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## Chen K'u: The Ceramic of the Sacred Cenote at Chichén Itzá

Study of the Ceramic Fragments of the Explorations Conducted in the 60's *Translation of the Spanish by Alex Lomónaco* 



Research Year: 1998 Culture: Maya Chronology: Contemporary Location: Yucatán, México Site: Chichén Itzá

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#### Background

The northern portion of the Yucatán Peninsula is characterized by the presence of cavities or dolinas filled with water, better known in the area as Cenotes, after the Maya term Dzonot. Many Cenotes were considered sacred by the ancient Maya, such as those known as Tabi, Yaxcabá, Tibolón, Sotuta and Kanchunnup, being the most famous among them the Cenote of Sacrifices from Chichén Itzá. Also known as the Sacred Cenote (it was called Chen K'u by the locals during the XIX century), this natural feature is a part of a ritual north-south axis that connects El Castillo or Kukulcán Pyramid, the platform of Venus, Sacbé no. 1, and the famous Well of the Sacrifices. The Sacred Cenote has vertical walls and it measures 59 m in a north-south direction, and 60.5 m from east to west. The water mirror is found at 22 m from the edge, and has a maximum depth of almost 14 meters.

This Cenote seems to have had a critical religious symbolism in pre-Hispanic times, as stated by the chroniclers Friar Diego de Landa and Father Aguilar, both as a depositary of offerings and a recipient of human sacrifices. Several archaeological projects have attempted to confirm such beliefs, and an amazing amount of evidence was found indicating that there were deposits of human remains, precious stones and metals (jade, turquoise, gold, tombac and copper) silex, obsidian, wooden objects, shell and even textiles, and naturally, a large number of local and imported vessels, complete and fragmented.

Nonetheless, the study and publication of the materials recovered has been extremely casual and this has affected the interpretations made on the chronology and functionality of the Cenote. Therefore, and as a part of the ongoing ceramic study by this author for the Chichén Itzá Project conducted by Peter J. Schmidt, it was decided to analyze the ceramic remains of the Cenote that were in storage at the Centro INAH, Yucatán, for which purpose a grant was requested and obtained from the Foundation for the Advancement of Mesoamerican Studies, Inc. (FAMSI).



Figure 1. Location of the Sacred Cenote.



Figure 2. The Sacred Cenote at Chichén Itzá during the 60's.

The Sacred Cenote is the most important ceramic deposit of Chichén Itzá, considering both the amount and the variety of the vessels recovered there during the two explorations completed. However, the real knowledge we had at hand until now regarding the Cenote ceramics was insufficient, as it was almost entirely based on complete vessels which are not representative of their extended history, while no significant amount of fragments had been previously analyzed.

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ABBOT BRASSEUR DE BOURBOURG

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## A Brief History of the Explorations at the Cenote

The history of the explorations at the Cenote began very far from Yucatán, with the discovery of a copy of Diego de Landa's manuscript by Brasseur de Bourbourg in 1862 in Madrid, who publishes it in 1883. This publication was of crucial importance for the future development of Maya archaeology, while it simultaneously drew the attention of scholars to Chichén Itzá. Written around 1560 in Spain by the man who would become bishop of Yucatán, the document refers to the possibility that the Sacred Cenote could contain valuable treasures:

"in this well they have had and had then the practice of throwing live men as a sacrifice to the gods in times of drought, and they believed they did not die even though they would never be seen again. They would also throw many other objects made of valuable stones, which they cherished. Thus, should this land have had gold, this well would be the place where it would be more abundantly bound to be found, as a consequence of the devotion of the Indians. The well is seven estados deep down to the water. Its width is of one hundred feet and it is round, with a stone cut to the water that is a marvel. The water seems to be very green, and I think this is caused by the groves that fence it, and it is very deep. On top of it and adjacent to its mouth there is a small building where I have found idols to honor all the primary idols of the earth, like in the Roman Pantheon" (1983:127).

This paragraph excited the imagination of adventurers. The first one to attempt the removal of objects from the Cenote was the Frenchman Desiré Charnay (1887: 358), who apparently explored the bottom in 1882 using two automatic probing Toselli machines, but abandoned his effort without having obtained any results (see Folan, 1968).

#### Thompson's Exploration

Edward Thompson was the first to pull out (literally) objects from the Cenote. After a twelve-year long stay in Yucatán, he had been appointed General Consul of the United States in Yucatán, and in 1894 he bought a rural Chichén farm owned by Delio Moreno Cantón, Leopoldo Cantón Freixas and Emilio García Fajardo, which included a large part of the archaeological site of Chichén Itzá, for an amount of 200 pesos. To explore the Cenote, he used the dredging technique from 1904 to 1907, with Stephen Salisbury and Charles P. Bodwitch as its major promoters. According to Tozzer, a pole crane 20 feet high was erected together with a 30 feet long crane boom at the east of the Steam Bath, while the dredge was a Harwood<sup>1</sup> with the shape of an orange skin (1957:195). This is still stored at the Site Museum in Chichén Itzá. Likewise, a small platform was built at the edge of the water surface, and one raft.

<sup>&</sup>lt;sup>1</sup> In fact, this is a standard Hayward dipper dredge with a four-blade scraper (see Folan, 1968, Note 3).



Figure 5. The dredger.



Figure 6. The dredger at the Site Museum.



Figure 7. Placing the dredger on the raft.

Later, in 1909, he began to conduct underwater explorations with diving suits, for which purpose he hired a Greek diver. In 1911 he abandoned the exploration. Some of his materials were sent to the Peabody Museum at Harvard University, and to the Field Museum in Chicago.

The material sent included a significant number of complete vessels.

Another portion was left behind at the Hacienda Chichén, and was irreparablely lost during a fire that took place sometime in the twenties. Among the lost materials was the collection of ceramic fragments.



Figure 8. The diving system.

The German archaeologist Teobert Mahler filed a charge against Thompson before the Department of Public Education, initiating a lawsuit for theft against the nation. Following a legal battle with the authorities, México's Supreme Court of Justice ruled in 1944 in favor of Edward Thompson. Once the legality of the collections was established, specialized studies of some of the materials began to be published, and finally, in 1992, the complete catalog of Thompson's "treasures" was published (Coggins, comp. 1992).

After several decades during which no further attempts were made to continue exploring the Sacred Cenote, with the exception of the excavation plans designed by Cirerol Sansores (1935), Acosta (1954), and Espejo Evia (1954), which never took place, in 1954 the Frogman Club of Mexico organized an expedition that yielded almost no results due to the poor visibility of its waters.

In short, Thompson's exploration, besides proving that the Sacred Cenote contained valuable pre-Hispanic objects, generated a heated controversy and major criticisms regarding the method used for extraction, and the destination of some pieces outside México created a feeling among many Mexicans of having their heritage plundered. Even in current times, many Mexicans remember with animosity the explorations conducted by Thompson.

In December, 1959, and on the occasion of the 58th Congress of American Anthropologists, the Peabody Museum returned to the Mexican State ninety-four gold pieces as a subsequent gesture of good will.

#### Exploration by Piña Chan and Folan

Early in the decade of the 1960's the exploration by the National Institute of Anthropology and History was initiated under the direction of archaeologist Román Piña Chan. It was comprised of two different phases.

During the first phase, from January 12 to March 31, 1961, the dredging by suction ("air lift") technique was implemented and diving. The air lift, overseen by Norman Scott, consisted of a compressor placed on a floating platform, with a suction tube measuring 24 cm in diameter and a hose through which the compressor injected air at the bottom of the Cenote. A vacuum is created through the mouth of the tube and forces everything it finds upwards. The contents were deposited on the raft at the surface to be further analyzed.



Figure 9. The descent to the platform.



Figure 10. The air lift on the platform.

This technique was put aside because the stones that covered the bottom of the Cenote limited its efficacy as well as that of the divers, and because the fragile objects and the human bones broke as they passed through the tube (Folan, 1967: 42). However, the experience gained allowed Folan (1967) to delineate a plan to desiccate the Cenote, which was to be undertaken later on.

The second phase, when the water level was lowered by nearly four meters, was conducted from September 1967 to April 1968 (Piña Chan, 1970). Given the complexity of this project, the archaeologists Román Piña Chan and William Folan, among others, worked in collaboration with different institutions, technicians, businessmen, divers and adventurers, particularly Pablo Bush Romero and the Exploration and Aquatic Sports Club of México (CEDAM - Club de Exploraciones y Deportes Acuáticos de México), Norman Scott, Kirk Johnson, and companies such as Dow Chemical, Purex Corporation, the Mayaland Hotel, Barbachano Tours, etc.

Piña Chan states that "when the water level was lowered, a large portion of the lime contour of the Cenote became visible, particularly on its west side, where Thompson had created a small peninsula from where to work, and this portion was explored by using the same techniques used in an excavation on plain land" (Piña Chan, 1970: 25, 28).



Figure 11. Thompson's "peninsula".



Figure 12. Piña Chan during the excavation.

However, the information obtained from this area was poor, as it was mainly the product of the mud discarded by Thompson. Air lift and divers were used again to stratigraphically explore the area below the steam bath (sections S11 to S16). The water, having recovered its usual level once pumping had ceased, was clarified with a variety of substances and provided a visibility of nearly 10 meters down.

As to the technique applied, Piña Chan stated that: "because the collapsed area affected the shape of a half sloping mound, we planned to gradually cut it in horizontal sections" (ibid. 1970: 28). Three layers were described by this archaeologist:

- Layer 1 "Mainly composed of numerous stones with bas-reliefs, as well as sculptures among which the following stood out: two large serpent heads with remains of painting, three banner bearers in the shape of seated jaguars, two slabs of the tablet of the Great Ballgame, among others."
- Layer 2 "Numerous fragments of bark, from buckets or vessels for extracting water, fragments of ropes and cords, pieces of charred fabrics, copal balls; small tripod dishes painted blue with copal in the inside; fragments of urns with paint directly laid on the mud, jade beads, a large amount of long bones, ribs, vertebrae, human skulls, bird bones and bones of small animals, some rattles and copper rings, and several complete vessels, typical of the Mayapán era in Chichén Itzá."

 Layer 3 – "The third section, richer than the previous one, contained more mud and deposited materials, of which the following are worth mentioning: numerous copal balls, two wooden stools, gourd fragments decorated with frescos, little wooden masks, vessel fragments decorated with frescos, copper and gold sandals, gold rattles, little plates and jade beads, abundant complete vessels of the Puuc era, pyrite plates corresponding to mirrors, skulls, human bones, gold flakes, etc."

Upon reaching this layer, and as a consequence of budgetary restraints, it was decided to conclude the exploration, even though the next deposit had been probed, where similar materials were rescued corresponding mostly to the late Classic Horizon (Piña Chan 1970: 38).

The building of the steam bath and the adjacent platform on the south side of the Cenote were also excavated and restored during this exploration.

After these works, no further attempts of archaeological survey were undertaken in this Cenote. Even though some studies of materials have been published, the set remains mainly unstudied. The present study represents an attempt to correct this situation.



Figure 13. Diving explorations.

### Previous Studies of the Ceramics from the Cenote

#### Brainerd's Analysis

Two small collections from the ceramic obtained by Thompson (which add up to 322 sherds) were studied by Vaillant in 1926, and further analyzed by G. Brainerd (1958), who presented a table of percentages by type, which he compared with the collections of the southeast colonnade (Brainerd, 1958: 44-45) (Figure 14). He found that the ceramic from the Cenote corresponded mainly to the Florescent periods – Early Mexican, and Late Mexican.

		CENOTE Nº	2			A SUR JMINATA STE
JARRAS		9.5			1.3	
Lisas	4.3					
Estriadas	5.2					
Ceremoniales		12.1			0.0	
(cajetes pintados	de azul)					
Sub-laqueado, tra	ansicional	1.5				
(no equivalente)						
Incensario Tardío		2.4			0.0	
(Incensario Antro	pomorfo)					
Incensario Temp		0.0			34.2	
(Incensario Pede	stal)					
Laqueado		13.6			0.0	
(Vajilla Roja Cor	riente)					
VAJILLA PIZAI	RRA					
(Vajilla P	izarra Media)		53.8			34.6
Jarras	40.0			8.6		
Cajetes	11.1			6.6		
Cazuelas	2.2			13.2		
Molcajetes	0.6			5.2		
<u>ROJO PULIDO</u>						
(Vajilla R	oja Media)	3.7			24.2	
NARANJA PUI	IDO					
(¿Varieda	ad Temprana de					
Vajill	a Roja Media ?)	1.2				
VAJILLA PIZAI	RRA DELGADA	1.5			0.0	
	elgada Floreciente)					
NARANJA FIN	-					
(Naranja Fina X)			0.0			2.26
TOTAL DE TH	ESTOS EN LA CO	LECCIÓN	322			1.254

Figure 14. Ceramic analysis by G. Brainerd on Thompson's sherds.

Traditionally, the Florescent period or Terminal Classic period is characterized by the boom of the Puuc cities, and would be dated between 800 and 1000 CE. It is followed by the Early Mexican period or Early Postclassic period, characterized by the boom of

the "Toltec" Chichén Itzá, dating probably from 1000 to 1200 of our era. The Middle Postclassic or Middle Mexican period, dated between 1200 and 1300 CE and would correspond to the boom of Mayapán; and finally, the Late Mexican or Late Postclassic period would extend from the fall of Mayapán to the arrival of the Spaniards, including the flourishing of settlements in the Eastern Coast, such as Tulúm.

According to Brainerd, the preponderance of jars and bowls would suggest a primordial use of the Cenote as a water source. He highlights the absence of unslipped incense burners from the Florescent and Early Mexican periods. The Coarse Slate ware (or Peto Cream of the Middle Postclassic in current nomenclature) would be absent, something that could be explained by a depopulation of the city, or the abandonment of the Cenote as a water source during the Late Mexican period. During this final epoch the Cenote was probably used as a place for ceramic offerings. The collection of complete vessels presently at the Peabody Museum was also discussed by Brainerd, and this helped him to reinforce the conclusions expressed above.



Figure 15. Postclassic ceramics from the Cenote published by Brainerd.

#### Ball's Analysis

The description of the vessels of the Peabody collection has been published once more in the catalog of materials of the Peabody collection (Ball and Ladd, 1992; Coggins, comp.). In this publication, Ball examined the hypothesis that the vessels and other materials recovered owed their presence in the Cenote to its use as a deposit of ceremonial offerings during a unique, extended episode, as opposed to many temporally discrete episodes (Ball, 1982). In his view, the predominance of domestic vessels, the high incidence of broken fragments and the high density and diversity of items that characterized the Florescent ceramic collection strongly denotes refuse contexts (Ball, 1992: 191-193).

The apparent functional ceremonial homogeneity and formal redundancy of the late Postclassic ceramic is consistent with the archaeological pattern that would be expected as a result of a temporally discrete episode of repetitive and formal offering rites in the Sacred Cenote. But the ceramic offerings could as well represent a single and synchronic episode of manufacture and deposit. To justify this latter statement, Ball suggests the possibility of a spectacular ritual of termination for the abandonment of Chichén Itzá by the end of the XII century.

According to Ball, to chronologically situate the ceramic materials recovered from the Sacred Cenote does not necessarily mean to fix in time the use of the Cenote as a focus of regular ceremonial activities. A post-quem dating for the placement of ceramic is the only fact that has been established. This issue is of considerable significance regarding some disparities which seem to exist between the depositional chronology suggested by the ceramic and the one implied by other types of artifacts.

"One of my working assumptions has been that the vessels and other recovered materials owe their presence in the Cenote to one single, extended event of ceremonial deposition of offerings, rather than to several temporally discrete events, but this assumption is now open to debate, based on the comparative typological chronology that involves the different classes of non-ceramic artifacts" (Ball, 1992).

Ball believes that a ceramic assemblage of one unique phase must suggest at least an overall contemporaneity of manufacture, use, and deposit. And, unless we accept the possibility of rituals where the offering of different materials correlate with different periods of time, such a contemporaneity should be reasonably extended to include other non-ceramic "offerings" that cannot be dated without their contextual association.

Unfortunately, the ceramic recovered is not temporally homogeneous but represents instead two different major intervals:

- The Florescent period (Terminal Classic Early Postclassic), traditionally defined between 800 and 1200 CE.
- The Decadent period (Middle Late Postclassic), between 1200 and 1550 CE.

Given the temporal duality of the ceramic collections recovered, another potentially productive line of issues to be studied could be one focused on determining whether a functional homogeneity is expressed in one or both assemblages, particularly regarding what should be considered as ceremonial vessels. The assumption here is that as the result of a repetitive behavior of a uniform type, as may be expected to have unfolded in connection with regular ceremonial activities, a functionally homogeneous assemblage or sub-complex would be more possible than a heterogeneous assemblage (ibid).

Of the two temporally discrete groups in which the ceramics from the Cenote could be separated based on typology, the earliest one comprises a mix of decorative vessels and styles with the predominance of water jars and other domestic utilitarian forms.

The strongly represented vessels include:

- Chichén / Puuc unslipped
- Chichén / Puuc Slate
- Chichén / Red Puuc (according to Smith's classification of 1971).

There are present small, although abundant, Silho or X Fine Orange wares, and Thin Slate wares.

There are also a handful of functionally ceremonial vessels, or fragments thereof, but I believe that they more probably represent garbage or ritual idiosyncratic acts. In general, the ceramic data strongly suggests that the primary function of the Cenote was water procurement and/or the deposit of refuse, a conclusion advanced in the past by Brainerd (1958: 44-45) on simple statistical bases (see also Tozzer, 1957: 198). The predominance of forms of domestic wares, the high incidence of broken objects and fragments, and the high density and diversity of items that characterize the Florescent ceramic collection are strongly connotative of garbage contexts, and I am unable to find any justification to interpret the Cenote otherwise (Ball, 1992).



Figure 16. Florescent vessel of the Peabody collection.

The other ceramic assemblage represented among the collections of the Cenote differs in its age and composition from the previous assemblage. Dating from the Middle to the Late Postclassic, the ceramic comprises a large number of Mayapán Unslipped and Mayapán Red wares, the most common among them being the tripod cajetes with red slip and blue painted post-fired cajetes. These are followed in frequency by unslipped vessels of a similar shape. Most tripod vessels contain traces or intact copal balls, while many present inclusions of jadeite or other materials (ibid).

The apparent functional ceremonial homogeneity and formal redundancy of the late Postclassic ceramic is consistent with the archaeological pattern that could be expected as a result of a temporally discrete episode of repetitive and formal offering rites at the Sacred Cenote. Once again I concur with Brainerd (1958) in suggesting that such is the case, and in dating at least one episode of formal ceremonial utilization of the Cenote sometime in the Middle to the Late Postclassic period. One final assumption is that these ceramic offerings represent a single and synchronic episode of manufacture and deposit rather than a chronologically complex situation (Ball, 1992).



Figure 17. Postclassic vessels of the Peabody collection.

The ceramic obtained through the explorations conducted by INAH along the 1960's had never been studied or published until now. Some of those complete vessels were illustrated in publications about these explorations (for example in Ediger, 1971; Piña Chan, 1970; National Geographic, 1962).

In 1998, with funds granted by FAMSI to this author (FAMSI Grant #97061), the fragmented ceramic materials from the *bodega* at the Centro Regional Yucatán, in Mérida, were analyzed, and the results are described below.



Figure 18. Complete vessel recovered during the explorations conducted in the 60's.

#### **Results of the 1998 Chen K'u Project**

During 1998 the analysis of ceramic fragments originating from the explorations conducted by Piña Chan were completed. This analysis was made possible thanks to a grant from the Foundation for the Advancement of Mesoamerican Studies, Inc. (FAMSI). Our goals were the following:

- 1. To determine the ceramic chronologic sequence of the Sacred Cenote;
- 2. To determine the Cenote's functionality for the different periods, and;
- 3. To obtain data of the ceramic remains to help in the interpretation of the rituals that took place at the Cenote.

A total 71,247 sherds were classified with the Type - Variety system (Smith, Willey and Gifford, 1960), providing for the first time reliable data and percentages about the ceramic from the Cenote.

Total Sherds Analyzed	71,247	
	14	
Unassigned	843	1.18%
Historic Horizon	91	0.13%
Tases Horizon	37,871	53.15%
Hocabá Horizon	6,050	8.49%
Sotuta Horizon	22,352	31.37%
Cehpech Horizon	552	0.77%
Motul Horizon	2,368	3.70%
Cochuah Horizon	878	1.23%
Xculul Horizon	15	0.02%
Tihosuco Horizon	224	0.31%
Ecab Horizon?	3	0.00%
	Sherds	%

#### **CHICHEN ITZA**



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The classification presented here is provisional, and certain changes may be expected in the future. This is because the technique used in the ceramic classification, based on visual and tactile criteria, does not allow for a ceramic classification that may be taken as final. Besides, as the analysis of the ceramic recovered by the Chichén Itzá project since 1993 to the present day progresses, our vision of the different complexes and ceramic types from Chichén Itzá will be gradually refined, so in general, all the ceramic data now available should be considered an approximation. This is why whenever changes are introduced in this report, copies of the new results will be made available to INAH as well as to FAMSI. The data published in this report may be used by any researcher, but should doubts arise, the author may be reached at the following email address: <u>cozuvice@yahoo.com</u>.

Results shall be revised following a chronological order, with special attention paid to the imported vessels and the forms that could denote rituals of any type.

The percentages presented in the following tables are expressed in relation with the total quantity of sherds from each complex.

#### Ecab (Mamom) Horizon 700 - 350 BCE<sup>2</sup>

Two types, Juventud Red and Muxanal Red, correspond to the Ecab Horizon. Even though there are three fragments in total, they evidence the occupation of the Chichén Itzá area since as far back in time as the Middle Preclassic. Ceramic from this Horizon has been previously reported at Chichén Itzá by Lincoln (1986), and more recent examples have been obtained in the building of the Ossuary and the Initial Series Group. The forms represented include cajetes and bowls, and I believe that their presence in the Cenote is accidental, or either that they were cast into it as garbage. Anyway, even though this ceramic does not evidence any utilization of the Cenote as a water source or as a place for ritual offerings in this period, we cannot overlook the fact that the explorations conducted in the 60's were interrupted before the deeper layers were tested, and therefore, maybe the more ancient horizons are under-represented.

<sup>&</sup>lt;sup>2</sup> In Northern Yucatán, the Preclassic period is still far from being well defined, and the evidence in Chichén Itzá and its surrounding areas is still too limited to allow for any date refinement. Smith (1971) defined a very general Tihosuco period that extended from the year 800 BCE to 100 CE. Subsequent works, such as those conducted in Dzibilchaltún, have divided this broad time frame into shorter periods. Here, following the advice of archaeologist Sylviane Boucher, we have decided to modify the dates provided by Smith, placing the Ecab Complex as the first part of the Late Preclassic, and leaving Tihosuco as an expression of the latest facet of the Formative. However, this arrangement is entirely provisional and subject to possible changes in the future, when the ceramic samples of this period will hopefully be more adequate.

Ecab Ceramic Horizon (? BCE - ? CE) (Middle Preclassic)				
JUVENTUD GROUP	1	33.33%		
PITAL GROUP	2	66.66%		

#### Tihosuco Horizon (350 - 150 BCE)

The ceramic sample of the Tihosuco Horizon that corresponds to the Late Preclassic period is more extensive in terms of quantity and diversity. Although we know of other examples of Preclassic ceramics from elsewhere in Chichén Itzá, among which the collection of the Ossuary collected by Peter J. Schmidt in 1994 deserves to be highlighted (Schmidt 1995, personal communication), the 224 sherds from this Horizon form the most significant Preclassic collection gathered to date (R.E. Smith, 1971: 139; P.J. Schmidt, 1991; Pérez de Heredia, 1997).

Ten types corresponding to 5 different groups are represented. Of these, the most important based on the number of fragments is the Orange Kin group, which amounts to 76.3% of this Horizon. The Sierra Group, with four types represented, comprises 12.9% of the total, an identical percentage to that of the Saban Group, which only presents one type: Striated Chancenote. The Ucú and Flor groups involve smaller percentages.

As to the forms, 91% of the Tihosuco sample are fragments of pitchers while the rest are cajetes and bowls in equal quantities. This could be interpreted as evidence that, for the Late Preclassic period, the principal function of the Sacred Cenote was to supply water, without any evidence of a ritual cult present in the ceramic. However, three quarters of these pitchers correspond to the Incised Orange Kin type, which because of its decoration may have possessed some special value y therefore, perhaps we should consider that these jars of the Kin type may have been cast there as offerings.

The Kin, Chancenote and Ucú types are characteristic of the northern Yucatán plains, reflecting an identity of their own for the inhabitants of this area. The Flor Cream type is related to the Petén, and Saban, to the eastern coast, although its presence in nearly all the Preclassic settlements of northern Yucatán would possibly suggest local production rather than some kind of exchange.

Tihosuco Ceramic Horizon (350 - 150 BCE)			
UNSLIPPED SABAN GROUP			12.94%
Chancenote Striated Type: Chancenote Variety	28		
Chancenote Striated Type: Chikilá Variety	1		
UCÚ BLACK GROUP		1	0.44%
Ucú Black Type: Ucú Variety	1		
FLOR GROUP			2.67%
Flor Cream Type: Flor	1		
Another type of the Flor Cream Group: Punched	5		
SIERRA GROUP		29	12.94%
Sierra Red Type: Sierra Variety	17		
Laguna Verde Incised Type: Laguna Verde Variety	1		
Repasto Black on Red Type: Repasto Variety	5		
Hongo Composite Type: Hongo Variety	6		
KIN GROUP		171	76.33%
Kin Orange Red Incised Type: Kin Variety	171		

# Xculul Horizon (150 BCE - 150 CE)

For the Xculul horizon which corresponds to the Proto-Classic period, we only have the Unto Striated type of the Tipikal Group. This ceramic assemblage includes only 15

sherds, all of which are fragments of pitchers. Once again, water supply seems to be the primordial function of the Cenote.<sup>3</sup>

#### Cochuah Horizon (300 - 600 CE)

The Cochuah Horizon, with 878 sherds and representing 1.23% of the total collection, seems to show what would be the first major occupation in the area between the years 300 and 600 CE. Nine different types already show a significant variability. The best represented type is Tacopate Trickled on Brown (probably related to northern Campeche) with 79% of the Complex, followed by Chuburná Brown type with 13% (this percentage is misleading given that all the fragments of this type pertain to a single pitcher). The rest of the types represent lower percentages, mainly with Cetelac Plant Temper, 3%, and followed by Xanabá (related to northern Yucatán), Caucel (related to northern Yucatán), Águila (related to Petén), Valladolid (related to northern Yucatán), Huachinango (related to the Eastern Coast), and Batres (related to the Eastern Coast).

The ceramic of this era is almost non-existent in the collections analyzed from other contexts at Chichén Itzá, where we have collected only 61 sherds of this period in the analysis of the 1993-1997 seasons. However, there is one sample from this time frame collected by Agustín Peña at Chichén Viejo (S. Boucher, personal communication), and it is a period which is well represented in the Balancanché caves. As far as I know, architecture assignable to this period has not been found at the site, but for the sample we have identified in the Cenote's collection, it would seem that a small settlement may have existed at that time. Ninety-four percent of these vessels are pitchers, 3.8% are tecomates, 2.3% are cajetes, and we found just one fragment of a bowl. In short, an analysis of form appears to reveal that the fundamental use of the Cenote at that time was as a water supply. For that period, no evidence was found of a cult or ceremonial use connected with the Cenote.

<sup>&</sup>lt;sup>3</sup> As observed, this complex overlaps with the previous one. This is due to the absence of definition of these early complexes at Chichén Itzá, and like we said above, the dates are provisional.

GROUP ?			3.87%	
Cetelac Plant Temper Type: Cetelac Variety	34			
XANABA RED GROUP	9	1.02%		
Xanabá Red Type: Xanabá Variety	7			
Caucel Black-on-Red Type: Caucel Variety	2			
AGUILA GROUP		7	0.79%	
Aguila Orange Type: Aguila Variety	7		0.7970	
CHUBURNA BROWN GROUP			13.89%	
Chuburná Brown Type: Chuburná Variety	122			
TIMUCUY ORANGE GROUP			1.02%	
Valladolid Dichrome Incised Type: Valladolid Variety	9			
UNSPECIFIED GROUP			0.11%	
Huachinango Dichrome Incised Type: Huachinango Variety	1			
MAXCANU GROUP			79.04%	
Tacopate Trickle on Brown Type: Tacopate Variety	694			
BATRES GROUP		2	0.22%	
Batres Red Type: Batres Variety	2			

#### Motul Horizon (600 - 800 CE)

The Motul Horizon, in the classification conducted in 1998, presented a total of 2,638 sherds, equivalent to 3.7% of all the ceramics analyzed. This sample, for the variety of types as well as the quantity of sherds, is one of the greatest surprises encountered in the investigation, as no ceramics corresponding to this period had been previously reported for the Cenote, although a number of other artifacts from this context had in fact been dated to this period. Among them, there are outstanding jades of the Palenque style, particularly one with the name of the ruler Chan Bahlum from Palenque, and the date (2 Kib 14 Mol, 9. 12. 18. 5. 16, or 690 CE) (Coggins and Shane, 1989). These jades were carved close to the significant date of 9.13.0.0.0., which ends in 8 Ahaw (692 CE), the moment when according to the Chilam Balam of Tizimín, Chichén Itzá was founded (Edmonson, 1982: XVI).

Several of the anthropomorphic jade heads and the Nebaj style jade plaques also date between 700 and 800 CE. Although the coincidence of dates between jades, the founding date of the Chilam Balam of Tizimín and the Motul Horizon ceramics may not have more than an accidental significance, it may be fitting to explore the possibility that in fact around that time the founding of Chichén Itzá may have occurred, and the suggestion that its founders may have had links with the region of Palenque should not be ruled out for the moment.



Figure 19. Jade from the Sacred Cenote.

Around this time we see a significant shift in regard to the functionality suggested by vessel forms. Among them, 56.7% are vases, 22.3% are bowls, 14.7% are pitchers, 5.4% are cylinders, and only 0.6% correspond to *cazuelas*. Thus a continuity in the water provisioning function is observed, and a higher incidence of vessels of a possible ritual function. Some of the bowls recovered display polychrome paintings with palace scenes, warriors, feathered serpents, etc.

As to imported vessels, the Tres Marías type shows connections with the southern area of Quintana Roo and northern Belize, while the Tinaja Group points to relationships with Petén, and the Becanché type with the Río Bec area. At this point, it is worth remembering that according to some chronicles and following the founding of the site during Katun 4 Ahaw, between 711 and 731, the Great Descent and the Little Descent took place (Noh Emal y Tz'e Emal) and the Itzás ruled for 13 katuns (260 years). Barrera and Morley (1949) argued that the Great Descent originated in Chiapas and in the Usumacinta's drainage on the west coast of Yucatán, to Uxmal, Ichcansiho (today identified as Dzibilchaltún), and finally to Chichén Itzá.

The Little Descent could have come from Central Petén, to the North of Belize and on the east coast towards Cobá and eventually to Chichén Itzá. Therefore, the foreign ceramic of this period could well support the existence of both migrations, though the evidence, so far, remains weak. One polychrome vessel showing the attack on a city and the flight of a number of personages could be related to the events that led to the foundating of Chichén Itzá during the Late Classic.


Figure 20. Polychrome vessel from the Cenote.

The Early Slate ceramic of Chichén Itzá was first identified during this study of the Cenote's materials, as it was the first time we had at hand a substantial assemblage of forms of pitchers, pots and vases that did not belong to the Dzitás Slate ceramic of the Sotuta Complex nor to the Muna Slate of the Cehpech Complex. Subsequent studies conducted in the Initial Series Group (Osorio and Pérez de Heredia, 2000), have allowed us to refine our understanding about the Early Slate ceramics, and it is now my belief that sherds of this ware in the Cenote (mainly bodies of pitchers), may have been wrongly classified as Dzitás Slate. A review of the Slate material from the Cenote is necessary to define this issue.

In addition, in the Initial Series, architecture associated to this ceramic was found, in a substructure under the Initial Series Temple (Osorio and Pérez de Heredia, 2000). Therefore, it is possible that the beginning of the urban settlement at Chichén had taken place during the Late Classic period, and that the Cenote had, since then, become a focal point for the settlement.

As to the presence of ceramics and objects from this period in the Cenote, there are several possible interpretations at hand. On one side we may think that it was during the Late Classic period when in fact the cult to the Sacred Cenote began, according to evidence provided by the fine and imported wares, while its use as a water source continued.

Another possibility is that vessels in this period, particularly those of the Tohopkú Thin Slate ware could be pointing to a termination ritual as the one proposed by J. Ball (1992) for later periods.



Figure 21. Thin Slate vessel with polychromy.

CHABLEKAL GROUP		3	0.12%
Chablekal Gray Type: Chablekal Variety	2		
Chicxulub Incised Type: Chicxulub Variety	1		
ENCANTO GROUP		1	0.04%
Encanto Striated Type: Encanto Variety	1		
YALCOX BLACK GROUP		4	0.16%
Yalcox Black Type: Yalcox Variety	4		
GROUP ?		129	5.44%
Tres Marías Striated Type: Tres Marías Variety	129		
TINAJA GROUP		180	7.60%
Tinaja Type: Tinaja Variety	43		
Pantano Impressed Type: Pantano Variety	5		
Corozal Incised Type: Corozal Variety	14		
An additional Type of the Tinaja Group: Modeled	40		
An additional Type of the Tinaja Group: Fluted	78		
UNASSIGNED GROUP		9	0.38%
	9		
Cizin Striated Type: Cizin Variety			0.54%
Cizin Striated Type: Cizin Variety CONKAL RED GROUP		13	0.54%

# 

DZITYA BLACK GROUP		4	0.16%
Algarrobo Modeled Type: Algarrobo Variety	4		
BECANCHE BROWN GROUP		2 0.08%	
Becanché Type: Becanché Variety	2		
EARLY SAY SLATE GROUP		186	7.85%
Early Say Slate Type: Say Variety	184		
Black Chemax Type on pre-slate: Chemax Variety	2		
TOHOPKU EARLY THIN SLATE GROUP		1,482	62.58%
Tohopkú Early Thin Slate Type: Tohopkú Variety	1,462		
An additional Type of the Tohopkú Group: Appliqué	18		
Possible Tohopkú Early Thin Slate Type: Tohopkú Variety	2		
CASASSUS GROUP		355	14.99%
Casassus Red Type: Casassus Variety	355		

## Cehpech Horizon (800 - 850 CE)

The ceramic collection that corresponds to the Cehpech Horizon or Terminal Classic, which is traditionally associated with the peak of the cities of the Puuc such as Kabah, Uxmal and Sayil, is smaller than the collection of the previous Horizon, suggesting a shorter period or a less intense occupation of the site at this time. Although the Cehpech complex was dated by Smith (1971) between 800 and 1000 CE, in the case of Chichén Itzá and according to recent data, it would seem that the use of the Cehpech ceramic was limited to a short period of time which we have tentatively dated between 800 and 850 CE (P.J. Schmidt, 1991; Pérez de Heredia, 1997). There has been a major discussion focused on the Cehpech ceramic from Chichén Itzá which in recent years has been at times interpreted as absolutely contemporary to the Sotuta ceramics. According to the ceramic from other contexts at Chichén Itzá, we have argued that Cehpech is a scarce and residual ceramic at Chichén Itzá which evidences a distinct,

though very short, occupation of the site (Schmidt, 1991; Pérez de Heredia, 1997). Cehpech would be diagnostic of the transitional period between the Motul and Sotuta complexes at Chichén Itzá, and could tentatively be dated between 800 and 850 CE, after which Sotuta would entirely substitute the earlier Cehpech and Motul ceramics. This would suggest that the Motul, Cehpech and Sotuta complexes would basically be sequential at Chichén Itzá (see the <u>Chronological Chart</u>).

Of the Cenote's ceramics we have classified, only 552 fragments may be associated with this period of time, representing only 0.77% of the collection. This paucity of the Cehpech ceramics is perfectly consistent with the paucity encountered in other contexts analyzed at Chichén Itzá (P.J. Schmidt, 1991; Pérez de Heredia, 1997). However, in spite of the limited sample, this presents a large variety with 19 different types present. The most common ware is Muna Slate, representing 35% of the collection, followed by the Thin Slate ware, with 13%. This Slate ceramic exhibits traits of form and decoration that associate it with its counterpart at Cobá. The Holactún Cream Group, which probably originated in northern Campeche, forms 7% of the Cehpech collection; the Máquina Brown Group (from Petén), 4%; the Achote group (of the Torro Type, associated with Río Bec), 3%; and the Vista Alegre group (associated with the Eastern Coast), 2%. The Balancán Fine Orange group and the Teabo Red group, represented by only three sherds and one sherd respectively, represent 1% of the sample.

As to the forms, 63.2% of the Cehpech sample consists of pitchers, particularly the ones known as *chultuneras*, implying that the primary function of the Cenote in this period of time was water supply. A 14.4% includes pots and 10.6% *cajetes*, while the remainder are mainly vases with only three fragments of censers. The paucity of fine imported wares such as Fine Orange may be interpreted against the ceramic offerings at the Cenote. *Cajetes* and pots, even though they could imply some ceremonial activity at the edges of the Cenote, were probably not cast there as offerings, and in any case they would imply that the Cenote was used as a dump.

The foreign ceramic connections of the Cehpech Horizon ceramics at Chichén Itzá point to the East Coast and Cobá (Vista Alegre Striated, Muna, and Ticul types), while some Slate ceramics show similarities in color and slip with those of Yaxuná (Boucher, personal communication, 1998).

HUM UNSLIPPED GROUP		7	1.26%
Oxkutzcab Appliqué Type: Oxkutzcab Variety	3		
Yokat Striated Type: Yokat Variety	4		

MUNA SLATE GROUP	198	35.86%	
Muna Slate Type: Muna Variety	171		
Sacalum Black on Slate Type: Sacalum Variety	17	-	
Tekit Incised Type: Tekit Variety	9		
Akil Impressed Type: Akil Variety	1		
		74	13.40
Ticul Thin Slate Type: Ticul Variety	67	-	
Xul Incised Type: Xul Variety	7		
TEABO RED GROUP		1	0.18%
Teabo Red Type: Teabo Variety	1	-	
BALANCAN FINE ORANGE GROUP		3	0.54%
Provincia Plain Relief Type: Provincia Variety	2		
Palizada Black-on-Orange Type: Palizada Variety	1		
HOLACTUN CREAM GROUP		39	7.06%
Holactún Black-on-Cream Type: Holactún Variety	33	-	
An additional Type of Holactún Cream Group: Plain Relief	6		
ACHOTE GROUP		21	3.80%
Possible Achote Type: Achote Variety	4	-	
Torro Notched Incised Type: Torro Variety	17		
ZUMPULCHE GROUP		1	0.18%
Chunkatzin Red on Thin Slate Type: Chunkatzin Variety	1		

VISTA ALEGRE GROUP			2.53%
Vista Alegre Striated Type: Vista Alegre Variety	14		
MAQUINA BROWN GROUP		25	4.52%
Azúcar Impressed Type: Azúcar Variety	24		
An additional Type of the Máquina Group: Fluted	1		

## Sotuta Horizon (850 - 1150 CE)

The ceramic of the Sotuta horizon is associated with the maximum development of Chichén Itzá, and it is consistent at least with the so called "Toltec" architecture of the site. The ceramic analysis of the Chichén Itzá Project actually suggests the beginning of the Sotuta Complex circa 850 CE, which would partially overlap with the Cehpech Horizon at a regional level, although as we have previously pointed out, the Cehpech and Sotuta complexes from Chichén Itzá are basically sequential. This implies that the construction of buildings during the second half of the IX century share the same Sotuta ceramics with later buildings such as the Ossuary, dated at the late X century. Currently, one of the objectives of the ceramic analysis of the Chichén Itzá Project consists in the differentiation of the possible early and late facets of the Sotuta Complex, but this is an ongoing work which requires modal and typological analysis as well as the analysis of a larger number of stratigraphic pits.

The Sotuta ceramic from the Sacred Cenote, with 22,352 fragments representing 31.3% of the total collection, is distributed in 29 different types. The Sisal Unslipped ware with 873 sherds comprising incense burners and striated pitchers is among the less represented types, hardly accounting for 3.9% of the collection, while in other contexts at Chichén Itzá this ware displays percentages that range between 40 and 60%. This indicates a poor presence both of unslipped bi-conical incense burners and striated pitchers to store liquids.

The Slate ware, with 18,385 sherds, represents the largest portion (82.2%) of this horizon.<sup>4</sup> There is a remarkable abundance of the Dzitás Slate and Balantún Black on Slate types, as well as a series of decorated types that include Balancanché Red on Slate, Chacmay Incised and Tekom Notched-Incised. This is a rather high percentage, given the fact that the Slate ware in other contexts from Chichén Itzá fluctuates around 30-40%. It is possible that artifacts corresponding to the Say Slate ware of the Motul Complex were identified as Dzitás Slate, given the difficulty in differentiating between these Slates when the parts are not diagnostic. In the case of the Say Slate artifacts, identification largely depends on the slip, which because of the time spent inside the

<sup>&</sup>lt;sup>4</sup> For the time being, this figure must be considered as tentative, as it is possible that a good number of artifacts may in fact pertain to Early Motul Slate.

Cenote, may loose shine and color. Therefore, it is assumed that the number of Slate artifacts of the Dzitás ware may possibly be over-represented.

The Dzibiac Red Ware presents a percentage of 9.28% of the collection, very similar to other contexts from Chichén Itzá.

The Silho Fine Orange Ware, a ceramic possibly imported from the Gulf area, presents a total of 831 sherds, making it the fourth best represented ware with 3.7% of the Sotuta Complex, much better represented than in other places at Chichén Itzá, where percentages are lower than 2%. Here, it is easy to assume that complete or semicomplete pieces of this ware have been sent to various museums in Mexico.

Tohil Plumbate, another foreign ware originated in the Pacific Coast of Guatemala and in Chiapas (Tajumulco) is only represented by seven sherds, and in other areas of Chichén the percentages are higher; therefore it is our belief that the fragments of this type of ware may have been pre-selected by the cataloguers of the expedition conducted in the 60's.

The Tinum ware, a ritual ceramic group that displays specular hematite decoration on orange or cinnamon backgrounds, was defined as a type by R.E. Smith (1971). Currently, we are working on the definition of the Tinum ware which adopts forms of incense burners (sahumadores), censers of the "Mixteco" type, tecomates and small pitchers (among others). Tinum is present with 60 sherds. The Tinum ware, locally manufactured with pastes identical to those of Dzitás Slate according to visual observations confirmed through petrographic analysis (Carmen Varela, 1997, personal communication), was inspired by samples imported from the Altiplano area, some of which may even have originated in the Cholula area (P.J. Schmidt, personal communication), and are also present in our collection (51 fragments). The percentage of Tinum ware is very similar to that found in other parts of the site.

Finally, we should mention the presence of a support of the Nicoya or Papagayo Polychrome type originating from Central America. Less than ten sherds of this Central American ceramic have been found so far at the site.

s	Sotuta Ceramic Horizon (850 - 1150 CE)			
S	SISAL UNSLIPPED GROUP		873	3.90%
	Sisal Unslipped Type: Sisal Variety	440		
	Pisté Striated Type: Pisté Variety	383		
	Espita Appliqué Type: Espita Variety	47		
	Cumtún Composite Type: Cumtún Variety	3		

DZITAS SLATE GROUP		18,385	82.25%	
Dzitás Slate Type: Dzitás Variety	14,640			
An additional Type of the Dzitás Unslipped Group	32			
Balantún Black on Slate Type: Balantún Variety	3,619			
Balam Canche Red on Slate Type: Balam Canche Variety	53	-		
Chacmay Incised Type: Chacmay Variety	24			
Tekom Notched-Incised Type: Tekom Variety	1			
Timak Composite Type: Timak Variety	48			
DZIBIAC RED GROUP		2,075	9.28%	
Dzibiac Red Type: Dzibiac Variety	2,032			
Chan Kom Black-on-Red Type: Chankom Variety	3			
Xucú Incised Type: Xucú Variety	5			
Xucú Incised Type: Cream Slip Variety	1			
Holtún Notched-Incised Type: Holtún Variety	1			
Holtún Notched-Incised Type: Cream Slip Variety	33			
SILHO FINE ORANGE GROUP		831	3.71%	
Silho Orange Type: Silho Variety	659			
Cumpich Incised Type: Cumpich Variety	46			
Kilikan Composite Type: Kilikan Variety	6			
Pocboc Notched-Incised Type: Pocboc Variety	14			
Yalton Black-on-Orange Type: Yalton Variety	106			
TOHIL PLUMBATE GROUP		7	0.03%	
Porvenir Semicircular Type: Porvenir Variety	7	-		

TINUM GROUP		69	0.30%
Tinum Red-on-Cinnamon Type: Tinum Variety	29		
An additional Type of the Tinum Group: Black and Red-on-Cinnamon	15		
An additional Type of the Tinum Group: White-on- Red Hematite	24		
LIBRE UNION GROUP		61	0.27%
Possible Libre Unión Red-on-Buff Type: Libre Unión Variety	61		
GROUP ?		1	0.00%
Possible Nicoya Polychrome Type	1		
GROUP ?		51	0.22%
An imported type (Cholula?) very similar to Tinum	51		

## The Functionality of the Sacred Cenote during the Sotuta Complex

Traditionally, the functions attributed to the Sacred Cenote are the following:

- Water supply source;
- Place of ritual offerings;
- Place for human sacrifices; and
- Oracle of the Rain God.

Nevertheless, chronology has not been taken into account at the time of proposing the above functions, and many interpretations have been dominated by romantic myths and sacrifices of maidens. While the function as a water supply is fully demonstrated by the predominance of pitchers among the ceramics recovered, it is fitting to consider that the Sacred Cenote's water may have had as well, at least at some point, a sacred character.

As to its function as recipient of offerings, this is a function rather hard to demonstrate for any of the time frames when the Cenote was in use. The presence of luxury objects and imported goods at the bottom of the Cenote does not necessarily mean that they were cast there as offerings. Ball (1992) has proposed the alternative idea of a massive termination event. The possibility also exists that the pieces were cast there in a premeditated act of destruction, perhaps as a result of a military conflict. And it could also be the product of using the Cenote as a refuse dump for prolonged periods of time.

Therefore, the possibilities are varied, but proving some or all of them is by no means simple. A study of the all materials as a whole would be required, trying not to jump to hasty conclusions based on preconceived notions.

Something similar can be said of the sacrifice ceremonies and the Cenote's function as an oracle. The Sacred Cenote cannot be viewed as an isolated trait but on the contrary, it should be measured within the ritual system of which it was a part, as the culmination of the ritual array of the Great Leveling.

While reviewing the Sotuta Complex with respect to the vessel forms studied, we observe that only 490 sherds (2.1% of the Complex) derive from coarse incense burners, which are very abundant in the building contexts at the site, particularly in the Colonnades, where at least once (structure 3D7 of the Northeast Colonnade) they are directly associated with Chac Mol sculptures (José Osorio, personal communication). The unslipped censers in their Spouted Appliqué and Cumtún Composite versions are associated with the cult of the rain god at the Balancanché caves (Andrews IV, 1970).

This paucity of unslipped censers at the Cenote is in contrast with the remarkable abundance of pitchers: 18,539 sherds representing 82.9% of the complex. These pitchers are both of large and medium size, whose function was clearly related to the provisioning of water, but they include as well small globular, thin walled jars, some of them with decorations, which may be considered within the category of possible offerings of fine and imported vessels. They may have been offerings to the Cenote, or used in the rituals that culminated at the Sacred Cenote of Chichén Itzá. The Mixtec censers should be included here, as well as the incense burners and molcajetes decorated with hematite, both local (of the Tinum type) and imported.



Figure 22. Sacrifices at the Cenote.

Perhaps these rituals involved more domestic utensils as well, such as Pots (2,877 sherds; 12.8%); and in a much lesser degree Cajetes (163 sherds: 0.7%); Vases (66 sherds: 0.2%) and perhaps Molcajetes (24 sherds: 0.1%).

In short, the Sotuta ceramic from the Cenote shows the utilization of water with a greater intensity than in earlier times, but at the same time a number of fine and imported vessels that would evidence the final rituals enacted at the side of the Cenote or that were cast there as offerings.

Although Tozzer (1957: 200) affirms that the two fundamental purposes of the rituals conducted at the Cenote were petitioning for rain and forecasting the harvests, the associated iconography throughout the Sotuta timeframe indicates that their meaning, at least during the peak of the city, was instead related to the Feathered Serpent (Quetzalcóatl-Kukulkán) and the warfare rituals. The north-south ritual axis seems to be the logical continuation of the east-west axis that connects the Temple of the Warriors with the Ballgame, and whose relation with war is clear in the iconography.

The north-south axis presents the descent of the feathered serpent along the beams of the castle's stairs. The Venus platform continues this relationship with the feathered serpent, and this association could be older. Excavated by Le Plongeon in 1883, the interior showed a number of serpent sculptures and stone piles painted in blue and red which possibly formed the substructure of this platform. The serpent's descent from the Castle continues in Sacbé 1, whose two small lateral walls terminated in two serpent heads (Pérez de Heredia y Victoria, 1997). The heads, recovered from the interior of the Cenote by Piña Chan and W. Folan, convert the Sacbé into an enormous serpent.



Figure 23. Jade from the Sacred Cenote.

A possible representation of the Sacred Cenote in a vault cover of the Temple of the Owls (shown on the cover of this work), with a representation of the feathered serpent in its interior, confirms the belief that the serpent in fact descended to this well. We may also mention here that a recurrent design in the local decorated wares is that of intertwined serpents.

Evidence comparable to that of the Sacred Cenote was recovered by the author at the beginning of Sacbé 1 in 1993 and 1994, when the Chichén Itzá Project conducted excavations at the Great Platform (Pérez de Heredia, 1994; 1995). Here, an altar linked to the beginning of Sacbé 1 which connects with the Sacred Cenote was discovered, one that possibly served ritual functions. A lateral test pit made at the Sacbé and this altar revealed a ritual deposit associated with Sotuta ceramics, which included other materials also present at the Cenote, such as skulls, mandibles and long bones, burnt arrow points and shell and jade beads similarly burnt, unslipped censers and other wares (Pérez de Heredia, 1997).

Thus, the rituals celebrated here included the burning of arrow points, as shown in some bas-reliefs from the site, as well as the burning of copal in large censers and the secondary deposit of human bones (mainly male and female adults), many of which were intentionally broken and burnt (Arias and Pérez de Heredia, 1998).

In sum, the Worship of the Sacred Cenote during the Sotuta times is connected with the Feathered Serpent and Warrior Rituals, as a culmination of the Warfare-Sacrifice Complex that conceptually dominates the Great Platform at Chichén Itzá.

It is difficult to determine whether there was any worship of the Sacred Cenote during the early Sotuta times, although some data seems to suggest that in fact, the Cenote was the subject of particular consideration at that time. Nikolai Grube has identified phrases in the inscriptions of Las Monjas denominating the water of the Sacred Cenote as 'Sak Nab' or 'Pure Sea'. The inscriptions refer "to look in" or "to conjure" the Sak Nab. Sak means 'white' or 'pure', while Nab stands for 'lake' or 'sea' (in Schele and Matthews, 1998, Note 36, p. 369).

The presence of fine and imported wares such as Silho, Plumbate, Tinum and Nicoya suggests that these rituals correspond to a fully developed phase of the Sotuta complex.

## The Hocabá and Tases Horizons (1150 - 1450 CE)

In view of the difficulty in establishing a distinction between the unslipped wares of the Middle and Late Postclassic periods (Hocabá and Tases Complexes), the endless repetition of forms during both periods and the absence of stratigraphy in the materials recovered by E. Thompson, Ball (1992) proposes to consider both Complexes as a Chen K'u Sub-complex, with unslipped cajetes frequently covered with Maya blue paint, as well as anthropomorphic censers with pedestals, all of which served an eminently ritual function: that of burning incense. Occasionally, shell and jade beads were inlaid in this incense or copal, a custom that originated at least with the Sotuta Complex, as evidenced in Sacbé 1.

On the other hand, the abundance of this Postclassic ceramic induces Coggins to suggest a Postclassical Cult of the Cenote where these cajetes and censers would have been cast as offerings.

In our analysis we have attempted to make the best possible distinction between the Hocabá and the Tases complexes, although in the unslipped ware most sherds are assumed to correspond to the latter, for which, Tases is probably over-represented.

#### Hocabá Ceramics

6,050 sherds were assigned to the Hocabá Horizon, representing 8.4% of the total collection, a percentage that is consistent with the average of this complex at the site.

Unslipped wares include pitchers of the Yacman Striated type. The percentage of this unslipped ware is low because, as previously mentioned above, given the impossibility of distinguishing between them, all the unslipped cajetes were included in the next period.

The Mama Red ware with 4,098 sherds is the most significant of this complex, and it primarily appears in the form of small tripod cajetes, with solid supports, as well as middle-sized cajetes with solid or hollow supports.

Regarding the Peto Cream group, which was considered to be absent from the Cenote (Coggins, 1992), is well represented with 1,867 sherds, mostly in the form of pitchers of the Xcanchakán Black-on-Cream type.

In sum, the Middle Postclassic reveals, as its major forms, the pitchers for carrying water, the tripod cajetes and the incense burners for copal offerings. The Hocabá era would witness the transition from an institutionalized cult at the Cenote, with the use of fine and imported wares, to a more popular cult characterized by coarse wares.

NAVULA UNSLIPPED GROUP			1.40%
Navulá Unslipped Type: Navulá Variety	32		
Yacman Striated Type: Yacman Variety	53		
MAMA RED GROUP		4,098	67.73%
	4,039	ч,000	
Mama Red Type: Mama Variety	ч,000		

K	UKULA CREAM GROUP		1,867	30.85%	
	Kukulá Cream Type: Kukulá Variety	43			
	Xcanchakán Black-on-Cream Type: Xcanchakán Variety	1,815			
	Xcanchakán Black-on-Cream Type: Sharp Incised Variety	7			
	Pencuyut Incised Type: Pencuyut Variety	2			
	Another Notched-Incised Kukulá Group	1			

#### Tases Ceramics

Eleven ceramic types of the Tases Horizon have been identified, amounting to a total of 37,871 fragments which comprise 53.1% of the collection. If we add to this the 8.4% from Hocabá, the percentage obtained is 61.5%, for Ball's Chen K'u sub-complex. In Tases, the major group is formed by the unslipped Panabá ware, which is mostly present in the form of tripod cajetes for copal offerings, with a variety of a similar shape that shows a brown wash. The Huhí Impressed and Thul Appliqué censers are common. The anthropomorphic Chen Mul censers are under-represented, possibly as a result of having been pre-selected by the cataloguers. Photos of vessels of this type have been published, as shown in the figure below, but their actual origin is unknown.

The Panabchén group includes mostly tripod cajetes of the Mama type in the variety that shows no exterior slip. Lastly, the Tecoh Red-on-Bay (*Rojo sobre Bayo*) type is represented by 43 sherds.



Figure 24. Censers of the Chen Mul type.

PANABA UNSLIPPED GROUP		35,116	97.72%
Panabá Unslipped Type: Panabá Variety	33,307		
Panabá Unslipped Type: orange paste	34		
Panabá Unslipped Type: Brown Layer Variety	1,254		
Chen Mul Modeled Type: Chen Mul Variety	424	-	
Huhí Impressed Type: Huhí Variety	19		
Chenkeken Incised Type: Chenkeken Variety	15		
Thul Appliqué Type: Thul Variety	237		
Acansip Painted Type: Acansip Variety	13		
Acansip Thul Composite Type: Acansip Thul	8		

	Variety			
	A Modeled Coarse Type with no Slip	5		
PANABCHEN RED GROUP				7.16%
	Mama Red Type: Unslipped Exterior Variety	2,498	-	
	Possible Panabchén Red Type: Panabchén Variety	214		
POLBOX BAY GROUP			43	0.11%
	Tecoh Red-on-Bay Type: Tecoh Variety	43		

#### The Functionality of the Sacred Cenote during the Middle and Late Postclassic Periods

The abundance of Postclassic ceramics and other objects considered of late origin, has led Coggins to posit a *Postclassic Cult for the Cenote* where these cajetes and censers were cast inside as offerings. However, it is highly probable that the vessels of the Middle and Late Postclassic periods were cast into the Cenote by Diego de Landa and not by the prehispanic Maya, and therefore this "cult" would be, actually, Landa's act of destruction (Pérez de Heredia and Victoria, 1995).

Friar Diego de Landa, in his Relación de las Cosas de Yucatán, describes the masonry structure built at the edge of the Cenote (known today as the Steam Bath), as a "small building where I found idols to honor all the major gods of the earth, almost like in the Roman Pantheon. I do not know whether this was an ancient invention or whether it came from the modern people, to see their idols when they went to that well with offerings. I have found full-figure carved lions, pitchers and other things..." (1986: 114).

The friar refrained from mentioning that he cast the idols, vessels and sculptures into the Cenote during the purifying act he conducted probably in 1558, when during a visit he made to the villages located in the vicinities of Valladolid, he discovered huge "trickeries and idolatries", and severely admonished the most important Indian lords of those places. It is rather logical to assume that seeing such a degree of idolatry displayed at the Cenote of Chichén Itzá, Diego de Landa destroyed this "Maya Pantheon" through the most simple and expeditious way: by casting all those "evil" objects to the bottom of the well. This destruction of idols at the Sacred Cenote took place four years before the famous 'Auto da Fe' (Act of Faith) of Maní. Diego de Landa's visit to the Sacred Cenote was not accidental but a part of a plan designed to destroy the major centers of the ancient religion. Landa was aware of the fact that the indigenous felt for Chichén Itzá and its Sacred Well "a veneration just like ours for the pilgrimages to Jerusalem and Rome" (1986: 48), and could therefore anticipate the effect that such a blow would have on the morale of the pagan, bellicose and rebel Mayas from Northern Yucatán.

The huge amount of Postclassic ceramic fragments should not be overlooked. We have at least one hundred and fifty vessels of the Middle and Late Postclassic periods, plus 33,900 fragments from the same time frame. If all this evidence was present around the area of the Steam Bath, then this building and the adjacent platform must have been virtually covered with pieces, and therefore the description of the Pantheon by Landa would gain veracity. This is true even leaving aside the fact that the fragments Thompson excavated must have been mostly from the Postclassic period.

How many vessels could 33,900 sherds represent? If we accept an average of 100 sherds per vessel we obtain 330, which, together with the complete vessels, would yield a number close to the 500 vessels. And should Thompson have excavated a similar amount of sherds, we would be talking of some 800 vessels. This would be the approximate number Landa observed at the edge of the Cenote.

The Steam Bath, as well as the adjacent platform, were excavated during the explorations conducted in the 60's. The materials found there were scarce and do not reflect the Pantheon described by Landa. Later, someone, between Landa's visits and the excavations of the XX century, must have cast them into the Cenote, and the most obvious suspect in this case would be precisely, Landa.

Moreover, a similar action of throwing idols away into the Cenote is documented. This was made by Bishop Gregorio Montalvo, Landa's successor, in 1583 in the village of Tizminac. Sánchez de Aguilar, an agent and witness of this destruction admits that "... with my own hands I broke the idols, I trampled on them, and following his orders (the bishop's) the remains were cast into the lake" (Destruction of idols by the Bishop, in Sánchez de Aguilar, 1987:32). Therefore, the Postclassic vessels from the Cenote were not cast there by the Maya. This does not deny that during the Middle and Late Postclassic periods there was a cult going on at the Cenote, given that all those ceremonial vessels were located at the edge of the Cenote.

The question then is whether the Middle and Late Postclassic cult is similar to the cult to the Cenote during the Sotuta horizon, when as we have seen, Quetzalcóatl was the venerated deity. The Hocabá and Tases ceramic and the non-ceramic materials from those times do not show representations of the feathered serpent. Furthermore, at the beginning of the XIX century the local inhabitants thought that the Cenote was propitious for presenting offerings to Chaac, the rain god. Therefore, the Postclassic cult of the Cenote may have been related to rain petitioning ceremonies or simply to the veneration of ancestors. In those ceremonies, vessels were not cast to the depths of the Cenote, but instead, offerings were deposited on its margins.



Figure 25. Excavation of the steam bath and platforms by the Sacred Cenote conducted by Piña Chan in 1971.

## Chauaca Ceramic Horizon (1530 - ? CE)

A small sample of sherds assignable to the Chauaca horizon were recovered among the prehispanic materials from the Cenote. It is too small to draw any final conclusions, and we recommend that a more detailed study of this material be undertaken.

Chauaca Ceramic Horizon (1530 - ? CE)				
Ichtucknee Blue-on-Blue Type	1			
Unidentified Type possible related with Zapote Brownish Green	10			
Unidentified Type	66			
Unidentified Type possibly related with Blue-on-White Band and Line	9			
Unidentified Type	1			
Unidentified Type	3			
Unidentified Type	1			

## Conclusions

Until recently, our knowledge of the cultural history of the Sacred Cenote, based on the partial study of its ceramic, was limited to two major temporal events: the first consisted of materials from the Terminal Classic-Early Postclassic periods, and included luxury and imported ritual objects. The second, dating to the Middle and Late Postclassic periods, evidenced an impoverishment in regard to the opulence of the materials, including mostly cajetes, incense burners and ceramic censers. The occurrence of objects at the Sacred Cenote is due to two reasons: the gradual accumulation resulting from a series of ritual offerings, or either a spectacular act of deposit as a part of a magnificent termination ritual (Brainerd, 1958; Piña Chan, 1970; Ball, 1992; Coggins, 1992).

The ceramic analysis presented here, conducted on the collection of ceramic fragments from the explorations of the 60's, has enormously broadened the temporal sequence of use of the Sacred Cenote, as we now have evidence of the entire chronological column at the site of Chichén Itzá, spanning the Preclassic, Classic, Postclassic, Colonial and Modern periods. Therefore, we now have a vision closer to the historic reality regarding the use of the Cenote de los Sacrificios of Chichén Itzá. Not only has our temporal vision been expanded, but also, the presence of some ceramic types never found

before at Chichén Itzá has been established. Therefore, from the point of view of the ceramics from Chichén Itzá, the ceramic analysis conducted has greatly contributed to our knowledge.

Besides, the ceramic material of the Sacred Cenote has produced, for the first time, a clearly distinctive ceramic collection which we have dated to the Late Classic period and which had not been previously established at Chichén Itzá. Later studies have confirmed this finding, which defines the Late Classic period as the time when the urban development of the city was initiated.

Regarding the functionality of the Sacred Cenote, the study of the ceramic fragments presented here provides materials for a more thorough understanding of the role played by the Cenote in the cosmovision of the site's inhabitants through its different epochs.

Clearly, always, and from the very beginning, the Sacred Cenote was utilized as a source of water, being its basic and major function, as noted by George Brainerd (1958). Establishing the temporalities and meaning of its ritual function is rather more complicated.

The Sacred Cenote may have been used as a depositary of offerings since the Late Classic period. The ceramic sample of the Motul horizon is one of the major collections of its type, both for the quantity and quality of the objects involved. The reasons why the inhabitants of Chichén Itzá would cast these materials into the Cenote, based only on the ceramic, are not easy to establish. According to the data established here, a reclassification of the non-ceramic objects of that period is required, as well as the iconographic study of this era.

The greatest apogee regarding the deposit of high quality objects in the waters of the Cenote took place during the Terminal Classic and Early Postclassic periods. As shown earlier, the iconography of this era is associated with the god Quetzalcóatl, and the Sacred Cenote would be the last station in the great War-Sacrifice ritual complex to which the great leveling of Chichén Itzá was dedicated. Thus, we understand the Sacred Cenote as a part of a whole and not as an isolated ritual case.

It is very difficult to assess whether these objects were deposited in repetitive acts or through one single action. In my opinion, a series of repetitive acts seems more plausible, but the question remains open to debate.

The last great period of ceremonial activity around the Sacred Cenote corresponds to the Middle and Late Postclassic periods. A significant decline in regard to the quality of objects may have been accompanied by a shift in their meaning. In this case, as shown in the corresponding chapter, the ceramic objects were not cast into the Cenote by the Maya but by Bishop Diego de Landa. Possibly, during colonial times, the Cenote was a place to visit and maybe to conduct rituals somehow connected to Chaac, the rain god.

I believe this work is not yet finished. Certain ceramic groups are yet to be re-examined, and particularly, the study of complete vessels disseminated in different museums must

be fulfilled. Future changes to this report will be timely submitted, with the purpose of creating a debate around this fascinating Cenote.

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