

# Socio-political implications of lowland Maya burials: methodology and tentative hypotheses<sup>1</sup>

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Ever since the first modern explorers trudged through the tropical rainforest of the Petén, the remnants of Classic Maya civilization have fascinated scholars and laymen. What kind of society spawned the houses, palaces, and temples which are now only ruins? Perhaps the best informants are the builders themselves, who have been in their graves for over a millennium. Excavated burial data indicate a change in emphasis within Classic Maya society (A.D. 300–900) from recruitment of political and religious functionaries from the whole Maya population to the recruitment of officials from small ascribed segments of the population. These and other data suggest that one of the factors underlying this change was Classic Maya economic organization and a system involving wealth as a prerequisite for achieving office. Burial data, in addition to providing evidence of metamorphosis in the structure of Classic Maya society, furnishes a means for testing hypotheses to explain how and why socio-political mobility developed into socio-political stratification.

Many other models of the socio-political organization of Classic Maya society have been proposed. Although they often present diametrically opposed views, most models share three features: they are usually synchronic, they are often constructed from ethnographic data, and they have not been systematically tested by the archaeological record (Haviland (1967) is one exception). In contrast, it is proposed in this paper to use archaeological data primarily, with ethnographic data as a supplement, to construct and to test a diachronic model of Classic Maya socio-political organization.

The interrelationships between those who have access to community resources in terms of goods and services and where that wealth is concentrated and distributed are crucial to any study of socio-political organization. During the Maya Classic a great deal of energy was consumed in individual expenditures to produce food and shelter; however, some of the products of individual and collective energies were not *directly* utilized toward this goal. They were invested in two forms of what in this paper is called 'wealth': (1) items only indirectly relevant to subsistence: temple and palace structures, carved stone monuments, decorated pottery, obsidian eccentrics and 'ceremonial' tools, musical instruments, jade and shell ornaments, and all items placed in burials; and (2) the community resources in terms of labor and products needed to obtain these items. For the purposes of this paper, the primary interest is in the patterns of distribution of 'wealth' in the form of grave goods.

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The archaeological data in this study are derived from burials. The whole paper rests on one postulate supported in the Maya area by ethnographic (Ruz L. 1968: 15-32; Pope 1969), ethnohistoric (Ruz L. 1968: 63-78), and archaeological data (Haviland 1967; and sample test 2): burials and associated artefacts were not randomly distributed, but varied in direct relation to other aspects of Classic Maya society.

Before the burial data can be utilized, their interrelations in time and space must be defined. Archaeologically established time units containing similar burials and burial distributions were lumped together. The interments found at each site quoted in this paper were divided into two chronologically significant types of burial patterns, one early and one late. Due to local variations, the transition between burial configurations did not occur at each site at the same point in time. Therefore, to make early and late burial data more easily comparable between sites, time will be considered relative to burial patterns. The time range of early and late burial patterns at each site will be called the Early and Late Period respectively.

In addition to these chronological relationships, spatial relationships are important variables. Burials were interred into the temples and palaces, which together form ceremonial centers, and into the small houses scattered throughout the outlying areas surrounding ceremonial centers (figs 20*b* and 20*c*). Temples are square clusters of a few rooms on high, pyramidal platforms. Palaces are structures of multiple rooms in parallel rows on low, rectangular platforms. Houses are small platforms which once supported perishable superstructures of probable domestic use. Only burials in thoroughly excavated structures, where their space and time associations are understood, were utilized in this paper.

The ideal study would involve burial populations from temples, palaces, and house platforms in and around a single ceremonial center. The available data, however, are incomplete from any one site (Tikal may prove to be an exception). In this paper a selection has had to be made of one component of temple and palace burials from the Petén and one component of house mound burials from British Honduras (fig. 20). Therefore, an assumption must be made: that the populace of the Southern Lowlands during the Maya Classic shared common patterns of socio-political organization, just as it shared common patterns in architecture, ceremonial paraphernalia, calendrics and epigraphy, and burial customs. This assumption will be implicitly tested when the model proposed by this paper is tested site by site (cf. sample test 1).

The burial patterns from two sites will serve to illustrate the techniques involved in isolating patterns in terms of wealth and the important aspects of the model developed. The first burials to be studied came from a group of small house platforms at the rural site of Barton Ramie in British Honduras (Willey *et al.* 1965; and figure 20*c*). Sixty-five structures were tested and two were completely excavated. A total of 117 burials of known data were recovered. Of these, 43 were attributed to the Early Period (pre-A.D. 700 phases: Jenny Creek through the Tiger Run-Spanish Lookout transition), and the remaining 74 to the Late Period (post-A.D. 700 phases: Spanish Lookout and New Town).

The age distribution patterns of the Early and Late Periods proved to be significantly distinct. The remains of 19 mature adults and a total of 24 adolescents, young adults, and old adults were recorded from the Early Period platforms. In contrast, Late Period structures yielded 44 mature adults but only 30 individuals of other age groups. Thus, the

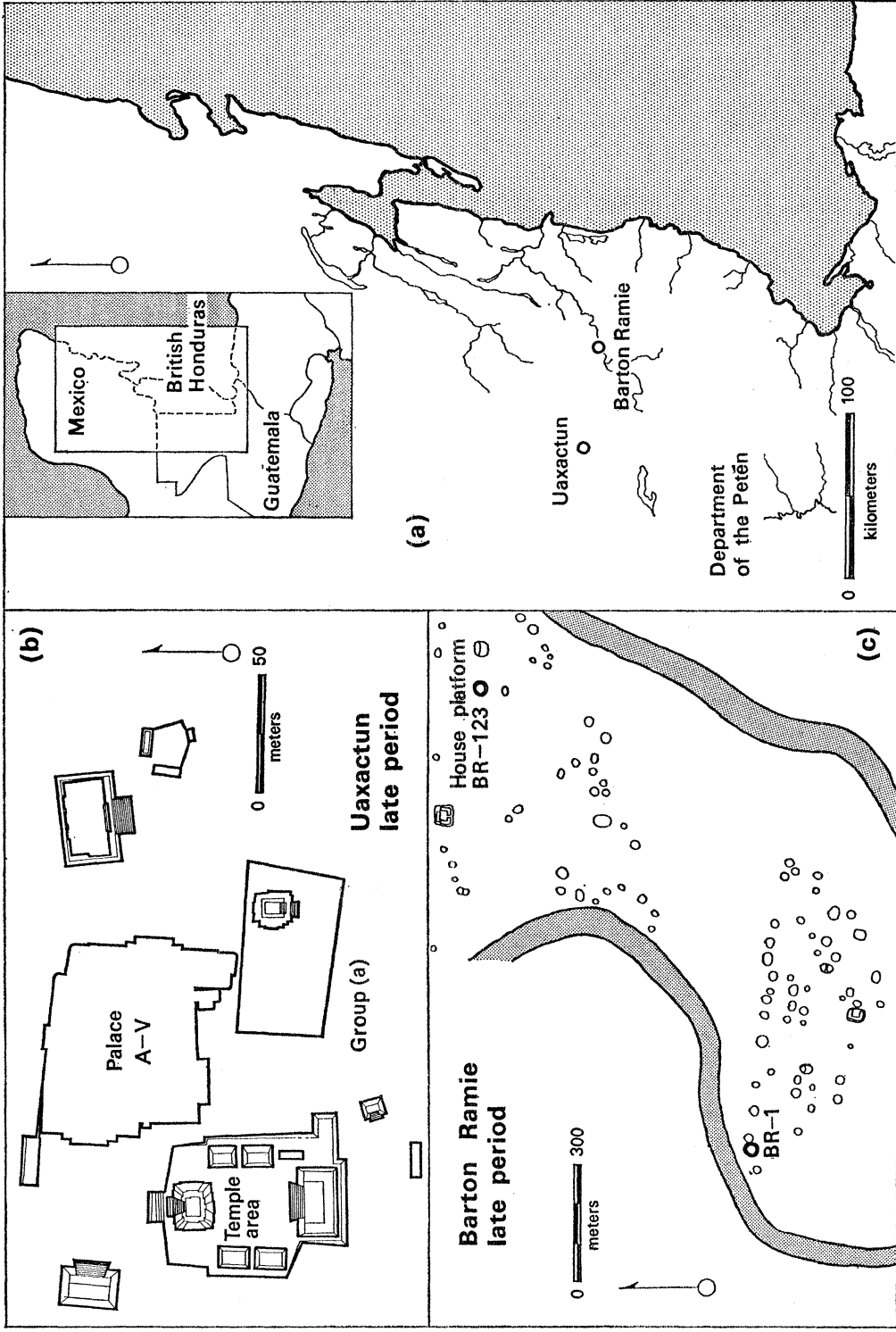


Figure 20 a: Orienting map (after Willey *et al.* 1965). b: Group A, Uaxactun (after Smith 1937). c: The south-east portion of Barton Ramie (after Willey *et al.* 1965)

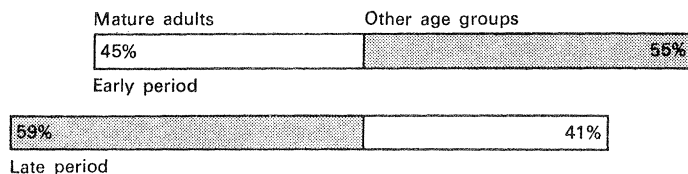
proportion of mature adults in the house platform burial population increased from 44% in the Early Period to 59% in the Late Period (fig. 21a).

One explanation for this change is that individuals often died young during the Early Period. There is, however, no evidence for any shift in the environment or subsistence which could account for an increased lifespan in the Late Period. In fact, Barton Ramie skeletal studies suggest just the opposite effect – the development of a poorer level of nutrition in the Late Period (Willey *et al.* 1965: 535-44, 570). Therefore, the small proportion of Early Period mature adult burials must be ascribed to some other cultural mechanism.

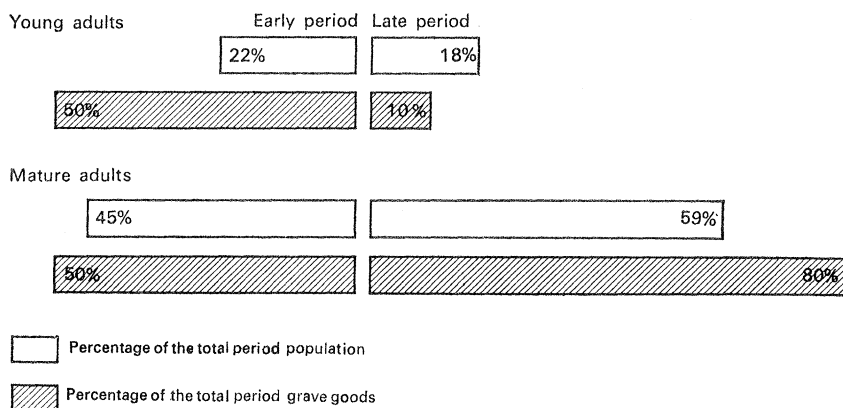
Other shifts in burial patterns were discovered by comparison of age and artefact distributions. Although young adults represented only 22% of the Early Period population, they were buried with more than 50% of the Early Period grave goods. Adults were associated with the remainder. The Late Period distribution pattern was a direct reversal of the Early Period trend. Young adults, 18% of the population, were associated with less than 10% of the grave goods, while mature adults were accompanied to the grave with almost 80% of the Late Period burial artefacts. Thus, although the proportion of young adults in the population decreased only 4%, the proportion of grave goods associated with young adults dropped 40% (fig. 21b).

Based on these data, Early Period (fig. 22: 1-23) and Late Period (fig. 23: 30-56) patterns are clearly discernible. During the Early Period young adult interments were the wealthiest burials placed in house platforms (fig. 22: 7-13). From other ethnographic and archaeological data it might be logically expected that adult burials would

(a) Distribution of age groups in the Barton Ramie burial population



(b) Distribution of grave goods in the Barton Ramie burial population



□ Percentage of the total period population  
 ▨ Percentage of the total period grave goods

Figure 21 Age and wealth interrelationships in the Early and Late Periods at Barton Ramie

## Early period burial pattern

House platforms  
Barton Ramie : Mounds 1 and 123

Ceremonial center  
Uaxactun : Temple A-V

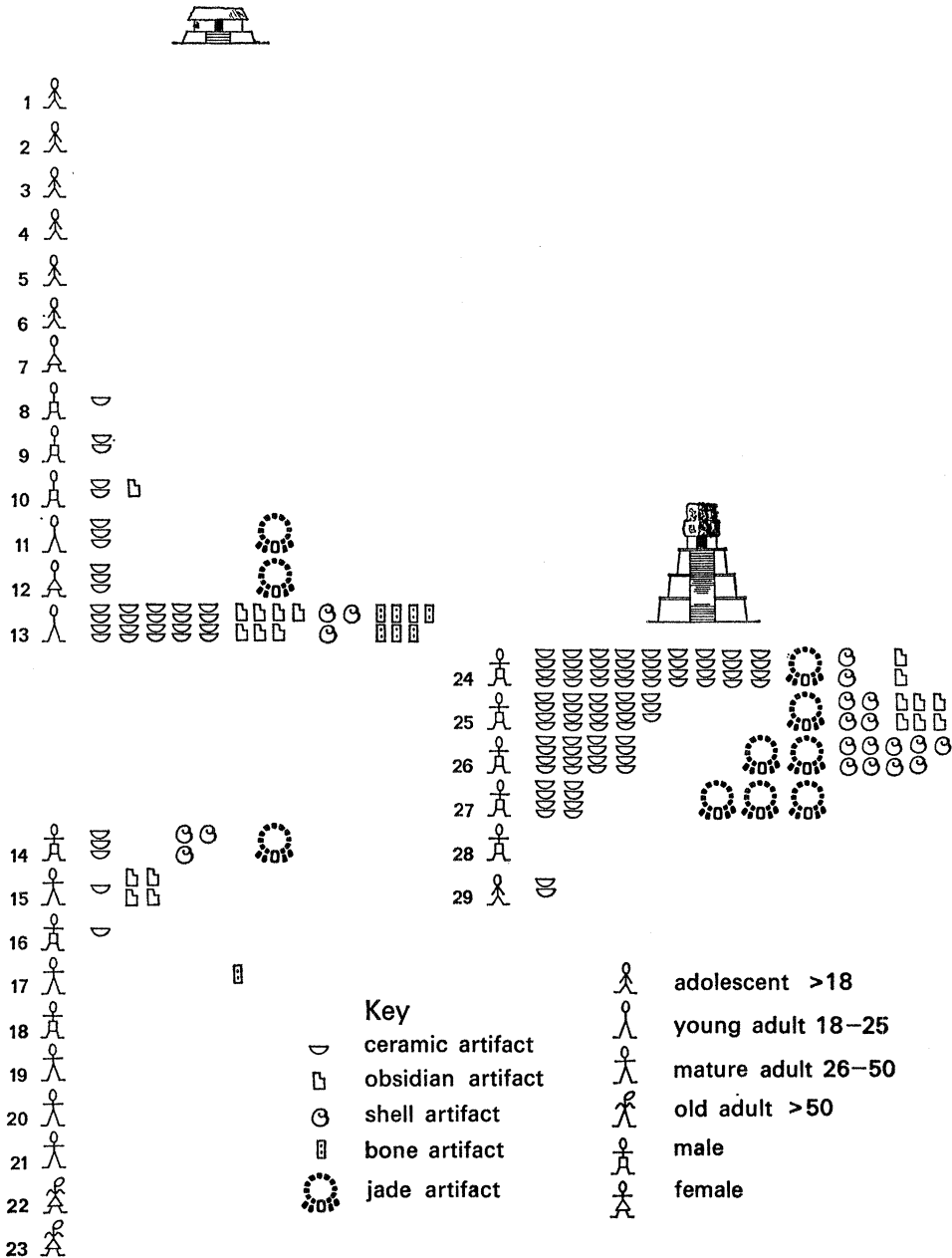


Figure 22 Hypothesized Early Period age and grave goods burial distributions (cf. appendix)

also contain a large number of grave goods; yet a surprisingly small number of adults, associated with a meagre assortment of grave artefacts, were buried in Early Period house platforms. Therefore, both a proportion of adults and also expected distributions of wealth among adults were missing. This suggests that the wealthy adults living in the outlying areas surrounding ceremonial centers were not interred in the platforms on which they resided. During the Late Period, a larger proportion of adults were buried in house platforms. Few individuals living in rural houses were wealthy, and most artefacts were placed in the graves of mature adults. In contrast to wealthy young adult Early Period burials, young adult interments were the poorest found in Late Period houses.

In order to explain these changes in house platform interment patterns, burial data from ceremonial centers were examined. The excellent excavation report of Structure A-V at Uaxactun in the heart of the Petén provided an ideal opportunity for study of the patterns of ceremonial center burials (Smith 1950; and fig. 20*b*). During the Uaxactun Early Period (pre-A.D. 600 phases: Tzakol 1-3), Structure A-V supported three small temples on an elevated plaza. Excavation revealed six Early Period interments, four of which were laid to rest in carefully constructed tombs containing numerous pots, carved jades, whole and carved shells, bone tubes, obsidian lancelets, and jaguar pelts (fig. 22: 24-7). Such artefacts are often associated with Maya functionaries pictured on pottery, stelae, and wall murals. These data indicate that the four burials were important functionaries engaged intimately enough in the ceremonial center's activities to be interred there at death with a degree of pomp. All of these burials were male adults!

Two other Early Period burials were interred in the plaza with much less attention. One may have been a lower class helper of the important functionaries (fig. 22: 28); his grave contained no artefacts. The other burial (fig. 22: 29), that of an infant placed under a stairway, may have been a dedicatory offering to some aspect of construction. This pattern of wealthy adult tomb burials and a few dedicatory offerings and poor interments is found in the temple areas of most Classic Maya sites during both the Early and Late Periods.

Temple areas continued to be used and constructed in other areas of Uaxactun during the Late Period (post-A.D. 600 phases: Tepeu 1-3), but at this time Structure A-V was converted into a maze of palace buildings and terraces (fig. 24). In direct correlation with this change, the burial population of A-V increased sixfold. Instead of only one adolescent, there were fourteen; instead of five male adults, there were twenty-four adults, half of whom were male and half female. Late Period A-V palace burials also differed from Early Period A-V temple interments in terms of the distribution of artefacts. Instead of only the extremes of wealth, there was a continuum ranging from rich to poor (fig. 23: 57-77).

Palaces were associated with age, sex, and artefact distributions similar, except in degree of wealth, to those found in Late Period Barton Ramie house platforms (fig. 23). Perhaps the palace was a residential unit or associated with a nearby house platform population. In addition, rich burials and their distribution indicate that palaces served a function in the administrative business of ceremonial centers (cf. sample test 2 and fig. 24). It is worth noting that in most Classic sites the richest burials in the Late Period, as in the Early Period, were placed in temple areas.

## Late period burial pattern

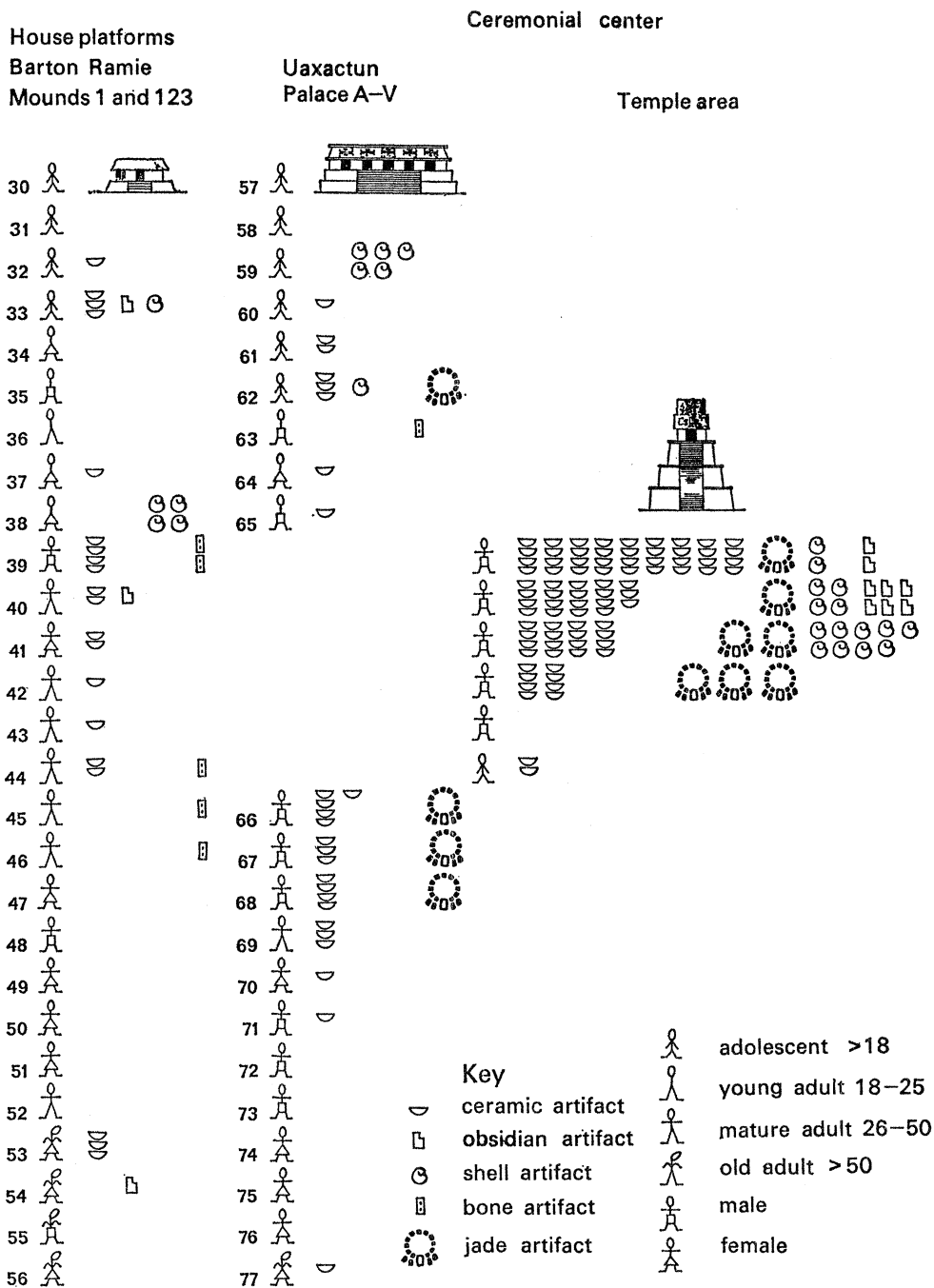


Figure 23 Hypothesized Late Period age and grave goods burial distributions (cf. appendix)

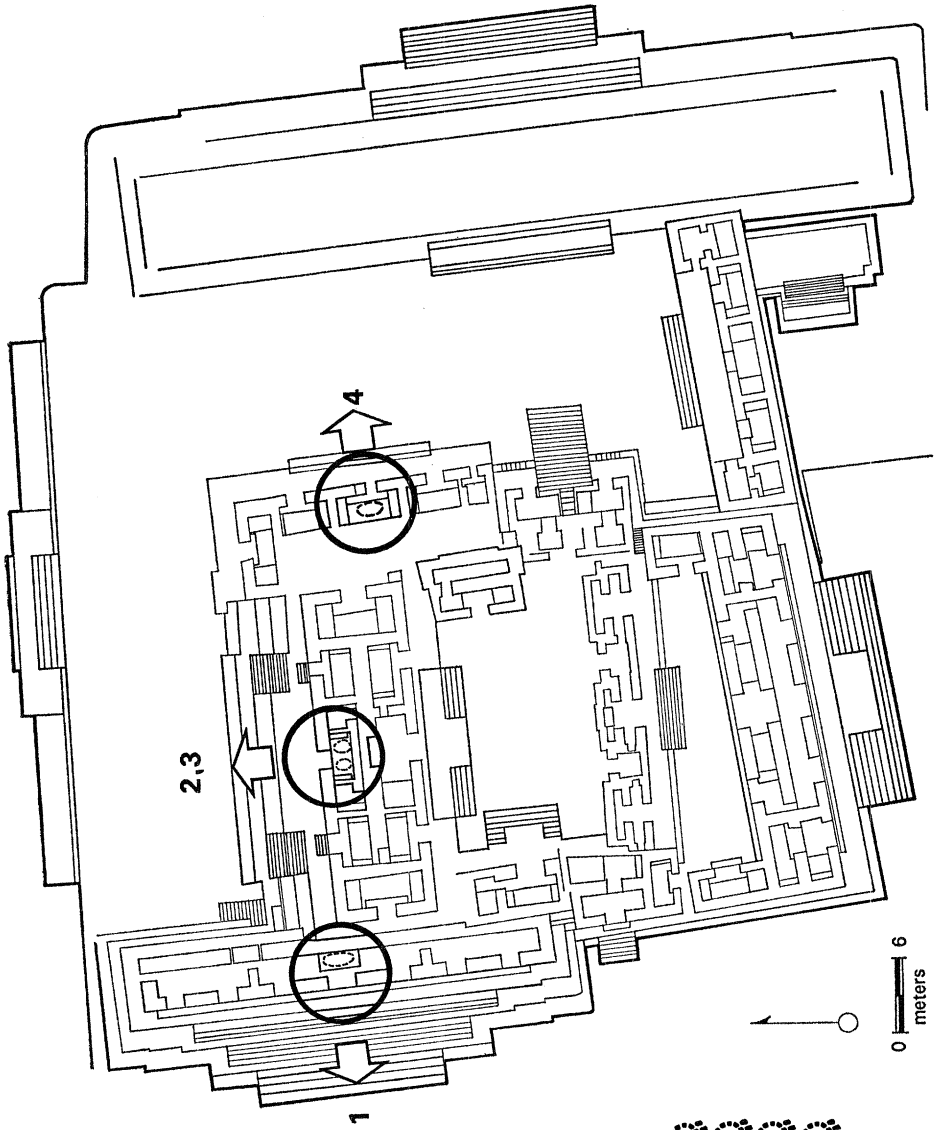
A diachronic, archaeologically testable model of Classic Maya socio-political organization was constructed from these data by two processes. The first was a careful study of the burial patterns just described. The second process included exposure to Maya ethnographic and ethnohistoric data and general anthropological theory to suggest the types of mechanism by which the archaeological patterns were formed. The role of ethnography as a supplement to archaeology is best illustrated by the use of data collected and interpreted by Dr Vogt (1961, 1969) and Dr Cancian (1965, 1967) at Zinacantan, a modern Maya community in highland Chiapas, and by Dr Bunzel (1952) at Chichicastenango, a modern Maya community in Guatemala. The ethnohistoric reconstructions by Dr Calnek (1962) and Dr Carrasco (1961) were also valuable. These studies all demonstrated that wealth was a prerequisite for attaining positions of political and/or religious authority in late pre-Conquest and in post-Conquest Mexico. Based on the preceding archaeological burial patterns, it is proposed in this paper that the above system was also a Classic Maya pattern and that it led to the changes in burial patterns between the Early and Late Periods.

The basic postulates upon which this hypothesis rests are: (1) population grew (Willey *et al.* 1965: 561-81), (2) ceremonial centers functioned as foci of administration (Tourtellot 1969) and concentration of resources (compare figs 20*b* and 20*c*; fig. 22: 1-23 and 24-9; fig. 23: 30-56 and 57-77), (3) persons in positions of authority had access to wealth in terms of community resources (Ruz L. 1968; Landa 1941; Calnek 1962). The resulting Early Period model is clearly drawn by the burial data (fig. 22).

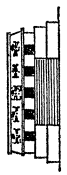
House platforms were missing mature adult burials; temples were full of them. The wealthiest Early Period burials were those of mature adults in temple areas and young adults in small houses. It is here proposed that the Early Period Maya population lived on house platforms and farmed nearby lands. As the Maya successfully exploited their chosen ecological niche, wealth accumulated within house platform populations. Due to the environment and the state of Maya technology, population was widely dispersed. Redistribution and trade centers played an important part in the economic and ceremonial integration of Maya communities. Clusters of temples and plazas functioned as foci of wealth concentrations in terms of intra-Petén and foreign trade, ceremonialism, and building construction. Wealth to support these activities was a prerequisite for initiation into ceremonial center activities and power positions. Thus the Early Period Maya invested his surplus toward increasing personal and community prestige, through the expansion of ceremonial centers in the form of temple construction, trade, and ceremonialism. Young adults collected wealth in the form of food resources and ceremonial objects with which to sponsor the specialists, ceremonies, and the community works involved in filling an office. The death of such individuals while accumulating wealth accounts for the rich young adult interments in Early Period house platforms. Especially significant to this model is burial 6 from mound BR-1 (fig. 22: 13) which included 18 pots 'arranged one over the other as though they contained food and drink' (Willey *et al.* 1965: 566), 2 pottery drums, 1 bone needle case, 2 bone needles, 6 projectile points, 3 'ceremonial' bladelets, 1 obsidian blade, 1 obsidian 'eccentric', 4 carved bone tubes, 2 shells, 1 composite shell ear ornament, and a turtle carapace.

Those who lived to attain office achieved a privileged position. Ceremonial center officials functioned at the hub of wealth mobilization and labor organization systems. Thus





Uaxactun  
late period



Palace A-V

Burials with Jade

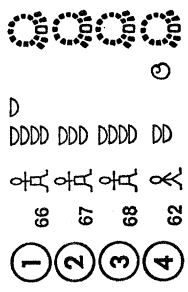


Figure 24 Illustration of sample test 2

these functionaries had access to wealth involved in running the center and no doubt used some of it to attain higher offices. A constant influx of wealth into the ceremonial center was maintained by the system of wealth as a prerequisite for achieving office. In addition, wealth flowed out from the center along family lines to outlying areas as adults who had attained positions of authority helped related young adults obtain goods for their initiation into office. At death office holders were buried in the ceremonial center with which they had been associated; thus the rich adults buried in temple areas account for the adults missing from outlying houses. Those who had not been initiated in ceremonial center activities were interred in their house platforms. Both wealthy and poor individuals resided on widely scattered house platforms, but after death they were separated by differential burial. Thus Early Period socio-political structure emphasized mobility in terms of individuals living on outlying house platforms attaining ceremonial offices and authority positions. This organization provided a solid economic, ceremonial, and socio-political integration between house platform and ceremonial center populations.

The appearance of palaces marks the end of the Early Period and the beginning of the Late Period. It is suggested here that the Early Period temple-house platform relationship was displaced in the Late Period by a temple-palace relationship (fig. 23). Ceremonial center functionaries, were no longer drawn from dispersed house platform populations but were recruited from small population segments living in, or associated with, palaces. The sex, age, and wealth distributions of Late Period burials are strikingly similar to house platform distributions. Thus ceremonial centers held groups which could perpetuate themselves without drawing upon outside house platform populations. Individuals living on house platforms no longer held office and were no longer buried in ceremonial centers. In the Late Period Barton Ramie house platforms the proportion of adults increased, young adults no longer held a special position, and burial goods were distributed with expected skews toward mature adults. Socio-political mobility between rural populations and ceremonial center populations had ended.

What were the mechanisms of change between the Early and Late Periods? Outside influence, especially that from Teotihuacán, cannot be discounted; however, the nature of the economic structure of the Southern Lowland Maya is another important factor. Ethnographic, ethnohistoric, and archaeological data can be put together to define the Classic Maya economy as 'mobilizing' (cf. Smelser 1959). In Nash's words,

'A system of mobilization for exchange collects goods and services into the hands of an elite for the broad purposes of the society. It has the social correlates of centrality and stratification needed to make redistributive exchange a viable mode, but it differs functionally from redistribution in two senses. Mobilization exchange promotes and underlines the power and prestige differences between the economic and political elite and the rest of society; the expenditure of the collected goods and commandeered services goes to implement ends defined by the elite' (1966:32-3).

It is suggested here that an important factor in implementing the concentration of wealth for community goals was (especially during the Early Period) the system of wealth as a prerequisite for holding office. This mechanism was adaptively advantageous because (1) it continued to insure reinvestment of wealth in terms of personal resources for community good (this system was constantly reinforced as wealth was continually

drained off in the form of grave goods, caches, carved monuments, and monumental architecture, all of which yielded little direct economic return), and (2) it selected office holders from individuals who had wealth in terms of those who also possessed administrative competence. This system in correlation with the other postulates of this paper explains the socio-political changes through time isolated in burial and grave wealth distribution patterns.

Population growth during the Maya Classic is well documented by excavations and settlement pattern surveys. Thus during the Early Period more and more people were competing for high status positions, and a smaller percentage of them attained these offices. As competition intensified and the number of competitors increased, the prerequisite wealth was harder to collect. Only those who had access to ceremonial center power and wealth could afford to provide the goods necessary to obtain office; it is likely that such wealth distributions followed family lines. Thus the accretion and redistribution of wealth became a circular movement within proportionately fewer and fewer families. This introduced an incipient hereditary mechanism. Authority positions had to be achieved, but accident of birth determined, to a greater and greater extent, those who had a chance of attaining it.

As wealth and authority positions localized in proportionately fewer and fewer families, those who attained office undoubtedly became an easily distinguished class with many common goals and interests which were implemented in ceremonial centers and not in cornfields. Using their special access to ceremonial center resources, segments of house platform populations began to construct buildings for residential and bureaucratic use. The move to ceremonial centers was no doubt slow; but the economic and ideological gap between the elite and the average farmer widened until it was finally embodied in a physical gap between palaces and house platforms. Populations living in palaces provided a solidified bureaucracy which choked off recruitment of functionaries from outlying areas. Attainment of positions was always attributable in some degree to inherited wealth; it was always achieved in terms of the results of the investment of that wealth. Socio-political mobility had not ended. It had merely been confined, in large measure, to populations within ceremonial centers who had family tie-ins to community goods and services.

The same factors that developed a ceremonial center elite within the whole Maya population developed an elite within the ceremonial center population. Status changes emphasized hereditary mechanisms. Wealth buried with children (fig. 24: 62) was not earned by the child's actions, but by the niche the child filled in relation to the position of its relatives. The existence of hereditary ruling lineages has been proposed through the use of burial data (Haviland 1967) and deciphered glyphs (Proskouriakoff 1960, 1961, 1963-4; Kelley 1962).

It has been hypothesized here that the nature of access to political and religious authority positions changed through time along a continuum between varying degrees of achievement and ascription. It has been proposed that one mechanism involved in this change was the prerequisite of wealth for attaining office. Thus burial data and suggestions from ethnography have provided a model of the socio-political organization of the Classic Maya and the processes that brought about some of the obvious changes between Early and Late Period material culture patterns. But a model is not an end in itself; it must be

validated by systematic testing of all possible archaeological data. To test the model a computer project was designed. The data relevant to the model from over 1,000 burials representing excavations from twelve sites are now being coded on to punch cards.

The proposed testing project will involve two procedures. First, the burial patterns upon which the model is based must be substantiated from every site producing usable data.

#### *Sample test 1*

Is it statistically significant that young adults buried in Early Period house platforms were associated with more grave goods than young adults buried in Late Period house platforms? A chi square test run on a preliminary sample yielded a significance level of 0.001, indicating a consistently high degree of association between cultural period, age at death, and amount of burial wealth. It is therefore significant that the nature of the relationship between age and wealth reversed itself between the Early and Late Periods. This test confirms the model. If similar results are obtained from all sites yielding relevant data, the assumption of the uniformity of Southern Lowland Classic Maya socio-political organization will gain support.

Once the model is refined by the first testing procedure, a second battery of tests will be run. If culture is an integrated system and changes in burial patterns are related to changes in socio-political organization, then shifts in socio-political organization also affected other aspects of Maya culture. The model can be used to predict these changes and can be tested by how accurately such predictions fit the archaeological record. For example:

#### *Sample test 2*

One isolated cluster of features in the Late Period Uaxactun palace was especially significant: the four burials, three adult males and one child, with the most grave goods, including the only Late Period A-V jade (fig. 23: 62 and 66-8). If wealth in terms of grave goods is correlated with holding power, then the position of these burials within A-V should be indicative of such a function in relation to the structure.

*Results.* All four were buried in 'throne' benches in centrally located palace rooms (fig. 24). These rooms were positioned at the head of stairways and face plazas; they were constructed and used consecutively, not concurrently. In a study of palace architecture, Clemency Coggins (1967) proposed that such palace rooms were audience chambers where high status officials held court. The audience chamber burials provide a neat correlation between wealth and positions of administrative authority in ceremonial centers.

#### *Sample test 3*

A complex of items associated (in varying degrees) with authority positions and ceremonialism can be defined using temple and palace burials (polychrome pottery, carved

bone objects, eccentric flints and obsidians, jade ornaments, shell ornaments). If access to such offices was open to house platform populations in the Early Period, but restricted to ceremonial center populations in the Late Period, such items will be significantly fewer in number in Late Period house platform burials than in Early Period house platform burials.

*Results.* The Early and Late Period burials at Barton Ramie yielded 113 and 111 associated artefacts respectively. The quantity of monochrome ceramics remained constant (41 Early, 39 Late); however, the total number of polychrome ceramics, ceremonial blades, carved bone tubes, and jadeite and shell ornaments decreased from 45 to 21. A chi square test run on these data yielded a 0.025 significance level. Thus it is significant that there are fewer items of the ceremonial center authority and ritual complex found in the Late Period Barton Ramie house platforms.

#### *Sample test 4*

If, in the Late Period, specific house platform populations used palaces for residential and administrative functions, then palace burials will contain a domestic tool complex similar to those found in house platforms (utilitarian obsidian and bone tools, spindle whorls) and items similar to those found in temple area burials (jade and shell ornaments, stingray spines, eccentric and ceremonial obsidians).

*Results.* A preliminary computer sorting of the artefacts from 427 burials indicates that this prediction is confirmed by the archaeological data.

Only time and money limit the number of such tests that can be devised and run by computer with the 1,000 burial sample.

The basic elements of the model proposed in this paper are not new; however, certain aspects of its generation and future use differ from most of the existing Classic Maya models. The model was purposely diachronic, was generated directly by archaeological data and indirectly by suggestions adopted from ethnographic data, and is testable by systematic use of further archaeological data. As it now stands, the model is not fully substantiated. It has been proposed not so much to prove its own validity as to find valid answers to questions about Classic Maya Society. Therefore, whether further testing confirms or refutes the model, knowledge of Classic Maya burial patterns and socio-political organization will have been increased.

**Appendix to figures 22 and 23**

*Burials 1–23* Representative Early Period Burials from Barton Ramie Mounds 1 and 123

*Burials 24–9* Early Period Burials from Structure A-V at Uaxactun

*Burials 30–56* Representative Late Period Burials from Barton Ramie House Mounds 1 and 123

*Burials 57–78* Representative Late Period Burials from Structure A-V at Uaxactun

1	BR-123-13	27	A20	53	BR-123-10
2	BR-1-14	28	A39	54	BR-123-4
3	BR-1-15	29	A66	55	BR-123-29
4	BR-1-19			56	BR-1-7
5	BR-1-20	30	BR-1-5	57	A25
6	BR-123-26	31	BR-123-2	58	A44
7	BR-1-25	32	BR-1-24	59	A55
8	BR-1-21	33	BR-123-22	60	A8
9	BR-123-20	34	BR-123-28	61	A57
10	BR-123-19	35	BR-123-23	62	A48
11	BR-123-13	36	BR-123-9	63	A24
12	BR-123-31	37	BR-123-24	64	A64
13	BR-1-6	38	BR-1-10	65	A47
14	BR-123-30	39	BR-123-18	66	A43
15	BR-1-16	40	BR-1-1	67	A34
16	BR-123-32	41	BR-123-5	68	A40
17	BR-1-23	42	BR-1-3	69	A38
18	BR-123-35	43	BR-123-36	70	A51
19	BR-123-21	44	BR-1-4	71	A46
20	BR-123-24	45	BR-123-6	72	A23
21	BR-1-21	46	BR-123-7	73	A52
22	BR-1-17	47	BR-123-3	74	A30
23	BR-123-14	48	BR-123-17	75	A67
		49	BR-123-26	76	A33
24	A22	50	BR-123-25	77	A68
25	A31	51	BR-123-12	78	A32
26	A29	52	BR-123-33		

*Unnumbered burials in figure 23*

These burials are a construct of Late Period temple area burials using data from Tikal, Palenque, and Altun Ha. In order to simplify the point of the patterns illustrated – that Late Period temple area burials followed essentially the same pattern as Early Period temple area burials – the burials from Early Period Uaxactun were used as representative of Late Period temple area burial patterns. Uaxactun itself may not have continued the complex temple area burial pattern to the same degree as the above sites.

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