

EXCAVATIONS AT THE POLVO SITE IN WESTERN TEXAS

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IN THE SUMMER of 1949 an archaeological field group, sponsored by the University of Texas, excavated a large house structure at the Polvo site (57D2-3) in western Texas. The previous summer J. Charles Kelley had excavated 2 structures at this site, which he reported in 1949. The site itself he identified as a component of the Bravo Valley aspect.

The Polvo site is located in southern Presidio County, Texas, some 8 miles south of the junction of the Rio Grande and the Rio Conchos, in what is referred to as the "La Junta" region of the Big Bend. The site lies about one mile to the southwest of the modern village of Redford, at the edge of the old Mexican pueblito Polvo. Physiographically, the site is located in the Redford Valley, through which the Rio Grande flows into the Cañon Colorado. Midway in the valley, an arroyo, known locally as the Arroyo Bayo Nuevo, enters the river. The site is located directly across from this arroyo, on the northern alluvial bank of the Rio Grande. Tributary streams have cut into the main terrace mass, leaving narrow valleys which are floored with the low terrace gravel. This results in narrow mesa tongues, often isolated from the main terrace, or connected only by narrow saddles. These high, flat-topped mesas adjoining the flood plains were usually the preferred locations of the prehistoric and historic groups living in the area, although in this case it was the alluvial surface itself.

The exact size of the Polvo site is not known, although it is the largest of the Bravo Valley aspect sites found in the immediate area. In general the site rises at the center and slopes downward toward the arroyo. Large refuse heaps and accumulations of fire-cracked stones can be seen scattered over the entire area. Most of the site is covered with scattered clumps of greasewood, mesquite, and cactus. From the eroded surface surrounding the excavated area a sizable surface collection of pottery and stone artifacts was made and identified in the following classes and types:

SURFACE STONE ARTIFACTS

End-notched pebbles	5
Manos one-hand, two-faced	2
Manos one-hand, one-faced	3
Hammerstones	2

Scrapers and/or blades	9
Arrowpoints, Fresno Triangular	5
Arrowpoints, Perdiz Stemmed	4
Arrowpoints, Piedras Triple-notched	17
Arrowpoints, unidentified	6
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Total	53

SURFACE POTTERY

El Paso Polychrome	7
El Paso Variant	2
Conchos Plain	141
Conchos Red-on-brown	13
Plain Brown	5
Playas Red (?)	2
Babicora Polychrome	1
Historic Mexican	48
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Total	219

To date, only a small portion of the site has been excavated. House No. 1 and House No. 2 (Fig. 75) were identified by Kelley as components of the La Junta focus of the Bravo Valley aspect (Kelley 1949). However, House No. 3 with which this report is primarily concerned is also identified as belonging to the La Junta focus on the basis of the pottery and stone artifacts but differs in type from any found thus far excavated. As a matter of fact, this house appears to be structurally unique in western Texas.

House No. 3 was a large rectangular pit house, lying parallel to Structure No. 2. The northern side of House No. 3 was eroded away; the east and west walls protruded into an arroyo bank. Measured from the south wall the structure was approximately 11 feet long. In depth the pit structure averaged 20 inches, judging from the height of a thin (3 to 5 inches thick) adobe liner plastered against the inside wall. An additional molding, some 6 inches wide and 5 inches high, was plastered around the inside wall base, and probably served as added support for the inside plaster. No opening or doorway was found, although this would not prove the absence of such as the north wall and portions of the west wall were missing. However, the lack of a door would fit into the general house pattern of the Bravo Valley aspect, leaving a roof entrance as a probable explanation.

On the hard-packed natural earth floor lay a mass of intersecting charred beams and saplings, representing burned remains of a roof structure. These ranged from 5-inch beams to small branches less than 1 inch in diameter. On the floor, midway against the south wall was a raised section of adobe 12 inches high and 30 inches square. Embedded in the top of this feature was a highly polished stone slab (15 by 11 by 8 inches). Similar adobe blocks or "altars" (without the stone inset), always found against the south wall, have been described as a La Junta focus trait (Kelley, Campbell, and Lehmer 1940: 34). Adjacent to the altar, on the west side, was a group of fire-cracked stones arranged in a circle some 20 inches in diameter. This ring was covered with loose charcoal and ash and possibly represented a ceremonial hearth. Kelley recorded a similar hearth in a La Junta structure in the lower Rio Conchos valley in Chihuahua, Mexico, although there the pit was against the north side of the altar (Kelley 1951: 114).

From the standpoint of new archaeological information the walls of House No. 3 probably

represent the most important trait found at the Polvo site. These were made of turtle-back shaped adobe "bricks" laid longitudinally from ground level and plastered together. This is believed to be the first time such walls have been reported in Texas. Similar construction was found by Lehmer (1948: 44) at the Bradfield site in the Tularosa Basin, across the Organ Mountains from Las Cruces, New Mexico, and again at the Alamogordo site on the alluvial deposits of the Sacramento Mountains, New Mexico. These sites Lehmer classified as belonging to the El Paso phase of the Jornada Branch of the Mogollon. However, Lehmer does not report that the adobe bricks from the El Paso phase were turtle-back shaped. Those from House No. 3 at the Polvo site were characterized by convex top surfaces and concave bottoms, as if the wet adobe had been shaped on the top of an oval stone, or perhaps over the knee. They were quite uniform in size and averaged about 12 by 7 by 4 inches. Another notable difference in the El Paso phase bricks was that they were set in foundation trenches dug 20 to 30 cm. below floor level

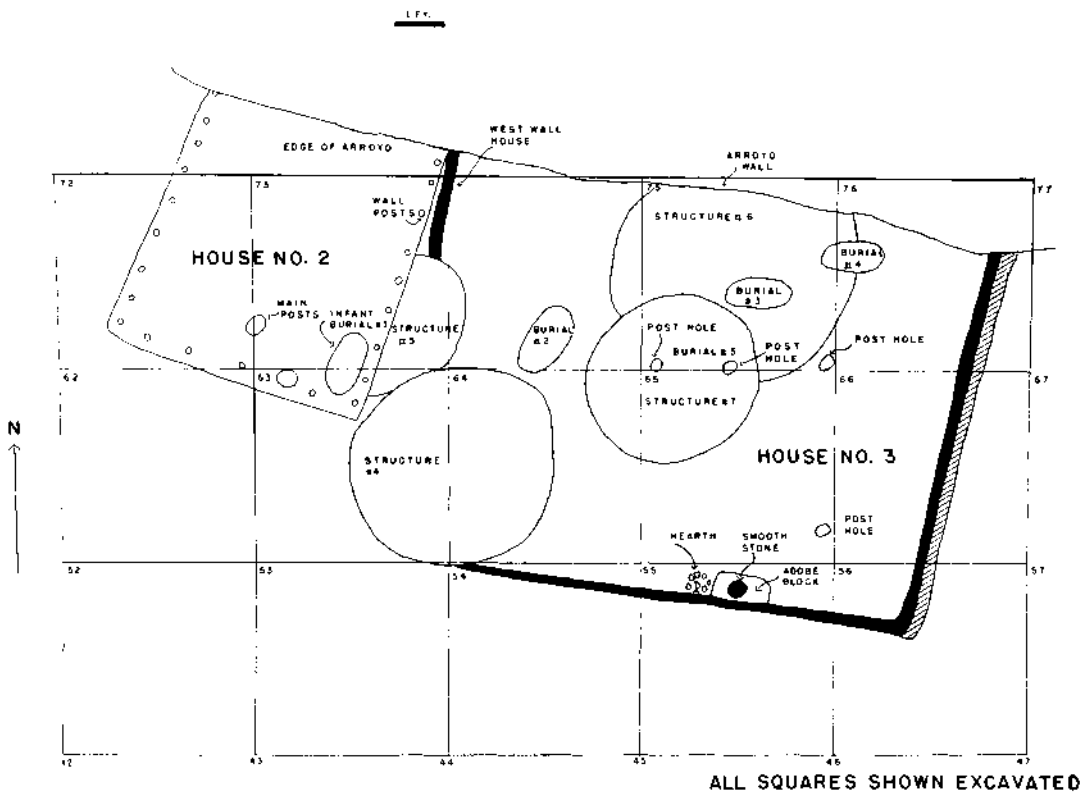


Fig. 75. Plan of houses and burials at Polvo site (57D2-3, Section VI K), western Texas.

(Lehmer 1948: 55). This was not the case at the Polvo site because the pit was lined only with a thin adobe layer. The use of the bricks presumably started at surface level, not in the pit.

At the Millington site (Shafter 7:1), which is the type site for the La Junta focus, there is additional evidence that traits from the El Paso phase were present in the area. One of the 22 structures excavated at this site was built in the El Paso tradition, which Lehmer states is "either a native copy or the product of a colony of El Paso people" (Kelley and Lehmer, n.d.). He points out that this structure bears a strong similarity to the house type characteristic of the southern part of the El Paso phase area, especially in those of the lower Tularosa Basin about 45 miles north of El Paso. Although there was no evidence of adobe lumps used in the house construction, the presence of an El Paso colony is evidence that relations existed between the peoples of the El Paso phase and the La Junta focus. This suggests that the architecture of the Polvo house may be related to the Bradfield and Alamo-gordo structures. This relationship is also borne out by the artifact assemblages.

Pedro de Castañeda, a private soldier on Coronado's expedition, recorded the house construction methods at Tiguex, a province of some 12 villages on the banks of the Rio Grande, in the vicinity of Bernalillo, New Mexico. Speaking of the adobe, Castañeda records (1907) that "... they make round balls of this, which they use instead of stones after they dry, fixing them with the same mixture, which comes to be like a stiff clay."

The Polvo site shows other features similar to the Tiguex pueblos inasmuch as the inside walls of House No. 3 were plastered smooth and painted with bands of yellow, black, red, and white colors. No recognizable forms could be detected because the thin adobe plaster was recovered in small fragments, ranging from 1 to 7 inches across. However, at least one fragment was painted with 3 colors, one of which curved and crossed over the other 2. All these bands measured about $\frac{3}{4}$ inch in width. It was from one of the ruins of the Tiguex Pueblos that Bliss (1948: 218-22) removed the Kuaua mural paintings from the walls of a subterranean kiva. Although the Kuaua murals used pre-vaillingly life forms rather than geometric forms as in House No. 3, the 4 colors found were

the same. A green color which Bliss reported as used sparingly was not found in House No. 3. Also it should be noted that the walls of this kiva were made from "irregular dried adobe balls set in adobe mortar."

From the above discussion and many other examples in the literature concerning the use of adobe balls, lumps, or turtle-back bricks in the late Pueblo periods it appears to have been a widespread culture trait. Therefore, there is little evidence to suspect an independent origin for this type of building at the Polvo site. From the central Puebloan area this trait appears to have spread southward into the El Paso phase of the Jornada Branch of the Mogollon. Since the La Junta focus is thought to represent an actual migration of peoples from the El Paso phase, along with certain local and plains influences, it is not hard to conceive of the transmission of this particular type of house structure into the area. The presence of only one example in the La Junta region is unusual, but a problem to be solved by further field investigation.

A total of 5 burials, 4 infant and one adult, were removed in the excavations. Since only one adult burial was found the skeleton remains are not considered of diagnostic importance in themselves. However, the associated artifacts, the high mortality rate, and the burial customs do give us certain information.

Burial No. 1. In brushing the hard adobe floor of House No. 2 for examination and photographing, a small cracked outline indicated the presence of a small pit structure in the southeast corner. This had been overlooked in Kelley's (1949: 94-100) excavations the previous summer because a homogeneous adobe cap blended with the floor covering. After a year's exposure the joined surfaces separated to reveal the pit of an infant burial, measuring 12 inches wide and 30 inches long, with the long axis north-south. Fourteen inches below this adobe cap an infant skeleton of undetermined sex was revealed. The position of burial was flexed on the right side, head to south.

Burial No. 2. Another infant burial pit, measuring 18 by 24 inches, was uncovered in Square 64, oriented north-south. The crumbled infant skeleton was some 12 inches below the floor level of House No. 3. No artifacts were found in association with the skeleton although 3 sherds of El Paso Polychrome were found in the fill material of the burial pit.

Burial No. 3. Another small infant burial pit had been cut 12 inches into the loose fill of a pit structure

which was below the house floor. Only a few scattered bones remained, probably those of an infant less than 6 months old.

Burial No. 4. Still another infant burial was uncovered in Square 66. The 12 by 18-inch pit had been cut into the east wall of Pit No. 6 to a depth of 11 inches. This was an infant of 6 months or less, and only small fragments of the skeleton survived.

Burial No. 5. The only adult burial was located in the center of House No. 3 in Pit Structure No. 7. The association of this burial with the house structure is subject to question although the pit structure was exposed at floor level. However, there is proof that it was dug prior to the destruction of the house, since the burned roof beams rested directly on the top of the pit. The pit itself was circular, measuring 3 feet 6 inches in diameter. The walls were undercut, leaving an overhanging lip at the top. Twenty-five inches below the top of the pit an adult female burial was exposed, tightly flexed on the right side with the head to the southwest. At the same level, or at the depth of the burial, were 3 sherds of El Paso Polychrome pottery, and lying directly on top of the skeleton were a stone bowl and pestle.

There has been no attempt, other than superficial examination, to establish physical type. Although the one adult skull was earth-warped, it appeared to be a mesocranic, and undeformed. The 4 infant skeletons were fragmentary.

All five burials excavated at the Polvo site follow the established mortuary pattern of the La Junta focus. However, this pattern is widespread in time and space through the Southwest. It is perhaps noteworthy that burial beneath house floors, along with personal property is a distinctive trait of the El Paso phase. In the Alamogordo site Lehmer (1948: 70) excavated 6 flexed burials beneath room floors. Although all the burials thus far uncovered at the Polvo site have been within the confines of a house structure it should be pointed out that only a few yards surrounding the houses were excavated. Quite probably extramural burials will be found, as they have been in other La Junta focus sites in the area.

In the excavated areas surrounding House No. 3 and in the fill of the house pit itself a variety of stone artifacts were found, all of which appear to be typical of the Bravo Valley aspect, although they do not represent a complete picture of the complex.

EXCAVATED STONE ARTIFACTS

Metates, shallow-basin; vesicular lava (1), sandstone (1).....	2
Manos, one-hand, single grinding plane.....	5
Pestle, 12 inches long, 4-inch diameter at rounded grinding end; in situ with adult burial.....	1
Stone bowls, oval, 9 by 7 by 3 inches; 1 in situ with adult burial	2
Blades, base fragments only, thin, pressure flaked, carefully squared corners	4
Scrapers, circular (3), prismatic (1), spokeshave (1), soubasse (1), scraper-gravers (4), side (16).....	26
Hammerstones, circular, flint core, used on entire surface.....	2
Arrowpoints, Fresno Triangular (16), Piedras Triple-notched (23), Toyah Triple-notched (2), Shafter Split-base (1), unidentified (15)	57
Total	99

Perhaps the most noteworthy feature of the lithic materials from the Polvo site is that no distinctive type of stone artifact represented is new; all have been recognized as traits of the Bravo Valley aspect, with the possible exception of one of the above stone bowls, which was painted inside with bands of red paint. Furthermore, no single lithic artifact can be assigned to one particular focus since the stone work appears to have been continuous throughout the aspect.

There is some evidence, although admittedly circumstantial, that the 2 metates found were set in a bin, as is characteristic of the Pueblo milling complex. Both metates are about the same size, have similar basins, were found within a few inches of each other, and both were found with the bottom surface on the 10-inch level resting upon pieces of charred saplings. Further, the coarseness of one and the relative fine grinding surface of the other would coincide with the milling bin principle.

From the above tabulation of stone artifacts it can be seen that by far the most numerous of the stone artifacts from the Polvo site were small, thin, pressure-retouched arrowpoints. The question of arrowpoint origin and relationships is one of the most baffling problems of the Bravo Valley aspect. Typologically, the Bravo Valley points are more closely related to those of the Livermore focus than to those of the El Paso phase. Arrowpoints of the El Paso phase are predominantly small, elongate-triangular, with either a straight or slightly concave base, although side- and base-notched points occur occasionally (Lehmer 1948: 62). In general the arrowpoints of the Bravo Valley are a modified Livermore type, but this is not the complete picture, as other types occur which

indicate the relationships with northern and eastern Texas. It is thought that the Jumano, who were in close contact with the Patarabueye of the La Junta region are responsible for introducing many of these influences (Kelley, n.d.). It may well be that the early Jumano culture is of Livermore origin. At any rate, from the historical and archaeological evidence the Jumano are known to have been great travelers and in contact with groups covering most of Texas. The Toyah focus of central and trans-Pecos Texas, thought to represent the archaeological culture of the Jumano, use Perdiz Pointed-stem, Clinton Contracting-stem, and Fresno Triangular points, all of which are found in the Bravo Valley. Further, one of these, the Perdiz Pointed-stem, is the dominant point type of the Frankston focus in east Texas and the Rockport focus of the Texas Gulf Coast.

At Bravo Valley aspect sites excavated in the Presidio valley and along Alamito Creek, Perdiz Pointed-stem points occur in greater numbers than any other arrowpoint type. Perdiz Pointed-stem has therefore been listed as one of the diagnostic traits of the Bravo Valley aspect (Kelley, Campbell, and Lehmer 1940: 73). But at the Polvo site this type is barely represented. Perhaps the Perdiz points of the La Junta region are all to be attributed to the Jumano, who are known to have spent so much of their time there. If so, they are probably not characteristic of the Bravo Valley aspect at all, but only of the Toyah focus (Jumano) of the region. Accordingly, the complex of arrowpoint types found at the Polvo site may be more characteristic of the Bravo Valley aspect itself than the assemblages reported from the Presidio sites.

TABLE 10. VERTICAL DISTRIBUTION OF ARROWPOINT TYPES

	Surface	0-6"	6-12"	12-18"	18-24"	24-30"
				(Floor)	(Pit)	(Pit)
Fresno						
Triangular	5	6	5	3	2	—
Piedras						
Triple-notched	17	3	4	9	5	2
Toyah						
Triple-notched	—	—	1	—	—	1
Perdiz						
Stemmed	4	—	—	—	—	—
Shafter						
Split-base	—	1	—	—	—	—
Unidentified	6	4	3	3	3	2

The Bravo Valley ceramic complex is highly complicated, due primarily to the peripheral location of the area, and early Spanish influence. Certain pottery types of the La Junta

focus have been traced up the Rio Grande into the El Paso area and show affiliations with the Southwest. A definitive classification of the later Concepcion and Conchos foci ceramics has not been reached, and probably will not be until more information is obtained regarding other pottery types, especially the Chihuahua wares. As a step in this direction the past 2 seasons work in Chihuahua and Durango have added new light to the overall picture of pottery affiliations between Mexico and the Southwest.

A total of 328 sherds was obtained at the Polvo site both from the surface and at various depths within that portion of the site excavated. Of this number 84 were found within the confines of House No. 3. The vertical distribution of pottery types, by number of sherds and depth are shown in Table 11.

TABLE 11. DISTRIBUTION OF POTTERY TYPES

Pottery	Surface	0-6"	6-12"	12-18"	16-24"	24-30"	30-36"
					(Floor)	(Pit)	(Pit)
El Paso							
Polychrome	7	2	6	32	24	1	1
El Paso Variant	2	—	7	4	5	1	—
Conchos Plain	141	—	—	—	—	—	—
Conchos							
Red-on-brown	13	—	—	—	—	—	—
Plain Brown	5	2	2	2	—	2	—
Playas Red	2	1	3	—	—	—	—
Chinati Ware	—	3	—	—	—	—	—
Ramos Black	—	—	—	—	1	1	—
Babicora							
Polychrome	1	—	—	—	—	—	—
Madera							
Black-on-red	—	—	—	3	—	—	—
Villa Ahumada							
Polychrome	—	—	1	4	1	—	—
Historic Mexican	48	—	—	—	—	—	—

It can be seen that El Paso Polychrome persisted through the excavated fill and is the predominating type among the sherds associated with House No. 3, especially from floor levels. This ware appears to be intrusive in the region, as does all the pottery associated with the La Junta focus. It is rather widespread up the Rio Grande, but to date this is the southernmost excavated site showing El Paso Polychrome.

In addition to classical El Paso Polychrome 19 sherds were found which have been listed as El Paso variants. All these sherds were much thinner than the classic Polychrome ware, and appear to be better decorated and better fired. The design and paste is that of El Paso, although the temper is fine sand. This is thought to represent a later trade pottery, or perhaps a local copy of El Paso Polychrome.

The Chihuahua culture center is represented at the Polvo site by 6 sherds of Villa Ahumada

Polychrome, 1 sherd of Babicora Polychrome, 2 sherds of Ramos Black, 1 sherd of Madera Black-on-Red, and 6 sherds of Playas Red. One questionable classification here is that of the Playas Red which is ordinarily coarse black or brown, but in this case is very fine and reddish brown. It is recognized that there is usually variation in all pottery types which could account for this difference.

Another type (?) represented by 12 sherds is listed as Plain Brown Chihuahua ware. This does not fall within the classificatory descriptions, although similar sherds were found at Shafter 7:1 (Kelley and Lehmer, n.d.), the type site of the La Junta focus. The outside is a dark reddish brown, slightly polished, whereas the inside is unpolished, and light tan in color. The smoothed-over coil marks are still visible on the outside, which in thickness range from 4 to 6 mm. The paste is dark brown, porous, coarse, and tempered with coarse sand. In general this resembles a carelessly made plain brown ware mentioned by Sayles (1936: 32-3) as being related to the Chihuahua Red wares.

All the preceding pottery types are of Southwestern origin, and appear to be trade pieces. Furthermore, they are in general traits of the La Junta focus, for which no locally made pottery is known. The lack of pottery indigenous to the La Junta focus represents one of the unsolved problems in the region. Even the evidence for local copies is far outweighed by that of actual direct trade for the pottery.

For the second period of the Bravo Valley aspect, the Concepcion focus (about A.D. 1400-1700), there is a sharp break with the previous period. The intrusive wares from New Mexico and Chihuahua disappear, and in their place is an assemblage of plain wares, red-on-gray, and red-on-brown wares. The common household pottery appears to be Chinati Plain, 3 sherds of which were found in the upper levels above House No. 3. These 3 sherds are all the pottery diagnostic of the Concepcion focus found. Several house structures thought to belong to this focus are visible on the surface in the northern portion of the site, which may yield more evidence of Concepcion occupation. Also there is evidence in the historical accounts which identifies 57D2-3 as the site of a Spanish mission established among the Tapalcolmes Indians near the end of the Concepcion focus (Kelley 1953: 42). Nevertheless, there is surprisingly little diagnostic Concepcion

focus pottery, which would indicate at most a limited occupation by this focus.

With the founding of Spanish missions in the La Junta region there is increasing evidence in the archaeological remains and historical accounts of a progressive acculturation of the native populations. Two pottery types of this general time period, known as the Conchos focus (A.D. 1700-1800), were found at the Polvo site. These were Conchos Plain and Conchos Red-on-brown sherds, all of which were from the surface.

The greatest problem of Conchos focus pottery is due to the fact that almost identical pottery continued to be made in the following Alamitos focus and is still made in the area today. However, Conchos Plain and Conchos Red-on-brown wares which occur in the Alamitos focus are in association with modern Mexican crockery, whereas in the Conchos focus they occur with Mexican Maiolica. The 141 sherds which have been classed as Conchos Plain, and the 13 sherds classed as Conchos Red-on-brown occur only with Mexican crockery at the Polvo site. Consequently, there is little evidence of a Conchos focus occupation at all, as these probably represent a later time period than that assigned to this focus. Again, the historical accounts bear this out, since the Tapalcolmes mission was recorded as being abandoned and in a ruinous condition in 1747.

The preceding pages present some new archaeological data from a west Texas site and point out certain relationships between this component and other cultures in Texas and the Southwest.

The Indian groups living in the La Junta region, known collectively as the Patarabueye, appear to have developed a culture in situ from about A.D. 1200 to the end of the 18th century. Many changes have taken place within the area, due in part to Spanish influence, but nevertheless there is a definite continuity of culture. Collectively, this culture is known as the Bravo Valley aspect.

It seems likely that the oldest permanent occupants of the Polvo site belong to the earliest component of the Bravo Valley aspect, the La Junta focus (about A.D. 1200-1400). It can be concluded that House No. 3 belongs to this older component, even though it does not represent the typical structure ordinarily recognized as belonging to this focus. The usual La Junta architecture, unlined pit houses with jacal walls, appears to be a mixture of the

El Paso phase house type and a Plains type of structure. House No. 3, a lined pit house with walls of adobe turtle-backs, suggests a more direct relationship with the El Paso phase, the house type of which was originally derived from the Anasazi culture.

The presence of the "altar" along the south wall is further evidence that the structure belongs to the La Junta focus. It is suspected that the "altar" evolved from the deflector found in the south or east quadrant of kivas of the Modified Basket Maker and the later Pueblo periods. At any rate the altar was probably diffused to the Mogollon, as it occurs in the Mimbres period. Altars similar to those of the La Junta focus occur consistently in both room kivas and subterranean kivas of Pueblo IV sites along the middle Rio Grande. Altars also occur in El Paso phase houses, and Lehmer (1948: 80) has suggested that this is an example of borrowing from the La Junta focus. It would seem more likely that the reverse occurred; that the El Paso phase of the Jornada Branch of the Mogollon would be the donor, or better, the carrier, of the "altar" tradition into the La Junta region.

The burials thus far excavated at the Polvo site belong to the La Junta focus, a conclusion based on location directly beneath the floors of La Junta Houses 2 and 3. Intramural flexed burials in a circular pit, along with burial offerings, are closely related to widespread traditions of the Anasazi and Mogollon cultures.

The site yielded an unusual amount of stone work for the limited area excavated. All the lithic materials found have been previously recognized as traits of the Bravo Valley aspect. However, the few Perdiz-stemmed arrowpoints found, in comparison with the large numbers found in the Presidio area, would indicate that this type of projectile point has a closer affinity with the Toyah focus than with the Bravo Valley aspect.

The pottery from the site narrows considerably the range of occupation. Eight of the pottery types belong in the La Junta focus, although there is no evidence to show that pottery was actually manufactured in the area. They appear to have been traded in from Chihuahua and the Southwest, particularly from the Mogollon area. Only 3 sherds of Chinati ware indicate Concepcion focus occupation, although the presence of several large pit houses visible on the surface in the northern

portion of the site, plus historical accounts, would indicate that there was some occupation during this period. There is even less evidence for Conchos focus occupation, although Conchos focus pottery wares that carried over into the modern Alamitos focus are well represented. All the historic ceramics belong to an early modern occupation, perhaps that inaugurated with the founding of the village of Polvo on the site in 1872. Occupation still continues at the site today, although most of the inhabitants have left to live in its successor, the modern village of Redford.

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February, 1954