COMPLEMENTARY DUALITIES: THE SIGNIFICANCE OF EAST/WEST ARCHITECTURAL DIFFERENCE IN PAQUIMÉ

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This thesis provides the first formal and phenomenological analysis of the architecture in Paquimé, otherwise known as Casas Grandes, Chihuahua, Mexico. The eastern and western halves of the city are divided by a stone wall and reservoirs. The monuments on the east are rectilinear, puddled adobe structures used primarily for domestic and manufacturing purposes. The buildings on the west, on the other hand, are open earth mounds lined in stone for public displays. This thesis analyzes each building individually, the relationship of the structures to one another, and the entire layout of Paquimé in order to better understand Paquimian visual culture.

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INTRODUCTION

Paquimé, a pre-Columbian city in Chihuahua, Mexico, flourished between ca. 1250 and 1470 (see Figure 1). 1 It was a significant city involved in trading elite goods to and from current-day Mexico and the United States. Paquimé's approximately fivethousand inhabitants lived in a hierarchical society that controlled a large region beyond its borders.² It is a unique center in the Americas, and it was named a UNESCO World Heritage site in 1998. Paquimé contains a juxtaposition of contrasting architectural styles and materials that complement each other and dictate the viewer's movement through its space. While the entirety of the excavated section is a ceremonial core, it contains two distinct sides divided by a stone wall and stone-lined reservoirs. The eastern half consists of puddled adobe buildings that are enclosed, private, interior structures for storage, residential, manufacturing, and restricted ceremonial purposes. The western half, on the other hand, is comprised of earthen mounds lined in stone and covered in plaster. These monuments are open, public structures without interior rooms. The duality inherent in the eastern and western sides of the city is similar to the painted designs on the pottery from Paquimé that embody the same concept of separate yet complementary sections of a whole. The seemingly opposing binaries that

¹When referring to the florescence of the city in ca. 1250-1470 AD, I will call it Paquimé. The surrounding region and the towns that existed both prior to and after the Paquimé phase are referred to as Casas Grandes.

² The population of Paquimé is still debated. Archaeologist Stephen Lekson recently estimated that there were approximately five thousand individuals living in the ceremonial core, but Charles C. Di Peso, the head archaeologist in the excavations, believed there were three thousand (Stephen Lekson, *The Chaco Meridian* (New York: Altamira Press, 1999) 78).

³UNESCO, United Nations Educational, Scientific, and Cultural Organization, World Heritage sites are those that are culturally or naturally unique in the world and are of "outstanding universal value" (http://whc.unesco.org).

⁴ The plaster no longer remains on the exterior of the mounds, but traces of it were found during excavations.

are represented in Paquimian visual culture define one another in their contrast and interaction.

Small bands of people inhabited the Casas Grandes area for centuries, but in ca. 1250 the region experienced a decisive population boom and architectural shift from semi-subterranean pit-houses to above ground contiguous-room unit dwellings. The archaeological evidence strongly suggests that Paguimé was a planned community inhabited by a hierarchical society. Therefore, this was not an organic growth but a conscious building effort, making the east/west division even more meaningful. Not only the architecture, but also the command over natural resources, suggests planning and a stratified society.⁵ Paguimé had an elaborate hydraulic system that consisted of dams, terraces, and reservoirs, even though a nearby river provided a constant supply of water. ⁶ There was also a system of drains throughout the city, so that pooled water could not undermine the puddled adobe architecture.

As archaeologists further examine the Chichimeca, they are increasingly finding that Paquimé was the chief town in a vast region.⁷ This is evidenced by the existence

⁵In Mortuary Practices and Social Differentiation at Casas Grandes, Chihuahua, Mexico (Tucson: University of Arizona Press, 1998), John C. Ravesloot uses Medio period (ca. 1060-1500) graves and funerary art to explain the hierarchical nature of Paguimian society.

⁶Charles C. Di Peso, *Casas Grandes: Medio Period* (Flagstaff: The Amerind Foundation, 1974)

^{335-345.}Charles C. Di Peso, the head archaeologist of Paquimé's excavations, coined the term "Gran West to the Pacific Ocean, south Chichimeca" to define an area that extends east to the Gulf of Mexico, west to the Pacific Ocean, south to the Tropic of Cancer, and north to the 38th parallel. He believed that the North American Southwest and northern Mexico were the same archaeological region. Using Di Peso's definition, the Gran Chichimeca is the northern frontier of Mesoamerica, and it includes the Mogollon, Hohokam, and Anasazi areas, and this is a useful term and a way to include northern Mexico into a cultural classification. The term Mesoamerica does not account for northern Mexico nor does "Southwest." The term North American Southwest refers to the Four Corners area of the United States including Arizona, New Mexico, Utah, Colorado, and occasionally containing parts of East Texas or Northern Mexico. For a scholar in New York, this area is in the southwest, but to someone in Mexico City, this is the northwest. Thus, the term is ethnocentric, assuming that only people in the United States refer to or study the area. Another problem arises when the two terms are used in conjunction. There is a vast area north of Mesoamerica and south of the Southwest that is not accounted for with these terms. For this reason, and the striking similarities between the groups in this region, I will frequently use the term "Chichimeca" to refer to this large region.

of several thousand satellite villages which may have provided the majority of food to the Paquimians, allowing it to function as a ceremonial center and home to artists, traders, and the social elite. Paquimé was an essential city in the trading of elite goods such as shell, turquoise, and macaws south into Mexico and north throughout the Chichimeca. The success of Paquimé's traders is evidenced by Ramos Polychrome, the ceramic style associated with Paquimé, because it has been found as far south as the Valley of Mexico, north to Mesa Verde, west to the Sonoran gulf, and east to the plains of Texas.9 There were also ceramics from Durango, Nayarit, and Jalisco found in Paquimé.

While there is persuasive evidence for both Mesoamerican (Mexican) and Puebloan (North American Southwest) origins of Paquimé, there are other questions to be raised and investigated. Nevertheless, the question of origin has been the primary focus of scholarly interest in Paquimé. The forms that exist in the city reveal a unique blending of styles from the Pueblos in the north and the Mexican sites to the south. Scholars have used the architecture in Paquimé, such as platform mounds, I-shaped ball courts, and colonnades to emphasize Mesoamerican presence in the city. While these examples are compelling, they do not constitute the majority of the architecture in Paquimé. The eastern half of the excavated site contains buildings that were modeled with puddled adobe which, along with contiguous room units with T-shaped doors, evokes Puebloan architecture of the North American Southwest.

This thesis will examine the eastern and western sections of Paquimé that are divided in half by a stone wall and stone-lined reservoirs. Where the wall breaks,

⁸ Di Peso, volume 3, 328.⁹ Di Peso, Volume 3, 315.

reservoirs fill the gaps. The eastern district's monuments are varied in design, but they are all puddled adobe structures. Because the rooms are angular and small, movement through them is restricted and controlled. One often reaches dead-ends navigating inside the maze-like buildings. The stone-lined structures lie on the west side of the wall. These consist of effigy mounds, an I-shaped ball-court, and temple mounds. These monuments are curvilinear, and viewers are permitted to move freely around them. The adobe half needed constant repair and could easily fall into ruin, whereas stone-lined structures required less maintenance and would have had longer life-spans. There is a clear formal distinction between the two sides.

The east side of the city is comprised entirely of puddled adobe structures with rooms designed as small units of rectangles and squares, rectangular rooms with wing halls, and the distinctive butterfly module. Room designs are complicated, having as many as twenty wall faces. The majority of the rooms are formed by walls meeting at ninety-degree angles and grouped into family clusters similar to apartments, connected by a hallway. The doorways between these rooms range from twenty to twenty-three inches in width, greatly restricting the free-flow of people and goods. The narrow doors force one to be conscious of each step, a reminder of place and, perhaps, that one is stepping on sacred ground. Major structures in the eastern section of the city include Unit 6, the House of the Dead, the House of the Skulls, the House of the Pillars, and the House of the Macaws.

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¹⁰A butterfly module is a unique room design at Paquimé. It resembles two Greek crosses placed next to one another. This is item 21 on the plan of Paquimé (see Figure 1).

¹¹Personal observation, October 2004.

The monuments on the western side of the city, on the other hand, are earthen mounds lined in stone and then covered in plaster. Only one of these structures has interior rooms, and these were burial chambers. This suggests that the western side of Paquimé was meant as a stage to be acted upon, and clearly not as a residential or private area. The buildings are public, and action would have occurred on their exteriors. Major structures on the western side of Paquimé include the Mound of the Cross, Monument of the Offerings, an I-shaped ball-court and accompanying temple, Mound of the Heroes, Mound of the Bird, and the Serpent Mound. Most of these monuments have stairs which lead to flat, mesa-like tops. They form the public ceremonial core on which ritual acts could be performed.

While there has been some scholarly study of the ceramics from Paquimé, art historians have yet to examine the architecture. I made the necessary first steps in analyzing the formal and phenomenological elements in the ceremonial core. This will greatly advance the understanding of Paquimé as a unique center. In order to accomplish this task, I relied on phenomenological description, a tradition in architectural history that analyzes the way in which architecture dictates human movement. This is one way to postulate the meaning, function, and intent in architecture.

¹²The only exception to this is the House of the Serpent. It lies in between the Serpent Mound and the Monument of the Bird. Like the Serpent Mound, the House of the Serpent was built during the Buena Fe phase (1060-1250) and abandoned in the Paquimé phase (1250-1470). The exterior doors to this structure have been sealed (perhaps ceremonially) with stones. Rather than razing the House of the Serpent or allowing it to fall to ruin, it was permitted to remain as the only puddled adobe structure on the western half of the site.

Statement of the Problem

This thesis will analyze the east/west architectural division in Paquimé as manifested by formal differences in architecture. The analysis will draw upon the formal and phenomenological qualities that delineate the eastern and western sides in an effort to understand Paquimé as a unique city instead of a Southwestern or Mesoamerican center.

Methodology

I traveled to Casas Grandes and spent one week in the ruins of Paquimé in October, 2004 and four days in March, 2005. While I was there, I took extensive notes and photographs. I interviewed Mercedes Jiménez del Arco, the director of the Museo de las Culturas del Norte in Casas Grandes, Shirley Robinson who worked with Charles C. Di Peso, and Mayté Lujan, a woman who grew up in Casas Grandes and now owns an art gallery there. In addition to travel and interviews, I have carefully studied Di Peso's archaeological field notes and all other related archaeological, anthropological, and art historical literature.

In March, 2005 I also traveled to Chaco Canyon, Chaco Culture National

Historical Park in New Mexico. 13 It was an important site to visit because of the many
parallels between it and Paquimé. The Chacoan florescence was prior to that of
Paquimé (ca.850-1150), and Chaco was abandoned approximately one hundred years

¹³ I also traveled to Santa Clara Pueblo and San Ildefonso Pueblos, contemporary Pueblo towns in north central New Mexico. While they are obviously not the same place as Paquimé, they provided me with the opportunity to experience similar spatial configurations and adobe contiguous room unit structures. Because Paquimé is a ruin, it is not filled with daily human activity and the sights, smells, and sounds that accompany such action. The Pueblos, on the other hand, provided a setting in which I could observe humans living in and using structures similar to those in Paquimé.

prior to the rise of Paquimé. Nevertheless, the Paquimians were clearly aware of the great civilization and trading center that existed before their own, and Paquimian architecture emulates Chacoan structures through the use of T-shaped doors. Stephen Lekson, in fact, postulated that the Chacoan elite actually founded Paquimé.

This study uses the architecture in Paquimé as a primary document. The inhabitants of Paquimé had no written language, so my study will not include written secondary documents. In order to understand Paquimian architecture without the aid of such documents, I turned to phenomenology. Phenomenology is a school of philosophical discourse that strives to diminish the dualistic binaries that are strongly sedimented in Western thought. Phenomenology has been used to study Greek, African, Native American, and many other cultures' architectural monuments. 14

I modeled my study on Christopher Tilley's *A Phenomenology of Landscape:*Places, Paths and Monuments. The first chapter of this text explores the relationship of landscape and settlement in prehistoric cultures. Because structural design, like landscape, dictates movement and shapes the volumes around people, this chapter easily relates to my study of Paquimian architecture. This method humanizes architecture by viewing it as a medium of human beings, not simply as a sterile container for human dwelling. Rather than treating structures by merely measuring them and analyzing building materials, as archaeologists have already done, I will investigate their role in dictating human movement and the structures' relationships to each other.

¹⁴Two such examples include the following: art historian, Suzanne Preston Blier, used phenomenology in *The Anatomy of Architecture: Ontology and Metaphor in Batammaliba Architectural Expression* (New York: Cambridge University Press, 1987). Vincent Scully also used phenomenology to understand Greek architecture in *The Earth, the Temple, and the Gods* (New York: Praeger, 1969).

¹⁵Christopher Tilley, *A Phenomenology of Landscape* (Oxford: Berg Publishers, 1994).

Buildings are not neutral spaces; they are value-laden places that reinforce sacred and secular messages. In Christopher Tilley's words,

...Space does not and cannot exist apart from the events and activities within which it is implicated. Space is socially produced, and different societies, groups, and individuals act out their lives in different spaces... These spaces, as social productions, are always centered in relation to human agency... They are meaningfully constituted in relation to human agency and activity. A humanized space forms both the medium and outcome of action, both constraining and enabling it.¹⁶

Phenomenologist Martin Heidegger introduced the concepts of being-in-the-world and the fourfold that were helpful for my studies. Being-in-the-world is a direct attack on Cartesian notions that divide existence into subject and object. Heidegger asserted that there is no such distinction, but, rather, that "being" must be part of the life-world. Heidegger divided all of existence into four categories, the fourfold. These are earth, sky, mortal, and divine. He believed that all buildings create locations where the fourfold meets.¹⁷

Maurice Merleau-Ponty, a French phenomenologist, saw human dwelling spaces as places where being-with, rather than "being" occurs. Merleau-Ponty often relied on the human body to dissolve the subject/object distinction. He used the metaphor of one hand touching another; in the act of touching, both hands are subjects and objects, feeling and being felt simultaneously, and blurring the subject/object divisions. The use of the body humanizes structures by reminding scholars that monuments represent and reinforce world-view as humans move through them and make them contextually

¹⁷ Martin Heidegger, *Poetry, Language, Thought*, Trans., Albert Hofstadter (New York: Harper and Row, 1971) 149-59.

¹⁶ Tilley, 10.

¹⁸ Maurice Merleau-Ponty, *The Visible and the Invisible,* trans. Alfonso Liagis, (Evanston: Northwestern University Press, 1968) 143.

constituted.¹⁹ Not only function, but also values, are evident in a culture's building styles. Scholars of theoretical archaeology, Michael Parker Pearson and Colin Richards, reinforce these notions by statements such as,

Classifications of people and things are physically realized through architecture, thus conceptions of order are constantly confronted from our earliest days and recollections. In some cases the most complex cosmological schemes are manifest in spatial representation. However, it should not be forgotten that the derivation of such meaning is contingent, on people and practice.²⁰

In other words, not only are structures built based on societal norms and beliefs, but the same structures teach individuals about those very views. The relationship between world-view and the built environment is reflexive; both continually create and reinforce one another.

While phenomenology offers a tool to collect data, it is not a means to analyze information. After collecting data and engaging in phenomenological descriptions of the buildings in Paquimé, I looked to other tools as ways to interpret Paquimian architecture. As I have already stated, issues of complimentary dualities also frequently occur on Paquimian ceramics. Examples of Paquimian visual arts such as pottery, jewelry, and sculpture provided other documents to support interpretation. I have seen examples of these artworks in the Museo de las Culturas del Norte in Casas Grandes, Chihuahua, Mexico, the Dallas Museum of Art in Dallas, Texas, and in the exhibition catalogues listed below. When these examples were not viable, I made sparing use of ethnographic analogy.

19 These ideas are also expressed by Yi-Fu Tuan in Space and Place: The Perspective of

Experience. (Minneapolis: University of Minnesota Press, 1977).

²⁰ Michael Parker Pearson and Colin Richards, *Architecture and Order: Approaches to Social Space* (New York: Routledge, 1994) xii.

Ethnographic analogy is a method often used by art historians and anthropologists through which contemporary native people speak for their ancestors. While there are strong arguments against the use of ethnographic analogy, for a prehistoric site such as Paquimé, it is a valuable method for interpreting visual culture where there are few other tools left by the culture, particularly a written language. Contemporary Pueblo groups are the direct descendents of the prehistoric Anasazi. Their oral histories provide a glimpse into the world view of the people living directly to the north of, and actively trading with, the Paquimians. In addition to looking at contemporary groups, I also made analogies between Paquimé and pre-Columbian centers in the North American Southwest and Mesoamerica.

Review of the Literature

Approximately one hundred years after the fall of Paquimé, the Spanish explorer Baltazar de Obregón was the first European to observe the ruins. He wrote that there were many six to seven-story great houses with walls that were covered in white plaster and brightly painted. Three hundred years later, Adolph F. Bandelier, an archaeologist who worked in the North American Southwest, conducted a brief survey of the area and called Paquimé the regional capitol of northern Mexico. He noted mounds of multi-storied ruins, canal irrigation, shell, turquoise, and pottery with human forms. 22

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²¹George P. Hammond and Agapito Rey, trans, *Obregon's History of Sixteenth Century Explorations in Western North America Entitled: Chronicle, Commentary, or Relation of the Ancient and Modern Discoveries in New Spain, New Mexico, and Mexico, 1584* (Los Angeles: Wetzel, 1928) 206.

²²Adolph F. Bandelier, "The Ruins of Casas Grandes," *Nation*, 51 (1890): 185-87.

In the mid-twentieth century, a series of anthropologists working in the North American Southwest all argued that Paquimé was a Southwestern site. Donald D. Brand, Robert H. Lister, and Harold S. Gladwin all postulated that Paquimé had its roots north of the present geo-political border.²³ Gladwin believed that Paquimé was founded by the Mimbres, a sub-group of the ancient Mogollon culture in southern New Mexico, and, in the 1930s, Lister argued that it was a Pueblo, or Anasazi, city.²⁴

All of these speculations were made using survey data alone. Amerind and INAH (Instituto Nacional de Anthropología e Historia) formed a team led by Charles C. Di Peso in 1958. Until 1961, they excavated less than 50% of the ceremonial core. In 1974, Charles C. Di Peso published the eight volume set *Casas Grandes: Fallen Trading Center of the Gran Chichimeca*. The first three volumes of the set outline Di Peso's theory about the origins and development of Casas Grandes, and the last five books contain the team's field notes. Di Peso postulated that Paquimé was a Mesoamerican trading center set up by Toltec *pochteca*. He believed that Paquimé influenced the groups in the North American Southwest including the Anasazi of Chaco Canyon, the Mimbres Mogollon, and the Hohokam. Di Peso believed the florescence

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²³Donald D. Brand, *The Historical Geography of Northwestern Chihuahua*, PhD dissertation, (Berkley: University of California, 1933).

²⁴Robert H. Lister, *Archaeological Excavations in Northern Sierra Madre Occidental, Chihuahua* (Boulder: University of Colorado Press, 1958), 212.

²⁵Charles Ć. Di Peso, *Casas Grandes: A Fallen Trading Center of the Gran* Chichimeca, volumes 1-8 (Flagstaff: The Amerind Foundation, 1974).

²⁶ Pochteca were Aztec traders/warriors who were instrumental in the rise and management of the Aztec empire.

²⁷ The Anasazi occupied northeastern Arizona, northwestern New Mexico, southeastern Utah, and southwestern Colorado from the first to the sixteenth centuries. The Mimbres Mogollon lived in southern New Mexico and southwest Texas from ca. 1000-1150, and the Hohokam resided in Arizona from 250 BCE to 1450 CE.

in Paquimé occurred between 1060 and 1340 when the *pochteca* came and brought spiritual knowledge of Quetzalcoatl.²⁸

Because this study examines the appearance of Paquimé, I carefully compared the maps, plans, charts, and photographs in *Casas Grandes: A Fallen trading Center of the Gran Chichimeca* (Volumes 1-8) with my own observations and photographs.

These volumes are still the leading source for information on Paquimé, but the illustrations included within them are often representations of Di Peso's thoughts about Paquimé rather than scientific drawings. Volumes 1-3 are filled with Di Peso's hand drawn maps, figures, and borders. These drawings form an interesting historiography unto themselves as they illustrate Di Peso's vision of *pochteca* founding fathers.

Natives in loin cloths, feathered serpents, and emblems from Nahuatl dot the pages. Di Peso's maps of Paquimé in these volumes frequently are not to scale, and they include the aforementioned embellishments which can easily mislead or subvert the interpretations of the data. While these illustrations pictorially clarify Di Peso's views on Paquimé, they fail to serve as objective documents.

Immediately, Di Peso's theory was criticized by anthropologists. Randall H.

McGuire cited the lack of Mesoamerican goods in the area.²⁹ In 1982, Stephen Plog refuted the *pochteca* theory.³⁰ Plog argued that there was never a monolithic Mesoamerican culture, so Di Peso was wrong to believe that he could infer the Toltec used *pochteca* simply because the Aztec did. Then, in 1992 Jeffrey S. Dean and John

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 $^{^{28}}$ Quetzalcoatl is the Mesoamerican god of the wind and water, and he is represented as a feathered serpent.

²⁹Randall H. McGuire, "Charles C. Di Peso and the Mesoamerican Connection," *Culture and Contact: Charles C. Di Peso's Gran Chichimeca*, ed. Anne I Woosley and John C. Ravesloot (Dragoon: Amerind Foundation and the University of New Mexico Press, 1993), 23-38.

³⁰Stephen Plog, "A Perspective on Mogollon-Mesoamerican Interaction," *Mogollon Archaeology: Proceeding of the 1980 Mogollon Conference*, ed. P. Beckett and K. Silverbird, (Ramona: Acoma Books, 1982) 227-38.

C. Ravesloot re-dated Paquimé.³¹ They found the florescence to be two hundred years later than Di Peso had thought, and to many, this was the fatal flaw in Di Peso's arguments.

Nevertheless, anthropologists such as J. Charles Kelly still believed that there was merit in the Mesoamerican classification of Paquimé because it is located in the northern frontier of Mesoamerica. After the re-dating, Kelly argued that rather than *pochteca*, the Mesoamerican elites who founded Paquimé were from West Mexico and part of the Aztlán mercantile system.³² This known trading route connects Durango, northwest Mexico, and, Kelly argued, Paquimé. He believed that the expanse of the Tarascan Empire in Jalisco cut the trade route to Paquimé and led to its fall. In 1999, Michael S. Foster also wrote that Paquimé was established by Mesoamerican elite.³³ He believed that there was an exchange of ritual goods such as copper, macaws, shell, and turquoise.

Stephen Lekson also believes that Paquimé was founded by a small, elite class, but he argues that this group originated from the north in Chaco Canyon of the North American Southwest. He links the elite in Chaco Canyon to those who occupied Aztec ruins in New Mexico and Paquimé. Lekson argues in *The Chaco Meridian* that the sites of Chaco Canyon, Aztec, and Paquimé are connected architecturally through their

³¹Jeffery S. Dean and John C. Ravesloot, "The Chronology of Cultural Interaction in the Gran Chichimeca," *Culture and Contact: Charles C. Di Peso's Gran Chichimeca*, ed. Anne I Woosley and John C. Ravesloot (Dragoon: Amerind Foundation and the University of New Mexico Press, 1993), 83-104.

³²J. Charles Kelley, "Zenith Passage: The View from Chalchihuites," Culture *and Contact: Charles C. Di Peso's Gran Chichimeca*, eds. Anne I Woosley and John C. Ravesloot (Dragoon: Amerind Foundation and the University of New Mexico Press, 1993), 83-104.

³³Michael S. Foster, "The Aztlán Tradition of West and Northwest Mexico and Casas Grandes: Speculations on the Medio Period Florescence," *Casas Grandes World*, ed. Curtis F. Schaafsma and Carroll L. Riley (Salt Lake City: University of Utah Press, 1999).

orientation to the north.³⁴ They all lie on the same meridian and are orientated on a north/south axis. The Great North Road in Chaco Canyon clearly makes the connection between Chaco and Aztec. While a road does not exist between Chaco Canyon and Paquimé, the Temple of the Cross in Paquimé emphasizes the cardinal directions and perhaps alludes to the northerly direction, where Chaco and Aztec are situated.

Michael E. Whalen and Paul E. Minnis, two archaeologists working extensively in the Casas Grandes area who question the very notion of Paquimé as a regional center, may have halted the debate over whether Paquimé's founders originated in the north or south. In Casas Grandes and its Hinterland: Prehistoric Regional Organization in Northwest Mexico, they published extensive data on ball-courts in the region.³⁵ This data led Whalen and Minnis to postulate that Paquimé only controlled, or had significant influence upon, a region extending merely as far as a day's walk from the capital.

It was not until recently that the art world took notice of the ceramics, jewelry, and architecture excavated decades ago under Di Peso. The Road to Aztlán: Art from a Mythic Homeland features recent photographs and essays about Paquimé. 36 It uses art and scholarly articles to link the Southwest to Mesoamerica, so the focus on the Chichimeca is solely to facilitate this connection. In 2002, the first catalogue devoted exclusively to Paquimian ceramics, Talking Birds, Plumed Serpents and Painted Women: The Ceramics of Casas Grandes was published.³⁷ The articles discuss the ceramic tradition of Paquimé, illustrated by the collection in the Tucson Museum of Art,

³⁴Stephen H. Lekson, The Chaco Meridian: Centers of Political Power in the Ancient Southwest. (Walnut Creek: Altamira Press, 1999).

³⁵Michael E. Whalen and Paul E. Minnis, *Casas Grandes and Its Hinterland: Prehistoric Regional* Organization in Northwest Mexico (Tucson: The University of Arizona Press, 2001).

³⁶Virginia M. Fields and Victor Zamudio-Taylor, eds. *The Road to Aztlán: Art from a*

Mythic Homeland. (Los Angeles: Los Angeles County Museum of Art, 2001).

37 Joanne Stuhr, ed. Talking Birds, Plumed Serpents, and Painted Women: The Ceramics of Casas Grandes (Tucson: Tucson Museum of Art, 2003).

and give a helpful formal analysis of Ramos Polychrome iconography that deals extensively with issues of duality and balance. Photographs of the ceramics from Casas Grandes dominate the text which provides formal, and some iconological, analysis. Also in 2003, anthropologist Christine S. Vanpool completed her in-depth study of Paquimian ceramics, *The Symbolism of Casas Grandes.* 38 Despite the recent surge of interest in Paquimé, no one is asking how its architecture acts to define the site.

³⁸ Christine S. VanPool, *The Symbolism of Casas Grandes*, PhD. Dissertation, (Albuquerque: University of New Mexico, 2003).

INTRODUCTION TO THE EAST

The eastern half of Paquimé is comprised almost entirely of a large adobe apartment block that is divided into houses. These houses are enclosed buildings for residential, manufacturing, and private ceremonial purposes. The rooms within the adobe structures are small, angular domiciles that form house clusters which are defined through connecting hallways. This chapter will describe the environment in which Paquimé is located, describe each of the houses in this precinct, and define building terms.

Environmental Landscape

Paquimé is located in a valley between the Sierra Madre Mountains in Chihuahua, Mexico. This region, known as the Chihuahua Basin and Range zone, is flanked by the Chihuahuan desert.³⁹ Towering, rocky mountains dominate the horizon on all sides but the north (see Figure 2). It is an arid region with only seasonal runoff watering the valley via the Rio Casas Grandes. The rulers of Paquimé instituted tight water controls including dams, terraces, a ditch, and reservoirs built inside the city.⁴⁰

Charles C. Di Peso and his team only excavated forty-six percent of Paquimé, and they focused on the ceremonial core. Outside Paquimé proper, ruins are scattered throughout the region. Archaeologists have excavated many satellite villages and cave dwellings that dot the surrounding terrain. Their relation to Paquimé is often attributed

³⁹Dawn Annette Frost describes the Chihuahuan Basin and Range zone as a limestone valley with seasonal streams and the Rio Casas Grandes cutting through it. The climate and topography are similar today to their state during the florescence of Paquimé (1250-1470). Natural resources in the area include: timber, agave, and other wild plants. Dawn Annette Frost, *Architecture as Chronological Marker: Testing Di Peso's Assumptions at Paquimé, Chihuahua, Mexico,* (Tulsa: University of Tulsa, 2000) 15.

⁴⁰The water system inside Paquimé was sophisticated enough to include a sewer system that carried human waste.

based on the existence of T-shaped doors. This, presumably, indicates that Paquimé had influence, if not control, over a wide region.

The East

The east side of Paquimé is comprised of multi-story, rectilinear, puddled adobe structures separated by narrow walkways and walled plazas. Di Peso identified this section of Paquimé as a large apartment complex. This half of Paquimé is private, enclosed, residential, and angular. The structures are rigid and formal, consisting of a maze-like conglomeration of small, rectilinear rooms. The rooms within the buildings are formed by walls meeting at ninety-degree angles, forming squares, rectangles, Ls, Greek crosses, and the distinctive butterfly module. Rooms are clustered into small family units of one to thirteen that are identified connected by hallways. T-shaped and rectangular doorways range from twenty to twenty-three inches in width, greatly restricting the free-flow of people and goods. The narrow, short doors force one to be conscientious of each step, bending and contorting one's body in order to progress from one room to the next.

Di Peso divided the Medio Period of Paquimé into three temporal phases (Buena Fe, Paquimé, and Diablo) using architectural characteristics. ⁴² Typically, in the North American Southwest, archaeologists use ceramics to mark phase progressions. Di

⁴¹ See plan. The butterfly module, named by Di Peso, is a room that looks like a stylized butterfly from an aerial perspective. Butterflies were frequently depicted in Teotihuacán, a city in highland Mexico that flourished from ca. 500-900, and they symbolized fire, war, or the spirit of a dead soldier. Interestingly, the only rooms designed with this motif are in the House of the Dead and the House of the Skulls where the there are plentiful below-floor burials and displays of skeletons. In Paquimé, the butterfly may have had funerary associations similar to those at Teotihuacán.

⁴² The Medio Period, or the florescence of Paquimé, is now believed to have been from ca. 1250-1470. Di Peso believed the city flourished earlier, from 1060-1340, so his phase dates are too early as well. He believed the Buena Fe Period was 1060-1205, Paquimé was 1205-1261, and Diablo period lasted until 1340.

Peso, however, saw enough meaningful change in the architecture to stipulate three distinct phases. Buena Fe buildings were characterized by one-story adobe structures with T-shaped doors, alcove platforms, and enclosed plazas. In the Paquimé phase, the adobe structures rose in several stories, and ball-courts and platform mounds were added to the city. Finally, Di Peso believed that in the Diablo phase, Paquimians converted communal spaces into habitations and did not maintain the city as adamantly.

In *Architecture* as a *Chronological Marker:* Testing Di Peso's Assumptions at Paquimé, Chihuahua, Mexico, Dawn Annette Frost stated that Di Peso based these divisions on intuition rather than statistical analysis. After completing an analysis of several architectural features in Paquimé such as fire hearths, T-shaped doors, and room shape and complexity, Frost concluded that the only two significant phases in the Medio Period were Buena Fe and Paquimé. While the number of phases within the Medio Period is debatable, what Di Peso and Frost make clear is that the architecture in Paquimé was never in a static, completed state. Paquimé was under constant renovation, partially due to the necessity of repairing adobe walls and re-applying plaster, but primarily because floor plans were constantly re-sculpted.

Paquimé began as small pithouse community. In ca. 1250, major irrigation and population growth led to an ongoing architectural project that was worked on over

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⁴³ Frost, 11.

⁴⁴ Frost, 108.

⁴⁵ Simply stated, adobe is baked earth. It needed maintenance and repair in the Medio period, just as it does today. Paquimé is re-puddled at least once annually. This is a bigger job today than it was for the Paquimians because the buildings in Paquimé no longer have roofs. The wood beam roofs covering the adobe structures would have protected them during the Medio period. Also, early explorers described Paquimé as having brightly painted walls. One can imagine that the paint and plaster that once covered the walls would have further protected them. Interestingly, both the consistent revisions to the format of the structures over time and the degenerate nature of the material are most evident on the eastern side of Paquimé.

time.⁴⁶ These alterations are more clearly distinguished on the eastern half because room shape and size, door type and quantity, and the presence and frequency of fire hearths can be measured and analyzed there. Before Paquimé was destroyed by a fire in ca. 1470, the city experienced a decline. During this period, the city was not well maintained and much of its public space was converted to domiciles.⁴⁷ The layout and function of rooms were converted regularly throughout the Medio period, and by the Diablo phase 23.8% of all the doors in Paquimé had been sealed.⁴⁸

Paquimé's constant state of flux continues to the present, and can not be disregarded in this, or any other study. Over time, the desert reclaimed Paquimé, covering the adobe apartment houses and effigy mounds with sand and brush. In the early 1960s, forty-six percent of Paquimé was excavated. Di Peso and his team were precise, and they took many photographs to record their finds, but, surely, slight alterations in the structures were made during its burial and exhumation. Since excavation, some structures were refilled, and the other puddled adobe buildings are repoured at least once a year (see Figure 3). Despite the exactitude of all those working on the site, it is still constantly altered, however minutely. The city changes seasonally as the walls diminish and are replenished; feet carve the walkways deeper into the

⁴⁶ The reason behind this population boom, or whether it preceded the architectural project, is unknown. Di Peso speculated that Toltec *pochteca*, or traders, founded Paquimé as a locale to trade religious knowledge for goods such as turquoise. Stephen Lekson, an archaeologist who specializes on Chaco Canyon, believes that the elite from Chaco founded Paquimé. Whalen and Minnis, on the other hand, believe that Paquimé was founded and inhabited solely by local populations. These three arguments largely revolve around the ongoing debate as to the origin of Paquimé being in the Southwest or Mesoamerica. This question will probably never be conclusively answered.

⁴⁷ Di Peso postulated that this fire was due to a war caused by invading hunter-gatherer tribes from the north, and it eventually brought the downfall of Paquimé. Evidence that Paquimé came to a violent end includes macaws left to die in cages and unburied human remains throughout the city.

⁴⁸ Di Peso et al., volume 4, 232.

⁴⁹ After Paquimé was excavated, archaeologists reconstructed the site. They used materials found on the site, and it is difficult to discern the reconstructed areas from the original. Since that time, as repairs need to be made on the western side, concrete is used rather than mortar, so one can easily differentiate reconstructions from Medio period construction.

earth. Each one of these, albeit minor, alterations affect the appearance of Paquimé, and therefore, my analysis.

Introduction to Terminology

Di Peso's *Casas Grandes: A Fallen Trading Center of the Gran Chichimeca* volumes 1-8 introduces readers to construction methods and terms, some of which are unique to Paquimé. The apartment blocks in Paquimé were made from puddled adobe around wooden piers. Adobe is made from caliche, a special kind of clay that, when mixed with water, can be baked into adobe. Wooden piers were used as support within the walls, to support ceilings and floors at higher levels, to line lintels and windows, and to create bed platforms. ⁵⁰

There are several wall types that were identified in Paquimé during the Medio Period. The majority are puddled adobe, and this form of construction is unique to Paquimé. The Paquimians built wooden casts of the walls onsite, poured a wet caliche and water mixture into the mold, and occasionally added boulders and large stones. Then the mixture was tapped into place either with feet or tools. After it dried, workers removed the wooden, exterior cast. The second type of adobe walls utilized in Paquimé, known as English Cob, are more common in the Chichimeca. The Paquimians made adobe bricks that interlocked, and these were stacked to make walls. Jacal walls were constructed by making a wall of cross hatched sticks and covering this with adobe. Such walls were used for temporary structures while buildings were being

⁵¹All buildings terms are borrowed from Di Peso et al., volume 4, 211-271.

⁵⁰ Stephen Lekson disagrees with Charles C. Di Peso's identification of bed platforms, thinking that they are room-wide platforms. Lekson believed that these were used for storage rather than sleeping, doubling the area of storage space in a room. Stephen H. Lekson, *The Chaco Meridian:* Centers of Political Power in the Ancient Southwest, (Walnut Creek: Altamira Press, 1999), 89-91.

renovated. All of the walls were covered in two coats of plaster, making them a pale gray color.

Windows cutting into the walls were typically made as part of the cast, but a few were carved out of the adobe. Windows are shaped as squares, rectangles, circles, rectangles with arched tops, Ts, and sighting windows. Rectangular windows are the most common, amounting to 45.5%, and the windows are aligned with the doors and niches. The Paquimians carved recessed niches in the walls in the same shapes as the windows, and there were 304 of these found in Paquimé. The alignment of windows and doors in Paquimé facilitated ventilation, and the niche alignment was, presumably, for aesthetic purposes only.

Di Peso classified the doors as rectangular, T-shaped, rectangular with a recessed T, or ovular (see Figure 4).⁵⁵ Small T-shaped doors are sixty-four centimeters at their widest point, and the small rectangular doors are only ninety-two centimeters wide.⁵⁶ These narrow doors restrict the flow of people and goods through the spaces. Paquimians averaged a little over five feet, so they would have been forced to remove any bags, duck through, and then carefully slide bags and goods through the opening.⁵⁷ Two people would not be able to enter simultaneously, nor a mother carrying her child.⁵⁸

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⁵² Sighting windows are those in which the lower sill angles up and the upper sill angles down, making the interior opening larger than that of the exterior.

⁵³ Di Peso et al., volume 4, 226.

⁵⁴ Di Peso et al., volume 4, 229.

⁵⁵ Rectangular doors were classified as being small or large, and 85.5% of these were small. T-shaped doors were organized in a similar fashion, and 89% of these were small. There were only three doors that were circles or ovals in Paquimé.

⁵⁶ These are averages based on Di Peso et al., volume 4, 233.

⁵⁷ Di Peso, volume 2, 479.

⁵⁸ The small T-shaped doors are also one foot shorter than the Paquimians were, so people would have to duck down in order to enter. Di Peso, volume 2, 479.

Alcove beds are built-in bed platforms that are supported on three sides by a wall. They are made of cross hatched beams covered in adobe and supported by four poles. The floors in the multi-story buildings were made using plank and beam construction. Beams were secured into the walls by placing them inside anchor holes. Today, these holes are visible in the unenclosed structures. The piers were then covered with smaller sticks and covered with a thin coat of adobe. Another unique feature of Paquimian architecture is the raised, or platform, fire hearths. These comprise 27.2% of the hearths, and a third of these have incised designs on the platform. These consist of a sphere crowning a cone with stepped or macaw motifs on the sides.

Baltazar de Obregón wrote that the walls of Paquimé were painted in many bright colors. During the excavations, archaeologists found traces of paint and plaster covering the walls. Some interior rooms were painted green or had green and red horizontal stripes, and there were incised designs in the walls as well as charcoal drawings.⁵⁹ The drawings depict anthropomorphic figures, horned serpents, animal motifs, and geometric designs similar to those on Ramos Polychrome.⁶⁰

The eastern half of Paquimé is largely comprised of one solid, multi-story apartment block divided into units or houses. The houses are separated by plazas, hallways, and walls. During Di Peso's excavations, several houses were trenched and refilled because they could not be properly preserved.⁶¹ Because I was not able to

⁵⁹ Di Peso et al., volume 4, 223.

The comparison between the painted designs on the walls and ceramic vessels is potentially significant. Unfortunately, the excavation notes only include Di Peso's drawings of the paintings rather than photographs of the paintings themselves. The Museo de las Culturas del Norte does not have photographs of the paintings, so the authenticity of Di Peso's drawings could not be verified.

⁶¹ These include the House of the Well, Unit 22, Unit 19, Unit 21, and parts of the house of the Skulls and Pillars.

access them, they have been excluded from this study. I will examine The House of the Macaws, Unit 6, The House of the Dead, The House of the Skulls, and The House of the Pillars.

The House of the Macaws

The House of the Macaws rests in the liminal space between the west and east. Et is formed by puddled adobe and contains living quarters closely related to the eastern apartment block. Despite the formal relation, it is set off from the main adobe complex by West Street. The House of the Macaws covers an area of 1,226.53 square meters in which there are four plazas and thirty-one puddled adobe, single-story rooms (see Figure 5). From the exterior, the building is low to the ground, and from any direction, the other monuments in Paquimé appear to tower over it. As the name of the house suggests, this was a building used primarily for raising macaws. Excavators found six hundred nesting and breeding boxes contained in two rooms, eggs and macaws of all ages, and stone feeding bowls (see Figure 6). During the height of the city, the House of the Macaws would have drawn audible if not visual attention because of the constant squawking of birds that likely emanated from the structure. The largest room is in the northern section of the house is roughly thirty-six by seventy-two feet long. Rectangular, squat pens that once housed macaws line the main wall, and they

⁶² Liminality is used to describe ephemeral relationships between people and the built environment that exists in physical, conceptual, or spiritual transitions. A liminal space is therefore a transition. A doorway is a liminal space in that when one is walking through it, there is a moment when one is neither in nor out. The House of the Macaws marks a liminal space of Paquimé that is both east and west, secular and sacred.

⁶³ A path runs north-south between the House of the Macaws on the west and the House of the Dead and Pillars on the east. Charles C. Di Peso named this trail West Street, and he believed that it served the many traders that came into Paquimé.

⁶⁴ Di Peso et al., volume 5, 523.

⁶⁵ Di Peso, volume 3, 435.

are accessed through circular stone doors. A cylinder of stone placed in the circular hole sealed the doors, caging the macaw inside. Many of these cylindrical latches were left in situ, lining the doors and scattered in the plaza in front of the cages (see Figure 6).

The room located southeast of the main pen room has two square niches in the western wall. These niches hold *metates* worn with age and weather. ⁶⁶ They are aligned with the exterior doors, so as one enters, s/he is facing a niche. The alignment of the doors and niches creates a visual rhythm within the House of the Macaws. As one moves through the structure, the regular placement of T-shaped doors follows a rhythmic march within the walls.

Four of the ovens within the House of the Macaws were lined with residue of agave, suggesting that the inhabitants also brewed mezcal. Also within the plaza, Di Peso's team found *manos* and *metates*, suggesting that the one-story rooms were living quarters. Di Peso and his team found shell pendants, seventeen drums, a stone gong, and ceramics within the House of the Macaws during excavations. Musical instruments were certainly elite items, and it is often assumed that their presence indicates a religious ceremony. The same is true of mezcal, and the presence of the two in the house where macaws were raised indicates that sacred rites were preformed here. Shell pendants were also prestige items that would be traded or worn on an elite person.

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⁶⁶ Metates are large, rectangular stones that were used with manos to grind corn.

⁶⁷ Braniff, 30. Mezcal is an alcoholic drink made from roasted agave hearts.

The ceramics included: Ramos Polychrome, Ramos Black, Playas Red, El Paso Polychrome, and several others. Di Peso et al., volume 5, 523.

There are more interior T-shaped openings in the House of the Macaws than in any other building within Paquimé, and these openings average only forty-four inches tall. Rectangular-shaped openings are only twenty inches wide, and these, rather than the T-shaped openings, were probably used as doors. While the doors throughout Paquimé are small, here, in particular, they suggest a restriction of access. Macaws were, arguably, the most valuable items within Paquimé, so they were protected through tight controls over entry to the structure.

The House of the Macaws held an abundance of elite goods, macaws, and the highest concentration of T-shaped doors, a motif that seemingly represents power and wealth. All of these factors indicate that the inhabitants of the House of the Macaws were members of an elite class. Approximately half of the space within the House of the Macaws was residential, and the rest consists of plazas and aviculture areas. The people who lived within this building had access to macaws, and they were presumably surrounded by the elite goods that archaeologists found within the house during excavations. They were located in the center of the ceremonial core of Paquimé, indicating that the human occupants were also the center of Paquimé's ceremonial life. The building and its occupants were self-sufficient, with their own cistern, allowing them to function autonomously. The structure itself is located in the center of Paquimé, protecting the structure while simultaneously making it conspicuously visible. There are two viable explanations for this placement and privilege: it was either tightly guarded, or it formed the ceremonial heart of the complex, and perhaps it was a combination of these two factors.

⁶⁹ Braniff, 30.

When the House of the Macaws was first built, the northern side was a colonnaded entrance. Later, it was sealed and transformed into living quarters. While this reflects the renovations constantly occurring throughout Paquimé, this alteration left the House of the Macaws with only one exterior entrance. This appears to be a deliberate restriction of exterior access, perhaps as a means of safeguarding the valuable macaws inside, as does its placement in the center of Paquimé.

Scarlet macaws are not indigenous to the Casas Grandes region, so they were imported from the south. This was a surprisingly successful venture, as the remains of eggs and macaws of all ages were found during excavations. Macaw imagery is prominent in Ramos Polychrome pottery, and the birds had a ceremonial function and meaning. Had the town not been destroyed by fire and the scarlet macaws left to die in their cages, scholars today would probably not believe that the Paquimians raised these creatures. Macaw imagery is often thought to refer to Quetzalcoatl, a Mesoamerican deity depicted as a feathered serpent. The feathers of macaws were also a prestige item and were used for personal adornment.

Ramos Polychrome ollas and effigies frequently depict a macaw's head crowning the body of a serpent, possibly a reference to Quetzalcoatl, and this motif was found painted on walls in Paquimé and incised on platform hearths. The macaw motif recurs in context of other elite items, so the symbol also appears to reference power. While macaws surely served a ceremonial function within Paquimé, they were also a valuable trade item throughout the Chichimeca.

⁷⁰ Olla is the term used for Paquimian jars. They are elegant vessels that are wider at the base and curve in before slightly flaring at the lip.

The Mimbres Mogollon, a group within the Chichimeca, repeatedly depicted what may be a trader carrying birds. An example of the celebrated black-on-white pottery displays two men, macaws, and a burden basket. The burden baskets were packs carried by merchants, so this is a visual record of traders bringing macaws across the Chichimeca. Scarlet macaws were sacrificed by the Mimbres in the spring. The use of macaws in the Chichimeca also extended to Chaco Canyon where they were buried with the dead. Mortuary and sacrificial uses allude to the fact that macaws were used in religious ceremonies, and they were prized throughout the region as elite goods.

Because they are not native to the North American Southwest, nor can they be raised that far north, macaws became prestigious trade items.

The House of the Macaws is celebrated through the built environment in Paquimé through its central position. It is separated from the adobe complex. This separation provided a practical distance between the living quarters and the live animals as well as marking a cognitive distance between the day-to-day aspects of living and those that ride the cusp between the mortal and immortal lines. Standing on the eastern side of the structure, one can clearly see the Monument of the Cross, Unit 6, and the main domiciles. Despite these buildings, the mountains dominate the view. A trail leads to the House of the Macaws from the Mound of the Offerings, and the two are separated by Reservoir 1. When one stands outside the southern wall of the House of the Macaws and looks north, Reservoir 1 and the Mound of the Offerings form a straight

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⁷¹ The Mimbres were a subset of the Mogollon that inhabited southwest Texas and southeastern New Mexico from 1000-1150. They are celebrated for their bowls, typically painted in black-on-white, and they display some of the only figural paintings on ceramics in the Chichimeca. The current dating of Paquimé places the Mimbres as prior to the Medio period. These bowls, nevertheless, help to illustrate a regional phenomenon that undoubtedly lasted several centuries.

Darrell Creel and Chamion McKusick, "Prehistoric Macaws and Parrots in the Mimbres Area, New Mexico," *American Antiquity*, 59.3 (1994): 510-524.

visual line. The reservoir may have been located close to the main aviculture center for practicality, or perhaps the built environment is making the analogy of earth and sky through the water and bird.

Unit 6

Unit 6 rises one story on the northern end of the puddled adobe complex (see Figure 7). It stretches over a total area of approximately nine-hundred-six square meters in which there are two plazas and five family clusters. It creates a low-lying, northern façade for the puddled adobe apartment complex that dominates the eastern half of Paquimé. Because some of its rooms are semi-subterranean, the structure has two floors from the interior, but from the exterior, it appears to only have one. Fire pits dot both Plaza 1 and 2 within the retaining walls of Unit 6. Because the family units are only comprised of three to five small rooms, the paths quickly reach dead ends. The unit is no longer covered by a roof, so one can see into the interior rooms, but often they are not accessible.

Unit 6 is centered around Plaza 1 where several T-shaped openings and rectangular doors open into the interior rooms. One must duck through the short, thin rectangular doorways to enter the interior rooms on the western and eastern corner of the unit. The rooms are small, and even without a roof, one feels caged within the confines of the thick adobe walls. The earth drops and steps lead to subterranean rooms surrounded by small, rectangular, above ground rooms. There are square niches in the walls positioned at shoulder height. The southern house clusters center around a plaza with a stone-lined drain and fire hearth. Large T-shaped doors around

this plaza lead to two-story rooms dotted with niches which are more spacious than the rest of the house.

Unit 6 began as a pithouse dwelling that was lived-in prior to the Medio Period. and it was slowly remodeled throughout the phases of Paquimé's development. In ca. 1200 there were two plazas and five family units consisting of many puddled adobe rooms on top of, and adjacent to, pithouses from the Viejo Period (ca. 900-1250). Nine pithouses were then filled, but some rooms remained semi-subterranean. In the beginning of the Medio Period (ca. 1250-1470), the Paquimians constructed jacal walls that filled Plaza 2, creating makeshift, temporary rooms, and workers added a colonnade along the north wall, facing the Mound of the Cross. 73 Over the course of the Medio Period, the colonnade was filled and became a wall lining a row of rooms. The left side of Plaza 2 was cleared of rooms and became a smaller plaza, and the jacal walls were replaced with more permanent, puddled adobe walls.⁷⁴ Many of the rooms, despite constant renovation, are semi-subterranean, so one often is forced to step down in order to enter them.

Unit 6 lies directly to the west of the unexcavated mounds of Paquimé. Protruding from the mounds, corners of adobe walls break free of their earthen coverings. This setting provides a constant reminder both of the transitory nature of the adobe walls, and the near loss of Paquimé in the annals of history.

For a definition of a jacal wall, see page 20.
 Di Peso et al., volume 4, 324-338.

House of the Dead

The House of the Dead is a single-story unit on the southern border of the Market Place, and it is separated from the House of the Macaws by West Street. Ten of the rooms and one plaza jut out from the main apartment block. A long hallway divides the walled plaza in the House of the Dead from the House of the Pillars. This hallway leads to Plaza 3. Long, low-lying walls of the plaza form a rectangle that is only divided by the long row of rectangular cages. Eighteen turkey pens line the western wall, and they create a visual rhythm of boxes in the empty plaza (see Figure 8). A drain cuts a diagonal through the plaza that would have been carrying water during Paquimé's florescence.

Only thirteen people lived in the nineteen rooms of the House of the Dead.⁷⁵ Di Peso surmised that they were probably priests because of the unusually large number of burials under the floors. These burials were accompanied by hundreds of broken ceramic drums and seven headless turkeys, suggesting religious ceremonies through animal sacrifice and the intentional shattering of ceramic vessels.⁷⁶ Turkeys were frequently buried with the dead in Paquimé, and, presumably, they were raised for religious purposes as well as for food.⁷⁷ There was also the highest concentration of Ramos Black within the House of the Dead, which was used to hold the final meal of the dead.⁷⁸ The people living in the house presumably presided over the funerary rites for Paquimé citizens.

⁷⁵ Di Peso, volume 3, 392.

⁷⁶ Di Peso, volume 3, 392-3. The ceramic drums are displayed as ceremonial items in the museum, and it is commonly believed that drums were used in religious ceremonies across the Americas. Most archaeologists agree that the presence of decapitated turkeys suggest sacrifice.

⁷⁷ Braniff, 31.

⁷⁸ Di Peso, volume 3, 392-3.

The House of the Dead occupies the central position of the adobe apartment block, and it is flanked by the House of the Macaws, the House of the Pillars, and the House of the Skulls. Rather than secluding the funerary space, the Paquimians embraced it. The placement of this house, along with the abundance of below floor burials throughout Paquimé indicates that the afterlife was both planned for and revered. Unlike the macaw pens, those for the turkeys were in a visible, central place. Rather than being tightly guarded, the turkeys were displayed, perhaps to remind those in the city of the certainty of death.

House of the Skulls

The House of the Skulls' two plazas and fifty-nine puddled adobe rooms (divided into 22 house clusters) cover an area of 6,850.2 square meters. The structure rises in three stories. The rooms vary in height with one rising three stories, thirteen rooms rise two-stories, and the remaining twenty-two rooms are single-story. 79 Di Peso's team found many elite items inside the House of the Skulls including natural formations (geodes, concretions), paint pigments, shell spangles, stone pendants, stone mosaic beads, two hand drums, a stone sculpture of a man's bust, shell beads, and assorted ceramics.⁸⁰ There was also a high concentration of textured and plainware Casas Grandes pottery along with four times as many *manos* and *metates* as in any other building. This, and the abundance of stone cooking tools and ceramic-lined fire hearths, led Di Peso to speculate that the people within this House specialized in food preparation. Also, within the House of the Skulls, archaeologists found the highest

 ⁷⁹ Di Peso et al., volume 5, 717.
 ⁸⁰ The ceramics included: Ramos Polychrome, Gila Polychrome, El Paso Polychrome, as well as others. Di Peso et al., volume 5, 757.

percentage of stone working and pottery making tools.⁸¹ There is an interior colonnade in front of the Plaza 2 with five square columns.⁸²

Plaza 3 divides the House of the Dead and the House of the Skulls. Six rooms line the wall that divides the plaza and the House of the Skulls, and they are in the shapes of Ls, rectangles, and three small squares. Two long rectangular rooms flank the eastern edge of that room group and they lead to the cross-shaped room (see Figure 9). A plaza flanks the cross room that separates the House of the Skulls and Pillars.

In the center of the building there is a cross-shaped room topped by a small room in which racks of human skulls were found, giving the structure its name.⁸³ Scattered in this area were also a trove of bones including a large quantity of bear leg bones. Interestingly, like the Mound of the Cross, this two-story room is also aligned with the cardinal directions. The bear bones and skulls contained within this room, along with the fact that it is oriented to the cardinal directions, suggests that private, religious ceremonies took place within its confines. These activities would be only for the spiritual elite, unlike the mass performances occurring in the western half of Paquimé.

The items found within the House of the Skulls along with the diverse rooms indicate that the unit enclosed a myriad of activities ranging from sacred to secular, normally operating in between the two extremes. The abundance of plainware, fire hearths, and manos and metates indicate that those in the house focused on food preparation and storage. The two-story cross-shaped room, on the other hand, would

Bi Peso, volume 3, 389.
 Di Peso et al., volume 5, 720.
 This is similar to the Tzompantli altars erected in Chichen Itza and Tenochtitlan. These were walls of skulls erected to honor the gods.

have been conducive to more ceremonial practices. One could come to any number of conclusions based on this combination, but most likely, the juxtaposition shows that the act of processing corn took on a ceremonial nature. Perhaps the Paquimians worshipped some form of a corn deity, combining the mundane acts of growing and eating into their religious world-view.

The House of the Skulls is connected to the House of the Dead. These two buildings may have been thought of as one large building by the Paquimians, or they may have thought of them as separate, as Di Peso did. Regardless, the two houses both held materials for sustenance and religion (corn and turkeys). The buildings indicate that all activities in the excavated section of Paquimé operated at a ceremonial level some, if not all, of the time.

House of the Pillars

The House of the Pillars forms the southeast corner of the apartment block (see Figure 10) and is named for the three sets of square columns within the building. Entering the house on the southern or eastern side, one encounters seven columns that create a grand entrance. An exterior, narrow path leads one from the columns to the ball-court on the southwestern side of the building. The row of seven square adobe columns on the southeast gave the building its name and Di Peso the dream of Toltec founding fathers. Zigzagging hallways were used to connect the five plazas to the interior rooms. An upper story room was filled with unused *metates*, suggesting that they were manufactured here. There was also a low-ceiling, upper story room used for

⁸⁴ The Toltec also built structures with square columns, so Di Peso felt that their presence in Paquimé proved that Toltec merchants founded and designed the city.

shell refining. 85 Room 45-14 appears to be a roofed "atrium room" supported by columns.86

An interior, ceremonial ball-court occupies 458.36 square meters in the southwest corner of the House of the Pillars.⁸⁷ Rather than an I-shape, it is rectangular with sloping sides that are tallest in the south. The small court is enclosed within the House of the Pillars. The initial effect of enclosing the ball-court would be to limit those viewing the game. This court was either reserved for an elite class or it restricted the number of viewers regardless of class. The interior ball-court clarifies that in Paquimé there was not a true duality of sacred versus secular, west versus east. The east provided places for ceremonial activities, but these activities only included small groups of people at a time.

This house has the highest ceilings and the largest rooms in Paquimé, and the walls are thickest here, suggesting that this was where the building rose to the greatest height. The rooms are spacious, and this was an enclosed, yet largely public, space. Anyone entering Paquimé from the south would encounter the House of the Pillars before reaching the city's interior. This building acted as a large public space, welcoming people while simultaneously awing them with the wealth and knowledge of engineering in Paquimé. The rectangular doors on the bottom floor are large enough to comfortably pass with a load. This was a public building, and the large doors are a marker of this.

⁸⁵ Di Peso, volume 3, 396-7.⁸⁶ Di Peso, volume 3, 396-7.

⁸⁷ Di Peso et al., volume 5, 617.

Within the House of the Pillars, there are sighting windows for viewing the Mound of the Heroes. The Mound of the Heroes was part of a signal system designed by the Paquimians that stretched over hundreds of miles. These stations were typically located at the tops of mountains and signals could be sent from post to post through smoke, fire, or runners. The Mound of the Heroes was the only location in Paquimé where these activities occurred, and the top of the mound, or manmade mountain, was covered in ash from the signal fires. Those in the House of the Pillars obviously paid keen attention to this system.

The rooms are many different heights, but they are interconnected by walls that form a zigzagging pattern unique in the city. This motif is accentuated by a drainage room that separates two larger spaces (see Figure 11). The butterfly module was also used in the House of the Pillars. These room designs combine to create a maze-like floor plan in the house. This would simultaneously awe and confuse those moving through the rooms. The floor plan mirrors the Paquimian penchant for complex geometric forms repeatedly used on Ramos Polychrome vessels.

The House of the Pillars served many functions, and the built environment reflects the house's multifaceted nature. Primarily, the house acted as a façade for Paquimé, and its exterior colonnades and spacious rooms are well-suited for public purposes. Conversely, the interior ball-court could act as a secluded location for the sacred ball-game.

⁸⁸ During the Diablo Phase, the sighting windows were sealed. (Di Peso, volume 3, 394-5).

Conclusion

The eastern half of Paquimé is largely comprised of one apartment block that has been divided into five houses. Houses are physically separated through wide hallways and plazas. They also had different functions, from raising turkeys and shell and stone refinement to provisions of domestic and public space. West Street delineates the apartment block from the House of the Macaws, creating a pause in the rhythmic adobe rectangles that form this half of the city. Access was tightly controlled throughout the east through narrow interior doors and limited exterior access. The adobe walls were once covered in plaster and paint, transforming the heavy, earth toned structures into light, decorative buildings crowning the valley.

INTRODUCTION TO THE WEST

The western half of Paquimé is comprised of effigy mounds, an I-shaped ball-court, and small, manmade bodies of water. These buildings are public, exterior mounds of earth lined in regularly spaced stones that were covered in plaster and paint. The mounds would have been used as stages on which public rites could be enacted. This chapter will introduce each of the monuments and explain their relationship to one another.

⁸⁹ The structures in both the east and west were covered in plaster and paint. Despite this, the formal differences between the two sides would have been evident during the Medio period. The curvilinearity on the west contrasts starkly with the angularity in the east. Also, the way in which the structures were painted may have differed.

Liminal Space

Two structures, the House of the Ovens and the Mound of the Cross, are located at the northern boundary of Paquimé, creating a liminal space between the interior and exterior of the city. ⁹⁰ They form a transition between the valley and the city, yet they are removed from the complex, creating a pause between the humanized place and the surrounding space. While no city wall or gate exits, Paquimé is clearly demarcated by these structures that rise out of the desert landscape valley. The House of the Ovens, where mezcal was brewed from agave, was removed as a health consideration for the people occupying the city. The Mound of the Cross may have stood apart and been elevated as an orientation device for the rest of the city. While the Mound of the Cross is a low-lying monument, its location on a hill makes it visible throughout the majority of Paquimé. ⁹¹

Topography plays an important role in demarcating Paquimé's borders. The northern edge of Paquimé is bounded by an arroyo just as the south is lined by the Rio Casas Grandes. From the northern arroyo, a hill rises on which sits the House of the Ovens and the Mound of the Cross. This naturally occurring feature separates the

⁹⁰The second I-shaped ball-court and the House of the Gods, two structures marking the southern boundary of Paquimé, also exist in a liminal space. These structures, however, are in a state of disrepair and were not viable for this study. Today, all that remains of the ball-court is a semi-circle of mounded earth covered in gravel. Di Peso speculated this was a court that was cut through by an arroyo, destroying the southern and eastern portions. The so-called House of the Gods, exists today only as a circle of stones surrounding a larger stone. It is too far east to be included in the section of Paquimé that is restored yearly. Both of these structures are smaller than those occupying the western half of Paquimé. Also, they only form a single line of structures surrounding the adobe complex, whereas on the west, there is a much greater area containing ceremonial structures.

On page 409 of the third volume of *Casas Grandes: A Fallen Trading Center of the Gran Chichimeca*, Di Peso stated that the Mound of the Cross was visible throughout the entire city. In my experience, this was not the case; certainly when the buildings rose to six or seven stories, the Mound of the Cross would not have been visible from behind them. Despite this, the Mound of the Cross is visible from most vantage points in the city, and it would have been clear from the roofs throughout the eastern adobe section.

structures from the rest of the city by elevating them. From the hill, the earth gradually slants down to the river, creating the slope on which Paquimé sits.

House of the Ovens

The House of the Ovens consists of one mound, two plazas, two house clusters, and four pit-ovens. It is the furthest removed complex in Paquimé, and it spreads over a 2350 square meter area. 92 The House of the Ovens rests on top of a hill in northernmost point in Paquimé. Pit ovens were dug into the top of a hill (see Figure 12), and the two house clusters rest at the bottom of the same hill to the north (see Figure 13). They are elevated on a manmade mound, but they are still several feet lower than the ovens. The large, stone-lined pit ovens were used by the Paguimians to make mezcal from agave. 93 The two pits are deep recesses lined in burnt stone, and approximately one foot out from their perimeters lays a circle of stones. Rather than forming a concentric circle, there are three breaks in the ring of stones.

The large pits suggest that substantial quantities of mezcal were brewed inside Paquimé. While it may have been made simply for recreational consumption, in Mesoamerica drinking mezcal had a religious connotation. The complex's location made the people's profession elusive and protected Paquimé's citizens from the fumes of the mezcal. There were extensive grave goods found inside the two house clusters and the ovens were full of agave hearts when Paquimé was excavated. 94 The elite grave goods, as well as the placement of the house, suggest that there was a greater cultural significance to drinking mezcal than mere recreation. Rather than being treated

⁹² Di Peso et al., volume 4, 272.⁹³ Braniff, 47.

⁹⁴ Di Peso, volume 2, 405.

as average workers, those who brewed mezcal in Paquimé were honored in death, indicating that they were part of a higher social strata. Also, while the House of the Ovens was probably detached from the rest of the city for practical reasons, its visibility and proximity to the Mound of the Cross underscore its cultural significance. The ovens were a contrived spectacle, placed at the top of a hill.

Mound of the Cross

The Mound of the Cross was modeled with earth lined in stone, forming a Greek cross surrounded by four circular mounds. ⁹⁵ It is oriented to the cardinal directions and sits on a hill overlooking Paquimé, southeast of the House of the Ovens. The arms of the cross average three meters wide, fourteen meters long, and sixty-seven centimeters tall. ⁹⁶ Each of the four mounds is about seven meters in diameter, and stairs lead to their flat tops. These stairs are on the southern side of all of the circular mounds except the northern one; the stairs leading to the top of the northern mound are located on the east. Interestingly, there are no steps leading up to the cross itself. Over three thousand ceramic vessels were found buried within the Mound of the Cross. ⁹⁷ Today the walls are irregular, forming an irregular, curvy outline, but it is likely that, during the Paquimé phase, they were straight and the planes met at ninety-degree angles. ⁹⁸

The Mound of the Cross is removed from the city's core, but, as a stone-lined building, it functioned both as a sacred structure and an orientating device. The entire

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⁹⁵ Crosses are a common motif in the Chichimeca and throughout Mesoamerica. The Greek cross refers to the four cardinal directions, so it is not surprising that it occurs frequently in both regions. There was an acute understanding of the cosmos in Mexico, both in the Highlands and Lowlands. Pecked crosses, or those carved into rock, occur frequently in the area around Teotihuacán. They also appear repeatedly on the petroglyphs that decorate the canyon walls in Chaco Canyon (Fig. 16).

⁹⁶ Di Peso, et al., volume 4, 288.

⁹⁷ Di Peso et al., volume 4, 290.

⁹⁸ Braniff, 46.

monument is low-lying, but because it is on a hill just north of the city, it is visible from most of the other buildings. Its isolation stems both from its location in the north and through its elevation on a hill. The segregation creates visibility and a sense of prominence, leading some scholars to presume that the Paquimians used this structure to align the rest of the city.

Like the rest of Paquimé's buildings, the Mound of the Cross is aligned to the cardinal directions. Further, it is aligned with the autumnal equinoxes, so the sun rises over the eastern arm as witnessed from the center of the cross. ⁹⁹ Also, from the center of the cross, the horizon is visible in all directions. Most of Paquimé is visible from the circular mounds surrounding the cross. These correlations connect the cross both to the interior structures within Paquimé and the heavenly landscape.

Previously, scholars have discussed the visibility of the Mound of the Cross from different locations within Paquimé. Because the Mound of the Cross highlights the east/west division in Paquimé and it possibly acted as an alignment tool, more illuminating insights arise when one discusses what is visible from the mounds themselves. Standing on the northern mound, the line that delineates the east and west is clear (see Figure 14). The arms of the cross itself appear to begin this delineation, stretching to the retaining wall, and extending down the center of the city. While the Mound of the Cross supports the east/west division within Paquimé, it also harmonizes the two sides through the conscious use of topography and directionality. From the western mound, a clear line of sight extends from the Mound of the Offerings, the Mound of the Heroes, the Mound of the Bird, and ending with the House of the Serpent (see Figure 15). The Paquimians made skillful use of the existing topography within

⁹⁹ Di Peso, volume 2, 409.

Paquimé, placing the Mound of the Cross on a hill, and allowing it to physically crown the city. This emphasizes the cardinal alignment of Paquimé, indicating that directionality was a key concern of the Paquimians. While this presents a harmony between the built and natural environment, it is the human control over nature that is emphasized.

The West

A stone wall bisects Paquimé, and there is a clear formal and functional distinction between the western and eastern complexes. There are two breaks in the stone wall, and the two stone-lined reservoirs fill these gaps. These reservoirs formally relate to the structures around them, acting as a boundary between east and west. While there are ceremonial structures on the north and south, they act as markers, or liminal space to enter and exit the city. As a border, they form the skin of Paquimé. The west occupies as much space, or area, as the adobe complex.

Sacred structures lie on the west side of the stone retaining wall. These consist of the Serpent Mound and House, Mound of the Bird, Mound of the Heroes, I-Shaped Ball-Court and associated Temple, Mound of the Offerings, and Reservoirs 1 and 2. These structures are curvilinear, stone-lined mounds surrounded by open plazas and pooled water. Viewers may move freely around them and follow the stairs

¹⁰⁰ Di Peso, however, divided the ceremonial precinct into three zones: the Marketplace (the Mound of the Offerings, Reservoir 1, Mound of the Cross, Central Plaza, Mound of the Heroes, I-Shaped Ball-court and Temple, and House of the Macaws), West Entrance Complex (Reservoir 2, Mound of the Bird, Serpent Mound and House), and the South Entrance Complex (Ball-court 2, The God House). Di Peso himself called this division arbitrary (volume 2, 409), and the experience of Paquimé reveals a different configuration.

¹⁰¹ For a longer discussion of the wall, see page 68.

¹⁰² The House of the Serpent is the only exception.

¹⁰³Unit 5 or the Monticulo is excluded from this study as it was probably not meant to act as a structure. It is comprised of solid gravel, and it was either a stockpile of this material or an unfinished monument. Di Peso, volume 2, 421.

up to flat, mesa-like tops. The monuments on the west are markedly different from the east side in that they appear to be exterior, public monuments acting as large platforms or stages for outdoor performance. The monuments, for the most part, do not have interior rooms. Presumably, only priests or spiritually elite people had access to the tops of the mounds, but their actions could have been viewed throughout Paquimé. 104

Stone-lined structures are more permanent and required less maintenance than puddled adobe. Mounds of earth were lined with even stones and then covered in plaster. Presumably, they were then painted. The stone and plaster lends stability to the forms while simultaneously evoking the architecture in Chaco Canyon. The Chacoans built Great Houses out of well-fitted ashlar masonry. The stones lining the earthen mounds in Paquimé are placed in regular rows around the mounds, perhaps alluding to the formal qualities of Chacoan Great Houses in the Mc Elmo style. As was common architectural practice in this region, the regular stones were covered in plaster. In Mesoamerica, truncated pyramids were built from hewn masonry, so the Paquimians may have been emulating forms from Teotihuacán (ca. 150 BCE – 650 CE) or Tula (ca. 900-1200). These comparisons aside, the Paquimians use of stone is a significant formal aspect.

¹⁰⁴ There is no archaeological evidence that suggests any restriction on who was allowed to access the top of the mounds. There is, however, ample evidence that this was a common practice throughout Mesoamerica. The truncated pyramids built by people of these cultures were actually bases for temples made of perishable materials such as wood. Royalty would ascend the stairs and enact socio-religious performance while the inhabitants of the city watched from plazas. In Paquimé, there were not structures built on top of the mounds, but they are surrounded by plazas. These, as well as the roofs of the adobe structures in the east, would provide excellent viewpoints from which to watch the actions occurring on the mounds' summits.

¹⁰⁵ Di Peso et al., volume 4, 223.

¹⁰⁶ Chaco Canyon, in present-day New Mexico, flourished from 900-1180. Great Houses, or large buildings constructed of regular masonry and containing great kivas, dot the canyon floor.

several different masonry types exist in Chaco Canyon, and archaeologists believe they were used at different times, Type I occurring first and the Mc Elmo being the last. This masonry style was also used in Mesa Verde, and it is characterized by the use of regularly placed, larger stones to form the veneer of a wall.

Serpent Mound

The southwest corner of Paquimé is bounded by a low-lying effigy known as the Serpent Mound (see Figure 17). This monument, as the name suggests, is in the form of an undulating snake that was constructed using mounded earth secured by terraced stones and then covered in plaster. The tail begins in the southwestern tip of the city and extends eleven meters along the western edge of Paquimé. Its head is in the north, and the effigy mound grows higher as it approaches the mouth, rising from twenty-four to thirty-three inches. The body varies in width throughout its curving masses from one to three and a half meters. Rather than a wall that physically impedes passage, this short, earthen mound created a symbolic boundary between Paquimé and the surrounding valley to the west. A double triangle extends out of the serpent's head, forming a plume. Within the head of the Serpent mound, excavators found a rectangular, stone slab with a plumed serpent incised on one side. The discovery of this relief carving reinforces that the serpent is indeed plumed.

The presence of a horned or plumed serpent not only within city but actually forming a boundary evokes many significant connotations. The plumed serpent is a motif that occurs frequently throughout the Chichimeca. Plumed serpents were regularly depicted on Ramos Polychrome. On these ollas, the form of the serpent is

¹⁰⁸ In October 2004 and March 2005, the body of the serpent was fairly straight, but Shirley Robinson, a resident of the area who worked with Di Peso during the excavations, informed me that it was formed in regular undulations until 2000. The site must be restored at least once a year, and Ms. Robinson believed that after years of restoration, the shape had changed. Di Peso's drawings and pictures also depict a serpent whose body writhes in regular undulations rather than the fairly straight form that exists today.

¹⁰⁹ Di Peso et al., volume 5, 478.

¹¹⁰ Di Peso et al., volume 5, 478.

¹¹¹ Di Peso et al., volume 5, 478.

regularly juxtaposed with that of a macaw. On this particular vessel, a serpent's body zigzags across the center of the olla, and it is crowned with the head of a macaw rather than a horn or plume. Stylized macaw beaks are superimposed on the serpent's body as if to form the textured scales of the snake. Interestingly, rather than a tail, the serpent's body ends in feathers. The snake is painted in black, and the macaw head is highlighted through the use of red pigment. Geometric forms occupy the spaces above and below the snake's body, adding stepped motifs, squares, and visual dynamism in what would otherwise be negative space.

Modern Puebloan people use the horned serpent as a symbol for water, maize, lightning, and the sky. This motif is commonly related to the feathered serpent of Mesoamerica, a physical manifestation of Quetzalcoatl, the feathered serpent. Quetzalcoatl displays an inherent duality that represents the earth and sky. The deity also connotes the heavens, rains, fertility, and transformation. The plumed serpent has variable meanings throughout the Americas, but, nevertheless, is a persistent symbol relating to a deity associated with water, earth, and sky. 113

The House of the Serpent sits directly to the east of the Serpent Mound.

Because these two structures occupy the southwestern most point in Paquimé, they relate to each other more than to any other monuments. They are surrounded on all sides by open expanses, even within the city proper. Formally, the Serpent Mound evokes the rolling, rocky foothills that frame the western skyline of Paquimé, making its

¹¹² Polly Schaafsma, "Quetzalcoatl and the Horned and Feathered Serpent of the Southwest," *The Road to Aztlán: Art from a Mythic Homeland*, Virginia M. Fields and And Victor Zamudio-Taylor, eds (Los Angeles: Los Angeles County Museum of Art, 2001), 143.

Americas. This 1200 foot long mound in Louden, Ohio was built in ca. 1100, and also has the form of a regularly undulating serpent.

relationship to the surrounding valley and mountains far more pronounced than any of the other effigy mounds. It is furthest removed from the rest of the monuments within the city. This was a city of both commercial and spiritual importance, and the western rim's boundary reminds the passerby that s/he is entering ceremonial space.

House of the Serpent

The House of the Serpent is the only puddled adobe structure on the western half of Paquimé, and this large monument encloses a total of thirty-two hundred square meters. 114 It contains twenty-five single-story rooms and two multi-story rooms that open onto four interior plazas. 115 There is only one exterior door to the house, so access to the interior is extremely limited (see Figure 18). The House of the Serpent was one of the first structures built in the Medio Period (1250-1470), perhaps acting as a prototype for the adobe structures in the east. It set the standard for architectural elements that were later utilized: T-shaped doors, bed frames, square columns, stairs, drainage systems, and limited exterior access. 116

The structure is much lower than the adobe buildings on the eastern side of Paquimé, and low lying walls give way to large, open plazas. The walls along the perimeter average about two feet wide, and many of the interior rooms are semisubterranean. The rooms within the House of the Serpent surround the plazas, and they are shaped like squares, rectangles, and rectangular rooms with wing halls. Along the northern wall, there are heated bed platforms that measure approximately sixty-four by forty-six inches. There are several circular and square openings in the walls that

 $^{^{114}}$ Di Peso et al., volume 5, 475. 115 Di Peso, volume 2, 372 and $\,$ Di Peso et al., volume 5, 475.

¹¹⁶ Braniff, 35.

functioned as vents for the interior rooms. The puddled adobe walls meet at ninety-degree angles, forming a complex that appears to be a series of regularly stacked cubes. During the day, there is a dramatic play of light and shadow on the smooth adobe walls.

The House of the Serpent filled several roles during the florescence of Paquimé. This structure was built in ca. 1200 and abandoned during the Paquimé phase, in 1250, when wooden posts and stone seating disks were removed from portions of the unit. The ground floors were then used to raise macaws until the roof fell in, killing a man whose remains were left in the rubble. 117 Afterward, the House of the Serpent was used as a burial ground, and bodies were interred inside the decaying adobe walls. Macaws and beads were buried in caches underneath the plaza floors. 118 At some point, the solitary exterior door and doors leading from the three plazas were sealed with stone. Di Peso believed that some of Paquimé's inhabitants did this while the city was under siege because the stone barricades had been breached and there were unburied remains found throughout the rooms of the House of the Serpent. 119

The large, central room in the House of the Serpent (Room 38) had an assemblage of prestige items underneath the melted adobe floor. These objects included: bone and stone tools, stone vessels, ceramics, shell beads, scarlet macaws, and human remains. This assemblage of elite goods led Di Peso to speculate that the House of the Serpent was originally ceremonial and was later secularized in order to

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¹¹⁷ This is evidenced by the nesting boxes found within the rooms. Di Peso et al., volume 5, 475-502.

¹¹⁸ Di Peso et al., volume 5, 482-4.

¹¹⁹ Di Peso et. al., volume 5, 475-502 and Braniff, 37. It is also possible that the doors were sealed prior to the destruction of Paquimé. If so, it is possible that The House of the Serpent was ceremonially "buried"

The ceramics included: Ramos Polychrome, Villa Ahumada Polychrome, Baricora Polychrome, Dublan Polychrome, and others. Di Peso et al., volume 5, 508.

raise macaws in the interior. 121 I argue that Di Peso was wrong to believe aviculture secularized the structure. Rather, this act furthered any spiritual or elite associations with the building. Macaws are directly implicated by the plumed Serpent Mound nearby. The bird, as well as its feathers, is commonly associated with Quetzalcoatl, the same deity monumentalized in the Serpent Mound, and macaws were raised primarily for their feathers which were used in ceremonial clothing, headdresses, and as trade goods. 122 This suggests that the House was not secularized but made sacred through aviculture.

The juxtaposition of the House and Mound of the Serpent creates a telling relationship. The Serpent Mound and House are spatially set between Reservoir 2 and the foothills to the west, creating juxtaposition between earth and water, the scarlet macaws then evoking the sky. The consistent repetition of plumed serpents with macaws on Ramos Polychrome ceramics furthers the dualistic, ceremonial meanings in the Serpent Complex. This may lead to future inquiries that show that the House of the Serpent was not secularized, but, rather, its ceremonial function was altered during the Medio period.

Also, the placement of the House of the Serpent on the western side of Paquimé reinforces its sacred nature. Certainly, if the city planners had not wanted the structure on the west, it would have been razed rather than used and maintained. This, of course, begs the question why the Paquimians would evoke the eastern side of the city in the west. Perhaps, it was that people needed to live with the macaws that were originally being raised within the house. The presence of a puddled adobe structure on the western half of Paquimé highlights the fact that there are no fixed dualities in

Di Peso et al., volume 5, 508.
 Michael Joseph Rizo, Scarlet Macaw production and Trade at Paquimé, Chihuahua, Master's Thesis. (Tucson: Arizona State University, 1998).

Paquimé. The private is evoked in a public quadrant of the city, reinforcing that rather than binaries, the public/private and sacred/secular spectrum operated on a sliding scale. Buildings existed somewhere between these fixed opposites and could be experienced in a myriad of different ways.

Mound of the Bird

The Mound of the Bird is a small effigy mound to the northeast of the Serpent complex that measures approximately 320 square meters and sits close to the second reservoir. There are a series of ramps in the west that lead one up and around the body of the bird (see Figure 19). The northeast portion of the mound is marked by a hooked triangle, forming a beak that points northeast. On the southern side, two staircases outline the wings and tail of the bird and lead to the summit (see Figure 20). The sides of this structure, like the other western buildings in Paquimé, are lined in fine, regularly spaced stones covered in plaster. The interior of the mound is comprised of sandy earth in which six vessels were found. 123

When one ascends the Mound of the Bird via the ramps on the west, one is led around the northern rim of the perimeter of its body. Then, the viewer is forced to turn in order to ascend to the summit, thus walking through the beak to enter the belly of the bird. The phenomenological aspects of this journey take one through the bird's eastward pointing beak, through its mouth, and onto the flat top of the mound, acting as a bird's belly. One can then descend one of the two sets of stairs delineating the wings from the tail, as if being defecated by the creature. From the adobe complex, it would appear as though human beings were being consumed and then excreted by a macaw.

¹²³ These were all Casas Grandes plainware. Di Peso et al., volume 4, 474.

From the top of the Mound of the Bird, the House and Mound of the Serpent are clearly visible. In fact, this is the only point in Paquimé where the Serpent Mound can be seen. When understood in conjunction with the fact that macaws were raised in the House of the Serpent and the evocation of Quetzalcoatl, a telling relationship forms. The buildings juxtapose serpent and bird, two forms often combined in Ramos Polychrome. The beak of the bird points northeast toward the Mound of the Heroes, involving this mound and the reflecting pool around it in the relationship of the structures.

While the Mound of the Bird is small compared to the other monuments in western Paquimé, it is laden with performative and iconographic meaning. Macaws appear frequently on Ramos Polychrome and they were raised in Paquimé, probably due to their association with Quetzalcoatl. The relationship between the Mound of the Serpent and the Mound of the Bird replicates the same juxtaposition that repeatedly occurs on Ramos Polychrome ollas. These frequently depict a man emerging from the mouth of a bird/serpent composite creature. The common motif could have been performed as one ascended the ramps of the Mound of the Bird, entering the body through the beak.

Mound of the Heroes

The Mound of the Heroes¹²⁴ is a truncated pyramid, and it is the largest ceremonial structure within Paquimé (see Figure 21). It is fifty-six meters long on the east-west axis and forty meters wide on the north-south axis. 125 While the mound of the Heroes is a circle on all sides except the west, the irregularity of its dimensions is due to the terraced east façade with two staircases leading to the top. This orients the Mound to the east, facing an open area that separates this structure from the House of Macaws. 126 The exterior of the Mound of the Heroes was covered in a stucco, stone façade. The city's ditches drained to the southwest of the mound, forming a large, shallow reflecting pool around the structure. 127 The summit was covered with a layer of ash, suggesting that it may have been part of the signal system. 128

Three small structures reside to the southeast of the Mound of the Heroes and were, presumably, related to the large mound. A small pit-oven was found during the excavations, still filled with agave hearts. 129 Two small subterranean rooms lie next to the pit oven, one circular, the other square. The interior walls of these structures were lined in stone, replicating the veneer of the Mound of the Heroes. Because beads were

¹²⁴ The Mound of the Heroes is so named because fallen soldiers were buried there in 1911. During the Madero Revolution, the Madero forces met the Federales near Paguimé, and the Maderos were forced to take refuge within the ruins. Eighty-five men were slaughtered during the conflict that ensued, and their remains were left in a shaft that had been dug into the Mound of the Heroes by looters. Because of the historic funerary association, the excavators did not dig into the Mound of the Heroes to search for art objects within the monument.

¹²⁵ Di Peso et al., volume 4, 463.

¹²⁶ Di Peso referred to this open area between the Mound of the Heroes and the House of the Macaws as the marketplace because the surface of the earth was littered with beads and fragments of turquoise, shell, and pottery.

²⁷ Di Peso, volume 2, 423.

¹²⁸ There are a series of signal towers throughout the Casas Grandes region. Messages and warnings were sent via smoke or fire. Cerro de Moctezuma is the closest of these signal stations to Paquimé, and there is a clear line of visibility between it and the Mound of the Heroes.

129 Di Peso, volume 2, 422-3.

found outside the two one-room structures, Di Peso called them sales booths. 130 He believed that Paquimé was a thriving trading town filled with traveling merchants, so this name reflects his overall preconception about the city. Beads, shell fragments, and turquoise were found throughout Paquimé, so their presence near the subterranean rooms does not reveal the rooms' functions. The rooms' position in the west combined with the stone walls indicates that they were related to the ceremonial activities occurring on and around the Mound of the Heroes. It is possible that they were backstage areas so that those scheduled to ascend the mound would actually appear as though they were rising from the earth. In this way, they may have acted as Paquimian sipapus, or representations of the mythic place where humans emerged from the earth. 131

As the largest ceremonial monument, the Mound of the Heroes dominates the western section of Paquimé. The top of its tall summit can be seen throughout the city as if it is part of the mountains surrounding Paquimé. The water in the shallow pool would reflect the sky and facades of the monuments, and set the Mound apart, tonally, from the rusts, browns, and creams that dominate the terrain. It is also the closest structure to the temple associated with the primary I-shaped ball-court.

Both the towering size and dominant position of the Mound of the Heroes point to its prominence in Paquimé. Because its summit is visible throughout Paquimé, it probably served as the primary stage for the ceremonies that occurred in the west. From the top, one relates more closely with the surrounding mountains than with the structures below.

 $^{^{130}}$ Di Peso, volume 2, 403. 131 Sipapus, small holes in the interior floors of Anasazi and Puebloan kivas, symbolize the mythic place of emergence from the world below.

I-Shaped Ball-Court and Temple

A pathway leads north from the Mound of the Heroes to the Temple associated with the primary ball-court (see Figure 22). The structure is approximately nine hundred square meters, and the aerial view of the temple is in the shape of a conch shell. 132 The conch is a common motif in Mesoamerica that suggests water and wind by emulating the form of a spiraling shell. 133 The temple's stone-lined walls were once covered in plaster. They slope inward about nine degrees and form regular, level ramps, spiraling around the monument. The excavators found bone, shell, stone, and ceramic offerings interred within the temple. 134 While there was no evidence of a structure ever crowning the summit, it would have provided premier seats for the ballgame (see Figure 23). This provided privileged seating while simultaneously making those of the elite class part of the spectacle, reinforcing their power in this grandiose display.

The temple faces north to the ball-court. This I-shaped court is eighty-eight by forty meters. The floor of the court was found littered with shell and turquoise beads. There are mounds of solid gravel for seating on the east and west sides of the ball-court that rise three and a half meters. The western side of the court has a larger mound with a thin, rectangular passageway going through the center. The mounds, which were presumably for seating, are the only barriers or walls to the court. Despite this, Di Peso

¹³² Braniff, 24.

¹³³ In the Postclassic (900-1521) period in Mesoamerica, round pyramids were dedicated to Ehecatl, Quetzalcoatl's manifestation as the god of the wind. Esther Pasztory, *Aztec Art* (New York: Harry Abrams, 1983), 123. Spiraling, circular temples, such as El Caracol in Chichen Itza, evoke Ehecatl by simultaneously emulating the conch shell and the wind in a cave.

¹³⁴ Di Peso et al., volume 4, 300.

¹³⁵ Di Peso et al., volume 4, 295.

¹³⁶ Di Peso et al., volume 4, 292.

describes the ball-court as a *tlachtli* court, identifying the Paquimian ballgame as synonymous with that of the Aztec. ¹³⁷ The Aztec played on I-shaped courts with tall walls that had rings near the top. The object of the game was to shoot the rubber ball through the rings without the player using his hands. The ball-court in Paquimé, however, does not have walls on which rings could be affixed, so they must have played a slightly different version of the ball-game.

Different versions of the ballgame were practiced in Mesoamerica for three millennia, but, generally speaking, it was a game that could be recreational or highly sacred. Two teams of four to six players exchanged a rubber ball without touching it with their hands. At the most symbolic level, the ballgame reenacts the cycle of life, death, and regeneration as a tribute to the Maize God. Xbalanque and Hunahpu, legendary hero twins of the Maya, defeated the lords of the underworld in a series of tests that included a ballgame. Burials underneath ball-courts reflect this mythic story. While the *Popol Vuh*'s account is specific to the Quiché Maya, the ballgame was played by the Olmec, Maya, Toltec, and Aztec, so it was a cultural practice that continued despite temporal and spatial disjunction.

The ball-court complex marks the northwest corner of Paquimé, as well as the western rim of the central plaza. This would remind visitors entering from the northwest, as well as Paquimé's inhabitants, of the multi-faceted nature of the city: spiritual and commercial, domestic and elite. This grand court references the same sport in

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¹³⁷ *Tlachtli* is the name of the ball-game that the Aztec played. Di Peso et al., volume 4, 295.
138 Dennis Tedlock, trans, *Popol Vuh: the definitive edition of the Maya Book of the Dawn of Life and the lories of the Gods and Kings,* (New York: Simon and Schuster, 1985). The Hohokam also played the ball-game. While scholars believe this is a derivation of the Mesoamerican sport, the Hohokam played on elliptical, rather than I-shaped courts.

Mesoamerica, and, as Whalen and Minnis speculate, marks the significance of Paquimé as a regional center. 139

Mound of the Offering and Reservoir 1

The Mound of the Offerings "more or less marked the north-south dividing line between the western portion of the excavated city devoted to ceremonial structures and the eastern part taken up by secular dwellings." It is only forty-five meters long on the north-south axis and twenty-nine meters long on the east-west axis, yet it dominates the city through its central location. The monument is comprised of diagonal ramps of earth and stone ascending to a spiral ramp that encircles a circular mound. This stone-lined, plastered, irregular curving monument was the only sacred structure with interior rooms, and they, too, are lined in stone. A large, sloping ramp opens in the south that is approximately forty-eight feet wide, and to the east of this slope, a narrow ramp rises to the circular base of the temple. The ramps are lined in regularly spaced, fist-sized stones that were once covered in plaster and paint. On the northern edge of the temple base, three stone steps ascend to the crowning, stone lined, circular mound.

The interior of the ramps are divided into three crypts and surrounding rooms for offerings and an altar. The central and most prominent crypt contained the remains of a man placed in the fetal position inside a large olla and the scattered remains of other

¹⁴¹ Di Peso et al., volume 4, 305.

¹³⁹ Michael E. Whalen and Paul E. Minnis, "Ball Courts and Political Centralization in the Casas Grandes Region," *American Antiquity*, 61 (1996): 732-746.

¹⁴⁰ Di Peso et al., volume 4, 305.

There was no evidence of a crowning structure on the mound. Di Peso et al., volume 4, 305.

¹⁴³ The thinner ramp is thirteen feet wide. This, as well as the dimensions of the wider ramp, is based on my measurements in October 2004.

individuals who were, presumably, sacrificed as offerings.¹⁴⁴ A niche in this room held the base of a stone sculpture depicting a standing woman wearing a headdress (see Figure 25).¹⁴⁵ Two rooms that flank the central crypt each contained a person buried in an olla. In front of these rooms, there are stone-lined quarters that contained a series of offerings, including stone nesting boxes, stone tools, ceremonial arrows, stone and shell beads, un-worked shell, and ceramics, all indicating the importance of the man who was buried here.¹⁴⁶ Di Peso suggested that the man in the central crypt was Paquimé's founder and the other two crypts contained his successors.¹⁴⁷ Even Beatriz Cornejo Braniff stated, "Ello sugiere que este personaje y so monumento debieron representar una función muy especial en la ciudad."¹⁴⁸

The Monument of the Offerings is oriented to the south, and it is the only structure on the site facing this direction (see Figure 24). The directionality, pointing to the south, may suggest that this person was in fact from the south or wanted it to appear as such. The stone-lining of this structure forms part of the wall dividing the city. The burial monument occupies a central position in Paquimé and clearly assists in the delineation between the east and west. The fact that humans were buried inside helps to make sense of the structure's placement. It is close to the adobe buildings in which the Paquimians lived, indicating that the structure was part of both the mortal and immortal worlds.

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¹⁴⁴ Braniff, 26.

Di Peso et al., volume 4, 309.

¹⁴⁶ The ceramics included: Ramos Polychrome, Villa Ahumada Polychrome, Carretas Polychrome, and others. Di Peso, et al., volume 4, 308-12.

¹⁴⁷ Di Peso, volume 2, 419.

¹⁴⁸ "He was surely an important man, and so his monument represents a special function in the city." Braniff, 27.

The Mound of the Offerings opens to the south, facing Reservoir 1. This circular pit is now empty except for desert brush, but at the height of Paquimé it was filled with water. The relationship between the Mound of the Offerings and Reservoir 1 indicates that the man buried may have facilitated the water controls within Paquimé. The round temple crowning the Mound of the Offerings mirrors the circular form of Reservoir 1, so the two structures emulate one another's shapes. The built environment highlights that those interred in the mound were related to irrigation, and therefore, the wealth of the city. As the water passed through a series of stones, it was purified. The clean, clear water in a stone-lined pit would have reflected the blue of the expansive Chihuahuan sky. The blue water was the twinkling centerpiece, set like a turquoise stone, in the city.

Conclusion

The western side of Paquimé is filled with various monuments, but they share common characteristics. The structures are public, ceremonial, curvilinear structures surrounded by plazas and open spaces. The temples and effigy mounds in the west are earth mounds lined in regularly spaced stones and covered in plaster, forming a striking formal contrast with the adobe buildings in the east. These buildings were manmade mountains within Paquimé, and they could have acted as stages for political and religious performance.

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¹⁴⁹ In this arid region, water is an especially important symbol for life and power. For this reason, turquoise was often used throughout the North American Southwest and Mesoamerica to indicate fertility and water. The blue water in the reservoir would appear like a giant gem in the center of the city.

JUXTAPOSITION AND CO-CONSTITUTION: INTRODUCTION TO PHENOMENOLOGICAL METHODS

Phenomenology is a school of philosophical discourse that understands the world through the physicality of the body and sensory perception. This is in opposition to more traditional philosophical models in which knowledge of the world is derived through thought. Understanding the world in this way suggests that meaning results from existential moments in which one is subsumed by the senses, experiencing the world rather than merely being cognitive of it.

Heidegger elaborated on these ideas in his ontological writings, providing many of the concepts that informed this study. His notion of being-in-the-world describes a state in which one is involved in a relationship with all other entities in the life world. This nexus requires one Being interacting with those that are ready-to-hand, present-at-hand, and a cognitive world of presence-at-hand. *Dasein*, or Being, involves interaction in the world rather than the contemplation of it. Being is thus rooted in the material realm and our perception of it through our senses.

Heidegger divided all of existence into four categories, or the fourfold, consisting of earth, sky, mortals, and divinities. The earth is both our planet and the tangible things on it. The sky includes the solar system, clouds, wind, weather, and stars. The term mortal refers to humans, and, for Heidegger, human mortality was an important factor in *Dasein*. Because mortality implies temporality, *Dasein* is rooted in its spatial and chronological setting. When one meets the world-at-hand, bound in temporality,

¹⁵⁰ For this concept, Heidegger was indebted to the pre-Socratic philosopher, Hericlitus, who is best known for his statement that you can not step in the same river twice. This short phrase suggests that the river (or any other entity) changes every instant. Not only the river, but also the one stepping changes, thus altering the subject's perception of a similar experience in the same place. This truism

one encounters *Dasein*. Divinities, or immortals, are all entities which are not bound by time. Heidegger saw art, and primarily architecture, as a tangible space in which the fourfold meets. Architecture is not just a shell but a dynamic conductor and shelter for the interaction of the four disparate entities. This interaction was what Heidegger described as dwelling. Architectural spaces allow dwelling, the physical representation of *Dasein*.

Maurice Merleau-Ponty used these concepts to stress the primacy of the body in understanding the world. He stood in direct opposition to Rene Descartes and the assumption of a duality between mind and body. For Merleau-Ponty, the famous dictum "I think therefore I am," was a fallacy. Humans exist therefore they are, and their physicality co-constituted with cerebral functions defines them. This dynamic ontological bond extends to all relationships that were previously understood as binaries: subject/object, you/me, mind/body. For Merleau-Ponty, the two forms of human perception, physical and cognitive, co-constitute one another, or define each other in their interaction.

The term "co-constitute" connotes a deeper level of interaction between two forces than simply "constitute." To constitute is to form, comprise, or represent. The prefix, "co", asserts that one element is effecting another. By adding the first "co" and a hyphen, a stronger relationship is implied. Rather than one element comprising another, the two form a reflexive relationship in which one factor composes or establishes the other. Thus, the definition and meaning of one of these factors can only be determined by its relationship to the other, and vice versa.

roots the world in its constant state of flux, creating dynamism in mortality based on the linear temporality of life.

Phenomenology has been adopted and applied by several disciplines to come to a greater understanding of architecture. Even the forefathers of phenomenology used architecture as a means to describe the important affect environment has on experience. Hegel said, "the first of the fine arts that confronts us, as the beginning of art itself, is architecture. Its task consists in so manipulating external inorganic nature that it becomes, in its artistic treatment, cognate with the mind....architecture prepares the way for the adequate actuality of God." ¹⁵¹ In other words, architecture is an art that comes into being through many people, and then is used by many more. Buildings are a stronger statement about cultural values because they do not communicate a personal message or feeling, but rather physically manifest and reify a culture's world-view. The primacy of architecture in the arts, and its power over human movement and perception, has created an easily scaled bridge between theoretical discourse and application. The built environment directs human movement, and therefore perception, making phenomenology a tool that is not only useful, but necessary. ¹⁵²

This way of looking at and understanding the built environment affected several disciplines. Art historians such as Vincent Scully and Suzanne Preston Blier utilized phenomenological practice to study both Western and non-Western architecture, respectively. Archaeologists, geographers, historians, and art historians have studied the way in which the human body both affects and is affected by architecture. Each of

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¹⁵¹ Georg Wilhelm Friedrich Hegel, *Hegel: On the Arts, Selections from GWF Hegel's Aesthetics of the Philosophy of Fine Art*, abridged and translated by Henry Paolucci, (New York: Frederick Ungar Publishing, 1979), 64.

rather than causal. One's movement dictates perception, but, likewise, perception guides movement. For example, as one walks down a street, dark driveways may appear ominous and ultimately produce fear therefore hindering movement. The *perceived* threat hinders one's *movement* into the space. Simultaneously, one could only observe those very driveways as one ambulates past them.

these disparate fields has contributed to the understanding of the layered meaning in the built environment.

Yi-Fu Tuan incorporated phenomenological techniques and applied them to the notions of space and place. 153 He described place as a humanized space, one that is familiar, comforting, and enclosed. Space, on the other hand is more abstract and open. In order to understand a building, one must look at it not as a theoretical space, but rather as a place, sod with human experience and meaning. Tuan weaves physical and mythical space together, relating how the ideas and perceptions of space are often infused with cultural meaning. Through experience, sight, and touch one is able to understand spatial qualities, and therefore see the intersection of physical and metaphorical space. Tuan asserted that a general characteristic of mythical space is anthropocentrism, so when studying architecture, "Man is the measure. In a literal sense, the human body is the measure of direction, location, and distance." This presupposition urges scholars to experience architecture rather than observe it. This experience brings new understanding based on the dictums of the architectural setting and the relation between it and the body of the researcher.

Theoretical archaeology, as defined in *Architecture and Order*, takes issue with the way in which archaeology typically dehumanizes architectural ruins. ¹⁵⁵ Social space is built conforming to societal rules and norms rather than as a backdrop for activity. Social, gender, and age classifications can be inferred through architecture. Societal

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¹⁵³ Yi-Fu Tuan, *Space and Place: The Perspective of Experience,* (Minneapolis: University of Minnesota Press, 1977).

Tuan, 44. Tuan, of course, is playing off Pythagoras' quote "man is the measure of all things." This dictum, while certainly true in Greek architecture, is by the very nature of a built environment, true for all manmade structures.

¹⁵⁵Michael Parker Pearson and Colin Richards, eds, *Architecture and Order: Approaches to Social Space*, (London: Routledge, 1994).

norms are subsequently learned and reinforced through the built environment, making the relationship between structures and cultures reflexive. The very term *designed* implies planning and thinking. It comes from the Latin word *disignare* which means to mark out or devise. It is also etymologically related to the words designate and scheming, again connoting planning and mark making. In order to build, one must first have a design. Heidegger supported the idea that the relationship between building and thinking is reflexive. Building requires thinking, yet humans build in order to think. Archaeologists practicing under these ideas read origin stories, social strata, and world view through the design of the built environment. In non-literate societies architecture may be the only available text through which to pass history, world-view, and tradition.

Because of the intimate relationship between place and the surrounding space, it is useful to look at a site as it relates to the surrounding environment rather than a binary of inside/outside. Landscapes often contain alcoves of humanized spaces that were altered through a conscious human action. Spaces can become humanized, and therefore, places by being named, recognized, and/or drawn upon. In *The Iconography of Landscape*, Denis Cosgrove and Stephen Daniels illuminated the formation of the concept of landscape. Landscapes, either gardens, paintings, or otherwise, are cultural representations of ideal natural forms, framed for ease of consumption. In studying archaeological cultures, it is important to understand that the natural landscape can provide a source for symbolism, often seen in the Americas through directional alignment with astronomical bodies such as Venus. These alignments, whether astronomical or terrestrial, also form part of the landscape, or surrounding space.

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¹⁵⁶ Pearson and Richards, eds, xii.

Christopher Tilley links phenomenological attitudes to architecture in by applying the former thinkers' ideas to the built environment.

Architectural space only makes sense in relation to pragmatic, perceptual and existential space, but it involves a deliberate attempt to create and bound space, create an inside, an outside, a way around, a channel for movement. Architecture is the deliberate creation of space made tangible, visible and sensible. This is why buildings play a fundamental role in the creation, recreation, production and reproduction of existential space and have profound effects on perceptual space. 157

He draws special attention to landscape as well as the way a built environment relates to and creates the surrounding spaces. Movement also plays a key role. Movement is a temporal, existential action that guides one through a space, and therefore tremendously affects one's perception as perception dictates movement. This method accounts for the relationship between people and land, and the reflection of that in the built environment.

These trends in archeology, anthropology, geography, history, and art history indicate that buildings are not sterile containers that can be understood through passive observation. They are, rather, humanized places, relating both to their surroundings and to the humans they shelter with designs based on cultural values. These concepts, when applied to Paquimé, illuminate facets of this culture that have previously gone undiscussed. Phenomenological studies can determine, or shed light on, the way a human body is forced to move in different places, the way in which a structure alters mood, and the often disregarded fact that the built environment reflects and actively creates cultural values and world-views.

¹⁵⁷ Christopher Tilley, *A Phenomenology of Landscape*, (Oxford: Berg Publishers, 1994), 17.

Applying Phenomenology to Paquimé

The Paquimians *chose* the site on which to build the city. They deliberately utilized two strikingly different building techniques. They modeled rooms with complex floor plans while juxtaposing reservoirs and walls with these structures, creating a unique city. All of these decisions reflect a world-view that the Paquimians related through the built environment. The key to understanding this environment is to move through the spaces and experience the buildings, their relationship to each other, and their connection to the surrounding landscape.

When the key idea of co-constitution is applied to the built environment in Paquimé, the contrasts between space and place, secular and sacred, and physical and mythical space become more layered and pronounced. The openness of the west is defined by the enclosure of the east. Their relationship is reflective in that the two define each other through their ongoing interaction. The two sides of Paquimé should not be thought of simply as binaries because a true duality does not exist. Notions of private versus public and secular versus sacred operated in Paquimé on a constantly fluctuating scale rather than as static dualities. During a religious festival the entire core would function as a ceremonial sector, while in times of heavy trading, the city would take on a more commercial character. The nature of the two sides, and the city as a whole, was constantly shifting.

Richard C. McCleary (Evanston, IL: Northwestern University Press, 1964).

¹⁵⁸ This study shows that Paquimé continues to be defined by, or constituted by human interaction. As researchers excavate, write about, and reflect upon their predecessors' research, the city has been reactivated both in scholarly discourse and experiences of the many visitors. This is the process Merleau-Ponty discusses in "The Philosopher and His Shadow." This article relates the legacy of philosophers (and, I would argue, all scholars) is not in their publications, but rather the ideas that those publications spur in others. Maurice Merleau-Ponty, "The Philosopher and His Shadow," *Signs*, tr.

The Sierra Madre Mountains dominate the skyline throughout Paquimé. The Paquimians built cave dwellings in the peaks surrounding the city that included Tshaped doors and puddled adobe walls, making the cultural demarcation clear. From inside Paquimé, foothills rise to mountains hugging the city on all sides but the north. Desert scrub covers the terrain in patches, thicker in low spots where water is more available. The view opens to the expansive sky, clear and light blue on most days. Weather is easily observable in the wide sky as storms can be seen blowing into the valley across the mountains. Within the city, Heidegger's notion of the fourfold meeting in architectural monuments is startling. The earth rises and literally forms the city, giving it its color, texture, and substance. The sky caps the view, and all variations in weather, time of day, and wind are easily observed and affect the overall mood of the surroundings. Mortals, through their presence in the city, gave it meaning and purpose. The Paquimians invoked the immortals by building the city based on a plan that was dictated by their cosmological views, honoring those in interred in the Mound of the Offerings, and evoking their deities through the Serpent Mound.

Different Views of Paquimé

One's experience, and therefore interpretation, of Paquimé is dependent on a number of factors. As a researcher, my goal has been to describe the buildings within the city as they once stood. Despite my best attempts at objectivity in recreating what the city may have looked like, it is important to account for who I am and what I experienced. When I went to Paquimé, I saw ruins, not a living city filled with the sights, smells, and activity one would expect in a thriving urban area. I experienced ruins

turned into a museum and tourist center. There are no longer roofs on the buildings.

Plaster no longer coats the surface of the structures as it once did. I carefully read the excavation notes and attempted to account for the way the city would have functioned at its height. The attempt to reconstruct Paquimé firmly roots this study in inference about the significance of the specific architectural forms and layout.

Today the structures rise slowly in gentle curves of sun baked earth. The multistory structures are not fully enclosed as they are in a ruined state, and one can make out ridges in the walls that presumably secured the ceiling/floor of the multi-storied residences. There are countless T-shaped openings, much too small to be doors. A pattern of rooms emerges, comprised almost entirely of ninety-degree angles. The floor plans of the rooms appear to be covered in a series of zigzags and geometrical compositions like the imagery on Ramos Polychrome ollas.

Any contemporary view of the city will doubtlessly be affected by the present state of the ruins. They are just that, ruins. Today the sharp rise in the southwest corner of Paquimé emulates a mountain peak behind it. At Paquimé's height this peak was part of a much larger, and possibly quite higher, apartment complex in the House of the Pillars. The rectangle, L-shaped, and zigzag rooms form a startling contrast to the slopes and curves of the ceremonial structures. The tops of the adobe living quarters stretch into the mounds of unexcavated earth. Rabbits dart through the ruins, and desert scrub now grows on the top floors of this once dominant city.

My perception and interpretation of Paquimé contrasts greatly with the experience of the tourists in the ruins, and mine is probably more closely aligned with a Paquimian elite rather than a commoner. Today, tourists are not permitted to access

the interior buildings, so they experience Paquimé as an open expanse of earthworks.

Our different genders, nationalities, and levels of education affect our experience. The same variables would exist during the height of Paquimé.

There is little doubt that Paquimians lived in a stratified society. A priest would have more access within the city than a poor citizen. A rich trader would have different experiences and living quarters than a person working in the shell or stone refining industries. Different social positions afforded varying access to the city, and different viewpoints. The social status of each of Paquimé's inhabitants presumably shifted through time. One was not born into a class and remained in that same status until death. It is important to note that affluence, age, sex, and other factors affect status, and all of these variables change through time and place.

Walk Through Paquimé

During excavations, archeologists found lined walkways leading throughout the city. These are, for the most part, the same paths that are used by visitors today. Just as the layout of buildings dictates human movement and perception, the paths that provide a route through Paquimé serve to control human movement, and therefore perception.

Entering from the northwest ball-court complex, one would be directed on a path through the city. The path begins along the eastern side of the ball-court, and turns to the east, toward the Mound of the Offerings and the crypts that held the founder of

Paquimé and his successors. The road directs travelers to this location as if forcing them to pay tribute to this prominent figure in Paquimian history. The trail then leads in between the Mound of the Offerings and Reservoir 1. From the pathway, one could see the stones purifying water as it entered the reservoir. From this location, steps cross the dividing wall and lead down into the Central Plaza. One can either go into the plaza or follow the path as it turns south and follows the eastern wall of the House of the Macaws. The path leads one to the ceremonial ball-court in the House of the Pillars and splits in two directions. It follows east along the colonnaded façade of the House of the Pillars, and it extends to the west along the rim of Reservoir 2. From the reservoir, the corridor leads one to the southern wall of the House of the Serpent before turning north and directing the viewer between the House and Mound of the Serpent. Another angular turn to the east directs one past the northern side of the Mound of the Bird. Here, the path turns north, going along the western side of the Mound of the Heroes and rejoining the entrance path on the northern side of the House of the Macaws.

The path privileges certain structures while not even entering the vicinity of others. Whether one enters Paquimé from the ball-court, as previously described, or from the Serpent Mound or the House of the Pillars, the path highlights certain structures, namely the I-shaped ball-court and Temple, the Mound of the Offerings, the House of the Macaws, the House of the Pillars, the Mound and House of the Serpent, and the Mound of the Bird and Heroes. Furthermore, the trail leads to the altar within the Mound of the Offerings, forcing anyone who treads on the path to honor those interred within.

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¹⁵⁹ The identity of those interred is conjecture. Di Peso believed that this was the founder of Paquimé, and his two successors. Regardless, this was an important man, and seemingly, one is directed to pay tribute to his memory each time one travels on this path.

Dividing Paquimé

The two-part wall that divides Paquimé only rises three and half feet at its greatest height. 160 It runs along the eastern side of the Mound of the Offerings before bisecting, lining both the east and west side of the House of the Macaws. During excavations, researchers quickly learned why this wall was elevated. Run off began destroying the packed, hard floor of the city, and the wall was quickly rebuilt, so there would not be any further damage to the ruins. The excavators used the original stones from the wall, but Di Peso admitted in the field notes that originally, the wall was probably higher. Even if it rose another one or two feet, a grown human could easily scale the wall. While it retains water, it also clearly divides the city in two distinct precincts. Di Peso said, "It appeared that this wall served to divide the ceremonial section from the secular living section of the city." 161 Di Peso never explored this idea, and the only mention he made of it is on this page, buried within the eight volume set.

There was a one-room structure located within the western dividing wall (see Figure 26). The room was in the shape of a D, the back curving along with the contour of the wall itself, and the front of the structure was once a jacal wall. A few paces southeast of the room there is a square, stone-lined pit oven. The one-room structure is forty-five meters long on its longest wall, and yet archaeologists found one hundred fiftythree vessels and one stone pendent within the small room. 162

The retaining walls do not physically restrict human movement as much as they prevent flooding, but for the human population, they served as a reminder of place and a symbolic boundary. The area around the wall is blanketed with the spacious plazas.

 ¹⁶⁰ Di Peso et al., volume 4, 360.
 161 Di Peso et al., volume 4, 360.

¹⁶² Di Peso et al., volume 4, 362.

The only two buildings near the wall are the enormously significant structures: the House of the Macaws and the Mound of the Offerings, the latter actually forming part of the wall. This symbolic boundary marks the transition from sacred to secular, public to private, and religious to domestic. Both the buildings that occupy the space around the wall also fall into a liminal, transitory state.

The House of the Macaws marks the space between sacred and secular through its function and layout. This low-lying structure rests between the two retaining walls, and it is adjacent to West Street. The southern half is comprised of family units and the northern half is dominated by the large plaza with macaw pens. As an apartment block, the structure served the domestic needs of its inhabitants. The many hearths within the House of the Macaws attest to this. The macaws raised within the structure, however, rode the cusp between trade item and religious icon. Macaws played an important role in Paquimian identity, and certainly held a religious meaning. They were also traded, making them also an exportable good. These varied functions and connotations slide from sacred to secular along the continuum and seem fitting for a building that also lies in both the ceremonial and domestic quarters.

The Mound of the Offerings housed a deceased man who, by his very placement in Paquimé, marked the point in between the mortal and immortal worlds. The eastern side of the Mound of the Offerings actually comprises a section of the retaining wall that divides Paquimé in half. Another element that delineates this structure as both sacred and secular is the interior rooms within the mound.

The central walls combined with the structures placed around them create a division in Paquimé that is primarily symbolic. While distinct precincts can be articulated

through other means, the Paquimians *chose* to clearly delineate east from west. This division is furthered through the use of the two reservoirs that lie in the city's interior. The clear demarcation leads one to speculate that access to the western side may have been restricted to the spiritually and/or politically elite. Even if commoners had access to both sides of Paquimé, the formal distinction between east and west would serve as a constant reminder that the places on the west were reserved for activities reaching the divine.

Architecture and Ceramics in Paquimé

With few exceptions, the arts that survived from Paquimé are architecture and ceramics. The motifs utilized in one form replicate those used in the other. This displays a unified cultural view through artistic choices that draw from similar iconography or, perhaps, that there were tight controls over the accepted visual language. Vessels from Paquimé were painted in creams, rusts, and black. Geometric motifs either completely cover the forms, or they occupy any negative space. The artists filled all the negative space on the vessels, creating surfaces filled with forms coming together in a maze-like arrangement. From an aerial perspective, the floor plans of the eastern half of Paquimé replicate the ollas in their use of repeated geometric motifs that come together in tense combinations. Angularity dominates both the ceramics and the architecture. Zigzags and angular spirals cover vessels just as they comprise the floor plan of the structures in the city.

Evidence suggests that Ramos Polychrome vessels were made specifically for the Paquimian elite. Other ceramic forms such as Villa Ahumada Polychrome and Baricora Polychrome were made in the city during the Medio period, but Ramos Polychrome was found in areas that link it with those who held power within Paquimé. The similarity of the forms in the pottery and architecture, two media controlled by the elite within Paquimé, suggests that those in charge of the city's ceremonial and political sectors also dictated the artistic vocabulary to be included in both architecture and ceramics.

The most common motifs on Ramos Polychrome vessels are serpents and macaws. The stylized version of a macaw head is on most of the jars, and often the zigzagging lines that circle the body of ollas are bodies of serpents. These motifs occur architecturally through the Mound of the Bird and the Mound of the Serpent. Macaws were a prized jewel within Paquimé, evidenced through aviculture.

More specifically, macaws seemingly acted as a symbol either for the city or, particularly, for its powerful residents in both architecture and ceramics. The biological feat of successfully raising scarlet macaws in northern Mexico, along with their commercial value and religious significance, would carry a prestigious aura. The image of the macaw was broadcast throughout the city in the architecture. The Mound of the Bird provided a stage on which ritual acts could be performed that required a mammoth built macaw. The House of the Macaws holds the central position in the ceremonial core, making it visible from almost every location within Paquimé. This symbol was reinforced by the macaw motifs repeated on Ramos Polychrome ollas.

¹⁶³ Maria S. Sprehn, Social Complexity and the Specialist Potters of Casas Grandes in Northern Mexico, PhD Dissertation, (Albuquerque: University of New Mexico, 2003).

World View Read Through Architecture

The architectural monuments within a society are a reflection of values and attitude within that culture. The motifs in the effigy mounds and the way in which they are juxtaposed with one another highlights the religious beliefs of the Paquimians. Simultaneously, the architectural motifs, such as T-shaped doors, serve as a symbol of place as well as restricting access and the free-flow of people and goods.

The serpent/macaw complex in the southwestern corner of Paquimé juxtaposes the two creatures and seemingly alludes to a deeper religious meaning. The Mound of the Serpent illustrates a plumed serpent. The symbol's relationship to macaws is accentuated through the Mound of the Bird and the fact that macaws were once raised in the House of the Serpent. The fantastical combination of a snake and a bird is a common motif in the Americas, and it seemingly acted as a symbol for Paquimé. 164

In Mesoamerica, this is a long standing symbol for Quetzalcoatl that dates back to the Olmec. 165 The motif also occurs in Teotihuacán, particularly on the façade of the Temple of Quetzalcoatl where heads of plumed serpents are alternated with that of a fire serpent. Here, there is a clear reference to water with the feathered serpent. In Aztec symbolism, Quetzalcoatl was the god of wind, clouds, and therefore rain.

In the North American Southwest, the Anasazi, just as contemporary Hopi people, commonly depicted a plumed serpent. This motif occurs on petroglyphs and,

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¹⁶⁴ It is important to note that the existence of a symbol, such as a feathered or plumed serpent, throughout the Americas does not mean that the symbol means the same thing to all the cultures that use it. The concept, known as iconographic disjunction, was originally published by Erwin Panofsky and it has since been applied to the art of the Americas by George Kubler. Basically, as motifs are continually used throughout time, their meanings often change. When a meaning persisted, the motif used to illustrate it mutates. Therefore, the feathered serpent probably did have a different meaning to a Teotihuacano and an Anasazi. As cultures borrow motifs and beliefs from other people, they only take what is necessary for that group. Therefore, the meanings and associations of the serpent certainly changed over time and distance, but, nonetheless, some attributes persisted.

165 Monument 19 in La Venta portrays a snake with a crest and feathered back.

more recently, on kiva walls. ¹⁶⁶ Contemporary Pueblo people also use the motif of a plumed serpent as seen in the Hopi's Palulukong and the Zuni's Kolowisi. Both of these deities bring abundance and fertility. The Mimbres also depicted a feathered serpent on their black-on-white bowls. Current research traced the development of this symbol back to knowledge of and belief in Quetzalcoatl.

Because this feathered serpent persisted as a motif across hundreds of years and over great distances, it is not surprising that it encompasses varied meanings and associations. Whether the form of the feathered serpent is referred to as Quetzalcoatl or Palulukong, it continued to be associated with similar themes. The wind blows in clouds that carry rain. The water feeds the crops and brings fertility and abundance. The juxtaposition of water and sky inherent in a composite of a snake and a bird reflects these varied themes and the way they enrich one another. The Mimbres depicted the feathered serpent before the rise of Paquimé, so clearly, the symbol had already spread north of what is generally considered Mesoamerica. The Paquimians seemed to have inherited and perpetuated a belief in a fantastical, life-giving creature that brings abundance.

They built an effigy mound in the form of a plumed serpent and then surrounded the structure with forms that reinforce its importance. The Rio Casas Grandes runs just south of the serpent, so that the snake actually appears to emerge from the water. The House of the Serpent was initially used for raising macaws, the bird whose feathers were used to make costumes representing Quetzalcoatl, and the closest effigy mound is the Mound of the Bird which actually takes the form of a macaw.

 $^{^{166}}$ A kiva is a circular, semi-subterranean ceremonial structure used by the Anasazi and contemporary Pueblo people.

Quetzalcoatl's importance within Paquimé was also reinforced through the placement of the House of the Macaws. The structure occupies the center of the ceremonial core, and it is literally bounded on its eastern and western sides by the two retaining walls. It is further delineated by the open plazas that surround the building on all sides but the north. Interestingly, Reservoir 1 lies just north of the House of the Macaws, followed by the Mound of the Offerings, creating a clear line of sight to all three structures. This may insinuate that the ruler buried within the Mound of the Offerings held control over not only water, but also the macaws that provided Paquimé with its primary revenue. This power may have been commercial or spiritual, but it is more likely that it was a blending of the two.

T-shaped doors are a defining characteristic of Paquimian architecture. Di Peso believed that the presence of T-shaped doors was proof of Mesoamerican colonizers. Interestingly, the only sites in Mexico with T-shaped doors are Paquimé and its outliers. This motif is, however, a defining element in the architecture of Chaco Canyon. Chaco Canyon, in present-day New Mexico, flourished before Paquimé, and it lies on the same meridian as Paquimé, several hundred miles north. Stephen Lekson believes that the ruling elite of Chaco Canyon actually founded Paquimé. While this is unlikely, the Paquimians visually likened themselves with this major commercial and ceremonial hub to the north, perhaps in an effort to legitimize their right to rule. For those in the Chichimeca, the T-shaped door would be synonymous with commercial and spiritual power, and indicator of community, and a marker of place. Paquimé, a city with a similar nature as Chaco, wisely made use of the symbol already steeped in layered and powerful meanings.

Access

Throughout Paquimé, access into and around the structures was restricted through the built environment. The architecture makes it clear that the majority of the excavated spaces in Paquimé were not designed for high traffic, and the entire western section may have been visible while simultaneously not traversable. Short, narrow doors, maze-like interiors, and the retaining wall were all elements that restricted access for most.

Narrow doors throughout the city controlled access, and could have been easily guarded. The short passages force people to bend down and pass any bags through separately. This limits the amount of human traffic through the spaces, and it greatly reduces the amount and kinds of materials that could be carried from room to room.

Access to interior rooms, particularly in the House of the Macaws, was limited, presumably preventing some from entering altogether. Enclosed ceremonial spaces like the interior ball-court in the House of the Pillars and the cross-shaped room in the House of the Dead were designed to only include a select few in the proceedings.

The maze-like configuration of the rooms in the east would prevent those not familiar with the city from accessing spaces located deep within the buildings. This combined with the high percentage of small doors suggests that large groups were not invited into the interiors. While the kinds of activities occurring on the east were different than on the west, this half of Paquimé is still considered the ceremonial core. Limited numbers of people would be invited to the events in the interiors because the spaces can not accommodate high traffic.

Presumably, only the elite would be able to climb the mounds on the western side of Paquimé. He activities occurring on the west would be visible to those throughout Paquimé, only a select few would be able to stand on the mounds' summits. There is, however, a path that led throughout the city, so most of the citizens would presumably be allowed to amble around the monuments.

Visibility

Paquimé's buildings create a built landscape that has variable characters when seen from different vantage points within the city. While not every Paquimian would have access to view every perspective of the city, each vantage point provides a different and more layered understanding of the Paquimé and its nature. Views of Paquimé from the east and west are strikingly different, and there are some complexes in which line of sight delineates the relationships between the buildings. In a planned community, like Paquimé, the views from certain vantage points were planned and emphasized. These lines of sight reinforce relationships between structures and dictate one's perception of the city. One's view of the built environment also affects the way in which one moves through Paquimé.

From the top of the giant mounds in the west, one sees the puddled adobe complexes that housed Paquimé's citizens. During the Medio Period, the adobe complex would appear as a series of stacked modules of squares and rectangles.

Rooms on the east could have been accessed from the roofs, and activity would have taken place on the exterior of the apartment complex. One can imagine that during the

¹⁶⁷ This inference is based on more well-known cultural practices in Mesoamerica. There temple platforms were stages on which to enact religious and political performance.

Medio Period, these adobe walls covered in brightly colored designs that likely emulated the designs on Ramos Polychrome. The white plaster would transform the appearance of the structures from blocky earth-tones to light forms emerging from the valley.

Paquimé is strikingly different when viewed from the east. Standing within the central plaza, one is invited to take a three hundred sixty degree look at the city. During the Medio Period, as today, there is nothing shielding the viewer from the desert sun within the plazas. A three foot wall circles the viewer in uneven undulations that loosely resemble an "I" in the earth, and part of the partition flanking the plaza forms the retaining wall dividing Paquimé. Facing north in the plaza, one sees the earth rise, crowned by the Mound of the Cross. Its southern arm points down at the viewer, a looming edifice low in the horizon. On the east, the stories of Paquimé's apartment block appear to rise in slow stair steps into the sky. Unit 6 flanks the northern end of the plaza, and the southern tip of the Central plaza shares a wall with Plaza 3 in Unit 13. To the south, plazas stretch out to the Rio Casas Grandes, only visually punctuated by a slight rise from the House of the Pillars. Facing the west, one is initially confronted with the House of the Macaws which forms a low-lying ground line to the mounds rising behind and all around them.

From the roofs of the apartment complex, one would be invited to look west and gaze at the mounds. In the northwest, the temple associated with the I-shaped ball court would outline the boundary of the city with a spiraling conch form, and from this point one could see anyone on the temple's summit. To the west, the Mound of the Heroes would dominate the view. Nestled among the reflecting pool, the unpainted areas of plaster would take on a blue-gray tone, and the stairs leading to the summit

would be clearly visible. Further away and to the south, the Mound of the Bird would emerge from the valley. From the roofs, the outline of the form of a bird would be visible. Interestingly, the roofs of the eastern buildings would provide the best vantage point from which to view the activities occurring on the mounds as is common practice among the Pueblos today.

There are several vantage points within Paquimé that one is invited to consider the relationship between buildings based on their visual alignment with one another. From the eastern mound of the Mound of the Cross one can gaze to the southwest and see the Mound of the Offerings, Mound of the Heroes, the Mound of the Bird, and the House of the Serpent form a straight line. While the Mound of the Serpent is not visible from this vantage point, it is observable from the summit of the Mound of the Bird. Interestingly, this is the only location beyond the Serpent Complex from which the Serpent Mound can be seen. A visual alignment is also made between the House of the Macaws, Reservoir 1, and the Mound of the Offerings. Standing south of the House of the Macaws and looking north, the viewer perceives the three monuments as forming a straight line that points to the horizon (see Figure 27).

Movement

As with all architecture, that in Paquimé dictates human movement. The eastern half of the ceremonial core confines human motion through low ceilings, short, narrow doors, and the maze-like arrangement of rooms and hallways. The architecture in the west, on the other hand, provides a setting for large motions that could be viewed from vantages throughout the city. Small confines in the west are limited. Movement was

also controlled by issues of access and visibility. Inside the eastern apartment block people must stoop down and only make small, controlled motions. The small rooms are surrounded by zigzagging hallways, so travelers may only take a few paces before being forced to make ninety-degree turns. The low ceilings in this half force one to subtly stoop, making the already small rooms feel more enclosed.

The western half of Paquimé allows for different kinds of motions. For the most part, this side of the city is comprised of exterior monuments and large plazas. One may move freely, but these movements would lack any protection that the eastern enclosures may have provided. The open stages and manmade mountains invite large, sweeping motions. These areas probably acted as stages for socio-religious performance and spectacle within Paquimé. Those performing had the ability to make the exaggerated motions that would captivate their audiences.

The built environment within Paquimé dictates human motion and the kinds of activities that could take place. Issues of access and visibility would also influence the permitted movement throughout the city. Obviously, one could only move through a space if granted access. If that access, however, was only granted periodically it would also affect the kinds of movements one would engage in. It would give the secluded spaces a special aura and call for more reserved kinds of activities. Visibility affects movement in that one typically only moves into spaces one can see. The limitations inflicted through the built environment affected a certain amount of control over the human inhabitants.

Control

Scholars such as Dean Ravesloot proved the existence of a stratified society in Paquimé through mortuary data. The built environment also alludes to a hierarchical system within the city. As previously discussed, the experience of Paquimé would be greatly variable upon one's social and physical position, two reflexive variables. I have proposed that only the upper echelon would have access to the western, ceremonial core of Paquimé. This would create a class system in which the elite would have access to spiritual knowledge that a common person would not. Even Di Peso divided the interior rooms of the western apartment block based on social rules. Some house clusters are larger and have higher ceilings than others. The greater square footage would be reserved for those possessing more money or power. Thus, the confining, maze-like nature would give way to more luxurious spaciousness for elite citizens.

The overall visual language utilized by Paquimians displays that there was an external control over the permissible motifs. The macaw and the serpent were used repeatedly on Ramos Polychrome as well as in effigy mounds. Geometric motifs such as squares, rectangles, zigzags, and crosses dominate the eastern half of Paquimé while simultaneously filling any negative space on Paquimian ceramic vessels. While this level of similarity could be because artists and designers were all working under the same world-view. The high level of congruity, on the other hand, may be the result of tight controls within artistic conventions.

Conclusion

Despite the obstacles in understanding Paquimé, there are many indicators that can be read through architecture. Phenomenological descriptions lead to an understanding of the way in which buildings and paths dictate human movement throughout the city. Through looking at the relationship of the buildings to one another, a greater understanding of Paquimian world view emerges. By contextually constituting the city and accounting for the varied roles of its citizens, one can postulate the way in which Paquimé might have been experienced by residents and visitors. Issues of access, visibility, movement, and control made clear through architecture would affect viewers' perceptions of Paquimé. These methods provide access to understanding Paquimé as a socially stratified community that functioned as both a commercial complex and religious center.

CONCLUSION

The scholarship revolving around Paquimé has largely focused on unanswerable questions of the city's origin. In contrast, this study presents the first thorough description of the architectural monuments within the city. Examining Paquimé as a site unto itself reveals it to be a unique combination of forms and motifs from both the North American Southwest and Mesoamerica. Elements from both regions fuse effortlessly at Paquimé, combining contiguous room units with temple mounds, and T-shaped doors with square columns. The Paquimians borrowed forms from their neighbors from the north and south to create a city that reflected their specific world-view while simultaneously relating to their community in the larger region of the Chichimeca. By emulating specific architectural elements from the north and south, the Paquimians created a city that is similar to those in Mesoamerica and the North American Southwest, but not exactly the same. This fusion of varied architectural features made Paquimé a distinct entity that, nevertheless, evoked distant sites and contemporaneous, as well as past, cultures.

Paquimé appears as a city steeped in duality, yet these dichotomies exist on a sliding scale. Two different architectural forms and methods were utilized in Paquimé, making a clear distinction between its eastern and western sides. This division is further highlighted by the stone wall that literally bisects the city into two discrete halves. While the west was primarily for public ceremonial activities and the east for private, more often mundane, events, any number of factors could alter the way in which these spaces were perceived and experienced. One's experience of these binaries would

depend upon contextual variables, creating multiple contingent meanings of Paquimé's architecture.

East of the stone wall, the puddled adobe, multi-story houses create an apartment block. West Street cuts between the apartment block and the House of the Macaws, creating a visual pause and accenting the large plaza in the east. This side of Paquimé is characterized by buildings with small, angular rooms arranged in a maze-like composition. The east is largely enclosed, secular, and was used for domestic and manufacturing purposes. Despite these primary functions, private ceremonial activities also occurred on this side of Paquimé, creating nodes of spiritual activities in a precinct that was largely commercial and domestic.

The west half of Paquimé, on the other hand, was a public, sacred domain for political and/or religious performance. Monuments were constructed by creating artificial mountains of dirt, lining them with evenly spaced stones, and covering the entire structure with plaster and paint. The area is dotted with effigy mounds, earthen temples, reservoirs, and open expanses. Inhabitants could move freely around the structures which rarely contain interior rooms. Rather, they are exterior monuments with stairs that could be ascended and used as stages for public spectacle. The exception to this norm is, of course, the House of the Serpent. Macaws were raised in the confines of this adobe building until it ceased to be used during the Medio period. The Paquimians seemingly left it on the west to remind viewers that while the west was primarily for public display, it served variable needs at different times.

The two sides of Paquimé served different functions, and therefore, building design and layout varied. Interestingly, two distinct building methods were used on

each side. The baked, puddled adobe in the east is very different in process and materials than the mounds of earth covered in stone and plaster on the west. The built environments created separated two distinct types of human activity, sacred and secular, and created the spaces in which the myriad of human activities that fall into the spectrum between these two poles could occur.

The layout of Paquimé and the juxtaposition of the built environment highlights a deeper level of symbolic import than any one building does standing alone. The serpent/macaw complex, for example, reveals that the two animals frequently juxtaposed on Ramos Polychrome were also combined architecturally, and presumably, through performance. Deeper meanings are related through the relationship between the Mound of the Offerings and Reservoir 1. The structures indicate that the man interred within the mound might have been associated with the life-giving properties of water.

Experiencing Paquimé and engaging in phenomenological description reveals that human movement was controlled through different means on each side. In the east, movement is controlled, and often restricted, but from the roofs of the adobe complex, the entire city would be visible, creating a sense of spaciousness and openness. On the west, movement was controlled through limited access and paths that forced inhabitants to be conscious of, and pay respect to, significant forms throughout Paquimé, such as the Mound of the Offerings.

When discussing human movement, one must be careful to note that issues of control and access would vary according to the status of the viewer. A common citizen of the city would experience Paquimé as a tight, small, confined space, but an elite

individual's quarters would have higher ceilings, more space, and create a different mood and experience. Depending on the occasion, any citizen of Paquimé might operate as an elite or a commoner. One's status was susceptible to change rather than remaining static, and would depend on age, sex, initiation into groups, knowledge, marriage, and shifting kin relationships.

Power and Paquimé

At Paquimé, prestige goods such as copper, turquoise, macaws, stone sculpture, jewelry, and a ceramic style (Ramos Polychrome) made exclusively for the elite class reflect the same ideals and visual language as the architecture. The jewelry, painting, architecture, and ceramics combined a Paquimé to create a pompous display of elite power. This display legitimizes the right to rule while simultaneously securing power through the trade and exhibit of these very prestige items. Similarities between the iconography and aesthetics of Paquimian architecture and Ramos Polychrome show that the Paquimian elite consistently employed a unified visual vocabulary. This congruity indicates that, rather than all of these forms simply operating within the same cultural view, there was a group of people dictating artistic choices. These individuals wielded power throughout the larger region, and they consciously displayed this power in the art they commissioned.

The issues of visibility, access, movement, and control made clear through the built environment coalesce to form a picture of those displaying their power over the environment, resources, and human beings. Careful attention was paid to dictating movement and vision through restricted access and dictated paths. The maze-like

configuration of the rooms within the adobe complex would likely confuse those unfamiliar with such spaces. This loss of bearings results in the structures themselves controlling the mental faculties of those inhabiting the rooms. Visual displays of power include the rigid plan of the adobe structures, the conscious restricted access, and the congruity between the buildings and pottery. The cardinal alignment of the buildings within Paquimé display that the architects exhibited not only knowledge, but also control and, therefore, power over the natural environment. This control was enacted through irrigation and water controls. All of these factors work together in the contrived effort to make Paquimé appear strong and powerful.

The Paquimians reiterated their power through their built environment. The monumental architecture controlled one's access, visibility, and movement. The Paquimians alluded to other powerful centers, such as Chaco Canyon, to legitimize their right to rule. Paquimian architecture, ultimately, speaks the language of power.

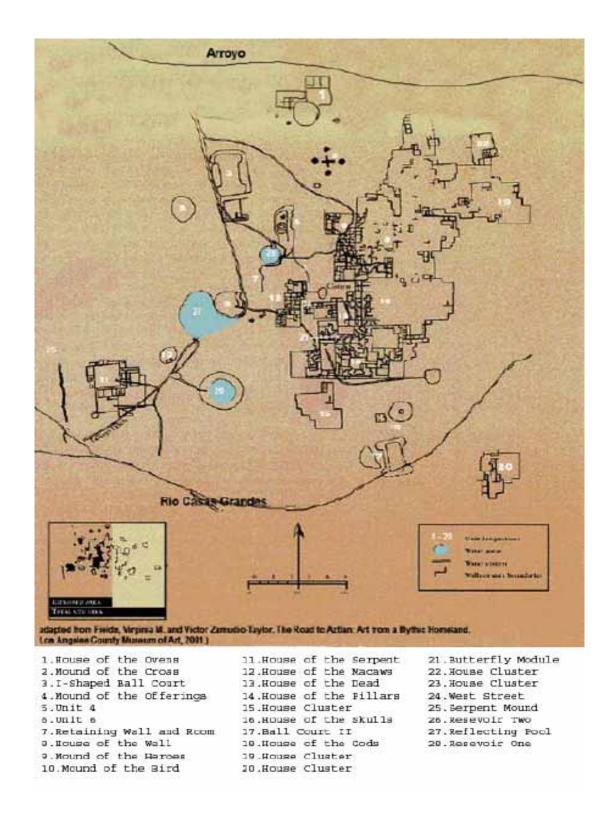


Figure 1. Plan of Paquimé during the Medio period.

All photographs taken by Delain Hughes. Figures marked with an asterisk are reproduced with permission of the National Institute of Anthropology and History (INAH). CONACULTA-INAH-MEX



Figure 2. The Sierra Madre Mountains line high desert valleys, like this one that encases Paquimé.



*Figure 3. Workers re-pudding the adobe in March 2005. Reproduced with permission of the National Institute of Anthropology and History (INAH). CONACULTA-INAH-MEX



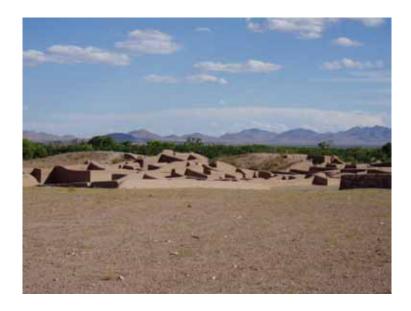
*Figure 4. Oval doors in the House of the Serpent.



*Figure 5. The House of the Macaws: detail of door and niche alignment.



*Figure 6. The House of the Macaws: macaw pens in Plaza 1.



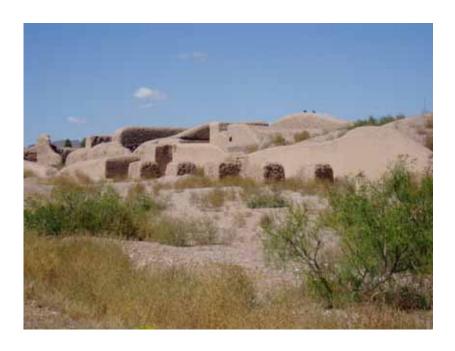
*Figure 7. Unit 6, northwest exterior.



*Figure 8. The House of the Dead: turkey pens in Plaza 3.



*Figure 9. House of the Skulls: room in the shape of a cross.



*Figure 10. House of the Pillars, southeast exterior.



*Figure 11. House of the Pillars, drainage room.



*Figure 12. House of the Ovens, pit oven.



*Figure 13. House of the Ovens, aerial view of domiciles.



*Figure 14. Mound of the Cross, view from northern mound.



*Figure 15. Mound of the Cross, view from the western mound. From this vantage point, the Mound of the Offerings, the Mound of the Heroes, the Mound of the Bird, and the House of the Serpent form an almost straight line of sight in the southwest direction.



Figure 16. Pecked cross in canyon wall between Chetro Ketl and Pueblo Bonito, Chaco Canyon.



*Figure 17. Serpent Mound.



*Figure 18. House of the Serpent, northeast exterior.



*Figure 19. Mound of the Bird: ramps in the west.



*Figure 20. Mound of the Bird: two stairs in the south that delineate the tail from the wings.



*Figure 21. Mound of the Heroes.



*Figure 22. Temple associated with the I-shaped ball-court, photograph taken from the east. The ball-court is adjacent to the temple to the north (left).



*Figure 23. I-shaped ball-court, taken from the temple's summit.



*Figure 24. Mound of the Offerings and Reservoir 1 in the south (lower right).



*Figure 25. Stone sculpture found in the Mound of Offerings.



*Figure 26. Room in retaining wall.



*Figure 27. House of the Macaws, southern wall. From the south of the House of the Macaws, Reservoir 1 and the Mound of the Offerings form the background view.

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