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RIO GRANDE PREHISTORY: PRELUDE TO CONTACT

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INTRODUCTION

The basic descriptive and chronological framework for Rio Grande prehistory was established early in the 20th century (e.g., Kidder, 1915, 1916, 1924; Hewett, 1906; Nelson, 1914). Before the advent of various chronometric dating techniques the Rio Grande area was especially attractive to prehistorians, because it offers the ruins of villages abandoned during the historic period. Archaeologists could then begin from a known abandonment date and, as their excavations proceeded down through various strata, work their way back into prehistory. Not only were documents crucial for chronology, but historic accounts and observations of the modern Pueblo Indian villages provided the context for interpreting archaeological finds. The Rio Grande Pueblo Indians were considered living analogs for their ancestors by generations of archaeologists.

New data have been assembled since the early days and syntheses have been prepared periodically (e.g., Cordell, 1979; Lang, 1977; Wendorf and Reed, 1955). Yet only within the past five years have southwestern prehistorians begun to evaluate in a systematic manner the discrepancies between the late prehistoric and historic periods and the kinds of changes within Pueblo culture begun by initial contact with Europeans (e.g., Cordell and Plog, 1979; Cordell, 1984; Upham, 1982). Once the changes are fully appreciated and understood, a clearer picture will emerge of the culture encountered by the Spaniards in 1540.

ENVIRONMENT

Natural Setting

Compared to the San Juan Basin, the Hopi Buttes, and other regions of prehistoric Pueblo Indian development, the Rio Grande valley is relatively lush. The Rio Grande and some of its tributaries provide abundant sources of water. The mountains on both sides of the river serve as large catchment areas for precipitation, and the growing season over much of the valley proper is adequate for maize.

Nevertheless, prehistoric farming was not without risk. Floods have been catastrophic during the historic period and would have been beyond the technological abilities of the prehistoric Indians to control (Cordell and Earls, 1983). Poorly drained soils were damaged by mineralization (Fosberg and Husler, 1979). Dense stands of hardwood along the river were difficult to clear with stone tools, and crops planted in fields on the floodplain were subject to insect infestations and disease (Ford, 1972).

Relying on observations of agricultural practices among the modern Pueblo Indians, most prehistorians have underestimated the risks and assumed that irrigation or floodwater farming provided the bulk of agricultural produce during the late prehistoric period. However, recent archaeological surveys have documented hundreds of thousands of square meters of prehistoric upland-water and soil-control features throughout the Rio Grande area (Cordell and Earls, 1983; Cordell, 1984). The features, consisting of rock and earth terraces, rock grids, and raised and bordered fields, suggest that there was far more dependence on rainfall farming than is usually credited.

Given what appear to be considerable risks to agriculture, gathering and hunting must have constituted important elements in the prehistoric Pueblo Indian economies. Although few quantitative data are available, most studies support the importance of game (e.g., Emslie, 1981; Snow, 1974) and wild-plant food (Toll, 1983).

Cultural Setting

The archaeological record of prehistoric occupation of the Rio Grande area is as long as it is elsewhere in the Southwest. Sites dating to the Paleoindian Period (ca 11000-7000 B.C.) are known through excavation and reconnaissance survey (Hibben, 1955; Judge, 1973; Weber and Agogino, 1968). Sites of the Archaic Period (ca 6000 B.C. to A.D. 100) are not abundant, nor are they unusually scarce (e.g., Campbell and Ellis, 1952; Schaafsma, 1976).

Nevertheless, the record of prehistoric Pueblo occupation before A.D. 1200 is scant compared to areas such as the San Juan River drainage, the San Juan Basin, and portions of southeastern Utah. It is possible that many earlier sites are deeply alluviated, or have long since been eroded into the river, or lie under modern villages, towns, and cities. It is also possible that the relative abundance of game and wild-plant foods permitted Rio Grande populations to rely substantially on hunting and gathering, maintaining a mobile-residence pattern.

The major prehistoric increase in Rio Grande area settlement occurred between about A.D. 1200 and 1400. These dates follow the collapse of the structured social system centered in Chaco Canyon (Judge, 1983) and the abandonment of large areas of the Colorado Plateau. Some of the people from the San Juan Basin and Mesa Verde areas may well have moved into the upper Chama and Rio Grande valleys, accounting for the population increase. At the same time, however, other densely populated areas also included the area around Zuni, the upper Little Colorado and Winslow/Chavez Pass area of central Arizona, and the Tonto Basin and adjacent areas of Arizona below the Mogollon Rim (Cordell, 1984; Upham, 1982).

Most of the large and better known sites of the Rio Grande area date to the period between 1300 and 1600. These include Te'ewi, Tsiping, Howiri, Tsama, and Sapawe of the Chama Valley; Tsankawi, Tshirege, Otowi, Tyouny, and Puye of the Pajarito Plateau; Pot Creek Pueblo, Old Picuris, and the ancestral Taos village "Cornfield Taos" near Taos; Arroyo Hondo, Cieneguilla, Pindi, Pueblo Lumbre, Pueblo Largo, San Cristobal, San Marcos, and Las Madres of the Santa Fe and Galisteo Basin areas; Rowe Ruin, Loma Lothrop, Arrowhead, and Pecos Pueblo on the upper Pecos River; Kuaua, Alameda Pueblo, Paa-ko, Tijeras Pueblo, and San Antonio in the vicinity of Albuquerque; Tenabo, Gran Quivira, and Chilili east of the Sandias; and Pottery Mound, Senecu, and Teypama south of Albuquerque.

The number of very large late prehistoric sites of the Rio Grande area is impressive in contrast to the number of late prehistoric sites in central Arizona. In addition, the Rio Grande sites were occupied longer, many into the historic period, again in contrast to the upper Little Colorado and Tonto Basin sites that were abandoned in prehistoric times. The relative stability of the Rio Grande sites suggests that natural resources were sufficient to support large settlements and the social mechanisms of village integration were well developed.

CONTINUITIES AND DISCONTINUITIES

It is easy to recognize continuities between late prehistoric pueblo villages and the modern pueblos—a fact that has long encouraged the archaeological practice of using the modern villages as direct sources of analogy. Both prehistoric and modern villages consist of a massed series of roomblocks, one or more open, community-plaza areas, and one or more semisubterranean, ceremonial rooms or kivas. The cotton mantas (dresses), kilts, sashes, and tablitas (headdresses) worn by dancers at ceremonies are depicted in rock art and in murals dating to the

14th century. Many symbolic representations found painted on late prehistoric ceramics, rock art, and kiva murals are clearly recognized and understood by modern pueblo people (e.g., Dutton, 1963; Smith, 1952). These include representations of awanyu (plumed serpents), stepped clouds or kiva stairs, and lightning, as well as particular ceremonies and cosmological personages. On a more prosaic level, modern pueblo women make pottery, know how to grind corn using manos and metates, and know the use of many wild plants found in archaeological contexts, just as modern pueblo men know the rituals and techniques of the hunt and farming, the regulation of ritual events, and how young men are to be educated for positions of leadership in Pueblo society. On the most obvious levels, Pueblo Indians maintain their native languages and value their traditions.

Perhaps one of the more common paths of human reasoning is to emphasize similarities and continuities, thereby minimizing or overlooking the unfamiliar and the different. Archaeologists traditionally employ this mode of thought. This has lead to numerous attempts to assign linguistic or tribal identity to pueblo archaeological remains, especially ceramic styles (e.g., Mera, 1935; Ford and others, 1972) and to interpretations of prehistoric patterns of kinship and post-marital residence rules (e.g., Longacre, 1964, 1970). Emphasizing similarities has also lead to assuming that prehistoric pueblo villages were politically and economically independent, as the modern villages are, that each prehistoric village produced its own ceramics, and that agriculture provided a greater portion of food than did hunting and gathering.

Despite the undeniable similarities, however, there are discontinuities between the present and the prehistoric archaeological remains. For example, some symbolic representations (e.g., Dutton, 1963; Cordell, 1980) are not identifiable today. Petrographic analyses of rock used to temper ceramics, as well as analyses of clays and pigment minerals (e.g., Warren, 1980; Kidder and Shepard, 1936) indicate that not only were large quantities of ceramic vessels exchanged or traded among villages, but residents of some sites produced no ceramics of their own (Plog, 1980), and some sites, or clusters of sites, supplied certain kinds of vessels for an entire region.

There are other contrasts between the late prehistoric and historic periods which suggest that prehistoric organizational patterns were unlike those of today. The similarities between the Rio Grande and Western Pueblo stylistic treatment of ceramics and in kiva art indicate considerable interaction, oriented along an east—west axis, over the enormous distance from Pecos to the Hopi villages. A well-known example is the Sityatki style, a complex decorative treatment produced at Hopi, that also occurs on jars made at Pottery Mound. The murals from Kawaika-a and Awatovi, in the Jeddito area of Arizona, are similar in execution, pictorial treatment, and motif to those from Kuaua, at Bernalillo, and Pottery Mound (Cordell, 1984). It seems likely that at least some of the motifs relate to the Kachina cult, and it is possible that Kachina ceremonialism entered the Western Pueblos from the Jornada and Rio Grande areas, as the Schaafsmas (1974) propose. Probably most important though is that the similarities reflect a strength of interaction among villages that is not documented historically.

Two additional lines of evidence suggest that late prehistoric villages may not have been completely autonomous. First, within clusters of contemporary sites, some large sites seem to lack kivas whereas other sites within the cluster have several. This situation seems to characterize the late prehistoric upper Pecos Valley sites of Rowe Pueblo, which lack kivas, and Arrowhead, which has several. Second, modern pueblos maintain shrines and sacred areas well beyond their reservation boundaries, sometimes on other reservations. For example, the Zuni maintain shrines in the Sandia Mountains, and the Hopi make pilgrimages to the Zuni salt lakes. Retreats to shrines and sacred areas should not be interferred with. Today, arrangements for undisturbed pilgrimages are made by telephone (E. Ladd, oral comm. 1981). It is likely that in the late prehistoric period communication among villages relied on some coordination of ritual events by the religious hierarchies of different villages. Upham (1982) discusses modes of alliance systems within the 14th century Western Pueblo that may have been similar and have not continued into historic times.

FACTORS BEHIND THE DISCONTINUITIES

The brief discussion of differences between the late prehistoric and historic periods focuses attention on the systemic changes that must have accompanied contact with Europeans. Only three of these are discussed here: introduced disease, domestic livestock, and laws regulating colonial settlement.

Native-American populations had no immunities to the diseases introduced by Europeans (i.e., smallpox, tuberculosis, measles, etc.). When diseases are introduced in such situations, mortality rates of between 20 and 100% are documented. A severe smallpox epidemic struck the First Mesa Hopi villages as late as in 1853, reducing the population from 1200 to 650 persons by 1862 (Adams, 1981). Schroeder's (1979) review of various archival records lists 61 pueblos known to have been abandoned since 1540. Although reasons other than epidemic disease are given for some of these abandonments, disease is an all too common factor in most cases.

Heavy population losses must have had profound effects on pueblo economy and political organization. For example, some villages may not have been able to perform traditional ceremonies, because there were not enough people to carry out important roles or the leadership positions of various societies could not be filled. It is also possible that there were not enough able-bodied people to plant, tend, and harvest crops. Villages that could not continue to survive socially may have joined other villages, as the inhabitants of Pecos did when they went to Jemez in the 19th century (Cordell, 1984; Lycett, 1984).

Wild-plant and animal foods were not only important to the pueblos prehistorically, but often may have made the difference between starvation and survival. European domestic livestock grazed on land that had provided the wild resources essential to the pueblos. At first, the diminishing quantities of wild resources must have been alarming. However, as pueblos adopted domestic livestock and European crops, former hunting, trading, and foraging expeditions must have become less common, and the social ties that facilitated access to resources in the vicinity of distant villages declined.

Finally, Spanish law required colonists to establish their communities on land not already occupied by the Indians. Thus, in most cases, Spanish settlements were established in between the pueblos. While it is true that the general absence of Spanish colonists within Indian villages enabled the Indians to preserve many of their cultural traditions, the rule would have disrupted some aspects of the native system. The presence of Spanish settlements in between the pueblo villages further inhibited economic, ceremonial, and political interaction among the pueblo villages. The end result was the village autonomy and independence we are familiar with today.

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Taos Pueblo, ca 1920. Photo by Burt Harwood.