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THE ANASAZI CULTURE OF THE NORTHERN RIO GRANDE RIFT

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INTRODUCTION

It is not surprising that in the legends of origin of the modern Tewa-speaking Pueblo Indians, the extent of the "Tewa world" (Ortiz, 1969) very closely corresponds to the geological extent of the Espanola Basin of the northern Rio Grande rift area. (For this paper the terms "Tewa world" and "rift area" will be used synonymously to refer only to the Espanola Basin.) The Tewa world thus is comprised of the Rio Grande valley and its tributaries, the Tewa pueblos, their fields, their range for hunting and gathering, and their sacred areas. Beginning at a shrine in the center of the plaza in each of the Tewa pueblos, and extending outward in the cardinal directions to distant mountains that form the horizon, a series of other shrines serves to delineate the Tewa world in the minds of the Tewa people.

The Tewa world not only has areal extent, it has a time dimension; archaeological studies have shown that the Tewa world was a recognizable entity as early as A.D. 1325, and may be traceble back even further.

Today's Indian inhabitants of the Tewa world can easily refer to their legends of origin to demonstrate that their roots in the area lie in the distant past—"since time immemorial," as they sometimes put it. Their memory is based in part on the fact that the region abounds with ruins of ancient, long-abandoned villages still bearing Tewa names that are referred to in oral histories. But there are hundreds, or even thousands, of other ancient dwelling sites in the Tewa world that are apparently beyond memory or tradition.

RATIONALES OF ARCHAEOLOGICAL RESEARCH IN THE RIFT AREA

Beginning in the late 19th century, anthropologists sought to give scientific substance to the Tewa world through systematic studies of the cultures of the Rio Grande pueblos. As early as the 1880's, Adolf F. A. Bandelier, the Swiss anthropologist/naturalist, came to New Mexico to begin a study of the Indians of the living pueblos. **In** particular, he wanted to document the relationships between the modern pueblos and other pueblos that were occupied when the Spanish first came to the Southwest in the 16th century. Additionally, he sought to relate both the modern pueblos and those occupied in the early Historic period to still others whose construction and use was totally prior to the arrival of the Spanish and the writing of their chronicles. The latter pueblos were, therefore, prehistoric, and for them there could be no documents among the 19th century Tewa unless they were in the form of oral traditions—unwritten and passed on by word of mouth.

Bandelier's reports (1890-1892) intrigued scholars in the nation's museums, and for the next 40 years the northern Rio Grande region hummed with archaeological activity as pioneer archaeologists such as Edgar L. Hewett (1953), Alfred V. Kidder (1958), Nels C. Nelson (1914), and Jean A. Jeancon (1923) excavated thousands of prehistoric rooms in several dozen major pueblo ruins in the region.

Early 20th century excavations in the rift area focused on sites named in Tewa oral histories and reflected an evolutionary approach to the interpretation of Pueblo culture, i.e., the culture of the modern pueblos evolved from that of the pueblos occupied just before the colonization of the area by the Spanish in the late 1500's. What they hoped to discover was an earlier, less developed culture—how much earlier, they could not really say. Dendrochronology—tree-ring dating—was still in its infancy, and other methods, such as radiocarbon and obsidian-hydration dating, were still over a generation off in the future. Consequently, for the first 20 years of field research in the rift area, reference to chronology was conspicuously absent in archaeological reports.

One rationale of archaeology is that cultural identification and relationships must be based on repeated and reasonably consistent associations of such tangible items and attributes as settlement patterns, house types, layouts of architectural features, and categories of local and intrusive pottery, stone, bone, and other artifacts. Geological, botanical, and zoological data could permit the in-depth recognition of relationships between the cultural assemblages from the prehistoric sites and those that could be observed among the living pueblos, as well as the reconstruction of the prehistoric environment and its effects on the culture being studied. Thus, until as recently as the 1970's, archaeological research in the rift area strongly emphasized the evolutionary approach initiated by the first generation of archaeologists. It relied heavily on acquisition of collections for both museum exhibits and related research, and called for increasingly detailed description and classification of the fragmentary and incomplete attributes recovered from both excavations and archaeological surveys.

During the last decade or so, proponents of the "new archaeology" have questioned the goals and methods of "old archaeology." New archaeologists do not see simple description and classification of artifacts and the establishment of historical sequences as the principal purposes of archaeology. To them, those procedures too frequently inhibit research and are only preliminary steps in the explanation of the cultural processes.

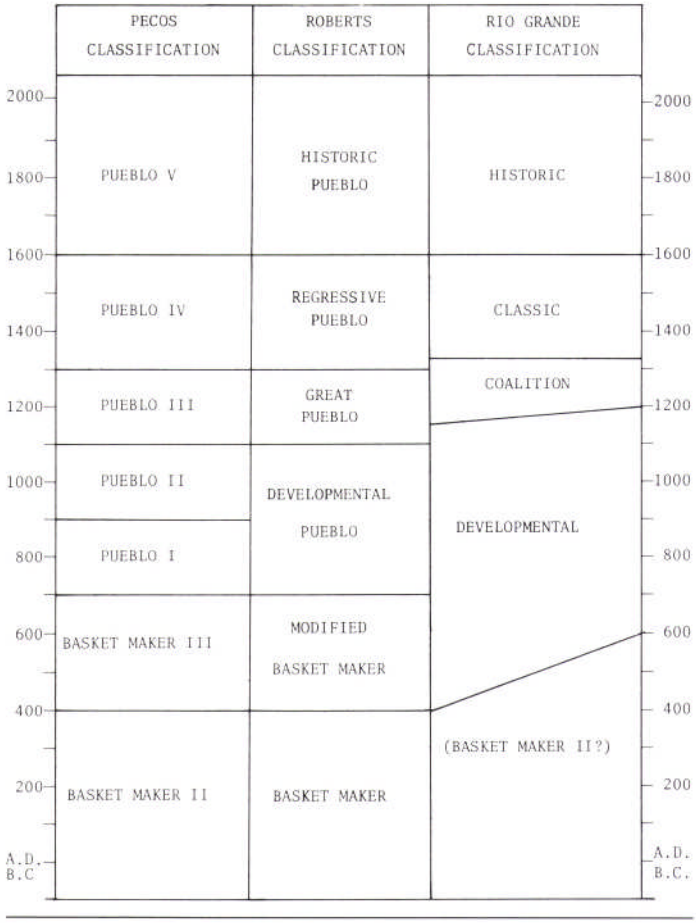
In the rift area, there is comparatively little information that reflects the developing thought of the new generation of archaeologists. Still, the cultural–historical approach to archaeology has not been rendered obsolete, though what was formerly accepted as established facts is now viewed as "models" or postulates requiring substantiation through the application of more systematic methods of data acquisition and analysis. Nevertheless, a great body of data and archaeological specimens is available that can be used to provide relevant and palatable information to those who visit museums and national monuments and whose interests are primarily historical.

PECOS CLASSIFICATION VERSUS RIO GRANDE CLASSIFICATION

When a group of archaeologists convened at the ruined Pueblo of Pecos in 1927 to pool the results of their studies of the Anasazi Culture—the prehistoric sedentary agricultural Indians of the northern Southwest, they established an evolutionary sequence of numbered periods (Table 1) to which they could relate their archaeological discoveries. This was the "Pecos classification" familiar to all Southwestern archaeologists (Kidder, 1927). For those working in the Rio Grande region, excavations had concentrated on sites of the "Proto-Historic" period (or Pueblo IV) which was characterized by the "decline from the preceding cultural peak," of the Great Pueblo period (Pueblo III).

One archaeologist (Roberts, 1936) went so far as to re-name the periods of the Pecos classification and refer to Pueblo IV as the "Regressive Pueblo" period (Table 1). To some Rio Grande scholars this was an unkind cut, because it implied that the culture of the Rio Grande region was somehow inferior to that of the west. It was a matter of some controversy, and the problem was more than just terminological. The Pecos classification worked moderately well in the San Juan Basin of northwestern New Mexico where ruins were abundant and, with the notable exception of Chaco Canyon, fairly consistently reflected the scheme developed at Pecos. The Rio Grande region just didn't fit. No

TABLE 1. Stratigraphic-nomenclature chart comparing the principal Anasazi cultural-sequence designations for the northern Southwest.



matter how hard Rio Grande archaeologists tried to adjust their interpretations to the Pecos classification, their field work suggested that prior to Pueblo IV evidence of cultural development was either missing, truncated, or inconsistent, and only occasionally corresponded to that in the west.

Between 1930 and 1950 archaeological surveys began to supplement data acquired from excavations, and it was found that there were indeed a few scattered prehistoric settlements in the Rio Grande region that at least superficially resembled their western contemporaries. These discoveries got further support from dendrochronology, but the region still yielded information that conflicted somewhat with that found in the San Juan Basin.

Several attempts were made to re-synthesize the cultural developments of the Rio Grande region, but it was not until 1955 that an acceptable alternative to the Pecos classification was developed (Wendorf and Reed, 1955). For convenience, we can call it the Rio Grande classification (Table 1). It was less detailed than the Pecos classification, but it nevertheless offered a framework on which cultural, demographic, and environmental change in the Rio Grande region could be reconstructed, compared, and, ultimately, explained.

THE RIFT AREA BEFORE A.D. 1325

No Paleoindian (late Pleistocene) campsites have, as yet, been found in the rift area, though isolated finds of diagnostic projectile points of that period have been recorded in and near Santa Fe and on the Pajarito Plateau. They may have been dropped by Paleoindians, but it is more likely that they were found elsewhere by later Indians and brought into the rift area.

Human use of the rift area appears to have begun during the Archaic period (ca 5500 B.C.–A.D. 400) when small, nomadic groups of hunters–gatherers explored the area and became familiar with its terrain, available resources, and climate. Sites of the Archaic period occur in both lowland and upland locations throughout the rift area, including the Tesuque Valley (Miller and Wendorf, 1958) and high-altitude sites in the Sangre de Cristo Mountains (Wendorf and Miller, 1959). Artifacts of that period are found throughout the rift area, notably in the vicinity of Cerro Pedernal (Bryan, 1939) near Abiquiu, where deposits of both Pedernal chert and Polvadera obsidian (Warren, 1974) were readily available to the Archaic and later Indians for quarrying and manufacturing chipped stone tools.

The Developmental Period, A.D. 400-600 to 1150-1200

Maize agriculture had been introduced into the rift area during the last centuries of the Archaic period (Skinner and others, 1980), but it would be several hundred years before the hallmarks of the Anasazi Culture—recognizable permanent settlements and pottery-making—were adopted by the inhabitants of the region. During this time, the Developmental period, the population of the rift area seems to have been small, dispersed, and largely settled along the lower portions of the permanent streams draining the western slopes of the Sangre de Cristo Mountains in the area between Santa Fe and Esparlola (Fig. 1A).

At present, the earliest dwelling sites known for the rift area are those reported along the Rio Tesuque and Rio Nambe (McNutt, 1969; Skinner and others, 1980), which consisted of semi-subterranean pit houses (Fig. 2A) of irregular shape and generally non-systematic placement of a hearth and various pits, post holes, and other interior features. One of these structures in the Nambe drainage has been radiocarbon-dated at about A.D. 400.

LA 835 (a single-site number, but actually consists of a cluster of small, separate, not entirely contemporaneous dwelling sites), near Pojoaque and Tesuque Pueblos (Stubbs, 1954), may have begun as a scattering of single subterranean dwellings (Fig. 2B), but by A.D. 850 or 900 they were all accompanied by short contiguous alignments of surface dwellings and storage rooms with walls constructed of massive coursed adobe or jacal (vertical poles set into the ground and plastered with adobe). As surface-room units became the primary domiciles for nuclear or extended families, the subterranean rooms appear to have been converted to the almost exclusively ceremonial functions of a kiva, following the pattern established in the western Anasazi areas. Commonly, one or two of the largest surface rooms also had interior features arranged like those in the pit houses and later kivas (Fig. 2B, C).

Associated with these structures is Red Mesa Black-on-white, a mineral-painted pottery type of widespread occurrence that is a key indicator of the ascencInce of Chaco Canyon, in northwestern New Mexico, as a major ceremonial and economic center during the 9th and 10th centuries (Marshall and others, 1979; Powers, Gillespie, and Lekson, 1983).

An isolated community ceremonial chamber, a Great Kiva (one of only two or three known for the entire Rio Grande region for this period), had been constructed at the Pojoaque site cluster (Stubbs, 1954; Peckham, 1979). Tree-ring dates are too few and incomplete for precise dating of the Great Kiva, but they suggest that it may have been constructed as early as the 10th century. However, later styles of western-derived, mineral-painted pottery [so-called "Chaco II Black-on-white" and, later, Kwahe'e Black-on-white (Mera, 1935)] associated with the structure indicate that its last use was in the Ilth century, while there was still strong influence from the San Juan Basin area.

Unlike the massive house-blocks of Chaco Canyon, the greater LA 835 community occupied scattered locations through 5-10 km of the Nambe and Tesuque Valleys. However, the variety of non-local pottery types and artifacts associated with the site cluster suggests that it may have been a regional economic center, possibly approaching the status of a "Chaco outlier" (Powers, Gillespie, and Lekson, 1983; Marshall and others, 1979).

Some, but not all, dwelling units at LA 835 may have been vacated during a drought between A.D. 1125 and 1150. However, the demise of its Great Kiva at this time may be more significant, since its aban-

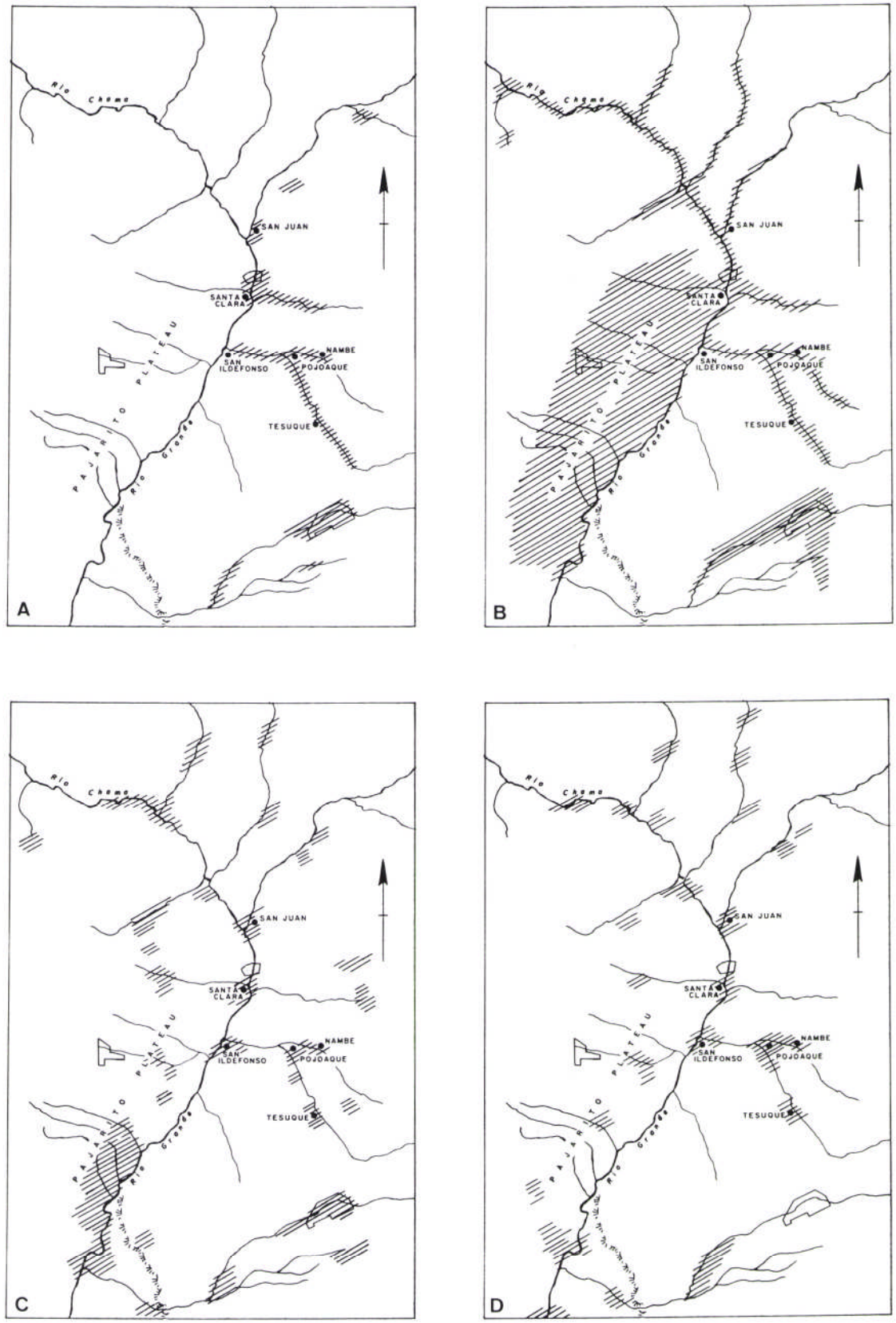


FIGURE 1. Changes in the settlement distribution in the Tewa world, circa A.D. 400–600 to A.D. 1600. **A,** Development period (A.D. 400–600 to 1150–1200); **B,** Coalition period (A.D. 1150–1200 to 1325); **C,** Early Classic period (A.D. 1325–1400); **D,** Late Classic period (A.D. 1400–1600).

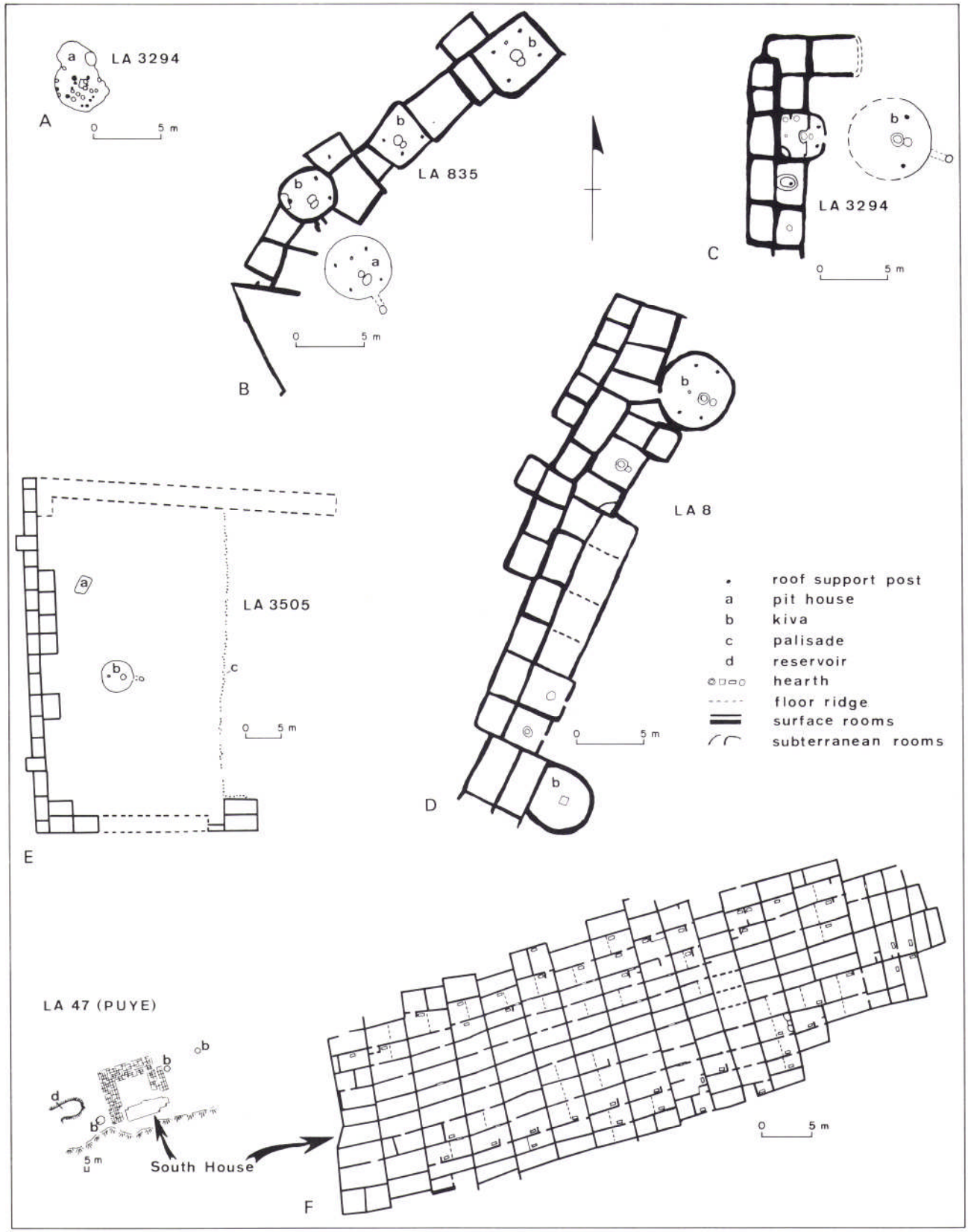


FIGURE 2. Sequence of development of dwelling ground plan in the Tewa world. **A,** Early Developmental (Tesuque area); **B,** Middle Developmental (Pojoaque area); **C,** Late Developmental (Tesuque area); **D,** Early Coalition (Santa Fe area); **E,** Late Coalition (Abiquiu area); **F,** Late Classic (Pajarito Plateau).

donment coincides with the collapse of the Chaco socio-economic system in the west. Reverberations of that event were felt throughout much of the Anasazi area, leading to the decline of many of the so-called "Chaco outliers."

Throughout the Developmental period, the rift-area population appears to have grown slowly, and mainly in lowland areas, but archaeological-survey data show that there was movement toward some locations along the extreme eastern perimeter of the Pajarito Plateau, the upland mesas that form the eastern flanks of the Valles caldera. Still, much of the rift area was largely vacant when the Coalition period began in the late 12th century.

The Coalition Period, A.D. 1150-1200 to 1325

Although not appearing to be a momentous event, the change from mineral to vegetal pigment on rift-area painted pottery announces the advent of the Coalition period. A similar change had taken place in a number of areas in northwestern New Mexico 50-75 years earlier and may have served as the model followed later in the rift area.

In the rift area at least two diagnostic pottery types (Mera, 1935) are known for this period: Santa Fe Black-on-white (ca A.D. 1 150 or 1175 to 1300) which, though in vegetal paint, seems to continue design trends begun during the Developmental period; and Wiyo Black-on-white (A.D. 1275 or 1300 to 1350), whose brownish color, increased thickness, and heavy-handed decoration in vegetal paint seem to have no antecedents in the rift area.

The changes in ceramics more or less coincide with the beginnings of a population explosion in the rift area (Fig. 1B) that can only be explained by the arrival of migrants from the west or south. Beginning in the second quarter of the 12th century, areas of the San Juan Basin began to depopulate, and at least some of those leaving that area began to drift eastward, stopping for an undetermined period along the upper Rio Puerco before moving into the Rio Grande region. Subsequently, during the last quarter of the 13th century, the San Juan Basin, the Mesa Verde area, and much of southwestern New Mexico experienced many years of drought, leading the remaining inhabitants to giving up and moving into areas where water supplies were more reliable and where they could join those who had emigrated almost a century earlier.

During this period, hundreds of dwelling sites were established on the largely vacant Pajarito Plateau (Worman, 1967; Steen, 1977, 1982), especially in the southeastern part of the plateau (Biella, 1979). Early Coalition settlements east of the Rio Grande were either fewer in number, or were subsequently absorbed and obscured by the growth of substantial pueblos late in the period. Occupants of many of the latter villages continued the Developmental pattern of settling along the permanent streams draining the western Sangre de Cristo Mountains (Fig. 2D), but larger villages were frequently situated on mesa tops.

At least six large villages were located along the Santa Fe River, including Pindi Pueblo (Stubbs and Stallings, 1953) and the School House Site near Agua Fria, and an almost continuous village that underlies the Municipal Building, in downtown Santa Fe, and extends southwestward to St. Francis Drive (U.S. 84/285). Other settlements were established southeast of Santa Fe: Arroyo Hondo Pueblo (Schwartz and Lang, 1973), Pecos, Forked Lightning, Dick's, and Rowe ruins (Kidder, 1958), and northeastward along the western fringes of the New Mexico Plains near Watrous, north of Las Vegas. Still other major settlements were being founded along the lower Rio Chama (Fig. 2E) and its tributaries (Hibben, 1937; Leubben, 1953; Peckham, 1981), and, apparently for the first time, the lands along the Rio Grande north of Espafiola and San Juan Pueblo to near Velarde were permanently settled.

Although the Anasazi are generally thought of as being very sedentary, the Coalition illustrates how mobile they really were. Early in the period, they seem to have had a pioneering spirit in spite of the stress they experienced in having to abandon their former homes. Once in the rift area, they had to explore it, locate areas of potential settlement and cultivation, as well as usable natural resources. They seem not to have been reluctant to experiment with new areas of settlement, ex panding their development of some localities while abandoning others.

The Coalition period was certainly the time of establishment of all of the existing Tewa pueblos (Ellis, 1964). Tewa legends of origin say that they emerged from the underworld at a lake near Alamosa, Colorado, and split into two groups as they moved southward down both sides of the Rio Grande. Because places of "emergence" were often changed to accommodate the changing locations of migrating groups, this has been interpreted as indicating that the Tewa had originally lived in the upper San Juan River drainage, in the Mesa Verde region and in the vicinity of the Navajo Reservoir (Ellis, 1967), though neither the intervening area between the upper San Juan and the rift area nor the southern San Luis Valley have been systematically investigated for corroborative archaeological data.

Coalition dwellings on the Pajarito Plateau seem to continue the Developmental architectural tradition of one or two large rooms with kiva-like interior features and with as many as a dozen smaller contiguous rooms for storage (Fig. 2C). Unless migrants arriving from the west had adopted the prevailing rift-area dwelling layout, this room configuration may indicate that many of those moving to occupy the Pajarito Plateau at this time were the descendants of the Developmental occupants of the rift-area lowlands. On the other hand, Ellis (1967) raises the possibility that the indigenous rift-area people may have held the arriving migrants at bay, forcing them to settle in upland areas until their peaceful intentions were verified. However, both situations may have occurred, but at different times.

Many of the small early Coalition period sites on the Pajarito Plateau seem not to have been associated with subterranean kivas, possibly because of the shallowness of the soil capping the massive volcanic tuff that forms many of the mesas. However, subterranean kivas have been recorded at Coalition sites in the Santa Fe and Tesuque Valleys (Stubbs and Stallings, 1953; McNutt, 1969).

The merging of populations, the abandonment of old communities in the rift area, and the establishment of new ones appear to have continued into the second decade of the 14th century. It is generally felt that during this period both the original rift people and the arriving migrants experienced considerable stress as each competed for arable land, water, and other resources, while at the same time experiencing the vagaries of a not totally familiar environment. The development of pueblos with enclosed plazas may have been due to increased need for defense from attack by either unfriendly neighbors or even nomadic Indians from the plains east of the Sangre de Cristo Range. By A.D. 1325 the major period of unrest and resettlement passed, relative stability prevailed, and the Anasazi were again able to devote their efforts to less stressful and more cooperative undertakings as the Rio Grande Classic period began.

THE CLASSIC PERIOD, A.D. 1325-1600

In some respects, the Classic period continues events and developments that began during the Coalition period. The coalescence of the population (Fig. IC, D) continued on the Pajarito Plateau as major Coalition communities, such as Puye (Morely, 1910), Shufinne, Tsankawi, Potsuwi (Otowi), Tyuonyi (Hendron, 1940), and Tsirege, grew even larger and many now-nameless settlements were abandoned. In the lower drainages of the Rio Chama, the huge villages of Teewi (Wendorf, 1953), Poshu-ouinge (Jeancon, 1923), Sapawe, Tsama, Howiri, Hupobi, Pose, and Abechiu (Abiquiu) (Hewett, 1906) had hundreds of rooms each, often surrounding multiple plazas. Other ancestral villages of the modern Tewa pueblos were all in these areas, but in most cases these were abandoned before A.D. 1600 (Fig. 2F).

The modern communities along the Rio Santa Cruz have all but obscured any prehistoric remains in its bottomland areas, but early archaeological surveys show that much of this drainage, though settled during the Coalition period, lay inexplicably vacant during all but the very early Classic period. Curiously, the extensive Coalition villages within the limits of Santa Fe were also vacant by A.D. 1400, and there is no evidence of any Classic settlement in the Santa Fe Valley, except Cieneguilla—a large, non-Tewa pueblo south of the Santa Fe Airport

(incidentally giving credence to the early Spanish reports that the capital of New Mexico was moved to its present location because there were no Indians living there in A.D. 1609).

By A.D. 1400, the long-standing architectural tradition of ground-level kiva-like rooms being attached to houseblocks seems to have been discarded. Kivas were again subterranean. Those on the Pajarito Plateau were carved vertically into volcanic tuff, while those in the talus cliff-dwelling areas were often cut back into the faces of the tuff cliffs. Almost invariably, the ceremonial chambers had the same interior features as the Developmental-period pit houses. Added to these, however, were rows of holes in the floor, against the walls or on the north and south sides of the hearth, which held anchors for the bottoms of vertical looms. Perhaps sometime during the Coalition growing of cotton had been introduced to the lowland parts of rift area, and by the Classic period virtually every kiva, and some pueblo rooms, were equipped with looms, for it was mainly in the kivas that the men, rather than the women, did the weaving.

Most Classic pueblos had at least one circular "big kiva" measuring as much as 14 m in diameter, thought to have served as a community ceremonial chamber—as opposed to small kivas which may have been used by religious societies. Big kivas were equipped with loom sockets in the floors and with so-called "floor drums," usually pairs of rectangular sub-floor vaults whose functions are not totally understood. Covered with planks, the features may have held fetishes and may have been stamped upon during rituals to communicate with dieties in the underworld.

Big kivas may have also functioned in ritualized aspects of warfare (Hawley, 1950). Following the stressful times of the Coalition, the Classic-period Anasazi of the Rio Grande region show evidence of considerable preoccupation with warfare, particularly in the defensive layouts of villages and the depiction of shield- and weapon-bearing figures on rock art—petroglyph—panels found near some Classic sites. Formal warrior societies persisted among the Historic pueblos until the 19th century, and it is likely that these organizations had their beginnings in the Classic period, if not during the Coalition. Rift-area rock art also portrays many masked figures or katsinas, horned serpents, and other elements that suggest that the Katsina Cult had been introduced into the area from the south-central New Mexico (Schaafsma and Schaafsma, 1974), homeland of the Jornada Branch of the Mogollon Culture, by the beginning of the Classic period.

Archaeologists frequently note that the concentration of the population into large villages may have permitted the establishment of more authoritarian control over the populace, thereby enabling the Anasazi to accomplish major "public works" projects that lesser groups of people could not have undertaken. Foremost among these would have been projects that would have conserved, or improved the utilization of, scarce water.

Modern weather records in the Espanola Basin show that much of the area lies in a "rain shadow" caused by the proximity of the Jemez Mountains. Weather conditions of the past, as reconstructed from dendrochronological data (Dean and Robinson, 1977), show that the rift area has repeatedly experienced periods of extreme drought as well as years of surplus moisture. Upland areas of the Pajarito Plateau and the foothills of the Sangre de Cristo Range receive more precipitation than the lowland areas, and it is likely that some Coalition and Classic settlements in the rift area were located to use this advantage. Even so, water was a precious commodity, and the Anasazi developed a number of ingenious ways to maximize its use.

After building check dams and gridded gardens during the Coalition, the Anasazi drew on their awareness of the environment to reclaim thousands of hectares of marginal land for farming. Prairies on the bluffs overlooking Ojo Caliente Creek were divided up into extensive grid systems, with garden plots outlined with cobbles, covered with gravel mulches, and linked by what appear to be ditches or water catchments. A mesa top near Abiquiu, almost 300 m above the Chama Valley, is covered with literally hundreds of garden plots in grids laid out to trap heavy rainfall, preventing it from running off unproductively. Large reservoirs were constructed adjacent to villages at Puye, Shufinne, Tsirege, and Potsuwi. Whether for drinking purposes, agriculture, or construction, these structures reflect emergent engineering skills as well as the ability to organize village labor resouces for the common good.

Besides having the labor supply to simply clear the bottomlands, construction of ditch systems and diversion of water from major rivers were other achievements of the Classic period. Early Spanish chroniclers reported seeing fields under irrigation when they first visited the rift area. Unfortunately, modern irrigation farming has obliterated all but a few possible examples of prehistoric ditches, though some of the modern systems may still use ditch alignments established during the Classic period.

The Classic was the time of the so-called "Biscuit Wares" (Harlow, 1973). The soft, thick, porous, painted pottery of this period in the rift area reminded early archaeologists of the "bisque" or "biscuit" stage in the manufacture of modern glazed pottery. They named and described a series of pottery types, and conveniently alphabetized some of them in the order of their occurrence, as follows:

Type Name	Abbreviated Name	Time Range
Abiquiu Black-on-gray	Biscuit A	A.D. 1350-1425
Bandelier Black-on-gray	Biscuit B	A.D. 1425-1475
Cuyamungue Black-on-tan	Biscuit C	A.D. 1475-1600
Sankawi Black-on-cream	-- --	A.D. 1550-1650

All of these types were decorated with vegetal pigment, showing continuity with Wiyo Black-on-white of the Coalition period. The earliest of the types was slipped, polished, and painted only on the interior of bowls (bowls were almost the only form of vessel for Biscuit A and Biscuit B); Biscuit B was slipped, polished, and painted on both interior and exterior; and Biscuit C and Sankawi Black-on-cream showed progressive thinning of vessel walls, thinner-lined decoration, and production of storage jars as well as bowls. Notable in the painted designs of the earlier types is the depiction of the Awanyu, the Tewa conception of the keeper of springs and other forms of water.

Produced in the rift area, and coincident with part of the period of manufacture of Biscuit C, was a unique incised and polished gray ware, Potsuwi'i Incised. Although some incised decorated pottery may have been made in the rift area during the Developmental period, there is no indication of any relationship between it and the Classic period type unless it is viewed as a stylistic revival. It has been suggested that Potsuwi'i Incised was introduced from the Plains or lower Mississippi areas where incised pottery was being made at about the same time (Mera, 1932; Harlow, 1973). An alternative source may have been the Casas Grandes area in northern Chihuahua where similar incised pottery was being made only slightly earlier than Potsuwi'i Incised. Additionally, the Casas Grandes area may have been the stimulus for the over-all smudged black or gray ware which began to be made in the rift area by about A.D. 1500. In some variations, the black ware has been made continuously to the present day, and its production and sale by the potters of San Ildefonso and Santa Clara constitutes a major source of income for many creative craftspeople in those pueblos.

Concomitant with the manufacture of the Biscuit Wares in the rift area, Pueblo Indians in the middle Rio Grande region and the Galisteo Basin were making totally different pottery decorated with a lead glaze and other pigments and slip colors. As was the case throughout the prehistoric period, there was much reciprocal trade of desirable objects and materials, especially pottery, and the middle Rio Grande glaze wares are commonly found at Classic-period sites in the rift area. Sometime during the 1520's, glaze-decorated pottery began to be produced at Puye, west of Santa Clara Pueblo, and in the vicinity of modern San Juan Pueblo. By coincidence, a glazed-pottery producing village, Pueblo del Encierro (LA 70), approximately at Cochiti Dam, was abandoned very shortly after A.D. 1520, as determined by tree-ring dating. The people of Cochiti Pueblo say that Pueblo del Encierro was not one of their ancestral villages, whereas members of a clan at Santo Domingo Pueblo (whose Tano-speaking ancestors had moved into that Keres pueblo in the late 1700's) state that the pueblos at Cochiti Dam were occupied by some of their earlier ancestors. Thus, it is possible that a group of Tano people, on abandoning Pueblo del Encierro, moved north to Puye, introduced glaze-decorated pottery to the rift area and, by their presence, influenced the language of the original Tewa occupants of

Puye. Now extinct, Tano is considered by some linguists to have been a southern Tewa dialect. Although its influence on the Tewa at Puye may have been slight, it may have been enough to cause today's people of Santa Clara Pueblo (who claim Puye as an ancestral village) speak a dialect noticeably different from that spoken by the other Tewa pueblos (so different that the people of the latter pueblos make fun of the way the Santa Claras speak Tewa).

THE HISTORIC PERIOD, A.D. 1600 TO THE PRESENT

The first Spanish colony and capital were established, in A.D. 1598, at the Tewa pueblo of Yuque-Yunque, on the west side of the Rio Grande opposite San Juan Pueblo. The impact of Spanish culture on the Tewa was substantial. It introduced new domesticated food plants, domesticated animals, firearms, the Roman Catholic religion, social, political, and economic controls, and many other features that are still evident in both Pueblo and non-Pueblo societies that make the multicultural Southwest so distinctive. The Tewa have certainly lost many aspects of the culture of their Classic-period ancestors. The language, though still spoken, is changing. Aspects of the Tewa religion have changed. The warrior society is extinct. Tewa pueblos have produced leaders in the fields of education, anthropology, medicine, and in other professions as well. They are well aware of the changes, and some probably lament them. At the same time, they retain a measure of many of the cultural advances that archaeological studies have recorded for the periods covered by the Rio Grande classification. In many respects they are still in the Classic period.

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