The BRASS / El Pilar Program

Archaeology at El Pilar
A Report on the 1995 Field Season

The Origins of Research at El Pilar: The BRASS Project

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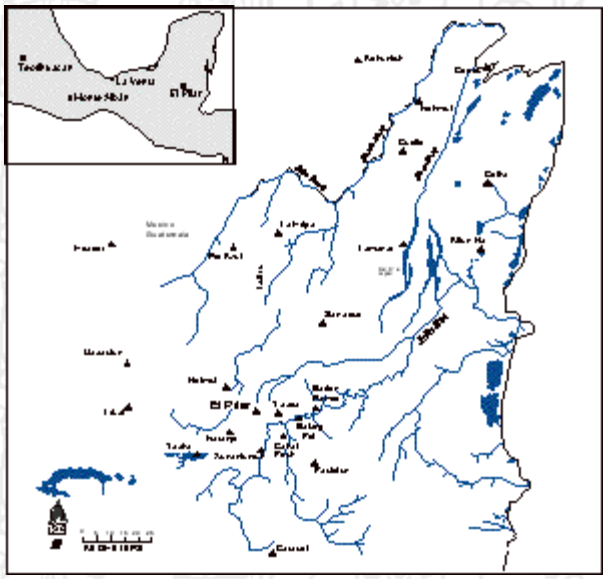
With an enthusiastic introduction to the region in 1982 by Jaime Awe, then of the Department of Archaeology, the Belize River Archaeological Settlement Survey (BRASS) was initiated in the upper Belize River area north of San Ignacio, Cayo District. Previous work some 25 years earlier had shown that this area was occupied early in the Maya sequence and continuously over time, and would have been logistically important for the ancient Maya, as the Belize River is a major seasonally-navigable river between the Caribbean Sea and Tikal in the heart of the Maya area. The area had received little attention in the intervening time, although it is today the subject of several important archaeological projects.

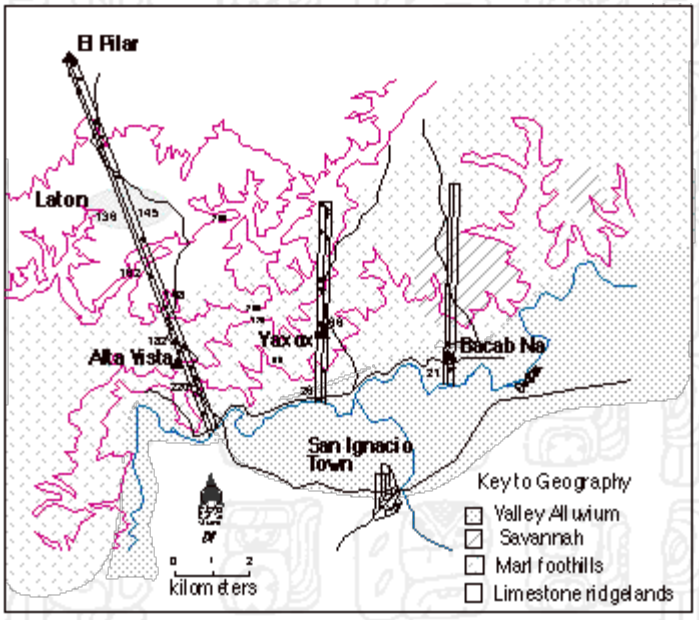
Advocating efforts to appreciate the full range of Maya society — both the monumental and the mundane — the BRASS project was designed to examine the cultural ecology of the Belize River area. This involved using environmental and geographic information as a backdrop for the archaeological settlement survey. The project collected data that identified where the ancient Maya lived, and what they were doing across this land. The results of the study have allowed us to assess the distribution of house sites and communities on the one hand, and their context and relationship to natural environment on the other.



The Central Maya Lowlands with El Pilar and other Maya sites indicated.

The 1983 and 1984 field seasons involved the survey of all identifiable cultural remains within three 250 M wide transects, one ten KM and two five KM long. The three transects were designed to traverse a range of natural environmental zones from the river bottom at 60 M to the ridge lands peaking above 300-400 M. This range of environmental zones included a variation of settlement sizes, from individual farmsteads to the major center of El Pilar. Excavations were conducted at residential sites within the identified resource zones of the valley, foothills, and ridge lands.

Test excavations revealed a wide variety of residential sites, from isolated field huts to large elite household compounds, not to mention monumental civic-ceremonial centers. Their locations were predictable: few and scattered houses were associated with poor agricultural soils in rugged or swampy terrain more characteristic of the foothills while dense settlements, including imposing elite patio groups, were found in the rolling fertile ridge lands concentrated in the vicinity of El Pilar.



The Belize River Archaeological Settlement Survey Area

While most houses displayed evidence of the basic household activities of farming, storage, cooking, and serving, a few exhibited distinctions that spoke to other more specialized occupations. Several, particularly in the poorer zones of the area, were involved in making the common stone tool, called the "chopper," that would have served as the ancient Maya machete for everything from opening palm nuts to chopping firewood. Rare in all the Maya area was the discovery of an obsidian (volcanic glass) production site in the ancient settlement cluster we named Laton, about 4.5 KM south of El Pilar on the El Pilar transect. The 1985, 1989, and 1992 seasons expanded excavations at this important location. The elite house site at Laton is the first identifiable obsidian blade production site found in the Central Maya Lowlands. The site yielded a concentrated stash of thirty-nine exhausted prismatic cores behind one house wall and production waste of over 30,000 pieces of obsidian in another stash translating into densities as high as 1.7 million obsidian, pieces per m^3. From trace element tests, we know that this obsidian was imported into the Belize River area from El Chayal and Ixtepeque in the volcanic highlands of Guatemala, over 300 KM or 200 air miles away.

The 1986 field season was dedicated to preliminary investigations at the minor centers of Alta Vista, Yaxox, Bacab Na, and the major center of El Pilar. Valuable building and chronological data were recovered from looters' trenches, and those trenches that threatened the stability of structures were backfilled. Test pits were also excavated in plaza areas to identify the nature of rebuilding in open areas. This was the first concentrated attention that El Pilar had received since its abandonment some thousand years earlier.

The analysis of data from the 1983-84 survey transects demonstrated an association between the resource zones and settlements which was further tested in the 1987 field season. Systematic surveys were made of small areas (82.2 hectares total), supplemented by general surveys of the study area that verified these relationships. This decade of research paints a rich picture of the ancient Maya settlement community patterns and landscape that was the home to this complex society. These settlements and communities were integrated through the center of El Pilar, by far the largest center in the area.

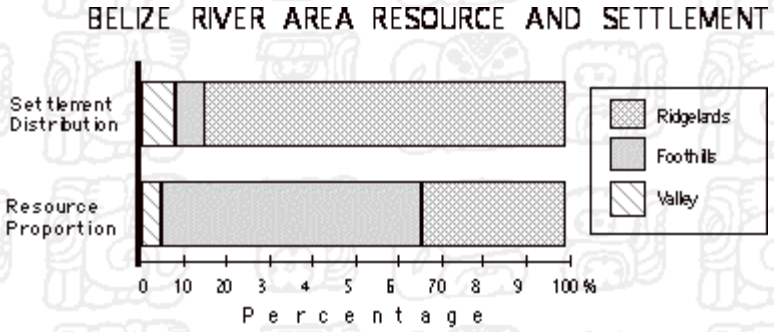
Communities of the fertile Belize River Valley were made up of moderately sized homes widely spaced from one another, and contained everything that a household would need to enjoy life in those ancient times. The residents were able to afford a certain amount of luxuries which are most often associated with only the elite in other areas. The even distribution, considerable household resources, and large amount of land accorded to valley residents is interesting. This unusual set of circumstances suggests privileges conferred by those in control upon valley dwellers. Since the valley alluvial soils are among the best in the Maya Lowlands, but form only a small proportion of the local area, let alone the region as a whole, it is probable that they were producing what today we might call cash crops. In fact, at the time of the first Spanish explorations in Belize, the populations of the Belize River Valley were producing cacao (chocolate).

Like other ancient Mesoamericans, the Maya probably used cacao as a medium of exchange, "money" that literally grew on trees. As we know today, these trees had to be carefully tended, managed, and protected— something a single family could not afford to do on its own if it precluded staples. The production of valued crops such as cacao, but also cotton and tobacco, appears to have sanctioned special luxuries. The valley Maya likely received such luxury goods in exchange for faithful production of chocolate. Luxuries of the Maya included blades made of obsidian (like those produced at Laton), beads fashioned from marine shells, and highly prized green stone, such as jade or jadeite, and other exotic stones. This reciprocal arrangement would have fostered a dependent relationship between the specialized farming communities and the elite aristocratic administration. The administration would have guaranteed redistribution of basic foodstuffs produced in the ridge lands in return for "cash-cropping."

But not all were so fortunate. Other Maya lived in the marginal zones found mainly in the foothills rising up from the valley. People of these zones could not depend solely on agricultural pursuits. The dispersed families which were relegated to these areas, augmented their farming tasks with manufacturing and independently trading of stone tools, pottery, and other simple and basic household products to satisfy their daily food needs. Consequently, they could not afford many things beyond the bare necessities of life; hence, few valuables were found at these ancient houses. Such households relied on the central administration to maintain a stable exchange environment so that their household industries would net the foods so fundamental to making their ends meet.

While the settlements of the valley and foothills of the Belize River area were administered from afar, communities of the ridge lands such as Laton were under the more direct scrutiny of the local Maya hierarchy whose apex was located at nearby El Pilar. The ridge lands have the greatest proportion of good agricultural soils and make up the grain basket of the region. Some 85% of the area's settlement was concentrated in these ridge lands that form only 35% of the areas' resources. Here, in the ridge lands, we discovered the great diversity of occupations and ways of life of Maya society. They were composed of both rural areas and central civic areas. There were elite "haves," who controlled and governed, and

peasant "have-nots," who toiled and bore the obligations associated with sustaining the civilization. At the community centers, elites managed everything from the local farmers to the broader political agenda, manipulated loyalties of elite within their grasp, and negotiated with peers of other centers. This undoubtedly included far-flung trade relations, as we know that many valuables were made of material not found locally in the Maya Lowlands, such as obsidian from the volcanic zones of Guatemala and Mexico and jadeite from the Montagua Valley in Guatemala.



The have-nots were involved in occupations that kept all the basic aspects of daily life going. The majority of Maya were farmers who provided food for the populace. Some, as in the foothills, manufactured basic household items that were exchanged for food. Still others provided direct services to the elite and in return were supported by them. The most diverse of these people were found at the major centers of the region. El Pilar served as the focal center for these local households as well as the wider communities throughout the Belize River area.

The mosaic distribution of good agricultural land spread the ancient Maya across the landscape in large and small communities as well as hamlets and homesteads. Settlement patterns in the ridge lands around El Pilar show this hierarchy of community size and composition as related directly to the amount of available farm lands. The fertile lands around El Pilar are abundant in the surrounding rolling hills and ridges. Smaller areas of fertile land supported minor centers, such as Chorro, to the east. Pockets of land, such as those of Laton, had a single administrative temple associated with an elite residence. There were other dispersed and isolated spots of good farm lands, but due to small size these would have only field huts within or adjacent to them. All sizable areas of good land had the same density of settlement, two houses per hectares. The larger the area of fertile lands, the larger the community, and the largest community in the area was El Pilar.

El Pilar Site Background

El Pilar is located twelve KM north of the western Belizean town of San Ignacio, astride the Belize Guatemala border. The ridge land escarpment where El Pilar is prominently situated extends from Guatemala's Peten into Belize, north of the Belize River Valley. Coming up from the valley on the Pilar Road, you have ascended this major escarpment more than 340 M.

The area has long carried the name of El Pilar and while the origin of this name is obscure, the numerous natural sources of water speak to the old Spanish word for watering basin or *pila*, whose

collective would be designated in Spanish as El Pilar. Two local streams have their origins at El Pilar, one to the east, which we call El Pilar Creek, and one on the west referred to generally as El Manantial (the Spring). About 2.3 KM east is Chorro, a lovely delicate waterfall. Not far from the waterfall is a minor center named Chorro, after the falls. The abundance of water in the vicinity of El Pilar is rare in the Maya area; the venerable ancient city of Tikal had no natural water sources at all. The population there relied on constructed reservoirs or *aguadas*. The center of El Pilar is situated at the edge of the interior ridge lands that begin east of Tikal. At the point where El Pilar is perched, the ridges overlook the eastern flat lands that run to the Caribbean Sea. This situation provides a natural outlet for water and in part explains its abundance here.[1]

The center was recorded by Belize's Department of Archaeology in the 1970s by Joseph Palacio and the late Harriot Topsey, but its full extent was then unknown. Recorded as a triangle on the Department maps, Jaime Awe saw that El Pilar was in the area of the BRASS surveys, and, in 1983, encouraged Anabel Ford to visit the site with him. From this brief tour it was clear that El Pilar was large and a preliminary map was made of the major architecture in 1984 as part of the BRASS project. In 1986, also as part of the survey phase, preliminary excavation and rescue work was pursued at the site. The first full-scale investigation of El Pilar was finally begun in 1993 as a result of support and encouragement from Daniel Silva, at that time the area representative for Cayo.

El Pilar has more than twenty-five identified plazas in an area of approximately 100 acres (38 hectares), ranking it equal with major centers of the lowland Maya region. It is the largest center in the Belize River area, more than three times the size of other well-known centers such as Baking Pot or Xunantunich. The center of El Pilar is divided into three primary sectors: Xaman (North) Pilar, Nohol (South) Pilar, and Pilar Poniente (West). The eastern and western sections are connected by an offset causeway system extending between two large public plazas. Survey and excavations have been concentrated in the eastern side of El Pilar within Belize. The western section, Pilar Poniente, is across the border in the Republic of Guatemala.

The BRASS/El Pilar Program

In 1993, BRASS began a detailed study of the center of El Pilar, establishing the foundation for a long-term program of inter-disciplinary research. The archaeological research plan is segmented into mapping, excavation, and structure consolidation. The program has opened large portions of the site, providing access for visitors, while at the same time developing the fine-scale map of major architectural features of the center. This examination includes assessments of structure orientation, building styles, and degree of preservation.

The Maya used a fine and durable limestone extracted from local quarries at El Pilar, and the preservation is exceptional. Beautifully plastered masonry rooms, imposing corbel vaults, and monumental stairways have been identified in illegal looters' trenches and controlled archaeological excavations conducted in the initial stages of study. A preliminary chronology, based on ceramic comparisons, has revealed that monumental constructions at El Pilar began in the Middle Preclassic and continued with major

remodeling completed in the Terminal Classic. Occupation extended into the Early Postclassic. This long sequence spans more than 15 centuries and testifies to a continuous and methodical development in the area.

With the basic mapping complete, limited exposure excavations were conducted to determine lines of communication between the plazas. In addition, with the assistance of personnel from the Instituto de Antropología e Historia de Guatemala (IDAEH) and the Consejo Nacional de Areas Protegidas (CONAP) and the support of Guatemala's Ministry of Culture, Pilar Poniente was literally put on the map. This confirmed the causeway connections between Poniente and Nohol Pilar and set the stage for promoting a contiguous Belize-Guatemala park.

Inspired by this vision, the Belize Tourism Industry Association (BTIA), presided over by Godsman Ellis, launched a collaborative endeavor with the BRASS/El Pilar Program to establish the El Pilar Archaeological Reserve for Maya Flora and Fauna. Funded by the USAID in coordination with the Government of Belize, this will create an environmental and archaeological Reserve of nearly 2000 acres around the site core of El Pilar. Plans to establish a similar reserve on the Guatemalan side of the border are under way. With a bi-national reserve, El Pilar will be reunited as it was in Classic times, and visitors will be able to tour the entire domain of this magnificent ancient city.

The 1995 season of BRASS/El Pilar program initiated the intensive excavation phase of the archaeological investigations. Concentrating on the Nohol Pilar and the public area around Plaza Copal, we have begun the arduous task of understanding the construction history of this sector of the site. The major work of the season focused on the tunnel excavations of EP 7, or Xikna. In addition, tests along communication links between plazas and buildings were expanded to better understand the relationships between structures, plazas, and sectors of El Pilar. Plans for the future include the investigation of the north and western sections of the center and the development of an understanding of the residential components around the major monuments. Particular houses along the eastern side of El Pilar will be investigated with a focus on the recreation of the Maya way of life, including a view into their forest-gardens. Selected areas of the center will be consolidated to help to envision the splendor that was El Pilar.

The 1995 El Pilar Archaeology

The archaeological excavations of the 1995 season focused on the most public aspects of El Pilar; these were the areas that were on display during the Classic Period and would have been a source of community integration across the Belize River area. Just as it was in the past, this magnificent area could be a showcase as a tourist destination. Our first attention was on the general chronology of this major plaza. We conducted general excavations at building center axes, corners, and across the width of the plaza to appreciate the evolution of the plaza. Two major excavations focused on the east and west temples flanking the length of the plaza. A major tunnel was excavated 28 meters into EP 7, or Xikna, and a minor trench and stairway exposure was excavated at EP 10, or Ho Nohoch. We also devoted a portion of the season to addressing inter-plaza communications and building relationships that affect access and movements of people. The results of the 1995 season provide a very solid basis from which to interpret the long sequence of occupation in the public sector of the monumental center. Efforts for the future must begin to ferret out the parallel development of the private and restricted Xaman sector of northern El Pilar, the relationship of

Pilar Poniente in the west to Nohol Pilar, and the nature of the urban landscape of the residential sector. These are planned for forthcoming seasons.

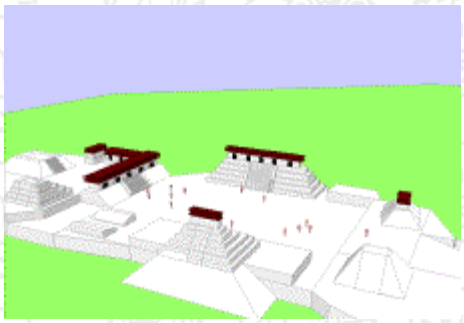
The 1995 Field Methodology

All excavations of the BRASS/El Pilar Program followed natural stratigraphic levels and records were maintained by cultural strata. Excavations proceeded with hand tools (shovel, pick, pick-a-hoe, trowel, and scoops), except where areas demanded a finer touch. Materials were screened through wire mesh. Half-inch screen was routinely employed for collapse and fill deposits. The exceptions were the special features. These were either collected *in toto* or screened using a quarter-inch mesh. All ceramics and lithics larger than a Belizean quarter (c. 2 cm) were collected in the field for later analysis. All bone, obsidian, and miscellaneous artifacts were kept as well as any organic samples in quantities sufficient for C14 dating. Strata were identified visually and described using Munsell colors and an inclusion guide from the PCA handbook. Strata were defined in terms of soil type (i.e., sandy, loam, etc. from the PCA Soil Primer), dry soil color (with a Munsell Soil Color Chart), and size, type, and percentage of inclusions (sizes range from boulders, cobbles, gravel and pebbles; and type generally ranged from limestone to chert).

Excavations Around Plaza Copal

INTRODUCTION

Plaza Copal is the largest public area of the surveyed center of ancient El Pilar. With interior dimensions at 115 meters north-to-south and 55 meters east-to-west and surrounded by some of the largest structures on the site it has obvious importance. Our previous limited excavations around the perimeter, where we examined structural preservation and orientation, established that Plaza Copal bore a heavily plastered surface in its last phases of use and had been resurfaced a number of times. To anchor the large scale excavations planned for the two principal structures on the plaza, we decided to open excavations at various points on Copal to widen the context of the reconstructed architectural history of the area. With this in mind, the BRASS/El Pilar field crews excavated eight units focused on Plaza Copal which were augmented by data from five additional units on structures around the plaza perimeter.



Projection of Plaza Copal in the Late Classic Period

PREVIOUS EXCAVATION

Plaza Copal had been the focus of considerable archaeological attention in the 1993 field season. Areas examined included the southeast and southwest corners of EP 9; the northeast, southeast and central stair of EP 10; the southwest, northwest and central stair of EP 7; and the southeast and northeast corners of EP 8. All of these units were examined in order to determine the condition, orientation, and context of the last evident structure. No excavations were made of the plaza itself, and only one, the northwest corner of EP 7, went below the last evident surface of EP 7/plaza contact. In 1994, two units were excavated in the Plaza Copal area. One excavation examined the mound-structure to the south of EP 10. This excavation went through the mound-structure (called S PLAT 10) to the thick layer of plaster which constituted a late surface in the plaza. The S PLAT 10 mound-structure was interpreted to be a rock crib holding stones destined for a construction project arrested before completion. The other unit, STELA 1, examined the resting place of stela fragments in front of EP 7's central stair. This unit was excavated through at least two separate plaza floors in an attempt to identify the possibility of the stela placement. The conclusion of this excavation determined that the stela had fallen onto the plaza area from a higher location either along the platform landing approximately one third of the way up the EP 7 stair, or at the top of the final landing of the EP 7 temple. Given this information, we knew that there were at least three distinct and temporally separated Plaza Copal surfaces (not including resurfacing) and they were very well preserved. The 1995 excavations were designed to fill in this interesting record and provide data for a full chronological reconstruction of the largest public sector of El Pilar.

PLAZA COPAL EXCAVATIONS

The majority of the units were designed as simple 1 x 1M or 2 x 2M test pit style excavations. The idea was to quickly reach bedrock or sterile soil in each unit and then compare the stratigraphy among the units to build up a history across Plaza Copal. The only units to retain this pure form were the units 1-4 across the center of the plaza (C CTR). Other units that began at test pits were ultimately enlarged as architectural features were encountered.

The C CTR Units

There were four Copal Center (CCTR) units, stretching in an east-west line connecting the major excavations of EP 10 with those at EP 7. Each excavation unit was a 1 x 1M unit excavated to bedrock. Once completed and profiles drawn, each of the units were compared. One of the immediate observations was that the strata in C CTR1, the westernmost unit, did not match those of the other three nor those in the large excavation in front of EP 7. The soils in C CTR 1 were darker, there were far more artifacts in what appeared to be secondary deposits, and there were layers of rock and cobble fill that were not found in C CTR2-4. Several plaster plaza floors were identified across the plaza in these units, but no trace was found of the well-preserved plaster floor found near the surface in the perimeter units [(FL)1007]. This floor surface may have broken up through post-depositional processes or there may have been another step down from the major temples into the plaza area. Another observation was that bedrock was almost one meter lower in the westernmost unit adjacent to EP 10 than in the other three that ran eastward. Bedrock was found at 240.8M in C CTR4, 240.17M in C CTR3, and 240.09M in C CTR2, and it was a fairly smooth and level surface. In C CTR1, however, the bedrock was found at 239.33M and it continues to drop off to the west (238.11M at EP 10 AXTR). No humus layer was found directly on top of bedrock so it can be assumed that the ancient Maya cleared the bedrock of humus and used this surface as the first plaza floor, later filling in the drop off to the west to expand in that direction. This preparation technique of cleaning the bedrock surface before building is consistent with observations at Tikal (Rudy Larios and Miguel Orrego personal communication), in the smaller centers of the Belize River area surveys, as well as other excavations of the

Maya lowlands.

EP 9 SEQ

This unit was originally designed as a 2 x 2M unit that began by relocating the previously excavated southeast corner of structure EP 9 (Xbalanque) and continuing down to bedrock. Under the supervision of Ryan Gray, this unit epitomized the tendency for even the most basic endeavor to turn unexpectedly complex. The goal to reach bedrock was eventually reached (at 239.36m), but not before the unit had been substantially enlarged to approximately fifteen square meters in order to examine architecture encountered in the process.

After locating the rounded corner of EP 9, the crew excavated through the remains of (FL)1007 and down to a layer of loose cobble fill. As mentioned previously, this floor is very well preserved where it abuts structures but quickly disappears as one excavates into the center of the plaza. In this case, the plaster was about 4cm thick near the structure but existed in only a 50cm wide band before disappearing. Beneath the cornerstones of the last construction of EP 9, major plaza changes and remodelings were uncovered. The loose cobble fill below the corner matched the type of fill found in excavations at the causeway access (BM STR) and in front of EP 10 (EP 10 AXTR), both along the western side of the plaza. This cobble fill layer was used to raise the plaza level and was packed into irregularly shaped construction bins that formed the foundation for the later phases of Plaza Copal.

The architecture defined in the EP 9 SEQ unit excavations can be divided into three main groups: the lowest floor with the associated round platform, the parallel north-south walls (of which there are five in total), and the unconsolidated possible rock crib walls. From observations of the interrelations of the strata and from a preliminary sorting of the recovered ceramics, these can be broken down into a series of temporal construction phases, mostly dating from the Middle and Late Preclassic. However, it must be emphasized that this sequence is hypothetical, intended to present one group of possibilities. Hopefully, more intensive laboratory analysis of ceramic samples and additional excavation in this part of Plaza Copal in the future will be able to better delineate the chronology of this area.

The earliest construction in the EP 9 SEQ unit, dating from the Middle Preclassic, is (FL)920, a 6cm thick plaster floor built about 25cm above cleaned limestone bedrock. Though the round plaster platform may have been added later, this structure is so closely associated with the floor which coves into it, that it can be considered part of the same construction phase. The platform is estimated to be about five meters in diameter, constructed of a limestone cobble wall (25-35 cm high where intact) and a chert and limestone pebble and cobble fill. It has been plastered over multiple times, and in most places plaster still coves directly down onto (FL)920. While this floor slopes down to the northeast within the unit, promoting drainage and following the contour of the bedrock, the top of the platform is level, meaning that the platform would have been significantly higher on the northern side, toward Plaza Duende. Where the edge of the round platform is still intact, there is a lip 10 cm wide and about 3 cm high running along it.

Round platforms similar to this platform at El Pilar and dating from the Middle Preclassic have been recorded at a number of lowland Maya sites, including Barton Ramie, Rio Azul, and Cahal Pech. They have been most intensively studied at Cahal Pech, under the direction of Dr. Jaime Awe. From comparisons with round structures in the Belize Valley, they show no signs of a superstructure, masonry or otherwise, and a public ritual function has been suggested for them, as dance platforms, oratories, or performance spaces. It is interesting to note the position of this platform at El Pilar, which is associated with two of the most public plazas of the site, is located just above Plaza Duende on the edge of Plaza Copal. Before more can be said about the partially exposed platform in the EP 9 excavations, a significant amount of additional excavation would be required.

In the process of enlarging the unit to expose more of the round platform, five separate north-south

parallel walls were discovered just north of the original excavation. The earliest and best constructed of these was fashioned from well-chiseled blocks. These rested on and cut into, the round platform. The other four walls were 60-70cm apart and built at later dates, judging from the stratigraphy. It is difficult to determine how these walls relate to the other architecture in the unit. We briefly examined rough rock walls retaining built perpendicular to the north-south walls discussed above. These appear to be for the purpose of raising the level of Plaza Copal at least 1m. Much more excavation is needed in this area to better define these "rock cribs." They may be associated with a series of parallel walls used for a similar purpose located not far away on the west balustrade of the ramp/stair between Plaza Copal to Plaza Duende.

EP 8 SEQ

This excavation was planned as a twin to the excavation of EP 9 SEQ. As with EP 9, previous excavation at EP 8 had exposed the rounded southeast corner and a 2 x 2M unit was planned to relocate this corner and continue down to bedrock. The excavation exposed four plaza floors before reaching bedrock at 239.32m. Few artifacts were encountered and, besides the plaza floor remains, no architecture was found. This suggests that there were varied dimensions to the changes in the evolution of Plaza Copal.

EP 3 NE STR

Two objectives prompted the excavation of this unit. The first was to locate and assess the northeast corner of the outset axial stairway of EP 3, an important structure forming the prominent southern perimeter of Plaza Copal. The second was to identify the depth of bedrock to complete our growing topography of the earliest constructions of Plaza Copal.

The first objective was met rather quickly with the location of the outside and inside corners of the outset stair and the associated broken remains of the plaster plaza floor. The stairway was made up of relatively small limestone blocks and was in very poor condition—a sharp contrast to the well preserved superstructure of EP 3. The inside corner revealed a slightly battered wall with an apparent terrace only 1M above the plaza floor. Although we had suspected that structure EP 3 was terraced, this discovery and the terraces uncovered in the excavations behind EP 2 of Plaza Axcanan at A BK STR (described in the communication section of this report), has shown that the basal platform of Plaza Axcanan was composed of small tiered terraces.

A 1 x 1M area in the northeastern corner of this unit was excavated to bedrock at 240.12M, in the course of which five more plaza floors were identified.

E BALL

This unit was planned to examine the crucial southeast corner of Plaza Copal, the site of the small eastern ball court at El Pilar. A 1 x 2M unit in the north-south center of the court and closer to the eastern building (EP 6) was excavated to bedrock at 238.00m. The discovery of four plaster floors and the subsequent elevation of the bedrock established that this was a sunken court, with the final surface one meter below other architecture in Plaza Copal. Also, we discovered another structure which predates the Late Preclassic ball court structures now showing. A small section of an east-west wall was discovered on bedrock in the center of the unit running under structure EP 6. A larger excavation unit would be needed to draw any further conclusions about the construction history at this location. One highlight of this excavation was the uncovering of a small cache below one of the floors. This cache contained a number of bone tubes similar to types attributed to instruments at Pacbitun nearby to the south of the Belize River.

OTHER EXCAVATIONS

A number of excavation units, described on other sections of this report, contribute important

information to the understanding of Plaza Copal. For example, extensive data came from both the excavations at EP 7 as well as at EP 10. The large size of these excavations enabled us to develop and compare stratigraphic profiles in detail for signs of plaza floors, nine of which were identified in EP 7 and four in EP 10. Excavation at BM STR (to the west between EP 10 and EP 9) and C STR (between Plazas Copal and Duende) established the nature of the drop-off from Plaza Copal to Plaza Duende and to the Bryan & Murphy Causeway. Needless to say, there are more questions that need to be answered by further excavation.

PLAZA COPAL SUMMARY

The excavation units around the periphery of Plaza Copal and those across the center have identified at least 15 individual plaza floors (see table). We now know that the earliest Preclassic construction was focused on the cleaning and clearing of the bedrock surface. Plaza Copal gives the impression that it was built on a hill because of the elevation of the plaza, however, we discovered that the plaza area was originally a fairly level bedrock shelf with a dramatic drop off to the west at the point where EP 10 is situated.

One often thinks of the overall plan of a major public area in a Maya center as one that did not change dramatically over time. Buildings are added to and built up in stages, but rarely eliminated completely or drastically moved. The 1995 excavations on Plaza Copal, however, seem to indicate that there were dramatic changes wrought over time, particularly in the Preclassic. By the Classic Period, Plaza Copal had taken on its essential shape. As will be seen in the discussion of EP 7, the earliest structures below EP 7 face east rather than west toward the center of the plaza and the round structure found at EP 9 SEQ was completely surfaced over as an open plaza. At some point, perhaps at the time the EP 7 orientation was changed, the Plaza Copal was extensively enlarged to the west and a new perimeter was defined with structures.

The 1995 excavations of Plaza Copal have given us a new set of questions that need to be answered. What was the original orientation and what structures existed in this Preclassic plaza? At what point was the plaza enlarged and did this coincide with the building of other major structures? How does the history of EP 10 compare to that of EP 7? These questions can only be explored by examining the architecture of the plaza itself.

Excavations at EP 7

INTRODUCTION

Structure EP 7, Xikna, is one of the major structures in Plaza Copal and was the focus of intensive investigation during the 1995 field season. The winged platform-temple structure of EP 7 is located on the east side of Plaza Copal. It consists of a central building 17 meters high and 80 meters long with side wings or platforms on the north and south sides of the west-facing temple structure.

There were three considerations in planning the excavation of EP 7. The first consideration, and the smallest in scope, was to develop a construction history for EP 7; the second consideration was to incorporate the construction information gained from EP 7 into the general knowledge of occupation and use of Plaza Copal; and finally the third consideration was that of a broad scale comparison of EP 7 to similar structures in the Maya region. Prior to excavation, it was noted by Lic. Miguel Orrego that structure

EP 7 resembled other structures in the Maya area that had large central structures with two platforms wings. Particularly, EP 7 is similar in style to structure complexes noted at Uaxactun but also at a range of other centers including Structure C at Rio Azul. Structures of this platform-temple have been deemed "mausoleums" and have produced long building sequences that reflect the evolution of centralization at Maya centers. Furthermore, structure EP 7, along with Structure EP 10 directly opposite on Plaza Copal, have similarities to the "E-group" alignments identified at Uaxactun. It was with these considerations in mind that we decided to open three units of excavation focused on EP 7 alone: (1) a tunnel through the central axis of EP 7, (2) a western unit situated on the front of the southern wing, and (3) a central unit on the southern wing. These three excavations together were designed to provide the first major data base on the construction sequence of El Pilar.

PREVIOUS EXCAVATION

Initial investigations of EP 7 were conducted on EP 7 over the last two field seasons and focused on surface definition of features composing the final phases of construction at the building. In 1993, the southwest and northwest corners and central stair were uncovered and construction features were identified. In 1994 a unit was excavated to examine stela fragments in front of EP 7's central stair. From this investigation we determined aspects of the latest building phase of structure EP 7. These units provided basic data on the last evident structure and helped in the interpretation of the larger plan of understanding Plaza Copal.

Excavations were a collaborative effort that included archaeological graduate and undergraduate students and the Belizean BRASS staff. They were supervised by Lic. Miguel Orrego.

EXCAVATIONS ON EP 7

EP 7 S PLT

This excavation unit was placed along the southwestern edge of the southern platform of EP 7 at an elevation of about 4 meters above Plaza Copal. The unit was oriented in such a way as to investigate a low rubble mound that had been recorded running north-south approximately three meters from the western edge of the southern wing of EP 7. The excavation was designed to first identify the nature of the surface remains and second to develop a construction history of the platform.

Excavation revealed a low wall running north-south where the rubble had been identified previously. Artifacts were found to be clustered around the eastern side of the wall [(WL)754], in the tumbled area. Two well preserved floors [(FL) 755 and (FL) 756] were uncovered on either side of the wall. These floors did not connect to each other; consequently, the unit was expanded to the north, on the west side of the wall. This wall was thought to be a central spine wall of a perishable pole-and-thatch structure. However no post holes were found within the unit.

As the excavation expanded, a one-meter square stone configuration of four faced limestone blocks was discovered [(WL) 791]. This square configuration was recorded and removed to investigate the interior. Underneath the stone facing blocks was an ashy soil from which a soil sample was taken. As the ash was cleared, a break appeared in another plastered floor [(FL)793] which seemed to be intentional rather than a result of deterioration.

The remaining excavation of the unit consisted of the investigation of this break in the plaster floor. The artifacts recovered from this facet of the excavations suggest that at some point after the Preclassic Period, a portion of the south platform of EP 7 was penetrated and then refilled for some presently unknown reason. Bedrock was encountered at 238.37 meters without being able to resolve the cause for the ancient excavation.

In conclusion, the data from EP 7 SPLT was insufficient to confirm or deny the hypothesis that the

low rubble mound at the surface of the southern platform is a spine wall of a perishable structure. It is possible that post holes may exist on the eastern side of the north-south running unexcavated wall. The disturbed area between the plaster floor cut and the western wall is intriguing and certainly suggests conventional Maya interment practices. The excavation of EP 7 S PLT has added to our store of knowledge regarding the construction history of Structure EP 7. Materials found in this unit provide a relative chronology for major construction episodes. The data from EP 7 SPLT also help guide future excavations in this area.

EP 7 S PLT CTR

To better understand the construction history of EP 7, a unit was placed in the center of the southern platform behind the unexcavated wall [(WL)754] originally identified in EP 7 S PLT. This central location was designed to augment the growing data on the major building elements of the southern platform. The unit was 1.5 x 1.5 meter square set on the top of the platform and excavated in natural stratigraphic levels. The plan was to take the unit down to bedrock in order to get a complete construction sequence. This aim was thwarted due to the instability of the unconsolidated loose cobble fill that composed the lower levels of the unit.

A series of 14 levels went down approximately 5.60 meters in depth at the point where excavation had to be stopped due to fear of wall collapse. The ceramics recovered from the unit were overwhelmingly from the Late Preclassic. This ceramic dating corresponds to materials recovered from the other EP 7 excavations. A noteworthy point of interest is that, with the exception of floor (FL)790, no plaster floors were found. This fact suggests a construction before the major Plaza Copal establishment as the excavation terminated well below the known level of the Plaza Copal. Once the profiles were drawn and analyzed, we came to the conclusion that the unit came down on the backside of a series of terrace platforms clearly visible in the western profile. The platforms were each about a meter in height and were made of rough walls.

The excavation of EP 7 SPLT CTR and the corroborating evidence from EP 7 SPLT indicates that the south structure of EP 7 had at least three major building episodes beginning in the Preclassic. The first structure in this locale was apparently built on cleared and cleaned limestone (there is no humus layer above the bedrock in any of the excavations of EP 7). At a later point in the Preclassic, a larger structure was built over the first. The last major episode involved filling in the area between the structure and the central structure of EP 7 as well as extending the "wing" to the east.

Combining the data from EP 7 S PLT with the data from EP 7 S PLT CTR suggests that there were several building changes and enlargements that predate the major construction of Plaza Copal, based on the absence of a plaza surface before bedrock. Further, the terrace platforms found in the center demonstrate the magnitude of dimensional changes in the evolution of the construction of what ultimately became a platform wing of the temple of EP 7. Earliest constructions began in the Late Preclassic Period, and continual modifications and changes were made over the course of that period. At this time the building at this location was separate and unrelated to EP 7. Only later in the Classic Period was the building finally connected to the temple. Further excavations at the interface between the temple and platform constructions will be able to demonstrate the nature of this transformation.

EP 7 STR & TUNNEL

The excavations at the central part of EP 7 represent the most intensive aspect of the investigations conducted in the 1995 field season. Although this investigation had two separate designations for recording purposes, the data generated from the investigations are integrated into one major sequence.

In the beginning of the field season the structure was carefully mapped in detail by Lic. Miguel

Orrego. This map provided a basis for all later drawings of the structure's profiles and plans. The excavation team planned a tunnel for the center of the pyramid to gain a basis for interpreting the construction history of the temple structure. To begin this process, the humus was removed from the latest set of stairs [(ST) 713] and the stair blocks were recorded. The last staircase of the temple was in an advanced state of collapse, but in very good and reconstructable condition. After recording the stairs *in situ*, they were numbered (for later reconstruction) and removed. The crew then excavated the penultimate set of stairs [(ST) 740]. These were found to be in excellent condition, beautifully stuccoed and in exact place due to the final stair construction. Cleaning of the stairs revealed a feature [(F) 737], a dedicatory cache placed centrally at the 7th step. The cache included bone, obsidian, a jade bead, evidence of copal incense, and other burned floral/faunal remains.

The uncovering of this exceptionally well preserved stucco staircase altered our original strategy for excavation. It was deemed that these stairs should not be removed (at the risk of damaging them) and so another plan of action for tunneling was devised. The stairs were protected by a champa built of corozo or cohune palm by the Belizean BRASS staff so that the elements would not deteriorate the delicate plaster and the stair could be enjoyed by visitors to El Pilar.

It was decided that the revised placement of the east-west running tunnel would be under the exposed stairs. To accomplish this goal, a wide 2 x 2 meter square pit was excavated in front of the main stair along the central axis down to bedrock two meters below at 239m. In this way we were able to tunnel through the structure without destroying the well preserved stairs. By the end of the field season the tunnel was approximately 1.3 meters high and reached 28 meters in length into the center of the structure EP 7.

Along the projected central axis, we noted that the axis of the latest building phase did not match up with earlier phases of the same building. This shifting over time is not unusual in the remodeling of major temple structures. The tunnel ultimately exposed very early construction phases that were unrelated to the final phases. These were chronicled in the differences between the north and south profiles of the tunnel. In addition to the main tunnel, several small probes were conducted off the main tunnel in order to clarify questions that arose as a result of profiles. These raised interesting sequencing problems and more extensive probes are warranted in future field seasons.

In the tunnel we exposed bedrock at several key locations. It is interesting to note that the Maya of El Pilar modified the bedrock itself as they prepared the primary plaza floor surface, sometime in the Middle Preclassic. As noted around Plaza Copal and in other major centers of the Maya area, much effort went into the planning of monumental constructions. All probes to bedrock revealed that the ancient Maya had cleaned off the humus layer before beginning the first construction projects.

There were some surprising findings within EP 7 TUN. Previous investigations at El Pilar had securely placed major monumental building projects well back into the Late Preclassic Period. Excavations in EP 7 TUN pushed back this dated into the Middle Preclassic Period. The earliest constructions under the temple of EP 7 were built during three to four phases of the Middle Preclassic, based on the preliminary ceramic analysis. These phases of construction include bedrock cleaning and clearing, two major plaza surfacings [(FL)799 & 798)], and a major building and modification (strata 764 & 7124) of a clay building platform. This clay construction appears to be composed of clay derived from the eastern aguada, suggesting that the platform construction was timed to coincide with the enlargement of the aguada. Clay constructions are well known and have been related to formative constructions around Mesoamerica, particularly the south coast of Chiapas and Guatemala, such as Abaj Takalik. The Middle Preclassic Period clay platform of EP 7 is consistent with such a construction style.

The early incarnation of EP 7 has a very different orientation from the later building sequences. The earliest building faced east, away from Plaza Copal, instead of west onto the plaza as the later structures do.

In fact, there is reason to suggest that the plaza on which the clay platform rests was an open interior courtyard that would have other platforms around it. It is probable that another clay platform opposed the one we found. This finding opens up a whole range of questions that will only be answered as more data is retrieved about the construction history of Plaza Copal.

The Middle Preclassic phases of construction were covered by Late Preclassic constructions. This marks the point where there was a building reorientation towards the west and the initiation of the construction of Plaza Copal as it evolved to the final Terminal Classic dimensions. The construction of floor 747 begins the sequence of 6 plaza floors that raise the plaza level more than one meter over three major fill episodes. Between the first and second episodes (associated with fill 746 between floors 747 and 735) the actual slope of the plaza shifts from the southeast to the northwest, and the plaza maintains the northwest slope to the last plaza level. This shift in slope likely corresponds to the point in time when the south platform and the central temple were joined, limiting water flow to the eastern aguada. This dates approximately to the Early Classic Period. We exposed five major temple constructions of EP 7, each related to a plaza floor as revealed in the profile. In the end, at least eight major construction sequences were identified.

The tunnel excavation answers many of the general questions we had about the history of EP 7 and Plaza Copal. But just as it answers certain questions, it raises many more. Further excavation will need to be completed in order to understand the final sequences. It is hoped that continued excavation of EP 7 in future field seasons will provide answers for some of these questions and clarify our view of ancient El Pilar.

Excavations on Structure EP 10

INTRODUCTION

Structure EP 10 is one of the largest constructions in the ancient Maya center of El Pilar. Situated on the west side of Plaza Copal, the largest public space on the site, EP 10 can be expected to have played an important role in the ancient city. One of the goals of the 1995 field season was to begin to define the architectural history of EP 10 and its relationship to EP 7 (the large pyramid facing it to the east) as well as their association with the development of Plaza Copal. The analysis of EP 10 turned up some surprises and has spawned more questions than answers.

PREVIOUS EXCAVATION

EP 10 was one of the first structures examined by the BRASS/El Pilar Project in its 1993 field season. Three large units were excavated on the eastern face of EP 10 in order to look at the preservation and orientation of this structure and to facilitate mapping. The northeast and southeast corners were exposed and found to be rounded, like many of the major buildings at El Pilar. While the northeastern corner was in very poor condition, the southeastern corner was in excellent condition with a smooth layer of plaster still adhering to the rounded corner and coving down onto a smooth plaster of the Plaza Copal floor. A large excavation in the center of the eastern face revealed the well-preserved remains of the axial apron stairway as well as the battered lower walls to either side up to the level of the first platform of a projected five terrace building.

In 1993, field crews also cleared out and profiled the only two looters' trenches located near the top

of the structure and just to the north of the center axis. These trenches were aimed into bonded walls and revealed the plaster floor of the top platform foundation and the rear wall and one front door jamb of the range building on the summit of EP 10. All of these excavations were backfilled.

EP 10 EXCAVATIONS

EP 10 is located on the eastern edge of Plaza Copal, a 55 x 115M public space surrounded by major architecture. The structure is approximately 80M long by 30M wide by 12M high and appears to be a five-stepped terrace pyramid with a range building across the top. The eastern face is distinguished by a 14M wide outset stairway defined in the 1993 excavations.

Two excavation units were planned for the 1995 field season: (1) EP 10 AXTR, a 2 X 2M unit on the center eastern axis which would be expanded into a tunneling operation if the stratigraphy proved favorable and (2) EP 10 STR, a 16 X 1.5M trench designed to clear off and examine the southern edge of the stairway from the bottom to top of the pyramid.

EP 10 AXTR

This excavation, under the able supervision of Nick Rab, was designed to better examine the preservation of the axial stairway and assess the possibility of tunneling into the structure. Experience from the excavations at EP 7, which had started the previous month, had shown that a 3 X 4M unit would be sufficient for this purpose. The first job would be to re-excavate and expose the stairway located in 1993. This was quickly accomplished and the first tread of the stairway, seemingly in excellent condition, and a portion of the plaster Plaza Copal floor, (FL)1007, was exposed. The unit was located on the central axis of this stair.

As the work of clearing 4M up the stairway progressed it became clear that the last stair of EP 10 was not in the condition we had expected. The bottom treads of this stair (stratum (ST)1027, hereafter called Stair A) were in place but much of the rest was a jumble of broken rock. We were able to define four wide stairs, each with a rise of 40cm and a run of 75cm, ending in a larger landing at the level of the first platform that extended 1.25m to the west. In contrast to the initial stairs, this landing was well preserved and more than 60% of the area exposed was covered with the original plaster. Quick calculations determined that the next set of steps would have to have a steeper incline in order to reach the top. A small probe was made in order to examine this second flight of Stair A and they were found to be well-preserved. The second flight was made up of much smaller steps, with a rise and run of 28cm. They were completely covered with plaster.

It was noticed that the Plaza Copal floor [(FL)1007] continued beneath the first flight of Stair A and, since it was in very poor condition, it was decided to remove a 2M wide portion of it in search of an earlier building. The plaster plaza floor continued westward for another 15cm before ending with a coved section against limestone rubble. Although difficult to see at first, the profile of this area made it clear that this rubble was the remains of another stair, Stair B [(ST)1036]. Stair B ran up to the first platform and disappeared beyond the excavation. Another plaster plaza floor, on which Stair B was built, was discovered to continue beneath this second stair. Beneath Stair B we ran into a series of small stone walls, each with different fills on either side of them. These appeared to be crib-type constructions with mixtures of several strata and refuse within them.

Behind the crib-type fill zone, and almost directly below the first platform the excavation encountered Stair C [(ST)1045], a massive well-preserved plastered stairway. The plaza floor that had been followed beneath Stair B coved up against the lowest step. Only the first step of this construction was examined and it was found to have a rise of 55cm and a run of 80cm.

With the excavation of Stair C it became apparent that the preservation beyond this strata was such

that we could not, in good conscience, continue tunneling directly into EP 10. The destruction of architecture in this excellent state of preservation would not fit with our project goals. The decision was made to pursue a strategy similar to that used on structure EP 7: excavation of a unit down to bedrock and then proceeding west beneath the stairs.

A 2 x 2M unit was marked out in front of Stair C and the excavation began by cutting through the floor (FL)1031 associated with this stair. This proved to be a large task in itself as the floor turned out to be more than 25cm thick and composed of a very strong plaster/lime cement. Beneath the floor there was a small foundation layer of sandy loam. Beneath almost 1.8M of loose cobble fill we encountered an early floor [(FL)1050] composed of compacted marl. At this point it was determined that tunneling, at least from the east side, would not be feasible due to danger of excavating the loose cobble fill.

Before backfilling this unit further work was done examining apparent retaining walls built of reused architectural stones in front of EP 10. This excavation work also succeeded in locating bedrock another meter below the compacted marl floor at 238.11m.

EP 10 STR

The excavation of EP 10 STR was supervised by Dina Rachel and was designed to expose a long trench along the southern edge of the axial stairway from bottom at Plaza level to summit where the range structure was based. In an effort to confirm general ideas about the design of EP 10, inparticular the number of platforms terraces. We also planned to examine the condition of the stairs with a mind toward consolidation and public exhibition. Finally, we intended to access to the top construction at the contact of the stairs and range building.

The unit was a 16M long trench, 1.5M wide, placed so as to overlap the stairway edge as evident from the bottom inside corner on the south. The initial stage of excavation went very slowly at first and involved the removal of humus and collapse layer above Stair A, . After two days, in which only 10 non-descript body sherds were found in the screens, it was decided to forgo the half inch screening to visually screening until the excavation reached the architectural components. This initial clearing stage took a total of five days, working from the top down, and exposed a stairway in an advanced stage of decay. We had hoped that the edge of the stair would be better preserved than the center but the collapse appeared to be complete. The stairway did not have a balustrade and much of the top structure seems to have collapsed on and down the stairs.

After careful excavation we began to discern some additional details at the top and bottom of the stair. At the level of the first platform found in EP 10 AXTR we discovered that the stairs narrowed. Stair A was inset 20cm from the lower flight and continued upward into the area of poor preservation. At the top of the trench, a well-preserved section of the foundation platform floor was uncovered and a portion of a door jamb was exposed.

Just below the top platform a pair of parallel walls of large cut-block construction, running north-south, were found. These walls retained a fill of cobbles, gravel, and sandy loam between them. The most interesting aspect of these walls are that they would have blocked access to the uppermost platform from the stairs (the remains of the walls were at least 70cm high). The axial stairway apparently narrowed near the top foundation platform and had a more restricted access. Following this discovery, the unit was backfilled to protect what remained of the architecture.

CONCLUSIONS

The excavations conducted on structure EP 10 provided mixed results. We were unable to begin tunneling, a project necessary to establish a complete architectural chronology. The stairway proved to be in a state of collapse too advanced to even think about consolidation and display. On the other hand, we did

find that there was earlier architecture in a state of good preservation. Stair C, in particular, appeared in excellent condition, although it would take a great deal of resources to expose a large area of that phase of construction. The final stairway of EP 10 itself proved to be quite different from what we could discern from the original mapping of the structure. Rather than being a highly accessible structure with a 14M wide stairway, we have found it to have an impressive lower stairway with more restricted access to the top range structure. These are important architectural details that help to understand the style of the Maya architects of El Pilar.

The excavation revealed at least three major construction episodes corresponding to the three main stairs. The last episode examined lies 1.8M above another, earlier, plaza floor and almost 3 meters above bedrock. All the middle construction phases date to the Late Preclassic Period, which suggests that earlier construction episodes may be associated with the lower levels of Plaza Copal floors.

We also found evidence of substantial rough construction in Plaza Copal itself. These rough walls, made of reused building stones (some with plaster attached), do not appear to be retaining or crib walls. Previous excavation in 1994 (at STELA 1) in the plaza had found small rough walls on some of the earlier plaza floors as well. Larger excavation units at some point in the future will be needed to better define these unique walls. They appear to imply that Plaza Copal was not always an open space.

The 1995 excavations at EP 10 have helped us to redefine this major structure. More excavation will be required to determine the nature of the stair access to the range building on top, the type of structure built on top, and when EP 10 was first built. Under the presumption that the loose cobble was used to fill in the bedrock drop-off, it is hypothesized that we may be able to successfully tunnel EP 10 from the west side, above the dangerous fill. This excavation would do much to establish the history of EP 10.

Communications at El Pilar

INTRODUCTION

During the 1994 field season the BRASS/El Pilar Project excavated a number of units in an effort to better understand the lines of architectural communication between plazas and structures. These excavation units were designed to examine passageways, identify stairways, and determine room controls. Continuing this program, the 1995 field season staff excavated nine units to look at communication between areas and structures.

This aspect of the project is a continuing one. Limited excavations were conducted at EP 3 (between Plazas Axcanan and Copal), along the Bryan and Murphy Causeway, at EP 26 (between Plazas Gumbolimbo and Ixim), at EP 29 (between Plazas Quelite and Ixim), on the stairs from Ixim to the H'men Na, along the north side of Plaza Manax, and at the Zotz Na. These excavations supplemented and complemented the exploration, clearing, and detailed mapping of the site core.

EXCAVATIONS

EP 27W

The purpose behind excavating this unit was to examine an apparent passageway through the southern range building in Plaza Gumbolimbo. After completing the excavation of this unit, we covered approximately 22 square meters and fully revealed the passageway. The passage is 2.2 meters wide and has an intact plaster floor bounded by the stairs down to Plaza Faisan on the south, the two central and

northern walls/jambs to the east and west, and opened up into Plaza Gumbo Limbo to the north. The intriguing aspect of this excavation is that this range building is uncharacteristically asymmetrical. That is, the structure has a range of 5 rooms roughly 2 meters wide running the length of the north side but no sign of corresponding rooms on the south side of the structure. A small exploratory excavation found a 2.5 meter wide plastered platform along the south face ending in well-preserved stone steps down to Plaza Faisan.

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EP 32

This excavation was initiated to investigate the low structures surrounding Plaza Faisan and determine if there were lines of communication between Plaza Faisan and Plaza Duende, to the south. This excavation covered 14 square meters when completed, primarily in a trench across the structure. Structure EP 32 was found to be in very rough condition but also appears to have been built in a rougher style than many other structures at El Pilar. It was a low, probably plastered, platform with a terraced platform along the north side and a 1 meter high wall on the south side. The excavation also revealed a small fragment of plaster plaza floor to the south of EP 32 but it is difficult to explore this area further due to the presence of an old logging road between EP 32 and Plaza Duende which has substantially disturbed the area. Any direct communication between Plazas Faisan and Duende to the south would have had to go through the complex of structures made up of EP 51, EP 32, and EP 33, most probably at EP 12. It does not, however, look like there was any such communications judging from the surface indications.

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D STR

Although originally called "D Stair" in project parlance this unit proved to be a ramp-like area excavated into the limestone bedrock upon which Plaza Duende is located. This excavation was a 1 X 3 meter unit to the north of structure EP 11 in the northeast corner of Plaza Duende. Surface indications show that there was an entrance/exit to Plaza Duende either to the east to Plaza Escoba, or toward the north to Plaza Faisan. After only removing half a meter of humus, the excavation crew found a fairly smooth limestone bedrock sloping downward to the east at a 12-15 degree angle.

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CSTR

Like the unit D STR, this excavation was initiated to locate a monumental staircase between Plazas Duende and Copal. The area chosen for excavation was near the center of a 30 meter wide entrance-way to Plaza Copal between structures EP 8 and EP 9. This area was clearly defined by its even slope and the continuing walls of Plaza Copal to the east and west. This is suggestive of an inset stairway. Despite more than 19 square meters of exploration in this area the resulting data is still difficult to interpret. We found elements of both stairs and ramps, which, however, were not contemporaneous. The preservation of architecture in this unit was generally very bad making interpretation difficult. A large portion of stone-paved ramp, sloping upward at approximately 12 degrees was found in the lower 3 meters of the unit while two stair fragments, neither spanning more than a meter of the slope, were found higher up.

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CD BAL

In an effort to clarify the data in unit C STR, this unit was placed along the western edge of the inset slope between Plazas Copal and Duende at the position of the balustrade. The rationale for this placement was the thought that preservation could be better at the interfaces. Thus, it was hoped that the ramp and/or stair would be more definitive in this spot. CD BAL was expanded, following cultural features, to a

final size covering 25 square meters. Final exposures included the western wall of the inset area, the northwest corner of this wall, another wall parallel to the first, and a small (2.25 square meters) area of plastered ramp with a 12 degree north-south slope. CD BAL did not, however, help to clear up the data from C STR but did serve to help formulate a future strategy to look further at this area.

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BM STR

Another important entry point to the large public Plaza Copal is the western entrance from the Bryan and Murphy Causeway. This causeway is more than 30 meters wide, bounded by balustrade walls, and extends more than 450 meters to the west. Again it was assumed from the steep grade to the causeway that we would find some sort of stairs when excavating here. Instead, a 4 square meter trench at the top revealed a clay surfaced ramp. After the removal of approximately 1 meter of humus and sandy loam, two distinct clay surfaces, once at a 12 degree slope, were found overlaying a clean cobble fill, commonly used in the Late Preclassic at El Pilar.

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EP 3 CTR

Excavation here continued where it had left off in the 1994 season. EP 3 CTR is a passageway through the range structure between Plazas Copal and Axcanan (similar to EP 27W) and previous excavation had found the eastern walls/jambs of the passage. This season the passage was widened to examine the western jambs, a unit roughly 10 square meters in area. The eastern jambs were found in excellent condition with original plaster intact, hard and smooth. The passage floor, likewise, was in like-new condition. The western jambs, however, were not found in the same condition. Damage from tree roots, in particular, had left them in significantly poorer condition. The final passage measures 2.25 meters wide with a 1.6 meter deep northern room (facing Plaza Copal) and a one meter deep southern range of rooms (facing Plaza Axcanan). Surface indications suggest that this structure consisted of five rooms along its length. A large corozo palm champa was constructed to protect this area and to enable the program to leave it open for the enjoyment of Reserve visitors.

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EP 3 SEQ

Although the subject of a more in-depth article in this monograph by William Breitbach and Layla Lyne-Winkler, it is important to mention this unit in context with the others in this series. A 12 square meter unit, EP 3 SEQ, was excavated in the northeast corner of Plaza Axcanan to examine a relationship between structures EP 3 and EP 4, and to determine if there was the possibility of another entrance, besides EP 3 CTR, to Plaza Axcanan. We found EP 3 and EP 4 separated by a 1.5 meter plastered "alley" less than 4 meters in elevation above the ball court plaza to the northeast. This raises the likelihood that there could be a small stair down to the Plaza Copal level from this corner—a possibility that will have to be examined in future excavations.

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A BK STR

Once again, our excavation staff proved optimistic when naming this unit Plaza A Back Stair. We had long been intrigued by an interesting pattern of fallen cut stones beside the southwest corner of Plaza Axcanan's back terrace. The closest structure was EP 2 and the stones did not appear to have fallen from there but formed an apron-like slope from the terrace in one corner ending very abruptly on the south end. A 10 meter square excavation at this point, however, found not a stairway, but a series of five terraces that appear to continue the length of Plaza Axcanan's western side. Each terrace is roughly 1 meter high and

has a plastered surface. Though not entirely precluding an accessway to the rear terrace, this excavation did make that supposition significantly less likely.

CONCLUSIONS

To date, the BRASS/El Pilar Project has excavated 21 units that examine communication links among plazas and structures in the site core. This effort has significantly advanced our knowledge of the use of the architectural principles of enclosure and axis at El Pilar. First, we feel that the Maya of El Pilar were architecturally very conservative and remodelling in old traditions and maintaining old-style buildings (Rudy Larios and Miguel Orrego Personal Communication). Also, construction techniques follow principals of least effort in design and maintenance, minimizing building investments and long-term maintenance costs. One example of this is the consistent use of ramps rather than stairs to scale even steep inclines. Ramps are common architectural features in Preclassic times in much of the Maya Lowlands (Miguel Orrego, personal communication) and are found in many Belize River Valley area sites such as Baking Pot, Pacbitun, Xunantunich, and Cahal Pech. Ramps are also a hallmark of causeways and accessways at Tikal.

Second the use of enclosure and restricted entry at El Pilar has provided a view of the differential use of space, public versus private, within the site core. While there are more than three large public entrances to Plaza Copal in the south, for instance, there is only one way into and out of the H'men Na (El Pilar's acropolis in the north) and this entrance is marked by a large stairway that grows steeper as one ascends (based on surface exposures in Plaza Ixim, 1994). Previous work done at El Pilar has found signs of Terminal Classic construction in Plaza Axcanan and stone robbing from older structures of that plaza which makes it more likely that Axcanan was enclosed late in the site's history. Future excavation will probe this intriguing change in the urban pattern.

Finally, the definition of these areas and their fine scale mapping allowed for a more detailed study of the process of urban design at El Pilar. This provided a basis for understanding the temporal process of building. Also, keeping in mind that the monumental structures had a lasting presence, we are gaining an appreciation of the use of planning principles such as axis, enclosure, hierarchy, symmetry, and repetition. Future research along these lines will undoubtedly help to assess the process of urbanization in the central Maya lowlands and close a gap between macro and micro studies of Maya urban centers.

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[1] Belize's well known soils scientist, Charles Wright, made this observation in a May 1995 discussion.