specifically. Some of these hold ears of corn or dance paddles in their hands.

Over many of the yeis in Panel 3 are superimposed fifteen bison, ten with heart-

lines and two with objects sticking into them which could be either arrows or ceremonial wands. This latter interpretation is supported by the representations in Shooting Chant sandpaintings of bison which have heartlines and are stuck with feathered medicine wands similar in form to those in the petroglyph (Newcomb and Reichard, 1937, Pl. XXVII). There is evidence that the bison became an important symbol to the Navajos and that they had ritual associations. They are important in the Male Shooting Chant, and much bison material is used in other Navajo ceremonies (Fishler, 1955, pp. 50-52). Wheelwright claims that ceremonies were held when parties were sent to hunt bison (Newcomb, Fishler, and Wheelwright, 1956, p. 31). All humpback and horned symbols are very powerful to the Navajo. This information, coupled with the knowledge that this site was used as a shrine, makes it probable that the bison at this site have ceremonial significance.

The other identifiable yei is at LA 3022. With one reservation, the red figure in Panel 5 can be identified as Tobadsistsini or Born-For-Water, as represented in the Night Chant. The pictograph figure has a mask which, except for the lack of white hourglass figures, is identical to the one of Tabadsistini in the Museum of Navajo Ceremonial Art which in turn closely resembles that of the Pueblo deity Ahul (Smith, 1952, p. 304; Stevenson, 1891, Pl. CXV, Nos. 2 and 3). The white dots on the corners of the facial triangle in the pictograph correspond with shell beads on the mask in the Museum. Born-For-Water is shown with a similar mask in a Shooting

Chant painting (Portfolio IX-2, Navajo Museum of Ceremonial Art). In addition, Reichard (1950, p. 587) mentions that red ochre is Child-For-Water's impersonation symbol. It is rubbed on the hair, as well as on the body.

It should be pointed out, however, that Haile (1947 b, Fig. 11) pictures a similar mask without the hour glass figures which belongs to Red God or Xasceci, who also appears in the Night Chant. His body is also painted red and he is the god of racing, appearing only on the last afternoon of the ceremony (Matthews, 1902, p. 25). The mask, of Red God described to Matthews by medicine men, however, (Fig. 4) does not resemble that of Tobadistsini.

Other yeis at this site are much less certainly identifiable. At Panel 5 are two yeis within a rainbow. Hastyehogan, the House God, is described by Horner (1931, p. 125) as having a blue mask, many feathers, black staff and a white loin cloth. If the loin cloth were a distinctive feature of this god, then the figure to the right, which has what looks like a loin cloth on his kilt, might very well be Hastyehogan. Details of dress however, may vary with different appearance of the same figure. Neither Matthews (1902) or Stevenson (1891) mentions a loin cloth in his description of this figure. Stevenson depicts a Hastyehogan mask with only two feathers (Pl. CVX, No. 6) although Matthews states he may have many eagle plumes in his head-dress as does Hastyalti, or Talking God (Matthews, 1902, p. 11).

Thus, such an attribution is little more than a guess. Nevertheless, it is interesting to notice that Hastyehogan is often paired with Hastyalti, or Talking God in myths, ceremonies and sandpainting (Horner, 1931, p. 125). Talking God also is usually depicted with several feathers, as the figure in the pictograph. If this is he, however, he differs considerably from modern sandpainting representations in that he is lacking his usual white

mask, and his white feathers are interspersed with dark ones.

It should be noticed in connection with this panel that the colors of the rainbow are reversed from their usual order. Red in a rainbow encircling a painting normally acts as the outside guardian to keep the painting from danger. Red inside is used today in Evil Chasing or in chants with an exorcistic emphasis (Reichard, 1950, p. 182). More will be said about color later on.

Figure 40 is an example of a hump-backed figure at this site. Humpbacks in sandpaintings are usually equipped with horns and a staff and represent the Ganaskidi, who are associated with mountain sheep. This figure has no horns and no staff and thus it is difficult to say whether or not the pictograph in question really is supposed to represent this particular figure. Other humpbacks in the Reservoir have elaborate headdresses and play flutes (LA 3021). One Humpback at LA 3013 has possible horns. However, none can be identified as the Ganaskidi with certainty, as can the humpback figures from Canyon Largo, presumably of the same period, which have all the accessories with which the deity is usually portrayed (El Palacio, Fall 1962, cover).

Definitely horned figures occur at several sites. At LA 3036 there are two horned petroglyph figures. In a sandpainting from the Bead Chant, mountain sheep people are shown with horns like the figure in Panel 2, which do not have humps (Portfolio IV-A-B, Museum of Navajo Ceremonial Art). Similar horned figures also occur in the Mountain Chant form of the Shooting Chant, and some of these have speckled bodies (Portfolio VIII-A-10, Museum of Navajo Ceremonial Art). Horned figures also occur at LA 3022, LA 3043 and LA 4398 (Figs. 31, 45 and Pl. I).

Pointed red caps occur on so many different sandpainting figures that they are not distinctive. Thus we cannot identify the red mask at LA 3022 and the yei at LA

3037 from this feature. There are no other features that seem distinctive.

At LA 3041 there are four yeis with elaborate feather headdresses. Males and females alternate in line, the square masks and dresses indicating female forms; round-masks and kilts, male figures. They cannot be identified specifically. In arrangement they resemble Yei-bich-ai dancers, but the headdresses, probably of eagle feathers, show strong resemblance to figures from the Mountain Chant pictured in Portfolios II-2, III-6, III-9, III-15, VIII-A-6 (Museum of Navajo Ceremonial Art). In these paintings five eagle feathers may occur on both male and female figures, although some males have only three. As in paintings from many chants the yeis hold aspergils or rattles in this rock painting. The background of blue triangles in the pictograph resembles rain clouds, stacked in a similar manner, in the Mountain Chant and other sandpaintings.

Figures from the other panel of four yeis of Todosio Canyon (Panel 2) have not been identified. On the basis of appearance alone (for there seems to be no comparative data) one might hazard a guess that the yei-like figure at LA 3013 (Panel 9) might possibly be Spider Woman.

Outside of the yeis, several other kinds of figures deserve discussion. The stars painted on rock overhangs are of special interest. A ceremonial implication can be inferred, as they occur in ceremonial contexts in present Navajo art. Constellations are depicted in many different sandpaintings in Big Star Way, Bead Way, and the Beauty and Shooting Chants. Constellations of gods are represented on a rattle from the Night Chant (Tozzer, 1908, p. 28) and dance paddles with depiction of the Pleiades and Orion's belt come from Gobernador Phase archaeological sites (Hester, 1962). Assuming the petaled forms to have equal significance with the crossed star forms, Figure 42 from LA 3022 may possibly represent the Pleiades. Stars in similar configuration represent the Pleiades in Navajo star charts (Haile, 1947, a, Figs. 11 and p. 13).

The use, in conjunction with stars, of flower-like forms with either two or four petals is a curious feature. These petaled figures do not occur in sandpainting star fields. In sandpaintings, four-petaled forms are found in considerably more stylized form at the center of the design to indicate the homes of peaceful and subdued people (Mills, 1959, p. 54).

As for other figures, the Thunderbird at LA 4398 has already been mentioned (Fig. 51). The Thunderbird, as opposed to the eagle, always has a mask, and he is the only bird accorded this distinction (Newcomb, et al, 1956, p. 42). In Panel 4 at this site the horned face petroglyph (Fig. 31) is much like the horned faces of the sun and moon in sandpaintings. Horns give power to the bearer.

Lightning and snakes are commonly represented, as at LA 3013, LA 3022, LA 3043, LA 3017. At LA 3022 (Fig. 39) lightning arrows have been incorporated with cloud symbols. At LA 3043 arrow forms occur alone. The large figure on the upper right resembles entwined snakes in sandpaintings. A snake is also represented coiled, with the head on the outside of the coil at LA 3017. In modern sandpaintings this is a dangerous reversed form occurring in the Shooting Chant (Wheelwright, 1937, Pl. XIII). At LA 3013, Panel 6 with the encircled snakes and associated bear tracks is reminiscent of sandpaintings in the scare ceremonies from several chants in which a big snake encircles a field containing bear and other tracks. In this particular petroglyph, the spotty outside circle looks like a mirage guardian.

The strict color symbolism adhered to in sandpainting is less apparent in the Navajo rock paintings, but in many instances it is used in a traditional manner. At LA 3022 and LA 3041 the yellow line drawn across the chin of the female deities indicates that they have been fed with pollen. Green pigment used for the masks of figures from both these sites corresponds with what are usually blue masks;

to the Navajo green and blue are interchangeable. It has been explained that: "green sand was not considered necessary for present-day paintings because at a distance the mountains, the trees, and the shrubs appear to be blue, therefore, blue and green are considered the same color" (Newcomb, et al, 1956, pp. 15-16).

According to Newcomb, et al, (1956, p. 16): "red is a color of fierce power which is seldom, if ever, used as the main color or background of a sandpainting". This statement for one reason or another does not apply to the Navajo rock paintings. In every painting except the yeis at LA 3041, red is dominant. This disregard for its power may be due to several factors: either the idea of the power of red in quantities was not well established by the 1700's; the significance of the rock paintings differs enough from the sandpaintings so that the power of red does not matter; or the convenience of red pigment for use in rock paintings overcame the dangers it might have. On the other hand, we notice that red outlining, especially of the heads of yeis, is a common practice in both rock paintings and sandpaintings. This red circle indicates the life and power within (Newcomb, et al, 1956, p. 17).

We can conclude that the elements with which we have to deal correspond only with great difficulty to modern sandpainting figures. Similarities are sometimes strong enough to identify figures, and colors are used in a partially traditional manner. The total complex is somewhat different, however, from the sandpainting art of the late 19th and 20th Centuries.

Style and detail differences within the individual figures may be due to a difference in time period, as there is good evidence that Navajo art as we know it today had not reached its peak of development or evolution. Differences in layout between sandpaintings and rock paintings, a factor also important in stylistic analysis, would seem to be determined as much by function as time difference. The balanced symmetry, with emphasis on the directions, and the corresponding use of

color would seem to be aspects of sandpaintings that would be developed in a horizontal rather than a vertical art, where the four major directions have more significance.

Differences in specific use between these two types of Navajo art might also account for some differences in figure representation and combination, although both may have been used as a part of a ceremony and to illustrate the content of a myth or belief. Curing is an important aspect of modern sandpainting and ceremonies; the "power" brought by the depiction of the yei is to be absorbed by the patient. What function rock paintings and petroglyphs may have had for the early Navajo is discussed in the next section.

Function of Pictograph Sites in Navajo Culture

In the first part of this chapter pictograph figures from the Reservoir District were compared to those in modern sandpaintings. As just mentioned, although both are clearly tied in with ceremonial practices as revealed through the subject matter, rock paintings and sandpaintings do not necessarily serve the same purpose or functions within the Navajo religious complex.

In ethnographic sources, information about the use of pictographs in Navajo culture is scattered and varied in nature. Mention of rock pictures is made in some of the myths. Reichard (1950, pp. 443-445) records a mythical description of the Hunchback God which involves a deep canyon with steeply terraced cliffs and paintings of mountain sheep on the walls. This description fits well a section in the Canyon Largo complex which has figures of the Ganaskidi abundantly represented on the cliffs for a radius of several miles.

Myths also make reference to the Twin War Gods site, LA 3017, within the Reservoir, in regard to happenings after the Twins slew the Monsters:

The celebrated twins went to a place called Tho-hyel-li, the junction of

the two rivers in the valley of the San Juan, where their images may yet be seen reflected in the waters. They still dwell in a mountain cavern near this place (Matthews, 1883, p. 224).

In describing Nayenezgani, or Monster Slayer, it is said that:

Prayers and sacrifices may be offered to him at any place, but his home is at To'yetli, the Junction of the two rivers somewhere in the valley of the San Juan, and warriors who desire his greatest favor, before setting out on the war path, go there to offer prayers and sacrifices (Matthews, 1902, p.20).

From the Shooting Chant myth, Wheelwright records the following, probably about this site:

At the place of Separating Water /possibly a meeting place at San Juan River, used by Navajo chief men until recently in emergencies to obtain oracles/ it was decided to have a meeting and Iknee, the Thunder Bird and the Water Monster were in charge. In four days, all the Gods came to this place, also the animals and birds, and the four holy people. and in the evening the two sons of the Sun came. They said that now the monsters were killed they should plan how the people should live on this earth and the order in which ceremonies should be given (Johly, B' Yash and Wheelwright, 1958, p.21).

According to some medicine men, this is where the story of the Night Chant starts (Van Valkenburg, 1941, p.155-156). There was once supposed to have been, in the middle of the stream, a large rock which was never covered by floods. On it are reported to have been the footprints of Naye'nezganih, or Monster Slayer, but this rock was washed away in the flood of 1912. Also petroglyphs of the Twin War Gods said to have been made many years ago on the south bank of the river canyon, were covered by large slabs of rock during the landslides resulting from the same flood. It is impossible to know if these were the

painted Twin War Gods that are known today, or whether there was another set of depictions in this locality.

Thus, we know that there is an intimate link between some of the pictographs and certain myths and mythical beings. In addition, such sites were often used as shrines. This does not tell us, however, whether the idea of the sacredness of the spot was developed first and the paintings made to commemorate it, or whether the paintings were made of deities, and repeated ceremonies gradually led to the holy attribution of the locality, traditionally passed on through myths. In the case of the Twin War Gods site, perhaps the former is the case, as the confluence of the waters here as a geographic phenomenon seems to have some significance of and by itself.

In addition to reference to the Twin War Gods site in myths, the spot has been used by the Navajo as a shrine in recent times. An interview with Mr. Manuel Lucero (1959, personal communications), a long time homestead resident at the Pine and San Juan River junction, has produced the following ethnographic information about the use of the Twin War God shrine, LA 3017. Until the 1950's, a group of Navajo Indians would occasionally visit the pictograph panel during especially dry summers when crops were growing poorly. They usually stopped by Lucero's house and sometimes brought him small gifts before going over to the shrine in the evening. Lucero never observed the all night ceremonies but on a clear night he could hear chanting at his home which is 0.85 miles to the northwest of the shrine. The site itself gives evidence of repeated use. Bison are pecked over obscured and faded yeis, and new yeis pecked over the bison.

Other sites in the Reservoir that show continued use are LA 3022 and LA 4299. At both sites the cliff has been smoothed off, probably both in preparation for the execution of figures and to erase old figures before depicting new ones. It is impossible to tell, however, whether the practice of

ritual obliteration used with modern sand-paintings and some kiva murals was in practice here. As the subject matter involved in these sites is religious in nature, it is felt that these sites, too, were shrines visited for ceremonial purposes.

Other sites with yeis and other figures of ceremonial significance do not show evidence on the cliff of repeated use. It is impossible to tell whether or not such sites as LA 3036, LA 3037, LA 3041, LA 4398, and LA 4413, were visited repeatedly. Such sites may or may not have been used as actual shrines.

Recurrent visits do not imply changes in the pictographs. Navajos sometimes prayed with their hands pressed into hand-print impressions in a rock (Reichard, 1950, p. 558). A Navajo sacred cave on the present Navajo Reservation contains paintings of Pueblo origin which are reported to be records of the Sun God's teachings, left by the Yei-bich-ai. There is evidence that Navajo ceremonies are held there, as items from an altar have been found, but the wall paintings are left alone (Gardner, 1940, pp. 41 ff.)

In addition to the use of pictograph sites as shrines, there is some evidence that some pictographs may serve as mnemonic devices. Notes of Louisa Wade Wetherill state "...legend goes that they [the Navajo] at one time put several of the drawings of the paintings on the rock in a cave somewhere to the south of here (Kayenta) so that even if they lost all of the medicine men...they would not lose all of the paintings (Wyman, 1952, p. 13).

In recent times symbols similar to these in sandpaintings have been used by the Navajo for recording prayers and memorizing ritualistic procedure (Newcomb, et al, 1956). They are painted on cloth with water colors or colored pencils. The practice, however, is not known before 1950 (Newcomb, et al, 1956, p. 52).

As Newcomb points out, the use of permanent records for ceremonial know-

ledge is contrary to the usual Navajo attitude. He names acculturation as an important stimulant to overcoming this tradition, as there has been a recent need to preserve knowledge, to be able to learn it faster (Newcomb, et al, 1956, p. 52). It is impossible to know, of course, whether or not any of the pictographs in the Reservoir served in this manner. If used for mnemonic purposes as related by Wetherill is correct, it is possible that the custom has been long established. Or it may be a practice once used, stopped and resumed again due to acculturation pressures.

Nevertheless, the fact remains that in the 1700's abundant records of the ceremonial figures were made in permanent form on the cliff walls, not only in the Navajo Reservoir District but also in the country to the south, where it is even more prolific. There does seem to have been a shift in attitude between then and now towards the desirability of recording such figures in a permanent manner.

Lastly, it ought to be mentioned that some sites with Navajo pictographs lack the obvious religious symbolism of those discussed above. Sites LA 3016, LA 3047, LA 3496, LA 4054, LA 4055, and LA 4072 contains representation of animals, hand prints and animal footprints. The subject matter seems to be more secular in nature, although it is very possible that representations of animals and tracks could have been used among the Navajo for magical purposes of inducement, as they have been discussed in relation to the Pueblo work. The sandpainting tracks are considered powerful for exorcism, or they may show who lived in a certain place or walked in a certain direction (Newcomb, et al, 1956, p. 34).

Cultural Interpretations

Now that we have analyzed the Navajo pictographs in their more specific aspects, it would be well in a summary of the information already discussed to see what it tells us about larger aspects of the culture of which the pictographs are a part.

It has been established that the Twin War Gods; the Thunderbird and horned son or moon, Tobadsistini (or Red God); and star lore have played an important part in the religious complex of Navajos for at least two hundred years.

Other yeis were also important through this time, possibly some which can be identified as Spider Woman, Hasty-ealti and Hastyehogan. The Ganaskidi were important just to the south and probably in the Reservoir as well. Snakes, lightning arrows and other features now common in sandpaintings were used then. Analysis of ceremonial paraphernalia obtained from archaeological sites indicates that the Night, Witch, Mountain Chants and the Enemy and Antelope Corral Ways were practiced in the 1700's (Hester, 1962). The material culture recovered includes dance paddles, a wooden ceremonial belt, two ceremonial masks, pahoes and prayer sticks, poles, hoops, pipes and bird fetishes. From the paintings we can add corn ears, aspergils, ceremonial wands, kilts, sashes, necklaces, earrings and elaborate feathered headdresses of various kinds.

In addition to piles of rock, twigs, stone enclosures, designated prehistoric ruins and certain geographic features, pictograph sites were sacred to the Navajo as shrines in this period. The existence and use of decorated shrines indicates that art, then as now, was important in religious rites. Probably art served somewhat the same function, at least in some instances, in bringing the power of a deity or natural phenomenon into close range and control through its representation. The art itself indicates, in the sensitive balance of painted colors and forms to create pleasing designs, despite the great amount of detail for ritualistic reasons, that the art tradition had undergone considerable sophistication and development by the 18th Century. The refinement in painting technique and the subtle balance of color mass and detail in the rock paintings at LA 3041 and LA 3022 suggest a skilled painter, such as the medicine men who make modern sand-

paintings. Today only the medicine men, with helpers who have been initiated into the particular ceremony concerned, may do the actual rendering of a sandpainting (Newcomb, et al, 1956, p.44).

It is evident by now that at the time the Reservoir pictographs were made, Navajo religious art styles had not stabilized as they have since the first sandpaintings have been recorded. Yeis and other religious figures are not always in the same pattern, and it is also evident from what is known about the development of Navajo art that changes took place during the next 100 to 150 years to end in a crystalization of style considerably more conventional and abstract than that found in the Reservoir rock art.

Thus, the Reservoir figures seem to indicate a transitional stage in the development of modern Navajo art, possibly caused by intensive Pueblo contact. Style, also, can tell us something of the recent history of the people concerned, especially in regard to contacts. The Pueblo influence has already been discussed at some length.

Judging from the small amount of mural material available, however untimely, it appears that the Navajo work is closer stylistically to the Kuaua murals on the Rio Grande than to the murals from other districts. Rio Grande figures are arranged in linear sequence, usually in frontal position, and there is a pre-occupation with masks as in Navajo work. Likeness to the more elaborate curvilinear themes found in Pottery Mound and Awatovi are lacking in the Navajo art. Stepped figures, arrows, Thunderbirds and eagles are common themes from both Kuaua and 18th Century Navajo material. It is suggested on the basis of this scanty Pueblo evidence that perhaps paintings by the Eastern Pueblos had the greatest effect in influencing the Navajo art tradition. Corn (Cutler, 1961, personal communication) and pottery (Dittert, et al, 1961, p. 154) support this view that earliest Navajo contact was with the Eastern Pueblos.

CHAPTER VI

SUMMARY AND SUGGESTIONS FOR FUTURE RESEARCH

The present study raises many more questions than it answers; some of these immediate questions, as well as some of broader consequence are discussed in this final chapter.

In review, the subject matter of the Pueblo material, consists largely of human forms, sometimes combined with animals to make up a hunting scene. Magic concerned with fertility and food gathering success seems to have been a possible function of these representations. Types of anthropomorphs in the petroglyphs of the Navajo Reservoir differ largely in the degree of naturalism and stylization involved, with some correspondence to the relative size of the figures. In addition, it has become clear in this study, as one would expect, that the Pueblo material is very much within the general tradition of Pueblo pictographic art throughout the Anasazi area, with local differentiations which seem to be somewhat distinctive over the whole District. The weight of the evidence suggests that most of the Pueblo figures within the Reservoir are of Rosa Phase origin, A.D. 700-900, and therefore Basket Maker III-Pueblo I in nature.

This study has been only a small start to try to place Pueblo pictographs in their proper cultural context in the habitation data on the District as known. It is felt, however, that much work remains to be done in adjacent areas to assign specific temporal and cultural attributions to the types even within the Reservoir. Furthermore, studies need to be carried out in other Anasazi localities in order securely to define types so as to discover the general pattern of the evolution of Anasazi art in

both its time and space dimensions. If such a definition of pictograph figures with Pueblo culture phases could be established, it would have several values for the anthropologist.

First, an intimate knowledge of art styles might be used as supporting data to establish or discover cross-cultural contacts. Then the functions of art in Pueblo culture could be better explained, thus lending information on another facet of total cultural understanding. Next, with systematic knowledge it would be possible to study the development of the Pueblo art tradition through its variations in time and space to learn more about the evolution and development of art itself, anthropologically. The Pueblo tradition in the Southwest lends itself especially well to this sort of study as it covers such a long period of time.

The gathering of this knowledge, combined with studies of other kinds of art, such as pottery, would make art and culture studies possible through a long time span. This kind of research has been pioneered on a synchronic level by Mills (1959) for the Navajo and by Levine (1957) for the Upper Paleolithic.

These last ideas apply equally to the shorter development of Navajo art. The Navajo pictographs in the Reservoir are from the Gobernador Phase, A. D. 1698-1775. They consist largely of figures of yeis and other elements from a religious context, together with quadrupeds and animal tracks. Some sites function as shrines, and it has been suggested that magic and mnemonic use may have been the function of others. The figures are

rendered in a somewhat dynamic style which is in a state of flux without the rigid standards of representation found in modern Navajo religious art. Yet yeis, quadrupeds and other elements are obviously within the tradition of the modern sandpainting figures both in style and subject matter. Pueblo influences are evident in figures which disappeared or became less obvious in modern art, which was crystalized by 1880.

In comparison with Pueblo material, the known history of Navajo art is short and so far limited to the Gobernador Phase and after. Future studies conducted in Dinetah areas should attempt to see if Dinetah Phase pictographs can be defined, and if so, what aspects of these are carried over into later art and how these were maintained or modified after Pueblo contact. Such findings would be interesting to correlate with other cultural changes after 1700.

It has been mentioned earlier that the Gobernador Phase pictographs in the Navajo Reservoir are only a sample of the similar art work produced at the same time in adjacent localities. In order to have a complete understanding of the art of this period extensive studies should be undertaken in the Canyon Largo and other districts where the presence of Gobernador Phase pictographs can be established.

One of the areas of interest from this period is Canyon de Chelly. Hogans have been dated from there at A.D. 1758,

1766, 1770 (Hurt, 1942, p.89). This means that the Navajo occupied this District contemporaneously with the end of the Gobernador Phase occupation in the Reservoir. It has been suggested that there was a split among the Navajo prior to the Gobernador Phase and that the Navajos who went further west had less intensive Puebloan contacts (Hester, 1962). If 18th Century art in De Chelly could be distinguished from later Navajo pictographs, the effects of Puebloan contact and the resulting changes might be more easily defined for districts farther east.

"Planetaria" are found in both De Chelly and the Reservoir, but the numerous yeis common in the eastern region seem to be lacking in De Chelly. A hypothesis to be tested is that these star groups and what they involve were brought into the Southwest with the Navajos and thus appear in both localities; and, on the other hand, the yei concept was stimulated by Puebloan contact and thus arose early only among the Navajos in regions where the contact occurred.

In general there seems to be a secularization of Navajo pictographic subject matter; as time advances from the Gobernador Phase, extensive religious themes are less common. A study of Navajo rock art of these people moved south and west away from northern New Mexico would provide an interesting basis for studying the development and changes in Navajo art over a 200 year period.

APPENDIX A

MATERIAL CULTURE ITEMS SHOWN IN PICTOGRAPHS

PUEBLO

Chest ornament - LA 3013, 3015 (not illustrated), 3016, 4398
Bow - LA 3015, 3042, 4072, 4398
Arrow - LA 3015, 3042, 4072, 4398
Flute - LA 3042, 4072
Club (?) - LA 3015
Headdress
 Single feather - LA 3013, 3015, 3044, 4072
 Rabbit-eared or one with two feathers on either side of head - LA 3015
 Large helmet type - LA 4398

NAVAJO

CEREMONIAL CLOTHING

Headdresses

Horned - LA 3013(?), 3022, 3036, 3043
Feathered
 Single feather - LA 3017, 4413
 Many feathered - LA 3013, 3017, 3022, 3036, 3041, 4413
 (LA 3022 and 3041 clearly depict eagle feathers)
 Plains type - LA 3022(?), 3496
 Red pointed cap - LA 3037
 Circle apparatus - LA 3022

Masks

Circular - LA 3022, 3041
Rectangular - LA 3017, 3022, 3041, 3496, 4413
Conical - LA 3022
Necklaces (sometimes with pendants) - LA 3017, 3022, 3037
Choker necklaces (?) - LA 3022, 3041
Mantas or dresses - LA 3022, 3041, 3496
Kilts - LA 3017, 3022, 3037, 3041, 4413
Sashes (mantas, kilts and sashes may be tasselled) - LA 3022, 3037, 3041, 3043
Loin cloth (?) - LA 3022
Wrist and knee tassels - LA 3022(?), 3041
Moccasins - LA 3022, 3041

CEREMONIAL APPARATUS

Flutes - LA 3021
Dance paddles - LA 3017, 3022, 3036
Corn - LA 3022
Feathered wands - LA 3022
Rattles (?) - LA 3041
Aspergils - LA 3041
Shell beads - LA 3022
Pollen (pollen line on base of female masks) - LA 3022, 3041
Body paint (assumed from depiction of red figure at LA 3022 and blue male figures at LA 3041 and what is known of body paint uses from ethnographic sources)

MISCELLANEOUS

Reins - LA 3017 (not illustrated)

APPENDIX B

TABLE OF SITE DATA

SITE	LOCATION	PERIOD	CHARACTER OF SITE	ELEMENTS	SITUATION
LA 3013	T 30 N, R 8 W	Pueblo and Navajo	Multi-paneled petroglyphs.	Pueblo - largely anthropomorphs Navajo - mythical beings, shields and other mythical figures.	Lowest cliff
LA 3015	T 30 N, R 7 W Sec. 17	Pueblo	Multi-paneled petroglyphs.	Human groups, spirals, tracks, one hunting scene.	Lowest cliff
LA 3016	T 30 N, R 7 W Sec. 8	Pueblo and Navajo	One band petroglyphs.	Pueblo- broad-shouldered man Navajo - animals.	Cliff of 3rd bench above river
LA 3017	T 30 N, R 7 W Sec. 17	Pueblo and Navajo	Multi-paneled petroglyphs and paintings and combinations of both.	Pueblo - anthropomorphs. Navajo - Twin War Gods, yeis, bison, horses, eagle, corn.	Lowest cliff
LA 3021	T 31 N, R 7 W Sec. 18	Navajo	One panel, paintings.	Three humpback flute-players. One other figure.	Rock shelter, rincon in side canyon
LA 3022	T 31 N, R 7 W Sec. 30	Navajo	Multi-paneled petroglyphs and paintings.	"Planetarium", yeis, and other mythical figures.	Lowest cliff face
LA 3036	T 32 N, R 7 W Sec. 18	Navajo	Isolated petroglyphs.	Mythical beings.	Lowest cliff
LA 3037	T 32 N, R 7 W Sec. 19	Navajo	One panel, combination of painting and pecking.	Yeis	Lowest cliff
LA 3041	T 32 N, R 7 W Sec. 19	Navajo	One panel, paintings.	Four yeis.	Rock shelter in lowest cliff
LA 3042	T 30 N, R 7 W Sec. 7	Pueblo	Two panels, petroglyphs.	Anthropomorphs, flute players, hunter and animals.	Lowest cliff
LA 3043	T 31 N, R 7 W Sec. 19	Pueblo and Navajo	One large, somewhat scattered panel, petroglyphs.	Pueblo - human figures. Navajo - yei and undeterminate forms, possibly ceremonial. Also, hand, track, lightning, arrow and corn.	Lowest cliff

LA 3044	T 32 N, R 7 W Sec. 20	Pueblo	One large panel, petroglyphs.	Largely human figures, some birds, animals.	Cliff below second bench
LA 3046	T 30 N, R 7 W Sec. 30	Pueblo	One panel, two scattered figures, petroglyphs.	Anthropomorphs.	Lowest cliff
LA 3047	T 31 N, R 6 W Sec. 4	Navajo	One panel, petroglyphs.	Large foot, animals.	Rock shelter in talus boulder
LA 3048	T 31 N, R 7 W Sec. 32	Pueblo	One panel, petroglyphs.	Anthropomorphs.	Lowest cliff
LA 3496	T 30 N, R 7 W Sec. 6	Pueblo and Navajo	One large panel, two isolated figures, petroglyphs.	Pueblo - anthropomorphs. Navajo - yeis and bison.	Lowest cliff
LA 4054	T 30 N, R 7 W Sec. 7	Navajo	Scattered figures, adobe.	Hand prints, and unintelligible marks.	Rock shelter lowest cliff
LA 4055	T 30 N, R 7 W Sec. 7	Pueblo and Navajo	Several small panels, petroglyphs and paintings.	Tracks, eagles, humans.	Rock shelter lowest cliff
LA 4072	T 30 N, R 7 W Sec. 17	Pueblo and Navajo	One large panel	Pueblo - humans, flute players, animals. Navajo - animals.	Cliff of 2nd bench above river
LA 4398	T 31 N, R 6 W Sec. 17	Pueblo and Navajo	Multi-paneled, paintings and petroglyphs.	Pueblo - humans, animals, zigzag. Navajo - "planetarium", eagle yei, horned face, some tracks.	Lowest cliff
LA 4413	T 33 N, R 5 W Sec. 33	Navajo	One panel, petroglyph.	Yeis, corn plant, border decoration, horseback rider, animal tracks.	Talus boulders

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