

A SURVEY OF NAVAJO ARCHAEOLOGY

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The Navajo Indians of New Mexico and Arizona represent one of a number of peoples speaking dialects of Athapaskan, a widespread speech family in western North America, of which there are three main sections. One of these is in a more-or-less continuous area in the lake and mountain country of western Canada. The second (actually a series of discontinuous units) consists of Indian bands in the Pacific Coast region. The third, the Apachean or Southern Athapaskan, comprises the Navajo and Apache Indians. Apachean in turn is divided into two main linguistic segments, reflecting certain non-linguistic cultural similarities and differences. In the west, extending from the Four-corners area through western Arizona, are the Navajo, Tonto, White Mountain, San Carlos, and other Apache groups. The eastern Apachean-speaking peoples (sometimes called Lipan) are for the most part east of the Rio Grande. This division includes the Jicarillo (Ollero and Llanero) of northern New Mexico, the Mescalero of southern New Mexico, and the Lipan of west Texas.

The western Apache groups differ from those of the east not only dialectically, but also in appearance of clans, greater emphasis on agriculture, and in certain religious emphases — things that suggest greater contact with the Pueblo people of the Southwest.

NAVAJO-APACHE ORIGINS

Though the date of the first arrival of the Apachean peoples in the southwestern area is uncertain, it is probable that the ancestors of the present Navajo-Apache had reached the region by the time of first Spanish exploration. It has been suggested that either Athapascans or Utes forced the Pueblo retreat from southern Colorado and Utah in the 12th and 13th centuries. Although it is probable that the Pueblo Indian exodus was the result of other factors, it may be that hunting-gathering groups rapidly moved into the vacuum left by the retreating Pueblos.

There is a suggestion of possible invasion by Athapaskan-speakers or by some other outside peoples from remains of the *Gallina* culture. From the 9th to the 12th century the Gallina people lived in the high country north of the Jemez Mountains in New Mexico. This region was extremely important in aboriginal days because it lay across the main land route from the upper Rio Grande to the San Juan River. The Gallina culture, though basically Pueblo, shows a number of non-Pueblo traits, especially in the stone-work and ceramic traditions.

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This fact is particularly important in terms of the Athapascan problem. The most striking Gallina ceramic form was a pointed-bottom utility pot decorated by striating with a corncob. Hibben has suggested an eastern origin for this complex:

Woodland affinities [are] strongly suggested by the conical-bottomed shape of the Gallina utility vessels and augmented by the occurrence of trade sherds of cord-marked ware. . . . Certain other features of the Gallina complex add to such a supposition. For example, the architectural features, the great use of bone and antler, chipped knives, and clay pipes of non-Pueblo forms, as well as the physical type of the Gallina people themselves, all seem to argue for a non-South-western or, at least, non-Pueblo origin for the Gallina complex.¹

The important point in terms of the problem here is the fact that Gallina utility pottery is practically indistinguishable from 18th and 19th Navajo utility ware. As Hibben points out, however, this ceramic type has a fairly wide distribution:

[In addition to Navajo and Woodland] pointed-bottom vessels occasionally occur among the Zuni and Hopi. There is a single example from Pueblo Bonito in Chaco Canyon and another has been found in the Piedra district of Colorado. There is even the possibility of Great Basin affiliations on the basis of this trait alone.²

The relationship of Gallina people to Athapascan-speakers remains obscure. It is possible that the Gallina Indians were the actual ancestors of the Western Apache. This seems somewhat unlikely in view of the Pueblo-like character of Gallina culture. The latter group, however, may have influenced early Apacheans. It has even been suggested that the Apache-speaking nomads may have destroyed Gallina culture (the Gallina land was decimated by warfare of some sort).

Theories as to the relation between these nuclear Apacheans and Gallina depends in part on an assumption that the former migrated from the north and east. The classic attitude is that these proto-Navajo and Apaches came southward skirting the east fringe of the Rockies and entering New Mexico from the high plains. This idea is based on the fact that in early Spanish days a number of the Apachean groups were north and east of their present positions. Such a migration (presuming it began by the 13th century) *could* account for Gallina warfare and for the specific cultural similarities of modern Navajo to the Gallina.

More recently the suggestion has been made that Southern Athapascans drifted southward through the intermontane area, entered the Four-corners region, and then spread to the eastern slope of the Rockies. This position has been adequately summarized by Husher and Husher:

. . . we feel that the present evidence . . . justifies the hypothesis that a considerable part of the Southern Athapascan migration was via the Intermontane region and adjacent Rocky Mountain

¹ Hibben, 1949, p. 202.

² *Loc. cit.*

foothills to the east (but still west of the Continental Divide); that the ancestral Athapaskan bands brought from the north a simple hunting culture and a circular or at least curvilinear stone house often built in prominent locations, subsequently diffused to some neighboring groups; that their archaeological remains will be distinguished by emphasis on percussion flaking, lack of the stone ax or maul, lack of specialized mano-metate forms, use of a coarse sand or pebble tempered pointed-bottom pottery, use at some sites of a distinctive and archaeologically identifiable roof-construction [a steeply conical roof braced with sandstone slabs], use of a distinctive petroglyph style; and that sites showing various degrees of intergradation with the Pueblo should be expected from widely scattered points on the Northern Periphery, dating from early Pueblo times at least to the end of the Classical period.³

A more specific tie-up of Athapaskan and a particular northern Utah culture — that which produced Promontory Black pottery — is suggested by Steward, who writes: "If hostile Invaders are indicated for northern Utah, the bison-hunting makers of Promontory black pottery must be considered. If they should prove to have entered Utah from the Great Plains, they might be regarded as progenitors of the Navajo-Apache or related people."⁴

A detailed schema for the prehistory of the southern Athapaskan-speakers was advanced some years ago by Hall. He feels that the nomadic people first infiltrated the Southwest, probably before 900 AD, fighting with and perhaps intermarrying with members of the Gobernador Canyon *Rosa* culture. These nomadic invasions continued, introducing pointed bottom pottery about 1000 DA. The *Rosa* people were forced by this outside pressure to retreat to the highlands where they adopted some of the outsiders' culture traits — including their pottery — and became the *Gallina* culture. The nomads may have been the ancestors of the Navajo, at any rate the latter are first noted in the Gobernador, the old *Rosa* territory. Hall further suggests that construction of the vast pueblos in Chaco Canyon was a defensive move, forced by these same marauders.⁵

NAVAJO OR PROTO-NAVAJO SITES — SAN JUAN AREA

As pointed out by Hall the earliest known sites, generally regarded as Navajo are from the canyons (Gobernador, Largo, and so on) that drain westward into the San Juan Basin. This is also the area of the *Rosa* culture and the westernmost sites of the *Gallina*.

The first examination of "non-Pueblo" materials in the Gobernador-Largo was made after 1910 by Kidder, Morris, and Nelson, all working independently. Kidder noted and described ruins in both major canyons. He reported three main ruins-groups, two on the west side of the Gobernador ten miles from the canyon mouth and a third in Largo Canyon some twenty miles southwest of the first two. These settlements were all quite similar, built on mesa tops and con-

³ Husher and Husher, 1942, p. 88.

⁴ Steward, 1936, p. 62.

⁵ Hall, 1944, p. 103.

sisting of pueblo-like houses of irregular courses of stone masonry. Adjacent to the houses were "hogan like structures", which were

... much decayed but all show the same general features, being circular in ground plan, eight to ten feet in diameter, and made of cedar logs set in the ground and meeting at the top tipi-style. . . . They seem to have been covered with sod or earth, and to have been entered by short, low passageways of stone roofed with split cedar. From the condition of their beams they appear to be contemporaneous with the stone houses.⁶

Another architectural feature of these sites was the appearance of stone walls blocking off the narrow mesa edges on which the houses were built.

The pottery of this group included both black and two- and three-color painted wares. The blackware, from the description, seems to have been "Navajo Plainware" while the colored and polychrome pottery "is not distinguishable, in the sherds at least, from the 'modern painted' ware of the Pecos and Tano countries in central New Mexico."⁷ Still another kind of ceramics — a thin three-colored painted pottery — was unfamiliar to the investigator.

Kidder suggested that the sites in this area were made up of Pueblos living in conjunction with a people (probably the Navajo) who used a hogan-like dwelling. Kidder further felt that the ruins were from the Pueblo revolt period and represented Indians fleeing the Spaniards.

Nelson, who visited the Gobernador-Largo area in 1916, also noted a number of ruins. He mentions four sites of the type described above in the Largo Canyon, one near the mouth of Gobernador, and three near the junction of Burns and La Jara Canyons. These were all on high places, with Pueblo and hogan-like buildings, and with polychrome and glazed pottery.⁸

Dr. Earl Morris, in the period before 1920, made several surveys of sites in the large canyons east of the San Juan River, where he found a number of ruins, especially in Gobernador Canyon. At one site hogan structures had entryways to the north. Photographs taken by Morris show what is probably a tripod framework with leaning poles for the doorway.

Morris relates a story, told him by an old Navajo in 1912, that the people of the Gobernador-Largo were traditional "enemies" of the Navajo Indians. These hostile people were finally driven out by Navajo raiding parties.⁹

The recent survey of Farmer is one of the most complete studies of non-Pueblo archaeology in the area. This country, according to Farmer, is referred to by modern Navajo as *dinétah* (land of the People). The site survey made by Farmer was limited to the Largo and Blanco Canyons and their tributaries. Only the upper and middle Largo and extreme upper Blanco were surveyed, but in this area 29 sites were found. In his investigations Farmer noted all the kinds of

⁶ Kidder, 1920, p. 325.

⁷ *Loc. cit.*

⁸ *Ibid.* p. 329.

⁹ Morris, personal communication.

architectural forms previously described by Kidder and Morris. Of considerable significance was the discovery of forty-three forked-stick dwellings, of which two were excavated. The average diameter of these dwellings was 3.66 m. (c. 12 feet). The structures had from three to six main logs arranged in a conical frame with the forked ends interlocking. Other poles were piled on these to form the house walls. Doorways were usually in the east and occasionally had entryways.

A number of the sites had towers of crudely coursed stone. One example, in the Largo near Trubey's ranch, was on a flat ledge about 500 feet above the canyon floor. It was two stories in height with four rooms plus a fifth, built lean-to style, at the rear of the tower. The structure was roofed with piñon beams, brush, and sandstone slabs. The building was plastered outside and in and contained a number of "loopholes" — small openings in the sides of the tower. This building had a hooded fireplace in one of the tower rooms. Pottery found at its base suggested a date in the early 18th century.

Two stone walls were noted in the Rincon Largo (a tributary of the main canyon). These were of uncoursed sandstone and stood to a height of 1 m. (c. 3½ ft.).

Dumps were found at most of the sites. These were frequently 2–3 m. (c. 6½–10 ft.) northeast of the doorways of the dwellings, but there was no regularity of location. The trash heaps included fragments of corncob, potsherds, and bone, including horse and sheep bone.

A number of tree-ring dates were obtained from these sites. Although dating was not completely satisfactory, the material obtained suggested settlement in the early to middle 18th century.

The commonest pottery found in all areas and comprising about half the total sample was a coiled and scraped gray ware. The interior of this pottery was gray to dark gray, and the temper was sand, mica, and (possibly) ground potsherds. The forms included seed jars, pointed-bottom, and rounded-bottom jars. Decoration was limited to applied fillets of clay that formed lugs. This ware Farmer called *Dinétah Scored*. He equated this with Kidder's black ware and Keur's Navajo utility pottery (see below).

Other ceramic types included a thick-walled brown pottery reminiscent of one type of Gallina utility ware. The largest group of decorated sherds were red and black on orange that suggested Gobernador Polychrome.

Farmer also noted several modern Navajo sites, mainly in the vicinity of Haymes, four miles north of Counselors on state highway #44. These sites included the cribbed-log type of house structure and probably date about 30 years ago. In concluding his report he suggested that the archaeological material from the upper Blanco and Largo represented a merger of Pueblos of the revolt period with indigenous Navajo.¹⁰

¹⁰ Farmer, 1942, pp. 67–69, 71, 77.

Work specifically oriented to this relationship of Pueblos with Navajo was done by Keur. In 1940 she surveyed and excavated sites in Gobernador Canyon just south of the Colorado line in northwest Rio Arriba County, New Mexico. The survey, comprising parts of the drainages of Gobernador, Compañero, San Rafael, Muñoz, Frances, La Jara, and Pueblito Canyons, included some fifty sites. Two hundred and seventy-three hogan-like structures were found, of which nineteen were excavated. Most of the structures were of the forked-stick type, though stone-ring buildings were also noted. The excavated houses were more or less uniform in character. "Doorways usually face east or southeast and are marked by boulders, slabs, and/or doorposts."¹¹ A few buildings had entryways, one of which extended almost four feet inside the house. This particular entryway was lined on either side with posts.

Approximately twenty sweathouses were uncovered in this area. These were identified by the fire-reddened stones piled in semi-circular heaps.

In association with the hogan-like buildings were "pueblitos" (small pueblos) often defensive in nature and often associated with towers. The pueblitos were generally on flat mesa tops, near canyon rims, and, in many cases, on points where canyons joined. Towers showed the same features described by Farmer.

In this area Keur found considerable evidence for agriculture (corn and squash) and bones of a number of wild animals as well as those of the domesticated horse. Curiously, no sheep bones were discovered. A few metal artifacts indicated trade or other contact with Europeans. These tools mostly dated from the 17th and 18th centuries.

Pottery included Navajo Utility ware (Farmer's Dinétah Scored), Gobernador Polychrome, Pueblo wares of the 17th and 18th centuries, and sherds, almost certainly intrusive, from the Rosa culture a thousand years before. The Navajo Utility pottery made up almost four fifths of the total ware with Gobernador Polychrome forming about 15% of the total. Atypical examples include one pot with constricted neck, recurved rim, and sub-conoidal base, typical of Navajo Utility pottery but with a surface treatment reminiscent of Gobernador Polychrome.

The most important of the Pueblo trade wares was Ashiwi Polychrome. Less common were sherds of Jemez Black on White, Tewa Polychrome, Ogapoge Polychrome, Puname Polychrome, and sherds from the Hopi country — representing trade from both sides of the Pueblo area.

The time span from wood samples taken in this survey was more than a century. The earliest date was 1656 ± 20 . This came from a site (in Pueblito Canyon) containing hogan-like structures with no attached masonry buildings. At this site both Gobernador Polychrome pottery and Pueblo trade wares were absent.

¹¹ Keur, 1944, p. 76.

All of this suggests a pre-Pueblo period; surprisingly other tree-ring samples from this site date in the 18th century. The latest tree-ring date obtained by Keur was from Gobernador Knob and read 1771 ± 5 .

Keur in concluding her survey report suggested that the sites in this area represented infusion of Pueblos, presumably fleeing the Spanish, into a basic Navajo population.¹²

The writer in a survey of Largo and Blanco Canyons in 1953 visited hitherto unreported sites in the middle Largo. Two tower sites were examined, both on small canyons draining into the north side of the Largo, down canyon from Trubey's Ranch. Pottery found at these sites included a gray, scored utility ware probably identical with Navajo Utility and polychrome sherds that fell into the Gobernador Polychrome tradition. One of the tower structures stood to the height of two stories, with two rooms to each floor. It was built of uncoursed sandstone and dotted with plastered loopholes. This tower stood at the edge of a relatively flat mesa overlooking a shallow valley that drained into the Largo. No pueblitos nor hogan structures were noted, but the flat area above the valley stream and below the protective tower yielded potsherds, a mano, and several crudely made scrapers. A one-log ladder was found in place at a crack in the cliff wall leading up to the tower. It was of juniper(?) and showed marks of a metal ax. No projectile points were found and no tree-ring samples taken. A peculiar feature of these towers was their virtual identity with Anasazi towers found in the Hovenweep area of Utah-Colorado, dating from the 13th century AD.¹³

A number of workers have collected tree-ring specimens from the Largo-Gobernador area. Given in tabular form these include:

<i>Date</i>	<i>Plus/Minus</i>	<i>Area</i>
1656	20	Pueblito Canyon
1728	20	" "
1752	3	" "
1771	5	Gobernador Knob
1764	20 ¹⁴	Muñoz Canyon
1762	15	East of Counselors
1725	?	" " "
1745	10 ¹⁵	" " "
1700-1752	10	Gobernador Canyon
1754	10	Muñoz Canyon
1732	33	Gobernador Canyon
1752	3	San Rafael Canyon
1742	10	" " "
1737	10	" " "

¹² *Ibid.* pp. 76-79, 84.

¹³ Riley, 1950, pp. 341-342.

¹⁴ Keur, 1944, p. 84.

¹⁵ Farmer, 1942, p. 71.

1723-1727	1 ¹⁶	San Juan Canyon
1745 (plus x)		Largo Canyon
1745	10	" "
1762	15 (same as Farmer above)	" "
1491 (plus x)	} 20 ¹⁷	Gobernador Canyon
1541		

NORTHERN PERIPHERY

There is little in the southern Colorado and Utah sites to suggest Navajo as such. The Hushers have reported dry-masonry walls from southern Montrose County in the Uncompahgre Plateau region of western Colorado. They also found sandstone slab houses, presumably with walls of brush or skins over some sort of framework.¹⁸

Pearsall has noted circular stone (?) walls about two feet high and fourteen feet across in conjunction with petroglyphs and worked flint, also in this vicinity. Pearsall's site was about 25 miles south and east of Alamosa, Colorado, in extreme northern New Mexico.¹⁹

The ruins described by Moorehead for the Canadian River region (Texas Panhandle) may be fragments of round stone-walled buildings or possibly tipi-rings.²⁰ Renaud's sites in the Arkansas Valley in extreme eastern Colorado also suggest stone houses, but the builders are not known.²¹ Thomas, however, has pointed out that as of about 1700 there were Apache groups in southeastern Colorado.²²

CHAMA VALLEY

The Chama Valley survey of 1934-1936 produced numbers of "torreones" (towers) and what were referred to as tipi-rings. The towers seem clearly to accrue to the Gallina culture. Of the "tipi-rings" discovered in the Abiquiu area it is said:

These are the small lodge sites or house sites which aged informers of the area indicated were once occupied by Utes when Abiquiu was a center for that tribe. . . . These structures are more hogans than lodges, for they seem to have been built entirely or in part of posts and split beams set vertically on end and coming together at an apex in the center. The base of the post was further supported by a pile of boulders laid around them and by several large sandstone slabs leaned up against them to cover up some of the larger cracks.²³

¹⁶ Stallings, 1937, p. 3.

¹⁷ Hall, 1951, p. 27; also Smiley, 1951, p. 18.

¹⁸ Husher and Husher, 1942, p. 84.

¹⁹ Pearsall, 1939, p. 8.

²⁰ Moorehead, 1921, p. 7.

²¹ Renaud, 1931, pp. 95-97.

²² Thomas, 1935, pp. 18-19 *et seq.*

²³ Hibben, 1937, pp. 13-14.

Though this area is allotted to the Ute Indians, the houses described sound surprisingly like those of the Gobernador usually considered Navajo.

SOUTHERN AREA

Archaeologically the south-east extension of the Navajo is best known from the site of Big Bead Mesa in Guadalupe Canyon on the eastern slopes of Mt. Taylor. Keur explored this region and excavated at the mesa in the year 1939. She noted a number of sites in this general area. On Big Bead Mesa itself there were several groups of hogans and other type structures, notably towers and walls. These were extensively excavated in what was perhaps the largest-scale archaeological work ever undertaken on Navajo material.

One of the major features of the project was the excavation of hogans, several types of which were recorded. Keur presented these in tabular form according to architectural features and materials used:

- 1 Forked-stick type
 - (a) With stones as support at base of timber
 - (b) With large stone slabs marking doorway
 - (c) With piles of small stones or piers marking doorway
- 2 Circular stone-wall type
 - (a) Partly a stone wall and partly natural outcropping
 - (b) Large stone slabs marking doorway
 - (c) Piles of small stones marking doorway
 - (d) With some timber present
- 3 Only a circle of stones set in ground (perhaps 1 or 2)
 - (a) Partly stones partly outcropping
 - (b) Large stone slabs marking doorway
 - (c) Small stone slabs marking doorway
 - (d) Some timber present
 - (e) Only a few stones in circle
- 4 Neither timber nor stone. Site found by experimental trenching.

The forked-stick hogan was the most common at the sites. There was considerable variation in this type. Three-pole structures with poles at the north, west, and south were noted; however, five hogans yielded four principal forked sticks each, with no posts at the doorway. In the commoner three-forked-stick structures the doorway also varied: "In nine hogans, smaller forked posts were present to mark the doorway or form an entrance passage, but in only a single instance . . . were they the sole doorway structures. In three cases . . . they are used in conjunction with large stone slab markers, and in two sites . . . with piles of smaller stones."²⁴

²⁴ Keur, 1941, pp. 21-22.

The stone-wall type of hogan had a low wall of sandstone blocks with a definite break for the doorway. Frequently this type was built so as to take advantage of some natural outcropping. One example was rectangular in ground plan. Occasionally the stone-circle and forked-stick hogan would be used in conjunction; Keur reported eight such cases. It is not entirely clear how the bulk of the stone hogans were roofed, though roof timbers seem to have been used in some cases.

Doorways of the various houses were of three construction types: 1. entryway flush with side of hogan, 2. entryway extending inward into the hogan floor, and 3. entryway extending beyond the hogan.

Some of the entries of Type 1 had no special features, consisting solely of a break in the hogan circle. In other doorways of Type 1 and in all of Types 2 and 3 some special feature was used to mark the entrance. These features included flat sandstone slabs, piles of small stones, large boulders, and door posts with or without slabs or piles of stones. In the simple (Type 1) doorway the most frequent markers were large boulders, though most of the doors were unmarked. Built-in doorways (Type 2) had slabs leaned on edge to form the interior door walls. The extended doorways (Type 3) had all of the subsidiary features; slabs (7 examples), piers (5), posts (1), posts and slabs (1), piers and posts (2), and boulders (2). Most doorways were in the east, but occasionally, for topographical reasons, they faced in other directions.

The interiors varied considerably. The firepits were usually in or near the center of the room and were ovoid in shape. Floors were of earth, natural rock out-cropping, and (in one case) flat slabs of sandstone. There were twelve examples of deflectors.

Dumpeheaps in some hogan groups appeared outside the houses at a varying distance of three to twenty-seven feet from the entryways. A number of houses showed no evidence of dumps and the nearness of the cliff edge to some units suggested that trash was thrown down into the canyon. It was not clear if dumps were usually, or always, east of the houses, as is traditional in modern Navajo settlements.

A large number of sweat houses were found. They could be identified by the collection of reddened stones, probably tossed from the house after use. All sweat houses, with one exception only, were located away from the hogan groups.

Big Bead Mesa rises very sharply from the floor of Guadalupe Canyon and is excellently placed for defence. A great wall, twelve feet high and twenty-six feet in length, cut off the northwestern spur of the mesa from the remaining heights. This wall was made of dry masonry composed of large red sandstone blocks interspersed with loopholes. Other defensive features included smaller walls, tower rooms, and, at the top of the principal trail, a boulder poised to roll down on an enemy.

A number of examples of worked stone were found, consisting of manos, axes, choppers, hammerstones, and points. The projectile points were of quartz, quartzite, and obsidian and varied so greatly in type that random acquisition seemed probable. Axes and mauls were fully grooved and were usually made of igneous rock.

The most common ceramic ware found at Big Bead Mesa was Navajo Utility pottery. Gobernador and Navajo Polychrome were also found and seem to have been locally used. The trade wares included Zuni-Acoma-Laguna pottery, Puname Polychrome (Sia and Santa Ana), 18th century Hopi wares, and prehistoric Anasazi pottery. The trade and intrusive pottery types made up about 25% of the total ceramics, Navajo Utility some 74%, Gobernador and Navajo Polychrome 1%.

The occupation of Big Bead Mesa dated from 1745 ± 20 to 1812 ± 20 . A few dates were obtained with early 18th century readings (1712, 1721, 1724), but these timbers had numbers of outside rings missing and so were actually later than the readings would indicate. Chronologically speaking, Big Bead Mesa falls into the period after the Pueblo revolt and before the American occupation of New Mexico.²⁵

There are several other reports of sites in this region. Farmer has noted Navajo ruins along or near the Puerco River and in the area north and east of Mt. Taylor. These were, presumably, campsites of Sandoval's band and were occupied at the time of first American contact in the Southwest. It is possible also that some sites in this area were built by Navajo slaves of the Spanish. Hibben has reported hogan-like structures in the mesa country east of Mt. Taylor and west of the Puerco River. The writer was informed by natives of the Seboyeta area that Navajos journeyed through that country after the Fort Sumner treaty. The writer also explored parts of the region south of Cabezon peak. One large site (visited briefly by Hibben some years ago) contained eight to ten hogans, which were at the top of a small mesa and were inaccessible except by way of one narrow passage. All of the structures were stone-ring in type, and most of them had remains of a wood (probably three-stick) superstructure. In no case, however, were the foundation poles standing. Several of the dwellings had well-defined doorways, formed by leaving a gap in the stone circle. For the most part these faced to the east, though one structure was oriented northeastward. No special doorway features were noted. No trash heaps were discovered, and it seems likely that trash was tossed over the edge of the cliff; in fact, scattered sherds and bones were found on the talus below the mesa top.

In the country west of Mt. Taylor the material for Navajo occupation is by no means clear. There are Navajos in the Zuni area at the present time, especially

²⁵ *Ibid.*, pp. 21-23 et seq.

at Ramah near El Moro. Ramah, however, dates from post-Fort Sumner days. Archaeological work in the area of the Zuni-Navajo overlap south of Gallup and Fort Wingate will probably disclose more evidence of the Apachean peoples in this area. As yet little of such work has been done.

CHACO CANYON

In the Chaco Canyon and surrounding countryside early hogans have been located. Malcolm in 1937 found 48 Navajo (or presumed Navajo) sites. These were discovered, for the most part, on or around the base of Chacra Mesa, which lies about eight miles east of Pueblo Bonito. The ruins here were mostly of the stone-wall variety and appeared in several different shapes. Three main kinds of construction were used. For one type the builders utilized thin stone slabs for a fine dry masonry. A second type of building had rough uncoursed stone occasionally set in mortar, and a third type had coursed rectangular sandstone blocks with mud mortar.

Pottery in the area included Navajo Utility ware, described as fine grayware with exterior corncob striations. This pottery was normally found in the form of conical-based jars or pots. In the sites utility ceramics comprised 50% to 100% of the total collections. A "Navajo Painted Ware" was also found, sherd-tempered with medium wall thickness. The painted pottery generally had a red slip on bowl exteriors and occasionally an interior slip as well. The surface of this ware was generally well polished, and corncob marks were noticed on the surfaces of the pottery. Trade ware included Acoma-Ashiwi Polychrome and Ogapoge Polychrome. There were large amounts of intrusive pre-historic pueblo pottery.

The dates for the sites in Chaco Canyon were probably 18th century, this dating based on association with Ashiwi and Ogapoge wares. A burial excavated at the base of Chacra Mesa produced blankets and other textile. Pieces of these, examined by Amsden and Douglas, were pronounced "probably Navajo of a type made before 1850".²⁶

CANYON DE CHELLY

In the year 1941 W. R. Hurt made a reconnaissance of Navajo sites in the area of Canyon de Chelly, the center of present-day Navajo distribution. The survey included two hogan groups in the Spider Rock area of the canyon. In the first group three conical hogans were found, all of the interlocking-stick type. One of the structures had three poles standing to form the north, west, and south framework of the building, augmented by two doorway poles, leaned against the east side of the hogan. The hogan floor was excavated to the depth of a foot, and a shallow firepit had been scooped out in the center of the room. In the hogan

²⁶ Malcolm, 1939, pp. 6-7, 12-17.

interior were two large stones, one at either side of the door, to form the entry-way.

A second hogan in this group had three interlocking poles braced by large stones. A third building, "adjacent" to the first two, was not described in detail. The hogans of this group were rather large, having circumferences of 40-50 feet. Several refuse mounds were found, the largest to the *southwest* of the hogans but others in the more conventional east position.

The second hogan area lay six tenths of a mile to the north of the first. One of the structures here was a six-sided hogan, probably with a cribbed roof (though no remains of the roof were found). There was also a very large conical hogan, sixty-three feet in circumference. Nearby was what seemed to be the ruins of a four-sided hogan.

Ceramics found at these sites included plain utility ware, polychrome sherds, and a brown-on-buff pottery. The utility ware was identical with Navajo Utility, but the colored sherds were not completely identified.

The following dates were obtained for the houses:

<i>Group 1</i>		<i>Group 2</i>	
House 1, conical	1758	House 4, conical	1766
House 2 "	1758	House 5 six-sided	1770
House 3 "	1758	House 5 four-sided (?)	

These are the earliest known dates for non-Pueblo peoples in the De Chelly area. Navajo occupancy has, presumably, been constant (excepting the Fort Sumner period) for this area.²⁷

WESTERN AREA

For this region almost no archaeological material has been published. Farmer noted ruins in the Coconino Basin, possibly Navajo though the dating is not clear. Spier considers this area to be Havasupai; however, he mentions an account of the Havasupai meeting a group of Navajo near the Coconino country in the 1860's. The Navajo were fleeing from Kit Carson at the time and clearly seem to be intruders in the basin.²⁸

Colton has described square and rectangular boulder enclosures surrounding a shallow depression with doors generally to the south or southeast, found along the base of the San Francisco Mountains and in the Verde Valley. He suggests that these might be Navajo or Havasupai.²⁹ Spier has pointed out in this regard that Yavapai and/or Apache had camps in this region.³⁰

²⁷ Hurt, 1942, p. 90.

²⁸ Spier, 1928, p. 95.

²⁹ Colton, 1920, pp. 298-301; also Mindeleff, 1896, pp. 194-237.

³⁰ Spier, 1928, p. 95.

The land south and west of the Hopi Mesas is nearly unknown as far as Navajo or Apache archaeology is concerned, but it is probable that this area was traversed by Apache, Navajo, Hopi, and even Zuni Indians at various times.

SUMMARY AND CONCLUSIONS

The Navajo Indians, one of a number of Apachean-speaking peoples, seem to have entered the Southwest before 1500 AD and possibly several hundred years earlier. This migration was once believed to have followed the eastern spur of the Rockies across the High Plains and eventually into what is now New Mexico, Texas, and Arizona. Present evidence, however, indicates that these nuclear-Apacheans may have entered the Southwest from the north and west via an intermontane route.

It is not clear if Navajo and the various Apache groups were differentiated before the Apacheans reached their present homeland, but Navajo (as such) are known from early 17th century historical records.

Archaeologically speaking, Navajo sites are tentatively identified by a particular house structure — the *hogan* — and by three ceramic wares — Navajo Utility pottery, Gobernador Polychrome, and its degenerate descendent, Navajo Polychrome. Also important are subsidiary structures — sweathouses, walls, towers, and the like.

Sites that are generally considered Navajo are known mainly from the western part of New Mexico. In the area east of the San Juan River, comprising the drainages of the Gobernador, Largo, and smaller canyons, there are large numbers of probable Navajo sites. Further south in the Mt. Taylor region are a number of sites, including the large settlement at Big Bead Mesa. Sites in Chaco Canyon and in Canyon de Chelly suggest a Navajo population in those regions by the mid- to late-18th century. There are no dependable published reports on non-Pueblo archaeology of the Zuni and Little Colorado River drainages.

There is a strong suggestion that there was a population shift of Navajos from east to west in the first half of the 19th century. The Gobernador-Largo was largely deserted by 1800, and the occupation of Big Bead Mesa to the south ended about the same time. Though a few Navajo may have remained in the region of Mt. Taylor and the area immediately to the north, the major portion of these people, by the time of first American settlement, had moved to an area well west of the Continental Divide.

One final point concerning Navajo pre-history should perhaps be made. Navajo archaeology depends, in the final analysis, on the isolation of types of material culture that belong specifically to these Indians. At present it seems doubtful whether enough comparative work has been done on non-Pueblo peoples in the Southwest to form a clear opinion as to what is and what is not Navajo. Simi-

larities to the hogan, to cob-marked pottery, to the conical sweat lodge (the Navajo type) exist in many parts of western America among peoples whose archaeology is scarcely known. Under these circumstances conclusions based on "Navajo" material-culture finds must be viewed with caution.

BIBLIOGRAPHY

COLTON, HAROLD S.

- 1920 "Did the So-called Cliff Dwellers of Central Arizona also Build Hogans?" (*American Anthropologist*, ns., Vol. 22, pp. 298-301).

FARMER, MALCOLM F.

- 1942 "Navajo Archaeology of the Upper Blanco and Largo Canyons, Northern New Mexico" (*American Antiquity*, Vol. 8, pp. 65-79).

HALL, EDWARD T.

- 1944 "Recent Clues to Athapascan Pre-History in the Southwest" (*American Anthropologist*, ns., Vol. 46, pp. 98-105).

- 1951 "Southwestern Dated Ruins," IV (*Tree Ring Bulletin*, Vol. 17, pp. 25-32).

HIBBEN, FRANK

- 1937 *Excavation of the Riana Ruin and Chama Valley Survey* (University of New Mexico Bulletins, Anthro. Series, Vol. 2).

- 1949 "The Pottery of the Gallina Complex" (*American Antiquity*, Vol. 14, pp. 194-202).

HURT, WESLEY

- 1942 "Eighteenth Century Navaho Hogans from Canyon de Chelly National Monument" (*American Antiquity*, Vol. 8, pp. 89-99).

HUSHER, BETTY H. AND HAROLD A.

- 1942 "Athapaskan Migration via the Intermontane Region" (*American Antiquity*, Vol. 8, pp. 80-88).

KEUR, DOROTHY L.

- 1941 *Big Bend Mesa* (Memoirs, Society for American Archaeology, No. 1).

- 1944 "A Chapter in Navajo-Pueblo Relationships" (*American Antiquity*, Vol. 10, pp. 75-86).

KIDDER, A. V.

- 1920 "Ruins of the Historic Period in the Upper San Juan Valley, New Mexico" (*American Anthropologist*, ns., Vol. 22, pp. 322-329).

MALCOLM, ROY L.

- 1939 "Archaeological Remains, Supposedly Navajo, from Chaco Canyon" (*American Antiquity*, Vol. 5, pp. 4-20).

MINDELEFF, COSMOS

- 1896 *Aboriginal Remains in Verde Valley, Arizona* (Annual Report, Bureau of American Ethnology, No. 13, pp. 179-261).

MOOREHEAD, WARREN K.

- 1921 "Recent Explorations in Northwestern Texas" (*American Anthropologist*, ns., Vol. 23, pp. 1-11).

PEARSALL, AL.

- 1939 "Evidences of Pueblo Culture in San Luis Valley" (*Southwestern Lore*, Vol. 5, pp. 7-9).

RENAUD, E. B.

- 1931 *Archaeological Survey of Eastern Colorado* (Denver).

RILEY, CARROLL L.

1950 " 'Defensive' Structures in the Hovenweep Monument" (*El Palacio*, Vol. 57, pp. 339-344).

SMILEY, TEREH L.

1951 *A Summary of Tree-Ring Dates from some Southwestern Sites* (University of Arizona Bulletin, Vol. 22).

SPIER, LESLIE

1928 *Havasupai Ethnography* (American Museum of Natural History, Anthro. Papers, Vol. 24, pp. 81-392).

STALLINGS, W. S., JR.

1937 "Southwestern Dated Ruins," I (*Tree-Ring Bulletin*, Vol. 4, pp. 1-8).

STEWART, JULIAN

1936 *Pueblo Material Culture in Western Utah* (University of New Mexico Bulletin, Anthro. Series, Vol. 1).

THOMAS, ALFRED

1935 *After Coronado* (Norman, Oklahoma).



PLATE 1

Upper: Stone Hogan Circle, Mt. Taylor Area, New Mexico.

Lower: Remains of Hogan, Mt. Taylor Area, New Mexico.