

EARTH OFFERING AMONG THE CLASSIC PERIOD LOWLAND MAYA: BURIALS AND CACHES AS RITUAL DEPOSITS

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INTRODUCTION

One of the functions of archaeology is the reconstruction of the cultures of societies which no longer exist. The examination of material and data on the lives of these people also includes a concern with their ritual behaviors, which allow us to understand how they may have viewed the world. In the Maya world the reconstruction of ritual (Pohl, 1981) is a particularly interesting undertaking since we have recovered so much information which reflects this aspect of their ancient social behaviors. What is peculiar in studies of the Maya realm is the dearth of attention being paid to mortuary behaviour at a time when the archaeology of death (Chapman *et al.*, 1981) is of major interest to archaeologists throughout the world. Perhaps it is not surprising that mortuary customs among the Maya have not been a special concern as they have been in other parts of North America since burials are generally recovered in the

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course of explorations targeted at other aspects of sites, such as architecture or monuments. The lack of distinct cemetery areas or necropolis among the Maya means that burials generally are recovered in a random, if not chance manner¹. Thus studies of cemeteries such as conducted in other areas of the world cannot be a special focus of a research project in the Maya area. Relevant data for such studies must be culled from the published sources (Welsh, 1988b). These are among the reasons why no formal burial typology has emerged from any Maya site, despite the excavation of well over 300 burials from Tikal alone. This situation is further complicated by the evidence from caches in the Maya area, and the relationship between burials and caches is the subject of this paper.

TYOLOGIES

Our initial concern with «burials» should be that of making a general purpose typology (as distinct from a problem oriented typology) in order to perfect a field typology for future work (Klejn, 1982). This ultimate goal achieves a circularity in its purpose—that of using the data as we see them to construct a formal typology (etic) which should enable us to understand how the Maya themselves conceptualized these categories (emic). Gathering a wide

¹ This is not to imply that we cannot predict the locations of burials, but cemeteries as we know them simply do not appear at Maya sites. William A. Haviland (pers. comm.) notes that the North Acropolis at Tikal, with considerable numbers of elite burials associated with the temples, might be considered as a necropolis. Moholy-Nagy (pers. comm.) interprets the North Acropolis at Tikal as a Necropolis, but I see it as more like the burials beneath the floor of a European church. W. R. Coe's interpretation may soon be published. At Tikal large numbers of interments often are found clustered within what appear to be ordinary house platforms (e. g. Str. 4F-7 of Operation 20; Haviland *et al.*, 1985:82) or in some of the household shrines associated with Plaza Plan 2 (e. g. Str. 4H-4; Becker 1971:62 and tables). Each shrine in a Plaza Plan 2 group has at least several burials, and interments can be found at several other predictable locations throughout Tikal. However, these are not cemeteries in the sense of areas where tombs of most of the inhabitants of the site are concentrated.

The «cemetery» at Palenque described by Rands and Rands (1961; Ruz, 1958) appears to have been a mortuary area for the elite residents of Group IV (Roberston, In press: Group IV) rather than an area in which ordinary as well as upper class burials might be found. In some ways this may be a Palenque variant on the Plaza Plan 2 household shrines, or the North Acropolis burials at Tikal.

Also important in a discussion of Classic period Maya burial patterns is the discovery of 2 clusters of Middle Formative (roughly 900-600 b. C.) burials at Copan (Fash, 1982). The total number of individuals represented is only 31, and most of them are only partial remains reflecting what may have been usual mortuary practises for that period, according to Fash. If these 2 clusters represent a chronological rather than a social (or status) difference, then the population represented is not large and the term «cemetery» may here refer to a family graveyard. See also «Endnote 11» below.

range of data and subjecting them to multivariate analysis (O'Shea, 1984) might be one such means of approaching the problem. In any case, burials are clearly a means by which the members of a society embody their beliefs about the transition between life and death states and thereby afford us a view of both realms. These problems have been the concern of many scholars such as Binford (1971), Chapman, *et al.* (1981), O'Shea (1984), Peebles and Kus (1977), and Tainter (1975, 1978). While much of their effort has been directed toward the demonstration that «burials» reflect social status, and that the hierarchy of statuses can be used to reconstruct the complexity of a society, the basis for each reconstruction depends upon the development of a mortuary typology which accurately depicts the culture whose dead are being examined. This fundamental chore of establishing a typology which accurately reflects the cognitive structure of the society in question is the problem addressed in this paper.

Sprague (1968:482), who offers a good review of the early literature, is typical of the approach which discusses the «deposition» of a body as if it were a disposal, rather than a useful «offering». In the Maya area we now see that the use of a corpse has profound meaning in the ritual involving the continuity of life.

Interest in the organized study of Maya burial customs in general began with Ricketson's work (1925) and was continued by Ruz (1959, 1968), yet burial typologies in the Maya area generally remain on the level of «field classification» only. That is, when considerable numbers of human bones, or sometimes just a grave chamber, are found, a burial is defined. «Smaller» quantities of human bone may be defined as a «Problematical Deposit» (P.D.), and sometimes random scatters of bone from disturbed contexts are simply noted. In situations where «ritual» objects are found without human bone, the field classification used generally is «cache», with the presumption of ritual origins unless the ritual objects are those typically found in association with a burial (Haviland *et al.*, 1985: Burial 21)². Thus A. L. Smith (1950) was able to describe the caches recovered at Uaxactun, as well as from Altar de Sacrificios

² William A. Haviland notes that the funerary temples, such as those on the North Acropolis at Tikal, as well as the many «shrines» located in household groups conforming to Tikal Plaza Plan 2 (Becker, 1971), commonly have caches which appear to have been placed at various stages in their construction. If the temples or shrine buildings themselves are directly associated with (dependent for their existence on) the structure itself, then are the offerings which appear to have been made to the structure not associated with the burial (or the funeral ritual) even though these offerings are not actually placed within the grave? The logic of this argument appears clear, but the complexities of degrees of relationships are not always so simple in a religious cosmology, although they are always fascinating. Haviland notes (personal communication) that the only «houses» at Tikal in which caches were made were residences of the ruling elite (e. g. Caches 197 and 198 in Str. 5D-46).

(1972) and Seibal (1982) using this simplest of archaeological field classifications (cache or burial). W. R. Coe used this simple typology for Piedras Negras (1959) and the same approach was employed for many years at Tikal. As Chase (1988) has noted, Coe's definition (1965: 462) has done little to demonstrate the relationship between these two «extremes».

«The term "cache", prefaced by "dedicatory" or "votive", customarily designates a limited but significant variety of offerings found apart from human interments though not necessarily devoid of human skeletal remains.»

Our goal in the archaeological studies of this region should be the synthesis of ancient Maya cognitive structure (an emic understanding of all aspects of their behavior). How the ancient Maya conceptualized these deposits, which we have called caches and burials, may derive from a very different and much more complex typology than has been reflected in the simple dichotomy established by dividing deposits into the purely ritual (caches) and utilitarian ritual (burials, ritually placing remains, which also disposes of them). Our concern must be for understanding if these field categories do represent units, or what Klejn (1982:58) would call the boundaries of a type. Quite obviously many of the burials at Tikal were «making a ritual statement» while others were simply disposing the remains of a deceased «person» using a prescribed ritual. Quite possibly these depositions included the elimination of bodies of non-persons, in the form of infants who had not yet grown to or been inducted into the society as a «person» (Becker In press A). The following discussion treats the possible relationship between caches and burials at Maya sites, a subject begun some years ago (Becker 1963: 83-94). Although this discussion does not necessarily resolve any of the many questions asked, the subject warrants our attention at this time.

The conceptual continuum which appears to exist between caches and burials among the Classic period Maya reflects a cognitive concern not unique to these complex people. Caches and burials, as we see them, may have been but one set of concepts which the ancient Maya related more closely than do the modern people who are trying to reconstruct their lives. Quite possibly many cultures have a generalized category which I would call «earth offerings», a category within which there may be various conditions which distinguish aspects (or stages) of the whole. Many of Gustave Flaubert's works reflect his concern with such varied states of «matter» and the ways in which words serve to classify the varied aspects of a single whole. Thus the protagonists of Flaubert's *Bouvard et Pécuchet* (1910:41) find difficulty in identifying which of the four major forms of cloud they were watching, since «the shapes altered before they had found the names» (Mrosovsky, 1980:37). What they could agree upon (accept as a given fact) is that all of these things *are* «clouds».

Maya caches and burials, at least at the site of Tikal and during the Classic Period, may not have been two different things, but rather two subsets of a single category which I will call «earth offerings» (Becker, 1963). The problem of distinguishing between certain caches and certain burials was noted nearly 30 years ago at Piedras Negras where Coe (1959:120) noted that there were instances where «burial and cache features tended to merge». Despite the recognition that some burials which Coe presumed to be dedicatory and some dedicatory caches «may have had identical ends for the Maya, ... that objective is utterly obscure to us» (Coe, 1959:120). By approaching the problem from an archaeological-material perspective Coe made basic errors in his typology, including his failure to recognize that cache pits need not be distinct from grave pits and that the cache vessels themselves often were the analogues to complex built tombs.

The recognition that caches and burials may have similar cognitive meaning, perhaps relating to the death-planting-rebirth cycle, reflects Maya thoughts regarding various categories or names for parts of the human body (Danien In press), or for the meaning of an entire human corpse in the cosmic scheme of things. The details of these relationships are now being considered by various scholars. Welsh (1988a), for example, discusses the evidence for human sacrifice among the Classic Period Lowland Maya as part of his comprehensive research program relating to Maya burials. He suggests that those burials which resemble dedicatory caches are a category (1 of 4) providing evidence for human sacrifice. While I do not believe that these people were themselves sacrificed, the notable cognitive element here is the use of the body itself as an offering.

What needs to be made clear at this point is that the Classic Period among the lowland Maya spans some 700 or more years, and that the concepts under discussion may have varied through the temporal as well as spacial dimension (Coggin: personal communication, 1987). In addition, I would suggest that variations may appear at the same point in time but at different points within a single Maya city. These variations may correlate with factors of social class (Becker, 1986b), or even ethnicity as Moholy-Nagy (1987) has pointed out. As regards variations in the contents or burials between social classes one might consider Adams' (1977a:263, 328; 1977b:98) suggestion that a Maya Royal cult existed which involved «burials» of which the tomb, the temple erected over it as well as any associated building caches, and the monuments erected in association all composed a single unit. Moholy-Nagy continues this theme (1985:155-156) in her examination of the appearance and functions of marine molluscs in burials at Tikal. However, these behaviors all appear to be part of normal mortuary ritual but with the elite more able to translate cultural ideals into material goods. Even in burials of much less wealthy individuals, similar traits appear but much less lavishly expressed. One may infer that the lower

classes expressed the same cultural rules, but using perishable goods for which no archaeological traces have been found.

These considerations of variations in time and space as well as in social class should temper as well as aid our interpretation and use of European sources such as Bishop Landa (1941). What is important at this time is that we consider the categories which have been defined and attempt to determine if there are others that provide a more effective means of structuring and interpreting the data which we have gathered through archaeology.

The cognitive components of all such data sets are differently composed and/or differently divided by the rules of each culture. Our task as archaeologists is to recover the evidence and use it to understand these cultural rules, and how these rules vary in time and in space. Following Flaubert's concern with cloud types, a category of «skywater», to speakers of American English, can include sleet, rain, snow, hail, fog, and mist in addition to the more limited forms called — generically— clouds. Further divisions or subsets are created by the use of adjectives (e.g. wet snow, pouring rain) which thereby allow more specific divisions of the whole to be made. In fact, it may be the transitional states which are the most important, as they may be the situations which help us to best define the rules. Our goal here is to understand the Maya rules involved in making the deposits which traditionally have been called caches and burials. The areas where these «categories» overlap may enable us to recognize what the Maya had in mind when they did these things, just as understanding the transformation of cloud «types» may help us to understand the weather. Had Flaubert understood componential analysis he probably would have produced great ethnographies rather than great works of fiction, if there is a difference but in name.

MAYA BURIALS

Certainly one of the best manifestations of social behavior at Tikal, possibly on a par with the social aspects of architecture, derives from the data and material remains recovered from burials. As the number of burials excavated at Tikal now numbers in the hundreds, and the variety of situations from whence they derive is incredibly diverse, the possibility of formulating a working typology has become rather simple.

Whereas many archaeologists consider any or all of the remains of one or more individuals to indicate a «burial», the term has been held to a more restricted definition at Tikal. Careful data recovery at Tikal has produced an enormous number of human bone fragments scattered at random throughout the site, an occurrence which is duplicated in any archaeological context where soil conditions foster bone preservation and where burials commonly were

made within the habitation area rather than in special areas (cemeteries). I assume that the vast majority of the human remains at Tikal derive from disturbed graves. However, even where ancient cemeteries are spacially removed from living areas, the quantities of bone from disturbed burials also can be impressive in volume. Haviland (1985:14) points out that most Maya burials may have been made in middens, the subsequent reuse of which generated much of the human bone found scattered throughout the city.

Generally speaking, the limited definition of «burial» involves the original interment of one or more individuals in a prepared repository, however simple, together with any furniture or associated material, which may be absent (Shook and Coe, 1961; Becker, 1963; Navarrete and Martínez, 1977). Theoretically, the discovery of any one of these three variables is sufficient to indicate that a burial had taken place, or had been intended to take place. The matter of original interment, also referred to as a «primary» burial, has been a matter which leans directly to the problem at hand. This problem is that of distinguishing between the complete or partial interment of an individual as a «burial» or a «cache», and of evaluating other problematical occurrences of human skeletal remains such as those now catalogued at Tikal as «miscellaneous human remains». Archaeological evidence may not be able to determine if the intent was to «cache» (make an offering) or to bury (dispose of the dead). If this cannot be determined based on the archaeological reconstruction of the evidence, then I would propose that the process was not differentiated by those who made the burial/cache, and that our difficulty is an epistemological problem of projecting our categories to a situation which may not have made the distinctions which we would make.

The focus of this paper is that area in which caches and burials, two seemingly diverse aspects of society, appear to meet at Tikal, and throughout the Maya area. However, before considering this problem, some attention should be afforded those activities concerning human «remains» other than those involved in an apparently primary burial. The term «secondary burial» occurs with regularity in both archaeological as well as ethnographical literature. This term appears inappropriate to the specific archaeological situation in the Maya area, and probably elsewhere. Generally, the term «secondary burial» refers to the processing of human remains in a ritual pattern, which eventually culminates in the interment of only skeletal material or greatly altered human remains (Russell, 1987: 389). A suggested alternative to this is the term «two-stage burial», which indicates that a preliminary activity, or first stage (dismemberment, scaffolding, preliminary interment, cremation, etc.), precedes the actual permanent interment, or second stage. This is what Sprague (1968:479) termed «compound disposal». The term «redeposited remains» would better apply to cases in which the human bones are inadvertently or wilfully removed from their place of original deposition and subse-

quently redeposited elsewhere³. Thus a secondary burial might not be expected to have a formal grave, nor a careful redeposition.

When dealing with burials (bones, chamber, offerings, etc.) or simply the human remains alone, one must try to infer the function of the burial with regard to the concept of death as understood by the participants in the funeral, the meaning of the funeral, and the relationship of the living to the dead in the culture which conducted these activities. The burial of an individual, or individuals, is conducted in a manner which fulfills all the post-mortem requirements of both the deceased and the people with whom the deceased was involved during his or her life. One may assume that the death of a *milpero* did not have the far reaching effect that would be felt at the death of a royal person or some other important individual. Correspondingly, all ranks or grades or social levels would tend to have funerals somewhat in accordance with their «social persona» (Binford, 1971) including their social class. For the Post-Classic period Landa's (1941:130) observation that persons of high rank would be cremated and have temples built over them, while most people seem to have been buried with personal property within their houses.

The requirements of the soul or spirit of a deceased Maya are important because of the continued relationship with the world of the living (Death-burial-rebirth; Landa, 1941:129-30, fn.604; Closs, 1988). Perhaps the deceased's position, either formally or informally determined, dictated the nature of the steps taken to provide for his or her afterlife, as well as to protect those still living from the wrath (or with the woes) of an ill-provisioned ancestral spirit. The latter was the case among the ancient Greeks, whose dead had to receive proper burial in order to be at *rest*. The construction and contents of graves often reveals data concerning concepts and feelings regarding the transitions from life to death, or from one life to another. Thus the archaeologist may be provided with insights into both of these worlds through the excavation of burials.

Burials found dug into middens at Tikal reflect what might be considered to be the cross-cultural norm for body disposal. The body was simply buried. Haviland (1985:142) discusses «negative grave construction», where a corpse

³ Haviland (pers. comm.) notes that redeposited burials represent «non-persons» while I believe that they represent special items needful of *relatively* careful redeposition. Haviland cites the case of Tikal P. D. 231 (from CH. 6C-11) as a clearly redeposited person of considerable stature accompanied by elaborate artifacts, both suggesting his position among the elite. Haviland believes that this represents the body of a noble who had been deliberately exhumed from his tomb during a political upheaval and then dumped into a commoners grave. However, I believe that this case as well as the parallel example of the tall male from the chultun un the center of Gr. 5G-I at Tikal, also buried with elaborate tomb goods, represents no more than the respectful redeposition of tomb contents (bones and pots) of individuals whose graves were accidentally disturbed by construction activities which took place many years after their burials (Iglesias, 1988).

was placed on an open surface at which a platform or structure was meant to be built. Fill for this construction then was heaped over the corpse «creating» a burial. Haviland's classification of this type of burial (e. g. Tikal Bu. 59 as well as one behind the principal structure in Gr. 4H-I) in the same category as simple pit burials (such as Tikal burials 11, 12, 17, etc.) in a single «informal» category may distort an important distinction which may be better understood when we examine those more formal burials which have elements in common with ritual deposits at Tikal called «caches».

Returning to the problem of the relationship between caches and burials, note should be made that there generally exists a concern of living peoples for the remains of their dead. This concern relates to the problem of categorizing human remains when sufficient time has passed (one generation, more or less) for the concerns of survivors to be altered. Persons encountering an «old» grave may have very different concerns from those of the people who were responsible for the deposition of the human remains. Wherever such remains were encountered by ancient Maya in the course of building activities such as temple renovation, what that worker encountered may not have served to automatically categorize the material, or to provide him with guidelines as to how those remains were to be treated. The concepts which applied at the time of death may have had little relevance 20 years later. As in the case of determining what constitutes a burial, there exists a need to provide a theoretical reconstruction of the intentions of the people representing the living culture as regards their interactions with people representing the «dead» or past culture.

THE PROBLEM AT TIKAL

At Tikal, as throughout the Maya area, a profusion of different types of assemblages which are apparently offeratory come to light in the course of excavation (Laporte, 1988: chapter 8). These are generally considered as having been ritually proffered on any occasion other those relating to burials or funerals. However, there exist a number of circumstances in which the Maya began construction subsequent to and directly over a burial (such as Burial 160), or a cache, in effect using the building (temple, platform, etc.) to «seal» the grave (or cache). Such an interment or cache might be considered to be «dedicatory» to the structure immediately covering it; or the burial may be seen as commemorative to the burial beneath. If the burial or cache pit intrudes through a surface and that surface is subsequently restored (plastered over, patched, etc.) so that the former surface continues in use we can assume that this neatly sealed «deposit» was not dedicatory (Coe, 1959:78); unless, as William Haviland suggests (personal communication), the burial/cache were

dedicatory to a more removed modification of the building. I would suggest that a physical association with the addition/modification is a direct and necessary linkage required of dedicatory offerings. Since one cannot be certain as to whether the individual interred beneath a structure or other architectural feature had been sacrificed, as Thompson (1939:220) suggests at San Jose, one cannot determine beyond any doubt whether this kind of «burial» represents a case of an offering being made of a human (or its spirit) to the structure, or if other circumstances may have led to this particular type of relationship between the individual and the structure.

Identification of the skeletal remains found in burials having such a «dedicatory» relationship to a structure reveals no absolute regularity, and therefore precludes the possibility that a sacrifice occurred, using a specific class of victims of a required gender and age. The possibility that the death of an individual of some importance, such as a priest or elder, motivated the construction of a building must be given consideration from both the negative and positive aspects, as in the case of Burial 160. On the positive side are the elaborate tombs, richly furnished, which appear to have been built specifically to receive the remains of single individual, plus any human offerings which are simply grave goods. Whether or not the structures covering such burials can be considered mausoleums of a sort, housing the remains of an individual, or whether the individual and his burial furnishings are dedicatory to the structure further complicates the problem. One possible variation along these lines is that the individual may be considered as only a ritual item, who must be «sacrificed» and interred together with other ritual goods, which we interpret to be burial furniture. The negative side of the problem concerning the possible «dedicatory» nature of certain burials involves two factors of time relating to construction. The first is that time or part of the year during which construction would be most likely to begin, assuming that this might be a constant; the second being the specific year in any period encompassing the occupation span of a group of buildings during which construction on a structure with a «dedicatory» burial may be undertaken. Quite possibly the data involving decisions regarding the initiation of tomb construction might be seriated (Rouse, 1967), which might enable us to determine if a death (and burial) initiated the construction of such structures, or if they were built according to some other agenda, with the necessary burial being taken from wherever a reasonably important individual became available.

At Tikal all those structures which have either «dedicatory» burials or caches (which are the cognitive equivalent) had non-residential or «ritual» functions (Becker, 1971; 1987; see endnote 2). Such burials are diagnostic of the ritual functions, as in the case of some range-type structures which appear within residential groups (see Str. 4E-31: Haviland *et al.*, 1985). The construction of such a structure within a residential cluster may be of significance in the

development of that group, or in the religious life of the people or family responsible for the construction of the group. This might mean that a sacrificial victim was involved (Welsh, 1988a:146-147), but it could equally suggest that anyone dying immediately prior to the time when construction was scheduled to begin might be entombed beneath the structure. Quite possibly the death of the head of a residential family (the occupants of buildings around a plaza) required more than a simple interment. Excavations at Tikal, however, indicate that a burial could be made at a time considerably before the construction of the covering structure⁴. This might indicate that the death of a specific person could relate to, if not initiate, the construction of such a structure. The funeral could take place any time of the year in such cases, and the construction could begin at a time more favorable to building activity, such as after the harvest season or at the beginning of the dry season.

We do not know, for example, the reason for the apparent long delay in constructing the temple over Tikal Burial 48. However, Burial 48 was a «seated», bundled, headless, elite burial. All of these characteristics are shared with Tikal Burial 85, which also may have been interred after some delay — at least enough time having elapsed to allow the bones to be defleshed without cutting the flesh from them.

Dedicatory burials, in many cases, suggest a retrospective orientation to the related activities. This is implied by the nature of the grave (chamber) provided for these burials which appear to «dedicate» a shrine. In cases where the grave chamber has been cut through the floor of a platform, or through a plaster floor which is inside a room, the act may be interpreted as signifying the ritual «killing»⁵ or defacement of the existing architectural feature, if a new building or major renovation completely covers the one just «killed». In cases where a building appears to continue in use after such an «interment» we might do well to determine how such burials differ from those where the old structure «must» be replaced by a new construction.

The act of penetration into the floor of an old structure, and into its deepest fills, like the penetration or entering into bedrock or an earlier building, has a quality similar to that which is associated with ritual offerings, which at Tikal would be considered to be caches. Ritual defacement or «killing» is well documented for carved stelae at Tikal (e. g. Stela 31) and is suggested to have occurred prior to the burial of certain large vessels with flat bottoms and nearly vertical sides. Each vessel had a single, large, applied

⁴ J. M. Weeks notes (personal communication) that the Ximenez Chronicles mention burials which were made long before the structures which cover them. Weeks suggests that the ethnographic literature should be culled for such information.

⁵ Weeks (1980) notes that every funerary urn at his site (N15), whether holding cremated remains or actual bones, had been «killed». See also Wauchope's (1943) evidence from Zacualpa.

faces on it, and they may have served as censers⁶. Two examples of these are known from Tikal: vessel 3 in Burial 35 (Becker, 1863: Fig. 15c; Haviland *et al.*, 1985: Fig. 48b) and a vessel with the female in Burial 162 in front of Structure 7F-30 (Haviland, 1981: 107-110). Note should be made that *both* of these burials, which I excavated, had been placed in chambers cut into the bedrock, although the forms of their chambers are not the same.

Ritual «defacement» may also have been associated with the process by which structures were «buried» by being covered with a later building. The huge, decorative architectural masks, in both a stucco and ceramics (see data on the excavations of Tikal Group 4H-I), may also have been defaced by the Maya when their function terminated (that is, when the building was rebuilt)⁷.

Thus the act of cutting a grave through the floor of a structure may have served a similar ritual purpose to those mentioned above. The function of a structure or platform would thus be formally ended and subsequent construction at the same locus would not only fill in the grave, but would literally bury the earlier structure. Perhaps the intrusion of a burial into bedrock prior to erecting the initial structure at a given locus is in some respect linked to the sanctification or consecration of the ground over which the structure is to lie, or is otherwise related to the concept of defacement by intrusion⁸.

If Coggins' (1988) «impregnation» model (which appears to hold only for the Early Classic period) is considered, a greater sense of cultural continuity can be seen in this act of penetrating the bedrock (or structure) in order to place a grave. The impregnation (or fertilization) created by excavation for a grave provides the basis for rebirth and new life, as was implied by Holland (1964) for the modern Tzotzil Maya and reaffirmed by Vogt (1969) and Lowe (1982: Fig. 15.2). Thus the act of burial achieves both a forward and a backward temporal orientation (Becker, 1988a:123). The dual relationship created by the interment might reflect a life-from-death motif, while duality also can be seen in the grave digging serving to deface («kill») the earlier structure with the subsequent construction built as a monument to the occupant of the grave (also dedicated to his reborn self). The relationship of duality, creation, and

⁶ A defaced vessel of similar function, but quite different form, is described by Wassen (1962:150, Fig. 1) but is without provenance. The vessel has a globular body onto which is set a large and slightly flaring rim, and the face was missing when found. Wassen believes that the «decoration had fallen off», but I believe that, like the examples from Tikal, the face had been removed. Wassen's example may be a highland variation of examples noted from Tikal.

⁷ J. M. Weeks notes (pers. comm.) that Lothrop (1936) suggests that Uatlan was resurfaced after the death of each leader; thus, generational «depth» can be correlated with plaster resurfacing.

⁸ J. M. Weeks notes (personal communication) that the highland Maya identify bedrock as being earth with a heavy «Load». Weeks sees a possible analogy with the use of caves for burials, and this also calls to mind Early Classic tombs at Tikal, which generally are cut down into bedrock and then dug off to one side to form a «cave».

procreation appears as a strong theme throughout this area (Lowe, 1982:291-292); Closs, 1988). Before turning to a situation from Tikal in which a burial actually served as a cache, note should be given to the important work of H. Moholy-Nagy (1987) in the identification of Teotihuacan-related burials at Tikal. Her studies demonstrate that some of the interpretive difficulties which may confront excavators of urban sites such as Tikal could derive from the discovery of anomalous situations reflecting the presence of, or contact with, foreign populations. In this case the foreign elements may reflect influences from central Mexico, far beyond the borders of the Maya realm and therefore most likely to include material and/or cognitive elements quite different from the usual. These studies may point the way toward the recognition of variations in the cultural elements which exist *within* the Maya area, as between individual cities or towns. Variations in architectural patterns between relatively proximal sites in the Maya lowlands (e. g. Plaza Plan 1 at Tikal and its mirror image at Yaxha; Becker, 1982:112) have been noted, and similar variations should be expected in burials and caches among these many sites. However, as in the case of this architectural variation, the basic cognitive elements may be expected to be relatively uniform, with the material or behavioral expression of them manifesting local differences.

A BURIAL WHICH IS A CACHE

All of this discussion only touches on the problem of distinguishing between what are to be called burials (see Appendix I) and what are to be considered in the category of caches (see Appendix II), and whether both of these are cognitively «Earth offerings». Is a dedicatory burial, such as described above, an offering or a variety of offerings? More complex situations, however, call for a grater probing of the relationships which effect burials and offerings, and perhaps the best example which we have from Tikal derives from Burial 132, which also was excavated from the locus of Str. 7F-30⁹. Vessel number 3 from Burial 132 is the uppermost of a pair of cache vessels which were placed under the head of the deceased¹⁰. This large vessel

⁹ Every building stage and alteration of Str. 7F-30 was accompanied by an axial burial or a cached offering. Haviland (personal communication) suggests that both a cache and a burial were associated with each phase of this particular structure.

¹⁰ Several examples of these carved cache vessels similar to that in Tikal Burial 132 (note 5 below) are illustrated by Berjonneau and Sonnery (1985), along with a jade and shell mosaic mask very much like the one from Tikal Burial 160. I presume all of this material to have been looted from some location at Tikal. The general form of these caches is known from numerous locations throughout Tikal. These caches each consist of an identical pair of plates which have flat bottoms and flaring sides (set at approximately 45 degrees to the base). Usually these are of an orange

has an elaborate decorative panel carved into the «upper» surface and 5 smaller panels carved into the sloping «rim». The lower member of this otherwise matched pair of vessels is unadorned.

Cache vessel sets are often depicted in Maya art, and the best evidence which we have for this subject derives from the iconographic observations of George Kubler. A vase from Uaxactun (Crypt I of Structure A-I, Pyramid E) has an Initial Series date believed to be ca. 9.16.8.11.0. (759 a. C.). Kubler (1977:15,18, Figure 26) describes the man in a jaguar costume holding a package, perhaps representing an offering made by visitors¹¹. Morley (1937-8, I: 229) had recognized this package as being composed of two bowls [paired], which he assumed contained a human skull as did the pairs of identical bowls found in Structures E-II and E-III at Uaxactun. Coggins (1976:240) suggests that the shape and color of such paired, and tied, bowls is Early Classic (Tzakol) in date, more than 100 years before the date of the vessel which

paste, undecorated, and date from the Early Classic. The larger and carved vessels may be Middle Classic in date. Variations are common, as in the case of Cache R-3-2 at Piedras Negras. In that case a pair of cylindrical tripod vessels, but of Early Classic date, had their feet removed prior to caching, when one was inverted over the other. A child's skeleton was among the items found within (Coe, 1959:95). Note should be made that the removal of feet from tripod vessels is a trait often found in association with Late Classic burial assemblages, and I suspect that this example from Piedras Negras dates from the Late Classic, reusing Early Classic vessels.

Where pairs of flared walled vessels were used for caches, the materials placed within generally were mounded into the lower dish and the upper was «inverted» over the offering. Weeks (pers. communication) notes that all cremation vessels in the highlands have ceramic lids. At Tikal three such pairs of cached vessels were found close together in the fill of what we have termed Quarry 4F-1 at Tikal, near which Burial 35 was discovered (discussed above, Becker, 1963: 54-55). These 3 caches were placed within the platform fill of an Early Classic building, and with the presence of Burial 35 suggest that the original structure may have been a Plaza Plan 2 group shrine. Since these vessel pairs were «empty» when found and in an unusual location, they were designated as Problematical Deposits 23-25 (Haviland *et al.*, 1985:155-6, Figs. 17,18, and 59). These 3 examples date from Manik times.

Coe (1959:108-116) summarizes the cache data from earlier excavations throughout Mesoamerica and beyond. Of importance to this review of the situation in Tikal is the recognition that the ceramic forms described for this site may be strongly specific to Tikal, and that cache vessels at other sites, such as Piedras Negras (Satterthwaite 1939) may be of very different forms while containing similar objects (e. g. eccentric flints, sting ray spines, bird skeletons, shells, and jades).

¹¹ Kubler (1977:19) suggests that another short figure on this vessel from Uaxactun also may be holding a «package» (tied set of cache vessels, see Endnote 1) similar to the one held in the hand-paw of the jaguar-person, but the preservation on this vase is too poor to be certain of anything.

Note should be made of Welsh's (1988b: Tables 36,37) «burials» of severed heads, placed within, under, or between bowls as well as «burials» of infants placed between 2 plates. Others would see many of these as «caches», but Welsh's classification reflects an ambiguity which might be solved by calling these «earth offerings». The very few examples (ca. 20) of such severed head «earth offerings» tabulated by Welsh is a reflection of the small numbers which have been reported in the literature, not their rarity in the Maya realm.

Kubler is describing. Coggins explains the apparent anachroism by suggesting that the seated jaguar represents the Underworld and is shown as offering an «...unearthed cache bowl made about 9.5.0.0.0. [ca. 534 a. C.]... to the enthroned ruler», for rededication.

I believe that what is represented on this vase from Uaxactun is an early example of the *later* tradition in caching which involves the use of human heads (sacrificial?) placed between two vessels, and which will be explained below. Concerning the scene we are describing, Coggins (1976:238) believes that the tomb at Uaxactun from which this vase came was contemporary with Burial 132 at Tikal, which she says includes late Ik period pottery but with early Ik period cache materials. Coggins thinks that these cache materials once had been dedicated to a royal founding ancestor of the people occupying this household group (Group 7F-I), and that they were «resuming» ceremonial activity at this location, commencing with this tomb. Thus the dedicatory functions which I suggest are being put into a broader context by Coggins (1988).

What is of particular interest concerning these skulls found in cache vessels is that they are a trait which is archaeologically known at Tikal, and which is a characteristic of Tikal Plaza Plan 4 (Becker, 1962; 1971; 1987). Diagnostic of this residential group arrangement is a small platform in the center of the plaza, and such «trophy heads» (their origin remains uncertain) often have been found cached within these small structures (e. g. Tikal Groups 6E-III, 6F-I, 7F-XV, 5C-III, 6D-I, and 6D-X). Unfortunately, plans to excavate groups of this form (Tikal Plaza Plan 4) were not implemented. The dates of the associated structures remain imperfectly known, although I suspect that they date from the terminal Classic period¹².

¹² Moholy-Nagy (pers. comm.) notes that at Tikal «“Trophy head caches” also occur in other architectural configurations besides Plaza Plan 4, e. g., Cache 173AB with Str. 5E-38 and PD 170 in Chultun 6F-6». Coggins (1975:240) follows A. L. Smith (1950:93) in identifying such paired cache vessels as an Early Classic trait. Evidence from Tikal certainly supports this conclusion, but the use of cache vessels of a similar shape but of a later date to hold skulls appears to be a Terminal Classic trait at Tikal which continues into the Post-classic period. However, A. L. Smith (1950:93) describes 4 headless Early Classic «burials» at Uaxactun (E21-E23,A27) as possible caches (votive offerings) since each consisted of a pair of orange ware bowl cache vessels, placed lip to lip and containing a human head. Three of the 4 heads also included the upper 2 or 3 cervical vertebrae. Smith thinks these skull burials only appear at Uaxactun during the Early Classic and that animal caches at that site date only from the Late Classic period. Quite possibly there was a significant difference in the periods of use of these traits at the rather proximal sites of Tikal and Uaxactun, and the subject warrants further review. Welsh (1988b) includes much of this information in his review, but a summary of the data appears in the following paragraphs. The meaning of skull burials/caches for eastern Native North American populations has been considered by Seaman (1988). The predominant theories are at polar extremes, with the usual interpretation for North America being that these heads were those of revered ancestors. However, Seaman's review of the evidence leads him to support the «defeated enemy» interpretation.

Also of interest within the burial-cache continuum are the numerous Problematical Deposits (P. D.) at Tikal which have elements of both burials and caches within them. Excavations in the area of Tikal Group 6D-V conducted under the auspices of the Proyecto Nacional Tikal (PNT) encountered several extremely interesting P. D.'s (Iglesias, 1987; 1988). One was located behind Str. 6D-18, but the more significant is PNT P.D.21, found behind Structure 6D-20. This deposit appears to be a huge trash heap filled with cache materials as well as 2 primary (Iglesias, 1987) burials all dating to Manik IIIa times. The combination of materials suggests that both the caches and burials had been together, or that they were being disposed of using the same pattern of deposition¹³.

A CACHE COMBINED WITH A BURIAL

At Tikal the discovery of an enormous sub-stairway cache combined with a burial (Burial 132: Ik) provides the best evidence that these two categories may include elements which are cognitively related, or can be transposed. The body in this «Burial 132» is flexed, with the head resting on the upper member of a

Skull burials and headless burials in dedicatory positions are common at Nebaj (Smith and Kidder, 1951:29-31; Becker, 1986a). These authors also suggest that disturbed tomb goods were reburied as caches at Nebaj. Caso (1938; 1939) describes a subfloor cache at Monte Alban (Period III-b) which contained a cranium and proximal vertebrae. Pieces of human skulls appear in caches at Baking Pot, Belize (Ricketson, 1929:5) and from the Caracol at Chichen Itza (Ruppert, 1935:85-6).

From the Postclassic period we have evidence for these customs from Flores, where Cowgill (1963:436-7) dug a test pit which located 2 skull burials of the Postclassic period, with no evidence of the postcranial remains in association. The context was undetermined due to the limited size of the test. Skulls buried separately from the rest of the body were found at Mayapan by Smith (1962), and can be dated to about 1200 a. C. In testing the third island of Topoxte, Jones *et al.* (1981:543) found one inverted skull, over disintegrating bits of bone, in a fill layer. All of these suggest that separate skull burials may have been a late trait in the Maya world. Excavation of groups conforming to Plaza Plan 4 might help us to understand the transition to this caching behavior.

Earlier examples of «skull burials» and other anomalous interments appear at Copan during the Middle Formative period (Fash, 1982). Fash compares these examples with the contemporary caches and «celt-equipped burials» from the site of San Isidro Chiapas, Mexico recovered by Lowe (noted by Fash, 1982). This suggests as long history both for the mortuary customs as well as for the conceptual merging of caches and burials.

¹³ Although Maya «cemeteries» are not known, certain buildings often have numerous sub-floor burials. Many chultunes at Tikal have large numbers of human bones (e. g. Op.29C and Op.33A/24). Moholy-Nagy says this is especially true during the Early Classic, and that the bones in these deposits are associated with distinctive objects. Jones has a large assortment of bones associated with 5C-1 and Iglesias (1989) has what may be the largest deposit of human bones from a problematical source at Tikal.

very large pair of cache vessels, which were filled with marine offerings and other goods. Unfortunately, the context for a similar vessel now in the Princeton Museum of Art¹⁴ remains unknown, but the presence of this piece (if it is not a fake) as well as the fragmentary examples from Tikal described by Coggins (1975:243-247) suggests that the Burial 132 example is not unique and that the context also may not be different. Note should be made that there are similar clues relating burials and caches from other sites in the Maya lowlands. For example, W. Ashmore (1980:43) located a cache dating from the Early Classic period at Quirigua which she suggested «is a symbolic representation of a tomb burial». At least one other burial at Tikal (Bu. 160: Manik 3B) included «eccentric» flints, which are the equipment «normally» found in caches¹⁵.

The great importance of these data is the light shed on the relationships between «temples» and the burials which they so often cover. The information reviewed here suggests that many Maya burials may have been viewed by the makers as offerings to the temples which covered them, rather than believing that the temples served as monuments to the people who are interred beneath them.

Haviland (1985) points out that Tikal burials 26-30 and 33-37, beneath Strs. 4E-31 and 4F-7 respectively, are offerings made «to» these buildings, but he regards «Str. 7F-30 as dedicated to the burials within it» (pers. comm.). The evidence noted above suggests a mutuality in the builders' minds which was not be intended to be separated.

CHILDREN AS OFFERINGS

Child burials, or the association of apart of, or all of the entire skeleton of a child within a cached offering, is often dealt with as purely if they were offeratory in nature. In certain instances at Tikal the intact skeleton of an infant may occur in a situation which obviously represents an offering, such as the two children (ages ca. 9 and 10) who were sacrificed as offerings in Burial 160 (which probably dates from somewhat after the Maya year 9.4.3.0.0. associated with the tomb; probably after 500 a. C.). At Tikal there has not

¹⁴ A similar vessel which appears to be the lid to a cache pair is in the Museum of Princeton University. This has a carved panel, but there are only 4 smaller panels carved into the sloping rim of the vessel, rather than 5 as on the Tikal example (Schele and Miller, 1986:Pl. 75). See also note 3 above.

¹⁵ Moholy-Nagy points out, however, that Burials 132 and 160 at Tikal which were found at the same locus are the *only* known examples at the site where flint and obsidian eccentrics normally found in caches were placed *inside* the repositories. She suggests that this characteristic may have been peculiar to the occupants of Group 7F-I. Moholy-Nagy also is studying cache vessels of the types found in Burial 132 and has data correlating the presence of associated artifacts.

been a systematic study of the remains of children as a single category, but we do have some interesting, if limited, data from other sites. At Piedras Negras, where all human bones found in «caches» were defined as Miscellaneous Human Skeletal Material (Coe, 1959:121), an infant skeleton was found in Cache R-3-2. This Early Classic cache was placed within a pair of altered tripod vessels (see Endnotes 2 and 12). Variations on this theme occur throughout the Maya realm. Wilkerson (1984:109-110) describes a cache-like situation from the area of El Tajin in which the skeleton of an infant was placed beneath an inverted bowl. Nearby, a similar bowl had been inverted over 2 adult phalanges [terminal?].

The available data concerning infant burials from Teotihuacan is worth noting. Sempowski (1983:475, also 445) notes that fetuses and neonates were buried differently from other subadults, which is what Weeks (1980) also found at Chisalin. Many were interred under interior walls in residential compounds or within residential altars, suggesting that these remains served some dedicatory function. I would caution, however, that this may represent ease of disposal as well as possible ritual. Given the size of the population estimated for each group at Tikal, averaging perhaps 25 individuals, relatively few graves are located in proportion to the probable numbers.

Sempowski (1983:445-6) notes that many of the children at Teotihuacan appear to have been aborted or deliberately killed. Since a high percentage were aborted after the 5th month, this could reflect a deliberate process. Often the remains were placed in vessels, as at Chisalin, or on large sherds, both practices which are found in many cultures throughout the world.

Examining these behaviors we may infer that the practice of placing a child's remains into a cache or special deposit may relate to the concept of the soul, and the beliefs regarding the «arrival», «receipt», or «development» of a soul within a human infant. The concept as held in the minds of the lowland Maya of the Classic Period cannot be derived from our limited context, but in many respects it does not matter. An important factor in such cases relates to the value of human remains, their power, and their potency in pleasing the gods without displeasing the original owner. Human remains, whether of a child who may not yet have gained a soul, or of a deceased person who has been separated from, or has been left behind by a departed soul, maintain some significance which dictates that they be treated with some formality, if not the full respect due to the remains of a newly deceased individual¹⁶. The disruption of a grave through reconstruction, accidental entry during another interment, or whatever reason imaginable would therefore require that the

¹⁶ At Late Postclassic Chisalin (Weeks, 1980) adults tend to be cremated, children interred. This pattern is also common in central Italy in the early Iron Age, but in these areas, as elsewhere, mortuary patterns are continually changing.

remains be handled with some respect and/or care, relocated, or somehow be disposed without offending the spirit of the dead. This would be an example of an instance in which a secondary burial, as I use the term, would be required.

BONE PREFERENCE

A further note should be made of the possibility that specific human bones were considered by the Maya as having greater significance, or as being more representative of the total remains of an individual than other bones. Often the assumption is made by excavators that all parts of the skeleton deriving from a single person would always be afforded equal treatment. However, I suggest that this is by no means the case once a corpse has been reduced to a jumble of bones. As a rule of thumb I suggest that those bones most easily recognized as human by the naive observer are those which would possibly receive greater attention when relocations or such similar activities are undertaken. Despite their size, innominates (pelves) are rarely relocated or reused in the Maya area or anywhere else in the world (Becker, 1986a). As Stoessiger and Marant (1932:164n) point out, «In most ossuaries and *Gebeinhäuser* [skulls and thigh-bones] are the only bones preserved».

Correspondingly, the same direct proportion can be assumed between the recognizability of a «bone» and its religious or ceremonial value. A skull might be considered to have far more value than a number of other bones, simply by virtue of ease of recognition. Hence, when human remains are used specifically with ceremonial offerings we might assume that specific bones such as skulls and femurs had greater value than others.

Finger bones (phalanges), which are not easily identified in their skeletalized state, often appear in caches at Tikal. One must presume that these bones were within the actual fingers cut from the living, or from the recently dead (Becker, 1988b), and not selected from amidst the jumbled bones of a human skeleton. Human bones, either intact or in a fragmentary state, often occur in archaeological contexts at Tikal i circumstances which cannot be placed into the general categories of burials or offerings.

Many are within units tagged by the excavators as «Problematical Deposits», while others from general excavations simply remain «problematical» (Becker, 1986a). Intentional cached deposits of miscellaneous goods, may not have been significantly different to the Maya as similar deposits containing the remains of a human. However, the general situation may be such as to allow us to designate such an assemblage as a «cache». The same remains under other circumstances would be termed a «burial», the difference being in the nature and location of the repository.

Once again we are confronted with the problem of reconstructing the origin

and significance of certain burials which are now considered to be «dedicatory», or serving to dedicate a specific construction. Generally such a structure would have a function other than residential. If the persons interred in such graves had been sacrificed, the remains might be regarded as more offeratory in nature than funereal; but if the individual died a natural death the reverse might be a more logical judgement. Further, there exists the possibility that either alternative might be correct in any given instance. Obviously what begins to form is a picture of a transitional area in which the remains do not derive from simple interments made according to specific rituals which serve to dispose of a deceased individual. Neither can one assume that these remains were definitely deposited as a ritual offering, which might be the case with a piece of furniture or even a household slave, if such existed among the Classic Maya.

Burials which conform to a standard pattern, located in association with small structures which appear to be residential in nature present little or no problem. These, however, may grade into the problem of dedicatory burials, or burials associated with construction in temples and other buildings which may have been religiously oriented. The ultimate problem in classification appears when materials which clearly signal a grave are found to include material which alone would clearly be identified as a cache (e. g. Tikal, Burial 132). When human remains are the principle features, these assemblages are classed as burials. Where only the furniture, without skeletal remains of grave-like repository, occur the situation is more likely to be considered as an offering. The category, which is transitional in nature, grades into the final category of «offerings». When human remains occurred with secreted offerings, or caches, in situations normally containing offering without human remains, the remains are dealt with simply as objects belonging to the assemblage comprising the offering. In the case of some bundle burials, etc., the remains deposited in the grave may not represent the entire individual. Some portions might have been removed for ritual purposes, or pass directly into a cache of non-burial repository.

In almost any excavation, human remains, generally fragments of bones or groups of a few bones, are likely to occur with no associated traits which would enable them to be placed in the system just noted above. Human remains in such cases indicate that the skeletal material has derived from one of the three aspects noted in the chart (Becker, 1986a). Obviously, the source of these «Miscellaneous Human Remains» (as they are categorized at Tikal) relates to the categories described, but until more can be learned about the nature of such remains they become part of a general category with this catch-all title.

Possibly the interment of an individual along with cached objects may not have differed in intent as regards the deceased that any other form of

interment. Dedicatory burials may also be of this nature, in having attributes of a cache while fulfilling the main purpose of a burial. However, the intentional deposition of bodies in repositories other than those which contain only burials, such as in cache pits, must be assumed to have a difference basic character or significance.

The lack of data pertaining to the problem under discussion also limits attempts to work with other related problems, the most important at this point being the establishment of a burial typology. Resolving the definition of «burial» and related assemblages must precede the work which has already begun on subsequent problems. Typologies of this sort should result from the discovery of regularities and patterns which may demonstrate progressive changes in the thoughts and concepts of those people who dealt with these patterns in terms of their own folkways and mores. Archaeological typologies have been established for ceremonies and tentative sequences have been worked out for architectural features. Thus one should expect that concepts relating to death and burial changed during the course of Maya history. The rate of change may not have been as rapid as the change in ceramic traditions. At Tikal, by the time the data (bones and grave goods) from the first 150 excavated burials were available to work with, clear patterns began to emerge. These patterns relate to and complement the chronological sequence which had been described for ceramics for both Classical times as well as the latter part of the Preclassic period.

Ultimately, of course, a working burial typology will be established for individual sites, if not for the Maya area as a whole. The typology will do more than provide the assignment of a number-letter designation to a burial, which will serve as an adequate identifier of the interment as an archaeological unit, but should at least indicate the regularity in gross features which have meaning for social and chronological relationships peculiar to the site (O'shea, 1984). Moholy-Nagy's (1986) paper focusing on the Early Classic burials at Tikal, as an excellent example of what can be done with mortuary data, demonstrates variation by social class and provides useful suggestions regarding the possibility of recognizing ethnic differences from these data. Her work is extremely important for archaeological studies of urban populations (complex societies). For general comparative purposes a typology is most efficient, but a complete description is always required, and the most effective means of dealing with any individual burial. The list of necessary data exceeds the scope of information usually provided by excavators, so a «check list» is offered as Appendix I (Ruz, 1959, 1968; Moholy-Nagy, 1986). When this list is compared with the data usually sought for «caches» (see Appendix II) one can see that they appear to be separate entities.

CACHES

Obviously, parallel data on caches is necessary to demonstrate the points which I have made regarding burials and their relationships to caches. However, categories of caches tend to be more limited since the complexities provided by skeletal remains often are absent, or can be included in a single unit. The work of Nagao (1985) on Mexica (Aztec) caches, which includes a good catalogue, ethnohistoric parallels, symbolism, and discussion of continuities in time and space, should be consulted. Prof. Laporte's (1988) discoveries of caches in his excavations of Tikal Group 6C-XVI are extremely important and should be noted, particularly since Becker's Group 6C-XVI (Strs. 6C-51/53) conforms to a Plaza Plan 2 group (Becker, 1982:127; 1971). A brief outline for collecting cache data appears as Appendix II. The question of how these characteristics merge or overlap with those sought when recording a burial remain the focus of our attention.

COMPARATIVE DATA

John Weeks (personal com.) suggests that cross cultural examples of peoples who make «earth offerings» may provide valuable insights into the question of these burials/deposits at Tikal. His own research with the highland Late Postclassic Maya site of Chisalin offers valuable data on Quiche Maya mortuary practises (Weeks, 1983:60-68, also 414-5). The caches listed in his table 74 (p. 416) include four which may have been associated with burials. The range of variation at Chisalin, with an internally ranked social system much like that of Tikal, provides numerous variations within this limited sample. The larger sample from Tikal, on the other hand, offers the possibility for finer interpretation of the as yet unpublished data.

DISCUSSION

The difficult task of formulating a typology of Maya mortuary behaviours which will accurately reflect the cognitive structure of these ancient people must begin by understanding what kind of typology we are seeking. A multivariate technique, using all the possible data available, may be too complex. A technique by which we identify specific traits may err in the selection of the factors which the observers select for study. While we cannot focus on a single technique which will guarantee that Maya meanings will be revealed to us, our hope is that field recording will be sufficiently broad as to allow a typology to emerge from the data which we *have* gathered (inductive).

Obviously we must recognize that *what* it is that we choose to record may colour what it is that we *believe* that we see. The following observations are believed to be of importance in the study of urban Maya mortuary programs.

1. Every aspect of the situation within the building clusters at Tikal, from refuse distribution to the arrangement of the various structures within the individual clusters, implies that *most* of the architectural groups at Tikal served as residential compounds.

2. At Tikal the artifact inventory, distribution of refuse, and details about the construction of various buildings are among the many features about which our knowledge of the Lowland Maya has been increased, and new understandings developed.

3. Patterns of architectural construction related to mortuary programs, the size and shape of related buildings, burial procedures, and other commonplace activities of the Maya began to be clarified through excavations in the early 1960's. The map of Tikal plus excavations of selected buildings have been of great use in directing subsequent excavations both at Tikal as well as at other Lowland Maya sites (e. g. Quiriguá: Becker, 1972). These data also should help, eventually, in dating or chronologically relating various aspects of a site prior to initiating excavations. The synthesis of a working typology for structures, groups and burials would appear to be a logical result.

4. Small structure excavations at Tikal (e. g. Haviland *et al.*, 1985; Iglesias, 1987) have provided a great range of information about burial types previously unknown at the site. A maximum description of each burial will serve eventually to develop a typology covering the entire range of interments at that site. By deriving a typology from these data, rather than forcing the data into preconceived categories, a functioning system can be achieved for Tikal «earth offerings» which should be of use in comparisons with data from other sites.

CONCLUSION

The problem of understanding the burial-cache continuum as it operated during the Classic Period in the Maya lowlands (and perhaps throughout ancient Central America) requires a far more realistic approach to the data base than has yet been considered. The dichotomous categories originally established, and derived from previous archaeological research, fail to serve in all situations at Tikal. New insights and attitudes afford a more flexible interpretation, which supercedes the former categories. Perhaps the most important observation from the Maya realm is the lack of formal cemeteries which remove the dead from the world of the living. The use of «burials» as

«caches» (offerings) may reflect Maya cosmological concerns with using human remains to feed the gods (or to impregnate the «earth») in order to bring forth renewed life and to continue the cycle of being (rather than to dispose of the unwanted corpse of the dead, as if a life had come to an end). Such concerns appear to have been developed by the Middle Formative throughout Mesoamerica, and reached sophisticated levels of implementation around the beginning of the Classic period, probably as a result of emerging state socio-economic organization.

The consideration of Maya burials and caches as existing along a continuum would appear to be in order, and might provide improvements in the ability to understand the cultural situation as it existed at Tikal and perhaps throughout the lowland Maya realm.

APPENDIX I:

A CHECK LIST OF TRADITIONAL BURIAL TRAITS

- I. Site and description
 - A. Location within site, relative area
 - B. Association with surrounding structures
- II. Architectural association
 - A. Structure type: Temple, Palace, Burial structure, Small structure, small platform (as in Plaza Plan 4), etc.
 - B. Architectural detail: beneath stairway, bench, etc.
 - C. Axiality
- III. Grave type (Description)
 - A. Simple, cist, chamber, etc. (Plans, sections, and explanations are required to clarify these terms).
 - B. Cache (assuming that certain «inhumations» are separable into such a category)
- IV. Number of individuals and specifics on each one.
 - A. General condition of remains, parts identifiable, parts believed represented by fragments. (Note position)
 - B. Age and means of determination.
 - C. Gender evaluation and the measurements and observations which are indicative of these conclusions.
 - D. Dentition
 - E. Pathology and deformation, painting of body, special wrappings, etc.
 - F. Theory as to reason for interment (burial, sacrifice, offering, etc.) and justification

- G. Primary, two-stage, secondary
- V. Orientation and position of skeletal remains
 - A. Orientation of head and body, and criteria (see IV A)
 - B. Flexion and criteria
 - C. Posture: prone, supine, seated, or bundle burials
- VI. Grave «furniture»
 - A. Vessels
 - 1. Number and location relative to body and other pertinent objects or features.
 - 2. Description; types and ceramic phases; possible sources, and comparative data.
 - 3. Significant features or arrangement (at head and feet; inversion; ritual breakage or other modification for use as burial offerings, such as removal of feet from tripod plates or the perforation of a base; etc.).
 - B. Body adornment: shell, jade, paints, etc.
 - C. Miscellaneous goods
 - D. Notes concerning ideas of the functions of the specific articles of grave furniture
- VII. Dating: Based on above findings and comparative data, both the cultural period or phase and the rough or absolute data. Also include other means of dating as by Carbon 14, structural associations, etc.
- VIII. Problematical Deposit: Materials which appear to be unusual, perhaps cached, but do not fit into contexts which can now be recognized. This research may best explore these cases.

CACHES

- 1. Context of Ritual Caches
 - A. Ceremonial structures
 - B. Domestic structures
- 2. Function
 - A. Dedicatory (to building, stela, etc.)
 - B. Terminal
 - C. Neither of Above/Other
- 3. «Furniture»
 - A. Associated vessels, either as containers (chambers for bones or artifacts) or as offerings.
 - B. Other categories of offerings
 - C. Arrangement of contents
- 4. Dating

5. Problematical Deposit: Materials which appear to be unusual, perhaps cached, but do not fit into contexts which can now be recognized (this category repeats no. VIII under «Burials»).

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