

An Ethno-Archaeological Investigation of Yapese Mortuary Behavior

ROBERT B. PICKERING

Dept. Anthropology, Indiana University/Purdue University, Indianapolis, Indiana 46206

Abstract—Information provided by old persons from a number of Yapese villages was compared with data collected by Mueller to gauge stability and change in Yapese mortuary practices. As an attempt to gain a better understanding of how grave monuments are related to social characteristics of the dead, this paper presents detailed morphological descriptions of graves, informants' interpretations of various aspects of grave monuments, and informants' descriptions of biographical details of decedents interred within.

Introduction

This paper presents the results of an ethno-archaeological investigation of Yapese mortuary behavior. Fieldwork was conducted in 1980 as part of the mitigation project in advance of construction of the new airport on Yap Island. The airport alignment impacted lands controlled by villages in three municipalities, Rull, Dalipebinau, and Kanifay. The project combined the data gathering techniques of on-site archaeological investigation with personal interviews of persons with knowledge of specific graves. From the informants, data were collected concerning the form and physical properties of known graves, and when possible, their contents. This information was elicited in a format that would be of maximum use to the archaeologist. Interviews with Yapese informants about traditional mortuary behavior provided ethnographic interpretations of burial features.

Data were collected on all graves for which living people had a definite memory. The oldest informants could remember the German occupation which ended in 1914. While that length of time is short in archaeological terms, it is a significant period of history for the Yapese. After the Germans, the Japanese occupied Yap until the end of World War II, at which time the island became part of the United Nations Trust Territory of the Pacific Islands, under American supervision. Graves from all of these foreign-dominated periods are present in this sample. While many of the informants could not associate the graves with specific years, they could attribute them to the period of foreign occupation. In the case of the Japanese, an additional distinction was made. The pre-War Japanese period (1914–1941) was differentiated from the War years (1941–1945).

Informants from the villages of Fedor, Lamaer, Luwech, Tafnith, Yaboch, and Yinuf were interviewed concerning general knowledge of mortuary behavior and specific knowledge of individual graves. The primary criteria for selecting informants were age and village affiliation. Persons of either sex who were born before World War II were sought out and interviewed when possible.

The research area was limited to those lands and villages which would be affected by Alignment 5B for Yap's new airport facility. While those boundaries may not have been ideal, they did include villages of different castes which maintained traditional links.

These villages constitute a major portion of a "net" in Lingenfelter's (1975) terms and can be viewed as a legitimate area of study. Lamaer is a noble village in the Banpageal Alliance (Lingenfelter 1975) and head village of the region. It participates in reciprocal relationships with the "commoner" village of Luwech, "servant" villages of Tafnith and Yinuf, and "serf" villages of Fedor and Yabach. Disposal of the dead activities are an important aspect of the reciprocity between these villages. Working with informants from all caste levels represented in this area resulted in a comprehensive examination of the mortuary system from different viewpoints.

Grave Description

Five major variables were used to describe mortuary features on Yap. The variables are 1) above-ground grave form, 2) below-ground grave form, 3) construction material, 4) location and 5) grouping of features. The variables were determined through an examination of 45 graves which were visited at least once with informants who knew the deceased (Table 1). General information concerning mortuary behavior was usually collected at the house of the informant. In addition, the informants would be asked if they had any relatives buried in the alignment area, and if so, would they visit the grave with the interviewer and talk about the grave and its occupant. All substantive interviews about specific graves took place at the grave site.

Some of the major variables include minor variables. For example, above-ground grave form includes metric descriptions of length, width, and height, and morphological characteristics such as the presence or absence of specific architectural components.

ABOVE-GROUND FORM

Above-ground grave form is the most obvious dimension of variation. In the sample of graves observed during the ethnographic survey, only three basic forms stand out: rectangular rubble, tiered, and cement crypt. Gordon (1980) defined additional types in the same general area as those visited in this survey. However, informants did not have information about interments in the other grave forms.

The first type is a rectangular grave made of piled stones (Fig. 1). These were generally within the range of 1 to 1.5 meters on a side. Small upright stones were placed around the edge of the rectangle with schist rubble scattered within the rectangle. These graves were low to the ground and were sometimes difficult to find in heavy vegetation. However, on clear ground, the rectangles and heaped cobbles were clearly visible. This kind of grave was common in the survey area and would have required relatively less energy and materials for construction than other kinds of graves.

The second type of above-ground feature was the rectangular tiered grave (Fig. 2). A tiered grave has straight sides and a flat top. Construction techniques varied within this type. In some cases, the sides were made of large slabs of schist set upright in the ground with other pieces of tabular schist being set flat on the surface thus giving the grave a regular rectangular outline. In other cases, upright stones on the sides and corners of the graves were combined with courses of small schist rocks set with the ends to the outside. This form of grave has a rougher overall appearance than those set with large flat slabs.

Table 1. Selected demographic characteristics of decedants.

Decedant	Sex	Age	Village	Period
En	male	adult	Lamaer	pre-Spanish
Ennelbuw	male	adult	Lamaer	pre-Spanish
Paqaqtinag	female	?	Yabach	late Spanish/early German
Caqberpin	female	?	Yabach	late Spanish/early German
Limog	male	adult	Yabach	German/Spanish
Yilueg	female	adult	Yabach	German/Spanish
Ruipong	male	old	Fedor	early German
wife of Maniged	female	adult	Fedor	German
Falarou	male	?	Fedor	German
Maniged	male	adult	Fedor	German
Ruwaleg	female	adult	Fedor	German
Figley	male	juvenile	Fedor	German
son of Ruwaleg	male	juvenile	Fedor	German
Long, husband of Ruwaleg	male	adult	Fedor	German
Matam	male	'80's	Yabach	German
Gilimteem	female	adult	Yabach	German
Githifinam	female	adult	Yabach	German
Runon	male	adult	Yabach	German
Thir	female	mid-adult	Fedor	German
Orothin	male	old	Delipebinaw	German
Yaloth	male	old	Lamaer	
Rapog	male	young adult	Taphnith	early Japanese
Finey	male	ca. 60	Fedor	1920-30 (Japanese)
Thirmad	female	ca. 70	Yabach	ca. 1928/Japanese
Munon	female	10-12 yrs.	Fedor	early Japanese
Bathu	male	old	Taphnith	early Japanese
Arteeng	female	adult	Yinuf	early Japanese
Long	male	'60's	Yinuf	ca. 1930/Japanese
Gikbuy	male	old	Lamaer	ca. 1930/Japanese
Tinidad	male	7 yrs.	Yabach	ca. 1933/Japanese
Piz	female	'40's	Fedor	Japanese
Gilbuy	male	'70's	Fedor	Japanese
Tatinaq	female	old	Yabach	Japanese
Rucgrong	male	old	Yabach	Japanese
Fatinaq	female	old	Yabach	Japanese
Ngorngor	male	'80's	Yinuf	1945
Fulfan	male	'80's	Yabach	American
Farlogeroq	female	'40's	Yabach	early 1950's
Fatinaq II	female	7 mo.	Yabach	1960
Tinag	female	ca. 90	Yabach	1960
Falbugoq	female	ca. 60	Yabach	1972
Ganagir	female	36	Yabach	1974
Pinuroy	female	ca. 65	Yabach	1974
Gilmitin	female	47	Fedor	1977
Giyafath	male	'80's	Luwech	1980

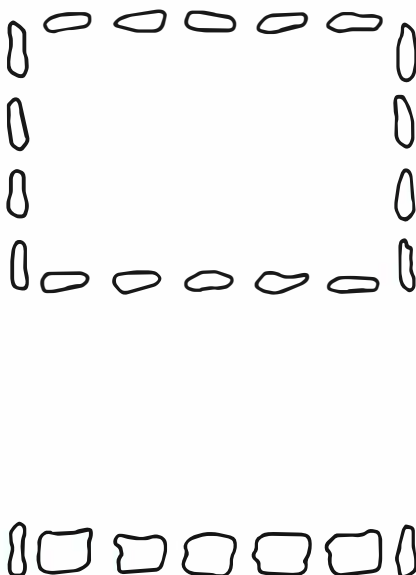


Figure 1. Plan and profile views of a stylized rubble grave. The sides are small upright schist slabs. The interior of the rectangle is filled with schist rubble.

The number of tiers in a tomb varied from one to five. However, the majority of tiered graves had one, two, or three tiers. No four-tiered graves and only one five-tiered grave were observed. Generally, the greater the number of tiers, the larger the grave. For example a grave built for a resident of Yinuf had 5 tiers and was 7.26 meters in length, 4 meters wide and nearly 2 meters tall. Two-tiered graves were observed near the village of Yabach. Their size was rather uniform with an average length of about three meters and width of two meters. Among one- and two- tiered graves, there is more uniformity of size than for the larger graves.

On many of the multi-tiered graves, upright stones, usually long flat slabs of tabular schist, were set upright in the ground adjacent to the short ends of rectangular graves. Most frequently, they were located at the four corners and/or at ends of the long axis of the grave. In cases of multiple tiered graves, these slabs were set on ground level and on each tier on the short side of the grave but sometimes along the long sides of large three or five-tiered tombs.

Some multi-tiered graves had two small top tiers rather than one long tier (Fig. 3). No other differences in the form or construction material were noted. However, multi-top tiered graves did not have the slabs of upright schist that characterized other multi-tiered graves.

The final type of grave observed was that of a single cast cement slab. Only one of this kind was noted. Part of the ceremony surrounding this burial was observed by the author. For many reasons, the interment is non-traditional and, in fact, idiosyncratic even in the modern period.

Crosses were considered to be variables of above-ground form. Crosses were found standing at the head of graves and/or lying across the tops of graves. The material for

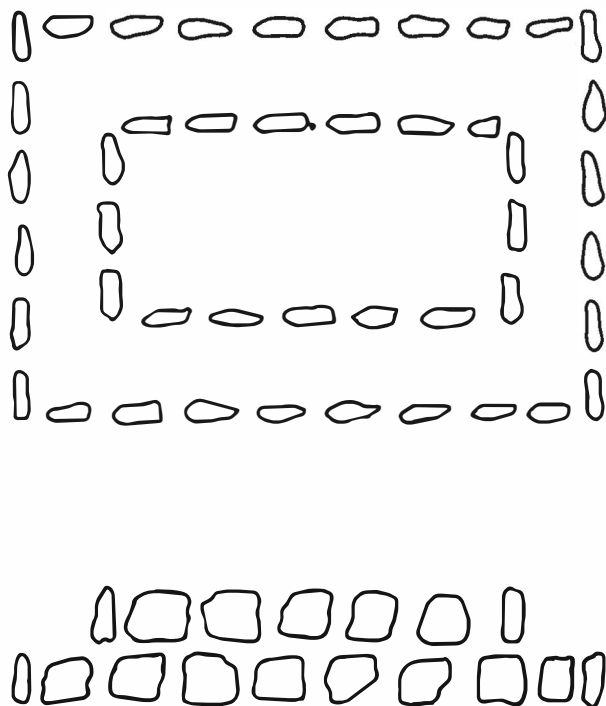


Figure 2. Plan and profile views of a two-tiered grave. The sides are dressed or flat schist slabs. The top of each tier is set with flat slabs of schist. The interior of the structure is filled with dirt and rubble. This basic construction pattern pertains to all multi-tiered graves.

standing crosses was wood usually decorated with plastic flowers, streamers, and sometimes mirrors. Crosses laid on top of the grave were of cement, cinder blocks, or schist slabs. The crosses, made of modern materials, were almost without exception found on graves that also were made of introduced materials.

MATERIALS

The material used in construction of graves included traditional, locally available stone or coral as well as modern introduced materials. Most graves were made of tabular schist which could be found locally. In some interment areas, schist outcrops were present near the site while in other cases, rock had to be brought from distant sources. For example, an informant from Fedor said that schist outcrops on the shore of his village were used for grave construction in Fedor and for villages that were overlords of Fedor such as Lamaer and Luwech.

Although uncommon, coral was used in grave construction. No above-ground grave made completely of coral was observed. Usually, only two or three blocks had been used in conjunction with schist slabs.

Cinder blocks are the other major construction material seen in Yapese graves. Clearly, their use dates from recent times. Cinder blocks were used in the construction of

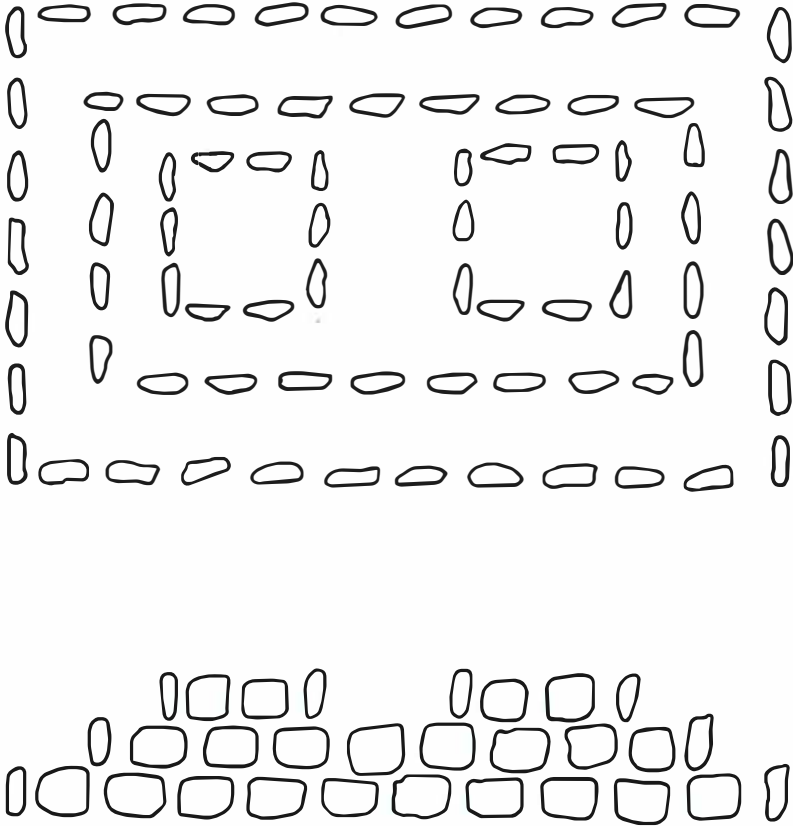


Figure 3. Plan and profile views of a grave with a multiple-top tier. Construction is virtually identical to that described under Fig. 2. The main distinguishing characteristic is the presence of two small top tiers rather than one long top tier.

tiered graves similar in size and shape to those made of schist, i.e., the form remained the same but the medium had changed. Cinder blocks and cement were also used in construction of the modern crypt.

BELOW-GROUND GRAVE FORM

The morphology of graves beneath the ground surface was observed only in a few graves in this project. However, many below-ground grave forms were observed in the excavation of Thongwal, an archaeological site in the airport alignment area, which was excavated as part of the same project (Hanson 1980). Most of the graves at this site were of the rubble-filled rectangle or single-tiered varieties.

Below-ground form of all graves was similar. Near ground level, a large flat schist slab or a number of smaller slabs would be placed flat on the ground. They covered the opening of a pit that was roughly circular in plan view and oval in cross section. The pit

was defined as having a dark, relatively loose fill as compared to the hard clay subsoil that is characteristic of this portion of Yap. See Hanson (1980) for details of grave morphology at Thongwal. The size of the pit varied to some degree. There were virtually no other variables in the form of this part of the mortuary feature.

LOCATION

Location as a dimension of mortuary behavior was also considered for each grave. Three variations were observed. Graves were located on the *tayid* or upland savannah, on terraced farmland on the *tayid*, or in village areas. The clear majority of graves was on either developed or undeveloped areas of the *tayid*. Graves on the *tayid* were often near villages, i.e., within 20–50 meters of villages or houses. It should be noted that graves were not found near all villages. For example, there were virtually no graves (except for those within the villages) observed within 150 meters of higher ranked Lamaer or Luwech. However, most graves visited were found within 150 meters of lower ranked Fedor and Yaboch.

Only two graves were observed within village areas: Both were one-tiered graves over three meters in length, heavily overgrown, and in poor states of preservation. These are probably the oldest graves observed. They are from the pre-Spanish period.

CLUSTERING

Two levels of grave organization were defined. The first is a dichotomy between single graves and clustered graves. The second stage of organization pertains to the cluster pattern, i.e., were the graves contiguous, paired, or grouped in a more complex manner? Contiguous graves had long axes parallel and shared a common side (Fig. 4). Paired

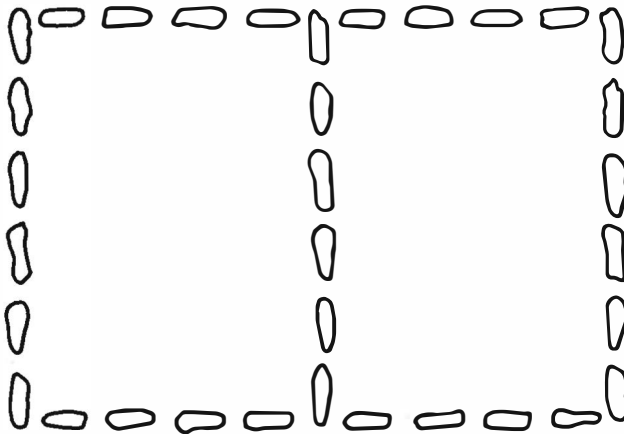


Figure 4. Plan view of stylized contiguous graves. The distinguishing characteristic is the sharing of a common wall between the graves. Contiguous graves may be of the rubble or single-tiered types.

graves also had long axes parallel but did not share a side. Grouping is a term denoting the presence of more than two graves and indicates that graves in close proximity were arranged in recognizable patterns such as rows.

Using the variables just described, a grave typology was developed and is illustrated as a key diagram (Fig. 5). This type of visualization shows which dimensions introduced the most variation into the system. It can be seen that only one of the construction variables, tiers, leads to greater variation. All piled graves appear to be homogeneous in form based on the variables considered. The other category also shows no variation. However, in this case, the figure is misleading; the only "other" example is the contemporary crypt.

Ethnographic Perspective

From these variable data domains, it would have been possible to develop correlations and predictive models based on archaeological data alone. The models may have explained the data and they might have become useful in future research.

However, the excellent cooperation of the Yapese made it possible to reexamine the mortuary feature data and determine their significance from the Yapese perspective. The opportunity to work with both archaeological and ethnographic data makes it possible to develop models that are both archaeologically useful and culturally sound. This combination will be of considerably more value to future students of Yapese culture than archaeologically derived models alone.

SOCIAL STRUCTURE AND MORTUARY ACTIVITY

The rigid social system that structures the living world of the Yapese also affects disposal of the dead. In Lamaer and Luwech, villages representing the noble caste, the dead were not interred by the family but by an obligated serf village; in this case, Fedor or Yabach. The ritual purity of the nobles would have been threatened by association with the dead or even the dying. Though the low caste villagers buried the high caste dead, ceremonies for the deceased usually took place in the high caste village. Interviews with high caste informants indicated that they knew much about the social relationships and ceremonies that were invoked at death. However, they knew little about the actual interment process, how graves were dug, or what items of material culture were put into the grave.

Members of the commoner castes also were subject to purity and pollution rules but because of their lower status, they often buried their own dead. An exception to this rule occurred when someone of the high caste was persuaded to "loan" a commoner family the services of serf villagers to construct a grave.

Serf villagers buried their own dead, the dead of the high caste villages who were their overlords, and sometimes persons from the middle castes. Informants from traditional serf villages provided extensive information on construction techniques, sources for raw materials, the amount of time necessary to build graves, and artifact inclusions.

Serf villagers' knowledge about grave construction was extensive and precise because they were the ones who did the work. However, their information concerning mortuary ritual was limited. On the other hand, high caste informants were very helpful with

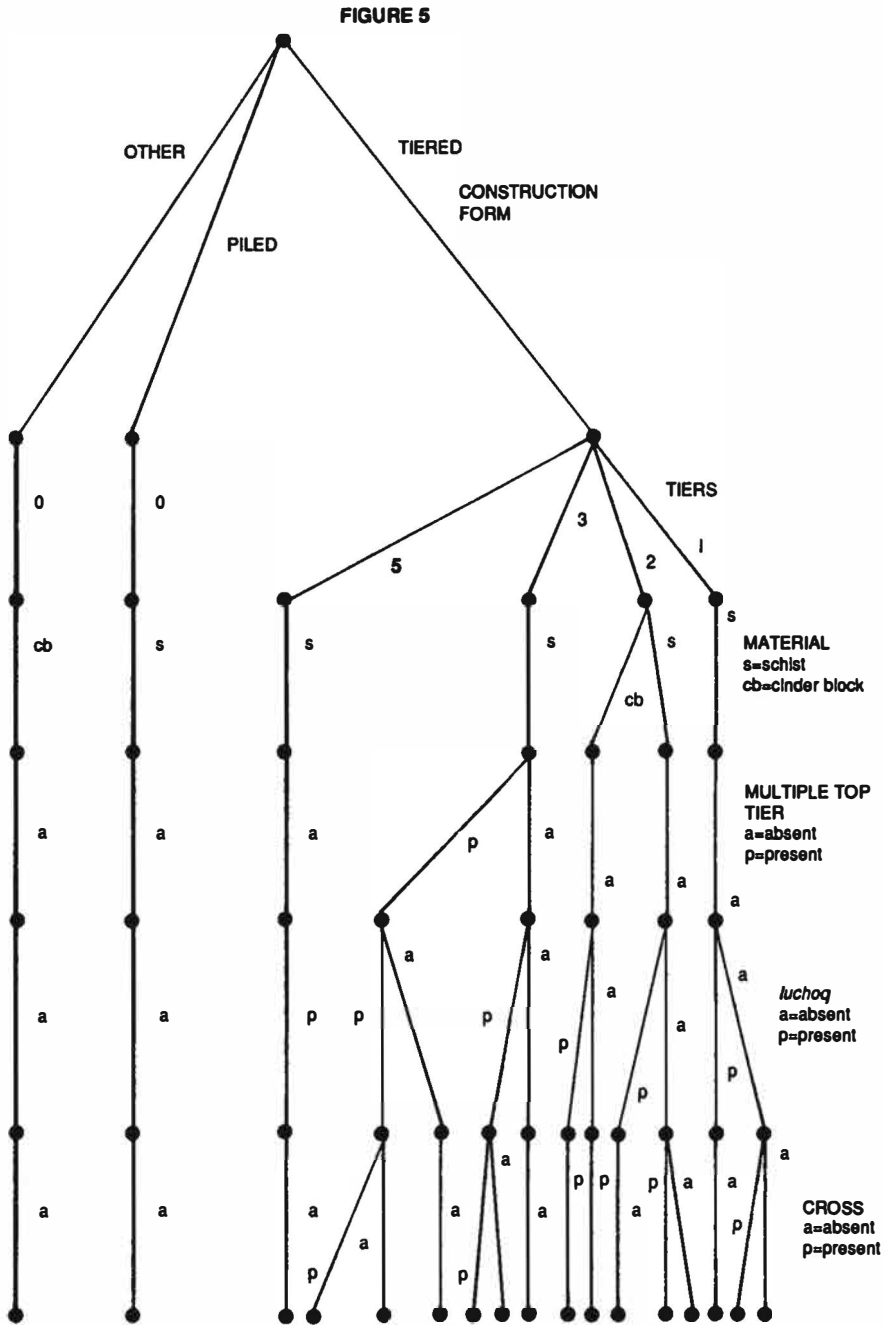


Figure 5. Tree diagram showing variable dimensions of mortuary features. Explanation of variables: a. Construction: 1. tiered; 2. piled; 3. other. b. Number of tiers: 1, 2, 3, or 5. c. Material: 1. schist; 2. cinder block. d. Multiple top tier: 1. absent; 2. present. e. *luchoq*: 1. absent; 2. present. f. Cross: 1. absent; 2. present.

information about ritual and the ideal form of the mortuary system. However, they had little or no knowledge of interment details; they did not bury the dead, nor did they observe interment. Members of the middle caste were helpful with both aspects of mortuary information as it pertained to their caste. In total, interviews from all three groups provided comprehensive information on many aspects of the mortuary system, i.e., from the philosophical aspects of ritual to mechanical aspects of the actual work of constructing graves.

ETHNOGRAPHIC INTERPRETATION

Many variables of grave construction are morphological features that had cultural meaning for the Yapese. Through discussions with individuals or small groups at gravesite, the use and meaning of various morphological features were discussed. New information was checked for consistency with other informants. Often, these subsequent conversations revealed new information or further qualifications.

Variability in above-ground grave form was one of the first topics discussed during interviews. Informants from all castes agreed that it was best to build the largest and nicest grave possible for the deceased. They also agreed that the higher the caste or social position within the caste, the larger should be the grave. From that statement, one might infer that the low rubble graves could be attributed to the lower castes and the large multi-tiered graves would represent the high castes. However, the real situation was considerably more complex and presents many exceptions.

Many informants related situations in which the personal relationship between the deceased and the living sometimes superceded more formal status characteristics, even caste. For example, two informants, one from Fedor and one from Yinuf stated that the living showed their love and personal attachment to the dead by building large graves. It was emphasized by the informants that the strength of the personal relationship between the living and the dead was more likely to affect the size of the grave than genealogical relationship, caste of the deceased, or position within the village.

A case from the early Japanese period (pre-World War II) pertains. The grave of a girl from Fedor was a three-tiered tomb. Great amounts of work and materials were needed to build this grave. Yet, there were no formal attributes of the girl that would have predicted this effort. The girl was only 10–12 years of age at death, lived in a serf village, and had no apparent social status differences from other young girls. Yet, her grave was larger than those of adults of either sex from villages of higher caste. When asked why her grave was so large, the brother of the deceased said the personal ties were so close, that he and other relatives wanted to build a fine grave. In addition, there being many living relatives, it was not difficult to assemble the necessary labor force.

A second example emphasizes the importance of the number of living relatives who can work together. A female informant from Fedor showed the graves of her father's father and her father's mother. The paternal grandmother's grave had three tiers while that of her husband was only a pile of rubble. On the basis of formal attributes such as age, sex, and position within the village, his grave would be expected to be more elaborate than his wife's. Yet, just the opposite was true. At the grave site, this seeming contradiction was discussed with the informant (granddaughter) and other more distant relatives. Their ex-

planation was that the wife had died first and her grave was built by her husband and other relatives. He had the desire and ability to construct a large grave. When the husband died, there were not enough close relatives to build a grave equal in size to that of the wife. Interestingly, had the husband died first, informants said that neither grave would have been elaborate. The wife would not have had any relatives in her husband's village to help.

While it is clear that people want to build the largest and nicest grave possible, there is also a cultural proscription against "showing off," in this case, constructing a grave that is beyond one's station (Lingenfelter, personal communication). This rule is applicable generally but is more likely to be a problem for the low caste. If a low caste person were to build a four-tiered grave for his father, the high caste overlord might require a six-tiered grave to be built for his father. The relative status would be preserved at the expense of low caste labor.

Presence or absence of a multiple top tier on a grave was found to be an indicator of the number of persons interred in a grave. In all cases, multiple top tiers were restricted to three-tiered graves but not all three-tiered graves exhibited this variation. Significance of the multiple top tier was learned from informants in Yabach and Fedor. Graves with multiple top tiers had more than one person interred within. Decedents were always closely related, i.e., husband-wife, sister-sister, father-son. The process leading to this type of grave was the same. When the first person died, a grave was built and the attending ritual performed. Sometime later, the second person voiced a desire to be interred in the same facility. When the second person died, the grave was modified and enlarged to accommodate both. The multiple top tier overlies each set of remains. At least for the present sample, this single dimension can be used to define the presence of a multiple interment involving people with a close familial or genealogical relationship.

A cautionary note pertains. Though all graves with a multiple top tier represent multiple interments, other types of graves can also hold more than one individual. For example, one of the graves belonging to a woman of Yinuf was a tall single-tiered grave which contained the remains of four individuals; three were bundles and one was a primary interment.

Of all the morphological characteristics of grave construction, the upright schist slabs set at corners may be the most important symbolic feature revealed in this study. These stones are called *luchoq* (Fig. 6). *Luchoq* are set on a grave by the person who inherits control of land from the deceased. This person must live in the decedent's house and observe certain activity and food taboos for a 27-day period after assuming the role of inheritor and caretaker. In most cases, the inheritor is a closely related male such as a brother or son. However, if there are no males to fill such a position, then a sister or daughter may inherit from the deceased. When a female dies, her land is passed to her children. As Lingenfelter has discussed (1980), the small contemporary population on Yap has created a condition in which there are more social status positions than there are people to fill them. Therefore, women inherit land more frequently than in former times.

At the end of the 27-day restricted period, the inheritor becomes the speaker for the land and may dispose of the produce of that land in any way he sees fit, i.e., he can eat the food or share it with those with whom he would normally share food. The term "speaker" is used instead of land owner because traditional Yapese custom dictates that the land itself is titled and has power. Those persons who take care of the land, speak for the power of

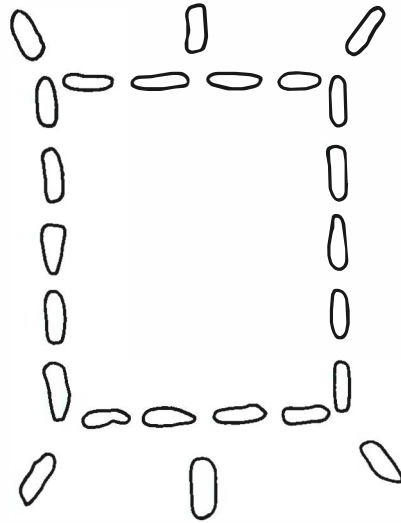


Figure 6. Plan view of a grave with *luchoq* at the corners and along the midline. *luchoq* were observed on graves ranging from one to five tiers. On smaller graves, midline *luchoq* often were not present. On large graves such as five-tiered graves, there were often *luchoq* along the sides as well as at the ends of the graves.

the land. Ownership in the Western sense is not traditional (Lingenfelter 1975). Therefore, when the speaker dies, that position must be filled by another who is qualified to speak for the land.

Informants were asked if the presence of *luchoq* on a grave meant that the deceased had been a speaker for land. They all answered in the affirmative. A grave which had *luchoq* could belong to a person, either male or female, who had land. *Luchoq* and multi-tiered graves form a statistically significant association. The ethnographic data from my study and Gordon's grave survey (1980) indicate that there are higher than expected frequencies of larger tiered graves with *luchoq* than rubble rectangle graves.

The ceremonial significance of *luchoq* may be analogous to schist slab backrests that are set into platforms near men's houses. The physical appearance of the two features is striking, particularly on single tiered graves. In effect, the single tier becomes the flat topped platform and the *luchoq* appear like backrests in miniature. This interpretation of *luchoq* was confirmed by two informants.

The presence of crosses, regardless of size or material, is explained by the resurgence of Christianity at the end of World War II. Crosses with individual graves reflects the interment of active church members near their villages. In 1980, there were at least three missions on Yap, Catholic, Methodist and Mormon. The Catholic mission, dating to the time of German occupation, is the oldest and has been active except during World War II.

Even though crosses are associated with introduced religion, there is a traditional analogue. Mueller (1917) notes that sprouting coconuts were placed at the head of graves.

Older informants interviewed by this investigator verified this past practice in the impact area. It is not done today but was done within living memory, i.e., during the Japanese period. Placing a cross rather than a sprouting coconut is now the more common practice. One informant from Tafnith said, "We (Christians) now put crosses at the head of graves, not coconuts." Approximately 50 years earlier, this informant set the *luchoq* and placed the sprouting coconut on his father's grave.

For the "material" dimension, native schist is by far the most common grave construction material. Schist is used for rubble-filled rectangles and tiered graves of all sizes. It is also the traditional building material for most house foundations, platforms and paths. Cinder blocks are a building material introduced within the last few decades. Only a few two-tiered graves of this material were observed. There is no cultural or functional factor that should restrict their usage. Men of Yabach who build graves said that cinder blocks were easier to use and looked nicer. The cost or value of cinder blocks did not appear to be an issue. There was no evidence that additional prestige was gained in using the material. However, it is probable that the cost of cinder blocks might have inhibited their use by more people. Although schist involves labor in quarrying, it is otherwise free.

Proximity and patterning of graves suggest an association between graves and may infer a special relationship between the occupants. For four grave groups, informants were able to identify the decedents and knew their social and kinship relationships.

The two clusters which had the most complete data are illustrated below. The first set of graves consists of two rows of graves (Fig. 7), all of which were two-tiered rectangular constructions of schist. All were of approximately the same size and each had *luchoq* at the four corners. Individuals interred therein included a man, his wife, her sister and the wife's daughter's daughter (Fig. 8). Dates of death ranged from 1960 back to an unspecified year prior to World War II. The other individuals interred in the group are thought by the informants to be relatives, but they could not provide details. Very likely, this lack of information means that they died before the memory of the informants or the informants did not participate in the funeral ceremonies. Individuals "E" and "F" served as informants for the author.

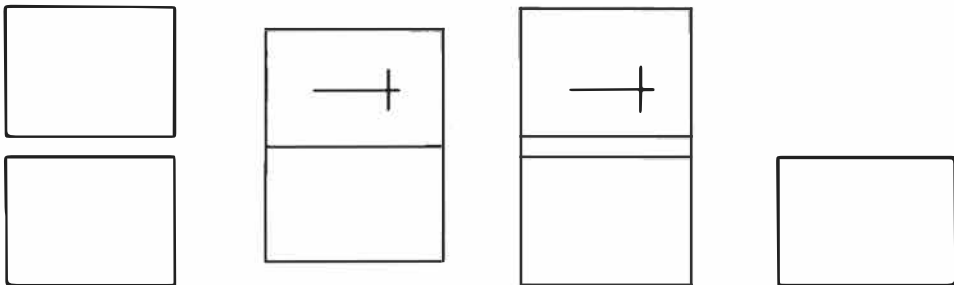


Figure 7. Two rows of graves observed near the village of Yaboch. All graves were similar in size and construction. The two crosses pictured are cinder blocks set into the top of the graves.

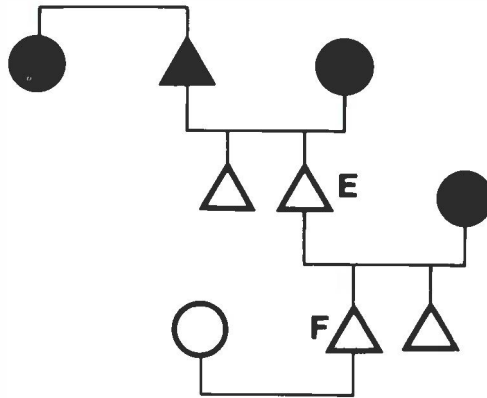


Figure 8. A kinship diagram showing the relationship of four of the persons (blackened symbols) interred in the graves pictured in Fig. 7. Individuals "E" and "F" were informants.

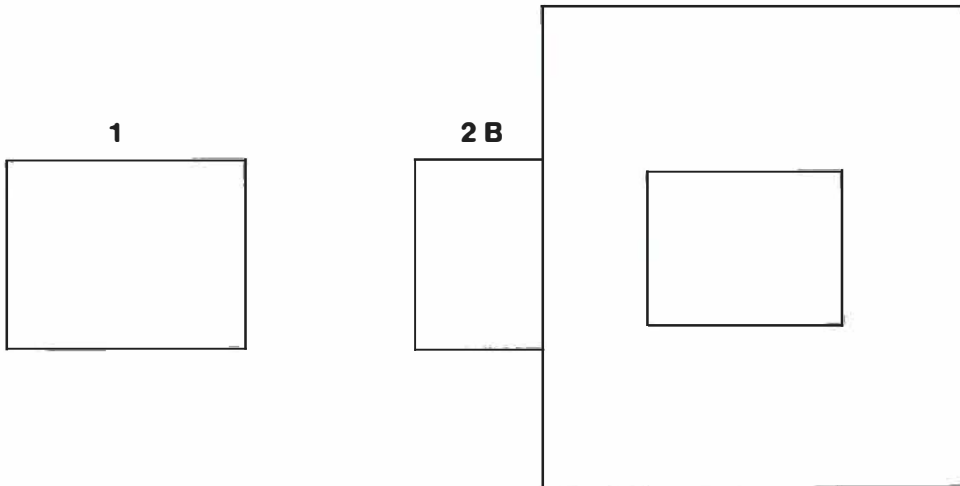


Figure 9. Depiction of graves at Site 45SW:1. Grave 1 is a single-tiered grave. Grave 2a is a nearly square two-tiered grave on which grave 2b (one-tiered) has been added. The graves were on land controlled by Yinuf.

A second example includes more members of a single family with the time range extending from 1974 back to the pre-World War I German occupation. A sketch (Fig. 9) of the graves shows a contiguous one-tiered and two-tiered grave. Figure 10 diagrams the kinship relationship of the decedents and an informant (Individual #10). The informant remembers being present at the interment of the last person (#6) to be buried. Individual #5 died two years earlier.

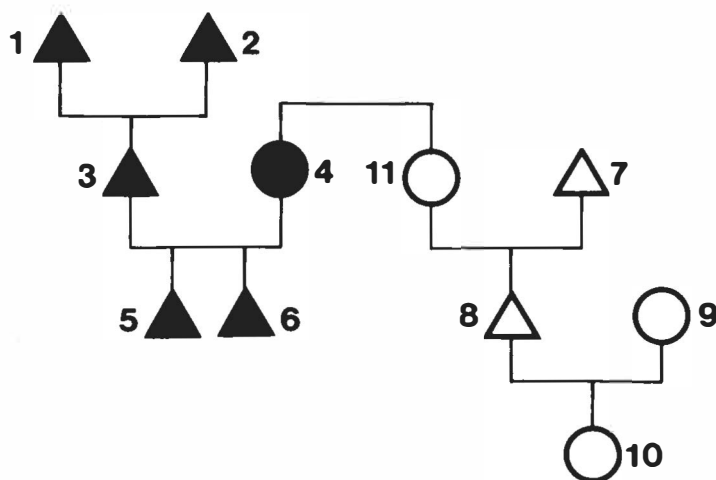


Figure 10. Kinship diagram of persons (blackened symbols) interred in graves depicted in Fig. 9. Individual #10 was the informant.

Discussion

Analysis of Yapese mortuary customs must consider traditional custom and effects of different foreign administrations. Customs are not static nor is it assumed that there is or was any "pure" type of burial that characterized the Yapese. Rather, mortuary activity is a dynamic pattern of behavior which changes through time as a result of inside and outside pressures. Table 2 shows the correlation between time periods and characteristics of grave form.

Grave location as a dimension of the mortuary program shows a pattern of continuance of traditional practices. The *tayid* near each village is still the principal burial area even though mission cemeteries are available to both Catholics and Protestants. Special situations such as cause of death determine the location of a burial. For example, Mueller (1917) writes and informants for this study agree that warriors killed in defense of their village were usually buried where they fell. The two village burials observed in this study were said to be those of fallen warriors. Their names and the context of their death and interment were recounted by villagers.

Caste and village affect selection of grave location. Low and middle caste villages bury their dead near their own villages. High caste villages may bury the dead on their own land but often choose to have them buried in or near the low caste village which they control. Being more ritually pure, high caste people want to be removed from any association with the dead. Some of the graves closest to Fedor are *Pilung* (chiefs) from Lamaer.

The introduction of Christian missions has offered the Yapese a new option. They may bury the dead in church cemeteries. However, that option is not always taken. When informants were asked why their relatives had chosen to be interred on their own land rather than in the church cemetery, personal preference was cited as the cause. Although

Table 2. Distribution of grave forms by time period.

	Pre-Spanish	Spanish	German	Japanese	American
# of graves	2	2	13	14	9
grave form*	1,1	3,3	2,2,2,2, 2,2,2,2, 2,2,2 3 ?	1,1,1,1, 2,2,2,2, 3,3,3, 5 P,P	2,2,2,2, 2,2, 3 P X
<i>luchoq</i> present	1	0	2	8	4
cross present	0	0	0	0	5

* numbers 1, 2, 3, and 5 represent number of tiers. P represents a piled grave. X represents a cement and cinder block crypt. ? represents type unknown.

comprehensive data were not collected on this subject, choice of burial in church cemeteries appears to be well defined. Today, stillborns and neonates are interred in mission cemeteries whereas in former times, they were buried near the menstrual hut areas. People born in the American period also are more likely to be buried in the missionary cemetery.

Concerning the use of *luchoq*, there is no evidence that the meaning attached to these stones has changed through the years or that they are used any less frequently. They are as common in the American period as in earlier ones. Though *luchoq* may not be associated with a time period, there is clear indication that they may be associated with village and, by inference, caste. Almost no graves from Fedor had *luchoq* while most of those from the middle and upper castes did.

Two changes in graves, one being raw material and the other a new architectural component, are clearly recent. While the traditional building material in Yap has been tabular schist, cinder blocks are now used to build many structures including graves. At least in the airport area, use of cinder blocks for graves dates from about 1960 and serves as a useful indicator of the period. In addition to the use of cinder blocks, the most obvious change has been the placing of crosses on or at the head of graves. All of the crosses, whether made of schist, wood, or cement, date from the American period. Only in the Catholic mission cemetery in Colonia were crosses from earlier periods seen. The paucity of early examples is surprising when one considers the date by which the Germans had established a mission on the island.

Summary

The ethnographic survey of mortuary behavior has added considerable detail to information about Yapese disposal of the dead practices. Data collection was divided into two categories—material remains and ethnographic descriptions. Material remains include all features and construction materials, artifacts, and human remains that were found at the interment site. Death of the individual causes all of these data domains to come together in a particular configuration and constitutes a single episode or disposal of the dead activity. Very often, the archaeologist or bio-anthropologist has only the material remains as a data

set from which to deduce broader patterns of behavior. Scope of the study is frequently limited by the type and preservation of materials recovered.

This investigation has combined detailed observations of material remains with Yapese descriptions and definitions pertaining to the mortuary domain, i.e., form and variation of graves have been documented. By combining the two data sets, investigation can go beyond description and explain certain aspects of the mortuary program and variation within a Yapese cultural context.

References

- Gordon, C. C. 1980. Mortuary survey. Archaeological and Ethnographic Investigations, Alignment 5B, Airport Historical Area, Yap, Western Caroline Islands. 1. Historic Preservation Office, Trust Territory, Saipan.
- Hanson, D. B. 1980. Archaeological investigations at three mortuary sites on Yap. Archaeological and Ethnographic Investigations, Alignment 5B, Airport Historical Area, Yap, Western Caroline Islands. 1. Historic Preservation Office, Trust Territory, Saipan.
- Lingenfelter, S. G. 1975. Yap: Political Leadership and Culture Change in an Island Society. University of Hawaii Press, Honolulu.
- Lingenfelter, S. G. 1980. Ethnographic investigation. Archaeological and Ethnographic Investigations, Alignment 5B, Airport Historical Area, Yap, Western Caroline Islands. 1. Historic Preservation Office, Trust Territory, Saipan.
- Mueller, W. 1917. Yap. *In* G.Thilenius (ed.). *Ergebnisse der Sudsee-Expedition 1908–1910*. Friedrichsen, de Gruyter & Co., Hamburg.