

# *The development of polity in Mesoamerica as interpreted through the evolution of plaza plans: suggested influences of the Central Mexican highlands on the Maya lowlands \**

Marshall Joseph BECKER  
(West Chester State College)

## BACKGROUND

Attempts to trace the development of «civilization» and to explain the means by which these forces operate are often attributed first to the efforts of Karl Wittfogel (1957). His single vector explication of the rise of civilization (irrigation) was followed by a number of other theses, each of which approached the problem from a different perspective. The variety of these considerations of sociopolitical change suggest that a complex economic interplay must exist in every place studied, and that in each area the history is unique and the stimulæ initiating the transformation may be different.

Some years ago Bruce Trigger (1974:95) noted that processual studies to explain the development of complex society were becoming of increasing interest to archaeologists. Trigger noted that the interpretation of how change comes about in political organization is of major importance in understanding social «evolution». Although serious doubts may exist regarding our potential to elicit such data from the archaeological record, Trigger assumed that they exist, and our problem is to determine how to retrieve them.

Since writing systems are a feature often associated with complex

---

\* The author would like to thank all of his colleagues, and A. Miller in particular, for their many useful suggestions regarding this subject. Special thanks are due T. H. Charlton, A. Diserod, J. W. Fox, C. Jones and B. Price for their careful reading of earlier drafts of this manuscript and their many valuable comments and suggestions. The interpretations made in this paper and any errors of fact or documentation are the responsibility of the author alone.

The research for this paper was supported in part by a grant from West Chester State College.

societies, clues to the process of culture change may be found in direct historical records. However, most of what we wish to know must be derived through the methods fundamental to archaeological enquiry: the excavation of material remains and inferences drawn from their spacial relationships. Inferences also may derive by coupling the methods of study employed in other disciplines. Therefore, the descriptive skills of the art historian joined to those of the cognitive anthropologist may enable us to comprehend the «meaning» of form or design in the material which at one time we could only describe. The recovery of remains and knowledge of contexts now form a very preliminary aspect of our research.

Trigger's observation regarding our studies of culture process opened the doors to a veritable rush of interest. The methods employed have expanded rapidly, but these are not of concern in this study. Much of what will be presented here has been achieved through inductive rather than deductive reasoning, and as such is difficult to describe with ease. The presentation, however, is in historical order with the hope that the reader will be able to understand the development of polity as I believe it to have occurred.

#### HYPOTHESIS

The kind of complex political structure which appears essential for the maintenance of a complex society, often characterized by the presence of an architectural entity called a «city», appears to have been developing in the Maya lowlands during the classic period. Although we have little direct evidence for this process, we can define the development of architectural clusters (buildings arranged in groups) and infer that certain differences in size, arrangement, and/or associated artifacts reflect a social class hierarchy which may serve as an indirect indicator of the development of complex society. In addition to postulating that the fundamental structure of a «city» was never achieved by the ancient Maya, I believe that the developmental processes in the Maya area were derivative from, not parallel to, the evolution of complex society in the Valley of Mexico. Maya towns became large «communities» with many of the aspects of urbanism found elsewhere (differentiated buildings, multiple ritual structures, monuments, etc.) as in the Valley of México, but never became true urban centers with dense residential areas, streets, craft areas, etc.

This paper will attempt to provide documentation for these ideas with data derived from studies of architectural clusterings (plaza plans) at Maya sites. Such studies provide but one of the various

approaches to the archaeological analysis of complex societies suggested by B. Trigger (1974: 97-101), and may complement some of the other fine work now available (e.g., Marcus, 1976). The use of the concept of «Plaza plan» (Becker, 1971-1980) and the linkage between architecture and political organization, enables us to formulate a theory based on direct evidence and which can be tested archaeologically at a series of sites. In essence, the theories built at this time serve to focus future research in Maya archaeology and to move the field more clearly from a Level One Science (data gathering) into a Level Two Science (theory building and testing).

### *The Role of Social Structure*

In order to develop this hypothesis two areas of direct concern must be summarized. The first, and more theoretical area, involves the possibility that ancient Maya society and other cultures of Mesoamerica may have operated with a social structure strongly derived from social moieties. The second, and archaeologically demonstrable aspect, relates to the architectural clusters at lowland Maya sites referred to as Plaza Plan 2 (P.P.2). These will be described below.

The thesis that dual leadership was a traditional and characteristic political structure among the Maya prior to the Late Classic period has been presented earlier (see Becker, 1975). In such a system an internal leader serving as the principal agent for resolving matters regarding the relationships between members of the culture and of these people to their land. On the other hand the external affairs leader was primarily a ritual leader, mediating between the members of this group and the external world, principally the spiritual world. By extension this leader also served as a war leader and, as the society grew more complex, as a regulator of trade.

Our lack of awareness regarding social as well as political moieties derives in part from erroneous conceptualization of «chiefdoms» as having a single ruler who is central to all leadership and power. At best a «chief» coordinates and mediates group decision making. In fact, we often find that ethnographic examples of «chiefdoms» are characterized by dual chiefs, the war (external) leader and the complementary peace (internal) leader. The development of a «state» from such a chiefdom is reflected in an elevation of the relative importance of the external affairs leader, disrupting the traditional balance, or complementarity, between these two individuals. Such disruption can be a symptom of the problems of «urbanization» as well as a cause of stress within a culture.

The duality of the social moieties inferred to have been operant

in Mesoamerican tribal societies of the Early Formative period served not only as a means of regulating marriage but also as the basis for «polity». The evolution of Maya society, according to this model, can be seen in the transformation of these mechanisms from informal cooperation between kin groups, based on custom, to increasingly formal roles in which kinship becomes incidental. The transformation from social moieties to political moieties enabled the society to operate on a more complex level with greater efficiency<sup>1</sup>.

Although political moieties may have begun to develop in the Maya area as a reflection of incipient state formation, this development may instead have been a function of the diffusion of ideas from the north as stimulated by the economic development centered in the developing Mexican states. Rather than being a simple evolution of a complex sociopolitical system, the tribal organization of Maya settlements reflected, but in a lesser form, the organization of the more powerful and more centralized states to the north. These organizational principles seem to have languished in the lowlands during the Late Postclassic but the Quiché and other «states» of the Maya highlands managed to sustain this weak tradition up until and somewhat beyond the period in which the Spanish arrived to take control of «external affairs», leaving «internal affairs» in the hands of traditional leaders. In the Valley of Mexico, however, a continuing development seems to have produced true and efficient states, but of insufficient organization and power to withstand the European disruptions and subsequent political domination.

Before examining the archaeological record we must recognize that we are using the evidence in an attempt to describe the processes which give rise to different political structures. Such processes are not teleologically operant, but can reverse, become static, malfunction, or otherwise change on the basis of elements working in the system. There are no levels to be achieved, rather processes to be described. Perhaps Webb (1978: 157) puts it best in noting that anthropologists generally examine recurrent social processes, and in the case of the Classic period Maya we are concerned with the «rise, expansion, and decline of archaic state systems». Once we have understanding of how these came to pass then we might consider how these processes relate to those in other places or at other times.

---

<sup>1</sup> Professor George Kubler has often remarked (pers. conversations) that discussions of moieties, as well as any political forms, notably are absent in Central American ethnography. Professor Floyd Lounsbury (pers. conv.) suggests that June Nash speaks about endogamous moieties in some Mesoamerican situations. The lack of discussion may reflect a general assumption that the post-contact situation has been disturbed in general. Polity is therefore believed to be a function of Spanish introduced systems.

*The Significance of Plaza Plan 2*

By 400-500 A.D. the development of a complex socio-political structure at Teotihuacan permitted an efficient state to develop; one which could organize resources in ways not then possible in the Maya area. The changing polity of the major Maya cities during the Classic period is the primary concern of this paper. Inferences about these changes are drawn from changes in «plaza plans» as noted at various sites. Thus the architectural data, so abundant in the Classic Period, becomes the reference point from which the evidence is derived for this thesis.

Within the overview presented below the emphasis will be on the importance of the development of Tikal Plaza Plan 2 (P.P.2; see Fig. 1),

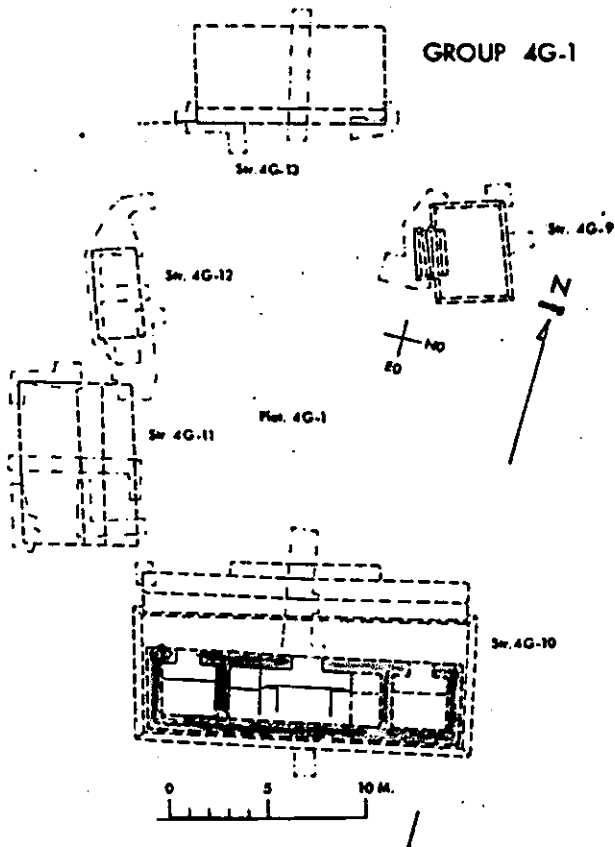


FIG. 1.—Group 4G-1 at Tikal, an example of Tikal Plaza Plan 2 (Becker, 1971).

and its parallels throughout the Maya lowland area, and the inferences which can be made regarding political structure based on these data. Although P.P.2 originally was defined at Tikal (Becker, 1971; see also Fig. 2), its existence throughout the area has led to this form of group arrangement, wherever found, as being termed P.P.2 for convenient reference. This generic usage avoids the problem of speaking of Quiriguá Plaza Plan 2, or Plaza Plan 2 at Quiriguá (see Fig. 3), when referring to a group conforming to this pattern at that site. In all cases P.P.2 is characterized by a ritual structure (oratorio) on the east side of a residential complex. Each construction stage within the ritual structure has been preceded by a relatively elaborate interment.

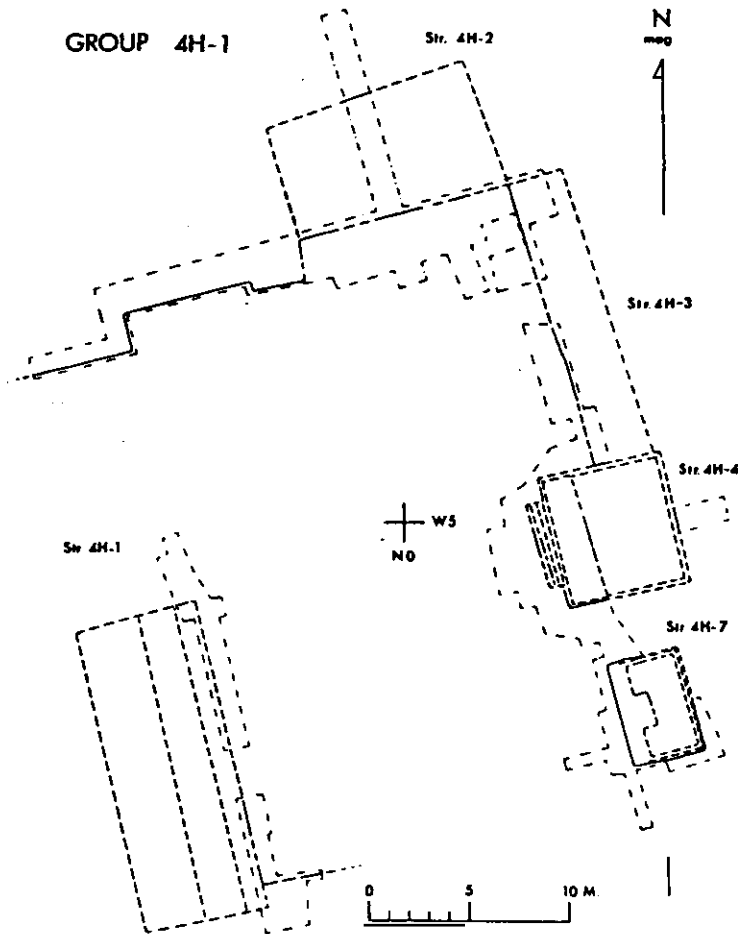


FIG. 2.—Group 4H-1 at Tikal. An example of a Tikal Plaza Plan 2 group with a low platform to one side of the oratorio (Becker, 1971).

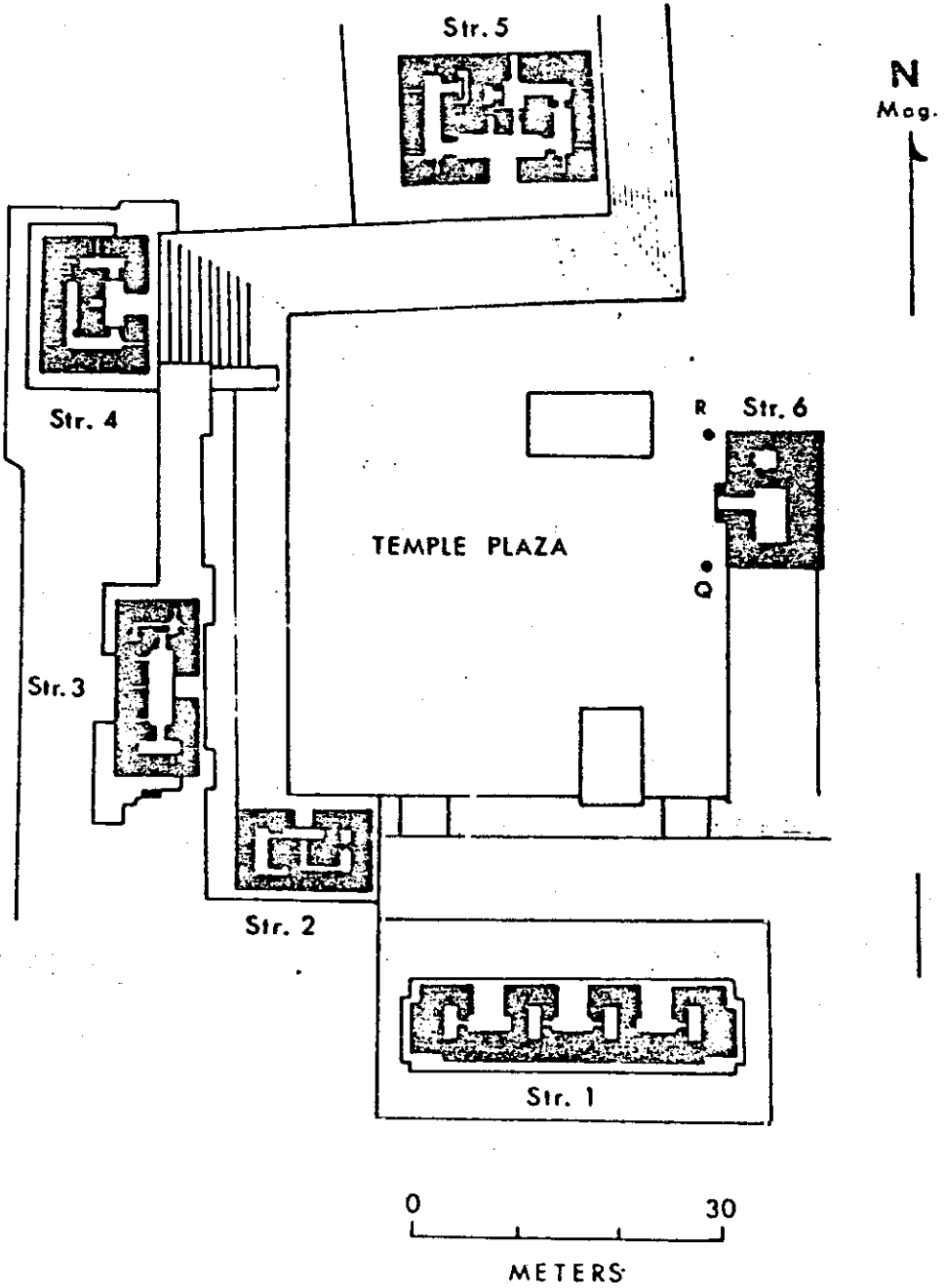


FIG 3.—The Temple Plaza Group at Quirigua (after Morley 1919: Fig. 1; 1938: Pl. 215).

Plaza Plan 2 at Tikal appears in a few examples during the Early Classic period and appears to increase in frequency throughout the Classic period. This pattern appears to reflect a «centrifugal» process in religious focus (Becker, 1971). By this I mean that the few high status individuals at Tikal during the Early Classic period tended to be interred in the North Acropolis area, the center of the ritual zone of the site. The interments in the shrines or oratorios associated with P.P.2, scattered throughout the site, suggest that high status individuals were being buried with their localized lineages in increasing numbers and that the central zone was becoming an area where only the highest status people (rulers) were buried.

As Healan (ms) has suggested, differences in structure form, elaboration, number of structures, plastering, etc. may reflect differences in social class. Some of the Plaza Plan 2 groups at Tikal, such as the Barringer Group, are so large that they would be considered interesting sites by themselves were they not within the «metropolitan zone» of Tikal. This suggests that the inhabitants were economically, if not actually socially, quite distinct from many of their co-residents at Tikal.

Although Plaza Plan 2 at Tikal may be an architectural reflection of class differences, this will be noted only briefly at this time. Our interest is in how people use or arrange space, as in their plaza plans, as an aspect of the way in which they interpret their «culture». Gilmore (1977: 437) notes that a model for social class is not simply a mechanism by which people are placed into categories, but must reflect an internalized understanding (a mental image or paradigm) by which the members of the group order the universe of cultural or natural phenomena. The different Plaza Plans used for residential groups reflect the interpretations of how each group of inhabitants believed themselves to fit into the society, but not on a conscious level. Changes in these aspects of behavior, therefore, may be seen as a reflection in alterations in how people perceive themselves. Such changes are part of complex society and the stresses generated by such changes in the society also are part of the problem which we are attempting to solve. What follows is a summary of culture change in the Maya lowlands as characterized by activities which are known at Tikal. The primary indicator of change noted is in the form and frequency of groups conforming to the Plaza Plan 2 arrangement.

The study of changing political systems need not involve the demonstration of far reaching changes in material goods but rather an understanding of the subtle alterations in internal dynamics which may enable trade alliances or other interactions to develop. Thus the problems under discussion here are not related to artifacts and architecture (P.P.2 in particular) except as these tangibles reflect a more subtle set of changes in polity.



## HISTORICAL DEVELOPMENT

### *I. Early Preclassic*

During this period the political structure of the lowland villages was characterized by tribal organization with strongly developed social moieties. These regulated basic social interaction (marriage, game competition) as well as provided the basis for dual and complementary leadership. No data exist regarding residential groups.

### *II. Late Preclassic*

Small villages began developing as chiefdoms (see Michels, 1979). Emphasis focused on internal order with the internal affairs leader (chief) as the center of daily life. Ritual and other «external» affairs were subject to the guidance of an external affairs leader. Scattered residential clusters are not known, but some evidence exists to suggest that the eastern side of some groups may have had ritual significance.

### *III. Protoclassic*

The beginnings of high-volume and long distance trade shifted the daily emphasis to the leadership role of the external affairs chief. Although trade with the cultures of the Valley of Mexico is characterized in general as the preeminent area of concern, a second thesis regarding trade is now emerging. C. Coggins and D. Friedel both believe (pers. com.) that a major nexus of power at this time existed at Mirador, and that relations with this economic focal point were of greater significance to the Maya lowlands than relations with the Valley of Mexico.

### *IV. Early Classic*

The agrarian villages in the Maya lowlands began to develop into economic centers largely through an increase in their trade nets particularly in relationship to overland trade into the Valley of Mexico. Specific towns developed as a response to trade and subsidiary villages gained in size through a filter-down effect. A host of artistic references reflected the source of wealth, and luxury goods demonstrated that the politically more centralized cities of Mexico served as the model for what was considered cultured and prestigious.

The general relationships between Teotihuacan and Kaminaljuyú, so well summarized by Cheek (1977), will not be dealt with directly in this brief paper, but the significance of our understanding of this interaction in order to understand the lowland situation cannot be underestimated (see Sanders and Michels, 1977). Michels (1977: 465) does *not* believe that Teotihuacan exerted political control over Kaminaljuyu, but that a strong influence was obvious. This is the position which I support and use as a basis for developing this paper.

The important questions regarding these political relationships have been asked recently by D. Rice and P. Rice (1980: 444). They note that the Early Classic period in the southern lowlands was witness to numerous developments reflecting relationships with the site of Teotihuacan. They then ask what was the *nature* of this contact. They note that Stela II in Plaza B at Yaxhá bears a Tlaloc figure, and at least one stela from Tikal is similarly decorated. The presence of green obsidian at lowland sites suggests imports from the Valley of Mexico, which R. Santley (1980) notes as continuing after the decline of the Teotihuacan influence in the Maya lowlands, about 600 A.D., perhaps up until the decline of Teotihuacan itself about 700-750 A.D. (T. Charlton: pers. com.). Ceramics in Mexican *shapes* abound in the Maya area. Even architectural parallels can be demonstrated. In no case do we know if all this reflects a colonial situation (lowland towns subordinated to Teotihuacan) or if these Maya sites were clients of the more complex states to the north.

The data summarized above must be termed superficial. By far the most penetrating study dealing with this problem has been presented by Ball (1980). Ball, noting that pottery data reflect only one aspect of this complex interaction, hastens to point out the need to distinguish between ceramic «homologies» and ceramic «identities». Only true «identities», or vessels actually made in one area and transported to another, represent the flow of trade or commerce. Ball demonstrates that pots actually «flow» but rarely, but that styles (what R. Sharer calls «ideational contact») are easily diffused creating ceramic «homologies».

Ball also points out that those few vessels which did travel generally represent personal ties. Thus finery gifts may be in this category. Ball (1980) notes that the vessels in the merchants barrio of Teotihuacan are «service» vessels originating in the interactive littoral zone of northern Belize and northwestern Yucatan. These in no way represent commerce in ceramics but indicate either the presence of a foreign ethnic group or a pochteca-like population in residence.

Ball's data, and the lack of evidence to the contrary, suggest that strong trade relationships existed and that Maya towns may have been clients of the Teotihuacan state, but no more significant interaction

(such as dependency or economic domination) can be inferred. The relationship between Teotihuacan and Tikal presumably reflects and is similar to those which existed between Teotihuacan and other major lowland «cities». The degree of influence is often exaggerated by archaeological attention being focused on the ritual center of a site.

Of particular importance to this preceding comment is Cheek's (1977: 447) observation that the «public centers» (large ceremonial architecture) at Kaminaljuyú reflected foreign influences while the «elite» and peasant residences remained reservoirs of Maya cultural tradition during the period of greatest contact with the Valley of Mexico. Borhegyi had pointed this out some years before, according to Cheek, but the observation is often lost on scholars working only with the ritual zones at a site. The masses continue the traditions and art forms of the culture and provide the basis for their reemergence in the ritual sphere once foreign influences decline, as they did at Kaminaljuyú after the decline of Teotihuacan as a powerful center.

Although Kaminaljuyú would be a good place to test the hypothesis presented below the problems of mapping in this area preclude use of the approach which I have selected. Specifically, the nature of the terrain in the highlands and the situation at Kaminaljuyú hinder the kind of surface mapping of structures (see Fitting, 1977) which can be accomplished with relative ease at many lowland sites. The problems of investigating residential structures at a site such as Kaminaljuyú are depicted quite clearly by N.A. Stenholm (1977) who put enormous effort into the description of a single residential structure. In fact, the inferences on social organization and polity at Kaminaljuyú summarized by Michels (1977) and more extensively documented in a more recent publication (Michels, 1979) derive solely from studies of large (ritual or ceremonial?) mound groupings. The possible residential functions of these structures or the possible relationships between buildings of the same group, have not been determined. Although Michels (1979: 102) attempts «to characterize households with respect to variation in social rank» he has only Stenholm's (1977) example to serve as evidence. Since residential data are so elusive (Michels, 1979: 64-70) the excavations of Kaminaljuyú focus on the large mounds, and interpretations drawn from these data are of necessity limited.

Although Michels (1979: 156, also 253-258) presents valuable evidence from Kaminaljuyú his use of terms such as «moiety chiefs» (after Bohannon, 1963) might better be replaced by «lineage leaders». The functions of these inferred leaders need to be understood to see how the dynamics of their positions relate to the political organization at the site. Michels (1979: 229-232) notes the presence of many ballcourts at Kaminaljuyú and associates each with a «moiety chief», a linkage which to me has external implications in the ritual of play

as well as linkages with trade. While as yet unresolved, the data from the highlands in general are of great importance in understanding the ancient Maya.

The splendor of high status burials and developing architectural skills in the Maya lowlands should in no way obscure our understanding that the *basis for Maya* «culture» continues to be rooted in Pre-classic traditions. The significance of ritual, shared power, and other aspects of the chiefdoms which characterize polity at that time cannot be underestimated. More significantly, the economic changes and vast changes in material culture taking place about 200 to 300 A.D. appear to have been followed by much less rapid change in the social and political structure.

These chiefdoms («towns») of the Maya lowlands may have developed trappings reflecting the complex societies to the north, and may have attempted to emulate aspects of Teotihuacan's material products. However, the cultural base upon which this was built is solidly Maya. At Tikal we find what appears to be continuity in centralized ritual focusing on the area which was to develop as the North Acropolis. This complex of purely ritual structures, situated to the north of the apparently residential Central Acropolis (Harrison, 1970), is the locus of the major burials (elite or high status individuals) of the Early Classic period.

Although R. Sharer (Dumbarton Oaks symposium 1980: Discussion) suggests that the Early Classic Acropolis at Tikal is evidence of a state system, the elaborate architecture found there is insufficient evidence for the existence of a political state. Even the monuments of the Early Classic period, the functions of which are not entirely clear, do not provide sufficient indication for the existence of a true state unless they reflect the power of the rulers (Marcus, 1974). However, the developing economics of the Early Classic period, possibly increased population, and complexity of political (trade) interrelationships produced a cultural situation of increasing diversity reflected in social class formation. Further diversity may have resulted from the entry into this area of peoples of different ethnic traditions. The earliest documented examples of Plaza Plan 2 at that date from the very end of this period.

The development of this specialized group arrangement may be seen as but one aspect of cultural heterogeneity which may have been growing in the period around 400 to 450 A.D. Inferred from the development of P.P.2, with its oratory or small temple on the east and associated high status burials, are the beginnings of kin group dynamics with an individualistic or extended family focus. This may be contradistinguished from the previous situation in which only a few high status members of the entire chiefdom were afforded elite style bu-

rials, and these were made at the ritual center. Burials associated with the ritual structure in groups conforming to P.P.2 reflect the interments of high status members of that group (extended family residential unit). Each of these interred individuals held a high position in the status ranking of the settlement as defined by the criteria of the epoch. The earlier period saw a single social hierarchy, but now we have the development of a much more complex situation with multiple lines of social differentiation.

At this point no attention can be directed toward possible origins of P.P.2 or parallels at other sites, but this avenue must be explored. Cheek (1977: 445) makes note of the *adoratorios* of Xolalpan, and the construction at Kaminaljuyú of buildings, which one may presume to be ritual, over burial pits. These may not be related to P.P.2, but questions regarding origins must be investigated.

One further variation should be noted. Plaza Plan 2 generally is considered to have but a single ritual structure on the east (Becker, 1971). Excavations in 1963 at Tikal revealed that Group 7F-1 at Tikal had both a large and a small west facing ritual building along the eastern edge of the complex. A group at the northeast end of the Tikal airfield had a pair of such structures which appear matched in size. Such «twin temple» examples (see Fox, in press) have been recognized as a variation of P.P.2 and identified at Tikal with the designation P.P.2T (Becker, 1970, 1980).

These changes in the residences of extended family kin groups do not provide direct evidence for my assumption that changes were taking place in the administration of the town. Once trade became a major element in the society, with luxury goods in high demand, the external affairs leader became a predominant figure. The transition to the Middle Classic derives from an accumulation of external contacts and foreign influences creating change and generating social problem. Webb also has noted these problems in the emergence of the state, «Their reliance on shared beliefs and their inability to handle internal conflicts and stress severely limit the capabilities of chiefdoms for social differentiation and innovation - as long as they remain chiefdoms» (Webb, 1978: 159). Webb clearly recognized the dangers which develop as a chiefdom approaches a state in both instability as well as rigid adherence to existing patterns of organization. His most important contribution, however, is in pointing out why trade is so important to a chiefdom, and what kinds of gains are provided by state formation.

At Tikal these changes are indicated by «individualistic» kin group dynamics as reflected in the group oriented P.P.2 arrangement, as opposed to the entire populace focusing on a single ritual center. This leads us into what is called the «Middle Classic». This epoch has been

variously denoted by Maya scholars (see Willey, 1974) but reflects a major period of transition in Classic Maya social and political evolution.

Despite the political changes of the Middle Classic the importance of local lineages, on which S. Borhegyi believed Maya religion to be based (W. Sanders, comment at the Dumbarton Oaks Symposium 1980) continues to be paramount. The continuity of this basic factor sets the stage for not only the confusion of the Late Classic period, but also for the ultimate decentralization of power which ends the Classic era.

#### *V. Middle Classic*

Once the origins of Classic Maya towns are recognized as derivative from trade and particularly the economic activities at Teotihuacan, then one may understand how disruptions at that site by 600 A.D. could have such profound effects throughout the Maya realm. Cheek (1977), who notes the origins of the concept of «Middle Classic», terms period 500-550 A.D. as the Teotihuacan Phase at Kaminaljuyú. His description of the relationship, drawn directly from the evidence, is a fine example of the best in archaeological inference.

By 450 A.D. Maya towns were just forming into relatively large units, although the components continued to utilize a dispersed residential pattern characteristic of an agrarian based economy. Interruption of trade with Teotihuacan left the incipient cities of the Maya area without a clear economic focus and equally wanting in a socio-cultural role model. The possible confusion in the artistic tradition in the period 500-550 A.D. may reflect this process. The ideal cultural model or pattern to «emulate» still remained, by the historical process termed «culture lag», that of the Valley of Mexico; but the lack of products from and economic interests between that area and the Maya realm permitted a return to traditional Maya art forms.

The removal of an external focus in high status decorative art correlated with the reemergence of native (Maya) based forms, but still bearing some characteristics of the complex patterns derived from the north. The developing social moieties of Maya society (see Becker, 1975) were unchanged in the Early Classic since they functioned quite well as long as trade and international politics were handled by Mexican power. Thus traditional mechanisms for maintaining Maya polity were adequate so long as external affairs were derivative or handled externally. Maya external affairs leaders simply acted as mediators between their chiefdoms and the ambassadors or representatives of other political systems.

Once these political and trade problems were no longer simply negotiated, the paramount need for Maya (individual town) based exchange mechanisms was to sustain the economic structure. That the Maya were successful in making this shift may be seen in 2 pieces of direct evidence while a third element of adjustment may be inferred. The first and most evident indicator of these changes are the larger structures which characterized Maya households and architecture in general. One may assume that each household (see Wauchope, 1938; Becker, 1980) consisted of a number of structures including a sleeping building, kitchen, sheds, and storage areas. The Classic period, so commonly characterized as that epoch marked by calendrics and monuments, is equally correlated with the concern for larger and better built structures. Although the ultimate or ideal Maya house may have included a vaulted building, platforms which lifted any of the structures of a group off ground level («out of the mud») became desirable. This trend, so evident in the Early Classic, continued strongly in the Middle Classic reflecting an increasingly wealthy population. One might even suggest that the shift away from Teotihuacano influence was much like being released from the burden of being a colonial dependent, in an economic but not political sense. Rather than seeing raw materials removed, at low value, to be converted into high cost goods somewhere else, the former «colony» assumed all the steps of the manufacturing process and reaped all the economic benefits of the sequence losing none of the value formerly lost in transportation costs. Quite possibly the Maya area villages were benefiting, on a short term basis, from the decline of Teotihuacan.

A second indicator of change at Tikal is the increase in the incidence of P.P.2 (Becker ms.). The incidence of groups conforming to this plan increased throughout the Classic period (as a percentage of all the groups identified at Tikal). In addition, excavations show that several groups originally conforming to a different arrangement were altered to conform to this «fashion». The ideological shift from an emphasis on ritual and interment in the central zone to one in which each residential compound maintains, or has the potential for, a ritual focus of its own (P.P.2) suggests an increasing cultural diversity at the site. Heterogeneity may have been in social class distinctions as well as ethnic variation. The main concern of these observations is the increasing heterogeneity through time and our ability to recognize it through mapping and confirm our inferences via excavation.

These two pieces of information provide the evidence by which we may infer a decline in centralized ritual authority. At the same time we may assume that the balance in the status enjoyed by the leader of the internal affairs moiety and the leaders of the external affairs

moiety at the beginning of the Classic period may have shifted to an emphasis on the external leader as a source of both ritual and economic success (see Becker, 1975). The decline in trade with Teotihuacan and the Valley of Mexico, and perhaps a generalized economic disruption, leads to stresses regarding effective political control. The complementarity of the roles of moiety leaders may have enabled them to provide a joint rule through the Early Classic period. Coggins (1980) suggests that Stela 5 at Uaxactún (A.D. 377) is the first documentation of foreign influence in the area. I prefer to interpret her evidence as reflecting an early statement regarding foreign affairs as made by an external affairs leader.

Quite possibly the dangerous problem of sharply shifting authority functions, which may occur if a chiefdom moves rapidly towards the development of an incipient or archaic «state», were reduced by the accommodations which these two leaders were able to achieve with each other at Tikal. Coggins (1980) believes that Stelae 4 and 18 at Tikal depict Curl Snout as a foreign ruler. She also believes that Tikal Burial 10 (430 A.D.?), which has numerous connections with highland Mexico, is that of Curl Snout. If she is correct in these points then one may infer that Curl Snout was a successful external affairs leader who had considerable power which was still balanced by that of an internal affairs leader. Neither position, I believe, was at that time hereditary. The shift to a single all-powerful ruler appears to be developing only by the end of the Middle Classic, but how this came about remains unclear. What we must do is examine the results and try to infer the process.

The psychological stress generated by the changes begun in the Early Classic created considerable social disjuncture. Quite possibly one of the dual leaders assumed (or even usurped) some of the powers of the other leader. This merger of control, perhaps as an attempt to regulate power in a more efficient manner, created a target toward which multiple elements of society suffering the disruptions of social change might direct their displeasure. Recent events in Iran with the late Shah and his father perfectly characterize this process.

Disruptions in trade or other external events may create added stress to such situations. Willey's (1974) suggestion that this period could be seen as a «rehearsal» for those processes marking the end of the Classic period seem to be valid in so far as they may reflect changes in the political structure towards a more traditional form (Preclassic) regulated by social organization. Religious revivals also may be a factor in this process (also see Ashmore and Sharer ms).

Since polity and religion in these situations are difficult to separate one might expect that political adjustments would be met with changes or resistance from ritual purists. I postulate that political innovation pre-



cedes religious change and not the other way around (see Sloane, 1974). One very important note must be made regarding the «kings» or rulers of Tikal during the years prior to the Late Classic. C. Jones (pers. com.) has pointed out that monuments suggest their presence, but that few specifics can be determined and no sequence such as that known from the Late Classic (Jones, 1977) has been demonstrated. I propose that this is not a function of the poor quality of the written record but rather reflects my thesis regarding moiety chiefs. Social moieties, which I believe to characterize the Maya villages of the Early Classic have leaders appointed from among the representatives of each member kin group. I do not believe that hereditary leadership positions were achieved until the Late Classic, and it is the development of hereditary status for these leaders (both internal and external) which is essential for the transition to political moieties (Becker, 1975).

Once the positions of power have become hereditary, then the monuments begin to reflect the more orderly transitions of leadership. The Middle Classic ambiguity in monument erection probably reflects this period of transition, or the evolution of true political moieties.

## *VI. Late Classic*

This period includes the transition to (or movement toward) an incipient, nascent, «inchoate» (Cohen, 1969), or «archaic» (Webb, 1978: 157) state at Tikal. These terms all designate an emerging state in which the centralization of power is far complete; what Drucker (ms) calls a «primitive» or «early state». Under these conditions regional centers, local or traditional, continue to enjoy much of their former authority. This situation exists between the chiefdom and that state as defined by Service (1962) on the basis of the ways in which power could be exercised. Service noted that chiefdoms may have hereditary inequality, but not true social stratification. No true ruling class exists since kin ties to common people are strong (see also Sanders and Price, 1968). The elite in a state, according to Service, have more power; they can conscript labor, wage war, levy taxes, and exact tribute (see also Carneiro, 1970: 733). Our problem is to determine how these behaviors can be identified in the archaeological record.

The large scale construction projects at Tikal, such as Temple I, could have been a function of taxation as well as of personal wealth. I believe that may have been involved in this project, but that the Twin-pyramid complexes (P.P.1, see Jones, 1969) reflect large scale projects created by public taxation and/or labor. Another characteristic of early states, according to J. Marcus (1974: 92), is the erection of «memorials of conquest», or monuments with themes such as pri-

sioners or military conquest. These artistic devices reflect warfare on a level distinct from the peripheral battles noted between chiefdoms. Obviously certain examples of construction projects or evidence for warfare, by their presence, demonstrate that a transition to the incipient state took place. Evidence which is archaeologically recoverable may be drawn from several sources, but the focus of this paper continues to be that of the arrangements of groups of structures, and Plaza Plan 2 are in particular. Some of the other lines of reasoning are presented as a prelude to a review of what I believe to be the direct evidence.

Two points which I can only note, but I am not qualified to evaluate, concern the artistic traditions and Mexican influence. The iconography which seems to dominate this period appears to reflect a re-emergence of the lowland tradition. On the other hand, remnant aspects of Mexican influence are fused to or submerged within it. These factors reflect the general changes in political relationships, but more significantly we can trace a development of an independent Maya power base.

The observation central to this thesis is that construction of groups of Plaza Plan 2 type at Tikal increased in frequency to the point where the Late Classic site had at least 97 such groups out of the 691 residential compounds identified (Becker, 1980). This is significant for one very important reason. The first known (identified) Late Classic ruler of Tikal (Ruler A, Sky-Rain), who was inaugurated in 682 A.D., was interred beneath Temple I (Jones, 1977: 42-5). The construction of Temple I completely altered the architectural arrangement of the North Acropolis zone and turned it into a huge replication of Plaza Plan 2, including the characteristic tomb form penetrating Str. 5D-1-sub and the bedrock below it<sup>2</sup>. This burial appears to shift the focus for Great Plaza burials away from the North Acropolis.

My contention is that the dual rulership which I postulate to have existed previously in a complementary balance at Tikal had shifted to a more strongly centralized power in the hands of the external affairs ruler. The divine origins of the dual rulers are clearly described in the Popul Vuh and other origin myths which reify the cognitive processes involved in having this political structure. In the Late Classic period at Tikal an incipient state was developing and characteristic of

---

<sup>2</sup> The significance of the subsequent construction of Tikal Temple II and the small temple (Str. 5D-73) on the south-west of the Great Plaza may reflect nothing more than an elaboration of Plaza Plan 2 as effected by the subsequent rulers. This would suggest that ritual behavior at Tikal continued to have sufficient focus on the Great Plaza to warrant continued orientation toward this area after the death of Ruler A.

At the symposium at which this paper was first presented W. R. Coe suggested in a comment that the structure beneath Str. 5D-1 was an earlier version of the large temple. If so the absence of a burial precludes that platform from having served as a ritual structure after the fashion of P.P.2.

such a state would be full authority for major political affairs (external) vested in a single ruler (see Becker, 1975)<sup>3</sup>. In the microcosm of Tikal this seems to be what Webb (1978: 158) is noting when he refers to «a major shift in the pattern of state control...» in the Maya lowlands.

The elaboration of architecture and ease of inferring social class differences during the Late Classic suggests that our observations of differentiations among residential groups and identification of certain ceremonial groups might have further application. The question which can be posed at this time concerns possible changes in elite zones and meaning of such changes. Are changes in the political system identifiable in changes in the organization of a site and its architectural components? The construction of Temple I at Tikal according to a plan previously recognized at the site, but not previously seen in the ritual zone, stimulates some ideas.

### *Changing Polity at Tikal*

In order to develop these propositions a summary of possible alterations in the political structure at Tikal will be noted, changes which appear to be paralleled by events at Copan and probably at other sites. The loss of external markets or general reduction in commerce of the Middle Classic created several difficulties and stresses noted above and best described by Webb (1978). The nature or extent of these problems set the stage for the external affairs leader to assume added influence, possibly including control of areas formerly under the aegis of the internal affairs leader. Although the external affairs ruler, traditionally concerned with matters of ritual (other worldly) and trade (other polity), comes to be the center of attention, the internal affairs leader continued to provide guidance in domestic matters such as land tenure, local taxes, etc. Quite possibly the paramount leader used his power to launch public works projects which previously

---

<sup>3</sup> Carol G. Thomas (1976: 93) suggests that the Late Bronze Age lords of mainland Greece developed "a political system which became a combination of tribal monarchy and centralized dynastic rule". Although Thomas is attempting to deal with problems of polity and political process she uses only the internal Greek evidence. Comparative studies in these areas suggest that Mycenaean political leadership may have been experiencing the same kinds of problems encountered during the Classic period in the Maya lowlands. In fact, many of the relationships are very similar to those described for Teotihuacan (Becker, 1975). I would even go so far as to conclude that what is termed the destruction in the Aegean area and the end of "Minoan civilization" about 1200 B.C. is simply the result of political change and decentralization of power similar to that which took place in the Maya area at the «end» of the Classic period about 900 A.D.

would have been in the domain of his counterpart leader. Such events may have bolstered the economy, but did not remedy the deteriorating economic situation. Note also should be made of T. Proskouriakoff's (1978) important suggestion that Maya religion was based on ancestor worship, and that ancestors of rulers of Maya sites achieved a semi-divine status. I believe that the pattern which Proskouriakoff describes emerged only after the external affairs moiety leader (Ruler A) took power, and that this pattern relates to the Plaza Plan 2 tradition, shared *only* by members of the external affairs moiety. During the Early Classic we can document the differential treatment of the dead only in groups conforming to Plaza Plan 2. The origins of the elite personages buried on the North Acropolis are not known, but during the Early Classic both internal *and* external leaders appear buried here generally in paired tombs. After Ruler A came to power, the external affairs leaders were buried in a P.P.2 arrangement while internal affairs leaders were buried somewhere else, not yet identified.

H. Berlin (1968) previously noted 2 distinct glyphs both of which he interpreted as implying «effective rulerhip over a Maya town». Berlin suggested that the «toothache glyph» was associated with «temporal power» and that the «seating glyph» means «preferably spiritual power». Quite certainly the Early Classic Maya and separate persons enjoying these distinct areas of interest. Both of the areas first came to be joined under the aegis of Ruler A.

Once a change from dual and reciprocally balanced leadership shifted toward the form in which power resided more in the hands of one of these two leaders, then this change in the sociopolitical organization favored a theory of divine lineage ancestry. The ancestors of the external affairs ruler may have become imbued with specific divine attributes as a means of validating the right of the «ruler» to continue and transmit his power. This theory may help to explain why the monuments at a site such as Tikal, and presumably elsewhere, are vague about dynastic data in the Early Classic, absent during the hiatus, and become clear about the line of succession only during the Late Classic.

A brief summary of some direct evidence from Tikal may flesh out this rather spare statement. By 682 A.D., when Ruler A was inaugurated, the power he assumed (probably by virtue of his personality combined with accidental timing of political history) overshadowed the activities of the internal affairs leader. Jones (1977:58) points out that Ruler A «presided over a renaissance of sorts, erecting the first known carved monuments... since Stela 17 at least 100 years before». Jones (1977:59) believes that Ruler A revived Tikal via massive development of foreign trade, which then decreased over the years before 790 A.D.

The new ruling lineage may have been related to, or descended from, the kin group resident in Group 7F-1 in southeastern Tikal. Structure 7F-30 in this group, as well as the adjacent structure, contains a series of elaborate burials all in the P.P.2 pattern, the first of which was made in the Early Classic period. Jones (1977:41) notes that he can identify the «name of another Tikal ruler» whom he believes to be a parent of Ruler A. I suggest that this person may have been the internal affairs leader and possibly the brother of a wife of Ruler A.

Ruler A seems to Jones to «have been more interested in the affairs of state than Ruler B, ...» To me this suggests that the consolidation of power and clever political maneuvering enabled Ruler A to move Tikal forward in a time of declining fortunes. His successor, Tikal Ruler B (Sun-Sky-Rain) was inaugurated in 734 A.D., and Jones (1977:58) describes him as self-centered. As the first person to inherit this position of power and responsibility Ruler B did not have the problems of consolidating traditionally divided lines of authority, and this have been significant in his behavior. Both Rulers B and his successor, Ruler C, may have tried to maintain prosperity by «make work» projects.

One should note that both Rulers A and B have names clearly linked with elements «external» to the town (see Becker, 1975). Ruler C, inaugurated in 768 A.D., cannot be identified as clearly. His name includes an animal head (peccary?), but the form of his name is not in the tradition of those of Rulers A or B (Jones, 1977: 56): The peccary appears frequently in inscriptions from the Early Classic at Tikal, often as a name. Ruler C had a reign different from his predecessors, characterized by building on a grand scale which I interpret as a reflection of his possible origins in (or orientation toward) the internal affairs moiety of his people. How long he ruled we cannot say, but certainly by the end of the eighth century Tikal was in major economic decline and all the public work projects and other efforts to sustain the economy were destined to fail.

A somewhat different approach to these problems of culture change might use the findings of linguists now examining these aspects of the Maya world (see Justeson, et al. 1980). Luckenbach and Levy (1980: 457) also consider linguistic factors in an attempt to study Maya social change. Their evidence indicates dialectical separations or divergences (into «communilects») occurred about 550 A.D. and again about 800 A.D. One might use such conclusions to support theories of social political fragmentation, but methodologies employed in the Luckenbach and Levy study could be called into question. I note ~~these~~ data not in support of this thesis, but to indicate that a range of tests might be devised to test various hypotheses.

*Culture Process and the Archaeological Evidence*

One must admit that our interpretations drawn from the archaeological evidence often require a considerable leap of faith. However, without positing such models our programs of enquiry are severely limited. For an example of a useful theory, Ashmore and Sharer (1975) suggested that the twin-pyramid complexes at Tikal, associated with Rulers A, B, and C, reflect a post hiatus revitalizations of dynastic power and prestige. This idea has been reinforced by Jones (1977). I agree that there was an economic resurgence at that time but suggest that it reflected a new and more effective political organization. I believe that the moiety leaders at Tikal were balanced in their political power during the Early Classic period, but that declining power at Teotihuacan reduced foreign influences at Tikal after 500 A.D. By 600-650 A. D. a period of transition or restructured polity at Tikal led to the development of a powerful external affairs «ruler» in the person of Tikal Ruler A, a pattern postulated earlier (Becker, 1975). The problem now at hand is to document, or to disprove this supposition using the various forms of evidence available from Tikal. Since this pattern may have been the reason for the development of other Maya cities one might equally seek data from the archaeological record to demonstrate a restructured polity along the lines suggested. Greater refinement of the theory is possible, but no proof can be achieved without excavation and interpretation, along the lines suggested by Sanders and Price (1968). Our data base has expanded greatly since they published, but not necessarily in ways useful to this study.

Identification of the tomb of Ruler A at Tikal (Jones, 1977) did not provide clues as to the location of the tombs of Rulers B and C, although the tomb within Str. 5D-73 on the Great Plaza might be a candidate. The position of Temple I, conforming in location (on the east) to that of the ritual structures of P.P.2, is *not* duplicated by Temples II through V. The west facing orientation of Temple VI, however, makes it a likely candidate for such a burial and I would suggest that its unusually small building platform be explored to test this hypothesis. The search for tombs in «large» structures, as opposed to the testing of this locational hypothesis, has not been productive at Tikal. At Quiriguá this hypothesis (Becker, 1972) was tested with success (Jones et al. 1977), suggesting that this burial pattern had wide distribution (see Becker, 1979).

Jones (1977:58, after Coe, 1965:42) also suggests that «The imposing Structure 5D-33-1st might have been built during this period...». The burial associated with that construction may be the preceding ruler of Tikal, or a co-ruler. Since Ruler B's tomb remains unknown

(Jones suggests that he may be interred in the East-facing Temple IV) and no evidence places him strongly in a patriline with Ruler A, these 2 rulers may have been from the different moieties at Tikal (see Becker, 1975). These distinctions of polity suggested here may explain differences in monument inscriptions produced for Ruler A and Ruler B as described by Jones (1977:58). Such political changes may also account for missing rulers in the Tikal (and other) dynastic lists (see also Coggins, 1975; Haviland, 1977).

The considerable size of Tikal provides us with several groups which could have served as the residential areas for the rulers. The West Plaza (GR. 5D-10: Becker, 1980a) might have provided an elaborate residential compound for the internal affairs leader. Harrison (1968, 1970) suggested residential functions as a major feature of the very complex Central Acropolis at Tikal. Quite probably the Central Acropolis served as a residential area for the main leader and his lineage. A much less complex architectural picture exists at Copán, possibly enabling some more specific suggestions to be made regarding building functions and the administration of that site. These will be noted briefly below.

Quite recently John W. Fox (in press) has considered a number of the issues dealt with in this paper but based his discussion on entirely different sets of data drawn from the Eastern Frontier. Fox notes paired temples placed in a location similar to those I have designated as identifying Plaza Plan 2T at Tikal (Becker, 1980a). Fox believes these to derive from a Quiché-like (see Sloane, 1974) war god and infers that the military leader in such cases assumed a title equivalent to that of the war deity. Such a priest-ruler transformation would be parallel to what I have postulated above as happening with Ruler A and his construction of Temple I at Tikal.

The evidence concerning the regularity of occurrence and predictive value of each group «form» (arrangements) continues to grow. At present our interpretations of the meanings reflected in these patterns are tentative at best. However, the independent conclusions of Fox agree in many respects with those which I have postulated. Other related evidence from northeastern Petén has been published recently by D. Rice and P. Rice (1980:452). They refer to each P.P. 2 group (Becker, 1971, 1980a) in their area of study as a «formal plazuela». Significantly, they find 27 such groups (they use the term «complexes») among the 100 groups which they sampled. Since all 27 were occupied in the Late Classic they infer that this pattern represents a functional integration of institutionalized behavior which crystallized in the Late Classic period. Although I am not certain what this means, I would like to believe that the Rices are inferring something similar to that which I have presented above; namely, that the Early

Classic chiefdom situation with centralized rituals and polity based on social moieties (community culture) had evolved by the Late Classic into a inchoate state with power more clearly defined and held by a descendant of the external affairs moiety.

## VII. *Epiclassic Tikal*

The last century or so of Tikal's viable history, like the last gasps of so many of her sister-cities, was marked by decreasing large scale construction activity and a sudden, and as yet unexplained, cessation in the erection of dated monuments (see Bove, 1981). Groups conforming to Plaza Plan 2 continued to be popular as or even more common than ever. Burials continued to be made in the small ritual structures, but on the whole construction was at a much reduced level and generally directed at adding minor additions to standing structures. All large «make work» projects had by this time terminated.

The art forms of external groups became increasingly common as this epoch began, and local traditions stagnated. The economic base of this urbanizing society, long distance trade, had become less secure and the decline of the internal fiscal system paralleled the large problem. As Jones suggests (1977) maritime trade around Yucatán may have been carrying much of the merchandise which once flowed through Petén. This basic source of wealth for so many of these towns in Petén was flowing into Yucatán by 900 A.D.

As trade as a source of wealth for Petén faded conflicts for access to these external markets must have increased. Not only were these large towns no longer able to sustain themselves, but they may have had difficulty in defending themselves against other powers who sought to control the available resources of feathers, pelts, possibly cacao, and cheap labor. Without external wealth the remaining population would have had difficulty in maintaining construction activity because no luxury goods could be brought in to pay for such ventures. The economic decline, including loss of control over access to resources, returned the political situation in various towns to a low level chiefdom. What we are witnessing in this situation is what has been so often termed the «decline of civilization» (see Service, 1975: 311-314). What generally happens under these circumstances is that changing economics, ecology, or other factors inhibit the successful operation of the political structure resulting in a shift (change) to a more stable or more traditional form, usually based on some kind of kinship. These forms of polity do not provide for the more efficient



utilization of human resources found in the state and productivity fall as a consequence (e.g. Iran 1980).

In many areas of the Maya lowlands only those few villages able to control some resources maintained a semblance of heterogeneity on into the Postclassic period. As foreign trade and local employment declined, large numbers of people, as a percentage of the population, abandoned the Classic period towns and dispersed into peripheral areas. Increased competition for goods or trade routes may be the cause of increased militarism as seen in artistic depictions and the use of defensive walls. Some people probably moved out of the area into places where trade was still providing economic vitality (see Cowgill, 1964). A pattern of shifting residence in the region of Petén-Belize-Yucatán to maximize economic productivity, has been demonstrated in the 20th Century and documented for a considerable part of the recent history of the region (Mazzarelli, 1976), a possible continuation of the process inferred above.

These changes in the social structure toward a single powerful ruler seem to relate to a correlate with increased trade and urbanization. Fox (in press) associates the characteristics of such a system, which he agrees gives a political and military advantage to its subscribers, with Mexican origins (see Carmack, 1968). Although such systems may have existed earlier in Mexico and their development in the Maya area may have been influenced by contact, I suggest that they may be evolutionary products.

Regardless of the source, the processes of change which create an effective ruling elite at the same time may create social instability. One may recognize that changes in the ruling class may have little or perhaps no effect on the agrarian masses. Even members of the upper class may continue to seek normalcy in traditional cultural values. The forces of trade and urbanization which require a changed political system may be the very forces creating an unstable social situation. The social instability of a single rather than dual leadership plus economic decline may have been significant in the deterioration of the organization of large towns in the Maya lowlands, but changes in agricultural efficiency (Turner, 1980) or any other aspect of society may have equally far reaching effects<sup>4</sup>.

---

<sup>4</sup> Robert L. Hall (1980) offers an extensive discourse on an interesting theory which basically suggests that «success» could lead to social disorganization. His argument, transposed to the Maya situation, would imply that the development of trade and economic success might lead to agricultural intensification. This could lead to the economic independence of individuals who have become successful farmers, and disruptions in the processes of organization.

What is of particular interest regarding this theory is that it complements B. L. Turner's (1980) subsequent suggestion that the agricultural techniques in the Maya area may have improved after 700 A.D. Turner clearly notes that

In expressing similar ideas regarding this period Webb notes the effects of both trade disruption and the problems of instability created by the experiments in polity. «That their maximum florescence took place during the Late Classic meant only that these greatest of chiefdoms or most incipient of states must have been in an unusually precarious condition when they began to receive serious pressure from the highly aggressive Epiclassic societies to the north. Since any attempt to compete would only increase social stress, a rapid collapse would be inevitable» (Webb, 1978:166).

The towns or residential situations which survived into the Post Classic may reflect both the economic success of these smaller units as well as a re-emergence of traditional «political» forms (chiefdoms). These latter aspects may be evident in the historic record. Physically the towns that were viable into the Post Classic appear to have been smaller in area, perhaps more densely settled, and in defensible locations (Rice and Rice 1980:447). Topoxté and perhaps Tayasal reflect the changes in economic and military circumstances.

### VIII. *Post Classic*

One may assume that by 900 A.D. the processes described above had returned the Maya settlements in the lowlands to a «political» situation (chiefdoms) like those which had been operative in the Early Classic. With declining central control the «urban center» deteriorated and the central area of Tikal became insignificant as local lineages reassumed their former pre-eminence. Small satellite communities, each a corporate unit, became the centers for local industry and a much reduced economy. The archaeological and ethnohistorical evidence for Petén remains nearly undisturbed, but an extensive record of Maya life in the highland regions has been the focus of considerable effort, and the data from Yucatán are worth noting.

The excavations at Mayapan (Pollock et al., 1962; figs. 11, 12a-u)

---

socio-political conditions can become a major issue in agricultural systems. He also notes that the development of improved agricultural systems and «growth» in socio-political areas are independent variables. This is why W. Sanders (Symposium comment) can state that agricultural intensification in the Maya lowlands led to social stratification but not to state formation, while in Mexico similar intensification led to state formation.

I suggest that the development of a unified leadership position could aggravate the process of decentralization, with people simply drifting away from large towns.

The many arguments opposing Hall's theory need not be reviewed. Note is made of this completely different interpretation in order that the reader be aware of the wide range of possible explanations for much of this evidence. The question of dual leadership and political moieties may be tested by an equally varied number of techniques.

reveal a densely packed clustering of residential groups. The majority of these were revealed to have an *oratorio* or ritual structure on the east. This pattern, dating to about 1200 A.D., certainly appears to reflect a cultural continuity with the Petén, if not actually providing support Cowgill's (1964) idea of a large population movement, which is noted above.

A piece of evidence from the Guatemalan highlands of a still later date has an even more interesting reflection from the past. Some striking similarities might be noted between the theoretical model regarding political moieties applied herein, the architecture of the Acropolis at Copán, and the sites of Utatlán and Iximché in the Guatemalan highlands. Carmack (1977) describes the Quiché, with their capital at Utatlán (see also Wallace, 1977), and the Cakchiquel, centered at Iximché, during the period from approximately 1200 to 1524. His data suggest that the power of these two entities, which he believes to be organized at the state level, may be seen as derived from aspects of their political organization, which in both cases appears to reflect a strong or dominant external affairs leader. I interpret these polities as nascent states, but this is not an important consideration at this point. What is significant is that the evaluation of the political system is central to our understanding of the organization of these systems and their operational success. More significant than this suggestion that Quiché political organization may reflect a dominant external affairs (moiety) leader is the direct evidence from the map of Iximché (Guillemin, 1977). This plan of the city has the center occupied by what I perceive as the «ruler's» residential-ritual complex, strikingly similar to the Acropolis complex at Copán (see Morley, 1920: Pl. 6). Guillemin had earlier concluded that this complex was the ruler's residence based on associated artifacts.

The processes under discussion as well as the cultural traditions may be followed up to the time of the Spanish Conquest (see Becker, 1980b). A few notes on the subject will suffice. Soustelle (1962: 80) noted that at the time of the Conquest the concept of private property as we know it was still «in the act of coming into existence». Robert M. Adams (1966: 65) suggested that land may have been corporately owned or rigorously entailed, and that institutions of land sale were still poorly developed. Many of the concerns voiced by Adams in this important work have been examined in detail in recent years. All of these attributes of land ownership and sale are considered to be attributes of a complex political state, or «nation»<sup>5</sup>.

---

<sup>5</sup> Perhaps the first modern «state», with a single leader centralizing both internal and external power, appeared in the form of Henry VIII who in the 1530's established himself as head of the Church of England as well as King.

## COPAN, HONDURAS: A PARALLEL SOCIO-POLITICAL HISTORY

In general the history of Copán closely parallels that of Tikal, but each Maya site must be seen as having its own cultural traditions and political development. Yet social moieties evolved into political moieties, and the beginnings of state formation under a relatively powerful external affairs leader characterized all of the major Maya sites. The Maya «states» had their most stable and complex development during the Late Classic period. Changes in the economic systems, and possibly in a vast array of other aspects of culture, led to a restructuring of society in vast areas of the Maya realm.

At Tikal the loss of income from trade may have led to a decline in the economy. The economy then may have been bolstered by large public works projects initiated by Rulers B and C, but a failure to overcome basic economic problems led to further decline. At Copán a similar process may have included a complete renovation of the Plaza as one aspect of the public works. The Acropolis at Copán became the scene of massive, labor-intensive construction involving fills huge both in extent and depth, capped by deeply ballasted and thick plaster floors. These few observations from Copán suggest that circumstances parallel to those described for leadership changes at Tikal existed on the southern periphery of the Maya lowlands. Although all the evidence from the Copán monuments is not yet available some tantalizing hints are present.

Smoke Jaguar, the 12th or 13th «ruler» of Copán, reigned during the interval from 630 to 680 A.D. Around 650 some 6 different stelae on the periphery of the site were erected within a period of a few days, and all have references to a person who does not appear to be Smoke Jaguar. Stela H at Copán (730 A.D.) may refer to an internal affairs leader, while the others indicate the external affairs leader. C. Baudez (S.A.A. paper, 1980) notes that the themes on these monuments might reflect these different orientations. Baudez perceives that these themes appear to be merged in the iconography of Stela D (736 A.D., Riese n.d.), suggesting to me that the previously distinct roles merged during the brief interval between 730 and 736 A.D. This suggests that the transition was rapid and may have been initiated by the new ruler.

---

This process may be termed «nation building: and incorporates a political structure still more complex than that found in «states».

As regards land ownership (private property vs. control by the political head of state) among the Aztecs of Texcoco as an indication of conditions during the earlier periods discussed in this paper see Carrasco (1978) and the discussion related to his position (Offner, 1981a, 1981b; Carrasco, 1981).

Smoke Jaguar was succeeded by 18 Jog (680-736), who appears to have been captured (?) by Cauac Sky, who termed himself the fourteenth ruler of Quiriguá. Earlier note was made of the existence of a Plaza Plan 2 at Quiriguá which dates from before 700 A.D. (Becker, 1972; Jones et al., 1977). For some reason this main group at Quiriguá was altered in form *from* the P.P. 2 arrangements although the general architectural arrangement persisted. The change may have related to the «capture» of 18 Jog (18 Rabbit), but the problem will not be pursued here.

The known architectural details at Copán provide valuable clues regarding changes in polity. The Acropolis of Copán appears to have undergone a shift in function by the end of the Middle Classic, much in the way that the clearing of the Great Plaza and construction of Temple I at Tikal altered the use of the center of that site. Large filling operations radically increased the size of the Copán Acropolis to create its final form (Becker Ms. B). This included a shift from a populated and generalized elite ritual-residential zone to the formation of an exclusive residencial-ritual zone for the paramount ruler (external affairs) of the site. His residential compound consisted of the East Court group, while the West court served as his personal ecclesiastical zone, and by inference the ritual center of the site.

Str. 18, which probably was built in 805 A.D., is the last major construction known on the Acropolis and served as a cover for the tomb of an important person. Several bits of evidence suggest that person was Morning-Sun-At-Horizon, the 16th and last known ruler of Copán. The structure includes elements which I interpret as suggesting a residential function for the building, although others suggest a ritual purpose. Included as decorative elements on this structure, and probably on the adjacent building, were paired elements including a weave or mat («pop») design over a tasseled element reminiscent of the Teotihuacan «Tassel headdress». Both of these elements have been associated with power of leadership, and specifically with the paramount external affairs leader (Becker, 1975: 319, 321).

Note might be made that Fox (1981) has suggested that there may be some recognizable distinction between the building types used by the religious and those of the secular leaders among the Pokomam. If the Acropolis at Copán housed the religious (and supreme) leader after 736 A.D., then might we locate the residence of the secular leader?

At Copán I believe that the residential compound of the internal affairs leader can be identified from the map. Structure 3 appears to be the most probable candidate for the foremost building of this other «ruler's» residence. The causeway connecting Str. 3 to other

parts of the city may reflect the role of the primary resident. At this time these interpretations of building functions are largely subjective, but the evidence to support this position is being assembled. I predict that one or more direct pieces of evidence of the internal affairs leader's presence will be located in excavations scheduled for this compound and also that texts relating to his role will be found in association.

The Epiclassic at Copán, as at Tikal, reveals an almost complete shutdown in new construction. By the beginning of this period construction has become flimsy and insubstantial. Fills were of loose rubble and prone to settling, rather than the rammed earth or «mudded» fills of the previous periods. Floors no longer had thick ballasts and heavy plaster coatings. These changes in the economics of the site may reflect political devolution, but such an interpretation is only one of many possible.

At Copán the Acropolis achieved its final form probably by 780 A.D. The two zones noted above seem to have been demarcated even earlier, but expansion of the location continued even after 800 A.D. As at Tikal, the actual size of constructions in Copán as well as the quality declined rapidly. Structure 18 is an excellent example of flimsy architecture. After this date a few terraces were added, but no major buildings. All activities may have ended on the Acropolis not long after, probably by 850 A.D. Given the decline in size and quality of construction, bits of activity may have continued long after this date, but the high point at the site had passed.

#### Now WHAT?

Unfortunately, few sites of the size of Tikal or Copán exist, and the ability to initiate huge projects to test such settlements extensively is declining. The numerous other Maya sites which have been or are being excavated may provide information quite useful in solving some of the riddles noted above. The theories, however, must be tested in the future through problem-oriented archaeological programs. The construction of hypotheses which can be tested through archaeology at this point appears to be a major problem.

The distribution of P.P. 2 throughout the Maya realm is becoming clear (Becker, 1979), and one may assume that the pattern is not limited by sharp boundaries. The inference that plaza plans may be useful in identifying aspects of social organization and political structure can be extended to parallel situations in the Valley of Mexico as well as to sites known from along the eastern frontier of Mesoamerica (Fox, in press). The archaeological evidence for the existence of moieties may

be sought in architectural characteristics, relative positions or locations of buildings, decorative styles, monuments, texts, artifact categories, and by any other means possible. Such searches will, most likely, tell us about relative power, and in the absence of complete histories we must clarify our models and distinguish between evidence to support theories and evidence interpreted in such a way as to support pet theories.

The ability to imply functions for architectural groups in order to understand culture process improves when we deal with archaeological situations of the 14th and 15th centuries. The period of the Conquest and the centuries immediately preceding can be studied through the use of Spanish documents and surviving native texts. Ethnohistoric enquiry does have greater application to periods proximal in time to those which are known directly. However, many aspects of culture history appear to be relatively stable and can be projected back in time with accuracy. Understanding culture process and forms of change enable us to increase the accuracy of the reconstruction of events in the distant past and merge the data from archaeology and ethnohistory.

Previously I characterized the dual leader form of government in a state-ranked society as being inherently unstable (Becker, 1975:218-219, 225-229), but the archaeological evidence may provide better perspective on this matter. Quite probably the point of transition from chiefdom to state is the period of greatest difficulty. The cultural stresses and adjustments necessary to achieve a «state» political system may subject the members of the society to cognitive disruptions and also set the stage for a shift back to the «chiefdom» form of organization.

I believe that the economic problems and socio-political adjustments in the Maya lowlands at the end of the Early Classic created the difficulties which are archaeologically characterized as a hiatus. I do not interpret the data as indicating a change from a theocratic to a secular (and later militaristic) government. Rather I see a developing theocracy in which the ritual functions of the now dominant external affairs leader became incidental to the management of a complex state. The internal affairs leader, a secular personage, was of less significance in the economy of the culture. The external affairs leader had greater concern with trade and competition (ritual ballgames or warfare) than with the religious behaviors of his constituency. In effect the heterogeneity of a complex state extends to its ritual practices, which may be diverse.

The achievement of a political state depends on the ability to organize both the members of the society and their relations with other peoples. Once the economic base declines past a critical point, the diversity so characteristic of a state becomes a source for internal

competition and disruption. Once the great Maya «cities» began their decline the inevitable outcome was the smaller towns which continued a traditional life style seen not only by the Conquistadores but also by many anthropologists of the 20th century.

#### SUMMARY

Political change, which may be described as the «evolution of polity» follows normal rules of culture change. Sometimes we forget that the course of such changes are not foreordained and predestined to become increasingly complex and efficient. Indeed, such changes may grow either more complex or less complex as the systems of which they are part change through time.

Changes in polity at major Maya sites do not proceed in only one «direction», but are capable of shifting back to forms previously operative. Studies of architectural groups, and perhaps sites as a whole, may reflect these changes in aspects of political organization. Changes in these systems, therefore, may be reflected in archaeologically detectable variations in the way buildings are arranged, and how these variations shift through time.

Only one conclusion can be stated with great certainty at this time: Plaza Plan 2 is an easily recognizable and highly predictable architectural arrangement documented at Tikal and at numerous other Maya sites throughout the Classic and Postclassic periods.

The «conclusions» which follow from this observation are not secure but have been induced from my reading of the data. Whether or not these ideas can be demonstrated to have validity, there is no doubt that they will influence the way in which Maya sites are excavated as well as the ways in which the excavators will *think* about these sites and the interpretation of evidence.

The development of Tikal Plaza Plan 2 in the Early Classic period and its increasing incidence may be an indirect reflection of greater cultural heterogeneity at the site. The diversity of religious orientations or traditions which this suggests may be an indicator of increasing cultural complexity (urbanization?). This plaza plan, and its possible manifestation in the Great Plaza at Tikal with the construction of Temple I, has been interpreted as indicating the decline of centralized ritual activities which operated as the focus of activity for the Tikal chiefdom. The shift in political leadership under Tikal Ruler A (682-734), which placed greater power in the hands of the external or war (trade) leader, is believed to be documented by the construction of a Plaza Plan 2 arrangement in the Great Plaza, with Temple I serving as the monument to Ruler A, the first ruler of an incipient state based



at Tikal. His success may have derived from the expansion of the trade role of Tikal, but his successors (Rulers B and C) were unable to maintain economic momentum. In the face of declining prosperity they initiated the huge temple-building «make work» projects to provide employment for the masses and provide economic stimulus.

The continued decline in trade, probably due to changing trade routes along the coast of Yucatán, ultimately rendered the leaders of Tikal unable to maintain the huge ceremonial structure of an organized state. Gradually the population moved to smaller peripheral sites, taking their traditions with them. The vast constructions and ceremonial trappings of the precariously balanced lowland Maya states fell into ruin while the bases upon which they were built were continued and reformulated in Yucatán and elsewhere in the vast Maya realm.

#### BIBLIOGRAFIA

ADAMS, Robert McCormack:

- 1966 *The Evolution of Urban Society: early Mesopotamia and prehistoric México*. Chicago: Aldine.

ASHMORE, Wendy and Robert J. SHARER:

- 1975 A revitalization movement at Late Classic Tikal. Paper presented at the Area Seminars in Ongoing Research. West Chester, Pennsylvania.

BALL, Joseph:

- 1980 Ceramics and Central Mexican Highland-Lowland Classic Period Social Interaction: a Theoretical Perspective. Paper presented at the Conference on Interdisciplinary Approaches to the Study of Mesoamerican Highland-Lowland Interaction. Dumbarton Oaks, October 18-19.

BECKER, Marshall Joseph:

- 1971 *The identification of a Second Plaza Plan at Tikal, Guatemala and its Implications for Ancient Maya Social Complexity*. University Microfilms. Ann Arbor.
- 1972 Plaza Plans at Quiriguá, Guatemala. *Katunob*, 8: 47-62.
- 1975 Moieties in ancient Mesoamerica: Inferences on Teotihuacan social structure. *American Indian Quarterly*. Part. I, 2: 217-236; part. II, 2: 315-330.
- 1979 Plaza Plans and Settlement Patterns: Regional and Temporal distributions as indicators of cultural interactions in the Maya area. Paper presented at the Symposium: Interdisciplinary Approaches to Maya Studies. XLIII International Congress of Americanists, 16 August. Vancouver, B.C.
- 1980a Ancient Maya Houses and their Identification: An evaluation of architectural groups at Tikal and inferences regarding their functions. Manuscript on file. West Chester State College. West Chester, P. A.
- 1980b Moieties at Tenochtitlán: Insights into Aspects of Polity and Social Structure in the Aztec State. Manuscript on file, Anthropology Section. West Chester State College. West Chester, P. A.

- Ms.A Field notes 1963, on file with the Tikal Project. University Museum. Philadelphia, P.A.
- Ms.B Excavations along the Acropolis Cut at Copán, Honduras: A summary of the goals and achievements of the 1979 season. Excavation Reports of the Proyecto Aqueológico Copán, 1978 and 1979 Seasons.
- BERLIN, H.L.:
- 1968 The tablet of the 96 glyphs at Palenque, Chiapas, Mexico. Tulane University, Middle American Research Institute. Publication 26: 135-149.
- BOHANNON, Paul:
- 1963 *Social Anthropology*, New York: Holt, Rinehart and Winston.
- BOVE, Frederick J.:
- 1981 Trend surface analysis and the lowland Classic Maya collapse. *American Antiquity* 46: 93-112.
- CARMACK, Robert M.:
- 1968 Toltec Influence on the Postclassic Culture History of Highland Guatemala. In, *Archaeological Studies in Middle America*. Middle America Research Institute. Pub. 26.
- 1977 Ethnohistory of the Central Quiché: The Community of Utatlán. In, *Archaeology and Ethnohistory of the Central Quiché*. Edited by Dwight T. Wallace and Robert Carmack. Institute for Mesoamerican Studies. Pub. 1: 1-19.
- CARNEIRO, Robert L.:
- 1970 A theory of the Origin of the State. *Science* 169: 733-738.
- CARRASCO, Pedro:
- 1978 La economía del México prehispánico. In, *Economía política e ideología en el México prehispánico*. Edited by P. Carrasco and Johanna Broda. Centro de Investigaciones Superiores del Instituto Nacional de Antropología e Historia. Editorial Nueva Imagen. México, pp. 15-76.
- 1981 Comment on Offner. *American Antiquity* 46: 62-68.
- CHEEK, Charles D.:
- 1977 Teotihuacan Influence at Kaminaljuyú. In, *Teotihuacan and Kaminaljuyú: A study in Culture Contact*. Edited by W. T. Sanders and J. W. Michels. Pennsylvania State University Press: State College, pp. 441-452.
- COGGINS, Clemency:
- 1980a The shape of time: some political implications of a four-part figure. *American Antiquity* 45: 727-739.
- 1980b An Instrument of Expansion: Monte Alban, Teotihuacan and Tikal. Paper presented at the Dumbarton Oaks Symposium, Interdisciplinary Approaches to the Study of Highland-Lowland Interaction, 18-19 Oct.
- COHEN, Yehudi A.:
- 1969 Ends and Means in Political Control: State Organization and the Punishment of Adultery, Incest and Violation of Celibacy. *American Anthropologist* 71: 658-687.

COWGILL, George L.:

- 1964 The End of Classic Maya Culture: A review of recent evidence. *Southwestern Journal of Anthropology* 20: 145-159.

DRUCKER, Philip:

- ms On the Nature of Olmec Polity.

FITTING, James E.:

- 1977 Research Design (Residential Architecture and Settlement Pattern). In, *Settlement Pattern Excavations at Kaminaljuyú, Guatemala*. Edited by Joseph W. Michels. Pennsylvania State University Press. State College, P.A., pp. 3-30.

Fox, John W.:

- In Press The Eastern Frontier of Mesoamerica: Cultural Innovation Along the Periphery. *Current Anthropology*.

GILMORE, David:

- 1977 The social organization of space: Class, Cognition and Residence in a Spanish Town. *American Ethnologist* 4: 437-451.

GUILLEMIN, George F.:

- 1977 Urbanism and Hierarchy at Iximché. In, *Social Process in Maya Prehistory: Studies in honour of Sir Eric Thompson*. Edited by Norman Hammond. Academic Press. London, pp. 227-264.

HALL, Robert L.:

- 1980 An interpretation of the Two-Climax Model of Illinois Prehistory. In, *Early Native Americans: Prehistoric Demography, Economy and Technology*. Edited by David L. Browman. Mouton, The Hague, pp. 401-462.

HARRISON, Peter D.

- 1968 Form and Function in a Maya «Palace» Group. *Proceedings of the XXXVIII International Congress of Americanists*, Vol. 1: 165-172. 12-18 August, Stuttgart-Munchen.
- 1970 The Central Acropolis, Tikal, Guatemala: A preliminary study of the functions of its structural components during the Late Classic Period. Doctoral Dissertation, University of Pennsylvania, Philadelphia.

JONES, Christopher:

- 1969 *The twin-pyramid group pattern: A Classic Maya architectural assemblage at Tikal, Guatemala*. University Microfilms, Ann Arbor.
- 1977 Inauguration dates of three Late Classic rulers at Tikal, Guatemala. *American Antiquity* 42: 28-60.

JONES, Christopher; Wendy ASHMORE, and Robert J. SHARER:

- 1977 The Quiriguá Project 1977 Report. The University Museum, Philadelphia, Mimeographed.

JUSTESON, John S.; Lyle CAMPBELL, and William NORMAN:

- 1980 Foreign influence on Lowland Mayan language and script. Paper presented at the Dumbarton Oaks Symposium, 18-19 October.

## LEVENTHAL, Richard M.:

- 1980 Household Groups and Classic Maya Religion. Paper for, Prehistoric Settlement Pattern Studies: Retrospect and Prospect. Barg Wartenstein Symposium No. 86. Wenner-Gren Foundation.

## LUCKENBACH, Alvin H., and Richard S. LEVY:

- 1980 The implications of Nahua (Aztec) lexical diversity for Mesoamerican culture-history. *American Antiquity*, 45: 455-461.

## MARCUS, Joyce:

- 1974 The iconography of power among the Classic Maya. *World Archaeology*, 6: 83-94.  
 1976 *Emblem and State in the Classic Maya Lowlands*. Dumbarton Oaks Research Library and Collection, Washington, D.C.

## MAZZARELLI, M.:

- 1976 *Continuity in Change: Settlement in the Upper Valley, Belize*. Doctoral Dissertation (University of Illinois at Urbana Champaign), University Microfilms, Ann Arbor.

## MICHELS, Joseph:

- 1977 Political Organization at Kaminaljuyú: Its Implications for Interpreting Teotihuacan Influence. In *Teotihuacan and Kaminaljuyu: A Study in Culture Contact*. Edited by W. T. Sanders and J. W. Michels, Pennsylvania State University Press, State College, pp. 453-467.  
 1979 *The Kaminaljuyu Chiefdom*. Pennsylvania State University Press, State College, Pennsylvania.

## MORLEY, S. G.:

- 1920 *The Inscriptions at Copán*. Carnegie Institution of Washington, Publication 219, Washington, D.C.

## OFFNER, Jerome A.:

- 1981a On the inapplicability of «Oriental despotism» and the Asiatic mode of production to the Aztecs of Texcoco. *American Antiquity* 46: 43-61.  
 1981b On Carrasco's use of theoretical «First Principles». *American Antiquity* 46: 69-74.

## POLLOCK, E.H.D., et al.:

- 1962 *Mayapán, Yucatán, México*. Carnegie Institution of Washington, Publication 619.

## PROSKOURIAKOFF, Tatiana:

- 1978 Olmec Gods and Maya God-Glyphs. In *Codex Wauchope: A Tribute Role*, edited by M. Giardino, B. Edmonson and W. Creamer. Tulane University: New Orleans.

## RICE, Don S., and Prudence M. RICE:

- 1980 The Northeast Petén Revisited. *American Antiquity* 45: 432-454.

## RIESE, Berthold:

- n. d. Fechas dedicatorias de los monumentos jeroglíficos de Copán. Manuscript on file, Proyecto Arqueológico Copán.

SANDRES, William T., and Joseph W. MICHELS, editors:

1977 *Teotihuacan and Kaminaljuyú: A Study in Culture Contact*. Pennsylvania State University Press, State College, PA.

SANDERS, William T., and Barbara J. PRICE:

1968 *Mesoamerica: The Evolution of a Civilization*. Random House: New York.

SANTLEY, R.:

1980 Obsidian trade and Teotihuacan Influence in Mesoamerica. Paper presented at the Dumbarton Oaks Conference, Interdisciplinary Approaches to the study of Mesoamerican Highland-Lowland Interaction. 18-19 October.

SERVICE, E. R.:

1962 *Primitive Social Organization: an evolutionary perspective*. New York, Random House.

1975 *Origins of the state and civilization: the Process of Culture Evolution*. New York, Norton.

SLOANE, Florence P.:

1974 Ideology and the Frontier: A hypothesis of a Quiché innovation in religion. Paper presented at the Thirty-ninth Annual Meeting of the Society for American Archaeology, Washington, D.C.

SOUSTELLE, Jaques:

1962 *The daily life of the Aztecs on the eve of the Spanish Conquest*. Trans. by Patrick O'Brian. New York, Macmillan.

STENHOLM, Nancy A.:

1977 Identification of House Structures in Mayan Archeology: A case study at Kaminaljuyú. In, *Settlement Pattern Excavations at Kaminaljuyú, Guatemala*. Edited by Joseph W. Michels, Pennsylvania State University Press, State College, Pennsylvania, pp. 31-182.

THOMAS, Carol G.:

1976 The nature of Mycenaean Kingship. Studi Micenei ed Egeo-Anatolici, Fascicolo 17. *Incuambula Graeca* 63: 93-116.

TRIGGER, Bruce:

1974 The archaeology of government. *World Archaeology* 6: 95-105.

TURNER, B. L.:

1980 Comparative analysis between agro-systems in the Basin of Mexico and Central Maya Lowlands: Formative to the Classic Maya collapse. Paper presented at the Dumbarton Oaks Symposium, 18-19 October.

WALLACE, Dwight:

1977 An intra-site locational analysis of Utatlán: The Structure of an Urban Site. In, Dr. D. Wallace and R. M. Carmack, editors: *Archaeology and Ethnohistory of the Central Quiché*. Institute of Mesoamerican Studies, SUNY Albany, Publication No. 1: 20-54.

WAUCHOPE, Robert.:

- 1938 *Modern Maya Houses - A study of their archaeological significance.*  
Carnegie Institution of Washington, D.C. Publication 502.

WEBB, Malcomb, C.:

- 1978 The significance of the «Epiclassic» period in Mesoamerican prehistory.  
In, *Cultural Continuity in Mesoamerica.* Edited by D. L. Bowman, Mouton,  
The Hague, pp. 155-178.

WILLEY, Gordon R.:

- 1974 The Classic Maya hiatus: a «rehearsal» for the collapse? In, *Mesoamerican Archaeology, New Approaches.* Edited by N. Hammond, University of Texas Press, Austin, pp. 417-430.

WITTFOGEL, Karl:

- 1957 *Oriental despotism.* New Haven, Yale University Press.