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The Navajo Exodus

by

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Abstract

The classic Dinetah occupation ended between 1748 and 1754. Sites attributable to Navajo emigrants from the Dinetah appear in the 1750's and '60's in the south central part of Navajo country and are characterized by forked-pole hogans, stone hogans, rare pueblitos, defensive locations and differences in ceramics from the Dinetah sites. They exhibit traits transitional between the classic Dinetah complex and Navajo culture as known for later periods. Defensive, economic and religious factors appear to have been operative in bringing about the changes.

Navajo archaeology has given considerable attention to the remains found in the Dinetah, that area in the extreme northeastern part of Navajo country embracing the Blanco, Largo, Gobernador, Frances, La Jara, upper San Juan and lower Los Pinos drainages in northwestern New Mexico. It was in this region that the Pueblo refugees, fleeing Vargas' reconquest of New Mexico in the 1690's, settled among the Navajos. Indeed, the name Dinetah is a Navajo word meaning "Among the Navajos." The efforts of the local Navajos and the refugees created in this area a cultural florescence that left remains that many archaeologists have studied. (Carlson, 1965; Dittert, Hester, and Eddy, 1961; Farmer, 1942, 1947; Hester, 1962; Hester and Shiner, 1963; Keur, 1944; Kidder, 1920; Schaafsma, 1963, 1966; Stubbs, 1930). The dispersal of the Dinetah population and subsequent diminution of the spectacular nature of the remains of the earlier period are subjects which have received somewhat less attention (Brugge, 1963; Keur, 1941; Vivian, 1960).

Spanish sources attribute the emigration to two causes, missionary activity and Ute attacks. In 1748 or 1749 Fray Juan Miguel Menchero helped some Navajos move from the north to a proposed mission site south of Mount Taylor (Reeve, 1959:19-20). By 1754, the governor of New Mexico reported:

The greater part of the native Apaches of the Providence of Navajo to the west of New Mexico have abandoned it and taken shelter at Cebolleta, close to the pueblo and mission of Laguna, and in the mountain and vicinity of Zuni, fleeing from the war by which the Utes seek satisfaction for the injury done them... (Reeve, 1960:202).

Spanish sources also mention drought as adversely affecting the Navajos during this period (Bentura, 1748). Tree-ring indices show a very severe drought in 1748 and moderate drought in the early 1750's, as well as rather dry years in the late 1750's (Stokes and Smiley, 1963:14). These years were generally not as dry in the upper Little Colorado drainage (Stokes and Smiley, 1966:11), an area suggested as the destination of some of the emigrants (Reeve, 1960:202).

The problem of early Navajo distribution, prior to 1700, is of significance with relation to later events. Benavides, writing with reference to the late 1620's, described Navajo country as extending indefinitely to the west and being bordered by that of the Gila Apaches on the south (Hodge, Hammond, and Roy, 1945:85). In 1706 their country was described as extending as far south as Laguna, Acoma, and Zuni and

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as far west as Moqui (Hackett, 1937:381-83). Both these descriptions were with relation to a region called the Province of Navajo were reported moving into areas with the region earlier considered a part of this province. By mid-18th century, it would appear, the Spaniards were also greatly impressed by the peoples of the Dinétah. current usage sometimes confined the name Province of Navajo to the Dinétah itself. It seems probable that the emigrants moved into areas already occupied by Pueblo-ized Navajos.

Unfortunately, archaeology has contributed little to the resolution of this problem. Tree-ring dates prior to 1700 have been obtained from Navajo sites throughout the regions described by the earlier chroniclers and perhaps even somewhat beyond, but none of these appear in definable clusters that would provide conclusive data indicating pre-1700 occupation. Indeed, no Athabaskan sites of any sort have been conclusively dated anywhere in the Southwest in the earlier periods. Even the Dinétah Phase which Dittert and others date about 1500 or 1550 to 1700 (Dittert, Hester and Eddy, 1961:245-49; Hester, 1962:62-63) lacks criteria sufficient to establish these early dates for the sites attributed to it. The sites have been dated primarily upon the basis of negative evidence and the assumption that Dinétah Utility was produced prior to the arrival of the Pueblo refugees. Dinétah Utility, while having some non-Puebloan traits, exhibits so many Puebloan traits in methods of construction, thinness of walls, firing atmosphere and general vessel proportions that it is much more likely that it post-dates the arrival of the refugees and is a product of the strong impact of Pueblo cultures upon native Athabaskan ways during the refugee period. Dinétah Utility, Indented Variety, or Gobernador Indented, is probably the earliest of the series, is particularly strong in Puebloan characteristics (Carlson, 1965:68). We have yet to identify the original ceramic type of southwestern Athabaskans, but it does not seem likely that it will closely resemble Dinétah Utility, if pottery was indeed produced by the Navajos prior to this time.

The earliest securely dated Navajo sites in the Southwest have been found in the Dinétah where the substantial pueblitos and hogans of the early 18th century have produced several clustered series of tree-ring dates. The structures of the area show unmistakable Puebloan influence in the pueblitos and the sturdy hogans doubtless reflect the application of Pueblo ideas concerning the kind of shelter a dwelling should provide, even when built according to a non-Puebloan design. Ceramic crafts are also heavily influenced by Puebloan ideas, not only in the utility pottery, but to an even more striking degree in the decorative types, Frances Polychrome and Gobernador Polychrome (Carlson, 1965:56-57). Puebloan influence in religion (Hester, 1962) and rock art (Schaafsma, 1963; 1965) is readily apparent as well.

It is to the Pueblo refugees that we are indebted for introducing among the Navajos practices in architecture that have produced the series of tree-ring dates that give us the clusters we need in order to feel secure when assigning a date to a structure. During the first half of the 18th century, these practices diffused, perhaps in part due to a limited migration, to neighboring Navajo bands on Chacra Mesa (Vivian, 1960) and at Big Bead Mesa (Keur, 1941). They do not appear elsewhere until the exodus from the Dinétah was well under way. It is the purpose of this paper to trace this movement as it appears in sites recorded by the Navajo Land Claim Survey and to describe some of the cultural changes during the period from about 1753 to 1821. The sites used for this comparison are limited to sites recorded as a part of the Navajo Survey, but where identifiable as the same as sites reported by other workers the identity is indicated. The sites were selected to give comparative data for three periods, 1700-1752, 1753-1770, and 1771-1821.

The period from 1700 to 1752 is represented by 25 sites in the Dinétah proper and includes all Dinétah sites that can be dated during the period by tree-ring

Of these, 1 can be assigned to the Museum of New Mexico's Gobernador Phase upon typological grounds. The remaining 4 sites would be considered typologically as belonging to the Dinéah Phase were it not for the tree-ring dates. Additional sites could be added on purely typological grounds, but have been omitted in order to have samples of comparable sizes and to maintain the greatest possible temporal control of the data.

The high degree of temporal control possible for the first period is not possible with the remaining two periods. The period from about 1753 to 1770 is represented by 29 sites which can be postulated as having a part of their occupation called Dinéah Utility, Transitional Variety, a variety of pottery which is generally similar to Dinéah Utility, but with sherd instead of sand temper. Tree-ring dates suggest a very limited time span for this variety, which soon developed into the modern Navajo types (Brugge, 1963). A number of these sites were occupied for periods greater than the brief span of 18 years included here, but at most the major occupation appears to fall within the period. All sites with pueblitos located distant from the Dinéah are included in this sample. A few sites are included on the basis of very slender dendrochronological data and some of these may properly belong in the next period. (For the geographic distribution, see Map 1.)

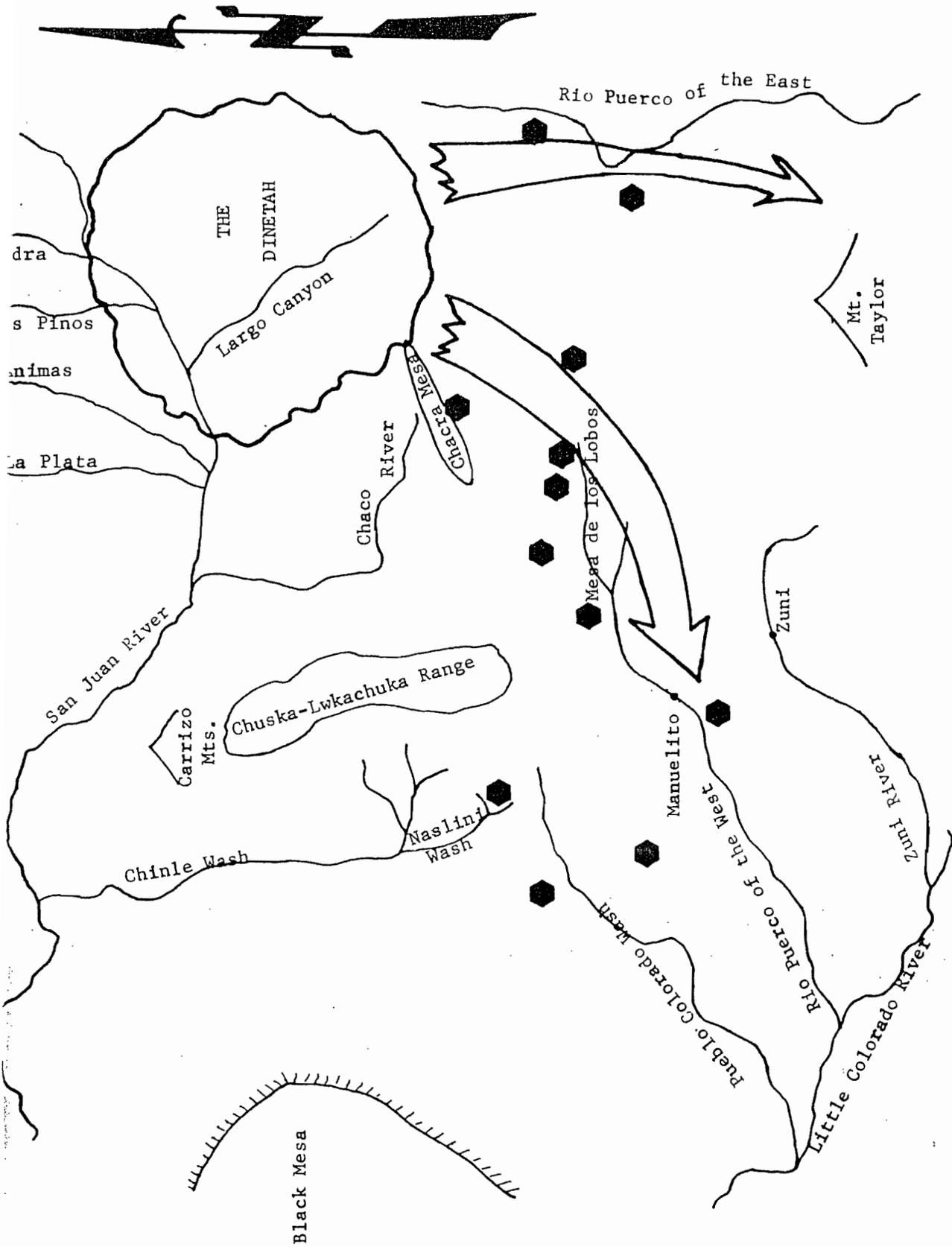
A sample of 52 sites datable by tree-ring dates was selected for the period 1771-1821. The larger number of sites is offset by the smaller number of dwelling units per site and the sample is about equal to those for the two earlier periods on this basis. The dendrochronological data for these sites is even more limited, with fewer dates for most sites and fewer clusters of dates.

A tabulation of the dates for each of these periods revealed that the sites within each sample produced far more dates within the periods they were chosen to represent, as is to be expected in samples selected primarily upon the basis of tree-ring dates. The distribution of these dates do show sufficient clustering for the samples as a whole, however, to indicate that the samples are reasonably well chosen on this basis.

	<u>Before</u>	<u>During</u>	<u>After</u>
1700-1752	12	140	1
1753-1770	32	67	8
1771-1821	27	93	1

Table 1. Temporal distribution of tree-ring dates for each site sample with relation to the periods represented.

The first factor to be considered for these periods is the percentage of sites which had defensive features, either by reason of the terrain, due to fortifications constructed by the occupants, or both. At a few of the sites the defensive precautions consisted of no more than building the hogans at the base of a mesa or crag to which the occupants could retreat and stand off an enemy. More frequent, however, were pueblitos and mesas and crags with low walls about the rims. In the latter cases, hogans might be either on top of the fortified height or at the base and hogans in both locations within the same site are not unusual. In the classic Dinéah period from 1700 to 1752 defensive features were noted for 75 per cent of the sites. Tree-ring dates suggest, but do not conclusively show, that most of the major defensive works were built after warfare with the Spaniards ceased, about 1716 (Reeve, 1958:229). If this is true, most of the defensive sites were meant to be held against Indian enemies, particularly the Utes. Few appear capable of with-



tanding attack by a Spanish army, but most would give protection from an Indian war party. The latest outside tree-ring date from any fortification in the Dinetah, a pueblito at Site E-CL-UL-Q, is 1752. While later dates have been reported, these have all been \pm dates and the true outside rings on the specimens date earlier. The 1752 date is close to the date of the Spanish report of the exodus (Reeve, 1960:202). In Chacra Mesa, also, all pueblid sites were built before 1750 (Vivian, 1960:231).

The succeeding period had defensive features at 55 per cent of the sites. This was still a period of peace with the Spaniards, but of continuing warfare with other Indian tribes, again particularly the Utes (Reeve, 1956). In the last period the proportion of defensive sites drops to 1 per cent, although if the sites of the 1752-1770 period that the continued occupation into the later period are considered, the proportion is 13 per cent. In the 1770's warfare with the Spaniards resumed (Reeve, 1959) and the defenses that served to stand off Ute attacks were no longer adequate. It should be noted that Spanish sources mention the construction of ten "stone forts" or "towers" in 1788 during hostilities with the Gila Apaches during a brief period of peace with the Spaniards (Kluckhohn and Spencer, 1940:9; Reeve, 1960:233), but these have not been identified archaeologically. It is not unlikely that this was not new construction, but repair of older fortifications, and Big Bead Mesa was probably one of the "forts," for the work was done under the leadership of the chief Antonio el Pinto who lived nearby (Brugge, 1966).

The decrease in fortifications while warfare continued raises a question as to what the Navajos did for defense at this time. A large number of sites during all three periods were so located as to be hard to find. Hogans are by their nature rather inconspicuous and deliberate camouflage was probably seldom practiced. The favorite tactic was mere concealment, locating on benches or in rincons and small side valleys, usually not too close to important trails or springs and with routes open for flight should the enemy approach too closely. The stationing of lookouts and sending of smoke signals kept the populace of a wide area informed of the enemies' movements. In the densely populated Dinetah of the early 1700's such tactics had limited value, but with the more dispersed settlement patterns of the late 1700's and over the greater extent of territory of the Navajo country as a whole they could be used with greater effectiveness. Before well armed and organized Spanish armies only the best of the fortified sites could be held, rare combinations of terrain and talent such as Big Bead, but concealment and flight were often highly successful. The sites of the period 1771-1821 include only two new defensive sites, one at the base of a small mesa to which retreat was possible and one, W-LLC-UC-DD, a stone pueblito-like hogan with loop holes, situated on a fortified point. According to Navajo tradition even the latter was completely plastered with mud for camouflage, a rare example of this strategem.

Navajo tradition is informative with regard to defensive measures. Most defensive sites are said to have been built for protection from Utes, Comanches, Apaches and even wild animals such as wolves. Some such sites were attacked by Spanish or Mexican armies but were taken by the enemy, as was Massacre Cave, or were saved by defensive war ritual. There was also ritual used to prevent the enemy from locating hogans. More frequent mention of white enemies occurs with relation to "watch-pits," fox hole-like lookouts usually built on the rims of mesas.

The average size of Navajo sites shows a decrease during the 18th century. During the first half of the century in the Dinetah the average number of dwelling structures per site was 2.9, but if the rooms of the pueblitos are figured as separate dwellings, the number is 6.4. From 1753 to 1770 the figures are 4.9 for structures and 5.4 for rooms, an increase in the number of structures, but a slight decrease in rooms per site. For the following period the number of structures drop to

3.0 per site, which would be the same for the number of rooms, all dwellings being one room hogans with the possible exception of the pueblito-like hogan at Site W-LLC-UC-DD, which may have had two rooms. These figures doubtless reflect adjustments to changing tactical problems. The fortified sites would require greater numbers of people to defend them, while the smaller sites would be easier to conceal. The change would have brought about changes in family structure as well and perhaps had profound effects upon social structure. An increase in the importance of clan in binding together the scattered family groups seems a likely result.

Average numbers of types of dwellings per site also show a change. In the classic Dinetah series the proportion of pueblitos is higher than at any other time or place. The hogans are almost entirely of the forked-pole type. The degree of conformity is exceptionally high. The structures included under miscellaneous are hogans so poorly preserved that the type could not be identified on the basis of surface evidence alone and would probably raise the figure for forked-pole hogan even further.

	Forked-Pole Hogans	Cribbed-Log Hogans	Stone Hogans	Houses	Pueblitos	Miscellaneous
1700-1752	1.7	trace	trace	-	.7	.4
1753-1770	3.7	.4	1.2	.1	.1	.3
1771-1821	.8	1.8	trace	-	-	.3

Table 2. Average number of dwelling structures per site by types.

During the transitional period pueblitos suddenly lost popularity. Again the most common hogan type was the forked-pole, but stone hogans were not uncommon and cribbed-log hogans were more frequently built. The choice between wooden or stone hogans could be partially a reflection of environmental differences, but many sites were located where both stone and wood were readily available. A comparison of the 29 sites with regard to building materials shows that 18 had only wooden hogans, both wooden and stone and 4 with stone only. The choice was clearly influenced by cultural as well as environmental factors. The three houses, two very small stone houses at Sites E-RP-UP-S and S-ULC-UP-AA and the other a two-room structure built of logs at Site W-LLC-BC-P, seem to be developments influenced by the pueblito tradition, but none could be called a pueblito. The influence of Puebloan architectural traditions is still clearly discernable during this period. It was much weaker than in the classic Dinetah, but extended over a much wider area from the Rio Puerco to the East to the eastern edge of Black Mesa.

In the late 18th and early 19th centuries even the slight Puebloan influence of the preceding period was further diluted. Cribbed-log hogans were increasing in popularity. The scarcity of stone hogans is probably more apparent than real. All sites included in the sample for this period were selected on the basis of tree-ring dates and areas with a scarcity of timber would be almost automatically eliminated by this procedure. Still, a preference for wooden hogans where the material was available does seem to be indicated. The stone hogan is the defensive structure at W-LLC-UC-DD which clearly shows the influence of the pueblito style of architecture. It is built on a crag separated from the tip of a rock spur extending into a small side drainage of the upper Oraibi Wash. The ground plan of the hogan conforms to the shape of the top of the crag, while the roof is cribbed. There are three loop holes in the portions of the walls still standing. The gap between the crag and the tip of the spur is bridged by a log ramp about 6 feet long and another room may have

occupied the tip of the spur. Walls are present, but no evidence of a roof and this section may well have been walled merely for defensive reasons.

The ceramic data for this series of sites are presented in Tables 3 and 4. The name Dinetah Utility has been retained here rather than using Dinetah Scored as suggested by Carlson (1963) because it allows for the inclusion of varieties, such as Indented Variety, Micaceous Variety, Filleted Variety and Transitional Variety, all of which are better subsumed under the general heading rather than being considered as separate types. While this violates the usual rules for naming pottery types, it much better fits the data in this series. In this analysis only the Indented Variety and the Transitional Variety are considered separately, these being those with the most relevant temporal limits. The other two varieties seem to be more important as geographic variants than as temporal indicators.

	Dinetah Utility Indented Variety	Dinetah Utility	Dinetah Utility, Transitional Variety	Modern Navajo	Gobernador Polychrome	Navajo Painted	Historic Pueblo Painted	Historic Pueblo Utility	Miscellaneous
1700-1752	.8	82.2	---	---	15.5	---	3.0	---	1.1
1753-1770	.1	24.2	52.0	4.6	.9	.5	6.0	trace	11.1
1771-1821	---	9.7	1.3	36.1	---	---	23.2	---	29.7

Table 3. Percentages of sherds from the sites sampled for the three periods.

The percentages indicate that a temporal seriation exists in the sample. Dinetah Utility, Indented Variety, appears in very small proportion in the earliest period and even smaller in the second, all of the latter being from Chacra Mesa. Dinetah Utility is predominant in the earliest period and rapidly decreased in popularity. Dinetah Utility, Transitional Variety does not appear until after 1750 and is predominant for perhaps two decades, but thereafter rapidly loses popularity. Modern Navajo types, Navajo Utility and Pinyon Utility, appear in some of the sites of the transitional period, but at most of these are clearly associated with later occupation. They are most common in the following period. Gobernador Polychrome, the earliest decorated Navajo type in this series, was the most common type in the classic Dinetah period, but thereafter was very rare. Navajo Painted appears only in the transitional period, although it is known to have continued in the later times as a very rare and variable type.

An overall decrease in pottery manufacture and use is indicated. In the Dinetah period 83 per cent of the sherds were from locally produced utility varieties. During the transitional period this decreased to 76.3 per cent and in the last period was down to 47.1 per cent. Locally produced decorated types accounted for 15.5 per cent in the Dinetah period, but only 1.4 per cent in the transitional period and none in the last period. This decrease was offset by a corresponding increase in the proportion of trade types from the Pueblos, which increased through the three periods, so that the overall proportions of decorated sherds are 18.5 per cent, 7.5 per cent and 23.2 per cent respectively. The miscellaneous category, made up largely

of prehistoric sherds, both Anasazi and Mogollon, plus a small residue of unidentified sherds, increases remarkably in the percentages. This is largely a matter of arithmetic, however, as is shown by Table 4.

Table 4 shows something that the percentages do not show, the rapid decline in pottery of all kinds during the late 18th century. It should be noted that the modern Navajo mode of disposing of broken pottery requires that the sherds be deposited in an out-of-the-place, under a bush or rock, sometimes with offerings, a practice that some informants consider analogous to burial of the dead (Brugge, 1963:22). This would limit the number of sherds that might be found on a site, but the scarcity does seem to represent an actual decrease in the use of pottery as well.

	Dinetah Indented	Dinetah Utility	Dinetah Transitional Variety	Modern Navajo	Gobernador Polychrome	Navajo Painted	Historic Pueblo Painted	Historic Pueblo Utility	Miscellaneous
1700-1752	65	6386	---	---	1203	---	235	---	84
1753-1770	11	502	1083	96	21	11	127	1	242
1771-1821	---	15	2	56	---	---	36	---	46

Table 4. Sherd counts for the Navajo sites represented in the three time periods.

Increasing mobility was certainly a factor in the decline in the use of ceramics, brought on both by renewed warfare with the whites and the rise of the livestock industry to a major role in the economy. It has previously been suggested that the decline in ceramics, along with Puebloan architectural styles, was also influenced by nativistic processes in Navajo religion, particularly with regard to Blessingway, which includes sanctions against painted pottery and stone houses, two of the most characteristic features of Pueblo culture (Brugge, 1963:21-22). Additional data suggestive of nativistic influences appear in the Morris' Dinetah sites. These nativistic movements may be characterized by the destruction of property, as is known from the Cargo Cults of Melanesia, but this phenomenon has not been prominent in American Indian movements. Carlson describes a deposit that suggests similar destruction:

The area surrounding the (burial) pits for somewhat more than 100 square feet was literally covered with fragments of broken pottery. It soon became apparent that this was not a chance assortment of sherds such as would have weathered from a rubbish heap, but a purposeful deposit representing many broken, but restorable vessels....Two of the painted vessels, the body sherds for some of the Dinetah Scored vessels, and I suspect, a good many sherds from plain ware vessels, had been discarded before this tabulation (Table 3) was made. The deposit suggests that when Site 4 was abandoned the inhabitants took such vessels as they had no intention of carrying and broke them on the surface of the principal cemetery. No pottery was found in the graves. (Carlson, 1965:21)

Carlson's Table 3 shows that the deposit included at least 58 historic period vessels, 50 of which were decorated types and 8 of plain types (Carlson, 1965, Table 3). Similar deposits have not been identified elsewhere in the Dinétah and this purposeful destruction may well have been an isolated and extreme example, but the scarcity of Gobernador Polychrome outside of the Dinétah suggests that few vessels of this type were carried away in the exodus. If the vessels had merely been destroyed to prevent their falling into the hands of others there would have been little reason to carry them all 200 yards to the cemetery. It would appear that the theological injunctions regarding the disposal of broken pottery mentioned above were coming into favor at the time. Earlier disposal of pottery in the Dinétah was in trash mounds as in pueblo culture. In most later Navajo sites true trash mounds do not exist. Each hogan has an ash heap, usually to the northeast, but any trash that finds its way into this does so accidentally. Most trash is disposed of at random, with the exception of the special treatment given pottery.

The above data show a progressive widening and dilution of Puebloan influence in Navajo archaeological sites through time. The identification of sites where emigrants from the Dinétah settled remains to be considered. Obvious features that might be expected are occasional pueblitos, a high proportion of forked-pole hogans, fortified sites, relatively large sherd collections including Dinétah Utility and Transitional Variety and tree-ring dates following shortly after the date of the exodus. The sites of the period 1753 to 1770 are considered individually below.

Of these, the best known is Site S-MLC-LP-L, located between Klagetoh and Wide Ruins, Arizona. The earliest reports of this site appear to be those of Victor Mindeleff, who visited and photographed it in 1883 (Powell, 1887:xxiv-xxv; Mindeleff, 1891: 92-92, Plate LXVI). Fewkes also reported on the site (Fewkes, 1898:434; 1904: 134). The Museum of Northern Arizona has recorded the site three times under the designations NA1018, NA2383, and NA5664. All sources used variants of the Navajo name, Kinaazini, but failed to recognize its Navajo origin. Tree-ring dates from the site have been published three times (Douglass, 1935:52; Smiley, 1951, No. 70c; Bannister, Hannah, and Robinson, 1966:24). The "tower" at this site is a typical pueblito, 2½ stories high, ends of the vegas embedded in the walls, a number of loop holes, indifferent masonry, rounded corners, and in a defensive location, all traits which are frequent in the Dinétah. Associated structures included 3 forked-pole hogans, a stone hogan, 2 burned hogans, and a corral. A total of 170 sherds were collected at the site by the Navajo Survey and the Museum of Northern Arizona has another 45 sherds under NA1018. The site has produced 15 tree-ring dates, all apparently from the pueblito. Of these, 8 dated 1759 and one at 1760. A log of dubious association with the occupation of the site has been dated at 1804 (Bannister Hannah, and Robinson, 1966:24). Tree-ring specimens from the hogans have not yet been processed. According to local Navajo tradition the site was occupied by members of the Ma'iideshgizhnii Clan, a clan of Jemez origin. It is said to have been used for defense from the Western Apaches and been utilized as a refuge until shortly before the exile to Fort Sumner, 1963-68.

Another site which has received some attention by other workers is W-CH-UC-I, up the canyon from Mazlini, Arizona. It has been recorded by Thomas Lee for the Arizona State Museum as Arizona K:3:51. The most conspicuous part of this site is a two-story pueblito with five ground floor rooms. Probably only two of the rooms had a second story. It is a typical pueblito in all respects except for the fact that some of the vegas protruded outside the walls, a feature which is rare in the Dinétah, but not unknown there. Associated structures were two small and poorly preserved stone hogans, one in a small rock shelter. Stokes and Smiley have published fourteen tree-ring dates for the pueblito (1964:22) and the Laboratory of Tree-Ring Research

has since dated four more specimens collected by Lee (Robinson, personal communication, 1966). Of these eighteen dates, nine date from 1759 to 1762. Navajo Survey collections contain 177 sherds, 81 of Transitional Variety, and Lee has collected more sherds from the site.

A third pueblito, E-C-LC-H, or Tseggha' Kini, is located near Coyote Canyon. The site has not been included in any other surveys, but was the subject of an exhibit prepared by a Navajo high school student for the 1965 Navajo Science Fair (Bitsui, 1965). The pueblito is a small three-room structure built on a spur of the rim of Toh Tlizhini Canyon and has, in addition to other typical pueblito features, a notched-log ladder. Associated structures include an eagle trap, two stone hogans, a corral and a lamb pen. One of the hogans, the corral and the lamb pen are considerably more recent than the other structures and probably date in the late 19th century. A total of 386 sherds were collected at this site, most being Transitional Variety. The tree-ring specimens from this site have not yet been processed. The pueblito is considered as associated with the Tsi'naajinii Clan, a clan of obscure origin, but often attributed to Zuni ancestresses. It is said to have been used for defense from Utes, Spaniards and Mexicans, use as a refuge continuing to the time of the Fort Sumner exile (Bitsui, 1965).

The fourth pueblito site, E-C-LC-F, near Sanostee, New Mexico, was first recorded by Stuart Peckham for the Museum of New Mexico as LA 7103, associated structures being designated LA 7976. Only the foundations of three or four rooms remain and identification as a pueblito is not definite. The associated structures consist of a forked-pole hogan and a circular windbreak. Our collections include only a few sherds, but others are in the collections of the Museum of New Mexico. The site requires further investigation to establish it as a site of the emigrants from the Dinétah with the degree of certainty possible for the preceding three sites.

A fifth site located east of Powell Trading Post, New Mexico, S-ULC-UP-MM, consists of five dwellings and a defensive wall built on a high ledge at the upper end of a sloping ridge. Four of the dwelling rooms appear to fit the description of stone hogans, but three of them are contiguous and all four are so located that a portion of the defensive wall forms the rear walls of the hogans. Our Navajo guide considered this as being a house rather than hogans, applying the same name as that given the Coyote Canyon pueblito, Tseggha' Kini. The fifth structure was a forked-pole hogan. In addition, there was a stone hogan not far below the crag. Of fifteen sherds were collected at this site, but all utility sherds were Transitional Variety. No tree-ring specimens were obtained.

Some distance down the ridge from the foregoing site is S-ULC-UP-LLL, consisting of seven stone hogans, a corral and a lamb pen. This site produced 55 sherds, most utility being Transitional Variety. According to Navajo tradition the occupants of these hogans lived here in order to have ready access to the fortified site and the two sites were contemporary, at least in part. The fortified site was apparently occupied only in time of war, which would account for the paucity of sherds there.

Another site east of Powell Trading Post, S-ULC-UP-MMN, consists of a small fortified crag with three hogans near its base, all on top of a high point near the head of a small canyon. The hogans are all probably of the forked-pole type, but were too poorly preserved to allow for certain identification. This site produced 83 sherds, most being Transitional Variety. There are no tree-ring dates from this site.

Not far to the east at Mariano Lake are two small fortified mesas. At one Site S-ULC-UP-LL, are nine forked-pole hogans on top of the mesa, while at the b.

are two more of the same type and another too poorly preserved for determination of the type. This site produced 29 sherds, with Dineta Utility predominating. Of the fourteen tree-ring dates reported, ten fall between 1759 and 1764 (Stokes and Smiley, 1966:8-9). The nearby site, S-ULC-UP-MM, also includes one forked-pole hogan on top of the mesa and a cribbed-log hogan at the base. The site produced only seven sherds of Dineta Utility. Of the four tree-ring dates, three fall between 1758 and 1762 (Stokes and Smiley, 1966:9).

Between Powell Trading Post and Rock Springs is site S-ULC-UP-AA, consisting of two forked-pole hogans, a hogan ring, and a stone house. The site lacks any obvious defensive features. The pottery included 67 sherds of Transitional Variety and 15 sherds of a partially restorable Zuni Polychrome bowl. The one tree-ring date from this site is 1755 (Stokes and Smiley, 1966:8).

In the Manuelito area are two sites of this period. One, S-ULC-UP-00, includes four forked-pole hogans built in dense woodland, possibly an example of concealment or as a defensive measure. The site yielded 86 sherds, mostly Dineta Utility. The wood collected from this site has not been processed for dates.

The other, S-ULC-UP-JJJ, includes four forked-pole hogans on a ledge high on the side of a narrow ridge, locally called Tse Dit'aah, "Sharp-edged Rock," in a clearly defensive locale. Below on the talus slope are a corral and two-forked-pole hogans. The site produced 208 sherds, most being Transitional Variety. Of these, only 26 sherds were found on the ledge. No wood has yet been collected from this site, but it would provide a good collection for dating.

Near Ganado, Arizona, Site S-MLC-LP-0 consists of eight forked-pole hogans on a small crag connected to Ganado Mesa by a saddle. The end of the crag toward the mesa is blocked by a defensive wall. Only fourteen sherds were collected here, but these include 10 of Transitional Variety. The site is said to have been visited previously by anthropologists, but no earlier collections have been located. Of the eight tree-ring dates reported, six fall between 1757 and 1764 (Stokes and Smiley, 1966:6). The site is locally called Taalahodijool, "Small Round Place Where a Sing was Held," and is said to have been successfully held against attacks by Utes, Comanches, and other tribes.

Well to the northwest on upper Burnt Corn Wash is W-LLC-BC-P. Structures include a cribbed-log hogan, a two-room log house, a ramada, a corral, and what was probably a threshing floor. Pottery includes Dineta Utility, as well as Transitional Variety, and Pinyon Utility, indicating a relatively long occupation. Two tree-ring dates of 1765 and 1798 (Stokes and Smiley, 1964:18) are compatible with the ceramic data. This is the westernmost site with strong evidence of Dineta influence of this period. Four sites not far to the south of this, W-LLC-NJ-K, W-LLC-SM-E, W-LLC-SM-F, and W-LLC-SM-N, have produced one tree-ring date each in the 1750's (Stokes and Smiley, 1964:21) and include collectively three forked-pole hogans and six cribbed-log hogans. There are no ceramic collections from these sites.

The southernmost site assignable to this period, C-ULC-CZ-C, has produced a long series of tree-ring dates with no clusters, but the latest date is 1764 (Stokes and Smiley, 1966:7). While the site probably dates in this period, at least in part, no definite Dineta influence is apparent.

It will be noted that a substantial number of the sites listed above are around the base of Mesa de los Lobos. One other site, E-RP-USJ-U, is located near the eastern end of this mesa, not far from Borrego Pass. This is another fortified mesa with a wall blocking the approach from a saddle connecting the mesa with the highlands to the south. On the mesa top are ten forked-pole hogans and a lookout. The

two southernmost hogans have been dismantled and most of the timbers were probably reused in the construction of the more northerly hogans. Most of the sherds associated with the two southern hogans are Dinetah Utility, while all sherds from the area of the presumably more recent hogans are Transitional Variety. The total collection includes 65 sherds. None of the tree-ring specimens from this site have been processed. The site is locally reputed to have withstood attack and certain small holes in the rock near the defensive wall are said to be bullet holes.

A number of sites along the eastern part of Navajo country also fall into this period. In the Dinetah proper one site, E-CL-UL-W, shows evidence of occupation through the period. The structures include three cribbed-log hogans, a corral and sweat house. Of the 35 sherds, only one is Transitional Variety. The twelve tree-ring dates range from 1630 to 1780, one falling at 1759. The nearest thing to a cluster are the two latest dates, both 1780. A long continued or sporadic occupation seems indicated and this may be a site occupied by some of the few Navajos that Spanish sources imply remained after the exodus.

Occupation of Chacra Mesa also continued. Site E-C-UC-HH, also recorded as CH-UC-N and Vivian's Site CM-139, near Pueblo Pintado is a fortified mesa with stone hogan, a forked-pole hogan and what are probably the remains of two burr hogans. A two-room pueblid structure may be no more than the ruins of a prehistoric Mesa Verde occupation or the remains of a poorly preserved pueblito. Of 260 sherds from this site, collected by the Navajo Survey and by Vivian, over half are Transitional Variety. The two tree-ring dates of 1725 and 1739 (Vivian, 1960:239) and some Gobernado Polychrome suggest that the site had an occupation beginning prior to the transitional period and that occupation was relatively continuous. If this site was occupied by emigrants from the Dinetah, they probably left well before the major exodus.

Another site in the Chacra Mesa area, E-RP-UP-M, with eight forked-pole hogans and one stone hogan, produced 93 sherds, mostly Dinetah Utility, but some Transitional Variety. Lacking tree-ring dates, the best estimate for dating the site would indicate at least part of the occupation in the transitional period.

Site E-RP-UP-S, near La Ventana, New Mexico, is located on a low bench below a defensible mesa top. The site obviously had a long occupation and the most recent hogan was probably built after the return from Fort Sumner. There are seven forked-pole hogans, one small stone house and three stone hogans. All except one of the stone hogans appear to predate Fort Sumner and the ceramic complex indicates 18th century occupation, although only 16 sherds attributable to the historic period were found. The five tree-ring dates range from 1719 to 1772 with three dates clustered between 1765 and 1772 (Stokes and Smiley, 1969:8). Occupation by migrants from the Dinetah is probable, but by no means certain.

Big Bead Mesa is well known due to the work done there by Keur (1940; 1941). Three sites were recorded by the Navajo Survey on the mesa, E-RP-MP-GG through -J. Because of their close proximity and the fact that two of these were included under one site designation by Keur, they are treated as one site here. Included are eight forked-pole hogans, seven stone hogans and one cribbed-log hogan, from which sherds were collected, about 22 per cent being Transitional Variety. Navajo Survey collections have produced nine tree-ring dates, three of which fall between 1758 and 1766. There is good evidence of occupation of this site as early as 1705 in the Spanish documentation, for in that year Navajos escaped Spanish forces by retreating to this height while the invaders destroyed their cornfields below. Some of the Navajos on the mesa had fled Spanish attacks in the Dinetah (Reeve, 1958:217-21). The high proportion of the dates in the late 1750's and the 1760's suggests that refugees from the Dinetah did join the local residents, as they had done a half century earlier, but that this time they came to stay.

To the east of Big Bead on Mesa Prieta at E-RP-MP-DD are two hogans, one forked-pole, the other cribbed-log. A single tree-ring date of 1754 is all that exists to date the site. The lack of sherds suggests that if the site dates during this period, it was probably not occupied by the emigrants from the Dinetah.

Another site near Marquez, New Mexico, produced five tree-ring dates ranging from 1723 to 1787, with two at 1755 and 1765. Structures included four forked-pole hogans, two cribbed-log hogans, a corral, a sweat house and other hogans so poorly preserved that they were not enumerated. Only one sherd of Dinetah Utility was found at the site. There is no certain evidence for occupation by emigrants from the Dinetah.

Site E-RP-MP-NN, near Canyoncito, New Mexico, with five stone hogans and abundant sherds for a Navajo site, 95, of which 67 are Transitional Variety, seems likely to have been an emigrant site. It has produced no tree-ring dates, however.

Having considered the sites individually, it is apparent that a few modifications may be made in the criteria for emigrant sites listed above. Stone hogans are relatively common in sites that give indication of emigrant occupation. Earlier suggestions that the masonry construction of pueblitos was the inspiration for stone hogans (Keur, 1941:70; Vivian, 1960:231) receive considerable support from this fact.

While most emigrant sites are productive of a fair quantity of sherds, some defensive sites appear to have been occupied only for limited periods when danger was apprehended and consequently yield limited collections. Defensive sites, because of their locations where drainage is good and disturbance at a minimum, usually have better preserved hogans than nondefensive sites and are more productive of specimens for tree-ring dating.

The sites that are most clearly those of emigrants are those around Mesa de los Lobos, on the upper Rio Puerco of the West in the Manuelito-Lupton area, and in the Wide Ruins, Pueblo Colorado and Nazlini areas. Within this area the Dinetah influence appears, in some respects, even stronger than in areas closer to the Dinetah, such as Chacra Mesa and the Rio Puerco of the East. Only in this area are true pueblitos known to have been built after the exodus. Much more survey work is needed, particularly in such areas as the Zuni Mountains, Canyon de Chelly and around the Carrizo Mountains, and excavations are essential to trace development in more detail.

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