The unique combination of Maya chronicles, e.g., the Popol Vuh and Annals of the Cakchiquels, descriptions written by Spanish friars and officials after the Conquest (ethnohistory) and archaeological remains allow a fuller, nearly ethnographic, reconstruction of highland Maya culture for the Late Postclassic (ca. 1200-1524) than for any other period of Maya prehistory. Unfortunately, the Maya chronicles and most Spanish descriptions concentrate on the dynastic histories of the numerically small ruling elites, their religion, worldview, and political and military machinations. Relatively little is stated explicitly about the other levels of Maya society. Similarly, archaeological investigations have focused on the centers and structures of the Maya rulers such as atIximché, Zaculeu, Uutlán, and Mixco Viejo. With the exception of the last named site, investigations have passed over the question of the conditions under which the other, lesser status inhabitants of such centers lived (Fauvet 1973). As part of a larger program, recent excavations at the Late Postclassic sites of Cainal and Pueblo Viejo Chixoy provide some insights into these conditions, particularly in regard to domestic architecture and associated remains (Iohn et al. 1990).

The information presented here is based upon the excavation of twenty-one small residential structures and inspection of many more. Seventeen of the excavated structures pertain to Groups B and C of Cainal, two of the three major and two minor groups into which the site was divided, following what appeared to be the ancient organization.

Cainal occupies river terraces along both banks of the Rio Calé, 2.5 km from its confluence with the Rio Chixoy. As is normally the case in this part of Guatemala, the Chixoy and its branches run through narrow, steep and high-walled canyons. The only relatively flat land occurs in the form of rounded promontories at the numerous bends in the river. In most cases these promontories are small and many supported outcrop settlements. Undoubtedly, the large flat river terraces along the Calé were a major factor in determining Cainal's location. At the same time, the precipitous terrain and poor soil combine to make farming precarious at best. How Cainal's estimated population (assuming six to eight individuals per residence) of between 2000 and 2500 was fed is not yet clear (Iohn 1979: 41). One possibility is that better farmland in an adjacent or near-by area was under the direct political control of Cainal. Such a pattern is known in the neighboring Alta Verapaz, from the period just after the Spanish conquest but before the Spanish had forced changes in traditional settlement patterns (Reina and Hill 1980). These naturally fertile areas were called comunias by the Spaniards and were intensively cultivated.

Each of the three major groups at Cainal follows the same basic pattern. Groups are composed of two precincts, ceremonial and residential. Ceremonial precincts consist of a temple pyramid and altar-shrine along with several long structures, boasting multiple stairways and entrances, arranged to enclose a plaza.
unexcavated area is included. Group A contained the greatest number of residences, 174. While similar in architecture and construction to examples in Groups B and C, many Group A structures appear to have been organized in units around small plazas. Group-A investigations have been reported in greater detail elsewhere (Fauvet 1980). Except in the southeast portion of the Group B residential precinct (discussed below) no particular grouping of the component structures was evident. In fact, based on analysis of entrance placement, privacy appears to have been desired over convenient access.

The site of Pueblo Viejo Chixoy is located 16 km. east (downstream) from Cainial on a knoll some 280 m. above the confluence of the Chixoy and Carchelá rivers. The location affords views to the south, up the Carchelá valley, and west up the Chixoy. A high peak just north of the site provides excellent all-round vistas. The Chixoy bends north at this point and today forms part of the boundary between the Quiché Maya to the west and Pokom Maya-speaking to the east. It appears likely this was also the case in pre-conquest times and that Pueblo Viejo Chixoy was an outpost of Cainial, maintaining constant vigil against the potentially hostile Pokom.

Pueblo Viejo Chixoy is composed of four long, low, narrow structures and a single pyramidal substructure grouped to enclose a small, open plaza. This area presumably formed the residential and ceremonial precinct for the highest status individuals (rulers' commandants?) at the site. Excavations demonstrated the structures in this precinct to have been unfinished at the time the site was abandoned. As at Cainial the ceremonial precinct was surrounded by small residences, numbering about 40 at Pueblo Viejo Chixoy.

The small residential structures themselves are interesting in that they fall readily into two types along a continuum based on the degree of elaboration of several elements. Primarily, these include platform construction and superstructure, though other elements such as benches, altars, floors, entrance flagstones (foun) and hearths also vary in complexity and elaboration.

**BENCHES**

The major interior features of both excavated and non-excavated residences at Cainial and Pueblo Viejo Chixoy were the interior platforms, designated benches. Two configurations existed. The "L" bench ran the length of a short side of a structure, and along a variable portion of a long side. The straight bench simply ran along the length of a short side, or along part of the length of a long side. All were filled with a mix of large and small river cobbles and were originally mud plastered. Presumably, they were used as sleeping platforms.

**ALTARS**

These constructions were present only when two benches or parts of benches ran along a long side. The space between the ends of the two benches might then be filled by an altar. These were of two types. The more common was the indented altar which was physically connected to both benches. It was probably more common because of the simplicity of its construction. A small wall or line of stones was laid between the two benches, and the space behind it filled in. It was probably finished off at the same time and in the same manner as the benches. The other, rarer type, of altar was free-standing. Although it occupied the same position as an indented altar, there was no physical connection between it and the two flanking benches. The only physical connection the free-standing altar had was with the rear wall of the superstructure. In cases where masonry altars were not present, it is possible that simple clay or wood constructions were used.

**HEARTH**

In contrast with structures at Pueblo Viejo Chixoy, hearths were only rarely identified at Cainial. There were, perhaps, three types of hearths, the simplest consisting of nothing more than a patch of burnt earth. This was also the type known from Pueblo Viejo Chixoy. The most elaborate type was made of burnt clay laid upon a stone foundation in the shape of a ring, the resulting hearth thus being raised from the floor and slightly displaced. An intermediate type may have consisted of a ring of stones around a burnt clay base, or may just be a poorly preserved example of the elaborate type.

**SUPERSTRUCTURES**

Evidently three types of superstructure were employed. The first consists of wattle-and-daub walls erected directly on the house platform: the second of a base wall of adobe, not quite a meter high, surmounted by wattle-and-daub walls: the third type similar to the second, except that the base wall is of loja masonry instead of adobe.

**FLOORS**

Mud plaster floors were probably universal in the houses at Cainial. Though their occurrence is not regular in the excavated sample, this is thought to be due to differential preservation.

**HEARTHS**

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situation at Pueblo Viejo Chicooy, where, due to a number of fortuitous circumstances, postmolds were easily identified. It seems likely that posts were used at Cantinal to support the roofs on those structures with simple wattle-and-daub walls, on the same pattern as at Pueblo Viejo Chicooy.

However, the abobe and loja base wall structures present a problem. If posts were used to support roofs on these structures, their placement is unclear. In some cases there was any evidence found of the posts being inserted in the loja or abobe walls. In any event, such placement would have seriously weakened the walls. It also seems doubtful that the posts were placed outside the platforms. Their placement inside the walls is a distinct possibility, by analogy to the residential structures at Pueblo Viejo Chicooy. However, one factor against such placement would be the resulting loss of floor and bench space.

Another possibility is suggested by the remains of a wattle-and-daub temple superstructure on a pyramid at Structure A-16 at Cantinal. There, small posts were placed at short, regular intervals along the walls, imbedded in a cap of abobe, and ultimately imbedded in the platform fill. The poles of the wattle were likely tied to this and daub applied. The numerous small posts would probably have been sufficient to support a thatched roof. This, in fact, appears to have been the case on the structure as no evidence of a Mexican style beam-and-mortar roof was found.

A similar system may have been employed on the abobe or loja base walls structures. A cap of clay or abobe could have been placed on the top course of the base walls, and the small posts imbedded in it. The poles of the wattle-and-daub may also have been set in local fill as in platform fill as in Structure A-16, the use of small posts probably results in a fairly stable configuration. It is not certain whether the same can be said for the technique outlined here for residences. Even if the posts were imbedded in more than a cap of clay or abobe, seem inherently weak. This would appear especially true for the ill-constructed pre-Columbian abobe walls. Stability could have been improved, however, if a system of joints were used to tie posts on opposite sides of the structure securely together.

No direct evidence of the kind of roof employed was found at Cantinal. It may be of significance. If a Mexican-style beam-and-mortar roof had been employed, one would expect some evidence of it in the form of collapsed roof coating. In fact, such roof collapse was not found in any structure at Cantinal, residential or ceremonial. In addition, the wattle-and-daub superstructures or upper walls would not have supported much weight. We are thus left with the likelihood that roofs of thatch, tied to a framework of poles.

Based on the investigations in Pueblo Viejo Chicooy and Cantinal Groups B and C, five types of small residential structures may be defined.

Type I structures are exemplified by Structure B-14. The structure is defined by large, water-worn dolomite cobbles laid out in a rectangular pattern 7.85 m. x 3.30 m., and constituting a rudimentary foundation structure. An "L" bench runs along the short north side and along the back wall, while a straight bench also followed the back wall. A large entrance loja was still in place midway along the west wall. A patch of burned earth near the angle of the "L" bench represented the remains of a hearth. Nearby were found hand- and grindstone (metate and metate) fragments used in grinding corn for tortillas. Fragments of burned wall daub (hopper) were in an indicated wall of this construction, supporting a pole-and-thatch roof.

The method of wall and roof support is illustrated by Structure 14 at Pueblo Viejo Chicooy. Also a Type I structure. Structure 14 evidenced a low "L" bench with an adjacent burned-earth hearth at one end and a larger hearth at the other end with associated mortars and metate fragments. Other artifacts recovered included a spindle whorl used in spinning cotton thread, a bird effigy pottery whistle, two large projectile points, and several obsidian blades and cores.

A fortuitous combination of circumstances allowed a characterization of the superstructure of this residence. A white pumice sand was the principal fill material in the small residential structures. When cut away at a corner of Structure 14, the dark post mold was clearly revealed. Stones, lacking in the pumice sand fill, were placed in with the post for bracing and further aided in defining the post area. By repeating the excavation process in the other corners, and by means of a trench through the platform, the post pattern for Structure 14 was revealed.

Structure B-6 at Cantinal typifies Type II constructions. The platform superstructure is more elaborate, consisting of large dolomite cobbles (similar to those used in

Type I construction, two courses sometimes present) capped by a single course of lojas (usually schistosite). No entrance lojas were present in Structure B-6, though they do occur irregularly in other Type II residential structures. This one measured 6.40 m. x 3.90 m. Both "L" and straight benches were again present, with some original clay plastering still in place on the "L" bench. Fragments of clay plastering were also found. Several whole and fragmentary manos and metates were found off the front and rear walls of the house, while the remains of several cooking pots (ollas) appeared on the floor. Although not prevented in Structure B-6, burned lojas were again present, with some original clay plastering still in place on the "L" bench. Fragments of clay plastering were also found. Several whole and fragmentary manos and metates were found off the front and rear walls of the house, while the remains of several cooking pots (ollas) appeared on the floor. 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a platform measuring 8.60 m. x 3.50 m. Superstructures are also more ambitious, formed of low (perhaps 75 cm.) adobe base walls supporting honequeque upper walls and a pole-and-thatch roof. Adobe blocks are also used to face the benches. The blocks, even when used for bench facing, contain a chunk of dolomite as a core, around which the adobe was added in a mold. Dolomite thus encased was turned from gray to white, and the presence of white dolomite chunks in the base observations was a sure sign of adobe use even when the original material had eroded away. Another feature of adobe use was the employment of small lianas as a base and between courses. This provided another indication of adobe use in structures less well preserved along the rear of the structure and to a lesser extent along its east wall. White dolomite and lianas indicated adobe facing of the east straight bench, while no such signs were present on the west. Lianas also indicated a small inset adobe altar connecting the two benches. An area of mud plaster floor was also uncovered.

The same theme is most fully elaborated in Type IV structures of which only one example, Structure B-46, exists at Cauinal. The platform measures 9.00 m. x 3.70 m. and is composed of two courses of dolomite cobbles capped by several courses of lianas. On top of this, meter-high base walls were constructed of lianas laid up in mud mortar. Based on the still more elaborate ceremonial constructions at Cañal, we believe that two square pillars of liana construction (not preserved) supported beams spanning the wide entrance. While the masonry pillars may have been capable of supporting a considerable load, evidence for other massive supports was lacking. Again, this suggests a relatively light roof of pole-and-thatch construction. On the interior, twin "L" benches were separated along the entire wall by a small, free-standing altar. All of these interior features were constructed of small rubble fill, faced with lianas masonry, and mud plastered. This last material was also used as flooring and to make a shallow, dished bench in the angle of the south bench. Remains of metates, manos, oflos and comedas (clay griddles) demonstrate that this structure, despite its elaboration, also served a domestic function.

Structure B-47 is somewhat out of the continuum of elaboration evidenced by Types I-IV, though it shares many components with them. Although only this one example is known, we have tentatively called it Type V. The main differences between Structure B-47 and the other Types are the presence of a narrow terrace running the width of the structure on its front side, and the composition of its platform substructure masonry. One course, or in some places two, of dolomite cobbles forms a base, surmounted by a course of face-dressed talpetec (fine-grained, compacted volcanic material). This in turn was capped by a single course of liana, originally including entrance lianas. Exclusive of the terrace, the platform measured 7.85 m. x 4.15 m. The terrace was constructed of large dolomite cobbles with a cap of lianas enclosing rubble fill. The terrace and interior floor surface were mud plastered. White limestone fragments along the "L" bench indicate adobe facing, though such evidence is lacking for the straight bench. A rough square of limestone fragments containing burned earth in front of the bench may be the remains of a mud-plastered hearth as in Structure B-46. Contour fragments and a masonry fragment again indicate a domestic function, though the base of an hourglass-shaped censer suggests ritual activities. This need not be contradictory, for, as was seen in Structures B-46 and C-22, altars are frequently part of the residential assemblage. Again, while dolomite stones in the collapse around the platform indicated low adobe base walls apparently supporting upper walls of lianaqueque and a pole-and-thatch roof, as in Type IV structures.

PLAZA UNITS
Although more common in the Group A plaza units developed over a period of time when, like the contemporary Maya, sons and sons of sons, married, and set up house--holds next to their father. Other units of two structures opening onto a common yard occur at Cañal and may represent an earlier stage in the process.

IMPLICATIONS
With the exception of Type V, the small residential structure Types clearly represent little more than a progression in the elaboration on a common theme. This elaboration depends mainly on the increasing use of liana (entrance, cap course, base walls) and adobe (base walls, bench facings), and on the decreasing use of wattle-and-daub. The same overall configuration was evidently desired, however, as Types II and III (and V) houses had their super- and what may be preserved in the archaeological record.

As reconstructed, the hypothetical peasant residence probably had no platform. This hypothesis being based on the very rudimentary character of the platforms in Type I structures. The superstructure may have been of wattle-and-daub construction, though simple, unshaped pole walls are a possibility. In either case, it is fairly certain such a structure would have had a thatch roof. Interior features would probably have consisted of nothing more than a burnt-earth hearth. Rubble-fill benches and clay floors were likely absent, their place being taken by pole-framed beds (tipcosas) and/or rush mats (poteas). Altars, if present at all, would have been of very simple construction, perhaps of wood. Taken together, this supposed peasant
house is strikingly similar to traditional Maya houses of the Rio Chixoy valley and other areas today. One exception here is that the modern inhabitants along the Rio Chixoy take advantage of terraces made by the ancients as locations for construction.

From the above reconstruction it is evident that the possibility of identifying a peasant house archaeologically is remote, except in unusual circumstances of preservation. Such a structure might be detected through the presence of anciently burned brazier fragments. The actual living surface would probably be impossible to identify, save for the occurrence of a hearth. Lacking these, only the presence of domestic trash (sherds, obsidian, bone, shell, broken metal, and manos) would signal the presence of a peasant dwelling to the archaeologist.

**SMALL RESIDENTIAL STRUCTURE TYPE PROPORTIONS**

One interesting feature is the relative proportions of the different types of houses in the two groups. In Group B there were 21 Type I's, 17 Type II's, 3 Type III's, 1 Type IV, and 1 Type V. The Type I figure may be slightly exaggerated as structures on the northeast may have been robbed of their lojas by the modern inhabitants to construct walls, hearths, etc. This may have caused possible Type II's to appear like Type I's. Thus the majority (88%) of small residential structures in Group B are nearly evenly divided between Types I and II, while the five examples of the other three types account for only about 12% of the total. In Group C, where 29 structures were uncovered in the north and northeast portion of the residential precinct, the following proportions existed. There were 7 Type I's forming about 24% of the total; the 13 Type II's formed almost 45% of the total, while the remaining 9 Type III's accounted for some 31%. When compared to Group B, one immediately is struck by the far greater proportion of Type III's in Group C, and correspondingly lower proportion of Type I's. In contrast, all residences at Pueblo Viejo Chixoy were Type I's.

Explanations of these differences and their significance have yet to be developed. The increasing elaboration shown by the small residential structure types is certainly suggestive of status gradation among the inhabitants of the residential precincts. However, the basis for such gradation is not explicit from the archaeological data. Ascribed or achieved position, age, and wealth may all have played a part. Unfortunately, study of contemporary highland Maya houses has not progressed since Wauchope's innovative study which focused on regional differences among general types of houses (Wauchope 1938).

Details of variation among houses in one community, and the reasons for such differences, remain a significant gap in Maya ethnography. Hopefully, the combination of ceramic and artifact analysis with study of ethnohistorical documents less concerned with the Maya elite (such as Colonial Spanish-Maya dictionaries) will provide the answers, at least until ethnographic studies provide more information. Ultimately, this combination of archaeology and ethnohistory will allow a better ethnographic characterization of highland Maya life during the Late Postclassic.

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