Archaeologists often argue over “facts”—whether they actually exist and, if they do, how they should be interpreted. One thing is clear, however—facts do not speak for themselves; they exist within an explanatory framework. Some archaeologists specify their research framework by building models of the past or posing specific questions. Others deny that they have a theoretical orientation and claim that they are “objective” scientists simply collecting data. When questioned further, most non-theoretical archaeologists, indeed, have an agenda but are unwilling to engage in the rigors of theory and problem specification. Posing questions and creating an approach to archaeological fieldwork is an extremely important and creative part of the research process. By framing questions, we not only focus our investigation but we also specify our perspective and our biases.

My style of research is to begin by examining ethnographic materials pertinent to the topic at hand—in this case, ancestor veneration. In ethnographic accounts, the richness of human behavior is described (albeit with the biases of the ethnographer). Archaeologists do not collect evidence of ancient behavior but the material residue or “fall out” of behavior; in fact, one of the great challenges within archaeology stems from the fact that archaeologists study physical materials (broken pottery, building ruins, and so forth) in order to evaluate abstract ideas about the past, such as why and how a social institution such as ancestor veneration developed. I find it easier to pose research questions about human behavior and to imagine the different types of archaeological patterns that might result by first reading ethnographic works.

Contemporary Maya of the Yucatán Peninsula and the highlands of Chiapas, México, and Guatemala have been studied extensively, particularly their cosmology and ritual—two topics that are highly pertinent to an archaeological investigation of ancestor veneration. In Maya studies there is another rich source of ideas about the past that comes from the past itself—Maya hieroglyphic writing and elite iconography. Over the past three decades we have made tremendous strides in hieroglyphic decipherment; currently in
Maya archaeology there is a strong and positive feedback between epigraphy and archaeology “from the earth” as the famous British archaeologist Sir Mortimer Wheeler put it. In short, our research questions can be better informed because we have a richer base of information from which to form them. With these thoughts in mind, I turn to the work of forging a research question.

Ancestors and Land
In a ritual called K'in Krus, contemporary Maya of Zinacantan, Chiapas, México, walk a circuit around their land. At designated shrine locations, they stop and give reverence to their ancestors, who are thought to dwell in the mountains and safeguard their land-holdings, their homes, and their water holes. Anthropologist Evon Vogt, who spent much of his career studying Zinacantan society (Figure 1), emphasizes the tremendous power and presence of ancestors in Chiapas Maya villages. The bodies of ancestors may disintegrate but their spirits live and continue to inhabit the landscape around the village. Elsewhere in the highland Guatemalan town of Chichicastenango, anthropologist Ruth Bunzel studied the ways of Quiché Maya, who informed her that their homes belonged to their ancestors—the living were just passing through. Their lands also belonged to the ancestors and they could not sell their fields or houses but passed them on to children and heirs. Reading accounts such as these, I became intrigued by both the similarities and differences in the treatment of the dead between Maya society and western European-derived society. Both societies conceive of an afterlife but in Maya society ancestors stay close to home and exert an influence that is generally beneficial and protective. In our society, when the dead come back it is usually as a poltergeist or some quasi-evil being. Moreover, we rely solely on wills and other legal documents to transmit lands and homes through the generations. Once dead, our ancestors do not continue to guide the course of things. But in traditional societies like that of the Maya, legal documents are amplified by the ancestors themselves who seem to exert a guiding force within society long after they cease to have a corporeal presence in this realm. Frequently invoked to reinforce the strength of precedent or the status quo, ancestors can provide powerful allies in disputes among descendants over resources. Once I understood something of the link between ancestors and land in contemporary Maya society, I began to read widely on the institution of ancestor veneration. From China to the Andean cultures of South America, ancestors—specifically named individ-

Figure 1
Modern Maya Places

ciated with the commemoration, by name, of deceased individuals. Through commemoration of an ancestor, whether at a shrine or an actual place of burial, the legitimacy of an inheritance
is reinforced. I learned that ancestor veneration is a highly selective practice and not all deceased individuals assume the status of revered ancestors; it is reserved primarily for those through whom material inheritance or privilege pass. Furthermore, while many societies give general attention to “those who came before,” the commemoration of an ancestor by name occurs primarily in societies in which families control well-delineated fields, orchards, or herds of animals, and rarely among groups with a communal ethic of land use or herd management. Thus it seems that counting sheep and measuring land boundaries or otherwise partitioning resources along the lines of individual family interests is part and parcel of reverence for the ancestors.

Royal Ancestor Veneration

Although ethnographic accounts link ancestors to homes and fields, a large corpus of archaeological material from the Maya lowlands and elsewhere reveals an equally strong link between ancestors and royal rule. In the first millennium A.D., royal ancestors of Maya rulers were interred in tombs within pyramid shrines at Classic cities as far-flung as Copán, Honduras, and Palenque, Chiapas, México (Figure 2). At the latter, Pakal the Great, who ruled from A.D.616 to A.D.683, built his own burial pyramid—a structure now called the Temple of the Inscriptions because of the long hieroglyphic text (later commissioned by the son of Pakal) that was carved into the inner walls of the temple. On the sides of his beautifully carved sarcophagus, Pakal instructed sculptors to chisel the profiles of his father, mother, grandmother, and other significant progenitors. Shown from the waist up, the ancestors of Pakal exhibit lifelike detail, and behind each figure is a fruit-bearing orchard species. For instance, Lady Kan-Ik, grandmother to Pakal, is posed with an avocado tree bearing ripe, pear-shaped fruit. Other relatives are shown with a fruit-bearing cacao (chocolate bean) tree or the sweet fruit trees of chico-zapote, nance, and guayaba. Orchards are transgenerational plants; that is, they are planted by one generation and those who follow inherit them and continue to care for them and harvest their fruits. In associating his ancestors with orchard species, Pakal used an agrarian metaphor to express his inheritance of the throne. This metaphor suggested to me that royal ancestor veneration may have been distilled from an earlier institution which was linked to subsistence resources much as is the case today. Regardless, royal ancestor veneration of the Classic Period Maya (circa A.D.250–900/1000) expressed political power, dynastic lines, and the central importance of the place where royal progenitors were interred.

Images of royal ancestors are not restricted to burial tombs. On Maya stelae (free-standing monoliths) and wall panels, which often commemorate the accession of a ruler or a victory in war over a neighboring city, ancestors are commonly shown at the top of a composition above a central protagonist. Sometimes named hieroglyphically and wrapped either in cloud scrolls or cartouches to indicate their corporeal removal from the present, such depictions
are particularly common at Yaxchilán. Linda Schele and David Freidel have referred to this pattern as “the principle of the anchoring ancestor.” By depicting parents as ancestral guardians, a descendant links his or her rule to those who came before and uses the strength of precedent to cement allegiances and to legitimize power and authority.

Occasionally there are hieroglyphic or iconographic references to the physical remains themselves. Shown on Altar 5 from Tikal, for instance, are the long bones and skull of a royal woman who is identified as originally from a nearby place called Topoxte. Two men wearing elaborate costumes perform a ritual over the stack of ancestor bones. David Stuart has translated the hieroglyph at position 26 as “pas-ah” or “was opened.” Two dates on the inscriptions, a death date and a later “opening” date, suggest that her primary burial place was a temporary one to be followed by a later exhumation of her remains accompanied by ritual performance. This continued attention to the physical remains of the dead and protracted treatment (including exhumation) of ancestors is a common characteristic of ancestor veneration worldwide.

As a consequence, perhaps, of these rich Maya materials relating to royal ancestor veneration—hieroglyphic texts detailing genealogies, carved portraits on stelae, and nine-tiered, templetopped pyramid shrines which house the physical remains of deceased royalty—some scholars have gone so far as to suggest that ancestor veneration was solely the prerogative of elites. This perspective assumes privileged institutions of the elite sector and projects a view of ancient Maya society as one of cultured elites and ignoble peasantry. Ethnographic accounts, on the contrary, indicate that a family does not need to be elite in order to venerate named ancestors. Moreover, modern archaeological surveys of broad areas around the central core of monumental architecture at ancient Maya cities are documenting tremendous variation in residential form, size, and elaboration among the nonelite sector of society. Clearly, we are not dealing simply with kings and peasants but with a continuum of wealth and status in both elite and nonelite parts of society. Finally, if ancestor veneration was a creation of Classic period elites, then it was a social practice with very shallow time depth and an anomalous institution since most Classic Period practices—such as divine kingship and pyramidbuilding—have recognizable Formative-period antecedents.

**Genesis of Ancestor Veneration:**

**A Working Thesis**

When I was in graduate school, a professor once told me to investigate a topic until I reached the limits of our knowledge and the scholarly thinking became fuzzy. “When you reach that point,” he said, “then and only then will you have a research topic.” Well, I thought I now had a research topic—the genesis of ancestor veneration in lowland Maya society. It was a critical institution among Classic Maya elites—indeed a central prop of divine rulership—but its origins were poorly understood. I also had identified paradoxes within the topic. While there existed a strong bond between ancestors and land in contemporary Maya society, the portrayal of ancestors in elite, Classic-Maya society was overtly political, emphasizing dynastic succession. Clearly, different forces were at
work and needed to be pulled apart and examined in order to generate a holistic view of this focal institution.

In addition to the multiple purposes of this practice, ancestor veneration seemed to be an indicator of social inequality. After all, revering ancestral relatives was a selective social practice and had the effect of concentrating wealth and influence within family lines across generational boundaries. Viewed in this way, this social institution promoted the unequal distribution of wealth and power. Archaeologists have long been interested in isolating the mechanisms and development of social inequality but no one had closely examined ancestor veneration—a social practice in which ideology and the material basis of life uniquely converge.

Furthermore—and most exciting—the ritual panoply of ancestor veneration in both burial interments and commemoration should leave visible archaeological traces that could be followed by careful excavation, recording, and analysis.

Using a model derived from ethnography, I decided to tackle the genesis of this social practice. I reasoned as follows: if ancestor veneration initially was linked to family consolidation of control over resources, such as land and orchards, then the creation of ancestors should coincide with changes in ancient patterns of land use. If not, then change in one category of archaeological materials should not be contemporary with change in another. Of course, coincident change would not prove my thesis since correlation does not equal causation but it certainly would lend support to it.

In archaeological research it is one thing to state a thesis and quite another to figure out how an idea may be evaluated in an unambiguous manner with archaeological data. In truth, our data are often insufficient to allow even a falsification of our research premise. Many archaeologists have addressed this challenge to archaeological research—Lewis R. Binford in particular. He has used the term “middle range theory” in reference to the underdeveloped methodological realm in which ideas and data collide, most often in the absence of robust logical sinew. In order to be able to evaluate my thesis in light of anticipated field data, I needed to generate expectations regarding how archaeological deposits might change as ancestor veneration and more restrictive forms of land tenure became the norm. I planned to investigate archaeological materials from the Formative Period (1000 B.C. to A.D. 250) of the Maya lowlands. This period spanned the time from the initial establishment of agrarian villages to the emergence of rulers. I anticipated that the creation of ancestors would entail a formalization of burial practices as to locale and number, age, and sex of individuals interred, possible reuse of certain burial locales, and protracted treatment of physical remains which would result in secondary interments. Excavations at other Formative sites such as Cuello, Belize, indicated that, from the early days of the Middle Formative (circa 800 B.C.), individuals were buried under the floors of houses. If I excavated several different Formative houses, I might be able to detect not only temporal trends that would suggest the selective creation of ancestors (as opposed to the burial of a deceased family member) but also emergent differences in the size and elaboration of houses which may indicate an unequal distribution of wealth.

Changes in land use would be more difficult to detect. The
Yucatán Peninsula, home to the lowland Maya, originally was a mosaic of tropical rain forest and wetland vegetation. Core samples retrieved from drilling into the interior lakes of the Peninsula indicate widespread disturbance of the forest between 2000 and 1000 B.C. Such disturbance is likely the signature of a colonizing population for which we have scant artifactual remains. As the population grew, more of the rain forest was removed as forests were converted to fields, and lumber and thatching supplies were needed for house construction as well as fuel for cooking and pottery production. In the tropics, there is a predictable succession of tree species; as climax species such as mahogany are removed, early stage “weedy” species replace them. If there is ample land, a field may be left fallow for as long as twenty years, allowing mature tree species to regenerate. From the sixteenth to the nineteenth century, this long-fallow rotation was the practice in much of the Yucatán since forced servitude and disease had caused a catastrophic reduction in the size of the Maya population. If land is in short supply, on the other hand, the cycle of fallow is shortened considerably or even eliminated and mature species do not develop. When this latter scenario is played out, lands are generally partitioned into family holdings much as Paula Brown and Aaron Podolefsky have documented in the highlands of New Guinea. Following this stream of logic, I reasoned that a pronounced decrease or absence of climax forest species in the burned wood samples collected from our archaeological excavations might signal the partitioning of the landscape into permanent family holdings. Of course, a large sample of wood charcoal would have to be carefully collected from a wide range of archaeological deposits using a labor-intensive technique called water flotation. Fortunately, we would be working in the heat of the tropics and few of my staff members or students would object to an afternoon at the float tank.

ARCHAEOLOGICAL FIELDWORK
Archaeological projects don’t just happen. There is a tremendous amount of preparation, both in research formulation and in the logistics of fielding a crew and conducting field work, especially when one is working in a host country. Rarely does an archaeologist design a piece of research and then find a site compatible with a research design. More probable is the following scenario: As part of a formal survey or casual reconnaissance, an archaeologist finds a site or an area that is compatible with a researcher’s range of interests. If preliminary investigations are fruitful, then the archaeologist sits down and formulates a full-blown research design with specific questions or a formal model, expectations for patterns in archaeological data, and a detailed outline of the scope and timetable of fieldwork to be accomplished. In the first part of this chapter I introduced you to the germination of a research design. Before that occurred, however, my interest in the genesis of ancestor veneration had been piqued by specific archaeological deposits encountered during 1990 while running an archaeological field school for Boston University at the site of K’axob in Belize, Central America, and earlier still while a graduate student on a National Science Foundation-sponsored project called “The Pultotrous Swamp Project.” With K’axob in mind,
therefore, this research was formulated and, having secured National Science Foundation support for my project, I assembled a crew for the 1992 field season.

K’axob, Belize—A Formative Maya Village

Located in northern Belize between the New River and the southern arm of Pulltrouser Swamp, K’axob is proximate not only to a diversified aquatic resource base but also to one of the premier water transport routes into the Petén. For these reasons, small villages sprang up at many locales in this portion of the Maya lowlands by 800 b.c. I first surveyed K’axob in 1981 when, as a graduate student on a project directed by Peter D. Harrison and B. L. Turner II, I was instructed to build a bridge across the swamp in order to see what was over there. Hazarding the “denizens of the deep” so notorious in tropical latitudes, we constructed a spongy bridge of perishable palmetto poles. When we reached the other side, we were not alone. The rich soils of K’axob had not escaped the notice of Maya farmers from the nearby village of San Estevan, who had been paddling their dugouts across the New River to cultivate small field plots at K’axob for several decades. As I mapped and dug test excavations at K’axob in 1981, I realized that it was a patchwork of fields in various stages of deforestation and regrowth. For this reason, we decided to call the site K’a’xob, loosely translated from Yucatec Maya as “place of many fallow fields” and actually a double entendre since the surname of the Maya landowner is Campos or “field” in Spanish. The western margin of K’axob is a lattice work of canals that drain an ancient system of wetland fields. Local Maya had constructed fish weirs across these canals in order to harvest the bountiful, aquatic resources of this wetland; one of the favorite pastimes of villagers from nearby San José was to sneak into K’a’xob to poach fish from the swamp.

Altogether the area covered by pyramids, house-mounds, and wetland fields is about 1.5 square kilometers or 0.93 square miles. Within this area, there are two large, focal plaza groups with pyramids as high as 13 meters and substantial platform constructions. Smaller patio groups of residential structures are configured as satellite units around these two focal constructions. At K’a’xob, construction activity commenced in the Middle Formative (ca. 800–400 b.c.) and continued through the Late Classic (ca. A.D.600–800); there is an elusive Late Postclassic (ca. A.D.1250–1500) presence at K’a’xob indicated by fragments of Maya pan-style incense burners recovered from the base of virtually all pyramidal structures, but there does not seem to be any architecture dating to this late time period.

Program of Excavation

During three field seasons (1990, 1992, and 1993), I concentrated our excavation effort in and around the southern group—the area we knew to be the ancestral core of K’a’xob based on the 1981 test excavations. In the end, we excavated seven large, deep horizontal exposures in structures and plazas (Operations I, VII, VIII, X, XI, XII, and XIII; Figure 3). Of the large-scale, deep exposures, by far the biggest is Operation I which was sunk into the basal platform of the large southern plaza. This unit revealed the earliest part of K’a’xob—a Middle Formative village. Our “window” to
this early time period is a 6 x 8 m excavation expanded from an initial 1.5 x 3 m test trench excavated during the 1981 season. Operation I is located in front of pyramidal Structure 18 which defines the western side of Plaza B. Early Classic (ca. A.D. 250–600) in construction, this pyramid rises four meters from the plaza floor on its eastern face while the western side rises nine meters from the edge of a low-lying aguada (seasonal lake) which is most likely a pit created when soil was needed for the construc-

**Figure 3**

K'axob, Southern Sector

The excavation of the platforms and pyramids of southern K’axob. This excavation unit yielded a series of stratified house floors, middens (refuse deposits), platforms, burials, and pyramid debris. By itself, the excavation sheds considerable light on changes in Formative Maya lifeways and, for this reason, I detail the findings of this finely stratified three-meter-deep excavation which took three field seasons to complete.

**Operation 1** By the third field season, getting to the bottom of Operation I seemed analogous to the search for the Holy Grail—engrossing and exciting but impossible. During the 1993 season, however, we did reach the earliest Middle Formative structures which were built around 700 B.C. The first inhabitants of K’axob built right on top of the ancient ground surface which itself was rich with cultural remains. Postholes sunk into this buried black humus indicated the presence of a simple earthen floor structure during this period. Two deceased individuals were interred in this ground surface: (1) an adult female buried with no associated offerings and (2) an adult male who was interred with over two thousand small, marine shell beads (arranged as bracelets and upper arm bands) and two ceramic vessels. Thus, the earliest burials at K’axob exhibit a marked degree of differentiation in grave accouterments.

Soon after these interments, a series of white plaster floors and low platforms were constructed at this location. The earliest residential configuration is composed of a low, round-to-oblong platform (retained by a single course of stones). The position of this low platform (called Structure 1) was maintained for the next five hundred years as was the midden zone to the north. Immediately adjacent to the main structure is an ephemeral structure that is represented by a series of thin floor surfaces. These floors are located to the southwest (downwind) of the platform and each one bore multiple traces of burning. These deposits provide an example of the familiar, dual structures of Maya households, with a cooking structure (represented by a series of thin, burned floor surfaces) adjacent to a more substantial living, sleeping, and storage structure. Only the floors of the structures were preserved. Fragments of daub (mud plaster with imprints of upright poles) collected from excavations suggest that these early houses were built of perishable pole and thatch materials. Ubiquitous features of this early time period are domestic facili-

**ANCESTOR VENERATION IN LOWLAND MAYA SOCIETY**

...ties such as stone- and sherd-lined pits which were located to the north of the kitchen and main structure. Four radiocarbon accelerator
dates on charcoal from dark lenses packed between the sequential “kitchen” surfaces indicate a relatively rapid sequence of construction: a time range of 770–520 B.C. for these early structures of K’axob. There are at least three sequences of structure expansion and floor-raising during later Middle Formative times. The lowest structure (1-G) contained two interments. Stratigraphically above this structure is another house (1-E) with a double burial. (This burial contains two vessels which bear the first observation of what was to become a common motif at K’axob—the red painted cross.) The final Middle Formative structure is a small circular platform (1-D) into which two burials were inserted, one with a deep, red dish inverted over a spouted vessel. Sherd- and stonelined pits continued to occur off the northern and western sides of Structure 1.

The first construction of a platform with a sufficient height to necessitate a multiple-course, stone retaining wall (called Structure 1-C) occurs during the Late Formative. At this time, the “toss” zone to the north of the platform is still in use and we see new construction of cooking features such as hearths, which suggests a continued residential function for this locale. Burials in this platform and the floor above it (Structure 1-B) maintain the pattern of the Middle Formative, i.e., primary, extended burials. During this period, a cache of four vessels arranged in a cross pattern is deposited into the plaza fill on the western edge of the excavation trench.

Burial patterns change dramatically, however, in the later part of the Late Formative. A series of circular pits (into which tightly wrapped, seated individuals were placed) were inserted into a low platform structure which lacked a plastered surface (Structure 1-A). A thick plastered floor covered the rest of the excavation area. Just short of the western limit of our excavation trench, two extremely deep burial pits had been prepared—an oblong trench and a circular pit. The trench extended down through the Middle Formative floor lenses to terminate on the soft, limestone bedrock. Judging from the condition of the collar lining of the trench and the stratified nature of the interred deposits, the trench was reopened several times and secondary burials were placed within (Figure 4). Altogether eleven individuals were interred at this location; they included children, adolescents, and adults. The deceased were sent off with their marine shell jewelry (a shell amulet and shell anklets among other pieces), carved bone handles, jadeite beads, and five ceramic vessels. The vessels represent a variety of forms, from a miniature red spouted jar to a large bowl with a flamboyant outflaring rim over which a streaky slip had been painted. A large cross was painted on the interior of the vessel base. In fact, two of the five vessels from the burial trench were painted with this motif. The small circular pit immediately adjacent to this secondary burial context contained six individuals; two of the three vessels from this circular pit also were painted with the red cross motif. These two burial locales, containing a wealth of burial goods and a concentration of vessels bearing the cross motif,
were then sealed over with a low platform, creating what was probably the first, formalized shrine at K'axob. At the end of the Formative period, the shrine complex was buried and two caches of ceramic vessels were deposited into the fill—a practice that archaeologists call a “termination cache” because it marks the end of the use of a structure, in this case of the shrine complex. The first cache consisted of a simple flaring-rimmed bowl; the second deposit was much more complex and included three vessels and seven pecked-and-shaped limestone spheres. The lowest vessel was filled with a collection of jadeite and shell carvings. During the succeeding Early Classic period (ca. A.D.250–600), pyramidal Structure 18 was built. This pyramid capped the earlier domestic structures, sub-floor ancestor burials, and the Late Formative burial shrine. Although only the basal course of the staircase risers was still intact, fragments of painted plaster excavated amidst the rubble revealed that the pyramid had been painted red. Through the Late Classic and Postclassic (ca. A.D. 600–1500) periods there is no known construction at this locale, but Structure 18 receives ritual attention during the Late Postclassic as evidenced by diagnostic fragments of ceramic, anthropomorphic incense burners (leg and arm parts, in particular) found at the base of the pyramid. The presence of Postclassic projectile points in association with these censers suggests that in addition to ritual practices, defensive or hunting activities were also coordinated from this locale.

**Excavations in “Satellite” Residences** Operation I clearly appears to be the focal area of ancestral K’axob. But we can only say this because we also excavated most of the residential mounds around Plaza B. Large-scale excavations in six “satellite” residential units within two hundred meters of Operation I revealed no additional Middle Formative construction units, thus confirming the pattern of small, nucleated Middle Formative settlements described elsewhere in the Maya lowlands. Late Formative-to-Early Classic construction units and burials, however, occur in most satellite contexts indicating pronounced settlement growth and internal differentiation at this time. In all units, excavators report a close sequencing between burials and structure refurbishing events. These findings indicate the crucial role of ancestor interments in structure renovation, even at the “household” level—a relationship that has larger implications for social practices such as the intergenerational transmission of resources.

**ANALYSIS AND SYNTHESIS**

**Architectural Patterns**

Careful stratigraphic excavation at K’axob has resulted in the documentation of over 554 discrete depositional and construction units, the bulk of which date to the Middle and Late Formative periods. In Operation I alone, there are fifteen construction phases with multiple refurbishing events within each phase. Excavations in satellite residences have yielded shorter construction sequences but total over thirty-five phases of Formative construction. Preliminary results of architectural, burial, and ceramic studies indicate that significant changes occurred during the middle
of the Late Formative, probably about 200 B.C. At this juncture in Operation I, the first ritual deposit of ceramic vessels (cache) occurred and the first multi-course stone-faced platform was built to replace the thin, plaster floors of earlier times. Soon thereafter, the first identified burial shrine was constructed in Operation I. Excavations in satellite residences indicate a thriving population during Late Formative and Early Classic times albeit living in simpler structures. In addition to evidence of emergent status differentiation in both life and death, excavations have yielded a wealth of information on Formative domestic site structure such as sherd-lined pits which were employed, often sequentially, for soaking, steaming, and roasting vegetal and molluscan foods.

**Burial Practices and the Creation of Ancestors**

Nearly all construction units contained intrusive pits in which burials were interred. Conservatively, a total of one hundred individuals have been recorded from all excavations combined. We have collected detailed stratigraphic records of the construction units into which individuals were interred; thus changes in burial practices can be analyzed with reference to architectural changes. Study of burial data has revealed a pattern of change in interments during the Late Formative. Noted especially in Operation I, an earlier tradition of single interments of fully extended individuals was replaced by multiple interments of individuals who were flexed, seated, or clearly secondarily deposited. These family interments contained individuals of all ages and both sexes and were well-supplied with burial offerings. One burial pit in particular, Zone 18 of Operation I, was reopened several times in order to add additional individuals and was capped by a low platform or shrine. This evidence suggests that the emergence of a kinship elite and the attendant commemoration of ancestors was a hallmark of the Late Formative at K’axob. Large-scale excavation, as opposed to “test-pitting for chronology,” has allowed us to document these complex and interrelated sequences of interment and structure modification. Our results suggest that subfloor burial was not simply an ancient Maya custom; rather it was a selective social practice that (1) created ancestors, (2) stressed continuity between the generations through the ritual observance of the places of the ancestors, and (3) facilitated the transgenerational conveyance of resources.

In a more general sense, these stratigraphic and burial data from three seasons of excavation demonstrate the crucial and determinative role of ancestor interments in the transformation of Operation I, in particular, from the locus of a nucleated Middle Formative village to a Classic period focus of ritual as represented by a pyramidal structure. Following the thoughts of Jack Goody and others, I suggest that this ritual elaboration of an ancestral place was a means of reckoning genealogy, and naming and claiming a place as well as associated resources.

**Evidence for Changing Land Use**

Due to the domestic quality of the Formative deposits, middens as well as infilled sherd-lined pits have yielded a wealth of macrobotanical,
faunal, and molluscan data. Plant remains, consisting primarily of burned wood, were retrieved through a comprehensive program of sediment sampling from excavation contexts. Organic remains were then separated from the sediment by means of a technique called water flotation. A total of 330 samples, primarily from Middle and Late Formative contexts, has been amassed through this recovery program. Analysis of these materials is now underway and preliminary results indicate that wholesale removal of the climax rain forest did not occur until the end of the Middle Formative; that is, climax and successive tree species were present throughout Middle Formative times. On the other hand, firewood collected from the swamp, savannas, and economic tree species became dominant during Late Formative times. This analysis can be used to evaluate the original thesis that the genesis of ancestor veneration was linked to profound changes in the use of the agricultural landscape. As mentioned above, burial practices changed significantly during the middle part of the Late Formative as evidenced by the construction of a burial shrine. During this period, wood charcoal data indicated that climax rain forest species were no longer easily obtainable for firewood. The landscape around K’axob was most likely a mosaic of regrowth plants as it had been for a few hundred years. The practice of ancestor veneration, therefore, could have been a response to a restructuring of the landscape into carefully delineated and inherited field plots.

Contribution of Research

Contribution of Research to Our Understanding of Maya Society

I hope this chapter has demonstrated how a program of focused research can yield insights to the past that were previously unthinkable. One can also legitimately ask whether this research has changed our understanding of Maya society. As I have written elsewhere, ancestor veneration as it was practiced in Maya and other societies is not really about the deceased but rather how the living make use of the dead to chart a course for the future. It is not an esoteric cult of the dead but rather a means by which a link is maintained between ancestors and their material legacy to future generations. Through attention to ancestors, there is continuity between the generations. While the very conservative nature of this practice reinforces social inequality, it also provides a charter for survival when a people are confronting overwhelming forces of cultural genocide and extinction.

Recent history provides a lesson here. Throughout the past five hundred years, Maya living in México and Guatemala have continued to venerate their ancestors through rituals such as the K’ín Krus. Labeled “traditional” by anthropologists and other outside observers, these practices, nevertheless, have held together the distinctive fabric of Maya society. More specifically, this program of research posits a link between ancestor veneration as social practice and human alteration of the environment. It should come as no surprise that preliminary results of our research indicate that landscape modification precedes human organizational change by as much as two hundred to three hundred years. In our own place and time, we are only beginning to modify our behavior and our social and education systems in order to deal with the aftermath of landscape and...
water degradation incurred over the past one hundred years by the Industrial Revolution and rapid population expansion. In this regard, this research helps to demystify Maya society and to revise the traditional notion that the ancient Maya were unique and mysterious.

NOTES
12. Radiocarbon sample numbers OxA 2721 to 2724; see Archaeometry 34 (1992): 337.


**Suggested Readings**


24 Research Frontiers

Research TOC