



## Chapter 20

# “Pottery for All Reasons:” Ceramics Through Time in the Sibun Valley

*Sandra L. López Varela*

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Pottery making involves a series of decisions made by a potter on what resources to use and which form to produce in order to meet specific needs. There is a “pot for all reasons,” as stated in the title of an edited book by Kolb and Lackey (1988). Understanding the motivation behind pottery production rarely has been achieved through the type: variety system, a preferred method by archaeologists who study Maya pottery. Ongoing ceramic analysis from the Sibun Valley settlements and caves provides a unique opportunity to explore the motivations behind pottery making and use. Traditional research includes typological descriptions of pottery supported by archaeometric techniques. When correlated with radiometric and stratigraphic data these techniques can provide a chronological framework for the studied region. A postprocessual framework guides our research to address the rationales behind pottery production in order to reach an anthropological interpretation of the past.

### **Geolocation of Pottery Collections**

Analysis of pottery from the Xibun Archaeological Research Project (XARP) includes ceramics from both caves and settlements located in the upper, middle, and lower reaches of the valley. Specifically, collections originate from excavations at the sites of Augustine Obispo, Pakal Na, Hershey, Pechtun Ha, Samuel Oshon and Cedar Bank, and from explorations in the underground caverns of Actun Chanona, Actun Ibach, Actun Ik, and Ek Waynal caves. The study of pottery from the caves of the Sibun Valley, in particular, provides an opportunity to explore the ritual and symbolic meaning of pottery deposition within a cave environment. The goal of this analysis is to arrive at an understanding of how pottery was produced, used, re-used, and discarded by the Xibun Maya.

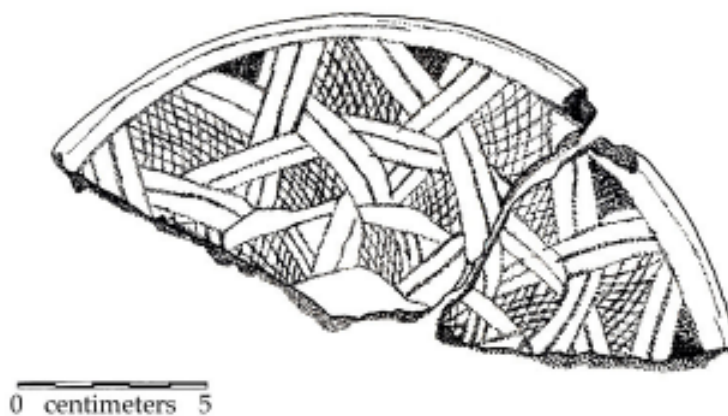
Analysis presented here provides a preliminary interpretation of inter- and intra- regional Maya networks across a temporal sequence spanning the end of the Late Formative to the early Colonial occupation at Cedar Bank. Local ceramic traditions of the Belize Maya region are represented for the Late Formative through the Postclassic period. In general, the Sibun Valley pottery types and varieties demonstrate modal links to the Belize Valley, Central Petén, and the Usumacinta-Pasión regions throughout the Maya Classic period. Postclassic pottery within the region shares pottery traditions with the Yucatán Peninsula and Central Petén.

### **Formative to Early Classic Pottery in Caves of the Sibun Valley**

Pottery from the caves of the Sibun Valley suggests intermittent visitation from the Late Formative to the Postclassic period. Pottery of Chicago Orange, Flor Cream, Hillbank Red, Monkey Falls, Unnamed Red-on-orange and Aguacate Orange was recognized at Actun Ik cave. At Ek Waynal, pottery types refer to the Late/Terminal Formative (e.g., Hillbank and Monkey Falls Brown) and to the Early Classic (e.g.,

Minanha Red). These types are reported as part of the ceramic assemblages of the Late to Terminal Formative of a vast region extending from northern Belize to the Belize Valley (López Varela and McAnany 1998).

Thus far, Late Formative to Early Classic pottery has been recovered only from cave explorations in the Sibun-Manatee Karst; none has been excavated in the settlements. Early Classic pottery is present at Actun Ibach, Actun Ik and Ek Waynal caves. Pottery markers of the Early Classic, such as orange glossy slips and polychrome basal flange plates, are well represented at Actun Ik cave by the following type: varieties -- Aguila Orange: Aguila Variety; Pita Incised: Unspecified Variety; and Actuncan Orange Polychrome: Actuncan Variety. Fragmentary Actuncan Orange Polychrome: Actuncan Variety bowls were deposited in Actun Ik and Ek Waynal caves, while vessels of Caldero Buff Polychrome: Variety Unspecified vessels were placed only in Actun Ibach. This cave also contained fragments of Lucha Incised: Unspecified Variety lid. The cover, incised with a mat design (Figure 20.1), was probably part of a monochrome tripod cylinder vase, an innovation in the Early Classic Maya vessel repertoire. Grooves and incisions of walls had been used previously to frame a Maya polychrome scene and to decorate monochrome vessels.



**Figure 20.1** Fragments of Lucha Incised: Lucha Unspecified variety lid and bowl sherd found at Actun Ibach.

In central Petén, tripod cylinder vases are said to be symptomatic of contact between Maya elite communities and those of Teotihuacan (Culbert 1993). Many of these polychrome vessels have been excavated at Tikal (Culbert 1993), Uaxactun (Smith 1955), and Copán (Sharer et al. 1999). However, not all Maya communities adopted the tripod cylinder vessel or expressed through material symbols a connection with Teotihuacan. In the Sibun Valley, Maya potters grooved and/or incised the walls and covers of monochrome tripods with Maya, rather than Teotihuacan, symbols. For instance, pottery types such as Lucha Incised, Santa Teresa Incised or Urita Gouged Incised were decorated heavily with chevrons, punctuated lines, incisions, and grooves, forming scrolls, triangles dots, or geometric weave patterns (Figure 20.1).

## Late Classic Pottery of the Sibun Valley Caves and Settlements

The founding of communities in the Sibun Valley may have occurred sometime during the Early Classic, but ceramic evidence relating to this time period has not been recovered. Unambiguous evidence does exist, however, for settlement growth during the Late Classic. The late growth is comparable to that of Xunantunich, located to the north in the Belize Valley (Le Count et al. 2002). Correlation of ceramic types between the caves and the settlements is noted from the Late Classic through the Postclassic.

In general, Late Classic ceramic assemblages are formed by vessels of Cambio, Encanto, and Tinaja groups (Smith 1955; Adams 1971; Sabloff 1975; López Varela 1989; Foias 1996). The jar form, in comparison to Early Classic times, increased in size, most likely in response to the food and ritual needs of an expanding population. Communities of the Sibun Valley acquired or locally produced the domestic wares of the Late Classic. Jars of Cambio Unslipped, Encanto Striated and Tinaja Red occur in the Sibun caves and at the settlement of Samuel Oshon and Pechtun Ha. Tinaja Red also is included in the ceramic assemblage of the Hershey site. Nanzal Red vessels are present both at Samuel Oshon and Aktun Ik. The presence of the Cambio, Encanto, and Tinaja groups in the Sibun Valley supports a link to the Central Petén and beyond; this link is further demonstrated by the presence of Cubeta Incised at Pechtun Ha, a Late Classic type that also occurs at Pomoná and Yaxchilan (López Varela 1989, 1998).

The Belize region also was producing its own distinctive red wares, specifically a Pine Ridge Carbonate (classified as Roaring Creek Red: Roaring Creek Variety). The Dolphin Head and Vaca Falls ceramic groups, characteristic of the Belize Valley and sites in northern Belize, also are part of the Late Classic assemblage of the Sibun Valley. Distributional patterns vary by group, type, and form. For instance, Roaring Creek Red is found in most caves explored by the XARP project and at the Hershey and Pechtun Ha settlement sites. Bowls of Dolphin Head Red are present at Actun Ibach and Actun Ik and at Pechtun Ha. Although many types are present both in caves and settlements, the “domestic formula” changes meaning when a vessel is transported to the symbolic underworld of caves (Stone 1995).

The Late Classic is well known for the Saxche and Palmar polychrome traditions found in the Usumacinta, the Pasión, Central Petén, the Belize and Sibun Valleys, and as far south as the Alto Salama River (Ciudad Ruiz 1988) and Alta Verapaz (Arnauld 1987). Polychrome vessels found at Actun Ik Cave span the Early and Late Classic periods to include Early Classic Actuncan Orange Polychrome and Dos Arroyos Orange Polychrome and Late Classic Benque Viejo Polychrome. Vessels of Palmar Orange Polychrome: Variety Unspecified were found at both Actun Ik and Ek Waynal, as well as the settlements of Augustine Obispo, Pakal Na and Samuel Oshon. Xunantunich Black on Orange: Variety Unspecified vessels appeared at Pechtun and Samuel Oshon as well as Actun Ik. Local pottery of the Belize region also is expressed in Benque Viejo Polychrome: Variety Unspecified, Chunhuitz Orange: Variety Unspecified, and Gallinero Fluted: Gallinero Variety.

## **“Last Pots” of the Classic Period in the Sibun Valley**

Throughout the Maya lowlands, Terminal Classic pottery expresses strong continuities with the Late Classic. The domestic formula of the Tinaja, Cambio, and Encanto groups endured through the Terminal Classic at sites such as Seibal (Sabloff 1975), Yaxchilán (López Varela 1989), the Tayasal-Paxcaman zone (Chase 1984), Macanche Island in El Petén (Rice 1984), Kichpanha (Reese and Valdez 1987), and Cerro Palenque (Joyce 1987:420).

A noticeable feature of the ceramic complexes of northern Belize and the Sibun Valley is a lightly striated, buff unslipped olla, named Red Neck Mother Striated (see Chase 1982). These jars are decorated with deep red slip on short outflaring necks. In the Terminal Classic period, however, the rims are slipped red down to the shoulder, and the bodies of the jars can be striated or plain (Graham 1987: 78). Similar ollas have been reported in Belizean caves (Pendergast 1974) at San Jose (D. Chase 1982: 138-139) and at Lamanai and Actun Polbilche (Graham 1987: 79). These vessels were also encountered during explorations by the XARP Project at Pass-Through cave (Csank 1998: Figures 6.1 and 6.5) and Pottery Cave (Csank 1998: Figure 6.10; compare with Graham 1987: Figure 2j found at Actun Polbilche). Graham (1987: 78) notes that large jars with slipped or washed rims are common in Belize from Middle Preclassic to Postclassic times; however, extension of the slip down on to the vessel shoulder appears to be a hallmark of the Terminal Classic period.

In Belize, another marker of the Terminal Classic period is a large dish with outcurved sides, basal break, a ring base or pedestal base, and a wide flared-everted rim that is flattened on the interior and beveled near a rounded or squared lip (Gifford 1976: 241). As noted by Graham (1987: 78), the form is widespread in Belize and occurs in a variety of types such as Roaring Creek Red and Daylight Orange. Distribution of this form is widespread and includes the Stan Creek District, Actun Tzimin in Caves Branch Valley, Actun Pobilche in the Sibun Valley, Altun Ha, and San Jose (Graham 1987: 78). The XARP project reported similar vessels from the following cave locations: Chrissy’s Crawl-Though (Csank 1998: Figure 6.4) and Pottery Cave, where Roaring Creek vessel forms (Csank 1998: Figure 6.7 and Figure 6.9) are almost identical to one found in a burial at Lamanai (Graham 1987: Figure 2d) and another reported by Graham (1987: Figure 2f) for Actun Tzimin. The form can be traced back to the Protoclassic-period polychrome dish with flared sides, basal break, and ring base. The basal break continued through the Late Classic in the tripod vessels of Saxche and Palmar groups. During the Terminal Classic, the form is elongated, and the ring base stretched, ending in a large volumetric form for the Postclassic. The widespread use of pedestal bases is a common trend of the Terminal Classic in Belize, Central Petén, and the Usumacinta-Pasión regions; it is best expressed in pyriform vases. A related bottle form, lacking a pedestal base, was collected from Actun Chanona. This reddish yellow (7.5YR 7/8) conical bowl with a sagging base is probably a Duck Run Incised: Duck Run Variety (Gifford 1976: Figure 148) decorated with incised half circles.

At the site of Pakal Na, a pedestal conical bowl with a small mouth is an addition to the Terminal Classic repertoire. An individual (Burial 1, Operation 22) was interred with two vessels of this form. The reconstructable vessel has a light brown (7.5YR 6/3), brown (7.5YR 4/2), to black (7.5YR 2.5/1) color (Figure 5b). The height of this vessel is 19.5 cm; the diameter is 6.5 cm. The insloping walls slant in a 40° angle. The base is very interesting, as it has a sagging belly placed on a 2.32 cm high pedestal base. The vessel is slipped and burnished on the exterior side and can be identified as Xuku incised. A series of circumferential lines encircle the vessel immediately below the rim, which terminates with a rounded lip. The vessel is decorated with three dimples that encircle the vessel. Circular depressions are not a common

decoration; Ichon and Grignon Cheesman (1983: Figure 83c) report Late Classic vessels from the Middle Chixoy Valley with circular hand-modeled depressions or domes. This so-called Rio Negro Brun Noir type was found in Late Classic Tomb 1 at Chirramos. Ichon and Grignon Cheesman (1983) consider the decoration to be an indication of the Postclassic period. In the Middle Chixoy Valley, the Late Classic ceramic assemblage shares another Belize Valley marker: vertical walled, ring-based vessels. Such vessels were found in Pottery Cave (Csank 1998: Figure 6.6), Altun Ha (Graham 1987: Figure 2g), and Seibal (Sabloff 1973: Figures 300-302). Common to the Belize and Sibun Valleys (Gifford 1976: 146; Csank 1998: Figure 6.3) are impressed dishes with elongated flaring sides classified as Kaway Impressed: Kaway Variety and found in Pottery and Actun Ik caves. The vessels follow the Tepeu trend of finger impressed jars of the Cambio and Encanto groups.

### **Fine paste pottery in the Sibun Valley**

Modeled-carved vessels are exemplified in the Sibun Valley through what Helmke, Colas and Awe (1998) named Belize Valley Modeled-carved vessels. The so-called Belize Valley Modeled-carved vessels are well known from Chanona and Footprint Caves (Graham, McNatt and Gutchen 1980). Helmke, Colas and Awe (1998: 101) report the finding of these vessels at Water Fall Cave and at a number of surface sites, for example, Ucanal, Baking Pot, Xunantunich, Maintzunun, Lamanai, San Jose, Altun Ha, Pacbitun and Actun Balam. Fragments of modeled-carved vessels have been found at Hershey and Pakal Na during excavations in Sibun Valley sites. Fragments of a so-called Pabellon Modeled-carved vase recently found at Chanona cave might be part of the so-called Chanona vase reported earlier by Graham, McNatt and Gutchen (1980: Figure 20.8).

The iconographic theme of the Belize Valley Modeled-carved vessels is fairly standardized as previously noted by Graham, McNatt, and Gutchen (1980) and Helmke, Colas, and Awe (1998: 96). The latter authors characterize Belize Valley Modeled-carved vessels as composed of a band of glyphs or primary standard sequence carved just below the rim, below which a relatively standardized scene was depicted within two panels. More than decoration, the panels detail a narrative. According to Helmke, Colas and Awe (1998: 131), the glyphs of the texts were written in Yucatec Mayan, suggesting a well-defined regional tradition of PSS dedications in Yucatán. In contrast, the iconography of the Ucanal vase, according to Helmke, Colas and Awe (1998: 106) is Usumacinta/Central Mexico-based. The scene on the Ucanal vase depicts the presentation of a captive to a lord who is dressed in a warrior's costume. The authors suggest that prior to the conflict, which resulted in the capture of the kneeling prisoner, the lord had undergone a bloodletting ceremony, indicating strong continuity of Late Classic ritual conventions. The Belize Valley Modeled-carved vessels also express confrontational scenes like those of the Usumacinta and Pasión regions.

Sherds of Fine Orange pottery are in the Sibun Valley; this fact supports arguments against the theory that foreign invaders introduced fine pastes (see Foias 1996; López Varela 1998). The making of Belize Valley Modeled-carved vessels may be a further clue to the adoption of a fine paste tradition that had been present in the Yucatán since the Late Classic. Chemical characterization and provenance studies are needed to define the locus of production of the Belize Valley Modeled-carved vessels, as have been conducted for the Pabellon Modeled-carved vessels of the Usumacinta zone. Such studies are needed before confirming that these vessels are not related to Pabellon Modeled-carved as Helmke, Colas and Awe (1998: 98) have suggested. Significantly fine paste pottery that clearly falls within the Altar Group also is present within the pottery assemblage of the Sibun.

## The Postclassic Period in the Sibun Valley

The beginning of the Postclassic period in the Sibun Valley is marked by the appearance of new ceramic modes linked to the Yucatán Peninsula. These modes proliferate during the time following the Burial 1 mortuary ritual at Pakal Na (see Harrison and Acone, Chapter 10, this volume). Previous markers of the Terminal Classic, however, continue into the early part of the Postclassic, for example: pyriform jars, pedestal base cylinders, and open tripod bowls with bulbous or effigy molded supports. Communities in the Sibun Valley followed the Tayasal-Paxcaman ceramic styles, such as Maskall Unslipped: Maskall Variety (A. Chase 1984: 36). This type was identified at the Samuel Oshon site for the Early Postclassic. *Comales* are found in the Yalam ceramic at Colha (Valdez 1987: 252) and within the ceramic inventory of the Samuel Oshon site.

Middle Postclassic pottery in the Sibun River Valley is expressed in the Paxcaman Ceramic Group found at both Pakal Na and Samuel Oshon sites. Chase and Chase (1987: 61) suggest that the appearance of Paxcaman Red ceramics during the Middle Postclassic period is the result of local experimentation in the Tayasal-Paxcaman zone. Valdez places the Paxcaman ceramic group (1987: 253) in the Middle Postclassic Canos Complex of Colha.

The Late Postclassic in the Sibun Valley may be identified by a cylindrical support from a tripod bowl or dish that exhibits two circular vents. The support, excavated from the Samuel Oshon site, may belong to a Payil Red vessel. Identical supports are reported for Los Renegados (Valdez and Guderjan 1988: Figure 1: 23), Mayapan (Smith 1971: Figure 41), and Watson's Island (Graham 1994: 197). Graham (1994: 167) also reports a grater bowl from Altun Ha and Lamanai with similar supports. Graham places these dishes chronologically between the late 14<sup>th</sup> and 15<sup>th</sup> centuries A.D.

Thus far, Postclassic pottery from the Sibun Valley is concentrated at the sites of Pakal Na, Samuel Oshon, and Actun Ibach. Types of Tulum Red (Paxcaman Red), Ixpop Orange Polychrome, and Mama Red (Papacal Incised) groups have been identified within the collections together with Mayapan-style incensarios. Postclassic pottery may be considered scarce in comparison with pottery from other periods; however, identification of these essential components of the Postclassic sequence serves as basis for future studies.

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## Chapter 21

# Pottery Vessels from Chanona, Usrey, and Arch Caves

*Alleen Betzenhauser*

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Caves are an excellent resource in the study of archaeological ceramics. They represent one of the few environments in which whole vessels can be preserved and studied. The lack of weathering and relatively constant temperature aid in the preservation of materials that would undoubtedly deteriorate in other sections of the tropics. Through the Xibun Archaeological Research Project (XARP), I have begun to study the whole vessels found in three of the caves mapped during the 2001 season; Actun Chanona, Usrey Cave, and Arch Cave. These caves are located within walking distance of the Sibun River and are relatively near to surface sites that were excavated.

Actun Chanona is located in the karstic limestone of the upper reaches of the Sibun River, near the foothills of the Maya Mountains. It is a large cave with an impressive eastern entrance. The ancient Maya modified many sections of the cave, especially an area called the Great Platform. This region consists of a large natural rock formation with cracks and crevices that were filled in with limestone breakdown, a layer of red clay, and finally, a layer of burned material and sherds. This area is an important frame of reference within Actun Chanona.

Usrey Cave is much smaller than Chanona and is located in the middle reaches of the Sibun. It is one of many caves in the Tiger Sandy Bay district. There are also examples of human modification, however on a much smaller scale than Chanona. This section of the valley can be characterized geomorphologically as cone-karst and cockpit karst. Although Usrey Cave contains an extremely difficult of access chamber with four vessels, the vessels under study here were found in an alcove above the main entrance.

The final cave is Arch Cave that is located in the lower reaches of the Sibun River. This region marks the furthest extent of the karstic limestone. The cave is relatively easy to access because the men who care for it built stairs to enable visitors to tour the cave. Evidence of ancient modification is also present. The entrance was completely blocked with limestone rubble at one point in time. A pathway of broken sherds leads to a jaguar tooth and a hidden room that contains fifteen complete vessels. This path has been termed “sherd alley” and the room is called the “assassin bug chamber” due to the large number of cone-nosed insects that live in and near the room. The main focus of this research is the distribution of whole pottery vessels found within these three caves. The size of the vessels and context in which they were encountered by the cave teams will shed some light on the purpose and significance of such vessels, especially if there is standardization of form or size.

## Methods

The process of studying cave ceramics began with the selection of the caves. I sampled these three caves because they are located in three different sections of the Sibun River Valley and they contain examples of whole vessels. The next stage took place inside the caves. While in the cave, a member of each team drew a sketch of each of the fifteen vessels using measurements taken from the actual artifact. The height and wall thickness were recorded with measuring tapes and calipers where possible. If the base

was missing due to the presence of a kill hole then the actual height could not be measured. If the vessel was whole then the actual wall thickness of the neck and base could not be measured. A sketch of the surface appearance was completed in the cave along with Munsell colors. The colors are difficult to record exactly due to the poor lighting environment. The actual vessels were left inside the caves because they are believed to be safe from looting and the transport of some vessels would most likely result in fracturing. This study presents a small sample of the Sibun Valley cave vessels because all the caves in the valley have not been explored nor mapped and looting of some caves has prevented the recording of these vessels that were removed. Also, the vessels located in the assassin bug chamber could not be studied this season due to the possible health hazards associated with the insects. Possibly next season a method for removing or repelling the assassin bugs would make the study of these vessels feasible.

The next step took place in the lab. We used the sketch drawings as templates in order to produce a finished drawing of each vessel. The measurements were followed exactly and in the instances where measurements could not be recorded we estimated wall thickness. I then used the original drawings along with the cave forms to compare the vessels and their contexts. The drawings were done on a scale of 1:1 cm originally; however, to be included in the report they had to be scaled down via a photocopier to 33 % of the original size and then inked.

## Data Set Description

All the vessels were most likely constructed by hand using a coil method. Since the Maya did not have a pottery wheel, the vessels could not have been thrown. The jars and bowls were probably made in a fashion similar to that of the modern-day Maya of Guatemala (Reina and Hill 1978: 81-86). The Maya probably constructed the large ollas in sections in order to shape and be able to manage the clay on that scale. The rims and appendages such as pedestal and ring bases were added to the vessel form in the third stage, after the body had been shaped and smoothed. The firing of these vessels is a complicated task. A certain temperature must be reached in order to bake the clay. Also, tempers added to the clay aid in the firing process by making the vessels more durable. Multiple vessels can be fired at once in an open-air kiln which is the type of kiln the Maya most likely used. The transport of such vessels can also be seen in the modern ethnographic example of Guatemala. When bringing ceramics to market to sell, many Maya people carry the vessels in a net or *cacaste* (cargo container) attached to a tumpline that is strung across the forehead. The back of the transporter supports the weight of the vessels. A person would carry as many ceramics as they physically could in order to sell as many vessels as possible (Reina and Hill 1978:26, 208).

The following is a description of each vessel I drew during the course of the XARP 2001 field season and represents my study sample. These vessels range from massive ollas to small bowls and come from three different caves. All the information gathered here has been amassed from the cave vessel forms, the sketches, and final drawings. Figures 21.1-15 represent the scaled down drawings and profiles of these vessels. The final section of the description concerns the vessels in the Assassin Bug Chamber of Arch Cave. Since we could not draw nor take exact measurements of these vessels due to health concerns, I have compiled a table that gives a general description of each vessel (Table 21.1). Also included are views of the the Northwest, West, and Southwest sectors of the chamber in figures 21.16, 21.17, and 21.18, respectively. The information was gathered during the mapping of the assassin bug chamber and is recorded in the field notebook.

## Vessel Descriptions

Table 21.1 Vessels from the Assassin Bug Chamber

| Vessel No. | Brief Description (Taken from Mapping Notes)  |
|------------|---|
| 71         | Inverted gray olla between columns  |
| 72         | Inverted olla with kill hole on side and top  |
| 73         | Large black, inverted olla with a kill hole near back wall surrounded by rim sherds                     |
| 74         | Large inverted olla with large kill hole (bottom missing)   |
| 75         | Broken red bowl with mend hole (Roaring Creek Red?) in front of Vessel 74                               |
| 76         | Large, complete Roaring Creek Red bowl with kill hole in the bottom in front of chamber                 |
| 77         | Inverted olla with calcified, red rim and kill hole in the bottom, rim of vessel 78 rests on it         |
| 78         | Inverted olla, same form as Vessel 77 but larger, huge kill hole (bottom missing), resting on Vessel 77 |
| 79         | Small reddish olla, half missing, on its side   |
| 80         | Inverted olla with large kill hole in bottom, behind Vessel 77  |
| 81         | Inverted ring base bowl with large kill hole, stalagmite to the right                                   |
| 82         | Small upright bowl, ring base, medial break, large pieces missing from both sides                       |
| 83         | Large tan olla broken in half lying on its side   |
| 84         | Large cream colored olla, in half, on its side, left of the room entrance                               |
| 85         | Small bowl broken in half, similar to Vessel 82 but larger, behind Vessels 77 and 78                    |

### Vessel No. 45

Location: C 21 Actun Chanona

Form: Olla

Rim Type: Squared

Size: Rim Diameter = 32 cm

Height = 37.8 cm

Maximum Body Width = 37 cm

Rim Thickness = 1.45 cm

Neck Thickness = 1.15 cm

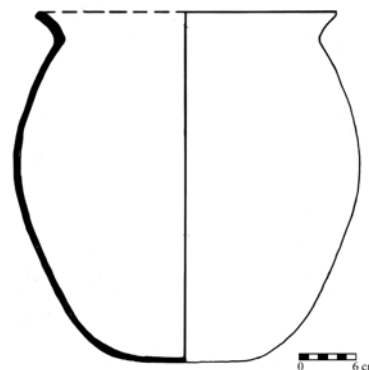
Base Thickness = N/A

Surface: Unslipped and fire-clouded

Paste: No visible inclusions, oxidized firing environment

Color: 10YR 5/1 Gray

Context: A mid-sized olla with a kill hole located at the western end of the Great Platform in a small outcrop.



*Vessel No. 47*

Location: C 21 Actun Chanona

Form: Olla

Rim Type: Beveled

Size: Rim Diameter = 39 cm

Height = 40 cm

Maximum Body Width = 37 cm

Rim Thickness = 1.43 cm

Neck Thickness = N/A

Base Thickness = N/A

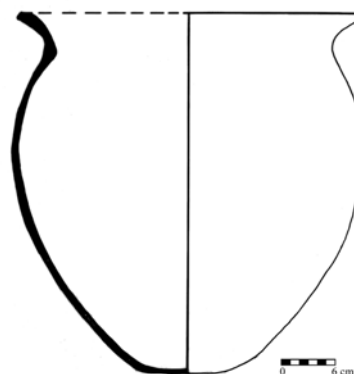
Surface: Unslipped, mottled

Color: 2.5 Y 7/1 Light Gray

Paste: No visible inclusions

Color: 10YR 6/1 Gray, 2.5 Y 4/1 Dark Gray

Context: A mid-sized olla located in an upper niche along the western edge of the Great Platform. No kill hole is present, however there are large fissures emanating from the base.



*Vessel No. 48*

Location: C 21 Actun Chanona

Form: Olla

Rim Type: Squared

Size: Rim Diameter = 28 cm

Height = 35 cm

Maximum Body Width = 34 cm

Rim Thickness = 0.83 cm

Neck Thickness = 0.72 cm

Base Thickness = 1.28 cm

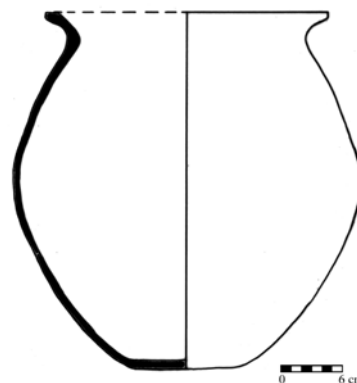
Surface: Mottled

Color: 10YR 4/3 Brown, 7.5YR 4/3 Brown

Paste: No visible inclusions, oxidized firing environment

Color: 10YR 6/3 Pale Brown

Context: A mid-sized olla located on the western slope of the Great Platform on the approach to the Western Entrance. A 13.85 cm diameter kill hole is present in the base of the vessel with radiating fractures toward the mouth.



*Vessel No. 49*

Location: C 21 Actun Chanona

Form: Olla

Rim Type: Squared

Size: Rim Diameter = 23 cm

Height = 26 cm

Maximum Body Width = 27 cm

Rim Thickness = 0.96 cm

Neck Thickness = 0.78 cm

Base Thickness = 0.94 cm

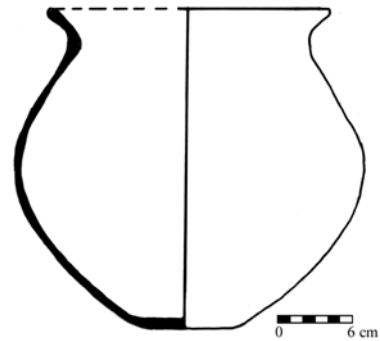
Surface: Unslipped and modeled with fire-clouding

Color - 7.5YR 2.5/1 Black, 7.5YR 4/6 Strong Brown

Paste: No visible inclusions, reduced firing environment

Color - 2.5Y 6/3 Light Yellowish Brown

Context: A small olla located 3 m West of Vessel 48 on route to the Western Entrance. 35% of the vessel is absent due to a massive kill hole that obliterated the base.



*Vessel No. 50*

Location: C 21 Actun Chanona

Form: Olla

Rim Type: Squared and flared

Size: Rim Diameter = 13 cm

Height = 33 cm

Maximum Body Width = 34 cm

Rim Thickness = 0.77 cm

Neck Thickness = 1.2 cm

Base Thickness = 0.65 cm

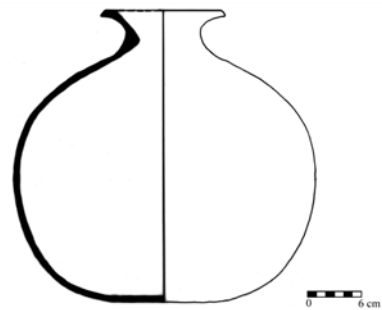
Surface: Slipped and burnished, calcification and fire-clouding

Color: 2.5YR 4/6 Red

Paste: Fine, white inclusions

Color: 2.5YR 5/6 Red

Context: This vessel is a mid-sized olla with a very restricted neck. It was found on its side with a large sherd inside the vessel that had been removed via a kill hole. The sherd was placed inside in antiquity as evidenced by the lack of calcification on the sherd. The vessel is located in a large burned area to the right of and above the Human Remains 1,2, and 5. It was most likely moved to this position because of the existence of a small speleothem (soda straw) near the neck of the vessel.



*Vessel No. 55*

Location: C 17 Usrey Cave

Form: Olla

Rim Type: Squared

Size: Rim Diameter = 22 cm

Height = 28 cm

Maximum Body Width = 29 cm

Rim Thickness = 0.57 cm

Neck Thickness = N/A

Base Thickness = N/A

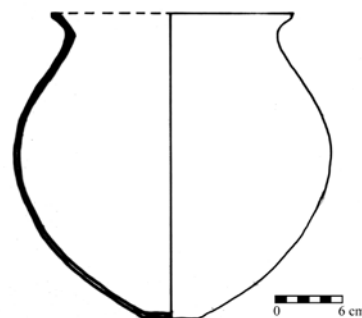
Surface: Slipped, striated, calcification, and fire-clouding

Color: 10YR 4/6 Red, 7.5YR 5/6 Strong Brown

Paste: No visible inclusions

Color: 10YR Light Yellowish Brown

Context: A small, red-rimmed olla found on its side in front of a small depression to the south of Vessel 56. The vessel is located in a small alcove.



*Vessel No. 56*

Location: C 17 Usrey Cave

Form: Olla

Rim Type: Squared

Size: Rim Diameter = 22 cm

Height = 23.5 cm

Maximum Body Width = 24 cm

Rim Thickness = 0.56 cm

Neck Thickness = N/A

Base Thickness = N/A

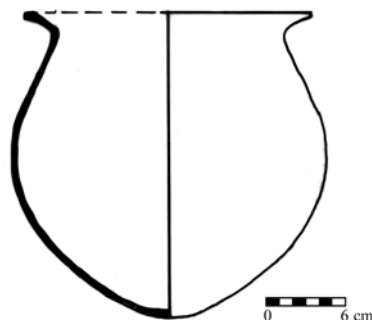
Surface: Slipped, fire-clouding, eroded

Color: 10YR 4/6 Red, 10YR 5/3 Brown

Paste: Calcite inclusions

Color: 10YR Light Yellowish Brown

Context: A small, red-rimmed olla closely associated with Vessel 55 in the small alcove above the main entrance. It is almost identical to Vessel 55 but shorter. It contains small animal bones and shells. A large, broken stalagmite from the other side of the depression was placed behind the vessel.



*Vessel No. 57*

Location: C 24 Arch Cave

Form: Olla

Rim Type: Beveled

Size: Rim Diameter = 40 cm

Height = 38 cm

Maximum Body Width = 45 cm

Rim Thickness = 1.13 cm

Neck Thickness = N/A

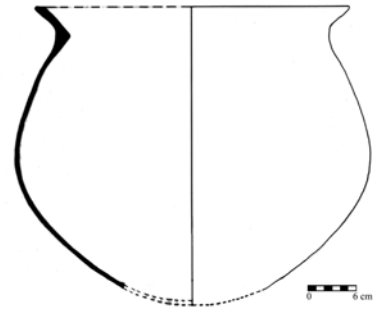
Base Thickness = 0.56 cm

Surface: Unslipped and course

Paste: Small, white inclusions, oxidized firing environment

Color: 5YR 4/6 Yellowish Red

Context: A mid-sized olla located in an alcove to the left of the main entrance. It is inverted and contains a large kill hole that removed about 35% of the base.



*Vessel No. 58*

Location: C 24 Arch Cave

Form: Olla

Rim Type: Beveled

Size: Rim Diameter = 51 cm

Height = 58.5 cm

Maximum Body Width = 59 cm

Rim Thickness = 2.15 cm

Neck Thickness = N/A

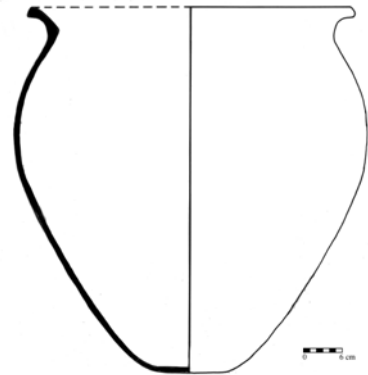
Base Thickness = N/A

Surface: Unslipped and course, fire-clouding

Paste: Fine inclusions

Color: 5YR 5/4 Reddish Brown

Context: The first of two huge ollas found in this cave. It is located in the first large chamber to the right of the entrance. It is closely associated with a fragmented pedestal base vessel and two stone altars. The olla was originally found on its side.



*Vessel No. 60*

Location: C 24 Arch Cave

Form: Olla

Rim Type: Round

Size: Rim Diameter = 26 cm

Height = 28.5 cm

Maximum Body Width = 35 cm

Rim Thickness = 1.31 cm

Neck Thickness = N/A

Base Thickness = 0.61 cm

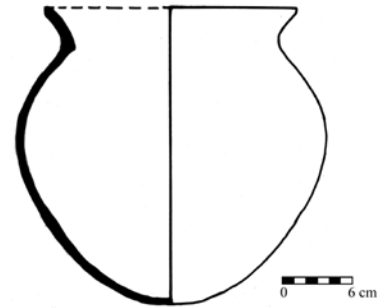
Surface: Unslipped except for rim, course, and fire-clouded

Color: 2.5YR 3/2 Dusky Red

Paste: Fine, white inclusions

Color: 2.5Y 4/1 Dark Gray

Context: Vessel 60 is a small, overturned vessel with a kill hole. It is located on the large ledge along the left side of the first large chamber, which is also on the route toward sherd alley that leads to the assassin bug chamber.



*Vessel No. 61*

Location: C 24 Arch Cave

Form: Olla

Rim Type: Round

Size: Rim Diameter = 23 cm

Height (to kill hole) = 23 cm

Rim Thickness = 0.95 cm

Neck Thickness = N/A

Base Thickness = 0.45 cm

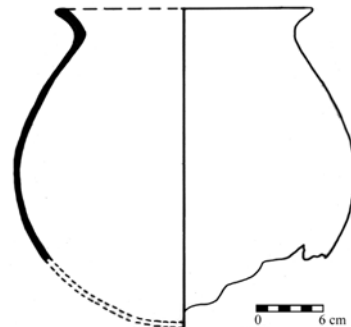
Surface: Unslipped except for rim, course, and fire-clouded

Color: 2.5YR 4/3 Reddish Brown

Paste: Fine, white inclusions

Color: 2.5YR 5/2 Weak Red

Context: A small, overturned olla near a complete pedestal vessel and stone altar. The base is mostly missing due to the presence of a kill hole. The rim is red with a fading brown to black body and fire clouding.



*Vessel No. 65*

Location: C 24 Arch Cave

Form: Olla

Rim Type: Beveled

Size: Rim Diameter = 47 cm

Height = 56 cm

Maximum Body Width = 61.5 cm

Rim Thickness = 1.23 cm

Neck Thickness = N/A

Base Thickness = N/A

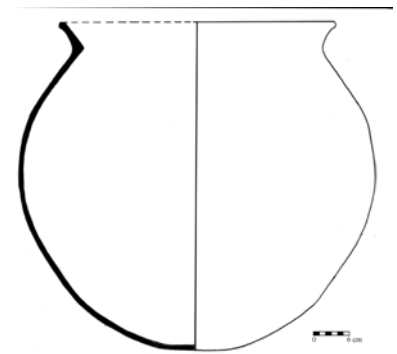
Surface: Unslipped and course with painted rim and fire-clouding

Color: 2.5YR 4/4 Reddish Brown, 2.5Y 4/1 Dark Gray

Paste: Fine, white inclusions

Color: 5YR 6/4 Light Reddish Brown

Context: The second massive olla found in this cave. It is closely associated with a stone altar and a complete pedestal vessel (Vessel 67). It is propped up on a small pile of rocks with a large bowl sherd behind it. The vessel does not have a kill hole but there are cracks radiating from the base. The contents of the olla include some sediment and small animal bones, possibly rodent. The rim has been painted red. The vessel is located next to the wall in a chamber with a low ceiling farther inside the cave.



*Vessel No. 67*

Location: C 24 Arch Cave

Form: Bowl with large pedestal base

Rim Type: Round

Size: Rim Diameter = 50 cm

Height = 20 cm

Maximum Body Width = 36 cm

Rim Thickness = 0.9 cm

Neck Thickness = N/A

Base Thickness = 0.62 cm

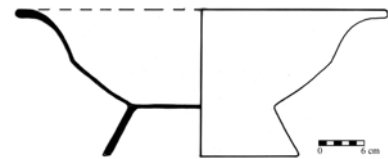
Surface: Slipped and fire-clouded

Color: 2.5YR 4/8 Red

Paste: No visible inclusions

Color: 7.5YR 6/4 Light Brown

Context: The vessel is located 7 cm from the stone altar near Vessel 65. It is overturned and has a kill hole in the center of the base. The pedestal appendage is 1.01 cm thick. The surface treatment is only visible in patches between calcification.



*Vessel No. 68*

Location: C 24 Arch Cave

Form: Olla

Rim Type: Round

Size: Rim Diameter = 22 cm

Height = 26 cm

Maximum Body Width = 27 cm

Rim Thickness = 0.84 cm

Neck Thickness = N/A

Base Thickness = N/A

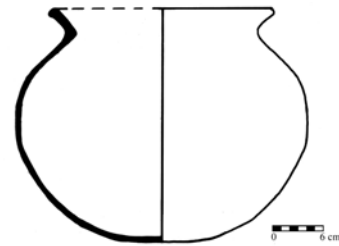
Surface: Rough and modeled

Color: 7.5YR 2.5/1 Black

Paste: No visible inclusions

Color: 7.5YR 6/8 Reddish Yellow

Context: A small, overturned olla located above the cave floor in a niche on a ledge. It is black with reddish orange swirls and striations across the body. Nothing else is closely associated with this vessel.



*Vessel No. 69*

Location: C 24 Arch Cave

Form: Bowl with ring base

Rim Type: Round

Size: Rim Diameter = 21 cm

Height = 11 cm

Maximum Body Width = 23.5 cm

Rim Thickness = 0.88 cm

Neck Thickness = N/A

Base Thickness = N/A

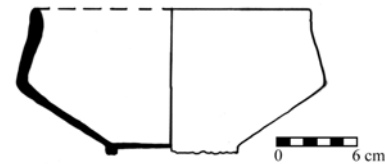
Surface: Slipped, modeled, and calcified

Color: 7.5YR 2.5/1 Black

Paste: No visible inclusions

Color: 2.5YR 3/4 Dark Reddish Brown

Context: A complete, small bowl located high on a difficult to access ledge. There is one large sherd 1.5 m away that is associated with the bowl. Caked mud and calcification are present on the surface. It is propped up on a small pile of rocks. No kill hole and no cracks are visible.



## Analysis

The information amassed from these complete vessels through the research of the 2001 XARP can be utilized to compare and contrast the cave ceramics of the Sibun River Valley. The type of vessel that will be analyzed most extensively is the olla, or jar, since this form is the only one that can be found in all three caves under study and is the most prevalent in general (Table 21.2). An olla can be defined as a globular vessel with rounded walls, a small flat base, and a restricted mouth (Reina and Hill 1978: 26). The degree

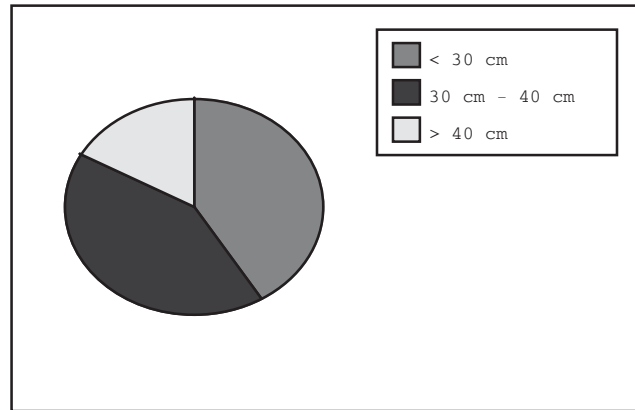
of restriction can vary from slight to very narrow. These jars are still used in Guatemala today for food storage and preparation. The bowls are shorter vessels with unrestricted necks and many times include a ring or pedestal base. These ceramics are often used to serve foods (Reina and Hill 1978: 28).

**Table 21.2 Pottery Forms in Chanona, Usrey, and Arch Caves**

| <b>Cave</b>  | <b>Ollas</b> | <b>Bowls</b> | <b>Totals</b> |
|--------------|--------------|--------------|---------------|
| Chanona      | 5            | 0            | <b>5</b>      |
| Usrey        | 2            | 0            | <b>2</b>      |
| Arch         | 17           | 5            | <b>22</b>     |
| <b>Total</b> | <b>24</b>    | <b>5</b>     | <b>29</b>     |

There are a total of twenty-four complete ollas in Chanona, Usrey, and Arch Caves combined. Arch by far outnumbers the other two caves in olla and whole vessel counts with totals of seventeen and twenty-nine, respectively. These results may be skewed due to looting and/or human and natural disturbance within the caves since pre-Colombian times. Also, fragmentary examples of both types of ceramics are found in each of the caves. However, this study focused on complete vessels only. A complete vessel in this case is characterized as either a vessel with no missing fragments or with basal fragments absent as a result of a ritual killing. Maya animistic beliefs extended to pottery vessels and it is generally thought that a “kill hole” in the bottom of a vessel not only terminated the use life of a vessel but marked it as part of a ritual offering.

The ollas range in height from 23.5 to 58.5 cm. The majority of heights for these vessels tend to fall between 20 and 40 cm with only two outlying vessels (Figure 21.19). Rim diameters of all the vessels including bowls range from 13 to 51 cm. Rim wall thickness of the vessels occupy a span between 0.56 and 2.15 cm with most falling within a one centimeter bracket around 1 cm thick. Only one vessel lies outside this range, Vessel 58. The potter who made this large olla may have made the walls thicker in order to ensure the stability of the vessel. A comparison of olla height to maximum width reveals that these examples vary slightly in the category as demonstrated by the Pearson’s *r* value of about 0.94 (Figure 21.20). Eight of twelve vessels are within one centimeter of a 1:1 ratio. The greatest degree of variation is exhibited by Vessel 57 that has a diameter that is 7 cm wider than it is tall.



**Figure 21.19 Olla height variations from Chanona, Usrey, and Arch Caves.**

Of the fifteen complete vessels studied, thirteen were found in difficult to reach/obscured locations or in a ritual context (Table 21.3). For example, Vessel 58 is located in a section of Arch Cave that also included two stone altars (Figure 21.21). Also, Vessel 65 is associated with a stone altar and an overturned pedestal bowl with a kill hole (Figure 21.22). Only two vessels, 57 and 60, were located in the open with no immediately apparent ritual context.

**Table 21.3 Location of Complete Vessels in Chanona, Usrey, and Arch Caves.**

| <b>Location</b>           | <b>Vessel Number</b>       |
|---------------------------|----------------------------|
| Difficult to reach/hidden | 47, 50, 55, 56, 68, 69     |
| Ritual/Altar context      | 45, 48, 49, 58, 61, 65, 67 |
| Neither                   | 57, 60                     |

### **Inferences and Conclusions**

Through the comparison of the data collected here I have deduced that there is some standardization of complete cave vessels within the Sibun River Valley. While at first glance the vessels may seem to be quite unique and varied in size, a closer examination of the ratio between vessel height and maximum body width of the ollas reveals that as the jars increased in height, their width increased proportionally as demonstrated in the high Pearson's r value. There seems to have been a standardized 1:1 ratio of height to width concerning the production of ollas placed in caves in the Sibun Valley.

The rim types are varied but each of the three types is equally likely to be used. About thirty percent of the vessels had a round or beveled rim with slightly more (about forty percent) exhibiting a squared rim. These may be regional or site specific style variations on rim type.

There also seems to be uniformity in the settings in within the caves in which the vessels were found. I believe that all the vessels were originally placed in ritually significant areas. Their locations today may be slightly different from the original context and other objects that would indicate ritual significance may have

been removed from the cave. The same preservation that makes the study of cave ceramics possible also provides looters with excellently preserved examples of Maya ceramics. Also, ritual items tend to be of high quality, an attribute that looters prefer. The fact that many of the vessels somewhat hidden, are positioned in difficult to reach sections of the caves, or are directly associated with stone altars and other items of ritual significance (such as the jade bead near Vessel 49), supports this conclusion that these vessels were placed in the caves as part of a ritual.

Ceramic vessels were an important commodity for the ancient Maya. The existence of mend holes in Maya pottery illustrates that even after a vessel broke, it could still be used if held together with twine. Perhaps ceramics were curated as long as possible because the procurement of another was not always feasible economically. The production of a single large olla requires great skill and resources. Properly tempered clay and an open-air firing pit large enough to fire such a vessel demonstrates the significance of this olla. Also, the effort required to transport these vessels up the side of the karstic limestone hill, into the cave entrance, and through the darkened cave passages reveals that these vessels were left here for a purpose, most likely as a ritual offering.

The Maya believed that caves housed the gods of the underworld such as Chac, the god of rain (Bassie-Sweet 1991: 93). In times of drought or planting, the Maya would probably make offerings to Chac to ask for rain or a good agricultural season. Maya society was based on agriculture, therefore water was an extremely important resource and the appeasement of Chac was a great priority. Many of the vessels found in the caves could be used to store or carry water. Also, the burning of copal incense was an important part of ceremonies. Small vessels such as Vessel 69 may have been used as incense burners although analysis of the interior of the bowl would give a definitive answer.

As a result of this preliminary study of the cave ceramics of the Sibun River Valley, conclusions as to significance and uniformity have been drawn. Future research in the caves of this valley would most likely increase the sample size and shed more light on this aspect of Maya pottery and ritual. A study of the types of vessels and the time frames within which they were made could help in dating the used of the caves. Also, a comparison with local surface site ceramics could possibly provide a connection between specific sites and caves. This correlation would prove interesting and useful in further research in the Sibun River Valley. A complete study of sherds found in the caves would be time consuming but very helpful to this area of research.

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