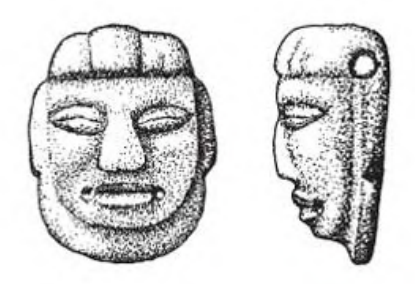
Chan Chich Archaeological Project



Research Year: 1997
Culture: Maya
Chronology: Protoclassic
Location: Orange Walk District, Belize
Site: Chan Chich

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Report on the Chan Chich Archaeological Project:

1997 Extended Season

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Brett A. Houk

Chan Chich Archaeological Project

CCAP

Chan Chich, Belize - Central America

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Introduction

This report documents the results of the extended 1997 season of the Chan Chich Archaeological Project (CCAP) which was partially funded by a grant from the Foundation for the Advancement of Mesoamerican Studies, Inc. (FAMSI) to the author (Project 97004). The 1997 Chan Chich Archaeological Project (CCAP) was a six week project that included plaza test pitting, limited structural testing (the ballcourt and staircase to Structure A-1), and looter's trench profiling. The field work was conducted by field school students under the direction of the author (project director) and Hubert Robichaux (field director).

A plaza test pit in the Upper Plaza was opened during the first week of the season in an attempt to gather chronological data related to what appears to be the oldest part of the site (Robichaux 1998). Based on the complex stratigraphy and unusual architectural features encountered in the test pit, the excavation was expanded to the west. This enlarged unit encountered a collapsed chamber at approximately 2.4 m below the current surface of the plaza. The excavation unit was expanded farther to the south and west to allow for greater exposure of this chamber (Robichaux 1998).

After five weeks of excavation, it wasclear that the chamber was a collapsed tomb, originally carved into bedrock and capped with large limestone blocks. The tomb was not vaulted and apparently lacked sufficient architectural support to withstand the weight of later plaza floors which were built upon it. Prior to collapsing, however, the chamber was filled (either intentionally or naturally) with a deposit of soft marl which covered the tomb's contents and protected them from being crushed by the eventual collapse of the roof (Robichaux 1998).

The chamber is oriented north/south, is approximately 3.3 m long by 1 m wide, and is carved into bedrock with the floor approximately 3.0 m below ground surface. The packed marl deposit and cramped work space resulted in slow exposure of the tomb's contents. The tomb contained eleven Protoclassic vessels (Robichaux 1998).

The other grave goods include two jade earspools, a tubular jade bead, and a jade pendant which is virtually identical to royal insignia jewels from Cerros and Nohmul dating to the Late Preclassic Period. A small piece of wood was recovered. Additionally, another wooden (?) artifact resembling a snake (scepter or staff?) is partially preserved in the north end of the tomb. Samples were collected, but the remainder of the artifact was reburied at the suggestion of Paul Francisco of the Department of Archaeology in Belmopan.

The jade pendant marks this as a royal tomb. The young age of the occupant may have important implications for the nature of rulership and kingship in the Lowlands during the Protoclassic. If the wooden artifact is actually a scepter, it could represent one of the earliest examples of the double-headed serpent bar associated with rulers during the Classic period.

Because of a previous teaching commitment, the project director had to return to Texas on June 23, 1997. This allowed insufficient time to document adequately, to conserve, and to transport to Belmopan the contents of the tomb. Funding was requested from FAMSI for an extension of the project in August because of the poor condition of the wood and bone recovered from the tomb. These artifacts will deteriorate more rapidly now that they have been removed from the matrix in which they have been encased for 1800 years.

Funding was requested to return the project director, Brett A. Houk, to Belize for four days in August to stabilize the wood samples and skeletal material removed from the tomb, to prepare this material for exportation to the United States for analysis, and to transport the remaining tomb artifacts to the Department of Archaeology in Belmopan. Paul Francisco, a conservator with the DOA, was to assist with conserving and packaging the bone and wood, and with preparing the remaining artifacts for shipment to Belmopan.

Funding was requested to cover the cost of airfare for Houk, departure tax to leave Belize for Houk, room and board for four days for Houk and Francisco, truck rental for four days, gas, conservation and packing supplies, film and developing, and of preliminary analysis of the wood samples from the tomb. Additionally, funding was requested to cover the 5 percent administrative cost assessed by the Department of Archaeology in Belize, based on expenditures in Belize. Because no additional excavations will be conducted under this budget, it was assumed that the 15 percent consolidation fee would not be required.

After the FAMSI grant was awarded, a matching contribution was made by a private individual. These additional funds were used to bring Robichaux (who oversaw the excavation of the tomb) and Ashlyn Madden (a technical illustrator) to Belize to assist with the project. Fred Valdez, who was in Belize at the time, assisted with the analysis of the ceramic vessels from the tomb.

Background

The ruins of Chan Chich are in dense tropical forest in the Orange Walk District of northwest Belize, approximately 4 km east of the border with Guatemala (Figure 1). The approximate UTM coordinates of the Main Plaza are: Zone 16, N 19 40 250, E 2 75 800. The elevation of the Main Plaza is approximately 140 m above sea level. The site is located at a bend in Chan Chich Creek south of the confluence with Little Chan Chich Creek. Once the creeks join, their northward flowing course becomes known as the Río Bravo, a perennial stream which eventually meets the Río Hondo near the modern Mexican town of La Union. Chan Chich Creek and a large *aguada* 100 m north of the Main Plaza provide surface water throughout the year.

Chan Chich is located near the southern boundary of a geographically defined study area known as the Three Rivers Region (Adams 1995; Houk 1996a). The Río Azul forms the western border of the region in Guatemala (Figure 1). The northern boundary is marked by the marshy expanse paralleling the Río Azul and the Río Hondo. The eastern boundary is defined by the Booth's River. The southern limit of the Three Rivers Region is somewhat arbitrarily placed south of Chan Chich (Adams 1995).

Environmental Setting

Cyrus Lundell's (1937) pioneering study of the physical environment of the region remains one of the best sources of information on the subject. As director of the 1933 Carnegie Institution of Washington and the University of Michigan biological expedition to the Maya area, Lundell (1937) studied the vegetation of Petén, Guatemala. While he later published a description of the vegetation of British Honduras (Belize)

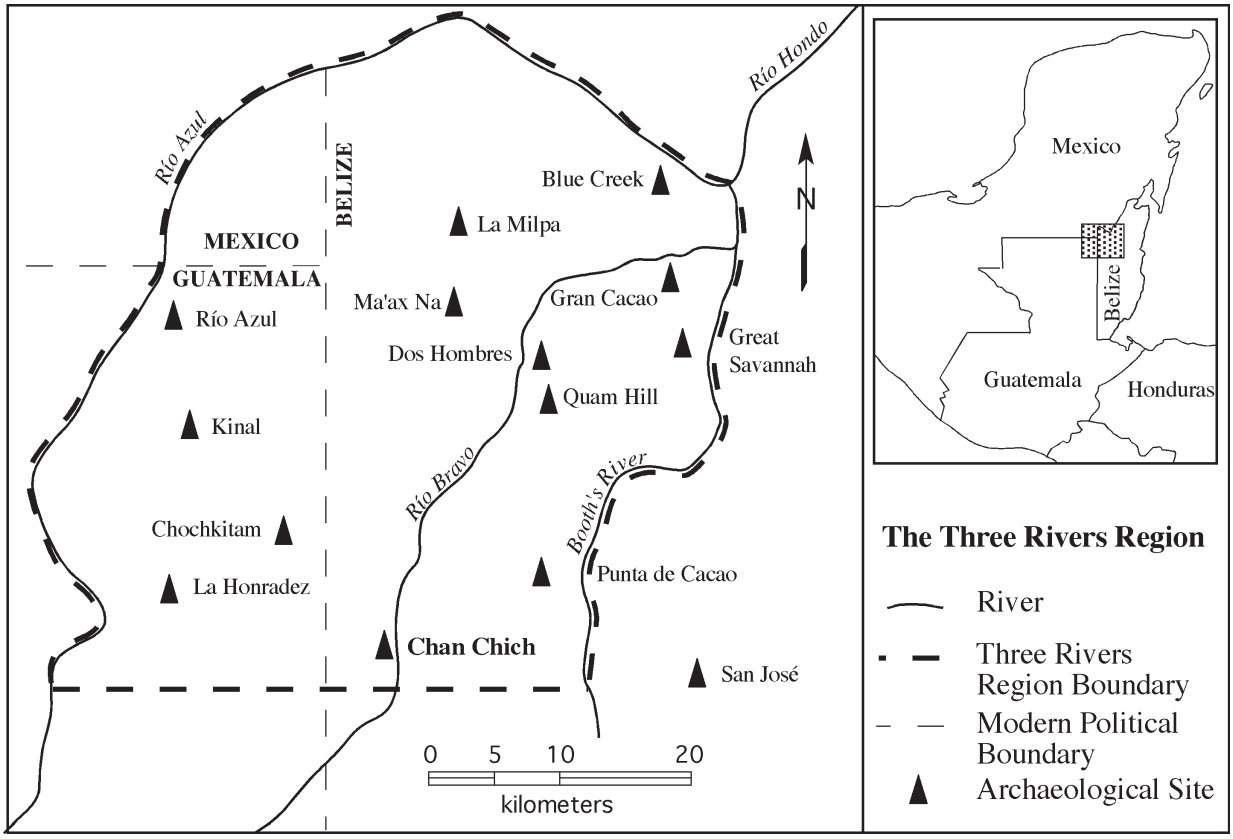

Figure 1. *Location of Chan Chich in the Three Rivers Region.*

(Lundell 1945), his earlier work on Petén is more detailed and comprehensive.

In the early 1990s, the Programme for Belize (PFB) contracted Nicholas Brokaw and Elizabeth Mallory of the Manomet Bird Observatory to inventory the vegetation of the western section of the Río Bravo Conservation and Management Area, an 110,000 acre tract located approximately 20 km north of Chan Chich (Brokaw and Mallory 1993). Their report includes information on the physiography, climate, and vegetation of the area and is largely applicable to the area around Chan Chich, although some important differences in vegetation patterns were noted during the course of the 1996 CCAP season.

Climate

Chan Chich is located at a north latitude of approximately 17° 32'. Brokaw and Mallory (1993:12) estimate that the average annual rainfall for the Gallon Jug area is approximately 1,500 mm. The year is divided into a wet season, beginning in late May and lasting into January, and a dry season, beginning in February and ending in May. Rainfall during the wet season often exceeds 200 mm/month, twice the average for the dry season (Brokaw and Mallory 1993:12).

According to Brokaw and Mallory (1993:12), in November through January, the daytime temperature averages approximately 24° C (75° F), and in April through September, the daytime temperature averages approximately 26° C (80° F). The coldest months of the year are January and February when cold fronts from the north enter the area and sometimes push the temperatures as low as 10° C (50° F). The hottest months are usually April and May, when daytime highs routinely exceed 32° C (90° F) (Brokaw and Mallory 1993:12).

Physiography

The Three Rivers Region is part of the Yucatán Peninsula, a limestone platform dating to the Eocene (58–47 million years ago). The karstic environment has been shaped by erosion, slumping, and faulting which have formed escarpments, uplands, and *bajos* (Brokaw and Mallory 1993; Rice 1993).

The area north of Chan Chich is characterized by a series of southwest-to-northeast fault lines which have produced three terrace uplands of successively increasing (from east to west) elevations (Brokaw and Mallory 1993). Each terrace is fronted by a steeply sloped escarpment. The terrain in the uplands is generally undulating, with broadly rounded hills and stretches of level ground (Lundell 1937; Dunning 1992; Brokaw and Mallory 1993). From east to west, the three escarpments are the Booth's River Escarpment, the Río Bravo Escarpment, and the La Lucha Escarpment (Figure 2). Chan Chich is located on the poorly defined southern extent of the Río Bravo Escarpment. The higher and more imposing La Lucha Escarpment, approximately 3 km to the west, is visible from some of the larger structures at Chan Chich (see Figure 2).

Wide depressions, or *bajos*, occur between the hills of the uplands. These *bajos*, which contain clayey soils, are poorly drained and often flooded during the rainy season (Dunning 1992; Lundell 1937; Rice 1993).

The topography of the area is typical of the Río Bravo Uplands as described by Brokaw and Mallory (1993). It is characterized by irregular limestone hills separated by expanses of level terrain. The largest plazas and structures are situated on these hilltops (Houk, Robichaux, and Durst 1996; Robichaux et al. 1997).

The elevation of the highest natural point in the project area is approximately 150 m above sea level at the hilltop location of Norman's Temple in Group C. The lowest point occurs 200 m north of the Main Plaza in Chan Chich Creek at approximately 107 m above sea level (Houk, Robichaux, and Durst 1996).

The dominant natural feature at the site is Chan Chich Creek, a perennial stream subject to episodes of extreme flooding during the rainy season. The banks of the creek vary from steeply sloping to low, level flood plains. The *aguada*, situated at the base of the hill that supports the Main Plaza, may be a remnant of an earlier channel of Chan Chich Creek (Houk, Robichaux, and Durst 1996).

Vegetation

The terminology used to describe the vegetation of the study area has been, is, and probably will always be inconsistent. The three relevant sources, Lundell's

Figure 2. *Looking west from the top of Structure A-1 at the La Lucha Escarpment.*

(1937) study of the vegetation of northern Petén, Brokaw's and Mallory's (1993) vegetation inventory of Río Bravo, and Ford's (1981) description of vegetation along the Tikal-Yaxhá survey transect each use different terms to describe similar vegetation types.

Hubert Robichaux (1995), in a recent settlement survey in the Río Bravo Conservation and Management Area, relied on Ford's (1981) nomenclature to describe vegetation zones, thereby maintaining consistency with her settlement data. I took a different approach, drawing largely on Brokaw and Mallory (1993) for terminology since their study was more recent (Houk 1996a). This interim report will take that approach as well, although Ford's (1981) *bajo* will be used frequently in the text since it has become imbedded in archaeological jargon. The relevant forest types found at Chan Chich are upland forests, cohune palm forests (*corozal bajos*), and cohune riparian forests. Also discussed is the transition forest (*escobal bajo*), although this forest type is not found in the immediate vicinity of Chan Chich.

Upland Forest

Upland forests occur on well-drained soils on escarpments, ridges, and hilltops (Brokaw and Mallory 1993). The canopy of the upland forest ranges from 15-30 m in height, and the dominant tree species include zapotillo (*Pouteria reticulata*), sapodilla (*Manilkara zapota*), cherry (*Pseudolmedia* sp.), male bullhoof (*Drypetes brownii*), pigeon plum (*Hirtella americana*), and silión (*Pouteria amygdalina*) (Brokaw and Mallory 1993:21).

Cohune Palm Forest

Although cohune palm forest covers only 0.7 percent of the Río Bravo Conservation and Management Area (Brokaw and Mallory 1993), it is the dominant forest type at Chan Chich. These forests occur in areas with deep, well-drained soils at the base of slopes and are named after the cohune palm (*Orbignya cohune*), the dominant tree (Brokaw and Mallory 1993). Because cohune palm forests occupy level ground, they are occasionally inundated.

Transition Forest

Transition forest occupies the shallow gradient in topography between the uplands and the scrub swamp forest, discussed below (Brokaw and Mallory 1993). In the Río Bravo Conservation and Management Area, transition forest covers 29.6 percent of the area (Brokaw and Mallory 1993:18), while Ford (1981:40) estimates that it "may be the most widespread envi-

ronmental zone in the northeastern Petén." This forest type is absent at Chan Chich.

Scrub Swamp Forest

Scrub swamp forests occur in poorly drained, clay-filled depressions which are seasonally inundated. They are frequently called *bajos* because their distinctive vegetation corresponds directly with the physiographic features of the same name (Brokaw and Mallory 1993). These forests have low, 4–5 m high canopies (Brokaw and Mallory 1993) and dense vegetation which is often difficult to penetrate (Ford 1981). Logwood, a tree harvested for dye in the 1700s and 1880s, also known as *tinto* and from which *tintal bajo* derives its name, is a commonly occurring tree in scrub swamp forests (Brokaw and Mallory 1993).

Cohune Palm Riparian Forest

Riparian forests are found immediately adjacent to perennial streams, and occur with greater frequency in the area around Chan Chich than they do near Dos Hombres (Houk 1996a). They are seasonally inundated and presumably have fairly deep alluvial soils. The canopy of the riparian forest is low, and many of the trees lean due to poor root anchorage (Brokaw and Mallory 1993). Some large, emergent trees, particularly the bullet tree (*Bucida buceras*), are found in riparian forests, but the most abundant, large tree in the Riparian Forest around Chan Chich is the cohune palm (*Orbignya cohune*).

Forest Types at Chan Chich

The vegetation around the site of Chan Chich includes three types of forest: upland, cohune palm, and cohune palm riparian. Small pockets of bamboo are located intermittently throughout the project area, the largest of which surrounds the *aguada* north of the Main Plaza. In general, forest types are closely correlated with topography (Houk, Robichaux, and Durst 1996).

Upland forest is found on the better-drained hill tops and slopes. Cohune palm forest is located in the level areas between hills. Cohune palm riparian forest occurs in several very low, level areas immediately adjacent to Chan Chich Creek. The largest of these expanses is in the southeast corner of the project area, situated between a bend in the creek and a prominent, densely-settled hill (Group H).

Previous Investigations

There is some confusion over the first appearance of Chan Chich in the archaeological literature. J. Eric Thompson (1939) visited the area in the 1930s prior to excavating the site of San José. Guderjan (1991a:35) believes that Thompson's site of Kaxil Uinic, which was named for a *chicle* camp operated by the Belize Estates Company, is actually Chan Chich. The major discrepancy between Thompson's (1939) description of Kaxil Uinic and Chan Chich is that Thompson noted the presence of a carved stela and an altar. Guderjan (1991a:35) notes that the old Kaxil Uinic *chicle* camp is located approximately "two miles west" of Chan Chich. Confusingly, this is also the location of a site which Guderjan et al. (1991:59) recorded and named E'kenha. This site, which is somewhat smaller than Chan Chich, has "a very badly damaged carved stela and altar" (Guderjan et al. 1991:59). It seems possible that E'kenha and not Chan Chich, which has an *uncarved* stela but no carved monuments (and no altar), is Thompson's (1939) Kaxil Uinic. Although Thompson (1939) originally planned to excavate Kaxil Uinic, the closing of the *chicle* camp prompted him to investigate San José instead.

In 1987, Barry Bowen and Tom Harding located and named the site that is now known as Chan Chich (Guderjan 1991a; Houk et al. 1996). Bowen, who had recently purchased the defunct Belize Estates Company and reopened the town of Gallon Jug, selected Chan Chich as the location of a jungle lodge. The site was named after Chan Chich Creek (Guderjan 1991b).

Guderjan (1991b) visited the ruins during the clearing operations in 1987 and returned the following year during the first season of the Río Bravo Archaeological Project. Guderjan's (1991a) team mapped the site core and documented many of the looter's trenches in the Main and Upper Plazas. In 1990, during the second season of his regional project, Guderjan (1991a) returned to Chan Chich, expanding the site map and recording some newly discovered features.

In August 1995, a team from the PFBAP, led by Fred Valdez was asked by Tom and Josie Harding, the managers of Chan Chich Lodge, to map the nature trails at the site in relationship to the ruins (Houk et al. 1996). The five day effort included two components: tape and compass mapping of the trail system and theodolite mapping of the major architectural groups at the site

to refine the previous map produced by Guderjan (Houk et al. 1996).

In 1996, Houk and Robichaux (1996), assisted by Jeffrey Durst of UT, mapped 1.54 km^2 around the site core during the first season of the CCAP. The results of those investigations guided the plans for the 1997 season and are summarized below.

Despite its size and accessible location, no scientific excavations had been conducted at Chan Chich prior 1997. Other than some limited testing by Guderjan's teams (1991b), Thompson's (1939) excavations at San José are apparently the only ones that were ever conducted within 30 kilometer radius around Chan Chich prior to 1997.

The site, like most of the larger ruins in northwest Belize and northeast Petén, Guatemala, was looted during the late 1970s and early 1980s (Figure 3). The degree of destruction and the amount of important information lost as a result of these activities varies from site to site and structure to structure. It is certain, however, that organized looting, fueled by unscrupulous art collectors and dealers in the United States, Europe, and Japan, has resulted in the greatest loss of data about the ancient Maya since the Spanish Conquest of Central America.

Results of the 1996 Season

The 1996 mapping project recorded 253 structures, 187 of which were previously unknown (Houk, Robichaux, and Durst 1996; Robichaux et al. 1997). The majority of the newly documented structures are small housemounds. Some of these are organized around formal courtyards while many are isolated or situated in informal clusters. The settlement around the major ceremonial/civic architecture is generally dispersed across the landscape.

The major architecture at the site, composed of the largest structures and plazas, is located in the western half of the project area (Figure 4). The most dominant elements of the site plan are Plaza A-1 (Main Plaza) and Plaza A-2 (Upper Plaza). West of Group A is the second largest architectural group, Group C. This includes Plaza C-2 (Western Plaza) and the acropolis-like Norman's Temple compound. These architectural complexes have been described in detail previously (e.g., Guderjan 1991a; Houk et al. 1996), but the 1996 project located several major, but previously unrecognized, elements of these groups (Houk, Robichaux, and Durst 1996).

The two most important discoveries from a site planning approach (see Research Design below) are the Western Causeway and the ballcourt. Guderjan (1991a) and Houk et al. (1996) previously mapped the Harding Causeway, a 40 m wide, elevated sacbe extending east from the southeast corner of the Main Plaza. The

Figure 3. *Looter's trench in the west face of Structure A-15 at Chan Chich.*

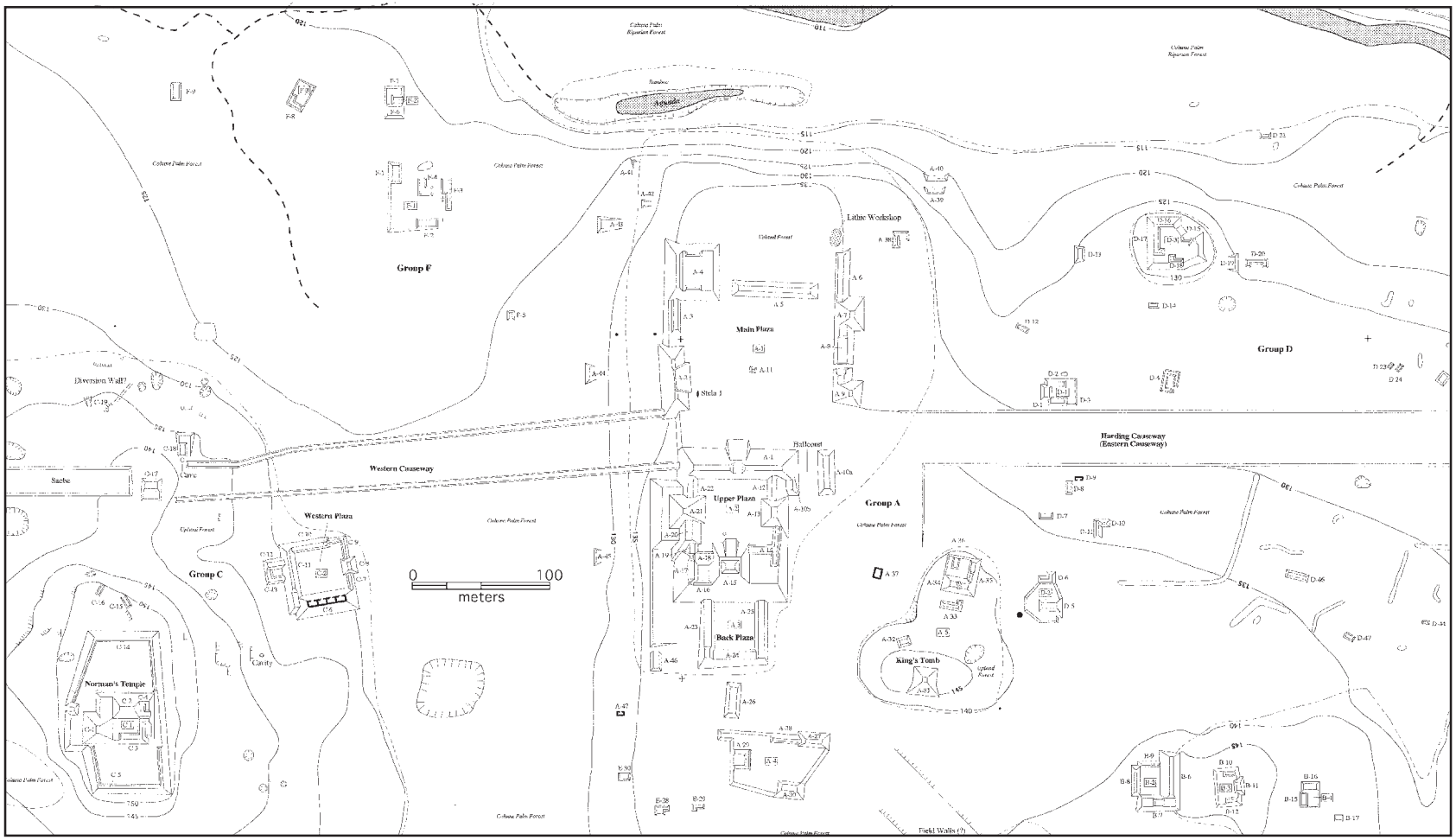

Figure 4. *Map of Chan Chich site center.*

1996 project discovered a complementary causeway on the west side of the Main Plaza (Houk, Robichaux, and Durst 1996; Robichaux et al. 1997). The Western Causeway is architecturally different from the Harding Causeway in that it is composed of two parallel linear mounds defining a 40 m wide space between them. The causeway connects the Main Plaza to an isolated mound (C-17) which is located approximately 100 m north of Norman's Temple. On the west side of this mound, another *sacbe* continues westward, but in a different form. Here it is similar to the Harding Causeway in that it is an entirely raised surface (Houk, Robichaux, and Durst 1996).

Another interesting feature of the Western Causeway is that a small cave, marked by a two meter wide vertical opening, is located at the west end of the causeway. This cave was cursorily examined during the 1996 season, and its actual size is not known. While the cave may prove to be small, bats were observed roosting in it.

A third causeway may exist at Chan Chich. Two parallel stone alignments are located southeast of Group A. If these represent a causeway, they would connect Group A with Courtyard B-1. The 1996 project, however, could not conclusively determine if these alignments were a causeway or not (Houk, Robichaux, and Durst 1996). Because the ground surface is higher on the southwest side of both lines (i.e., the central space is not elevated as is the case with the Harding Causeway), these features are mapped as possible field walls which may have been agricultural in function (Houk et al. 1996).

The second major discovery related to the site plan of the major architectural groups was the probable location of the ballcourt (Houk, Robichaux, and Durst 1996). One of the primary objectives of the mapping project was to locate the ballcourt at the site or, alternatively, confirm that the site did not have a ballcourt (Houk 1996b). Ironically, the ballcourt was "discovered" in the Main Plaza, an area which had been previously mapped twice (Guderjan 1991a; Houk et al. 1996).

The ballcourt is situated in the southeast corner of the Main Plaza. It was not previously recognized because the western structure is actually attached to the base of the large range structure (Structure A-1) which forms the south edge of the Main Plaza and the eastern structure is covered in dense vegetation. This discovery prompted the renumbering of Structure A-10 to Structure A-10a. Structure A-10b refers to the western building in the ballcourt (Houk, Robichaux, and Durst 1996).

This location is actually consistent with ballcourt placement at most sites in the area. Most of the larger sites in the Three Rivers Region have their ballcourt located in an intermediary position between the northern and southern groups of architecture Houk (1996a, 1997). La Milpa has a ballcourt in the southeast corner of the Great Plaza, although it is not attached to another structure.

Most of the settlement around the major architectural complexes at the site is probably residential in function. The vast majority of the newly discovered groups of housemounds are small and sometimes informally organized (Houk, Robichaux, and Durst 1996; Robichaux et al. 1997).

Four residential groups, Courtyards A-4, B-1, B-2, and B-3, were mapped by previous projects (Guderjan 1991a; Houk et al. 1996). In 1996, several new, presumably elite, residential groups were added to the map. The largest of these is Courtyard D-3, situated 250 m east of the Main Plaza. This group, which is built on a natural rise, is composed of four structures organized around a central courtyard. The terrain slopes steeply downward to the north of this group. The hillside here may have been intentionally terraced, a practice which has been documented elsewhere in the region (Dunning 1992). This group overlooks a low-lying strip of floodplain which is today covered in cohune palm riparian forest. This area may have been very important agriculturally to the Maya inhabitants of Chan Chich (Houk, Robichaux, and Durst 1996).

Group H is an important residential area that was discovered at the end of the 1996 season (Houk, Robichaux, and Durst 1996; Robichaux et al. 1997). This dense cluster of structures is located on the east bank of the creek. It is situated on a prominent hill which rises above a broad area of creek flood plain and is approximately 1.25 km southeast of the Main Plaza. Group H is unusual not only for the quantity and density of structures, but for the association of these structures with large mounds of chert debitage (see Meadows 1998a). Two of these mounds are approximately 1.5 m high (Houk, Robichaux, and Durst 1996). Other

areas of chert debris were encountered in Group B, associated with Structure B-25. Guderjan (1991a) documented a possible chert workshop north of the Main Plaza near Structure A-6, as well.

Project Research Design

The research at Chan Chich in 1996 and 1997 was the outgrowth of previous research by the author into *site planning* in the Three Rivers Region (Houk 1996a; 1997). The study of site planning is a method of addressing questions of socio-political organization, culture history, cosmology, and settlement patterning. Site planning, as used in this report, refers to "the deliberate, self-conscious aspect of settlement patterning, at scales from individual structures through regional landscapes" (Ashmore 1989:272). The long-term objectives of the project are issues which can hopefully be addressed by this approach to research at Chan Chich.

The recent study of site plans in the Three Rivers Region by the author has demonstrated that sites can be classified into one of two categories: Type 1 site plans in which a large open plaza is located at the north end of the site core and an acropolis-like group is juxtaposed at the south, or Type 2 site plans in which this pattern is reversed (Houk 1996a, 1997). The most commonly occurring site plan type is Type 1. This category includes Chan Chich, La Milpa, Dos Hombres, La Honradez, Kinal, and Quam Hill (Houk 1996a, 1997). The third site plan category, Type 3, is reserved for the larger site of Río Azul which does not resemble either of the other two patterns (Houk 1996a, 1997).

There is some variation within this group, however, and the Type 1 site plans could almost be divided into two subgroups based on the overall arrangement of the common elements. In the first group would be Dos Hombres, La Milpa, Kinal, and Quam Hill—sites with a distinct linear orientation on a north-south axis. In the second group would be La Honradez and Chan Chich—sites which generalized north south orientations that have large causeways radiating out from the center (Houk 1996a, 1997).

Chan Chich and La Honradez differ slightly from each other and from the other Type 1 site plans. In the case of Chan Chich, Plaza A-1 is a well-defined rectangular plaza second in size in the region only to the Great Plaza at La Milpa. It is located at the north end of the site, but this orientation is created only by the two largest architectural groups at the site; Plazas A-1 and A-2 which are aligned north-south. Plaza A-2 appears to be an exaggerated quadrangle group which actually surpasses Plaza A-1 in structural mass. The large causeways extending to the east and west are similar to the radial causeways at La Honradez and Kinal (Houk 1996a, 1997).

Type 2 site plans occur at Gran Cacao, Punta de Cacao, San José, and Blue Creek. The most salient features of Type 2 site plans are the variable orientation of structures within the same plaza and the southern position of the public plaza relative to the location of the private/enclosed space. There is less variation within the Type 2 group, but some does occur (Houk 1996a, 1997).

An interesting pattern emerges when the distribution of site plan types is examined (Figure 5). The Type 2 site plans are all located on the east side of the Three Rivers Region in a north-south line, paralleling the course of the Booth's River. Type 1 plans are found west of this line along the Río Bravo and into northeast Petén.

The Type 1 site plans may be related to a site planning template originating in northeast Petén. For example, the site of Xultun which is located southwest of the Three Rivers Region, between La Honradez and Uaxactun, shares many features of Type 1 sites. Type 1 sites also demonstrate many of the site planning principles outlined by Ashmore (1991:174) in her proposed template including "(1) a strongly marked north-south axis; (2) mutually complementary, paired functions for construction and spaces at north and south ends of that axis..."; (3) the common presence of a ballcourt "as mediator between north and south"; and (4) "the frequent use of causeways...to underscore the linkage between various elements and thereby stress the symbolic coherence of the whole." The only element lacking in the Three Rivers Region Type 1 site plans is "the appendage of subsidiary eastern and western units to form a triangle with the north" (Ashmore 1991:174), although this appears to be present at La Honradez and possibly Chan Chich (Houk 1996a, 1997).

Type 2 site plans, on the other hand, appear to be related to the pattern recognized by Hammond (1981) for sites in the area between the Hondo and New Riv-

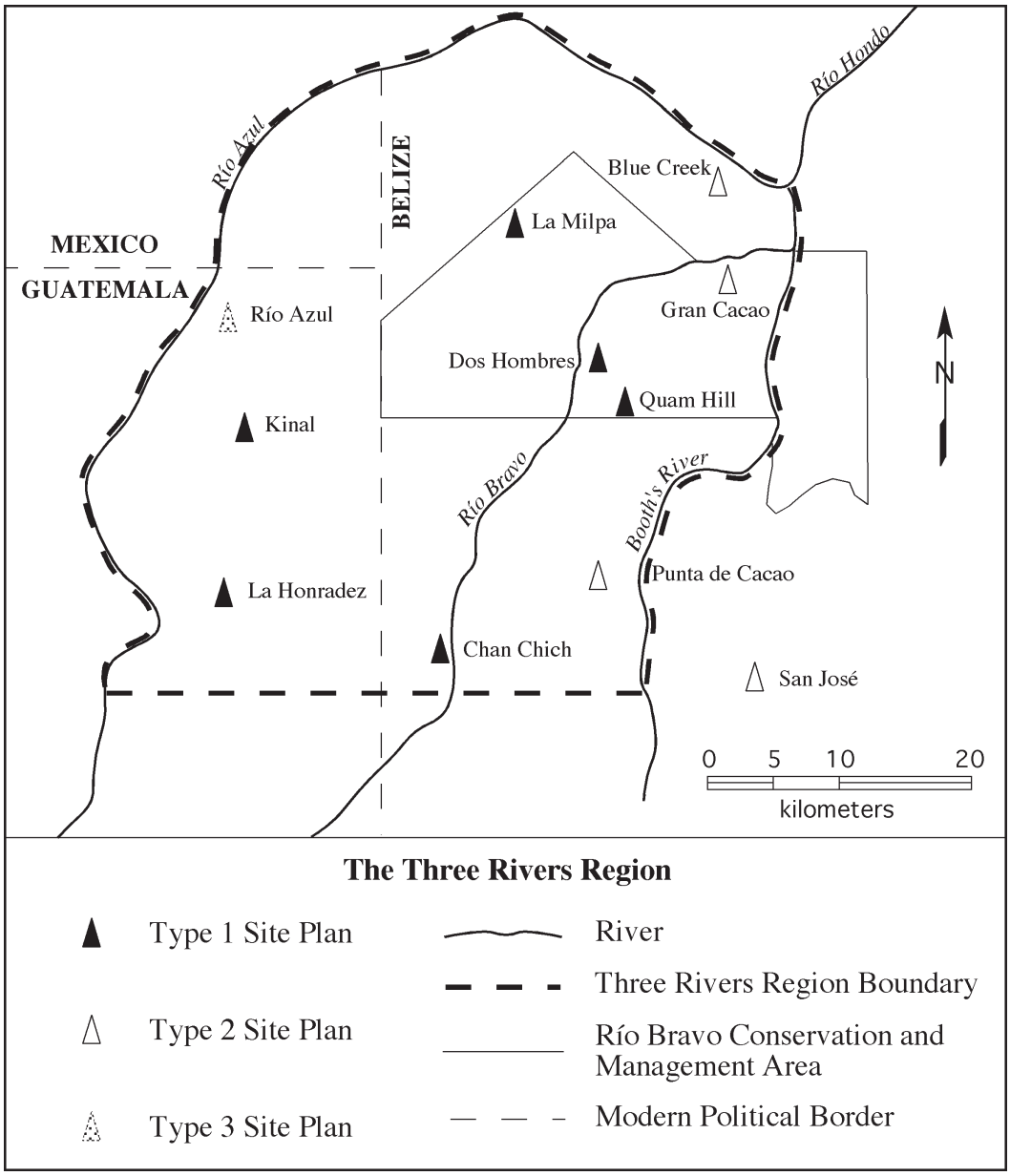

Figure 5. *Distribution of site plan types in the Three Rivers Region.*

ers in northern Belize. Nohmul, Aventura, and El Pozito "have a contrasting structure; in each the ceremonial precinct is split into two major parts, most apparent at El Pozito where they are massive multiphase acropoleis separated by open ground, and at Nohmul where a large and a small acropolis are linked by a sacbe" (Hammond 1981:165). Hammond (personal communication 1995) concluded that in this pattern, the public/open plazas were located at the south end of the site and the enclosed/private groups were at the north end.

The Type 2 sites appear to be on the border of two interaction spheres. They share the general site orientation of sites downstream along the Río Hondo, but other features, like well-defined acropoleis, stelae, and massive main plazas seem to be Petén influenced (Houk 1996a, 1997).

Long-Term Research Objectives

The CCAP has several important long-term research objectives.

- To determine the chronological development of the architecture at the site.

- To compare artifact assemblages and architectural styles to previously published data from surrounding sites and projects to determine regional similarities and differences.

- To understand Chan Chich's role in the political and economic structure of the region during all time periods of occupation.

- To compare non-elite domestic architecture to elite domestic architecture with the goal of determining the cultural relatedness of the elite and non-elite at the site.

- To establish likely political and cultural ties between Chan Chich and other sites in the region.

- To establish the date at which the Type 1 site planning principles appeared at Chan Chich, specifically, and in the Three Rivers Region, generally.

General Excavation Goals

Chronological data from each of the major plazas at the site will address questions of contemporaneity between important site plan elements (Houk 1996b). Some researchers, Hammond (personal communication 1995) remain skeptical of the validity of site planning templates like that proposed by Ashmore (1991) because of the palimpsest of many Maya sites. Indeed, the early form of a site is one of the possible factors affecting the later site plan. Establishing the chronology of the site will be necessary to understanding the construction order of, and the relationship between, major structures and public spaces.

Stylistic architectural data from these same groups will allow synchronic comparisons to other excavated sites east and west of the proposed cultural boundary discussed above. Sites with published architectural data on the west side of the boundary include Kinal (Adams 1991), Dos Hombres (Houk 1996a), and La Milpa (Tourtellot and Rose 1993, 1995). East of the boundary, the sites of Blue Creek (Guderjan and Driver 1995) and San José (Thompson 1939) have published site reports with comparable data.

Artifact assemblages from elite or ceremonial contexts will be compared to similar deposits from the sites discussed above as well as from sites to the west including Kinal (Adams 1991) and Río Azul (Adams 1990) to identify similarities and differences. Elite artifact assemblages will also be compared to non-elite assemblages. This comparison, when combined with architectural comparisons between elite and non-elite structures at Chan Chich and other sites in the region will be used to examine the question of whether the Late Classic site plan was the result of a colonizing elite's cultural expression of their Petén origins.

1997 Research Objectives

As a pilot project designed to determine the feasibility of a long-term research initiative, the 1997 season planned to target excavations at areas likely to yield the most information with the least effort (Houk 1996b). First, a series of test pits (approximately six 2-x-2-m units) was planned for the major architectural groups to establish the site's chronology. Second, several looter's trenches in the upper plaza were to be examined in detail. Third, selected trenches (two or three) were to be widened along exposed architectural faces to recover stylistic data as well as chronological information from sealed fill contexts. Fourth, selected structures were to be partially stripped of topsoil and collapse debris to examine the architecture of the last construction phase. The ballcourt and the staircase on Structure A-1 were selected for partial exposure.

A fifth objective was the initial investigation of Courtyard D-1, an elite residential group east of the Main Plaza. Jeff Durst was to use information from this group and a comparable group at the site of Dos Hombres as the basis for his Ph.D. dissertation.

A final objective of the project was limited consolidation of selected structures. We planned to use material removed during the widening of looter's trenches to fill some of the looter's tunnels into structures in the upper plaza. These tunnels represent a continued danger to the stability of some of the larger mounds at the site.

A major element of the planned consolidation effort was to be the first-time application of System 90, a catalytic penetrating sealer manufactured by Edison Chemical of Connecticut. System 90 is a heavy-duty, one component, low viscosity, solvent-borne sealer used to preserve porous masonry. It has the capacity

to restrict larger pore sizes which may otherwise permit bulk moisture infiltration. In 1997, we planned to test System 90's effectiveness by coating approximately 100 m^2 of exposed surface area.

For various reasons, the objectives listed above were changed prior to the beginning of the project. Jeff Durst elected to remain with TRAP for the entire season. He was replaced by Richard Meadows. As a result, the excavations at Courtyard D-1 were canceled. Because of concerns on the part of DOA, all the planned consolidation efforts were also abandoned. This included the testing of System 90. All architecture exposed during the project had to be backfilled. This included the staircase to Structure A-1 and the ballcourt.

Richard Meadows (1998b) was put in charge of the test pitting program in the western architectural groups. Owen Ford (1998) was operation director at the ballcourt. Hugh Robichaux (1998) directed the investigations in the Upper Plaza. Brett Houk (1998), acting as laboratory director and project director, also over saw the excavations on Structure A-1.

Excavation of a Protoclassic Tomb

The following discussion is taken largely from Robichaux (1998). Excavation efforts on the Upper Plaza were designated Operation 2 in the list of the project's excavation efforts at various Chan Chich locales during 1997. Ten suboperations (subops) in the form of test pits were excavated at three separate locations on the Upper Plaza during the course of the season. Their positions are depicted in Figure 5. Subop A was placed over the plaza floor near the front base of Structure A-15, an imposing pyramid-shaped mound situated on the Upper Plaza's south side, with the intent of meeting the data requirement for determining plaza construction sequences and chronology. Discoveries in conjunction with the excavation of Subop A led to the excavation of contiguous Subops C, D, E, F, G, I, and J. These excavations eventually resulted in the unexpected discovery of a Protoclassic period elite tomb (Tomb 2), located 1.7 m below the plaza surface.

With regard to methodology, the excavations normally proceeded by removal of natural/cultural layers and conformed to the methods outlined by Houk (1998a). Pickaxes and shovels were the principal tools for most of the excavations. Trowels, brushes, dental picks, and other more delicate instruments were used when appropriate. All of the excavated soil was screened. Generally, a $^1/_4$-inch screen was used, however, $^1/_{16}$-inch screen mesh was used for screening material which was removed from the floor of the tomb.

Dating of occupations and construction episodes was primarily based upon ceramic analysis. A stratum was assigned to the period/phase of the most recent ceramics found within it. The ceramic analysis was accomplished by Dr. Fred Valdez, Jr. (1998) of The University of Texas at Austin.

Suboperations A, C–G, I, and J

Structure A-15 is the tallest mound at Chan Chich, having a height of ca. 15.5 meters. The mound is situated along the southern edge of the Upper Plaza and has a pyramid-like form. A number of looters' trenches and tunnels have penetrated the mound from its eastern and western flanks. Examination of the structural remains visible within the looters' illegal and destructive diggings reveals the presence of several sequential construction episodes. Guderjan (1991:37, 39), after examination of the mound in 1988 and 1990, concluded the structure had experienced at least four construction episodes, and may have been one of the oldest and most important at the site.

Suboperation A was situated on the Upper Plaza surface about four meters south of the base of the southern slope of the Structure A-15 mound, and approximately two meters west of the structure's north-south axis (Figures 6). This position also placed the unit ca. one meter east of an 80 cm diameter circular hole which was present on the surface of the Upper Plaza. The hole had an apparent depth of 1.1 m and was lined with large stones of various shapes. Besides revealing construction phases and chronological data concerning the plaza itself, we hoped that Suboperation A would also provide some indication as to what the hole feature represented.

Subop A was 2 x 2 m in size, and had sides oriented with the magnetic cardinal directions. As the excavation progressed, features were encountered which dictated that the excavation be enlarged (Figure 7). Subsequently, contiguous Subops C–G, I, and J were opened. The final excavation plan was irregular in

Figure 6. *Location of Subops at Operation 2*. Note the hole feature appears as a white circle in the Subop A area.

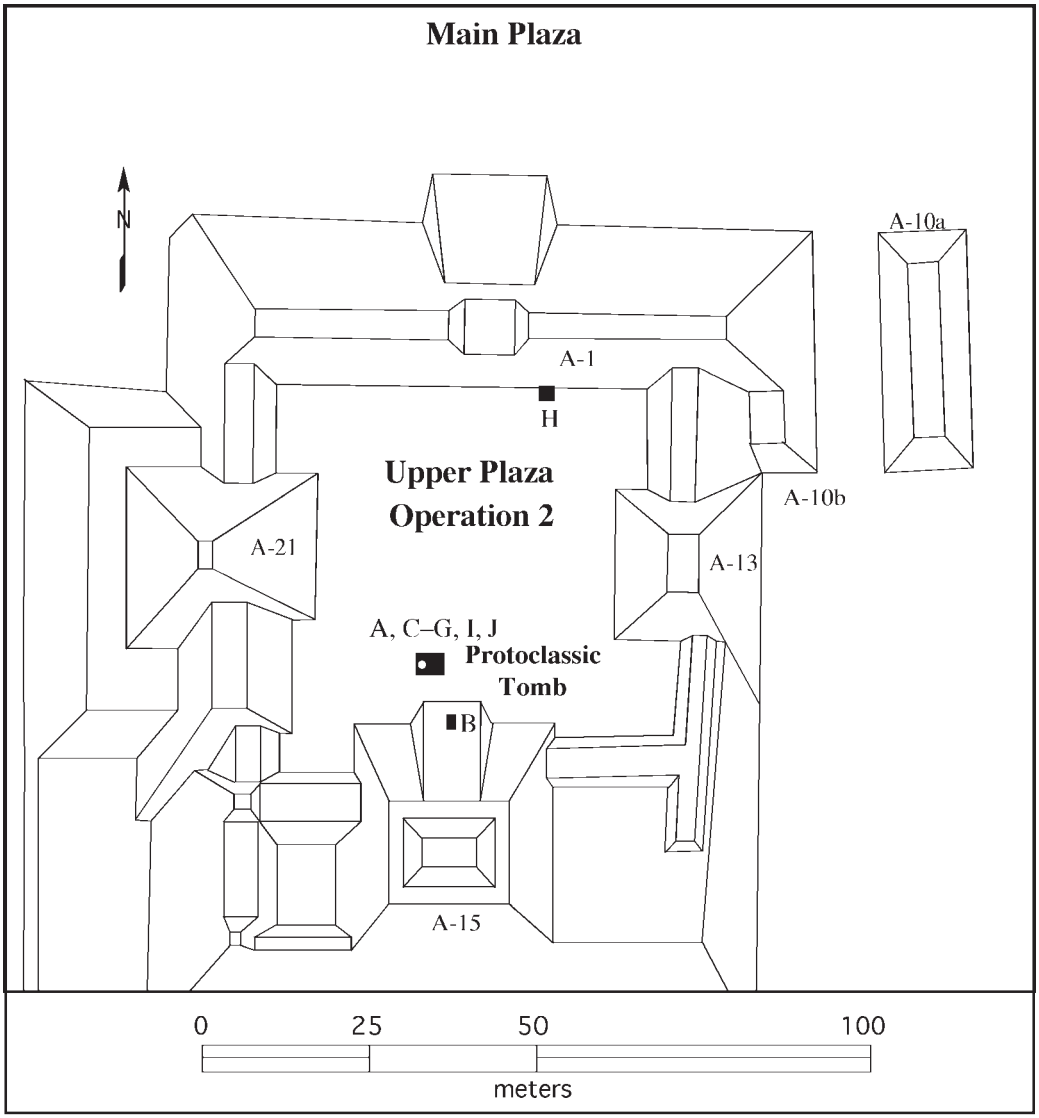

Figure 7. *Photograph of expanded excavations west of Subop A showing the hole in the plaza surface and the low walled structure.*

shape, and had maximum horizontal dimensions of 4.2 m east-west by 3.0 m north-south.

The excavation in Subop G was the deepest, reaching a depth of ca. 2.8 meters below the present plaza surface (note that the ground surface of the plaza was ca. 15 cm higher at the west end of the excavation than at the east end; depths cited below are from the west end surface).

Six floors were discovered. Additionally, one small, low stone-walled structure whose complete form and function are uncertain, and a Protoclassic period elite tomb located below the plaza surface were revealed by the excavation. The sequence of construction at this location is described below. The floors are numbered sequentially, from oldest (Floor 1), to most recent (Floor 6), in the discussion below.

Figure 8 presents a plan view of the excavation area showing the location of the Protoclassic elite tomb and the outer wall of the structure which was adjacent to the tomb. Figure 9 is a schematic view to the north, depicting the vertical arrangement of features including the six floors, the tomb, and the eastern and western walls of the small structure. Based upon stratigraphic analysis, and analysis of the sample of ceramics collected, all six of the floors appear to have been constructed during the Late Preclassic or Protoclassic periods (400 BC–AD 250). The five earliest floors were plastered. The most recent, Floor 6, was largely destroyed and its original surface is unknown.

The earliest construction was that of Floor 1, a surface which was situated ca. 1.2 meters below the ground surface, and 38 cm above what was apparently bedrock. Floor 2 was later constructed ca. 1.15 m below the surface. Floor 3 was positioned at a depth of ca. 95 cm below the surface.

Floor 4 appeared to be present only in the eastern half of the excavation unit. Two alignments of stone were resting upon Floor 4 to the east of Tomb 2. Of these two, the easternmost alignment coincided with the alignment of the east wall of a small structure above which rests upon Floor 5.

Tne next construction event was the creation of which occurred during the Protoclassic (AD 150–250). At that time, a rectangular shaped hole, perhaps 3.5 meters in length, with orientation near magnetic north-south (10° east of magnetic north), was excavated sequentially through Floors 4, 3, 2, and 1, until the surface of limestone bedrock was reached. The hole had a width of ca. 1.28 meters as it penetrated through Floor 4. The width of the hole was expanded gradually as it descended toward bedrock, where it reached a width of 1.6 meters. Upon reaching bedrock, the excavation narrowed to ca. 1 meter in width and continued down for 1.15 meters into bedrock to create the actual tomb chamber. It appeared that the floor and walls of the tomb were simply unplastered bedrock. The tomb has been dated to the Protoclassic period based upon the vessels present on the tomb floor (Valdez 1998).

The full length of the tomb was not exposed during the 1997 excavations. The tomb chamber appears to extend perhaps one meter farther to the north. It is anticipated that this area will be excavated during the 1998 field season.

The section of the tomb which was exposed during the 1997 field season had been covered by an estimated nine large, rectangular limestone slabs oriented east-west (hereafter referred to as *roofstones*), and laid out side-by-side, across the top of the tomb (Figure 8). The plan view shape of the tomb was slightly ellipsoidal, with the roofstones covering the center of the tomb being slightly longer than those at either end. There was some indication that the top of the roofstones had been plastered, tightly sealing the tomb. After the tomb had been sealed, the open area above it was filled with large stones up to a level 90 cm above the roofstones (Figure 9).

Then the tomb, and the large-stone matrix placed above it, were completely sealed off by the construction of Floor 5 which also dates to the Protoclassic. This presumably occurred shortly after the burial was completed. Subsequently, still in the Protoclassic, a small, low structure having stone walls was constructed upon Floor 5. A 2.04 meter long, north-south aligned segment of the structure's eastern wall was revealed early in the excavation (see Figure 5-8). At its north end, the wall turned westward, and had a nicely sculpted rounded exterior corner there. The westward extension of the wall was highly disturbed ca. 28 cm beyond the corner and its original extent can only be conjectured. The north-south wall section also appears to have turned westward at the south end of the unit, but the wall in that area was not fully exposed due to time constraints. The structure's west wall may have over-

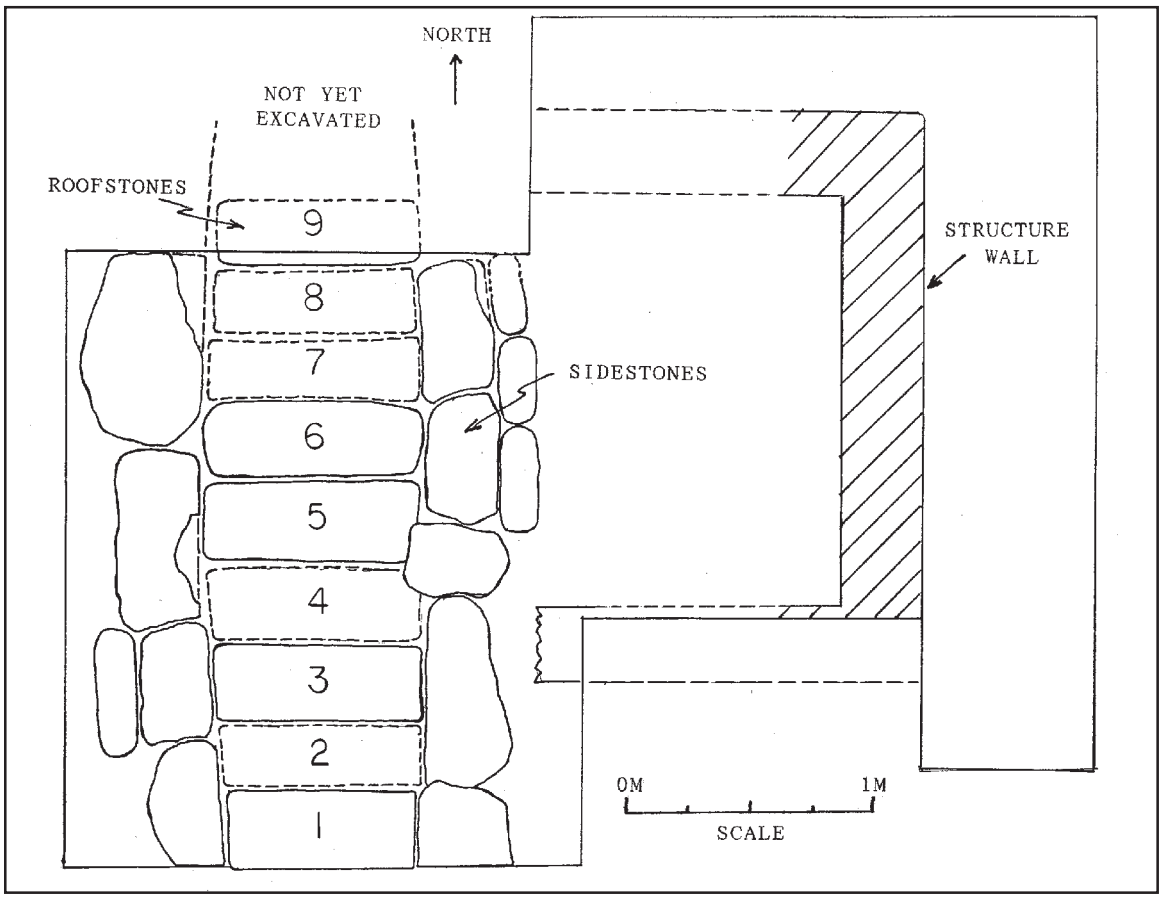

Figure 8. *Planview of the Subop A excavation area showing Tomb 2 on the west side with the wall of the adjacent small structure to the east and above the tomb.*

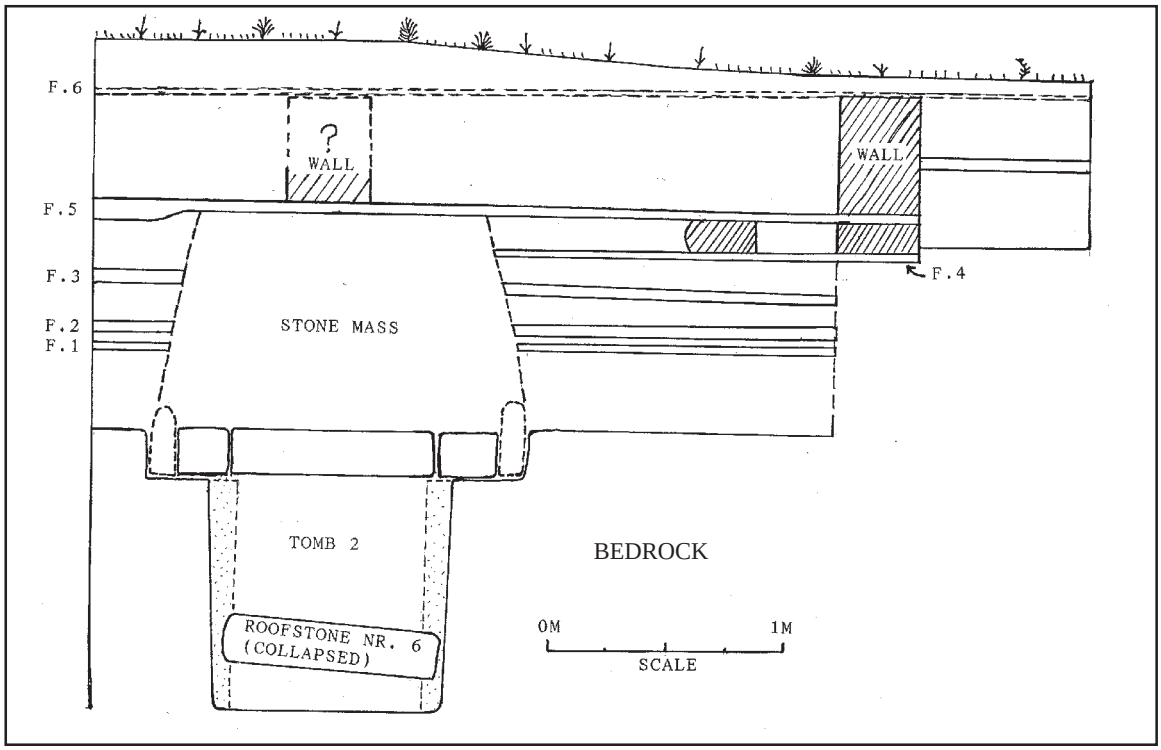

Figure 9. *Schematic view of the Subop A excavation area's north cross-section showing Tomb 2, floors (F), and the east wall and postulated west wall of the adjacent small structure.*

lain the center of Tomb 2. These walls corralled a large-stone-and-soil fill mixture within the structure's interior. The excavation suggested that the structure represents a small platform of unknown function which was constructed subsequent to the placement of Tomb 2.

Later, apparently still within the Protoclassic Period, the final surface, Floor 6, was constructed. This floor, which was only 20 cm or so below the modern ground surface, was totally destroyed, presumably by root action, and was detectable solely through the presence of a fill matrix of various sized stones in a gray soil beneath it. The small structure above and east of the tomb was completely buried under Floor 6. Ceramics collected from the humus above Floor 6 contained mostly Late Classic and Late Preclassic material, with only a trace of Early Classic sherds being present. Thus, surprisingly, all of the construction episodes uncovered in this set of excavation units through the Upper Plaza surface appear to date to Late Preclassic/Protoclassic times.

Tomb 2

Three of the tomb roofstones were found in-place in their original positions, revealing the tomb's original configuration. The majority of the roofstones had collapsed to various depths within the chamber). Roofstones 7 and 8 had collapsed and then broken into multiple smaller fragments. The roofstones in the center of the tomb (4, 5, and 6) had collapsed the farthest, and their fall had precipitated the creation of the hole on the surface of the plaza which had originally influenced the placement of Subop A. As the center roofstones collapsed downward into the tomb, stone and soil above them also collapsed downward, filling the chamber with sediment and stone, and creating the surface hole above. It should be noted that Roofstone 6, the roofstone which fell the farthest, did not fall all the way to the tomb floor. It landed, instead, upon a distinctive whitish, marly sediment at a level of about 15 cm above the tomb floor. Perhaps the simplest explanation for this situation is that the sediment leaked into the tomb floor from above, or from the deteriorating bedrock side walls of the tomb, before Roofstone 6 collapsed. An alternative hypothesis would be that the whitish sediment was culturally introduced at the time of the burial.

Tom Harding (personal communication 1997), co-manager of the Chan Chich Lodge, relates that when the plaza was being cleared ca. 1988, a large, fallen tree trunk lay over this spot. The trunk was cut into several sections for removal. When one of the sections was removed the hole was revealed in the plaza surface. This suggests the possibility that the tomb collapse was a recent event, provoked by the fall of that large tree on the ground surface above the tomb. Based upon its state of decay, Harding estimated that the tree had died perhaps 15 years earlier (ca. 1973). Thus, the collapse of Tomb 2 may have been a modern event, occurring as recently as 25 years ago. This event would have allowed water to enter the tomb area, and probably accelerated the decay of the organic remains in the tomb, and deterioration of the tomb's bedrock walls and floor. The debris in the hole overlying the tomb consisted mainly of organic material, very mulch-like in nature, which had fallen into the hole.

How the heavy roofstones were supported was not perfectly clear. Smaller *sidestones* which had the same thickness as the roofstones were positioned on either side of them, at the same vertical level (Figure 8). The sidestones all rested upon a small ledge which had been cut into bedrock at the level of the top of the tomb. Some of the sidestones apparently did not have adequate width to fill the space which had been cut for them, so narrow rectangular stones, set on end, were inserted, wedge-like, to fill the open space to the outside of the sidestones, thereby preventing the stones from shifting laterally. Although some of the sidestones had suffered damage over time, it was clear that they all presented flat side faces which interfaced with the flat lateral surfaces of the roofstones. It was also evident that the roofstones were "cemented" to the sidestones, thereby providing some support to keep them in position. The stone mass above the tomb weighed down upon the sidestones keeping them in place, but they also put a tremendous weight burden upon the roofstones. That the roofstones could have supported such a heavy weight while only being supported at their ends by cementing to the side stones seems doubtful. It is more likely that the bedrock walls of the tomb actually extended out slightly farther towards the tomb interior and reached under the east and west ends of the roofstones thereby supporting them from below, a much stronger arrangement. The side walls appeared to have deteriorated and softened, possibly due to water penetrating the tomb after the center roofstones collapsed.

Maya tombs covered by horizontal stone slabs and having a configuration generally similar to Chan Chich Tomb 2 have been found at a number of sites. Their use begins at least in the Late Preclassic and continues intermittently through at least the Late Classic period. Among these are Tikal's Late Preclassic Burial 85 and Early Classic Burial 22 (Coe 1990), a recently discovered Copan Early Classic royal tomb (Agurcia et al. 1989:480–487), Piedras Negras's Late Classic Burial 1 (Coe 1959), and Uaxactun's Late Classic Burial A30 (Smith 1950). A similar tomb design has been noted at the Zapotec site of Monte Alban in Oaxaca (Weaver 1981:114). While Maya burials below plaza floors are not exceptionally rare, they tend to be simple burials placed directly within a soil or construction fill matrix (see also Meadows 1998). Elite tomb burials placed under plaza floors appear to be uncommon. One such example dating to the Early Classic was recently discovered under the Great Plaza at La Milpa, a large site approximately 30 km north of Chan Chich (Hammond et al. 1996:89–90). That tomb has been interpreted as being royal in status, and is located in front of Structure 1, the tallest structure at La Milpa. Based upon the limited data available, tomb burials placed under plaza surfaces versus placement within, or under, major structures may be associated more with the early developmental stage of polities.

Contents of Tomb 2

The tomb contained human remains, jade artifacts, ceramic vessels, a serpent-shaped object, a possible paper fragment, many small green and red fragments possibly of stucco or paint, and a small fragment of wood. These will be discussed individually below. Figure 10 is a photo of the tomb floor as it was finally exposed. Figure 11presents a plan view of the Tomb 2 floor. Figures 12through 15are photographs of the tomb's contents *in situ*.

Human Remains

Badly deteriorated human bone was recovered from 30 separate locations within the tomb. Sixteen human teeth were also found. The bone was widely scattered across the floor of the tomb. Four of the ceramic vessels on the tomb floor had bone within them, and some bone was also found resting on the rim of one vessel. Thirteen of the teeth were found near the tomb's south end. The human remains from Tomb 2 were submitted to Julie Saul for analysis as part of the extended season funded by FAMSI. Her (personal communication 1998) analysis indicates the tomb had a single occupant, a robust male in the age range of 30–45 years who was interred in an extended, supine position. The head of the deceased was oriented toward the south. Thirteen maxillary teeth were found near the south end of the tomb marking the position of the skull. Three mandibular teeth were found in the area of the jade, indicating that after the mandible separated from the skull it fell or was otherwise moved to the chest area of the individual. Three of the recovered teeth were decorated (Figure 16). The right maxillary canine had a material insert in it, possibly hematite, and had been filed (Romero [1970] G-15 classification). The right maxillary lateral incisor also had what may have been a hematite insert in it, but was not filed (Romero [1970] E-1 classification). The left maxillary canine had also been altered by filing, but it had no insert (Romero [1970] C-5 classification).

Figure 10. *Photograph of Tomb 2 after it was completely exposed.* Taken from above the tomb, facing north.

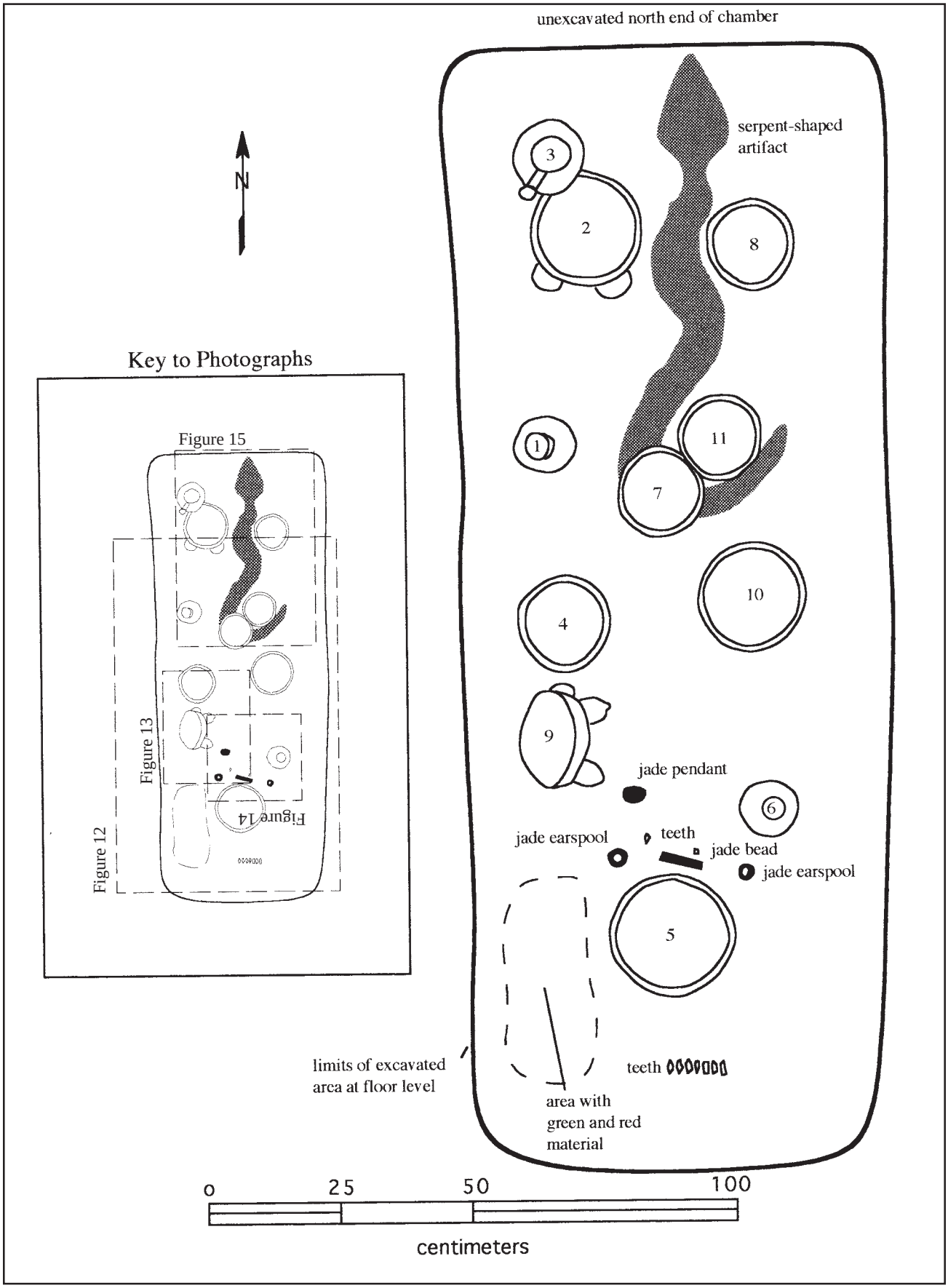

Figure 11. *Plan map of Tomb 2, Upper Plaza, Chan Chich.*

Figure 12. *Photograph of south end of Tomb 2, facing west, after vessels have been exposed.*

Figure 13. *Photograph of Vessel 9* in situ, *facing west.* Vessel 4 is visible on the right. One jade earspool and the jade bead are visible on the left. The jade pendant, face down, is to the right of the earspool. The dark object in the upper left corner is the photographer's foot.

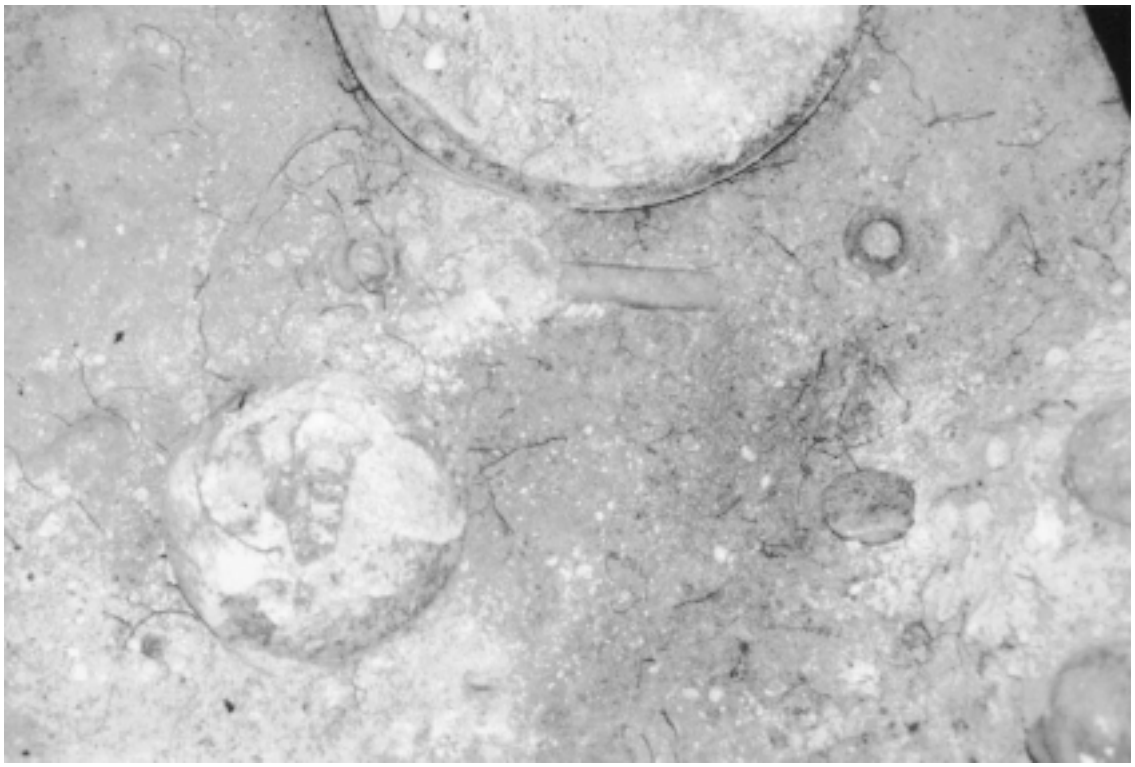

Figure 14. *Photograph of jade artifacts* in situ *in Tomb 2, facing south.* The jade pendant is face down on the right. The two earspools and bead are directly north of Vessel 5. Vessel 6 is to the left, and the feet of Vessel 9 are just visible on the far right.

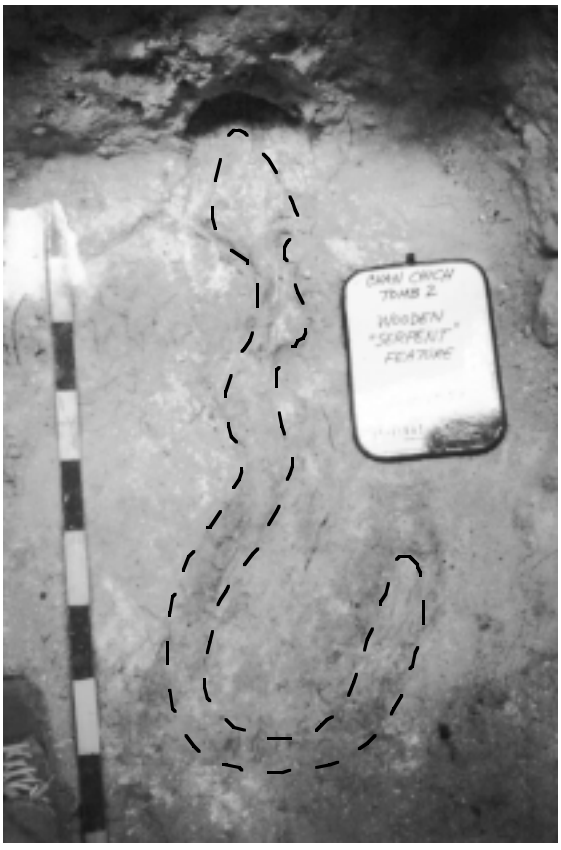

Figure 15. *Photograph of problematic, serpent-shaped artifact, facing north.* The ephemeral outline of the artifact has been highlighted with the dotted black line. Photograph taken after associated vessels had been removed.

The tomb floor was covered in many areas with a reddish material which may be cinnabar. The southern half of the tomb, where the upper part of the deceased's body was located, had the greatest concentration of the reddish material, especially the area around Vessel 5 and the jade artifacts. A thin layer of the reddish material also lined the bottoms of some of the ceramic vessels in the tomb. In the vessels where bone was found, the bones overlaid the reddish material. The body of the deceased seems clearly to have been positioned atop an elevated wooden litter at the time of the burial (see ceramics below).

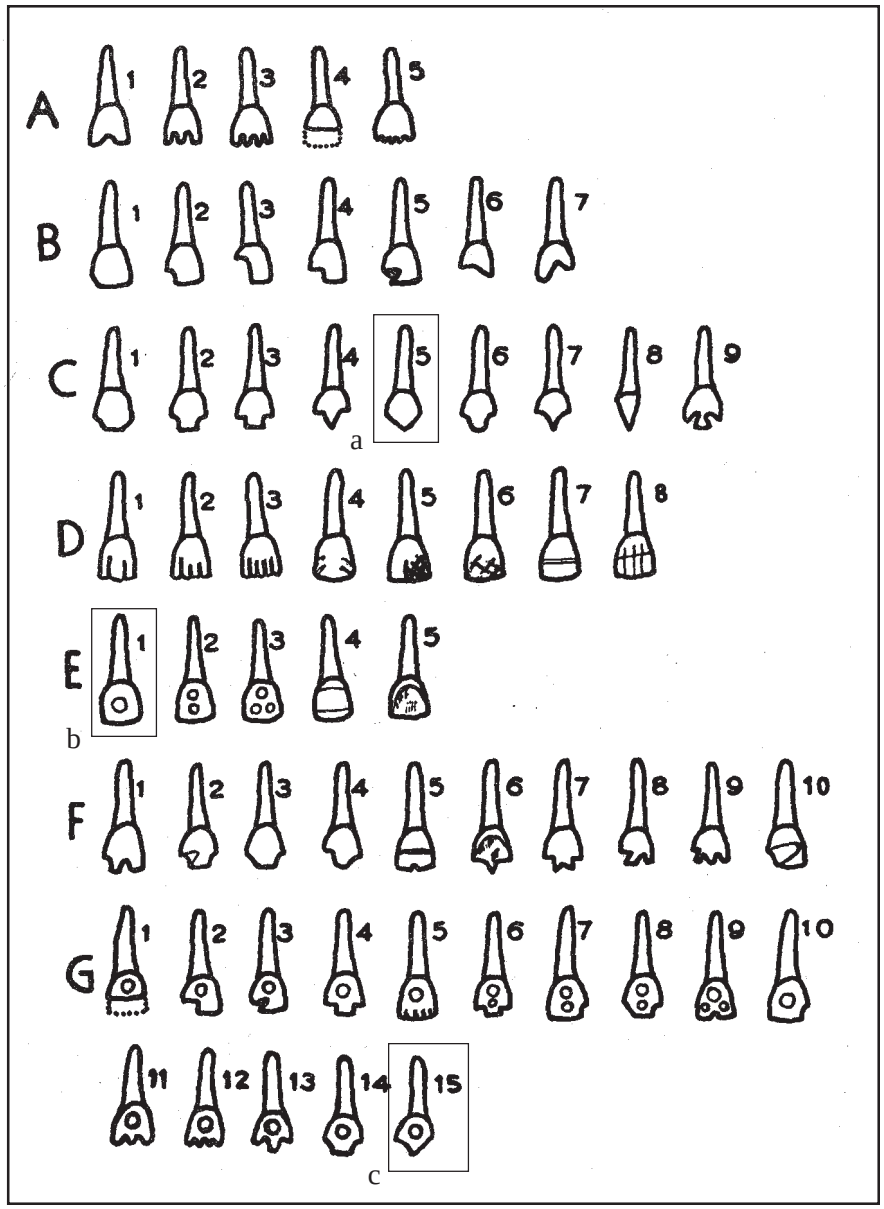

Figure 16. *The Romero (1970) classification system for culturally modified teeth in Mesoamerica.* The three modified teeth from Tomb 2 are similar to the examples marked by boxes. a: left maxillary canine; b: right maxillary lateral incisor; c: right maxillary canine.

Jade Artifacts

The greenstone objects recovered from the tomb are thought to be made from some form of jade and they are referred to here as jade, even though no confirming chemical analysis has yet been accomplished. Four jade artifacts were found in Tomb 2. They included two ear spools, one tubular bead, and a sculpted pendant. The earspools and the tubular bead (Figure 17) were of a design commonly found in association with the burials of Maya elite persons. The position, and symmetrical spacing of these three artifacts suggested the possibility that they were strung on a necklace, with some form of perishable material (possibly wooden tubular beads), now destroyed, separating them. Alternatively, the earspools may have been in their traditional position, attached to the person's ears, but that interpretation is inconsistent with the position of the bulk of the teeth recovered in the tomb, and the posited position of the individual's head.

Of particular interest was the carved jade pendant which is depicted in Figure 17. The pendant is of a type known as *helmet-bib* (Proskouriakoff 1974:10), based upon the head bearing a helmet-like headdress, and having a bib-like object surrounding the lower portions of the face. Hammond (1987), using archaeological evidence retrieved from Pomona, Cerros, and Nohmul, has made a persuasive argument that the particular face represented on the pendant is that of Kinich Ahau, the Maya Sun God. The dating of this iconographic configuration has been assigned to the Preclassic by Proskouriakoff (1974:11), and specifically to the Late Preclassic by Hammond (1987), and Schele and Freidel (1990:98–121). Helmet-bib head artifacts

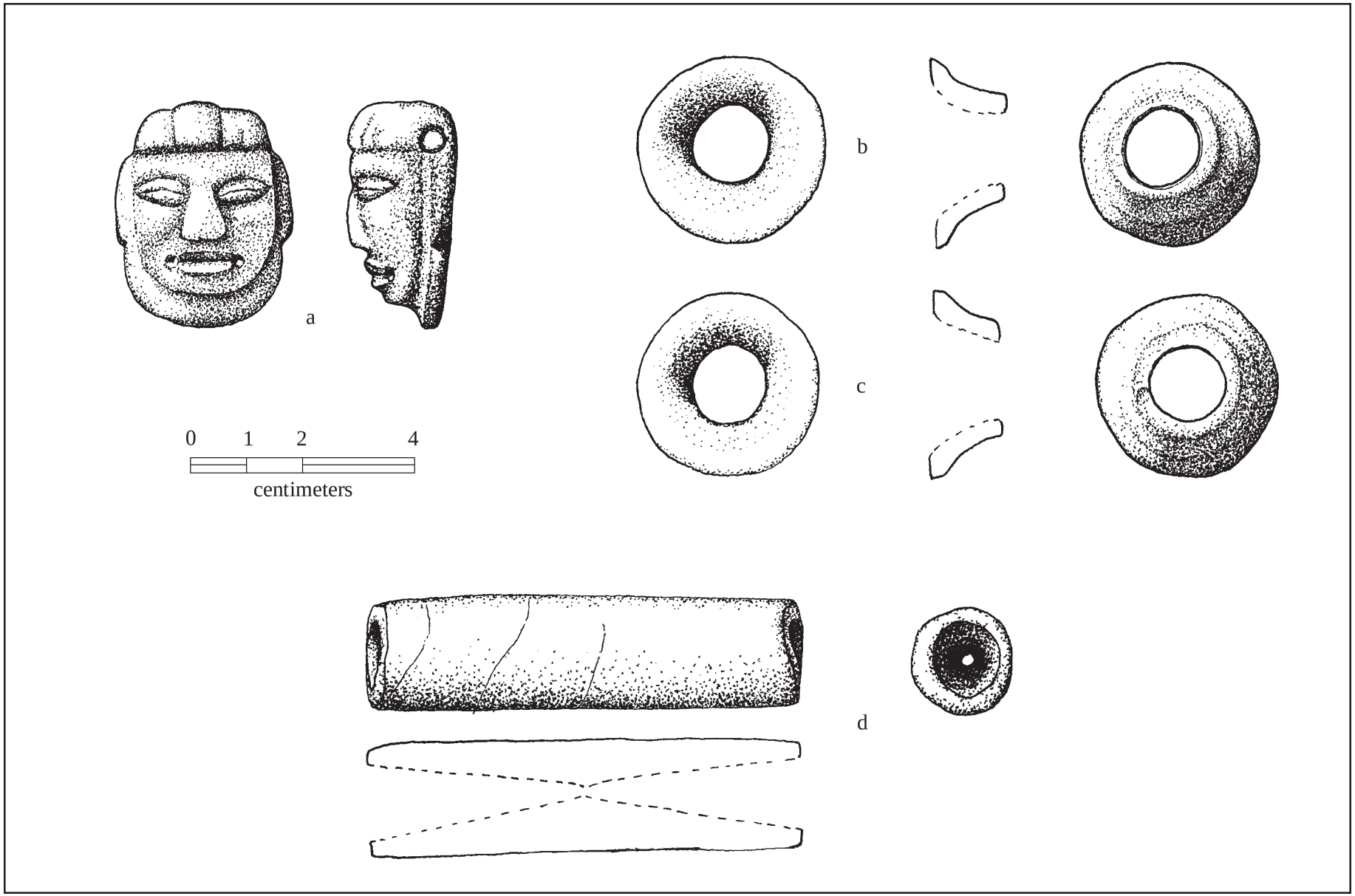

Figure 17. *Jade artifacts from Tomb 2*. a: helmet-bib pendant; b, c: earspools; d: bead.

recovered from archaeological contexts at Cerros and Nohmul have been dated to ca. 100 BC (Hammond 1987:22). The contexts in which the Cerros and Nohmul helmet-bib sculptures have been found links them to the personage of the ruling king (*ahau*) of the polity (Schele and Freidel 1990:102; Hammond 1987:23). David Freidel (personal communication 1997) suggests that the helmet-bib head pendant indicates the burial is a royal tomb. Based upon the above, it appears a reasonable possibility that the person buried in Tomb 2 was an early *ahau* or ruler of the ancient community of Chan Chich.

Ceramic Vessels

Eleven ceramic vessels were found on the floor of the tomb. They have all been dated to the Protoclassic by Valdez (1998). The assemblage included: four red mammiform support bowls (one of which had the feet removed prior to its placement in the tomb), one red basal flange bowl, one red-and-incised basal flange bowl, one red basal angle bowl, one red ring base jar, one red-and-buff mammiform support bowl, one red-rimmed buff spout-and-bridge jar, and one red-rimmed buff-incised spout-and-bridge jar (Figures 18 and 19). Six of the vessels had a layer of reddish material, possibly cinnabar, overlying their interior bottoms. As noted earlier, four of the vessels in the center of the tomb (Vessels 4, 7, 9, and 10) had bone fragments within them. In each of these vessels the bone was resting atop the reddish material. Bone was also found resting upon the rim of Vessel 5. This supports the suggestion that the deceased was placed in the tomb resting upon a low, perishable litter, with the vessels having previously been placed on the tomb floor, below the litter. A small fragment of *Pinus* sp. wood (John Jones, personal communication 1998) found near the tomb floor may represent the remains of the litter. Evidently, the vessels and other tomb furnishings were placed on the tomb floor first, and then the reddish material was scattered over them. This was followed by the placement of the tombs occupant on a raised litter which straddled the vessels. Very possibly, additional reddish material was thrown or poured over the body, especially the upper body, before the burial party sealed the tomb. A similar inference concerning the presence of an elevated litter was made for an elite tomb recently discovered at La Milpa (Hammond 1996:89), based upon the relationship of bone to ceramic furnishings within the tomb.

Possible Codex Fragment

A small (ca. 1 x 1 cm), very thin section of a bluish colored material was recovered during screening of sediment removed from near the floor of Tomb 2. Its position in the tomb with relation to other objects there is unknown. John Jones (personal communication 1998) who has examined the item indicates it appears to be a section of "pressed Gossypium cotton paper" which has "blue and black brush strokes" on it. He suggests it "may be an old text fragment". Instances wherein what appears to be the remains of ancient "codex" books in elite Maya tomb contexts have been re-

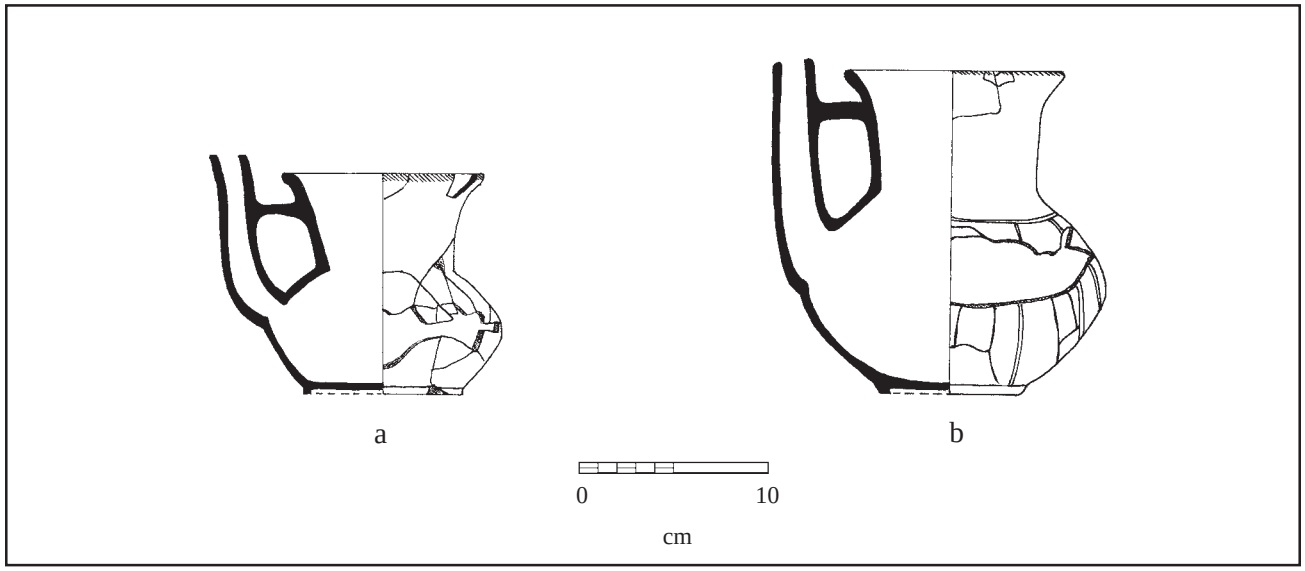

Figure 18. *Spouted Protoclassic vessels from Tomb 2 at Chan Chich.* a: Vessel 3, Unnamed Red-rimmed, Buff, spout-and-bridge jar; b: Vessel 1, Unnamed Red-rimmed, Buff-incised, spout-and-bridge jar.

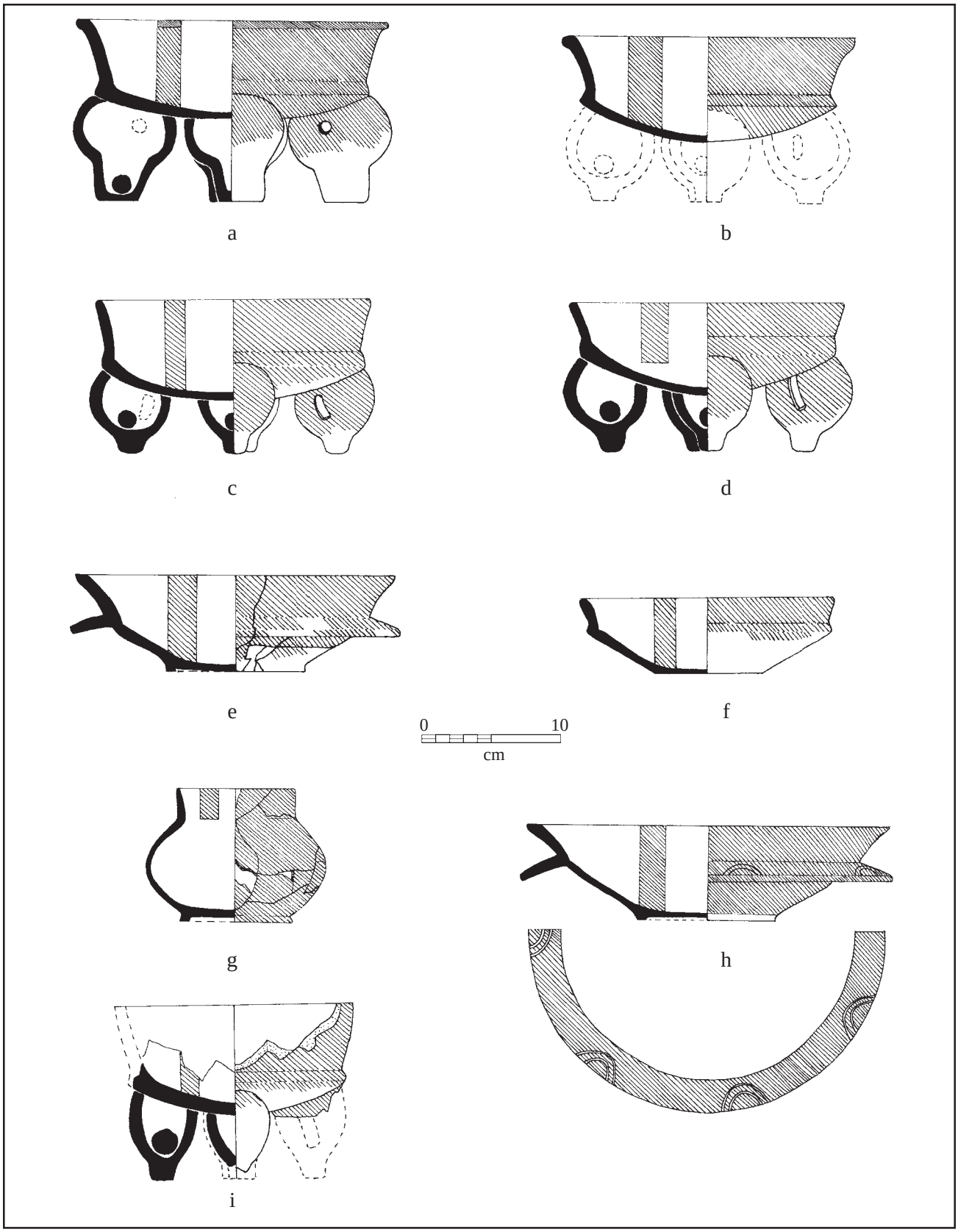

Figure 19. *Remaining Protoclassic vessels from Tomb 2 at Chan Chich.* a–d: Vessels 2, 4, 8, 9, Unnamed Red, mammiform support bowls; e: Vessel 10, Unnamed Red, basal flange bowl; f: Vessel 7, Unnamed Red, basal angle bowl; g: Vessel 6, Unnamed Red, ring base jar; h: Vessel 5; Unnamed Red-incised, basal flange bowl; i: Vessel 11, Unnamed Red-and-buff, mammiform support bowl.

ported from a few sites, most recently at Copan in Honduras (Agurcia et al. 1989:483–486). The surmise that the small fragment in Chan Chich Tomb 2 is a codex fragment is consistent with the Kinich Ahau pendant and is supportive of the royal status of the person buried in the tomb. If indeed the fragment is from a Maya book, or codex, it would represent a very early text, given the tomb's Protoclassic date.

Paint or Stucco

Near the southwest corner of the tomb floor, to the side of where the head of the buried person is believed to have lain, was found an area which had a large number of small, thin fragments of fragile material which was either green, red, or green on red (Figure 11). Observed edge on, the center of many of these fragments had a blackish color. The texture of the material seemed to be similar to flattened stucco. Examination of the material by John Jones (personal communication 1998) indicates the green and red material appears to have been painted onto a curved surface which had decayed. A reasonable possibility is that the material represents painted decorative elements on either a wooden or gourd vessel which subsequently decayed and left the fractured decorative material on the tomb floor. Similar cases were noted at Rio Azul in Tombs 23 and 19 (Hall 1987:132–133; 1989:76–78). An alternative possibility, given the material's position in the tomb, is that it may represent decorative elements on a headdress made of perishable material.

Problematic Serpent-Shaped Object

A deteriorated, curvilinear-shaped object, thought possibly to be of deteriorated wood, lay across the northern half of the tomb floor. As it was first being uncovered it seemed to be a large root, but as it became more fully exposed its shape took on the appearance of a realistic wood carving of a pit-viper snake such as a fer-de-lance. Additionally, the object's position, with the "head" at the north end of the tomb (as far as it has currently been exposed), and with its "body" extending southward along the very center of the tomb, argues against this being a root's chance resemblance of a serpent. The unexcavated part of the tomb lies just beyond the tip of the "snout" of this object. It is possible that this area is where the burial party exited, and sealed off the tomb. This area will be examined during the next field season. Should it prove to be the end of the tomb, this serpent can reasonably be interpreted to be a symbolic "guardian" of the tomb, protecting it against intruders. Alternatively, the artifact could be a staff. Early Classic stelae often depict rulers holding serpent-shaped staffs or scepters.

Due to its fragile condition, it could not be removed intact from the tomb. Several samples were removed from the object for testing. The results are conflicting. Two experts consider the sample material to be bone (John Jones personal communication 1998; Julie Saul, personal communication 1998). Another laboratory (Beta Analytic) reported that during its efforts to cleanse a sample of the object for dating, the material almost totally dissolved, leaving only a very small residue of woody pulp (R. E. Hatfield [Beta Analytic], personal communication 1998). This usually indicates that the sample has been poorly preserved and subjected to extreme conditions during its burial. The sample may retain it's structure but very little of it's content (R. E. Hatfield, personal communication 1998). Paul Francisco, a conservator at the Department of Archaeology in Belize, examined the object *in situ* and removed a sample for microscopic analysis. He found that the upper surface of his sample was uneven and displayed consistent scrape marks (Paul Francisco, personal communication 1997). Furthermore, the specimen exhibited grains consistent with a hard wood, but that it appeared to be petrified, a finding consistent with Beta Analytic's. Francisco also identified four strands of blue thread, one strand of red thread, and one strand of grayish-green thread. The tomb floor and the remaining sections of the object were covered with sterile soil at the end of the season. The object will be re-excavated during the 1998 field season.

Summary

The unexpected discovery of the Protoclassic tomb in the Upper Plaza not only was a cause for great excitement, but a source of constant concern. The time consuming excavations forced us to shift our efforts from other areas of the project and exhausted the reserves in our budget. Unexpected expenditures included the construction of 11 wooden boxes (out of marine plywood which was all that was available) to house and protect the vessels from the tomb and the return trip in August to begin the analysis and conservation of the tomb's contents. We were not able to complete our study of the looter's trenches in the Upper Plaza, however, nor were we able to excavate as many test pits as planned.

The time, energy, and resources spent excavating the tomb, however, were worth it. Our understanding of the site has changed dramatically because of that discovery, and new questions that we never thought to ask before will direct our research in the future. Before discussing the implications of the tomb and the other investigations in the Upper Plaza, I must point out one glaring omission from Robichaux's (1998) account of the tomb: the tremendously difficult nature of the excavations. The chamber, which was approximately three meters below the plaza floor, was difficult to access and to exit. The massive amounts of material, including the large roofstones, which overlay the collapsed chamber took weeks to remove. The floor of the chamber and the tomb's contents had to be carefully exposed by removing the surrounding marly matrix with dental picks, trowels, and paint brushes.

Once the chamber had been exposed, two excavators could work side-by-side on alternating quadrants of the tomb (Figure 20) for a period of days. As the floor of the chamber was gradually exposed, eventually only one person could work in the chamber at a time. The work had to be done in socks or bare feet. There was no breeze, it was extremely hot, and flies swarmed by the dozens.

The onset of the rains in June forced us to build a temporary structure to keep water out of the chamber. The tarp roof of this structure did a fairly good job of channeling large amounts of runoff onto the surface of the plaza around the excavation unit during heavy rains. We had to build a makeshift sand bag wall around the entire unit to keep this water from draining into the tomb as it pooled on the Upper Plaza.

The two most surprising aspects of the tomb were its location and its age. Plaza tombs, as Robichaux (1998) has discussed, are rare in the Maya area. Protoclassic tombs, in any form, are also rare. The Protoclassic and how Chan Chich fits into the regional picture are discussed briefly in the culture history below.

The Protoclassic in the Three Rivers Region is not well understood, primarily because the tomb found in the Upper Plaza is the only Protoclassic deposit from the region (at least that I am aware of). The importance and significance of this discovery lie in its potential to address the nature of the political organization of the site and of rulership at the dawn of the Classic period, as well as technological questions plaguing ceramicists who are trying to refine the Late Preclassic/Early Classic ceramic traditions in the region (e.g. Sagebiel and Kosakowsky 1997; Sullivan and Valdez 1996). Additionally, Chan Chich's location between two clusters of Protoclassic sites—the Belize Valley and northern Belize—may prove important in understanding the regional nature of the Protoclassic (e.g. Meskill 1992). Generally, the Protoclassic is recognized by the appearance of Floral Park ceramics at around 150 AD (Gifford 1976; Valdez 1987; 1998). The Protoclassic may be largely an

Figure 20. *Tomb 2 during excavations.* From left to right: Hugh Robichaux, Jennifer Vander Galien, and Jessica Sanchez.

elite cultural marker as Protoclassic ceramics are found exclusively in funerary or elite contexts at many sites (Meskill 1992). The presence of Protoclassic ceramics at Chan Chich may be a direct indication of adoption or development of kingship at the site. The association of the ceramics with the jade helmet-bib pendant strengthens this conclusion (Houk 1998c; Robichaux 1998).

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