

**Pueblo Bonito: Trade Network or Ceremonial Center?**

**An Honors Thesis (Honors 499)**

**by**

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A handwritten signature in cursive script, reading "James Coffin", is written over a horizontal line.

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## Purpose of Thesis

**This discussion focuses on the different theories associated with Pueblo Bonito, the largest Anasazi ruin. Located in Chaco Canyon in the state of New Mexico, Pueblo Bonito was the center of a great prehistoric empire. Surrounding the ruin are roughly one hundred smaller ruin sites. All of which are connected to Pueblo Bonito via a vast system of roads. Recently discovered, these roads lead to a question of controversy. What are the nature of these roads and their relation to the great Bonito? Hypotheses and theories are presented on the subject supporting all ideas concerning this topic. Finally, the reader is allowed to make an informed conclusion as to what he may believe on the subject based on the arguments and evidence provided.**

Located in the American Southwest are various stone ruins. They are traces and remnants of a huge prehistoric Indian culture, the Anasazi. The ruins illustrate a society that was quite advanced for its time. The masonry is smooth with each stone fitting perfectly in place like some elaborate jig saw puzzle. The size and shape of the larger structures tell modern archaeologists that geometry was prevalent in their everyday lives. The enormousness of the buildings and the settlements which they were a part of illustrate that a complex form of social structure must have been employed. Who exactly were the Anasazi and what were they doing? No one can answer that question for sure, but it has been the topic of much archaeological research for years. Perhaps someday the answers to the questions surrounding this group of people will be found.

The Anasazi were a pre-literate people and the ancestors to the present day Rio Grande Pueblo Indians. Because they were a pre-literate culture, all of what is known about them today is through postulates and theories derived from archaeological findings. The area of the southwest with the best remains of Anasazi life is Chaco Canyon located in the state of New Mexico. It is here that the site of Pueblo Bonito (Spanish for "Beautiful City"), the largest Anasazi ruin, is located. Pueblo Bonito is the ruin where most of the archaeological excavation on the Anasazi has been performed, and most of the evidence archaeologists have on these people has been acquired

through these excavations. Before discussing the ruins in detail, it is first necessary to grasp an understanding of the people themselves.

The people called the Anasazi entered the Four Corners region of the United States around the time of Christ (Coffin Spring 1993). Here they built many different settlements where their culture flourished until around 1400 A.D. when the Anasazi people simply disappeared. There are so many unanswered questions concerning the Anasazi. The two most prominent being "Why here?" and "Why did they leave so abruptly?"

The first question was easy enough to answer. Scientists speculated that the climate of Chaco Canyon was must more suitable for farming during the time it was occupied by the Anasazi (Anderson 13). They speculated that the area was more temperate, and that the land contained more moisture, thus more vegetation could thrive. However, recent evidence using dendrochronology as a guide shows that the climate then was very similar to that of today which left researchers standing back at square one. So why then did the Anasazi settle here? They probably found it suitable for their needs. In order to farm, the Anasazi had to have a complex social system which would allow them to gather water and channel it for storage and irrigation-- all at the moment's notice of a thunder clap. With both dry farming techniques and an irrigation canal system, the area suited the Anasazi quite well.

If the area was in fact suitable for Anasazi lifestyle, why did the people leave so abruptly fourteen hundred years later? This question has been more difficult to answer. Most speculate abrupt, severe climatic changes which could not support their lifestyle forced the Anasazi to seek resources they required elsewhere. Others argue that Bonito simply became too small for the growing Anasazi population, forcing them to scatter throughout other areas of the canyon (although current archaeological evidence disproves this idea). Yet even other researchers believe that the Anasazi demise may have been due to abrupt political or religious changes forcing the people either to other areas or out of existence. Hopefully, many of these unanswered questions will receive the evidence they need to be proved or disproved. Then, we as anthropologists, will tell the real story.

Located in the Chaco Canyon area, there are about seventy-five Anasazi sites which have been discovered. Of these, nine are referred to as Great House structures. These are multi-story dwelling complexes and can contain hundreds of rooms-- much more than other Chacoan settlements. Their elaborate design and size suggests a prosperous almost urban community, and a resident population in the thousands (Lekson et al. 101). To get an idea of the work which went into constructing such complexes, one small room would require some 45,000 kilograms of sandstone for the walls which would

require much manpower and time to complete. Wood used for support beams was found in trees ten inches in diameter some eighty kilometers away. The transportation of these timbers alone is evidence enough of social structure employed by the Anasazi. These Great Houses show a tremendous amount of engineering and social organization. The structures are meticulous in design. Even the doorways and air vents are constructed at regular intervals. This is quite amazing for a culture without writing.

Despite the fact that the Anasazi were a pre-literate culture, they obviously had a sense of geometry. It is expressed in the massive walls and "proportion and size of rooms, doorways, windows, vents, niched, and other architectural details." Also, each of the Great Kivas are perfect circles. The stone-rubble and mud-core load bearing walls are encased by finely laid, decorative veneers of carefully selected sandstone, and a variety of different methods were used to lock the masonry walls together where they butted into each other (Brody 89). Their Great House structures faced the south for solar gathering capabilities. The architecture of this culture clearly illustrates an advanced society. Why then, did such an advanced society have no writing? It is hard to imagine such enormous tasks being completed without the use of some sort of set of blueprints.

Researchers speculated that the larger, Great House sites were the distribution centers for this massive trade network. The smaller,

outlying settlements were merely stepping stones or stopping points along the trade routes. Evidence has shown that this vast trade network stretched from as far south as Mexico and as far north as present day British Columbia with Pueblo Bonito being at the center of it all. Artifacts indigenous to these areas have been found throughout Anasazi sites in Chaco Canyon which support this theory.

Archaeological excavation of Pueblo Bonito started full swing in 1921 when the National Geographic Society took an interest. Ever since this time, archaeologists have speculated on the reasons behind such an elaborate town, not to mention the other smaller, outlying Chacoan settlements. After many years of postulating theories, archaeologists now speculate that Pueblo Bonito was the center of the hub of a great trade network. Each of the outlying settlements are connected to Bonito by an elaborate system of roads.

Back in the year 1935 when he was working for Harvard, Clyde Kay Maben Kluckhohn began work in the Chaco Canyon area. He was the first to hypothesize that the small site houses that were found throughout the canyon were of the same culture as that of the builders of the Great House structures. Prior to his theory, other archaeologists thought the two were unrelated cultures which happened to settle in a common area. This view changed however, with the use of dendrochronology which provided evidence supporting Kluckhohn's ideas.

During the 1970s the discovery of the Chacoan roads led researchers to believe that the roads suggested a “hierarchically organized society that evolved in response to a need for resolving almost perpetual population-resource imbalance in an agriculturally marginal environment marked by climatic fluctuations (178).” This is the popular theory today-- that Chaco spread as an answer to environmental stress. There is one archaeologist who would like to revert to the original theories. He believes that the two different types of settlements did in fact house two different types of culturally distinct people. His name is Gwinn Divian.

He argues that the small house dwellers were actually a separate culture from the dwellers of the Great House structures. The two different groups were the San Juan and the Cibola. They had a parallel development with a common goal. They were not warring with each other, but rather helped each other in time of need. This was mainly during times of climatic hardship. The outlying settlements were not economic responses to subsistence stress, but they were constructed to relieve stress on the center of their society, and to spread the “empire.” If however, the settlements were spaced too far apart, they would lose contact with each other, and not be able to offer assistance to each other. This provided a very effective tool for combating any problems with subsistence the Chacoans may have faced.

Such a large settlement as Bonito was originally thought to have sprung up due to the invention of irrigation. Chaco having a dry, barren climate, could only have existed with the total cooperation of its members to gather water from rainfall and channel and store it for future use. The road system was originally thought to be a water transportation system to support the center or the civilization. The popular theory today, however, is that these were roads connecting Bonito to a vast trade network which provided the subsistence the settlement needed.

One of the most marvelous areas archaeologists encountered were the “trash pits” located in front of the complex. It was the year 1921 when Judd and his archaeological team decided to focus on the two mounds located in front of Pueblo Bonito. Judd argues that these “were not normal trash piles.” His reasons for forming this conclusion were that these piles contained thousands of pottery samples from all different Chacoan time periods. The mounds were also extremely large, measuring roughly 70 feet wide and thirty feet high. In all his attempts at trying to discover something different in the mounds, Judd disappointingly found the same thing each time: “A preponderance of building waste intermixed with debris of occupation that contained both early and late pottery (220).” After three separate excavations, Judd’s team uncovered a wall. It was true to Chacoan style, but was built a little “cruder” leading them to the

hypothesis that the Anasazi built this wall for a purpose. This being to contain the trash which they discarded, thus making this pile a sort of prehistoric dumpster. In Chaco Legacy, a short documentary about the Anasazi and Chaco canyon, one researcher who was present during the pioneer excavations recalls how the workers did not even need to use trowels to uncover artifacts in these pits.

Most archaeologists believed that these mounds were indeed designated dumping sites for the Bonitoans' trash. Judd's "prehistoric dumpster" theory was overlooked and brushed under the carpet. Scholars today, however, are taking a different approach as to the purpose of these structures stating that they were not trash pits at all. They argue that instead of Pueblo Bonito being at the hub of a vast trading network, it was the ritualistic center of the Anasazi. The trash pits then, were ceremonial offering sites where people tossed in their valuable objects to appease the gods. If this is in fact true, it changes the entire way archaeologists have looked at the Chacoan Center.

If Pueblo Bonito was a trade center, scholars have argued that it's conception was first with the outlying sites constructed as stopping points along the way. It was with these "posts" that the Anasazi could spread their vast trading empire. These sites could also be used as signaling stations for those traveling the Chaco roads which connect Bonito to all the outlying settlements. Researchers

speculate that fire was probably used for this communication.

If, however, these trash pits were in reality ritualistic landscape features making Bonito a ceremonial center, then it is argued that the outlying centers came first. This would make Pueblo Bonito a preconceived project unifying the Anasazi people who occupied the smaller settlements! It would also make the roads connecting all the Anasazi sites not routes for trade, but pathways leading to the ceremonial hub. Recent dendrochronology results show that some of the outlying settlements were in fact two to three generations older than their larger counterpart of Bonito. The two men pioneering this idea are Andrew P. Fowler and John R. Stein who have stated their claim in an unpublished article. They believe that the wall Judd described as a dumpster definition is actually the boundary for an offering pit. Despite the fact that their hypothesis is not widely accepted by their colleagues, it has begun to hold more water with their arguments. Fowler and Stein also realize that more excavation and dendrochronology must be performed in order to give their theory the backbone it needs. If research proves the two right, it would completely change the way scholars and archaeologists have viewed the Chaco area.

Because the Anasazi were a pre-literate culture, anything we know of them today has been gained through hypotheses and theories constructed from archaeological evidence. One new hypothesis which

is not gaining much recognition from others in the field is one proposed by Stephen Lekson. Lekson is the first to propose the theory that the great kiva structures are not kivas at all. He argues that they were in fact “round rooms” which served as large living rooms. He says that they were simply “a pithouse built in stone” (64). Because of the importance of the kivas to modern day Pueblo Indians and their similarity in structure from the kivas found in the Great House structures, this theory is tough to swallow and will probably never be accepted by more than a handful of archaeologists. Because everything is based on theory, answers are never quite absolute. Questions and new ideas about the Anasazi and Chaco Canyon are formed regularly. Because of these factors, researchers refer to Chaco and the Anasazi as the Chaco Phenomenon.

As American archaeology matured, new theoretical and technical methods had come into use which had not yet been applied to Chaco. In 1971, the National Park Service, in cooperation with the University of New Mexico, launched a campaign to take a modern, in-depth look at human achievements at Chaco. A new research center, The Chaco Center, was to be formed.

The first order of the Chaco Center’s business was a thorough, three-season reconnaissance of the park to determine exactly the number of sites present, their location, characteristics, and cultural affiliation (Lister 43). The surveyors walked the forty-three square

miles within and immediately adjoining National Park Service lands. More than two thousand sites were recorded, ranging from camps of the earliest nomadic foragers, through the pithouse to pueblo sequence of the sedentary farmers, to historic Navajo remains. Numerous other traces of past human activity included rock-cut stairways, roads and trails, water control devices, and examples of rock art.

The survey results indicated shifting settlement patterns that could be related to climatic fluctuations and changing cultural attributes. A network of line-of-sight signaling stations linking the entire population was defined. These signaling stations used fire to convey messages, but exactly what was said remains a mystery. Data was also obtained on location of sites, their presumed age, their geographic settings, and their promise for further investigation. This information was essential in selecting representative sites for future testing or excavation.

Perhaps some day the speculation about Chaco will be no more. Maybe the questions surrounding the Anasazi and their land will be replaced with answers. Hopefully, through further research and excavation the Great Chaco Mystery will become the Great Chaco Truth.

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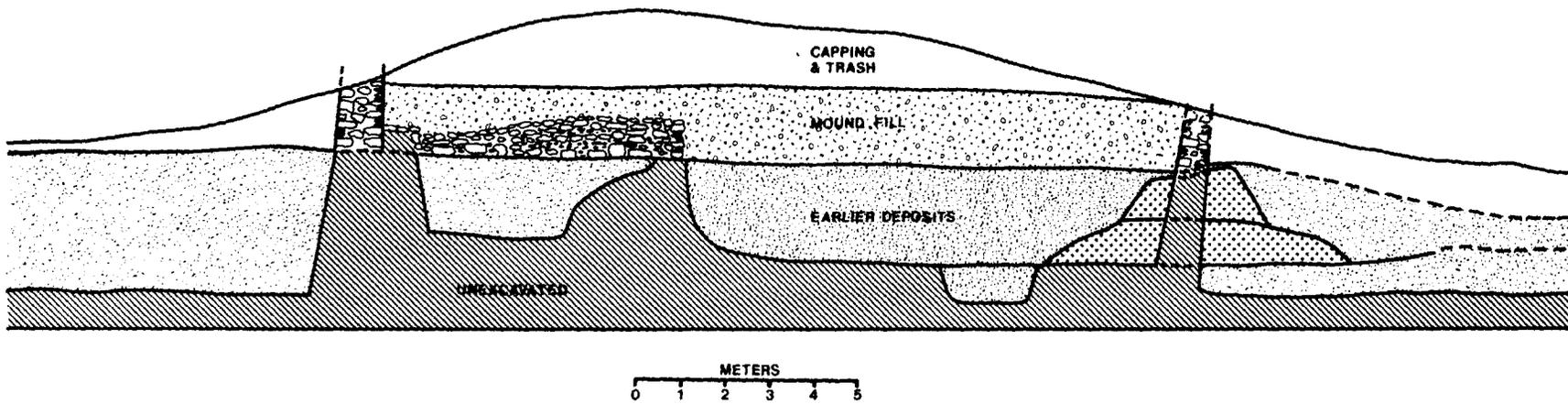


Figure 3.15. Stratigraphy of the East Mound, Pueblo Bonito (simplified; after Judd 1964: Fig. 24).

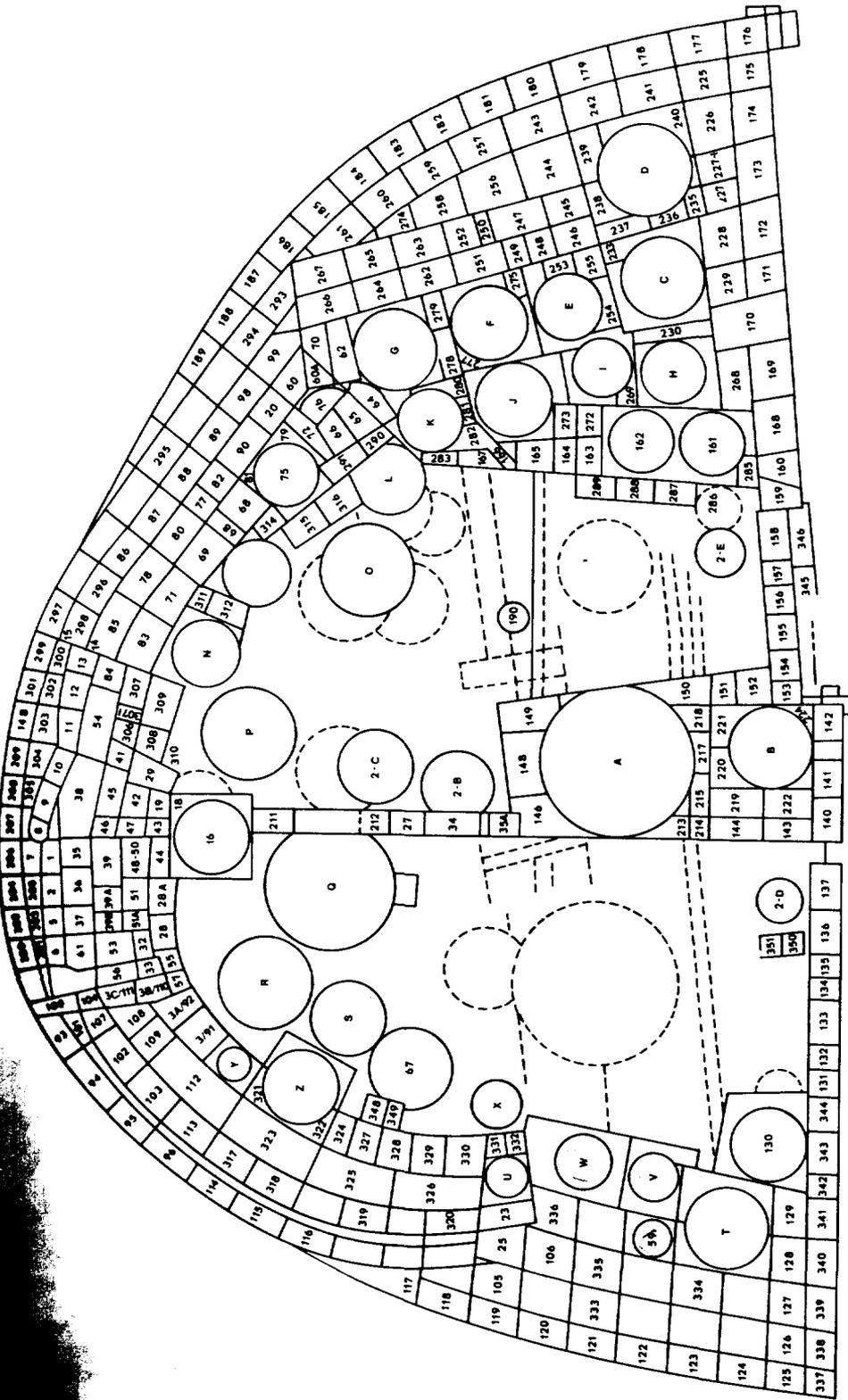


Figure 4.17. Pueblo Bonito.

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