# AN ARCHAEOLOGICAL STUDY OF SETTLEMENT DISTRIBUTION IN THE PALENQUE AREA, CHIAPAS, MEXICO

#### **Rodrigo Liendo Stuardo**

Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, México, D.F., Mexico

### ABSTRACT

Current research in Maya studies shows that the coexistence of a high degree of political and economic stratification, with a marked functional homogeneity, characterizes prehispanic Maya society. According to this evidence, questions regarding both the nature of the different segments that shaped Maya society and its integrative mechanisms are fundamental to arguments that characterize it as either segmentary or unitary. Using data from recent regional settlement pattern studies conducted in the Palenque region, this paper discusses the general settlement distribution in order to infer aspects of structure and development and the mechanisms that might have held together different social units throughout Palenque's developmental sequence.

Key words: Maya archaeology, settlement pattern, Palenque, social organization.

#### Political Integration in the Northwestern Maya Lowlands

Compared to other areas in the Maya lowlands, in the Northwestern Maya lowlands detailed understanding of political or economic issues from a strictly archaeological point of view is quite modest. Mainly, the focus on the study of political integration in the area has primarily been limited to the discussion of epigraphic evidence with reference to the presence and distribution of emblem glyphs (Culbert 1991; Marcus 1976, 1993; Mathews 1991), the identification of minor lords (Schele 1991; Schele and Freidel 1990), and recorded evidence of events that might indicate subordination between polities: royal visits, presence of paramount leaders at accession ceremonies, exchanges of aristocratic women, etc. (Grube and Martin 1998; Martin and Grube 2000). Using textual information, then, it has been argued that Palenque emerged as the capital of an influential political unit in the northwestern portion of the Maya lowlands by the end of the Early Classic (following the founding of the Palenque dynasty by K'uk' B'alam I in A.D. 431). Regardless of the accuracy of these reconstructions, the inscriptions, by the nature of the messages they convey (focused mainly on chosen events in the lives of selected few), are not generally well suited to convey information regarding society at large. This problem is especially

ANTHROPOLOGICAL NOTEBOOKS 11: 31–44. ISSN 1408-032X © Slovene Anthropological Society 2005 acute when dealing with the way households and entire communities were economically and politically integrated into larger political units.

Secondly, archaeological research at Palenque has by and large centered on the description and analysis of architectural and sculptural remains at the main site, with a rather sketchy interest in other aspects of archaeological evidence (García Moll 1991; Garza 1992; González 1998; Robertson 1983; 1985a; 1985b; Ruz 1973; Schele 1991). The single most important exception to this trend is Rands's (1967; 1987) successive survey efforts that covered an extensive area of approximately 7000 km<sup>2</sup> during the 1960s and 1970s. This study established the first ceramic sequence for the region (Rands and Rands 1957) and gathered important regional data necessary for the reconstruction of Palenque's settlement pattern, although his methodology was aimed mainly at dealing with the problem of defining the nature of local resource exploitation, manufacture and the consumption of ceramics. According to Rands, Palenque's "[basic] role in the regional exchange system was that of a consumer" (Rands and Bishop 1980: 42).

Following this pioneering work, several regional survey projects with different aims and theoretical orientations have been conducted in the area (Grave Tirado 1996; Liendo 2000; Ochoa 1978). Nevertheless, most surveys have focused on the location of sites with large civic-ceremonial architecture, leaving aside the investigation of the smaller communities located between them. Recent research focused on Palenque's hinterland provides a more fine-grained description of settlement features in the immediate vicinity of the site (a surveyed area of 37km<sup>2</sup>), allowing a more intensive analysis of trends of population control and subsistence strategies (Liendo 2003).

Since 1999, the *Proyecto Integración Política en el Señorío de Palenque* (PIPSP) has tried to expand the survey area in order to encompass a significant portion of the region that might have been under Palenque's political or economic influence based on epigraphic evidence of political subordination of lesser sites with regard to Palenque (Marcus 1976; 1993; Mathews 1991; Mathews and Schele 1974; Riese 1978; Schele 1991; Schele and Freidel 1990; Schele and Mathews 1998). At the same time, stratigraphic and extensive excavations have been pursued in a sample of secondary sites in the region (El Lacandón (López Bravo 2001), Nututún (López Bravo 1996); Santa Isabel, La Providencia, Lindavista and Chinikiha (Liendo 2003) in an attempt to establish the dynamics of political integration in the region.

A series of inscriptions might have delineated the limits of the political territory centered at Palenque (Xupá to the south, Tortuguero to the west and Chinikiha to the east). This region contains also a number of minor sites of relative importance that lack reported inscriptions, but exhibit important architecture and locational relevance to the general settlement system (La Cascada, Santa Isabel, El Lacandón, La Providencia, Sulusum, Lindavista, Reforma, Belisario Dominguez, El Bari, El Aguacate, La Concepción, San Joaquín, and San Juan). It also contains hundreds of small clusters of low platforms that might have constituted the residences for the bulk of the prehispanic population in the region (Fig. 1).

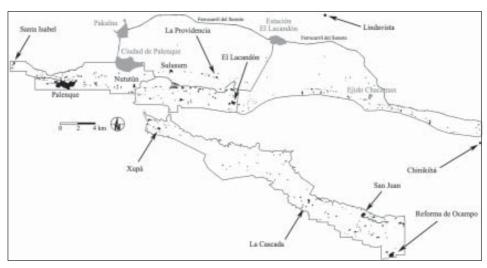


Figure 1. General view of settlements and location of major sites in the Palenque area.

# The regional context

We still lack basic information regarding the relationship between Palenque and a series of smaller centers located in the greater Palenque region, although advances have been made during the last three years in relation to the general structure and distribution of settlements in an area proposed to be under the direct Palenque's "political" control (Berlin 1958; Culbert 1991; Marcus 1976; 1993; Mathews 1991). Our project has recorded a total of 413 sites within an area of 450 km<sup>2</sup>. Our survey encompasses three environmentally diverse morphogenetic systems. From north to south these are the Pleistocene fluvial terraces, the Intermediate Plains, and the Tertiary formations of the Sierra de Chiapas (West *et al.* 1969; Rands 1974; Culbert 1973). (Fig.1)

Some of the variability detected during these surveys among site types might be due to variation in subsistence adaptations, but other aspects of settlement variation (population densities, location of civic ceremonial centers, settlement layout) lead us to suspect that many of these processes might be the result of historical and social circumstances tied to the development of social inequalities and hierarchical organizations associated with the rise of political complexity in the Palenque region. Some of these historical processes, although currently still under study, indicate that with the foundation of the Palenque dynasty in A.D. 431 important changes occurred in the region as a whole.

### **Rural architectural variability**

Within the goals of our research two dimensions of functional variation in ancient architecture were taken into consideration: (1) nonresidential structures indicating functional complexity, and (2) the distribution, characteristics and number of dwelling struc-

#### tures.

Following Ashmore's (1981) suggestion of 20 m<sup>2</sup> as the minimum for dwelling platforms in the Maya Lowlands for the Classic Period, platform size in our study area (excluding those smaller than 8 m<sup>2</sup>) ranges from 8 to 748 m<sup>2</sup>, averaging 36.4 m<sup>2</sup> (a 10% trimmed mean for a sample of 164). This evidence suggests that, on average, platforms in the Palenque area tended to be larger than those reported by Ashmore and more akin with the evidence for other areas in Mesoamerica (Evans 1988: 26-28; Smith 1992: 307). Two tentative explanations may account for this. First, ethnohistorical accounts describing Chol speaking communities in the Chiapas-Tabasco Lowlands give figures of 19 to 25 individuals per structure (Villagutierre, in Hellmuth 1977), and Rice (1987) suggests a figure of 10 individuals per mound in his study of the Petén District. Bigger co-residential groups in the area under consideration could account for the differences in platform size when compared to other areas in the Maya lowlands and certainly would be an important reason to upscale total population figures for the study region. Platform size and form can also be indicative of differences in wealth and status.

The interpretation of small low platforms as the remains of domestic structures is based on several criteria. First is the "principle of abundance" (Ashmore 1981: 40-41). These are by far the most abundant structure type in the region (a total of 1,306 platforms with a probable residential function were detected during our survey). Second, the formal attributes of such platforms are similar to modern households in the region. Third, the small degree of architectural variation among single platforms composing a patio group is a good indicator of the predominantly domestic function of the majority of platforms. If functional differences were present, then architectural variation would be expected. Fourth, in those cases where test pit excavations were pursued, the characteristics of the artifacts recovered in association with the platforms are the strongest evidence for a domestic function.

A second type of remains is called "range structures", differing from the more common dwelling platforms by their elongated design, by the height of the basal platforms that support them, by the use of well-cut stones in their construction and by the existence on many occasions of a front staircase. Within the study area, 164 range structures were found in association with other platforms and pyramids enclosing a patio area, never in isolation. The probable function of this specific type of building is the subject of debate in current archaeological research in the Maya area. Their closeness to other civic-ceremonial facilities has led to their characterization as special elite residences with civic functions (de Montmollin 1989: 51).

Pyramids correspond to the third type of architectural variation detected; they were easy to distinguish from domestic structures based on several formal attributes: a square ground plan, a basal area usually larger than 120 m<sup>2</sup>, a height more than 5 m, better quality construction material, and an architectural layout tending to form rather standard-ized plaza contexts. Fifty pyramids were found always in association with other architectural components (ball courts, plazas and platforms) denoting a rather civic-ceremonial function.

The restricted floor space (less than  $8 \text{ m}^2$ ) of several platforms found makes it very unlikely that these structures were dwellings, hence the decision to group them into a fourth type. Their tendency to be located at the corners of patio groups also suggests that these structures may not have been residences, but served other functions such as storehouses, kitchens or altars. However, accurate identification will need to wait for further excavation.

# **Rural site variability**

Within the study area several sites (Palenque, Nututún, Santa Isabel, Xupá, El Lacandón, Sulusum, La Providencia, Chancalá, San Juan, Reforma de Ocampo, Lindavista, Belisario Dominguez, and Chinikihá) (Fig. 1) stand out as larger and more internally complex than any of the surrounding undifferentiated habitation sites in the regional system. All these sites present clear evidence that elite residences are closely associated with features of ceremonial-civic functions. They represent nodes of political and economic activities in the regional system "serving political and ceremonial needs of a group larger than the household." (de Montmollin 1988: 43). They were labeled as "civic-ceremonial centers", and differ quantitatively and qualitatively from "civic-ceremonial sites", which may have only one civic-ceremonial structure.

Sites were classified following formal criteria in the following manner:

*Single platform.* The habitational function of all single platform sites is not absolutely certain. In those cases where surface collection was possible or where test pits were excavated, single platforms yielded materials that can be associated with habitational functions (N=130) They could be interpreted as temporary residences associated with agricultural activities. However, more evidence is needed to test this hypothesis.

**Informal group.** These constitute the next most abundant site type in the region (N=135). Their major formal characteristic is the absence of a central patio. Structures are located randomly in relation to each other. The number of structures in these groups ranges from two to four. The small number of structures per site and the lack of a central patio could be considered evidence for a late foundation for this type of site (Tourtellot 1983: 97-121).

*Patio-oriented group.* 149 patio-oriented groups were found within the study area. These have three or four platforms oriented toward a central patio. Patio groups are the most common and best understood unit of settlement analysis in Maya studies (Ashmore 1981; Tourtellot 1983). According to de Montmollin (1988: 43) they represent "the material correlate of a household level unit of sociopolitical organization."

*Multipatio group.* Fourteen multipatio groups were found. They correspond to the next higher level of settlement complexity above the patio group within the surveyed area. A multipatio group is a cluster of several patio groups separated by less than 100m from each other and by more than 100m of vacant terrain from other patio groups. The number of patios composing a multipatio group varies from two to five, and the number of structures from seven to sixteen.

It is uncertain whether all sites classified under the same label are functionally

equivalent, especially when considering chronologically distant periods. By the same token, we cannot always be certain that sites classified under different labels represent significantly different kinds of settlements. This problem stems principally from the fact that we have only limited control over variability in the distribution of ceramic and lithic artifacts on the ground surface and a small number of excavated contexts. Yet, the classification system allowed a more reliable classification of certain aspects of the general settlement pattern. It distinguishes, for example, between large, nucleated sites, on the one hand, and small dispersed ones, on the other. To some degree it also accounts for the differential distribution of an important array of architectural remains ranging from simple domestic residences to buildings with a more evident civic-ceremonial function. Following these criteria, 31 groups with a probable civic-ceremonial function can be suggested. These are clusters characterized by the presence of high construction volumes and by the existence of architectural types (pyramids, ball courts, civic-plazas and range structures) that could represent the nodes of important social activities for whole communities.

Although the size of the ancient city of Palenque is similar to other middle size lowland Maya urban centers, what is really striking are the differences in terms of the sheer number and density of structures present within the site core compared to its immediate surroundings.

The preliminary results from this study also demonstrate the existence during Late Classic times (A.D. 550-850) of several sub-regions outside Palenque's immediate hinterland (40 km<sup>2</sup>). These sub-regions can be defined by their different occupation histories, multiple subsets of population densities, architectural variation, causeways connecting micro-regions with the larger region, and the existence of a clearly defined set of frontier zones. These micro-zones might be indicative of the existence of potential sociopolitical groups larger than single communities, but smaller than a polity (districts or provinces).

Five micro-regions could be defined in these terms: the Palenque regional core, El Lacandón-Nututún subregion, the Chancalá Valley, the Llanuras Intermedias sub-region and, the Sierras sub-region (Fig. 2).

The first one, the Palenque regional core (the area delimited by the sites of Nututún to the east, Santa Isabel to the west and the low hills paralleling the Sierra to the north), has approximately 37 km<sup>2</sup>. This lightly settled sub-region (25 persons/km<sup>2</sup>) is characterized by its simplicity in terms of the number of architectural and settlement types. With few exceptions, sites correspond to single patio groups composed of low platforms, with twenty-eight corresponding to single mound sites. The distribution of rural house groups within Palenque's immediate hinterland cannot be fully explained as a direct result of ecological factors impinging upon farmers' decisions on where to settle. Hence, a more political framework is needed to elucidate in a more satisfactory way those processes leading to political centralization in the region.

A series of sites located on the southern bank of the river Chacamax conform the El Lacandón-Nututún subregion (delimited to the west by the site of Nututún, El Lacandón to the east and the river Chacamax to the north). El Lacandón is a small community (16

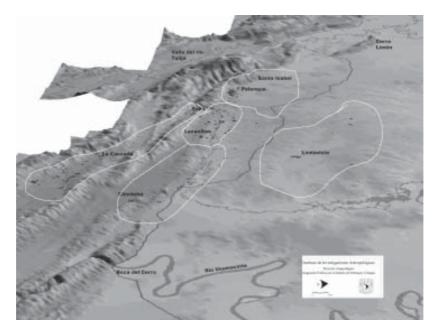


Figure 2. Comparison of settlement distribution and size within settlement limits.

ha) with a civic-ceremonial area of 3 ha. This central area includes several buildings with clear residential, administrative and ceremonial functions. In 1999, 74 structures were surveyed. El Lacandón is an important site for the understanding of early settlement dynamics. Important Late Formative-Early Classic ceramic assemblages were found during excavations in 2000 (López Bravo, personal communication 2003), a characteristic shared with Nututún and Paso Nuevo (Rands 2002). Within this region (25 km<sup>2</sup>) 480 structures distributed in 45 discrete groups were detected. This area also shows a higher structure density per km<sup>2</sup> than the one observed in the Palenque regional core (19 structures per km<sup>2</sup> compared to 9.6). The settlement clusters seem also to be more evenly distributed across the region when compared to the settlements around Palenque.

The Chancalá Valley is formed by two narrow valleys behind the first line of hills of the Sierra de Chiapas: 124 sites were located in 80 km<sup>2</sup> during the survey season of 2002. Of these, four sites correspond to civic ceremonial sites showing a more complex architectural layout and higher indexes of construction volume than the rest (Xupá, Chancalá, San Juan Chancalaíto and Reforma de Ocampo). Interestingly, the Chancalá Valley seems to have been the setting for two differentiated settlement systems that correspond to the natural division of the terrain into two separate river basins: the Ashipa river basin and the Chancalá river basin. Our survey detected a broad 15-km zone with no evidence of settlements, maybe indicating the existence of a political frontier. This "frontier" corresponds neatly with the distribution of two settlement clusters: one centered on the civic-ceremonial site of Xupá and the other gravitating around three major sites (two of them, Chancalá

and San Juan Chancalaíto, are connected by a prehispanic causeway). The discovering of a stone slab fragment containing the name of a local ruler and a toponym at the site of Chancalá might strengthen this hypothesis.

The cluster centered around Xupá is composed of 20 small architectural groups without major differences among them. Xupá itself is a site of 10.5 ha, with a concentration of important buildings in a good state of preservation. Fourteen buildings delimit an ample plaza. Both inscriptions and the abundant ceramic assemblage found at the site seem to indicate a late date for the settlement of the site. Xupá shares with a number of other sites in the region a very late occupation date (Murciélagos, Balunté periods, A.D. 750-850). Its location close to a passage through the Sierra indicates its association to the Nututún-Lacandón sub-region settlement system.

To the east, the second site cluster shows a different settlement dynamic when compared to the former. The three principal centers of the Chancalá river basin (Chancalá, 8 ha, 21 structures; San Juan Chancalaíto, 13 ha, 40 structures; and Reforma de Ocampo, 19 ha, 57 structures) probably functioned as nodal points for the 85 undifferentiated platform groups that occupied the valley. These three civic-ceremonial centers present complex architectonic layouts coupled with the presence of ball courts (San Juan Chancalaíto and Chancalá), plazas, and more elaborate building facilities.

The Llanuras Intermedias sub-region has been the subject of successive surveys through several years: according to Rands (1973; 1977) and Ochoa (1978), the archaeological evidence seems to indicate a settlement development with an architectural pattern that departs from the one that characterizes the former two sub-regions. The sites that make up this area (La Siria, Belisario Domínguez, El Barí, Cinco de Mayo, El Aguacate, Francisco Madero, Lindavista and San Joaquín) form a rather homogeneous group in terms of their chronology; all of them present ceramic assemblages belonging to Late Classic Otolúm, Murciélagos and Balunté phases (A.D. 550-850) with close ties to Palencano ceramic types. They also share a common building technique (earthen mounds) and a dispersed settlement pattern with the presence of monumental architecture. They conform to a very regular pattern with sites located 4 km away from each other and connecting the Sierras region to the Balancán area to the north. The sites in the Llanuras Intermedias sub-region form discrete population clusters congregated around settings where monumental architecture is present.

The sites located in the Llanuras Intermedias seem to indicate a settlement dynamics based on the distribution of a rather dispersed population around nuclei of monumental architecture localized discretely and regularly across the landscape. The architectural core present at these sites shows a clear modular layout: ballcourts, pyramids and platform groups forming quadrangles. The settlement regularity and the rather short and late ceramic sequence might indicate a strategy aimed at the development of an important route connecting Palenque to the Lower Usumacinta region.

The Sierras sub-region (from El Lacandón to Chinikihá in the east and the southern bank of the Chacamax river to the north) is characterized by the presence of a continuous line of settlements from Palenque to Chinikiha (located 37 km to the east). Although evidence of early occupations dating to Late Formative period have been detected at Paso Nuevo, El Lacandón and Chinikihá, this area, nevertheless, witnessed a population burst during the Late Classic period with the founding of numerous settlements connecting these three sites which denote longer occupation histories. During Murciélagos-Balunté times (A.D. 750-820) a continuous string of settlements connected Palenque and Chinikihá along the Sierra. These settlements are associated with a sacbe running eastwest beginning in the vicinity of Chinikihá and ending close to the site of El Lacandón. In general, the population figures for the Sierras sub-region seem higher than those proposed for the Llanuras Intermedias region. The population distribution in the Sierras is continuous and corresponds mainly to small platform groups with probable habitational functions. There is a salient absence of civic-ceremonial compounds in the area (with the exception of Chinikihá), with a tendency for several platform groups to cluster around groups with higher construction volumes, though lacking architectural components denoting clear civicceremonial functions.

#### Assessing settlement dynamic trends

Although the ceramic analysis is still in process, most of the sites localized within settlement survey limits can be tentatively assigned to the Late Classic Balunte period. Exceptions are Paso Nuevo and Chinikihá, where Robert Rands has extensively reported the finding of Sierra Rojo ceramics, diagnostic of Late Formative (450 B.C.-A.D. 250) and Early Classic (A.D. 250-550) assemblages and El Lacandón where an important early settlement has been explored (López Bravo, personal communication 2003). Small quantities of Sierra Rojo assemblages have also been found at Chancalá, San Juan Chancalaíto and Chancalá. Without a doubt, the presence of clear Formative (450 B.C.-A.D. 250) and Early Classic deposits in a sample of sites along the first escarpments of the Sierra de Chiapas attests to the importance of pursuing new regional investigations focused on these poorly known early periods.

In those cases where no associated surface sherds could be found or test pits excavated, a clear chronological assessment remains controversial at best, nevertheless, three moments are evident in the regional archaeological record and worthy of further analysis. The first moment (Picota-Motiepá ceramic periods: A.D. 100-550) is characterized by the development of political centralization with the founding of the ruling dynasty at Palenque and an increase of population figures within city limits.

At the same time, the development of a regional settlement hierarchy can be inferred. Although the relationship between smaller sites, such as Nututun or El Lacandon, with Palenque during early times remains unclear, the presence of similar ceramic types and their proximity to the main site might indicate the areal extension of the interaction sphere centered at Palenque.

The second transformation of Palenque's urban landscape (Otolum-Murciélagos: A.D. 550-750) corresponds to the moment of greatest political expansion of the site in the region. Population figures increase exponentially and the city reaches its maximum extent. The majority of securely dated buildings in the main zone date to this moment. Inten-

sive agricultural fields also date to the same period. This development surely had as its main goal to sustain the increasing site core population. New sites were founded in the region: Xupá and Santa Isabel. Another, El Lacandón, was abandoned.

The third transformation (Balunté: A.D. 750-850) is characterized by the settling of the territory previously vacant between minor nucleated centers in the region.

#### **Concluding remarks**

The chronology, settlement structure, and architectural patterns allowing the division of the rural region into settlement sub-regions cast doubt on the possibility of approaching rural settlement dynamics as a single regional phenomenon. Rural populations within the Palenque area might not have constituted a homogeneous unitary socio-political unit responding in similar ways to strictly top-down mechanisms impinging upon them. In this regard, the impact of the three moments in regional settlement changes described above on individual rural communities or sub-regions remains an important area of future research. On the other hand, the evidence presented thus far seems to indicate a high level of redundancy among the components of Palenque's urban and rural landscapes. The residential compounds in the city show significant formal, and probably functional, similarities among them. The most evident differences have to do with scale and possible differences of status. The size, density, and architectural complexity present at Palenque exceed in several orders of magnitude all other archaeological remains in the region. This alone bespeaks the disproportionate importance that Palenque might have held in practically every single aspect of daily life for the rural population in the region, regardless of social status or settlement type residence. Nevertheless, it would be a mistake to deny the existence of strong local networks of social obligations that integrated rural populations into socially discrete units. An understanding of the possible ways available to the myriad of small and middle size communities for integration within the greater Palenque polity must be contextualized and viewed from several scales of analysis (the household, the community and the sub-region). Most likely our main mistake is to cast the problem in terms of "either-or" scenarios, trying to understand the problem of ancient Maya political integration as either segmentary or unitary. By definition, the problem of integration is a matter of degree. It is not measured by the mere size of nucleated centers, nor by population density, but by the level of specialization of the system components.

# **Acknowledgements**

This research has been sponsored in different parts of its development by grants provided by the National Science Foundation, the Wenner-Gren Foundation, the Heinz Foundation and CONACyT.

#### REFERENCES

Ashmore, Wendy. 1981. Some Issues of Method and Theory in Lowland Maya Settlement Archaeology. In: Wendy Ashmore (ed.), Lowland Maya Settlement Patterns, Albuquerque: University of New Mexico Press, pp. 37-69. Berlin, Heinrich. 1958. El glifo emblema en las inscripciones mayas. Journal de la Societé de Américanistes 47: 111-19.

Culbert, Patrick. 1973. The Classic Maya Collapse. Austin: University of New Mexico Press.

- De Montmollin, Olivier. 1988. Settlement Scale and Theory in Maya Archaeology. In: N. J. Saunders and O. de Montmollin (eds.), Recent Studies in Precolumbian Archaeology, BAR International Series 421, pp. 63-101.

- Evans, Susan T. 1988. Excavations at Cihuatecpan. Vanderbilt University Publications in Anthropology, vol. 36. Nashville: Vanderbilt University, Department of Anthropology.
- Hellmuth, N. 1977. Cholti-Lacandon Chiapas and Peten Itza Agriculture, Settlement Pattern, and Population. In: Maya Prehistory: Studies in Memory of Sir Eric Thompson. London: Academic Press, pp. 421-448.
  Garza, Mercedes de la. 1992. Palenque. Tuxtla Gutiérrez: Gobierno del Estado de Chiapas.

García Moll, Roberto (ed.). 1991. Palenque: 1926-45. México: Instituto Nacional de Antropología e Historia. González Cruz, Arnoldo. 1998. Informe de actividades del Proyecto Especial Palenque 92-94. Manuscript on file, Centro INAH Chiapas, Tuxtla Gutiérrez.

- Grave Tirado, Luis Alfonso. 1996. Patrón de asentamiento en la región de Palenque, Chiapas. B.A. Thesis, Escuela Nacional de Antropología e Historia, México.
- Grube, Nikolai, and Simon Martin. 1998. Política clásica maya dentro de una tradición mesoamericana: Un modelo geográfico de organización política hegemónica. In: Silvia Trejo (ed.), Modelos de entidades políticas mayas, México: Instituto Nacional de Antropología e Historia, pp. 131-146.
- Liendo, Rodrigo. 2000. Palenque y su área de sustentación: Patrón de asentamiento y organización política en un centro maya del Clásico. Mexicon 23 (2): 36-42.
- ———. 2003. The Organization of Agricultural Production at a Classic Maya Center: Settlement Patterns in the Palenque Region, Chiapas, Mexico. *México: Instituto Nacional de Antropología e Historia – Pittsburgh: University of Pittsburgh (Latin American Archaeology Publications).*
- López Bravo, Roberto. 1996. Análisis de la cerámica de Palenque 92-94 (manuscript, Palenque Archaeological Project).

———. 2001. Informe Final de Actividades: Proyecto El Lacandón (manuscript). México: Instituto Nacional de Antropología e Historia, Archivo Técnico.

- Marcus, Joyce. 1976. Emblem and State in the Classic Maya Lowlands. Washington D.C.: Dumbarton Oaks Research Library and Collection.
- ————. 1993. Ancient Maya Political Organization. In: Jeremy A. Sabloff and John S. Henderson (eds.), Lowland Maya Civilization in the Eight Century, Washington D.C.: Dumbarton Oaks Research Library and Collection, pp. 111-184.
- Martin, Simon, and Nikolai Grube. 2000. Chronicle of the Maya Kings and Queens. Deciphering the Dynasties of the Ancient Maya. New York: Thames and Hudson.
- Mathews, Peter. 1991. Classic Maya Emblem Glyphs. In: T. P. Culbert (ed.), Classic Maya Political History: Hieroglyphic and Archaeological Evidence, Cambridge: Cambridge University Press, pp. 19-29.
- Mathews, Peter, and Linda Schele. 1974. Lords of Palenque the Glyphic Evidence. In: M. G. Robertson (ed.), Primera Mesa Redonda de Palenque, Part 1: 63-75. Pebble Beach: Robert Louis Stevenson School.
- Ochoa, Lorenzo (ed.). 1978. Estudios preliminares sobre los mayas de las tierras bajas noroccidentales. México: Universidad Nacional Autónoma de México.
- Rands, R. L. 1967. Ceramic Technology and Trade in the Palenque Region, Mexico. In: C. L. Riley and W. W. Taylor (eds.), American Historical Anthropology: Essays in Honor of Leslie Spier, Carbondale: Southern Illinois University Press, pp. 137-151.
  - . 1973. The Classic Maya Collapse in the Southern Maya Lowlands: Chronology. In: T. P. Culbert (ed.), The Classic Maya Collapse, Albuquerque: University of New Mexico Press, pp. 43-62.
- ———. 1974. The Ceramic Sequence at Palenque, Chiapas. In: N. Hammond (ed.), Mesoamerican Archaeology: New Approaches, London: Duckworth Pittsburgh: University of Pittsburgh Press, pp. 51-75.

 Press, pp. 159-180.

- . 1987. Ceramic Patterns and Traditions in the Palenque Area. In: P. M. Rice and R. Sharer (eds.), Maya Ceramics: Papers of the 1985 Maya Ceramic Conference I: 203-238. BAR International Series 345. Oxford.
- ————. 2002. Palenque and Selected Survey Sites in Chiapas and Tabasco: The Preclassic. www.famsi.org/ reports/97032/index.html.
- Rands, R. L., and B. C. Rands. 1957. The Ceramic Position of Palenque, Chiapas. American Antiquity 23: 140-150.
- Rands, Robert L., and Ronald K. Bishop. 1980. Resource Procurement Zones and Patterns of Ceramic Exchange in the Palenque Region, Mexico. In: Robert Fry (ed.), Models and Methods in Regional Exchange. Society for American Archaeology Papers I: 19-46. Washington D.C.
- Rice, Prudence. 1987. Lowland Maya Pottery Production in the Late Classic Period. In: Prudence Rice and Robert J. Sharer (eds.), Maya Ceramics: Papers from the 1985 Ceramic Conference II: 76-85. Cambridge: Cambridge University Press.

Riese, Berthold. 1978. La inscripción del Monumento 6 de Tortuguero. Estudios de Cultura Maya 11: 187-198.

Robertson, Merle Greene. 1983. The Sculpture of Palenque, Vol. 1: The Temple of the Inscriptions. Princeton: Princeton University Press.

———. *1985a.* The Sculpture of Palenque, Vol. 2: The Early Buildings of the Palace and the Wall Paintings. *Princeton: Princeton University Press.* 

———. 1985b. The Sculpture of Palenque, Vol. 3: The Late Buildings of the Palace. *Princeton: Princeton University Press.* 

- Ruz Lhuillier, Alberto. 1973. El Templo de las Inscripciones. México: Instituto Nacional de Antropología e Historia.
- Schele, Linda. 1991. An Epigraphic History of the Western Maya Region. In: T. Patrick Culbert (ed.), Classic Maya Political History: Hieroglyphic and Archaeological Evidence, Cambridge: Cambridge University Press, pp.72-101.
- Schele, Linda, and David Freidel. 1990. A Forest of Kings: The Untold Story of the Ancient Maya. New York: William Morrow.

Schele, Linda, and Peter Mathews. 1998. The Code of Kings. New York: Scribners.

Smith, Michael. 1992. Archaeological Research at Aztec-Period Rural Sites in Morelos, Mexico, Vol. I. University of Pittsburgh Memoirs in Latin American Archaeology No.4. Pittsburgh: University of Pittsburgh.

Tourtellot, Gair. 1983. An Assessment of Classic Maya Household Composition. In: E. Z. Vogt and R. M. Leventhal (eds.), Prehistoric Settlement Patterns, Albuquerque: University of New Mexico Press, pp. 35-54.

West, R. C., et al. 1969. The Tabasco Lowlands of Southern Mexico. Coastal Studies Series 27. Baton Rouge: Lousiana State University.

#### POVZETEK

Arheološka študija distribucije naselbin na območju Palenqueja, Chiapas, Mehika

Preučevanje kulture Majev kaže, da je bila za predšpansko majevsko družbo značilna visoka raven politične in ekonomske razslojenosti, obenem pa tudi naglašena funkcionalna homogenost. Zato so vprašanja, ki zadevajo tako naravo različnih segmentov, ki so sestavljali majevsko družbo, kot tudi njene integrativne mehanizme, temeljnega pomena v argumentih, ki jo opredeljujejo kot segmentarno ali unitarno. S pomočjo podatkov, zbranih med nedavno opravljenimi študijami regionalnega naselbinskega vzorca na območju Palenqueja, avtor obravnava splošno distribucijo naselbin, na osnovi česar skuša sklepati o vidikih strukture in razvoja mehanizmov, ki so združevali različne družbene enote v različnih etapah razvoja Palenqueja.

Ključne besede: arheologija Majev, naselbinski vzorci, Palenque, družbena organizacija.