Archaeological Investigations in the Candelaria Caves and La Lima, Alta Verapaz, Guatemala

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Location: Alta Verapaz, Guatemala
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Table of Contents

Abstract
Resumen
Introduction
Investigations in the Candelaria Caves
The Candelaria Settlement Survey
Ceramics from the Caves
  Early Classic Ceramics from the Candelaria Caves
  Late Classic Ceramics from La Lima and Associated Caves
  The Impact of Excavations in La Lima
The Role of the Candelaria Caves in the Maya World
Conclusions
List of Figures
Sources Cited
Abstract
FAMSI-funded investigations in the Candelaria Caves and the associated settlement of La Lima recovered evidence of a large Early Classic pilgrimage center with apparently locally-produced ceramics strongly resembling modes from the Central Petén. Due to changes in trade patterns, use of the system greatly declined after the Early Classic. Late Classic ritual activity is mostly restricted to the eastern extreme of the system around the contemporary village of La Lima. Ceramics recovered from the site and associated caves demonstrate a mixing of northern highland and lowland traits, with highland paste and slip and lowland vessel forms.

Resumen
Las investigaciones financiadas por FAMSI de las Cuevas la Candelaria y el asentamiento de La Lima asociado, recuperaron evidencia de un gran centro de peregrinación del Clásico Temprano, con cerámica al parecer, localmente producida, que se parece mucho a los modelos del centro de Petén. Debido a los cambios en el modelo del comercio, el uso del sistema declinó grandemente después del Clásico Temprano. La actividad ritual del Clásico Tardío está restringida mayormente a los extremos orientales del sistema alrededor de la villa contemporánea de La Lima. La cerámica recuperada del sitio y las cuevas asociadas demuestran una mezcla de rasgos de la región montañosa del norte y las tierras bajas, con pasta de la región alta y engobe y formas de vasos de las tierras bajas.

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Introduction
In 2003, the Vanderbilt Upper Pasion Archaeological Cave Survey (VUPACS) was asked by the Guatemalan Ministry of Culture and Sports to register, document, and investigate archaeological remains in the 18.5 km² proposed Candelaria Caves National Park (Figure 1), which opened in 2004 and is co-managed by the Ministry of Culture and two local Q’eqchi’ communities. In order to accommodate this request, the project engaged in investigations of the cave system and an associated settlement located within the park bounds.
The Candelaria Caves were a major ritual center associated with the Great Western Trade Route (Hammond 1972, Arnauld 1990, Demarest et al. 2003), which followed up the Usumacinta and Pasióén rivers to a series of interconnected valleys through Carchá and Salamá. This important route, along with the eastern route through the Motagua Valley and along the Caribbean coast, brought jade, obsidian, iron pyrite, quetzal feathers, and other highland goods to the Classic lowland market.

The caves are located at the highland-lowland transition 12 km. to the south of Cancuén (Figure 2) in an area defined by pyramidal haystack karst hills and ridges abutting the beginning of the highlands. The Candelaria Caves were brought to international attention by French spelunker Daniel Dreux in the 1960s, who soon after its discovery invited archaeologist Patricia Carot to perform a reconnaissance of the principal caves in the system (Carot 1989). A later reconnaissance of the first cave in the system was conducted by members of the Salinas de los Nueve Cerros Project (Pope and Sibberenson 1981). Although both projects reported a large amount of ceramics from throughout the Classic period, limited time and resources prevented an intense study of the caves or associated settlements.

FAMSI-funded research in the caves and the associated Late Classic settlement had several important results. 1) It was the first comprehensive archaeological survey of this system, and revealed evidence of intense use during the Classic period related to traffic along the trade route. 2) It provided the foundation for subsequent research in the Candelaria Caves and other Cancuén Project investigations in the Northern Highlands, and 3) research here was able to leave a positive impact on the local communities through the creation of the co-managed national park, proposing minimum-impact tourist routes through several of the caves, the training of guides, and the production of
special tourist impact maps to allow the village committees to modify the routes as time progresses.

Figure 2. The Upper Pasión Region and Northern Alta Verapaz.
Investigations in the Candelaria Caves

The cave system is centered around seven river caves along a 25 km stretch of the Río Candelaria, although hundreds of small hill-caves are located above and around them, of which VUPACS was able to reconnoiter 22 of these caves with the help of FAMSI. Ten caves or cave segments were mapped, and areas of ancient and modern use were identified and registered (Figure 3 and Figure 4).

Rituals here seem to have been undertaken in the same manner as pyramids, with evidence of public ritual on high, naturally-lit ledges above cave floors or the valleys outside (Woodfill et al. 2004). Amid the ash, incense burners, smashed and burnt pots, and hundreds of obsidian blades were found, along with shell "tinklers" and other evidence of ceremonial regalia. Behind these ledges, "backstage" parts of the ceremonies appear to have occurred, evinced by the presence of altars, hearths, and unslipped wares. In several caves, flat platforms were built below these stages, probably to accommodate more observers (Ibid.).

Figure 3. Cueva la Iluminada.

Figure 4. Map of the Candelaria Cave System.
The Candelaria Settlement Survey

The Candelaria settlement survey began in 2003 by the Guatemalan Ministry of Culture (Aguilar 2004), and follow-up excavations were conducted by VUPACS with the help of FAMSI (Segura and Monterroso 2004). Two significant sites (see Figure 1) were discovered by the Ministry and VUPACS–Muqbil'ha Viejo, an Early Classic settlement in the center of the cave system, and La Lima, a Late Classic village at its eastern edge. Surface collection at Muqbil'ha' has revealed Tzakol-sphere ceramics strongly reflecting modes typical of the Central Petén (Woodfill and Monterroso 2005), while La Lima contains a variant of Late Classic Alta Verapaz wares.

Both sites are approximately the same size, consisting of 3-5 plaza groups, although site organization is completely different. While Muqbil'ha' Viejo is organized with a more typical settlement density (mound groups are 30-50 meters apart), La Lima is spread out over more than a kilometer of narrow valleys, with each group approximately 300 meters from the next. The site is book-ended by two larger mound groups at its extreme edges, both of which front the principal entrances for Los Nacimientos, the furthest down-river cave in the Candelaria system and the principal focus of Late Classic ritual activity. In addition to its low density, the site is organized in a typical northern highland manner, with larger mounds built into the valley walls (Ohnstad 2005, A.L. Smith 1955).
with a rubble and earth fill. Exterior stones are irregular in shape and size and roughly hewn, heavily eroded and pitted on the non-visible sides.

Figure 5. La Lima Group A.
A total of 18 units were opened in La Lima in 2003 (Figure 5), exposing a back-structure midden and a corridor between structures two and three. The midden contains large pieces of daub intermingled with the ceramics, obsidian, chert, and other refuse. In addition, three units were placed in the entrance of the nearby cave Ratón de los Dientes (100 meters to the northeast).

Ceramics from the Caves

Unlike other caves in the area (Bill et al. 2003, Woodfill et al. 2005), use of the Candelaria system begins relatively late, with a miniscule amount of material recovered from the Terminal Preclassic. Use peaks in the latter part of the Early Classic (Tzakol 2 and 3), at which point it greatly overshadows other ceremonial centers in the rest of the region (Woodfill and Monterroso 2005). A smaller, more restricted period of use is found at the eastern, downriver part of the system in the Late Classic, surrounding the site of La Lima.

While use before the Late Classic is almost exclusively lowland-oriented with locally-produced wares directly imitating modes from the Central Petén (Woodfill et al. 2005), ceramics from this time period are mostly local, Alta Verapaz in style (cf. R. Smith 1952, Arnauld 1987, Arnauld 1986) with a small amount of lowland material presumably imported or brought by ritual practitioners from further north found within the cave system but not in the site itself.

Interestingly, in spite of the sheer quantity of ceramics from the caves (with an average of over 10 kg. in each 5 cm. level excavated in the 2004 field season), there is very little variation in form, type, and decoration in the Early Classic, and the clay used to make the vast majority of vessels seems to have been from the same source (INAA samples have been taken by Bishop and are awaiting analysis), even though the Early Classic and Late Classic ceramics are from different spheres (Petén and Alta Verapaz) and use different technologies (quartz and calcite in the Early Classic and ash, sand, and vegetal matter in the Late Classic). All of this strongly suggests that the ceramics were locally-made.

Early Classic Ceramics from the Candelaria Caves

There is very little variation in forms and types in the caves (Woodfill and Monterroso 2005). The largest represented type is Quintal Unslipped (mostly jars with a few spiked incensarios), followed by Águila Orange (mostly jars with a few curved Z-angle bowls). There is a wide range of color for Águila slips, from dull orange (2.5YR5/8) to bright orange (2.5YR6/8) to reddish-orange (10R5/8), although there is minimal variation in paste with this and all other Early Classic types. The Dos Arroyos collection (Figure 6b, shown below), which is slightly smaller than Águila, is almost exclusively composed of
basal-flanged bowls, with a few interior-slipped open bowls and a small amount of jars identical to those in the Águila group with the addition of red and black slip in simple geometrical patterns. There is very little variation in the iconography represented here—with few exceptions, all of the Dos Arroyos-group ceramics contain the "Serpent Head X" complex identified by Robert Smith (1955). Balanza-group ceramics are the most variable, with a few basal-flanged bowls, cylindrical slab-footed tripod vessels, open bowls, and jars.

Figure 6. Early Classic Polychrome from the Candelaria Caves.
There is a small amount of outlying ceramics – Fama Buff and Pucte Brown jars, a Dos Arroyos hemispherical bowl with an appliquéd "Curl Mouth" face (Figure 6a, shown above, Taube, pers. comm. 2005), and thin cylindrical vases with a cream and specular red slip, but the majority of vessels are much more standardized in form, decoration, and paste than one would expect for a pilgrimage site with no large nearby settlement. In addition, the ceramics are much more closely related to the Central Petén than to sites in the southwestern Petén, which are larger, thicker, and, in the case of Dos Arroyos Orange Polychrome, with much larger basal flanges and higher sides. There is, however, a minority variation of Dos Arroyos with a bright orangish paste, a large quantity of mica, and a cruder, more-easily-eroded slip which appears in small quantities in sites around Aguateca (Woodfill personal observation 2005).

Late Classic Ceramics from La Lima and Associated Caves

In the Late Classic, there is little doubt as to the local origin of the cave ceramics, as they are identical to those in La Lima. Vessels in this time frame have an interesting mix of northern highland and southern lowland characteristics – the technology is identical to that found by Arnauld (1986) and Smith (1952) in southern and central Alta Verapaz and Ichon (1992) in Quiché, with ash, sand, or organic temper and easily-eroded slips, but the forms are significantly different than those previously reported, with several new types and almost exclusively local varieties of pre-existing types having been identified (Monterroso 2005, Woodfill and Monterroso 2005).
Service wares in La Lima are exclusively sand- or ash-tempered and, while in many cases the slip is too poorly preserved to be certain, the majority of vessels seem to have been slipped brown (Chichicasté Brown-Black [Figure 7, shown above], identified by Arnauld [1986]), with a lesser quantity of red, cream, orange, and black surfaces. In spite of the similarity in paste and many of the modes to examples from further south, however, it is difficult to assign a specific type to the majority of vessels, and, at least in some cases no pre-existing type could be used. An example of this is "Sechochoc
Black” (Woodfill and Monterroso 2005, Figure 8, shown below) a northern highland version of Infierno Black – delicate plates with a small, sometimes-modified basal flange. While the sherds are ash-tempered (typical of highland pieces), black slip has not been identified in previous studies in the Northern Highlands, nor does the particular form appear.

![Figure 8. Sechochoc Black.](image)

There are also several plates associated with the last construction episode that are identical in form and decoration to Altar Orange and Trapiche Incised except for the presence of ash and ground pumice mixed into the paste (Ibid.). Two examples of Early Postclassic Alta Verapaz vessels (Figure 9, shown below) were uncovered from one of the associated caves – a black Z-angled bowl with incised pseudoglyphs (Lima Black Incised [Arnauld 1986]), and a small red-slipped jar with thick walls and four handles.

Although lowland ceramics are completely absent from La Lima (several examples are found in associated caves, however), some of the sample is identical to vessels from around Carcha, although in limited quantities. So-called Monkey pots (Smith 1952) were found scattered throughout the site, and in the caves were found several examples of a cream gouged-incised bowl with a band of pseudoglyphs below the rim and an orange lip (Figure 10, shown below, cf. Arnauld 1986: 424, fig. 182). Many of the decorative modes used at La Lima are shared with other sites in the Northern Lowlands, including cross-hatched deep incisions, bands of single or clustered reed-stampings, basal or medial ridges, alternating bands of different colors near the interior rim of bowls, and interior smudging.
Figure 9. Postclassic Ceramics from Cueva de los Metates.
Although there are a few Cambio pots and sherds in the caves, all of the utilitarian ware in La Lima is either Cebada Porous (Arnauld 1986) or related types (Woodfill and Monterroso 2005). The Cebada from the site (Figure 11, shown below), however, shares characteristics of both neighboring regions – the vessels are extremely lightweight, due to organic temper (which burned away in the firing process, leaving large pores throughout the paste), and the surfaces, while pockmarked, have been well-smoothed. However, the ubiquitous loop-handles found in specimens further to the south are completely lacking, and the form much more closely resembles Cambio with its wide-flaring mouth and continuous curve between the body and the neck. In contrast, Cebada from further south often has a break between the body and the neck (at the point of articulation with the handles) and only a slightly out-curved rim (Arnauld 1986).
The Impact of Excavations in La Lima

It is the definition of a local variety of Cebada Porous that may prove to be the most important contribution of La Lima. Since its identification by Marion Hatch (pers. comm. 2005), it has also been found to have composed a large quantity of the utilitarian wares at Cancuén (Monterroso, personal observation 2005) and makes an occasional appearance in Late Classic samples as far north as the Petexbatún (Castellanos and Woodfill, personal observations 2005). The La Caoba area, under investigation by VUPACS in 2001 and 2002 (Woodfill et al. 2003), also has evidence of this type both in caves and on the surface, mixed in with other general Cancuén-sphere types.

Some studies have successfully used utilitarian ceramics, which are often used as a marker for determining ethnicity (Berlin and Slane 1999, Sanders 1977, Spence 1996), as the technology used to make them as well as the jobs for which they were made tend to change very little over time within the same group. The lack of any highland utilitarian ceramics in the Candelaria Caves or other parts of the region in Early Classic contexts seems to indicate that in the Late Classic there was an influx of population into the region from the south. The identification of this type, which has been grouped into Cambio in previous investigations in the Upper Pasión, will allow present and future scholars to better understand the relationship between highland and lowland groups here and potentially further north.
The Role of the Candelaria Caves in the Maya World

Unlike other caves in the region, Candelaria began to be used only around the beginning of the Classic period, and peaked in the Early Classic with rituals apparently performed by people with distinctly Central Petén tastes. The smaller, more concentrated Late Classic use appears to have been unrelated to earlier use, as it is almost exclusively northern highland and consists of entirely local modes. What could have accounted for this change?

Another FAMSI-sponsored project directed by Federico Fahsen (2002) to rescue the newly-discovered steps of a hieroglyphic staircase at Dos Pilas revealed that Tikal already had control of the Río Pasión and at least the riverine section of the Great Western Trade Route before the founding of Dos Pilas, and the reason for the city's existence was to maintain Tikal's control of the route. This would indicate that the practitioners of ritual activities in the Candelaria Caves were at least associated with Tikal in the Early Classic, if not merchants and travelers from the site itself, which would account for the more "cosmopolitan" tastes in ceramic vessels.

In the Late Classic, however, use of the river system changed drastically. Many new sites were founded, including Cancúén (Demarest and Barrientos 2002), Dos Pilas (Houston and Matthews 1985), and possibly Raxruha Viejo (Bill et al. 2003). Cancúén was situated at the headwaters of the Río Pasión and served as a processing center for exotic raw materials coming down from the highlands (Kovacevich 2003), rendering travel into the highlands by lowland merchants obsolete. As a result, use of the caves decreased dramatically and became replaced by local ritual activities, and exterior ties shifted to the highlands, possibly with intermittent use by residents of Cancúén (accounting for the scattered Late Classic lowland wares).

The presence of exotics such as obsidian from Pachuca (Carpio, pers. comm. 2004) and Cerro de las Navajas (cf. Arnauld 1986) as well as apparently locally produced versions of fine orange ceramics show that La Lima lasted further into the Terminal Classic than sites immediately to the north. This again reaffirms ties to the Northern Highlands, did not collapse with the Petén. However, with the loss of the lowland market, use of the Candelaria Caves appears to have ceased soon after the abandonment of Cancúén and the cessation of the trade route, and residents of La Lima moved away soon after.

Conclusions

Research in the Candelaria Caves and associated settlements had several important outcomes. With FAMSI-sponsored and subsequent investigations, the Candelaria system is the first large ritual center in the southern lowlands to have been intensely studied. A paradigm of patterns of traffic and trade along this segment of the trade route has been created with data obtained, which will be tested in further investigations. As the first archaeological investigation at "ground zero" of the highland-lowland transition,
VUPACS was able to see the changing relationships between these two regions throughout the Classic period and the impact of the collapse and changes in the trade route had on the northern highland Maya.

But the most important result of these investigations there may be largely unrelated to archaeology. The Q'eqchi’, who are among the poorest in the Maya World, are now stewards of their own patrimony and co-managers of the Candelaria Caves National Park. This was only made possible through the archaeological registry made during the 2003, FAMSI-funded field season, which was a necessary step in the creation of the park.

The Q'eqchi’ are still benefiting from this research, which has resulted in an archaeological manual of the Candelaria Caves used in training for local guides, and maps of the tourist caves have been modified for the local village committees in order to monitor the impact of traffic in these caves. The tourist paths themselves were created by members of VUPACS in order to assure minimum impact on fragile formations and archaeological remains.

Thanks to FAMSI, members of VUPACS have been able to have a positive effect on both archaeologists’ understanding of this corner of the ancient Maya World as well as on two modern local communities. Research here and at other sites in the Cancuén area has been based on a partnership among archaeologists, the local government, and neighboring communities, which has resulted in benefits to all.

**List of Figures**

*Figure 1.* The Candelaria Caves National Park.

*Figure 2.* The Upper Pasión Region and Northern Alta Verapaz.

*Figure 3.* Cueva la Iluminada.

*Figure 4.* Ratón de los Dientes.

*Figure 5.* La Lima Group A.

*Figure 6.* Early Classic Polychrome from the Candelaria Caves.

*Figure 7.* Chichicaste Brown-Black.

*Figure 8.* Sechochoc Black.

*Figure 9.* Postclassic Ceramics from Cueva de los Metates.

*Figure 10.* White-Slipped Gouged-Incised Bowls.

*Figure 11.* Cebada Porous.
Sources Cited

Aguilar, Boris

Arnauld, Marie Charlotte


Berlin, Andrea and Kathleen Warner Slane

Bill, Cassandra, Michael Callaghan, and Jeannette Castellanos

Carot, Patricia

Demarest, Arthur and Tomás Barrientos
Fahsen, Federico

Hammond, Norman
1972  "Obsidian Trade Routes in the Mayan Area." In Science 178: 1092-3.

Houston, Steven and Peter Matthews

Ichon, Alain

Kovacevich, Brigitte

Monterroso, Mirza

Ohnstad, Arik

Pope, Kevin and Malcolm Sibberensen

Sanders, William

Segura, Adriana and Mirza Monterroso
Smith, A. Ledyard

Smith, Robert

1955  "Ceramic Sequence at Uaxactún, Guatemala (2 volúmenes)." In *Publications of the Middle American Research Institute, no. 20*. New Orleans: Tulane University Press.

Spence, Michael

Woodfill, Brent

Woodfill, Brent, Federico Fahsen, and Mirza Monterroso

Woodfill, Brent, Álvaro Ramírez, Carlos Girón, Jose Hurtado, Mirza Monterroso, Nicholas Miller, and Paul Halacy

Woodfill, Brent and Mirza Monterroso