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## 2 **TEMPORAL CYCLES IN THE ARCHAEOLOGY OF MAYA RESIDENTIAL GROUPS FROM CARACOL, BELIZE**

Arlen F. Chase and Diane Z. Chase

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*Considerations of ancient Maya cycles of time often focus on dated events obtained from texts on carved stone monuments or on Maya prophecies recorded in ethnohistoric documents. However, temporal cycles are also in evidence in the archaeological records of Maya households. Archaeologically recognizable cycles can be seen in the contextual data of Caracol's residential groups, specifically in terms of timed ritual acts carried out in these locations that are often associated either with cache practices or with human burials. For the Caracol Maya, the dates and sequencing of residential deposits suggests that acts of veneration were linked to overarching temporal cycles rather than to individual history and events relating to household or family – or even to the death of a family member. Taken collectively, these data suggest that the ancient Maya worldview was both focused on and constrained by specific concepts related to time. Commemorating the completion of temporal cycles was important for all levels of Maya society.*

### **Introduction**

It has long been known that the ancient Maya commemorated various cycles of time. Stone monuments were often erected in cyclical fashion, repeatedly celebrating 20-year temporal intervals. The attention that the ancient Maya paid to time is noted in ethnohistorical accounts and is also evident in the attention given to lunar and venus cycles within the codices. Ancient Maya time also became relevant to contemporary society in celebrations of the 13<sup>th</sup> Baktun in December 2012, however misguided this might have been. Yet, there remains debate about the degree to which specific Maya events, activities, monuments, and/or constructions reflect historical, as opposed to cyclical, commemorations. We continue to suggest that cyclical time was far more important to the ancient Maya than has been previously argued and that its significance is reflected in the archaeological record of many, if not most, sites.

Maya rulers are often portrayed carrying out ceremonies at the change of a given katun, or 20-year period of time; in fact, many carved stone monuments are katun markers that were erected in sequence by each ruler (e.g., Beetz and Satterthwaite 1981; Proskouriakoff 1950; Satterthwaite and Jones 1982). Individuals not only kept counts of their katuns of rule – in many cases counting down these 20-year periods of time in their texts – but they also often categorized their lives in terms of katun periods and further noted their participation in first-fire events that were often associated with New Years' ceremonies carried out in 52 year

intervals at times of calendar round shifts. Given the public placement of the carved stone monuments that emphasized katun endings and portrayed Maya rulers carrying out scattering ceremonies in association with these cycles, the broader populations of Maya cities were undoubtedly aware of the royal temporal commemorations. Archaeological evidence also suggests that these temporal cycles were commemorated by the population at large.

For more than three decades we have attempted to understand how the Maya used time through analyzing their archaeological records (A. Chase 1991; D. Chase 1985a, 1985b). We have found that certain ancient ritual remains can be articulated with celebrations of time (D. Chase and A. Chase 2008, 2009). We have further suggested that interments were often placed in association with specific temporal cycles rather than with the death of specific individuals (D. Chase and A. Chase 2004, 2011). At Santa Rita Corozal, it was possible to demonstrate that the paired incense burners found in many ritual buildings correlated with katun changes during the Postclassic Period. Paired incense burners found associated with the latest temples of Caracol suggests that katun changes were similarly marked at the end of the Classic Period (D. Chase and A. Chase 1998, 2000). The remnants of one ceremony can be dated to the 10<sup>th</sup> baktun on the summit of Caana; two incensarios accompanied the placement of a dateable giant ahau altar at the base of Structure B19 on the summit of Caana (A. Chase and D. Chase 2004).

The even earlier onset of the 8<sup>th</sup> baktun was marked by both construction efforts and the deposition of an elaborate series of caches associated with Caracol's Structure A6, the Temple of the Wooden Lintel (A. Chase and D. Chase 2006). The various temporal divisions of the 9<sup>th</sup> baktun – its 20-year katuns – were marked by the placement of Giant Ahau altars in the site epicenter (Satterthwaite 1954) and presumably by widespread deposits in the archaeological record of Caracol.

The archaeological data collected over the last three decades also appear to demonstrate that temporal celebrations integrated Caracol's residential households during the entire 9<sup>th</sup> Cycle. These ceremonies are more easily discernable in the archaeological record of Caracol because of the large number of ritual deposits associated with residential shrines at the site. Minimally 60% of Caracol's residential groups exhibit eastern shrine structures associated with caches and burials (A. Chase and D. Chase 1994; D. Chase and A. Chase 1998). In an earlier paper, we argued that Caracol's residential burials correlated with double-katun cycles of 40 years or, alternatively, calendar round cycles of 52 years (D. Chase and A. Chase 2004). Here we expound on this concept and also suggest that the face caches found in these same residential groups served as katun markers.

### **Temporal Cycles in Caracol's Residential Groups**

The ritual deposits found within Caracol's residential groups were not accidentally placed. They commemorated deceased ancestors and bound social groups together. Most Maya residential groups do not house the graves of all of their past inhabitants. Instead, it appears that only selected individuals were interred within a given residential group. These decedents make up no more than 5-10% of the total residential group population. This is not only true at Caracol, but has also been noted for residential groups that have been archaeologically excavated at Tikal, Guatemala (D. Chase 1997). At Caracol, a relatively fine-grained ceramic sequence has been developed using funerary ceramics from hieroglyphically dated chambers, radiocarbon dating, and stratigraphic associations (A. Chase 1994). Because of the

sample size and excellent contextual information, it is possible to date funerary ceramics to within relatively small blocks of time during the peak of Caracol's occupation during the Late Classic Period (A.D. 550-800). When ceramics are combined with stratigraphy across the various contexts, additional burials and caches can be dated through seriation. What emerges from these data is that fact that residential burials at Caracol placed in ritual contexts – i.e., on the axis to various structures – appear to have been interred with a temporal element that mimicked a 40-year or double-katun cycle. Absolute dating for the burial cycle can be established by examining dated tombs in Structure B20 in which the first was utilized by an individual who died in 9.5.3.1.3 (A.D. 537) and the second was occupied by an individual who died in 9.7.3.12.15 (A.D. 577), setting up a 40-year parameter between the stratigraphically-related individuals. The death dates in the tombs, however, do not account for double-funerals, secondary interments, or other post-processing of the dead that commonly occurred among the Maya, so some latitude may exist within this temporal cycle. As has been previously documented (D. Chase and A. Chase 2004) and as in the example included here, similar cycles of interment are found across various residential groups at Caracol.

While we were able to demonstrate that both face and finger caches are associated with burials at Caracol (A. Chase and D. Chase 1994), the isolated nature of these cache deposits, often placed in plazas in front of buildings, made it difficult to articulate exactly how caches fit into the broader picture of ancient Maya ritual. We were able to show that face caches appeared in the archaeological record of Caracol toward the beginning of the 9<sup>th</sup> Cycle but could neither satisfactorily explain their stylistic differences nor their temporal position and longevity. However, excavations undertaken within Caracol's residential groups within the last few years have yielded archaeological contexts containing caches that could be stratigraphically related to each other and to dateable burials. These data now permit us to suggest that face caches were deposited as part of both mortuary and katun ceremonies in

20 year intervals. The style of faces on the pottery vessels can be temporally seriated.

To demonstrate how the cache and burial cycles articulate, we will first look at the stylistic changes found within the face caches over time. Next, we will examine some of the archaeological excavations that were undertaken from 2007 through 2011 at Caracol. The first example shows the deliberate placement of a face cache immediately above the capstones of a crypt containing Late Classic vessels. The second example illustrates the stratigraphic relationships between burials and multiple face caches placed into a single building. And, the third example outlines the archaeological history of a residential compound consisting of adjoining plazas and structures in which the ritual deposits (both burials and caches) were sequent between the eastern buildings associated with the two plazas.

### Caracol's Face Caches: Stylistic Development and Contents

By comparing various deposits across the residential groups excavated at Caracol over three decades, it is now possible to see a stylistic sequence for the site's face caches. The earliest known face cache is a large lidded urn that is characterized by "jeweled" censer-like flanges found in the front core of Structure B34 (D. Chase and A. Chase 1998: figure 7); it was stratigraphically followed by the only other face cache associated with this structure – a similar, smaller urn that exhibits both jeweled flanges and, importantly, barbules and that was capped with a lid modeled to resemble flowering maize. As in Structure B34, barbules are also associated with one of the two urns recovered from in front of Structure A37; the other urn from Structure A37 has a hood but no barbules (A. Chase 1994: figure 13.7). The caches recovered from both Structure I5 (Figure 1a) and Structure F33, discussed below, reflect similar sequencing. Lightly hooded cache vessels, often without earflares, continue later in the sequences of both buildings. These jeweled hoods are similar to costuming found around the faces of several of Caracol's early rulers as portrayed on Stela 14 dating to A.D. 554 (9.6.0.0.0) and Stela 5 dating to A.D. 613 (9.9.0.4.0); it is likely that the caches are contemporary with these portraits.



**Figure 1.** Different styles of Caracol face caches: a. face with barbules and projecting/ flanged hood; b. bird contenance; c. simple face with earflares; d. hooded or beaded face with earflares.

These jeweled hoods (Figure 1d) do not appear to continue into the late Late Classic and there is a disjunction in the sequence that is marked by face caches that portray birds (Figure 1b). The bird face caches are fairly widely distributed at Caracol, occurring in at least a half dozen excavated residential groups. Human-like faces with earflares (Figure 1c) continued for a short while after the bird, but subsequently face caches are marked with more simple representations of faces, often on smaller containers. The final caches vessels that were utilized in Caracol's residential groups often contained no portraits.

Many face caches contain no preserved contents, probably indicative of organic matter. However, a number of Caracol's caches are associated with obsidian eccentrics (D. Chase and A. Chase 1998: figure 15). The use of obsidian eccentrics with face caches continued through the Late Classic Period at the site and is reminiscent of the use of obsidian eccentrics in caches associated with Tikal's stelae (often erected to commemorate katun cycles). Earlier face caches at Caracol contain other materials, ranging from beds of malachite to shells to

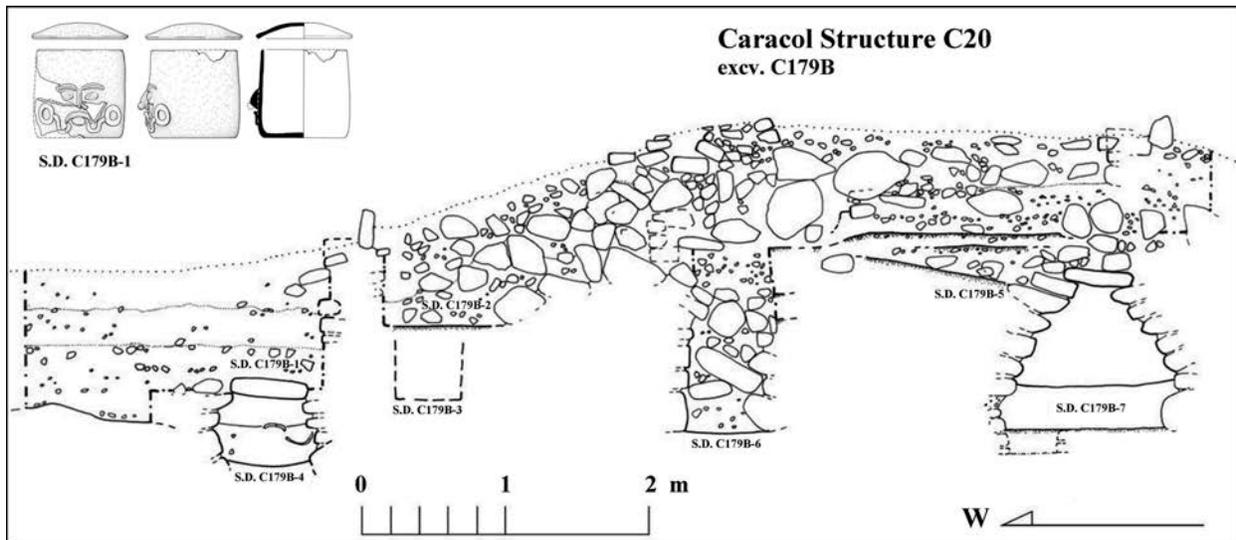


Figure 2. Section of Caracol Structure C20; the face cache was recovered immediately above the capstones for the frontal crypt.

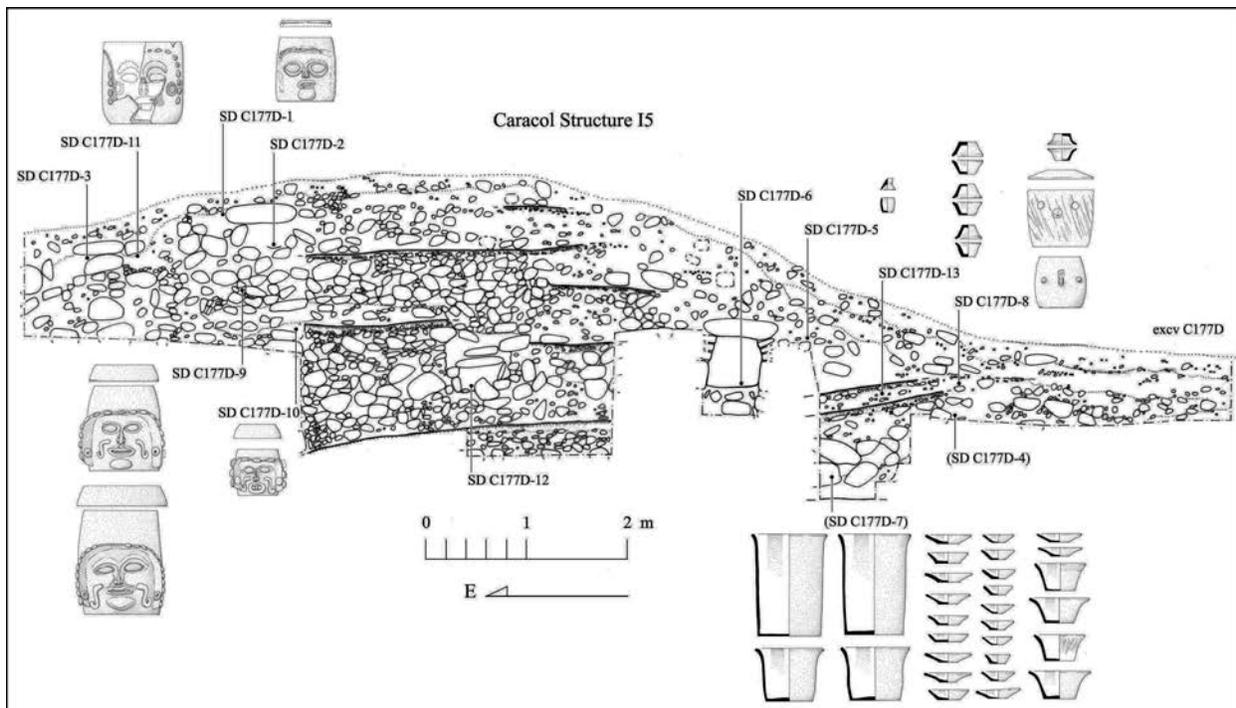


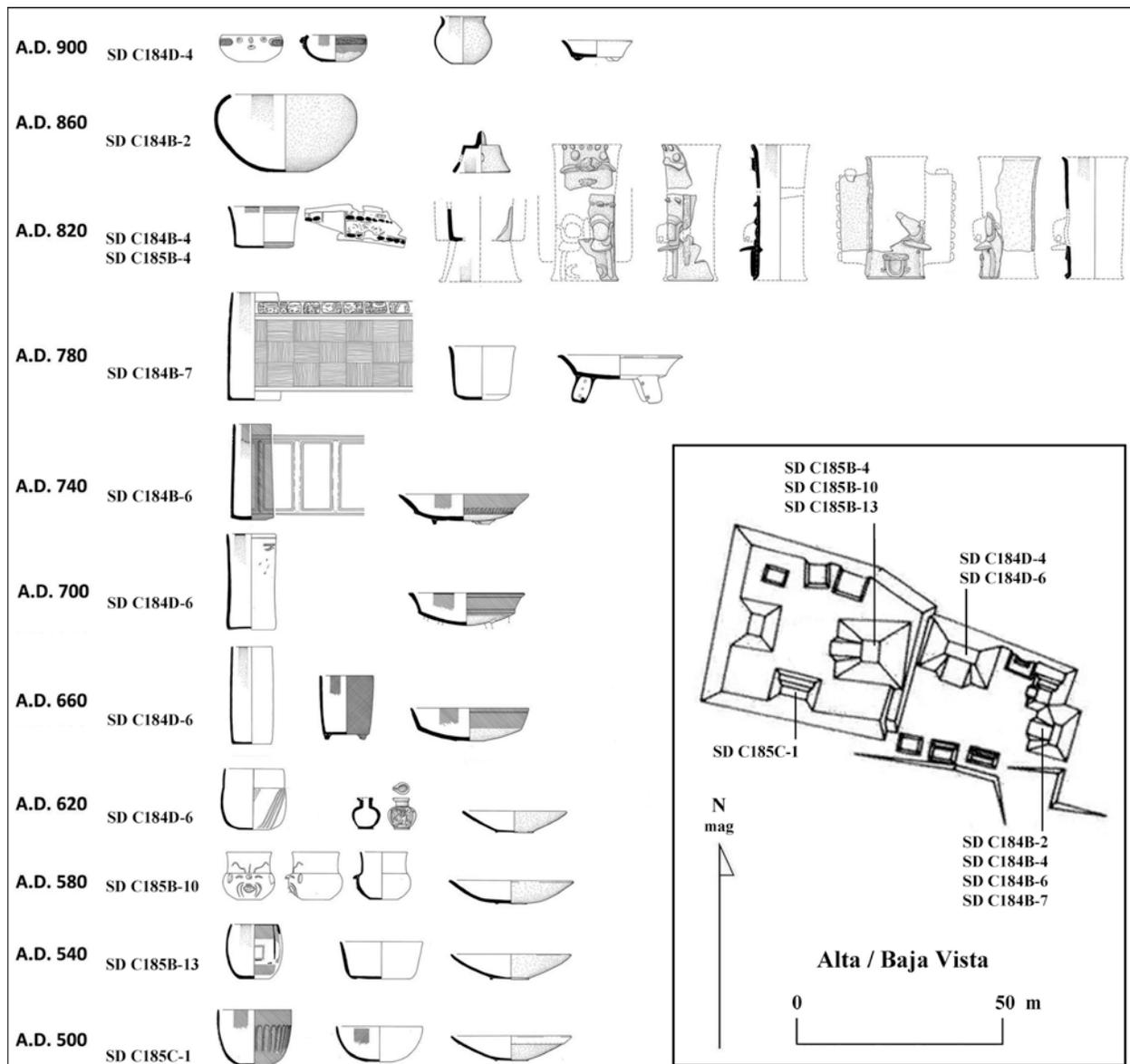
Figure 3. Section of Structure I5 and its caches.

jadeite beads. Inclusion of items in these caches, however, was rare by the onset of the Late Classic Period.

### Culebras: Structure C20

The Culebras Group was excavated during the 2008 and 2009 field seasons. The eastern

building in this group proved to be a typical one for the Maya of Caracol in that it yielded 4 burials and 2 caches (Figure 2). The burials are all associated with ceramic vessels, permitting these deposits to be sequenced into a series of episodic events separated by approximately 40 years and extending throughout the Late Classic



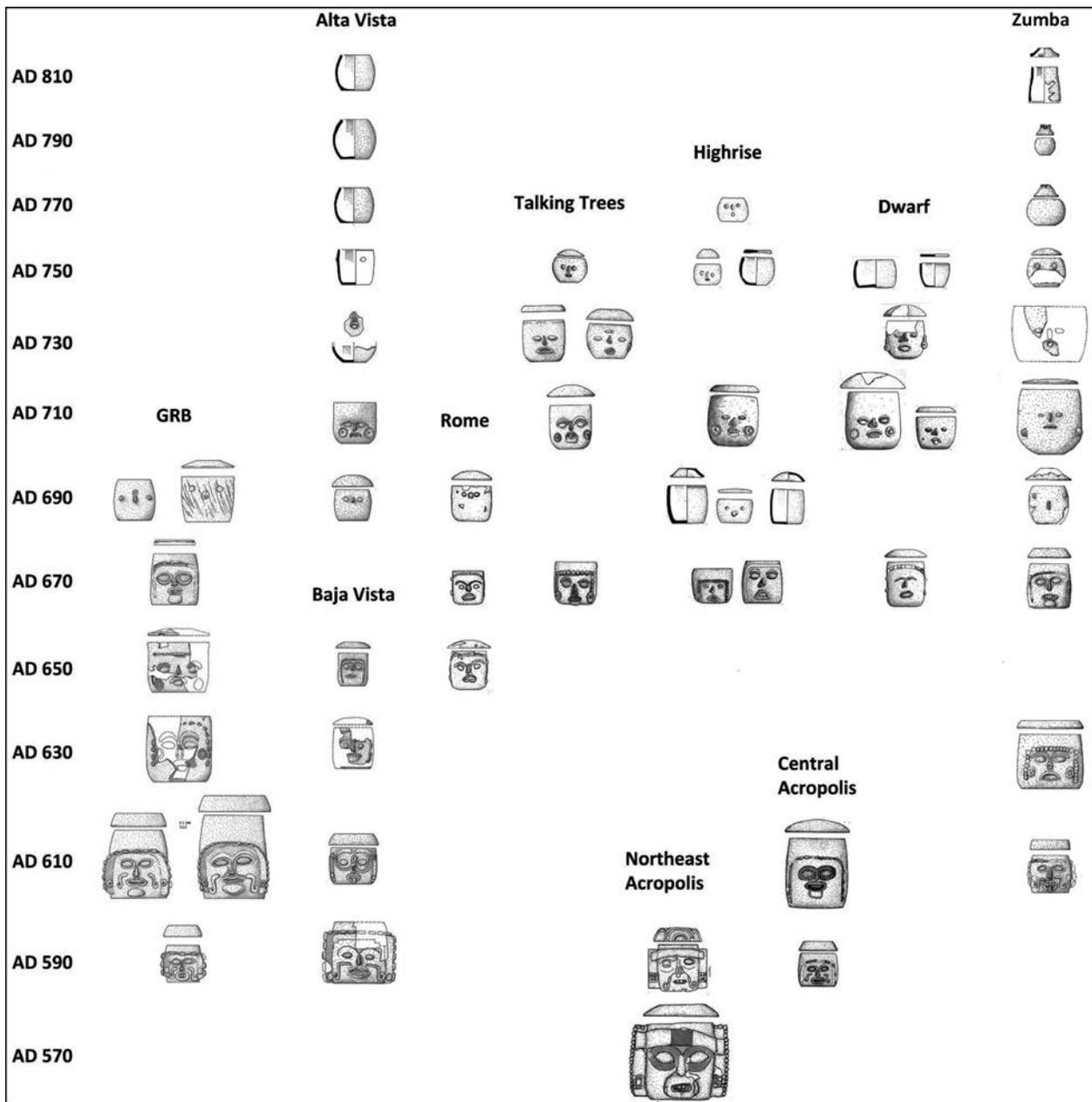
**Figure 4.** Seriation of burials recovered from Alta/Baja Vista following a double-katun pattern of interment that is consistent with the ceramic contents.

Period. One burial is of primary interest here. Located in front of the step of the building, it consisted of a single crypt with an extended individual with head to the north and the bones of an additional individual placed near the feet. The two vessels that accompanied this interment are clearly Late Classic in date, consisting of a footed plate and a polychrome figure cylinder. Above the capstones that sealed this deposit was a cache consisting of a finger bowl and a non-hooded face cache, thus positioning this face cache as contemporary to the Late Classic burial

vessels and providing a stylistic reference point for caches found in other residential groups.

#### **GRB Group: Structures I1-I8**

In 2007, a residential group immediately northwest of Caana was investigated in order to look at variability in residential remains. Four buildings were excavated within this group and two produced burials and caches. The north building, Structure I2, produced two burials within the building fill and a single face cache at the base of its stair. The eastern building,



**Figure 5.** Seriation of caches from Alta/Baja Vista and other residential groups, showing the stylistic and temporal sequence of these containers.

Structure I5, produced minimally 8 caching events and 4 burials (Figure 3). Six of the caching events involved face caches and two burials contained vessels. One of the face caches clearly was placed sequent to one of the burials and this same burial is placed directly above two of the earlier face caches, thus permitting the whole sequence to be better articulated. While the burials in Structure I2 and

I5 can be sequenced throughout the Late Classic Period, the face caches appear to span the earlier part of the Late Classic Period. The earliest examples in the sequence exhibit barbles and flanged jeweled hoods (Figure 1a). This is followed by examples with lightly marked hoods with and without earflares and then finally by a set of bird caches, one of which contained a carved limestone portrait of kinich ahau set atop

a series of obsidian blade eccentrics. Additionally, a sealed set of three finger bowls underlies the eastern building at its western extent and a massive caching event was placed into the front of the building during the late Late Classic Period.

### **Vista Group: Structures F30-F42**

Over the course of the 2010 and 2011 seasons, seven structures were investigated within a conjoined residential compound referred to as Alta/Baja Vista. These investigations recovered a broad series of burials and caches that can be temporally ordered and that suggests the veracity of the proposed ritual cycles relative to caches and burials (Figures 4 and 5). The Vista Group was ceremonially utilized throughout the course of the Late Classic Period. The initial ritual focus was in its western plaza area; the ritual focus shifted to the eastern plaza area in the late Late Classic Period.

The eastern building in the west plaza, Structure F33, contained two large urn caches dating to the early and late Early Classic Period; both urns contained Charlie Chaplins and other ritual items and are reminiscent of caches placed in public architecture in the Caracol epicenter. A change in the ritual focus of the Vista Group was marked at the end of the Early Classic Period by the placement of a burial within the summit remodeling of the southern Structure F34. Some 40 to 52 years later, the ritual focus shifted back to the eastern building with the placement of a small tomb in a stair balk at the base of the structure in association with a large lip-to-lip cache. The construction of this tomb disturbed a pre-existing lip-to-lip cache at the base of the structure, but represents a shift to traditional Late Classic Caracol caching patterns. One other burial, four face caches, and a number of finger caches followed. The face caches can be sequenced and generally follow the same stylistic sequence seen in Structure I5. However, burials are next deposited in the eastern plaza in association with the northern Structure B35, which also included a tomb. Following the use of this tomb, face caches are next found in the eastern building of the eastern plaza, Structure F38. The Structure F38 locus yielded 3 individual burials and 1 ritual deposit

that included human bone, all dating to the late Late Classic Period. The earliest burial at this locus contained two vessels and was placed beneath a small basal shrine room that fronted the structure. A second burial was placed to the front of this shrine room, as was a bird face cache. A renovation of Structure F38 elevated the summit of Structure F38 and infilled the shrine room. Contained within this shrine room were whole and partial cache vessels, partial incensarios, partial speleothems, and most of a human body. A new shrine was constructed above this locus and was associated with a small broken stone sculpture. A burial dating to the Terminal Classic Period was placed into the summit of the building and both it and the shrine were engulfed in a final renovation of the building. A final Terminal Classic burial of a child was placed into the north building.

For the Vista Group, the recovered burials can be positioned into a 40-year or double-katun cycle (Figure 4) and the recovered cache vessels are appropriate for positioning on each katun (Figure 5). The mix of cache vessels in the shrine room suggests that it was designed to Structure F38 possibly correlates with the placement of a burial into the summit of Structure F33 that was covered with the same broken incensarios. It is believed that both incensario deposits were associated with ceremonies carried out for the 10<sup>th</sup> baktun.

### **Summary**

Because of the long-term commitment to understanding Caracol's archaeological past, it is now possible to make some sense out of what once appeared to be disparate ritual deposits found throughout Caracol's residential units. While initially interesting because of their widespread distribution at the site and because of their social implications (A. Chase and D. Chase 2009), Caracol's face caches can now be associated with calendric ritual and assigned to specific blocks of time – 20-year katuns; thus, they also are exceedingly useful for dating the ritual use of a given residential unit. The face caches appear to interdigitate with residential burials that are also cyclical in nature, but that operate on an expanded double-katun timeline (Chase 2003, 2011]). Permutations in ritual remains among Caracol's residential groups still

remain to be explained. Some groups have multiple internments, but only limited caching activity; other groups have few burials, but numerous cached vessels. How and why these combinations occurred is something that should be answerable through future research at the site.

### **Temporal Cycles in Tikal's Residential Groups**

Residential households that have been archaeologically excavated at Tikal, Guatemala were also examined to see if there were any correspondences to the Caracol patterns. While Tikal follows somewhat variant ritual patterns, there does appear to be a focus on calendric ritual. Specially prepared ceramic cache containers are not known from Tikal residential groups and Tikal does not exhibit the face caches and finger caches found at Caracol. However, we know that Tikal emphasized rituals associated with the 20-year katun. This can be seen both in caches at the bases of Tikal's stone monuments, consisting of chert and obsidian eccentrics (Moholy-Nagy 2008), as well as in its emphasis on large architectural groups referred to as "twin-pyramid" complexes, which were erected to celebrate new years' ceremonies associated with the transitions of the Late Classic katuns at the site (Jones 1969). Still extant twin-pyramid complexes can be identified at Tikal for the katuns ranging from 9.13.0.0.0 (A.D. 692) to 9.18.0.0.0 (A.D. 726) and three earlier examples are also known (Jones 1991). The earlier examples date to before A.D. 562, when Tikal suffered a devastating star-war at the hands of Caracol.

Archaeological data from Tikal has already been used to suggest that most household inhabitants were not buried within the residential groups at the site (D. Chase 1997; Haviland 1988). However, an examination of Tikal's archaeological record suggests that the burials found in the eastern shrines of its residential groups did not follow the Caracol pattern of 40 to 52-year deposition. Rather it appears that the Tikal interments may have been oriented to actual katun ceremonies; this is strongly supported by the late Late Classic date of most residential burials that have been recovered (see Becker et al. 1999; Haviland et al. 1995). The repetition and stylistic

similarities of the vessels found in Tikal's residential burials strongly suggest a katun patterning for these stratigraphically separated deposits, but only in the late Late Classic time frame. If one examines the special deposits that were recovered during excavations made into residential groups at Tikal, it does not appear that the site celebrated much residential ritual between A.D. 562 and A.D. 692, or precisely the time of Caracol's apogee. Most of the recovered deposits at Tikal date to the late Late Classic (or Imix ceramic complex; see Culbert 1993) and many of its residential groups contain Manik burials that are not directly followed by Ik period burials in the early part of the Late Classic Period (based on data in Becker et al. 1999 and Haviland et al. 1985). Thus, Caracol and Tikal exhibit somewhat different ritual patterning in their archaeological records, something that is not surprising given their history of interaction (A. Chase 1991). However, cyclical interment patterns are present at both sites.

### **Conclusion**

Western perception of time is, for the most part, linear as well as historical. The historical aspects of Western time have come to be superimposed upon the interpretations that we make of the Maya archaeological record. Thus, archaeologists tend to focus on individuals and agency rather than on repetitive commemorative activities and offerings for the propitiation of cyclical time. Maya ritual events, specifically as relating to burials and caches, are often interpreted archaeologically in terms of individuals, families, and lifespans rather than being interpreted within a broader cosmological frame that commemorates temporal cycles. Ritual timing may differ from lifespan timing. Thus, a burial may commemorate a larger event or cycle and not the simple death of an individual.

How the ancient Maya viewed and used time has a complex history of interpretation. While the modern world has appropriated Maya time, as was seen in the public preoccupation with and celebration of the end of the 13<sup>th</sup> baktun (and the supposed end of the world) in December 2012, professional scholars of the past also had difficulty understanding how the

Maya used time. In the mid-twentieth century, both academic and public views of the ancient Maya had their communities ruled by priests who did little more than manipulate considerations of time, calendars, planetary cycles, solar and lunar revolutions, and other ritual counts. A more realistic picture of the Maya – one that included warfare and conflict – supplanted a utopian belief in the peaceful Maya once the hieroglyphs were understood. Epigraphic breakthroughs in the 1960s proved that the hieroglyphs found on carved stone monuments once thought to deal solely with the purview of time actually dealt with the dynastic histories of elite rulers. Scholars have subsequently chosen to emphasize the familial histories contained within the texts. Still, as noted above, the epigraphically-recorded history of these rulers is carefully placed within cyclical time and imbued with religious metaphor through the erection of stone monuments associated with the completion of baktun, katun, and hotun cycles.

An examination of the ritual deposits recovered in Caracol's residential groups strongly suggests that they were placed in accord with certain temporal principles. In combination with stratigraphic sequences gained through the excavation of Caracol's residential groups, the stylistic differences that are evident in both the face caches and the burials permit these deposits to be both securely dated and seriated. An analysis of these deposits demonstrates that Caracol burials were placed within residential groups as ritual offerings on a 40-year or double-katun cycle. Face caches appear to have been deposited in accord with a 20-year katun cycle and the onset of their deposition in residential groups appears to correlate with Caracol's war of independence from Tikal in 9.6.4.8.2. (A.D. 562). The multitude of these deposits that occur in Caracol's residential complexes signifies the importance of these ritual temporal cycles to the ancient Maya.

Marshall Becker (1992), who perhaps excavated more residential groups at Tikal than any other archaeologist, suggested that ancient Maya burials and caches would be better labeled as "earth offerings" – in recognition that something was amiss in our interpretation of these deposits. Even though he presciently

recognized that human bodies could be interred as ritual offerings, he could not articulate a broader framework to contextualize the placement of these deposits. The archaeological research at Caracol has succeeded in demonstrating that, for the most part, these earth offerings correlated with the ancient Maya celebration of cyclical time. The celebration of temporal cycles permeated all levels of Maya society at Caracol and was central to their identity.

Because of the disjunctions between the archaeological records and the present day Maya, we have tended to interpret their past remains with Western eyes – in which caches were purposefully secreted and burials were interred only when someone died. But, the ancient Maya were distinctly non-Western. They also were exceedingly religious. Maya hieroglyphic texts show that ancient Maya religious beliefs were interwoven with the celebration of time. While scholars have recognized the importance of time to the Maya elite for more than a century and a half, it has taken the archaeological record to demonstrate that the commemoration of the completion of temporal cycles was important for all levels of ancient Maya society.

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