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# **Re-examining the Black Legend: Contact Period Demography in the Rio Grande Valley of New Mexico**

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WINIFRED CREAMER

One of the widespread assumptions of the Black Legend is that Spanish explorers were responsible for the precipitous decline in population that occurred among the indigenous people of the New World because they spread European diseases to native people who had no resistance to them. Although we know that decimation occurred in Latin America, the situation on the northern frontier of New Spain is not as clear cut.

What has been needed is study of demography—population distribution and change—during the Protohistoric period from A.D. 1450 to 1680. This article outlines a strategy for investigating demographic change among the Puebloan occupants of the northern Rio Grande Valley, and presents some initial results of recent research on this topic. The work described is part of a multidisciplinary research project with the goal of identifying the nature of change in Native American society resulting from Spanish contact and domination.

The Northern Rio Grande Research Project was initiated in 1987 by Winifred Creamer of Northern Illinois University, and Jonathan Haas of the Field Museum of Natural History. The discussion of demography that follows represents the first phase of a long-term, interdisciplinary study of change in Pueblo society from prehistoric to historic times. Knowledge of population distribution and change is fundamental to our understanding of the Protohistoric period, as it forms the basis for discussion of factors that influenced economic, political, and religious systems at the time of European contact and beyond.

At the moment of first European contact in 1540, the Spaniard Francisco Vázquez de Coronado and a band of followers had entered New Mexico on a mission of exploration to look for gold and other riches.

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Interested in religious conversion of the people, they noted a thriving population of pueblo Indians living in many towns of hundreds, and possibly thousands, of people. By 1706, however, only eighteen pueblos are believed to have remained.<sup>1</sup> Some of the decline in population was due to disease, as epidemics of smallpox were reported during the 1600s. Scholars, however, continue to debate the impact of disease, the decline of population, and when each may have occurred.

The research currently underway examines the population dynamics in the northern Rio Grande region prior to and following the arrival of the Spanish in the sixteenth century. Basic problems being addressed include: determining the relative size of the population in the northern Rio Grande in the decades prior to any possible influence from early European explorers; and the population dynamics during the decades immediately *prior to* the first contact with Europeans and in the century *following* contact.

In approaching these demographic issues, the northern Rio Grande region is being examined as a whole in order to have a relatively comprehensive picture of population growth, migration, and decline. One specific example from San Marcos Pueblo, located south of Santa Fe, New Mexico, will also be discussed.

The research area is broadly considered to include the territory between Taos Pueblo on the north, Isleta Pueblo on the south, Jemez Pueblo on the west and Pecos Pueblo on the east (Fig. 1). This area, approximately 17,000 square kilometers, includes almost all of the modern "eastern" Pueblos. It also contains myriad archaeological sites, making it one of the richest zones of archaeological resources in North America.

Today, the area is occupied by numerous pueblo communities, which are commonly grouped by language. The Keresan speaking group includes Cochiti, Santo Domingo, San Felipe, Santa Ana and Zia; the Tewa speakers include San Juan, Santa Clara, San Ildefonso, Tesuque and Nambe; the Towa speakers include only Jemez today (and Pecos, historically); and the Tiwa speakers include Taos and Picuris in the north, and Sandia and Isleta in the south.<sup>2</sup> Historically, there was also a Tanoan language group occupying the sites in the Galisteo Basin southeast of Santa Fe, and the modern village of Hano on the First Mesa at Hopi is believed to represent the descendants of the Galisteo Basin Tanoans.<sup>3</sup> Although no modern pueblos are located in the northernmost subarea, referred to as the lower Chama drainage, during the protohistoric period it was occupied most probably by Tewa speakers.<sup>4</sup>

Relations among the Pueblo people of the northern Rio Grande have long been characterized by complex patterns of interaction and communication.<sup>5</sup> As observed ethnographically and historically the nature and extent of these relations dictate a broad regional approach to the

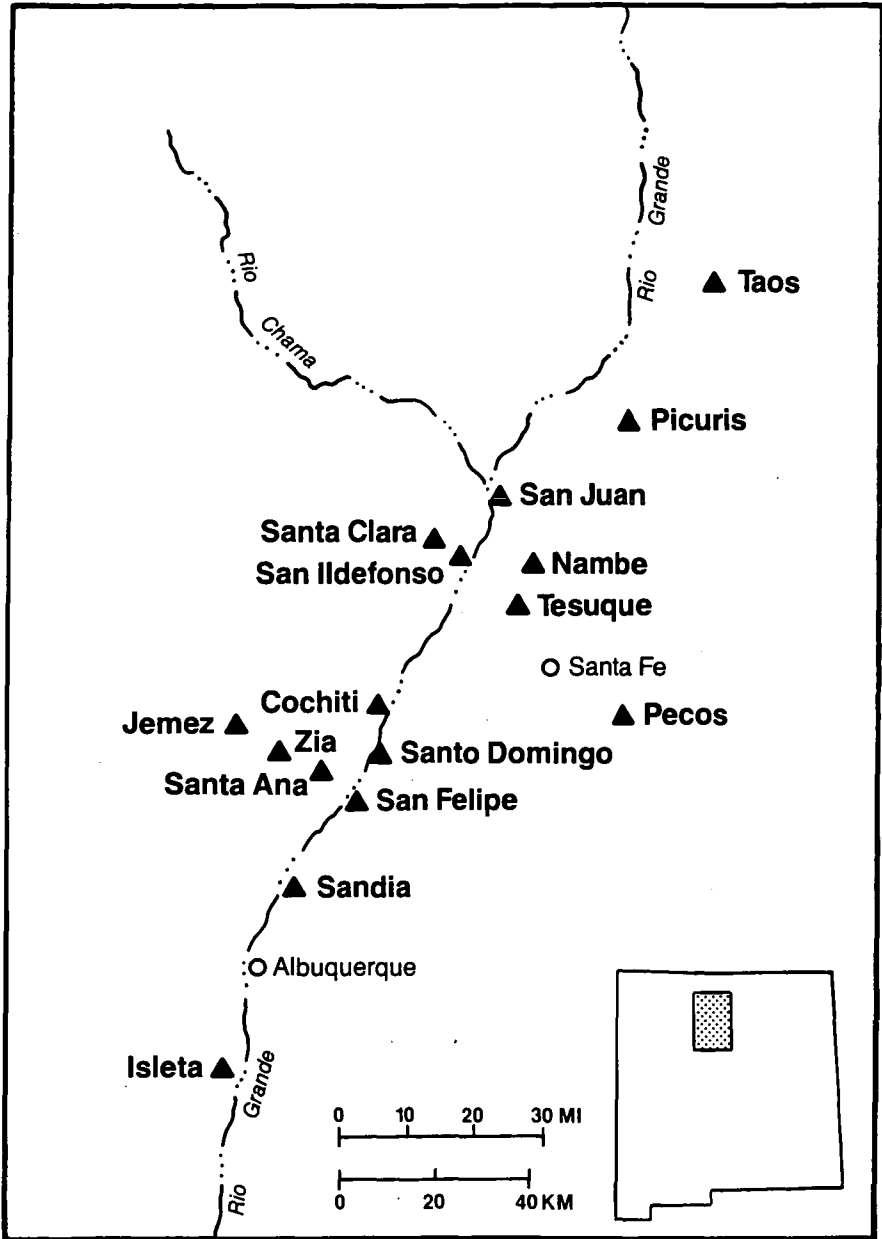


Fig. 1: The northern Rio Grande research area, showing the location of the modern pueblos.

protohistoric period. We know that in the mid-nineteenth century, for example, the last inhabitants of the Towa-speaking pueblo of Pecos moved completely across the research area (a total of eighty-five kilometers) to take up residence at the Towa pueblo of Jemez.<sup>6</sup> Yet in another nineteenth century migration, the remaining Tanoan-speaking residents of Galisteo Pueblo moved in with their immediate neighbors in Keresan-speaking Santo Domingo.<sup>7</sup> Thus, neither linguistic affiliation nor geographical proximity fully determines the social relationships and interaction between individual pueblos.

Generally, over the entire northern Rio Grande region, the Pueblos were held loosely together by a complex web of linguistic and social ties. In order to begin to understand patterns of population movement and change in the protohistoric period, therefore, it is necessary to approach the issue of demography with a broad regional view.

Estimates of contact period population in the Rio Grande Valley have been derived from documents, ethnography of puebloan groups, and archaeological data. Each source has value along with some drawbacks.

Though difficult to interpret, actual population figures appear in a variety of sixteenth century documents. Pedro de Castañeda noted in 1540-41 that pueblos had, "two hundred residents, the largest one containing between eight hundred and one thousand. . . . All these pueblos, counting those on side trips, total sixty-six, as I have stated. All combined must contain about 20,000 men. This can be easily estimated by the population of the pueblos, for between them there are no villages or houses, but on the contrary, the land is all uninhabited."<sup>8</sup>

In 1582, Antonio de Espejo reported, "I there found [in one portion of the present research area] eleven pueblos with a great many inhabitants, more than 40,000 souls, in my estimation, counting men, women, and children."<sup>9</sup> These two passages illustrate the difficulties of estimating contact period population. Castañeda's estimate yields an average of 303 "men" per village, while Espejo noted an average of 3,636 "souls" per village, an order of magnitude of difference. Attempts to adjust population reports for varying village sizes, or to include women, children and the elderly, when they may have gone uncounted, yield inconsistent results.

Additional difficulties include the fact that while more than sixty pueblos were identified by early explorers, some villages, such as the Tewa pueblos north of Santa Fe, were only mentioned by Gaspar Castaño de Sosa and not further reported until don Juan de Oñate's settlement of the area in 1598. Each traveler appears to have noted a different number of villages along similar but varying routes of exploration.

Typically, researchers have sought compromise in interpreting these accounts, and conservative population estimates have resulted. Edward H. Spicer noted there were sixty to seventy villages in the eastern pueblos region at the time of contact. "No village was large, the largest probably being less than two thousand inhabitants. Most of them were not over four hundred people."<sup>10</sup> What ethnohistoric accounts may provide is an upper and lower range of population in the northern Rio Grande region.

Following Spicer, if 80% of villages were assumed to have a maximum of 400 persons, and the remaining 20% with 1,000 inhabitants, regional population would be approximately 36,400. If Castaneda's total of 20,000 men was multiplied by five to factor in women, children and elderly family members, a figure of 100,000 is obtained. Schroeder's conclusion that the total pueblo population was around 50,000 in the late 1500s is based on a similar calculation.<sup>11</sup> Other data must be examined to evaluate these estimates.

Attempts have been made to reconstruct pueblo family size, and number of rooms used per family from ethnographic accounts of southwestern pueblos. This information has been compiled by several authors and used to estimate population from room counts at abandoned pueblo sites. Factored into this equation is an estimate of how many people lived in a pueblo village at any given time. Harold S. Colton arrived at an average family size of four to five, based on ethnographic data from Hopi.<sup>12</sup> His model assumed that there would be two people living in each ground floor room of a pueblo village. A study of the effects of population aggregation on roofed space per person also utilized 100% occupancy of Pueblos, based on contemporary pueblo population density.<sup>13</sup> In calculating the total population of a particular site, both these studies assumed that virtually every room of a pueblo would have been occupied at any given time. Both use contemporary, or reservation era, population and site data. Prior to the late-1800s, utilization of villages may have been less intensive, as more locations were available for settlement than after reservation lands were set aside for Puebloan peoples.

A combination of ethnographic and archaeological data has also been used to calculate family size. By comparing the volume of serving vessels with cooking vessels, Christy G. Turner and Laurel Lofgren concluded that pueblo family size was around five individuals.<sup>14</sup> Population was then estimated for Puebloan villages based on occupancy of all rooms. As noted above, this may yield higher total population estimates than warranted.

Archaeological research on the protohistoric period in the northern Rio Grande region has been carried out for more than a century. At the vanguard of the early research was Adolf E. Bandelier, who visited and recorded information about many sites in the research area. After col-

lecting historic tales from the Indians, reading documents, and visiting archaeological sites, Bandelier concluded that though their numbers had diminished over the centuries, little had changed in the way of life of the Pueblo people of the Rio Grande Valley.<sup>15</sup>

Early in the twentieth century, Nels C. Nelson of the American Museum of Natural History conducted several expeditions into the northern Rio Grande region, including major excavations at seven of the eight protohistoric pueblos in the Galisteo Basin.<sup>16</sup> Nelson relied on the reports of the Coronado expedition to conclude that Indian villages had been abandoned as a result of warfare even before the arrival of Europeans. Following up on Nelson's work, Alfred V. Kidder supervised the excavation of approximately 80% of the pueblo and mission at Pecos between 1915 and 1929. Kidder concluded that population decline among Pueblo people occurred steadily during the historic period, with the last native people abandoning Pecos in 1838.<sup>17</sup>

By far the most extensive regional research in the northern Rio Grande occurred between the 1920s and the 1950s. During this period, Harold P. Mera, under the auspices of the Laboratory of Anthropology, generated plan maps for most of the protohistoric sites in New Mexico. One of his primary aims was to address changes in prehistoric and protohistoric demography. To augment site maps, Mera also conducted a series of studies of the ceramics of the northern Rio Grande aimed at clarifying the temporal span of the region's pottery types, and identifying production centers, by associating ceramics with tree-ring dates that had been collected previously in the region.<sup>18</sup> Mera believed that by determining the latest pottery type present at a site, the date of abandonment could be determined within about twenty-five years. He attempted to record as many sites as possible in the northern Rio Grande Valley, making maps and surface collections at each. By compiling his data on pottery types, Mera felt he was showing the regional distribution of population movement and change for the entire protohistoric period.

At the time, Mera's work did not receive the publicity and discussion it probably deserved. Today, we recognize that it is important to know what portion of a site was inhabited before population is estimated. It is also clear that surface collections do not always accurately represent subsurface deposits, and that a single tree-ring date from an excavated context where no other material was recorded cannot reasonably be applied to the latest ceramics collected on the site surface.

During the post-World War Two era, the emphasis shifted away from regional studies such as Mera's, and demography was approached through ethnohistoric research. Few of the large protohistoric sites were

excavated.<sup>19</sup> The basic questions of where native people lived before and throughout the period of European contact, and whether there was significant population decline, remained unanswered.

Within the northern Rio Grande region there is ongoing controversy over the magnitude of demographic and social change associated with the initial period of contact between the Spanish and the Native Americans.<sup>20</sup> One view long maintained in the literature is that precipitous population declines were primarily due to European diseases, and occurred only after the arrival of the Spanish. As a consequence, the society of the Pueblo people as observed and recorded during the late nineteenth and early twentieth centuries was thought to accurately reflect the characteristics of native society prior to contact.<sup>21</sup> This view stressed social, political, and religious continuity between the history and prehistory of the Pueblo Indians.

Alternative interpretations have arisen recently, however, in which it is postulated that European diseases may have preceded the arrival of the Spanish and resulted in a substantial drop in the population prior to the period of actual contact.<sup>22</sup> If there was an early and largely unrecorded population decline in the Pueblo area, then the picture of Pueblo society derived from turn-of-the-century ethnography may be inaccurate. Precontact patterns of social and political organization might have been the product of larger groups interacting across the entire region, not the independent and isolated pueblos depicted by ethnography.<sup>23</sup>

For a study of demographic dynamics to be successful, we need a measure of population size for the research area, and an indication of whether population was increasing or decreasing over time. One problem with earlier attempts to study demography has been the tendency to use archaeologically derived numbers and locations of sites to assess various ethnohistoric accounts of native villages.<sup>24</sup> At the same time, ethnohistoric accounts have been used by archaeologists to identify and name sites.<sup>25</sup> Neither method yields the needed data. What both these approaches lack is an effort to determine the archaeological correlates of total site population, and to collect data that indicates population change.

In assessing total population of the northern Rio Grande region three variables must be considered. These include: one, the number of sites in the region; two, the date of occupation and abandonment of each site; and three, the number of rooms at each site that were in use at any given time.

Determining the number of sites depends on how the region and the research area are defined. The northern Rio Grande region is bounded by the extent of the contemporary pueblos, though other limits could have been selected. The results of past systematic archaeological surveys shape our expectations for site density in specific areas.<sup>26</sup>



One of the advantages of working on the protohistoric period in this region is that the large sites have long been known and recorded, although it has been more than twenty years since a protohistoric period pueblo of more than about 200 rooms has been discovered.

We also know from both ethnohistoric and archaeological data that almost the entire population resided in these large sites during this period.<sup>27</sup> Consequently, the population dynamics of the known large sites should accurately reflect the population dynamics of the region as a whole.

Once the pattern and extent of settlement is established, it is necessary to determine dates of occupancy and abandonment, and to identify sites that were occupied contemporaneously. For the purposes of the present project, exact dates of abandonment are of as great interest as dates of initial occupation.

Efforts to establish precise dates of occupation and abandonment have not yielded adequate results to date in the northern Rio Grande. Large sites are suggested to have been established in the mid-to-late 1300s based on tree ring dates, surface ceramics, and some excavation.<sup>28</sup> Many tree-ring dates were obtained during the period when the technique was being developed, and samples were collected without any indication of their context within the site. That is, samples of roof beams were taken without associated pottery or other materials.<sup>29</sup> To establish contemporaneity of occupations, tree-ring samples must be obtained along with extensive provenience data, and from multiple proveniences within individual sites.<sup>30</sup>

Other dating methods, such as archaeomagnetic dating and obsidian hydration, may be of use in situations where tree-ring samples have not been successfully collected. When tree-ring samples are available, however, they provide the kind of temporal resolution that is needed to assess whether sites were abandoned as a direct result of Spanish contact.

In addition to an understanding of site location and date of occupation, an indication of site size is needed. Archaeologists have traditionally used the number of ground floor rooms to estimate the size of Pueblo villages.<sup>31</sup> Recent studies of site occupancy suggest that a count of all ground floor rooms at a site may greatly overestimate population because fewer than half the rooms at a site may have been in use at any given time.<sup>32</sup> Sampling for tree-ring dating, or to collect ceramics for relative dating, should be done across all roomblocks of a site, to address the question of when individual roomblocks were in use. To determine the proportion of a site in use, a combination of surface and subsurface testing in each roomblock of a site can be employed to establish temporal variability across roomblocks.

The same categories of data needed to assess regional population can be employed to study population change. While there are indications from tree-ring dates and surface ceramics that some sites were utilized over a period of 300 or more years, there is also evidence that pueblo villages were not fully occupied at all times.<sup>33</sup> Assessment of population growth and decline, therefore, relies on our ability to identify contemporaneous occupations and to determine the portion of a site that was occupied at any specific time.

Analysis of the date of occupation and abandonment of specific roomblocks requires that more dates are obtained per site. Fred Plog's suggestion that obtaining fifteen dates per phase would yield appropriate understanding of site occupancy shows how much more intensive efforts at site dating need to be made.<sup>34</sup> Detailed chronometric and relative dates derived from ceramics could then be compared among localities on a regional scale. Presently available dates for sites in the northern Rio Grande are likely to be masking variability in site utilization, especially when only one or a few dates have been obtained for large protohistoric villages.

With more comprehensive dates for protohistoric sites on a regional level, it would be possible to distinguish population increase and decline from population movement. More precise dates would distinguish variability in site occupation by identifying sites used continuously from those used on several separate occasions, and from those with a short occupation span.

The Northern Rio Grande Research Project is a long term research project designed to study the impact of European contact on the Pueblo people of northern New Mexico. An initial goal is an assessment of total population and demographic change among the Rio Grande pueblos at the time of contact.

Beginning in 1987, a complete bibliography of sources on the archaeology, ethnography, and history of the research area was compiled to determine the number of protohistoric sites.<sup>35</sup> A comprehensive list was generated including the known large sites occupied roughly between 1450 and 1680. Castañeda's comment that most pueblo people lived in large villages is supported by archaeological surveys within the region. As mentioned above, these have shown that by the middle of the fifteenth century, the vast majority of residents of the northern Rio Grande had moved into large, permanent villages with anywhere from 300 to 3000 rooms. Within the research area, sixty-six sites having 300 or more rooms were identified, distributed among three subareas that have been distinguished based on differences in ceramic types.

Initial field reconnaissance was conducted at a sample of twelve sites in 1987, in order to begin to identify patterns of variability between the different subregions. The Jemez Mountains subregion is characterized

by the presence of Jemez Black on White ceramics. The lower Chama region is the area in which Biscuit Ware and related ceramic types dominate, and the area south of the Santa Fe River, including the Galisteo Basin, is characterized by Rio Grande Glaze painted ceramics.

At each site, outline maps were made using a laser transit, and controlled samples of ceramics and lithics were collected. The field reconnaissance not only demonstrated broad subregional differences in both ceramics and lithics, but also revealed that there are distinct differences in the surface assemblages associated with separate roomblocks or clusters of roomblocks. These findings implied that study of demographic change might be approached by using surface ceramics to study the abandonment sequence of the different roomblocks on sites in the different subregions of the research area.

Having determined the total number of protohistoric pueblo villages located in the research area, field research plans were to obtain more precise dates of site occupation and abandonment that are a necessary part of estimating population. Field reconnaissance at a sample of sites was undertaken in 1987. At every site visited, trash deposits were identified, with abundant potentially dateable pieces of charcoal (for radiocarbon and tree-ring analysis) and obsidian.

During field research in 1988 trash deposits were tested with a soil auger and ranged in thickness from one to four meters. A series of test pits were excavated in trash middens at a sample of thirteen sites representing each of the subregions within the research area. Five one-by-two meter test pits were excavated in separate trash midden areas at each site. The controlled excavation of test pits in such deposits provided samples expected to establish relative sequences of early-to-late ceramics when the analysis is complete.

At the end of the 1988 field season, extensive charcoal samples were submitted for dating by the University of Arizona's Laboratory of Tree-Ring Research. The tree-ring dates obtained were combined with other dates from Protohistoric sites in the research area.<sup>36</sup>

With the combination of tree-ring and firm historic data, some dates are available for twenty-nine of the sixty-six protohistoric sites identified. These can be divided into three groups. Seven of the dated sites are known to have been occupied historically by the construction of a mission chapel at the site. Seven others can be dated to the period following European contact in 1540 based on a combination of tree-ring dates and the presence of some historic artifacts.

The few tree-ring dates from the remaining fifteen sites do not reflect occupation after 1450. However, we do not know exactly when these localities may have been abandoned. Nine of these are located in the northern subarea of the research area, and five others are located in the south portion of the research area. Only one is located in the west-

ern sector, the Jemez Mountains. Overall, tree-ring data suggest a range of dates for site occupation in the Rio Grande Valley. These data are not sufficient, however, to make inferences about possible changes in Pueblo population associated with European contact.

To develop some idea of occupation and abandonment at individual sites, test excavations were carried out in 1990 at San Marcos Pueblo, in the Galisteo Basin south of Santa Fe, New Mexico (Fig. 2). The site includes over 2,000 rooms in forty roomblocks arranged in a rectilinear pattern. The site is located in San Marcos Arroyo, adjacent to two springs. The goal of the testing was to obtain samples of ceramics and other artifacts from the latest periods of occupation in each roomblock. Our expectation was that the ceramics collected would provide a means of determining the *relative* dates of occupation and abandonment of the different roomblocks, so we would know which roomblocks were contemporaneous and the abandonment sequence of all the different roomblocks at the site. In addition, comparison of the surface and sub-surface collections obtained will give us an indication of whether the relative date of roomblock abandonment can be determined from surface materials alone.

A detailed analysis of the excavated collections is continuing. Analysis of the surface collections by Patricia L. Hamlen suggests that even though the site is very large, only certain clusters of roomblocks were occupied at any given time (Fig. 2).<sup>37</sup> For example, our observations suggest that the roomblock closest to the springs in San Marcos Arroyo was abandoned in the fourteenth century, as only Glaze A decorated ceramics were obtained. This substantiates the report by Eric K. Reed that his excavations in that same roomblock yielded only Glaze A decorated ceramics, while his surface collections on another roomblock yielded Glaze A, B, and C fragments.<sup>38</sup>

Across the remainder of the roomblocks tested, it appears that clusters of three or four roomblocks were in use sequentially at different times, based on the ceramics recorded to date. One roomblock yielded a large quantity of late glaze wares (Types E and F). Unlike the adjacent roomblocks, occupation remains in that one roomblock were very near the surface, declining in quantity by twenty centimeters below the present ground surface. This roomblock is near the seventeenth century mission chapel. Other roomblocks had predominantly Glazes A and B, Glaze C, or Glaze C and D.

With a total of forty-one roomblocks numbered by Nelson, arranged in three or more groups, total site population at any given time appears to have been far lower than the more than 2,000 ground floor rooms might suggest.<sup>39</sup>

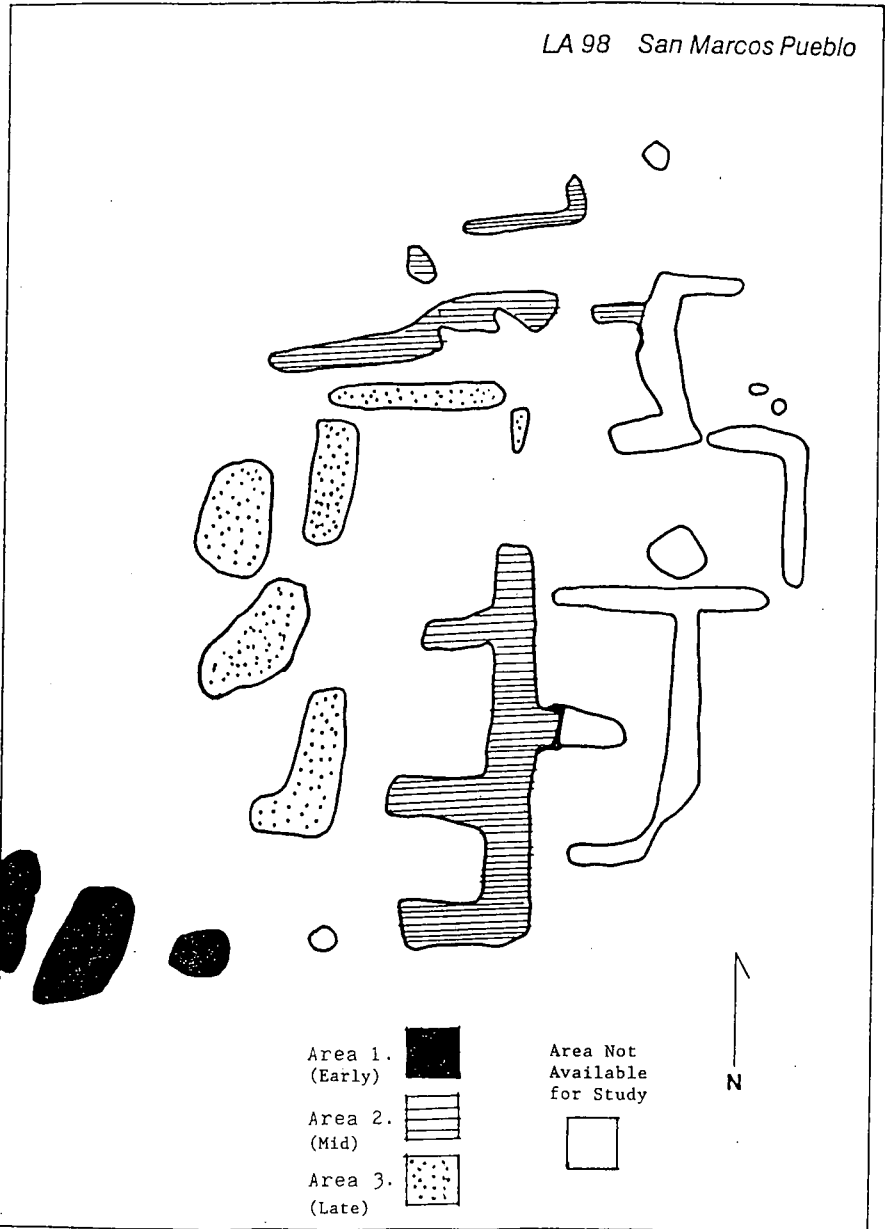


Fig. 2: San Marcos Pueblo, located south of Santa Fe, New Mexico, was the site of excavations in 1990.

The 1990 testing at San Marcos Pueblo suggested that groups of roomblocks may have been occupied at one time, not all the roomblocks at the site. These observations are supported by the ethnohistoric account of Castañeda that only one section of the pueblo Ximena was occupied in 1540.<sup>40</sup> In 1590, the chronicle of the Castaño de Sosa expedition noted during a battle at Pecos Pueblo: "For our greater protection, Castaño and the *maese de campo* went to an unoccupied section of the pueblo," from which the soldiers attacked.<sup>41</sup>

A preliminary assessment of population change among the northern Rio Grande Pueblos during the first decades of initial European contact can be made from the data discussed. Of the sixty-six sites identified in the research area, nearly half may have been abandoned by early in the sixteenth century.

Tree-ring data, while very incomplete for the region, shows clusters of protohistoric villages occupied in 1450 that do not appear to have persisted until 1540. Factors involved in this shift toward fewer settlements may include internecine warfare, disease, environmental stress, and social changes including initial European contacts. These are addressed by the continuing research of the Northern Rio Grande Research Project.

Information from tree-ring dating is not detailed enough from most places to determine when exactly specific sites or even portions of sites were abandoned. However, the data from San Marcos indicate that the number of roomblocks at each locality that were in use at any given time appears to be much smaller than has been previously estimated from surface ceramics.

More detailed dating of sites would contribute to our knowledge of the sequence of site occupation and would confirm the conclusions reached on site occupation and abandonment based on the materials available. Improved site dating is our greatest need.

While the overall number of sites may have decreased, individual pueblo villages may not have had the high population that has been attributed to them during the Protohistoric period. Even a substantial decrease in numbers of sites could represent aggregation of the population rather than decimation. It is possible that at times many roomblocks at a site were in use, though this may not have been the norm.

Places such as San Marcos Pueblo may represent repeated utilization of a locality over time, rather than growth of a village from small to very large. Total regional population may therefore have been smaller than has been estimated in previous studies and population may have been stable over a long period. Repeated use of a site because of favorable resources, rather than large occupations of long duration, implies there may have been a greater degree of mobility among the site's inhabitants than is known from recent ethnography. During the

Protohistoric period, growth in number of sites and roomblocks at each site could be evidence of increased mobility of family or other social segments. Population mobility is a hallmark of Anasazi settlement in many regions of the American southwest and may have been an ongoing strategy for the Pueblo people of the Rio Grande Valley.<sup>42</sup>

The present discussion addresses only the first of many questions that can be asked about a period of upheaval. Additional research will be needed to examine some of the possible causes of demographic change in northern New Mexico, including disease, warfare, environmental depletion, and other conditions.

The Black Legend seems to have imputed greater direct destruction of Pueblo population than seems warranted by the present research. The most serious effects did not come from the unthinking brutality of individual explorers or diseases they transmitted to the pueblo people, but from the profound social changes that those explorers instituted, believing they were doing good.

#### NOTES

1. Albert H. Schroeder, "Pueblos Abandoned in Historic Times," *Handbook of North American Indians*, 14 vols., (Washington, D.C.: Smithsonian Institution, 1979), 9:254; Marc Simmons, "History of Pueblo-Spanish Relations to 1821," *Handbook of North American Indians*, 14 vols., (Washington, D.C.: Smithsonian Institution, 1979), 9: Table 1.

2. Robin Fox, *The Keresan Bridge: A Problem in Pueblo Ethnography* (Oxford, England: Oxford University Press, 1967).

3. Edward P. Dozier, "The Hopi-Tewa of Arizona," *University of California Publications in American Archaeology and Ethnology* 44 (1954).

4. Schroeder, "Pueblos Abandoned," 9:238-39.

5. The complexity of Pueblo interrelationships is reflected in the works of: Esther S. Goldfrank, "The Social and Ceremonial Organization of Cochiti," *Memoirs of the American Anthropological Association* 33 (1927); John L. Kessell, *Kiva, Cross, and Crown: the Pecos Indians and New Mexico, 1540-1840* (Washington, D.C.: U.S. Government Printing Office, 1979); David H. Snow, "Protohistoric Rio Grande Pueblo Economics: A Review of Trends," *Anthropological Research Papers* 24 (1981), 354-77; Leslie A. White, "The Pueblo of Santo Domingo, New Mexico," *Memoirs of the American Anthropological Association* 43 (1935); "The Pueblo of Santa Ana, New Mexico," *Memoirs of the American Anthropological Association* 60 (1942); "The Pueblo of Sia, New Mexico," *Bureau of American Ethnology Bulletin* 184 (1962).

6. Edgar Lee Hewett, "Studies of the Extinct Pueblo of Pecos," *American Anthropologist* n.s., 6 (1904), 426-39.

7. Fox, *Keresan Bridge*; White, *Santo Domingo*.

8. Pedro de Castaneda, "Narrative of the Expedition to Cibola, Undertaken in 1540, in Which Are Described All Those Settlements, Ceremonies, and Customs. Written by Pedro de Castaneda of Naxera," in George P. Hammond and Agapito Rey, *Narratives of the Coronado Expedition, 1540-1542* (Albuquerque: University of New Mexico Press, 1940), 246, 258-59.

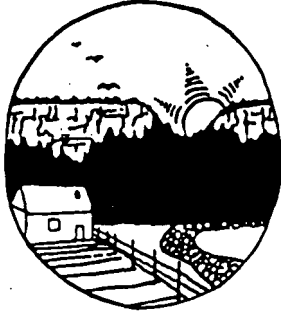
9. Report of Antonio de Espejo in George P. Hammond and Agapito Rey, *The Rediscovery of New Mexico, 1580-1594: The Explorations of Chamuscado, Espejo, Castano de Sosa, Morlete, Leyva de Bonilla and Humana* (Albuquerque: University of New Mexico Press, 1966), 222.

10. Edward H. Spicer, *Cycles of Conquest: The Impact of Spain, Mexico and the United States on the Indians of the Southwest, 1533-1960* (Tucson: University of Arizona Press, 1962), 153.
11. Albert H. Schroeder, *Rio Grande Ethnohistory* (Albuquerque: University of New Mexico Press, 1972), 48.
12. Harold S. Colton, *Black Sand: Prehistory in Northern Arizona* (Albuquerque: University of New Mexico Press, 1960), 103.
13. Karen Dohm, "Effect of Population Nucleation on House Size for Pueblos in the American Southwest," *Journal of Anthropological Archaeology* 9 (1990), 201-39.
14. Christy G. Turner and Laurel Lofgren, "Household Size of Prehistoric Western Pueblo Indians," *Southwestern Journal of Anthropology* 22 (1966), 116-32.
15. Adolph E. Bandelier, "Final Report of Investigations among Indians of the Southwestern United States, carried on mainly in the years from 1880 to 1885," 2 vols., *Papers of the Archaeological Institute of America, American Series IV* (Cambridge, Massachusetts: J. Wilson and Son, 1892), 2:160.
16. Nels C. Nelson, "Pueblo Ruins of the Galisteo Basin, New Mexico," *Anthropological Papers of the American Museum of Natural History* 15 (1914).
17. Alfred V. Kidder, "Pecos, New Mexico: Archaeological Notes," *Papers of the Robert S. Peabody Foundation for Archaeology* 5 (1958).
18. Harold P. Mera, "Chupadero Black on White," *Laboratory of Anthropology Archaeological Survey Technical Series Bulletin* 1 (1931); "Wares Ancestral to Tewa Polychrome," *Laboratory of Anthropology Archaeological Survey Technical Series Bulletin* 4 (1932); "A Proposed Revision of the Rio Grande Glaze-paint Sequence," *Laboratory of Anthropology Technical Series Bulletin* 5 (1933); "A Survey of the Biscuit Ware Area in Northern New Mexico," *Laboratory of Anthropology Technical Series Bulletin* 6 (1934); "Ceramic Clues to the Prehistory of North Central New Mexico," *New Mexico Archaeological Survey, Laboratory of Anthropology Technical Series Bulletin* 8 (1935); "Population Change in the Rio Grande Glaze-Paint Area," *Laboratory of Anthropology Technical Series Bulletin* 9 (1940).
19. Exceptions include: David Buge, "Preliminary Report: 1978 Excavations at Ponsipa-Akeri," *Museum of New Mexico Laboratory of Anthropology*; "Preliminary Report: 1979 Excavations at Ponsipa-Akeri," *Museum of New Mexico Laboratory of Anthropology*; Florence Hawley Ellis, "Archaeological History of Nambe Pueblo: 14th Century to the Present," *American Antiquity* 30 (1964), 34-42; Peter J. McKenna, "Notes on Excavations at Tsama, 1964," *Maxwell Museum of Anthropology, University of New Mexico*.
20. Kessell, *Kiva, Cross, and Crown*; Edward H. Spicer, *Cycles of Conquest: The Impact of Spain, Mexico and the United States on the Indians of the Southwest, 1533-1960* (Tucson: University of Arizona Press, 1962); Eric Wolf, *Europe and the People Without History* (Berkeley: University of California Press, 1982).
21. Edward P. Dozier, "Making Inferences from the Present to the Past," *Reconstructing Prehistoric Pueblo Societies* (Albuquerque: University of New Mexico Press, 1970), 202-13; Frederick Webb Hodge, "Handbook of American Indians North of Mexico," *Bureau of American Ethnology Bulletin* 30 (1907); Schroeder, *Rio Grande Ethnohistory*; George P. Winship, "The Coronado Expedition, 1540-1542," *14th Annual Report of the Bureau of American Ethnology for the Years 1892-1893* (1896), 329-613.
22. Authors arguing for pre-European depopulation include: Henry F. Dobyns, "Estimating Aboriginal American Population: An Appraisal of Technique with a New Hemispheric Estimate," *Current Anthropology* 7 (1966), 395-416; *Their Number Become Thinned: Native American Population Dynamics in Eastern North America* (Knoxville: University of Tennessee Press, 1983); Steadman Upham, "Smallpox and Climate in the American Southwest," *American Anthropologist* 88 (1986), 115-28; "The Tyranny of Ethnographic Analogy in Southwestern Archaeology," *Anthropological Research Papers* 38 (1986), 265-81; "Assumptions, Methodology and Social Dynamics in Southwestern Prehistory," *North American Archaeologist* 9 (1988), 78-94.
23. Ruth Benedict, *Patterns of Culture* (Boston, Massachusetts: Houghton Mifflin, 1934).



24. Schroeder, "Pueblos Abandoned."
25. Edgar Lee Hewett, "Antiquities of the Jemez Plateau, New Mexico," *Bureau of American Ethnology Bulletin* 32 (1906).
26. Linda S. Cordell, *A Cultural Resources Overview of the Middle Rio Grande Valley, New Mexico* (Albuquerque, New Mexico: U.S. Forest Service, 1979); David Stuart and Rory P. Gauthier, *Prehistoric New Mexico: Background for Survey* (Albuquerque: University of New Mexico Press, 1981).
27. John D. Beal, *Foundations of the Rio Grande Classic: The Lower Chama River A.D. 1300-1500* (Santa Fe, New Mexico: Office of Cultural Affairs, 1987); Bruce D. Dickson, Jr., "Prehistoric Pueblo Settlement Patterns: The Arroyo Hondo, New Mexico, Site Survey," *Arroyo Hondo Archaeological Series* 2 (Santa Fe: School of American Research Press, 1979); Michael L. Elliott, "Large Pueblo Sites near Jemez Springs, New Mexico," *Santa Fe National Forest Cultural Resources Report* 3.
28. Beal, *Foundations of the Rio Grande Classic*; Alfred V. Kidder, "Pecos, New Mexico: Archaeological Notes," *Papers of the Robert S. Peabody Foundation for Archaeology* 5 (1958); Stanley A. Stubbs and William S. Stallings, Jr., "The Excavation of Pindi Pueblo, New Mexico," *Monographs of the School of American Research and the Laboratory of New Mexico* 18 (1953); Fred Wendorf, "Salvage Archaeology in the Chama Valley, New Mexico," *Monographs of the School of American Research* 17 (1953).
29. William S. Stallings, Jr., "A Tree-ring Chronology for the Rio Grande Drainage in Northern New Mexico," *National Academy of Sciences* 19 (1933).
30. Fred Plog, "Political and Economic alliances on the Colorado Plateaus, A.D. 400-1450," *Advances in World Archaeology*, (New York: Academic Press, 1983), 289-330.
31. Beal, *Foundations of the Rio Grande Classic*; Colton, *Black Sand*; Turner and Lofgren, "Household Size".
32. Patricia Crown, "Evaluating the Construction Sequence and Population of Pot Creek Pueblo, Northern New Mexico," *American Antiquity* 56 (1991), 291-314.
33. Crown, "Evaluating Pot Creek Pueblo"; Denise Fallon and Karen Wening, "Howiri: Excavation at a Northern Rio Grande Biscuit Ware Site," *Laboratory of Anthropology Notes* 261b (1987).
34. Plog, "Political and Economic Alliances," 293.
35. Jonathan Haas, Winifred Creamer, and James H. Duncan, Sr., "A Bibliography of Archaeological Research in the Northern Rio Grande Region" (1987).
36. William J. Robinson, John W. Hannah, and Bruce G. Harrill, *Tree-Ring Dates from New Mexico I,O,U: Central Rio Grande Area* (Tucson: University of Arizona Laboratory of Tree-Ring Research, 1972); William J. Robinson, Bruce G. Harrill, and Richard L. Warren, *Tree-Ring Dates from New Mexico J-K,P,V: Santa Fe, Pecos, Lincoln Area* (Tucson: University of Arizona Laboratory of Tree-Ring Research, 1973); William J. Robinson and Richard L. Warren, *Tree-Ring Dates from New Mexico C-D: Northern Rio Grande Area* (Tucson: University of Arizona Laboratory of Tree-Ring Research, 1971).
37. Patricia L. Hamlen, "Patterns of Life at Pueblo Blanco, New Mexico: Determining Occupation and Abandonment Through the Use of Ceramic Surface Collection Analysis" (master's thesis, Northern Illinois University, 1993).
38. Eric K. Reed, "Test Excavations at San Marcos Pueblo," *El Palacio* 61 (1954), 337-38.
39. Nels C. Nelson, *Field Notes on San Marcos Pueblo* (Santa Fe: Museum of New Mexico, Laboratory of Anthropology).
40. Hammond and Rey, *Narratives of the Coronado Expedition*, 257; Albert H. Schroeder identifies Ximena as Galisteo Pueblo in "Pueblos Abandoned in Historic Times," 247.
41. Hammond and Rey, *The Rediscovery of New Mexico*, 272.
42. Shirley Powell, "Sedentism and Mobility: What Did the Anasazi Do? What Do the Data Say?," *Perspectives on Southwestern Prehistory*, (Boulder, Colorado: Westview Press, 1990), 57-75.

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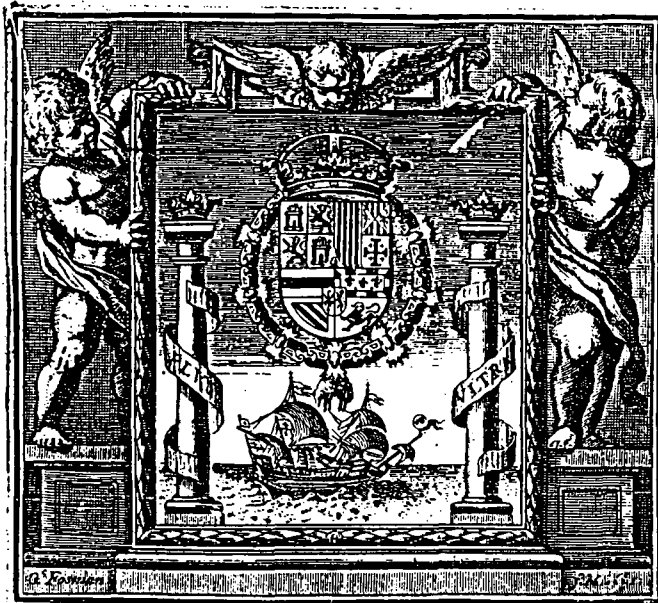
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