

The BRASS / El Pilar Program

Interpretations of Architecture at El Pilar: Results of the 1993 Season

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Introduction

The upper Belize River area of Belize has been shown to have been very important to the Lowland Maya. Research has shown that the Belize River Valley was occupied by the Lowland Maya, the valley served as a trade link between the Caribbean and the interior, also a route for population expansion into the Tikal area (Puleston and Puleston 1971; McKillop 1980; Healy, McKillop and Walsh 1984). To gain a better understanding of this region the Belize River Archaeological Settlement Survey (BRASS) began a regional survey followed by test excavations in 1983.

The first phase of fieldwork concentrated on local settlement patterns and was completed in 1989. It proved that local settlement was far less homogenous than previously assumed (Ford 1992). The three transect surveys that BRASS studied were designed to cover the range of environmental variability, ranging from the river bottom into the surrounding uplands, and to also sample a range of monumental architecture from four varied size area centers. The longest of the three transects ended at the monumental center of El Pilar, approximately 10 kilometers northeast of the Belize River Valley.

El Pilar is important to the area for several reasons. First, it is located amid dense settlement in the fertile uplands, and its large size compares favorably with other Lowland Maya regional centers. El Pilar has a large variety of monumental architecture, and the preliminary data has shown that the site has a long occupation history. Several factors strongly suggest that El Pilar is the largest center in the Belize River area and that it once reigned over the area, managing its resources and serving as the area's link to the other prominent centers in the Maya region.

The Project

El Pilar's location was recorded by the Department of Archaeology in the 1970's, but its full size and extent were then unknown. In 1984 the BRASS project, under the direction of Dr. Anabel Ford, developed a preliminary map of the site and salvaged some data from the existing looter's trenches on site. The combined BRASS/El Pilar project was initiated in 1993, under the field direction of D. Clark Wernecke. The project's initial goals were to develop an accurate map of the center and excavate test units to examine the nature of the varied structures, their alignment, and their state of preservation.

El Pilar's location is quite strategic ([FIG. 1](#)). The site is located amid fertile farmland and contains abundant water supplies. El Pilar is uniquely positioned to control the agricultural and trade resources of the upper Belize River area. Notably Tikal, the largest center in the Maya Lowlands, is 50 kilometers to the west while Naranjo, Tikal's regional administrative center, is just 30 kilometers to the SW. Additionally, the sheer size and architectural complexity of the site speak to its importance.

Resources and Settlement of the El Pilar Area

The ancient Maya were an agricultural society whose viability depended primarily on the success of their farming populace. There are four areas of land resources in the Lowlands that together formed the range of alternatives for both the ancient and modern populations (Fedick and Ford 1990). These four areas that can be used have been classified as:

1. Well-drained Uplands: Primary Agricultural Resources
2. Slow -Drained Uplands: Secondary Resources
3. Riverine-Associated Swamps: Secondary Resources
4. Closed Depression Swamps: Non-Agricultural Resources

The relative proportion of these resources determine the subsistence potential of local areas and form the foundation for the regions economy.

BRASS's earlier fieldwork in the upper Belize River area concentrated on determining how the ancient Maya community in this region used the area's resources. Their survey found that the valley was characterized by a small strip of primary agricultural land along the river and contains an average settlement density of 98 structures/sq. km (FIG. 2, TABLE 1). Next, the foothills were noted to be composed of a high proportion of secondary agricultural resources, which showed a corresponding drop in settlement density to three to 46 structures/sq. km. The ridglands also show a diversity in architecture with small, medium and large residential compounds sharing the uplands with the centers imposing monumental architecture. El Pilar is however not alone on the western ridglands because there are also several minor civic-ceremonial centers with that region.

El Pilar ranks greater than or equal to the other centers of the region (Adams and Jones 1981). The area mapped in 1984 covered more than 25 ha and was vastly expanded through more intensive mapping and surveying in 1993. The surveyed area of monumental construction now covers 42 ha (more than 100 acres) which includes some 70 major structures situated around 25 major plazas. Because the site is still covered with dense vegetation it is anticipated that more major components of the site will be documented during further fieldwork.

The present preliminary map of the site provides a general impression of the site's size and complexity (FIG. 3). The total site is made up of two major sections connected by a 950 meter E-W causeway. The west section, the smaller of the two, contains a major public plaza, large pyramids and a ball court. The eastern section is made up of several courtyards laid out in a linear pattern surrounded by imposing pyramids 17 to 21 meters in height, some large range structures, a ballcourt, and a large acropolis/palace structure. Excavation of the architectural features and examination of looter's trenches at El Pilar have revealed remarkable preservation in verification of the exceptional quality of the local limestone.

The size and complexity of the center coupled with the high settlement densities in the area attests to the importance of El Pilar as a regional center. Settlement density within one km of El Pilar is among the highest in the uplands at 292 structures/sq. km (Ford 1990) Next to El Pilar's Plaza F the presence of a significant chert tool production site is also indicative of the center's importance (Ford and Olson 1989). El Pilar is surrounded by many smaller satellite sites. One of these, Laton, contained the only known obsidian production site in the Maya Lowlands. This general picture presents an important regional administrative and economic power.

Investigations conducted to date at El Pilar revealed a long developmental sequence of Maya construction and maintenance at the site. These important civic projects were well underway as early as 250 B.C., when much of the southern portion of the eastern complex section was founded. Large ceremonial platforms and temples continued under construction throughout the centuries of both the Preclassic and Classic periods. Many large structures reached their current size in the Late Classic Period (A.C. 600-900), at the height of the Maya civilization. After the abandonment of Tikal, several important structures at El Pilar were in their final stages of construction during the Terminal classic period (A.C. 900-1000). This factor shows El Pilar exercised considerable independence from the major centers of the Peten.

The Architecture of El Pilar

Although less than a master-planned city, El Pilar has a coherent order exhibiting a constructed logic usual to most Maya centers (Robertson 1963). The Maya architects who built El Pilar, over the course of twelve centuries, used cultural notions of the proper use of orientation, form and space that resulted in the ordered "plan" existing today. This process has been called urban design to distinguish it from urban planning (Hardoy 1964).

El Pilar beautifully illustrates the two primary ideas of Maya urban design, axis and enclosure. The axis is an elementary ordering principle in architecture and is simply an imaginary line between two points about which forms and spaces can be arranged. As it is a linear condition, axial planning induces movement and views along its path (Ching 1979). Enclosure is perhaps the strongest form of spatial definition and can be used to define the flow and use of space.

Plaza C and D in the eastern section of El Pilar are excellent examples of axial ordering (FIG. 4). The main entrance to Plaza C is from Plaza D via a large staircase. Plaza C is large (100 X 150 meters) and flanked by successive pairs of structures ending in an imposing staircase and landing on structure EP3. The lines of view are impressive and the wide staircases and plazas are inviting to the public. Symmetry cannot exist without an axis and the Maya used axial planning to create lines about which to build symmetrical structures. Bilateral symmetry, or mirror symmetry, appears to have been the norm. Most of the structures at El Pilar possess bilateral symmetry and possibly a few exhibit rarely found radial symmetry.

A combination of enclosure and axial planning can be observed in the northern plazas of eastern El Pilar, plazas F, G, I, and the acropolis or H'mena. An axial line is established through the center of the stairs leading from plaza F to G, G to I, and from I up to the top of the H'mena. This axis splits the plazas in two, for the most part symmetrical, halves. Going north from plaza F the spaces grow

more enclosed. Plaza F is quite open and has many exits while Plaza G is completely inclosed with on the axial stairways in and out. Plaza I also contains just the two stairways, but appears even more enclosed than G because of the height of the buildings surrounding it. The H'mena is completely enclosed and has but one way in and out.

These plazas also admirably exhibit the use of the ordering principle of hierarchy through elevation. It can be safely assumed that the more enclosed and restricted an area is the more private and exclusive it will be. The walk to the H'mena from plaza F is one of increasing enclosure, restriction and of elevation. From the top of the H'mena a palacelike maze of rooms commands a view of all of El Pilar and the surrounding area. Suggestions are that many Maya sites were enclosed gradually throughout the Classic period (von Falkenhausen 1985).

George Andrews postulated that the ancient Maya used a set of four basic building groupings of distinctive characteristics to build their cities (Andrews 1975). These four are: the temple, quadrangle, palace and acropolis groupings. These forms exist within a range of variation, but seem to occur with great frequency.

The temple group is usually characterized by a group of two temples or three temples with an auxiliary building. The structure groups in plazas A, C, G and conceivably, west Pilar, could be temple groupings. Plazas G and I are excellent examples of the quadrangle, which can be any group of buildings forming a complete enclosure around a courtyard. The H'mena matches the description of a palace group, and, with the addition of G, and I, also forms an acropolis group.

Before leaving the architecture of El Pilar some mention should be made of its alignment. It has been determined that one guiding principle of Maya architecture may have been the alignment of structures with one of three possible options: 1) alignment with another, more important center, 2) alignment with astronomical landmarks and phenomena, or 3) alignment using geomagnetics (Fuson 1969; Carlson 1977; Aveni and Hartung 1982). Notably, most of the structures at El Pilar tested to date appear to have similar alignments within approximately 8 degrees east of magnetic north. Future research will require detailed testing for alignments if this preliminary data is to be confirmed.

Two important structures, EP7 and EP10, face each other across plaza C to the east and west (FIG. %). Here also, further study is needed to see if these two form what has been characterized as a Group E (Ruppert 1940). The Group E pattern of structures appears to have comparable astronomical significance found in many Lowland sites. Like the original Group E at Uaxactun, EP10 is a large bilaterally symmetrical temple facing east toward EP7 that in turn is composed of a large platform supporting a central temple and two flanking structures. The general picture is one of multiple examples of this known type grouping but each seems to have a different alignment, which rules out the

possibility that they were used for making a common set of astronomical observations (Andrews 1975).

El Pilar Chronology

Chronological analysis of El Pilar has been based on the comprehensive and detailed ceramic chronologies available for the Maya Lowlands (Smith 1955; Willey et al. 1965; Adams 1971; Gifford et al. 1976; Sabloff 1975). The preliminary chronological sequence for El Pilar is presently based on the examination of ceramics salvaged from looter's trenches during BRASS's 1984 field season. Additionally, ceramics recovered from the last occupation phase during the excavation of architectural features in 1993. These were examined with a focus on vessel form and rim characteristics.

The construction sequences exposed by looters provide a brief overview of the history of El Pilar. The ceramics recovered suggest that a great deal of construction activity at El Pilar spanned the Late Preclassic period through the Terminal Classic (250 B.C. to A.C. 1000). 1993 excavation work revealed other ceramic evidence of Terminal Classic activity throughout the site.

Future Plans for BRASS/El Pilar

The foundation for further research at the center of El Pilar has been established. We now have an understanding of the area's natural resources. The nature of local settlement during the construction and occupation of El Pilar is known. Additionally, the current rough site map will be the basis for future work. The long-term study of El Pilar will concentrate on the following aspects:

1. developing a detailed map of the site and its surroundings,
2. excavation to study construction sequences and form,
3. building consolidation and repair of looter damage,
4. selected reconstruction with a view to development of an ecotourist site, and
5. development of interpretive and educational programs presenting the results of the research.

In 1994, excavation work commences at strategic points along structures to aid in the fine-scale mapping of the site, using Electronic Distance Meter (EDM) and Total Station technology. This mapping stage is fundamental to further excavation decisions at El Pilar. This will also focus on determining the preservation of the architecture at the site. When the fine-scale map of the site

has been completed, the size, orientation and access of buildings can be determined. Axes of buildings can also be established to provide the basis for excavations examining building sequences and dedications.

Consolidation and reconstruction work is destined to be a cooperative effort with the Government of Belize. BRASS/EI Pilar would like to reflect the accuracy of archaeology, the realities of construction and sensitivities of aesthetics in this work. The project staff includes two architects who will monitor the exposure excavations with an archaeologist experienced in large scale restoration projects in the Maya Lowlands.

The final intended plan for EI Pilar includes publication of the results of the archaeological research in both scholarly and popular press form. An on-site visitor's program will be developed which includes information regarding the architecture of EI Pilar, its place in the region, and programs addressing the local environmental context. To this end the Ix Chel Tropical Research Centre and Wildlife Conservation International have begun the study of the local flora and fauna during the mapping program.

Summary

Research on the ancient Maya has traditionally focused on the development of centers. That body of research provides the necessary backdrop for continued investigation of the major center of EI Pilar. Investigations at EI Pilar will also be viewed in BRASS's decade-long residential and settlement pattern study. This combination provides a unique opportunity to develop and understanding of an important Maya center based also on the associations of the local communities that supported it.

Excavations at the community and center of EI Pilar should provide data critical to interpretation of household organizational diversity in the western ridgelands in order to assess chronological shifts in investments for monumental constructions, and the regional links of EI Pilar in the Maya Lowlands. Reconstructions of the building sequences at EI Pilar will be an indicator of labor demands, which in turn provide a basis for appraising power relations from the evaluation of population catchments from the local area. Finally, stylistic affinities of the architecture, artifacts and the presence and diversity of trade goods should allow an examination of the regional connections between EI Pilar and its wider interaction sphere in Mesoamerica.

The results of these investigations at EI Pilar will provide a detailed map of the site and region, building consolidation and reconstruction for further interpretation of structure variation, and visitor appreciation, also a program of interpretations and education for both scholarly and public audiences. The BRASS/EI Pilar

project should serve as a model interdisciplinary project encouraging future work in joint archaeological preservation coupled with ecological park development. An appreciation of the monumental community center of El Pilar represents a major step in defining the scale of centralization of the ancient Maya.

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Regional Map

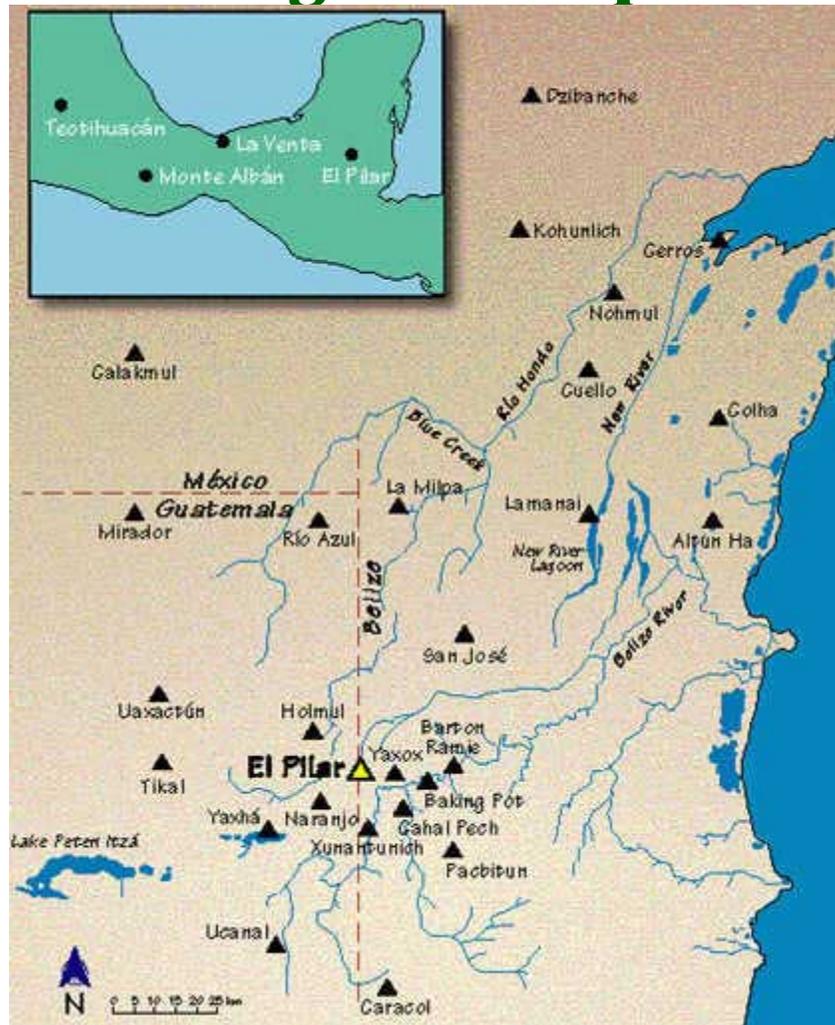


Figure 1: Map with location of El Pilar indicated

Figure 2: Land resources in study area and BRASS transects

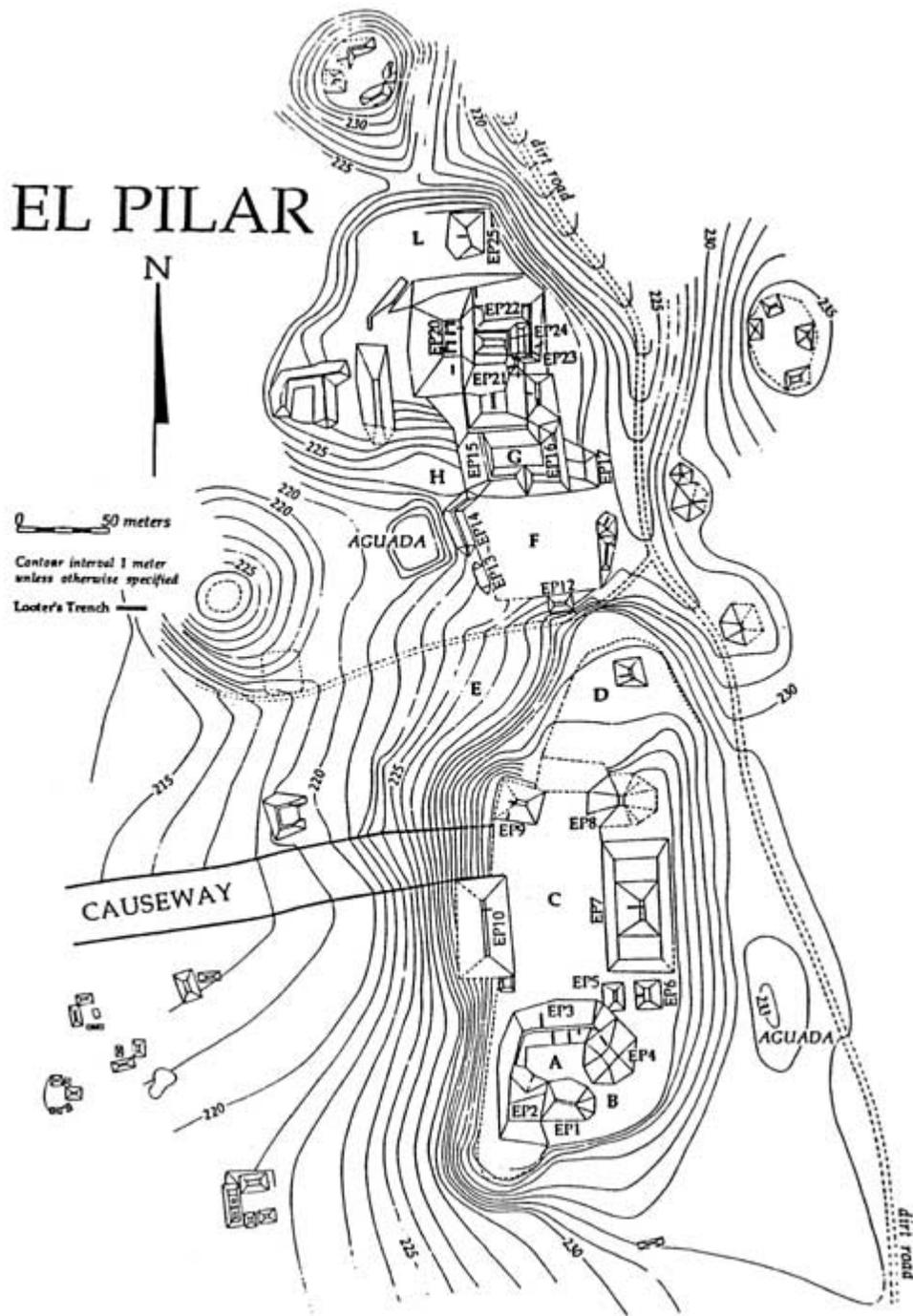


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