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BETWEEN THE CENTER AND THE PERIPHERY IN THE LAND OF THE "IK" LORDS: RECENT INVESTIGATIONS AT THE SATELLITE SITES OF MOTUL DE SAN JOSÉ, PETÉN

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From the very beginning, the primary goal of the Motul de San José Archaeological Project, headed by Antonia E. Foias of Williams University, was to test methods to see how economy and politics integrated in Motul de San José and in its political entity during the Late Classic period (Figure 1; Folias 1999, 2003). To date, most field investigations –including reconnaissance, surveys, test units, investigation of structures and a whole variety of environmental and ecological studies- concentrated on Motul de San José (Emery 2003, Foias 2003). These investigations revealed that Motul was a small to middle-sized Classic Maya center. The reconnaissance and survey carried out between 1998 and 2001 helped to locate over 200 structures within an area of 1.7 km2 (Foias 2003). The ceremonial epicenter extends over an area of 0.4 km2, and includes an Acropolis or royal palace that covers over 83.000 m3, a possible ceremonial north-south road, six stelae, several temples and multiple elite residences. The settlement, composed of elite and standard residences, covers an additional area of 1.2 km2, with more peripheral settlements that extend several more kilometers towards north and east (Foias 2003).

Test pits in this area have revealed that Motul de San José was occupied from the Middle Preclassic (BC 600-300) to the Early Postclassic (AD 950-1200, Foias 2003) periods. However, and clearly, the occupational peak at the site occurred during the Late Classic period (AD 650-830) when Motul was one capital of the political entity commonly referred to as an "Ik" entity, due to its distinctive Emblem Glyph (Foias 2000, 2003; Marcus 1976). At that time, Motul probably was as well one of the sources of the famous polychromatic "Ik style" ceramics (Reents-Budet 1994). Though the existing knowledge about Motul has been improved with this and other investigations, it is quite clear that in order to achieve some of our objectives we had to expand the scope of our studies. Any investigation proposing the study of a topic so wide and involving complexities such as political economics should be regional in scope and holistic in perspective (Montmollin 1988). This is a constant in the Maya lowlands, where residential dispersion, environmental heterogeneity (Fedick 1996) and possibly a remarkable degree of rural autonomy in the production of sustenance (Masson 2002:2), were the basic attributes of the population we are now studying. Therefore, it has been suggested that the vertical and horizontal integration of such society may have demanded a system of "intricate complexity" (Freidel 1981:377).

Since 2001, the Motul de San José Archaeological project has been in the process of initiating regional investigations in the area around Motul, one that may have formed the rural component of entity. Mostly, these investigations have been inductive in nature, primarily designed to obtain a better understanding of the research area and to create the infrastructure for future investigations oriented towards specific problems. To this date, regional investigations have included preliminary studies at three sites –Chakokot, Buena Vista and Akte- and one more comprehensive investigation in a fourth site –La Trinidad de Nosotros. This paper presents a brief summary of such investigations with some of the preliminary results and points of interest.

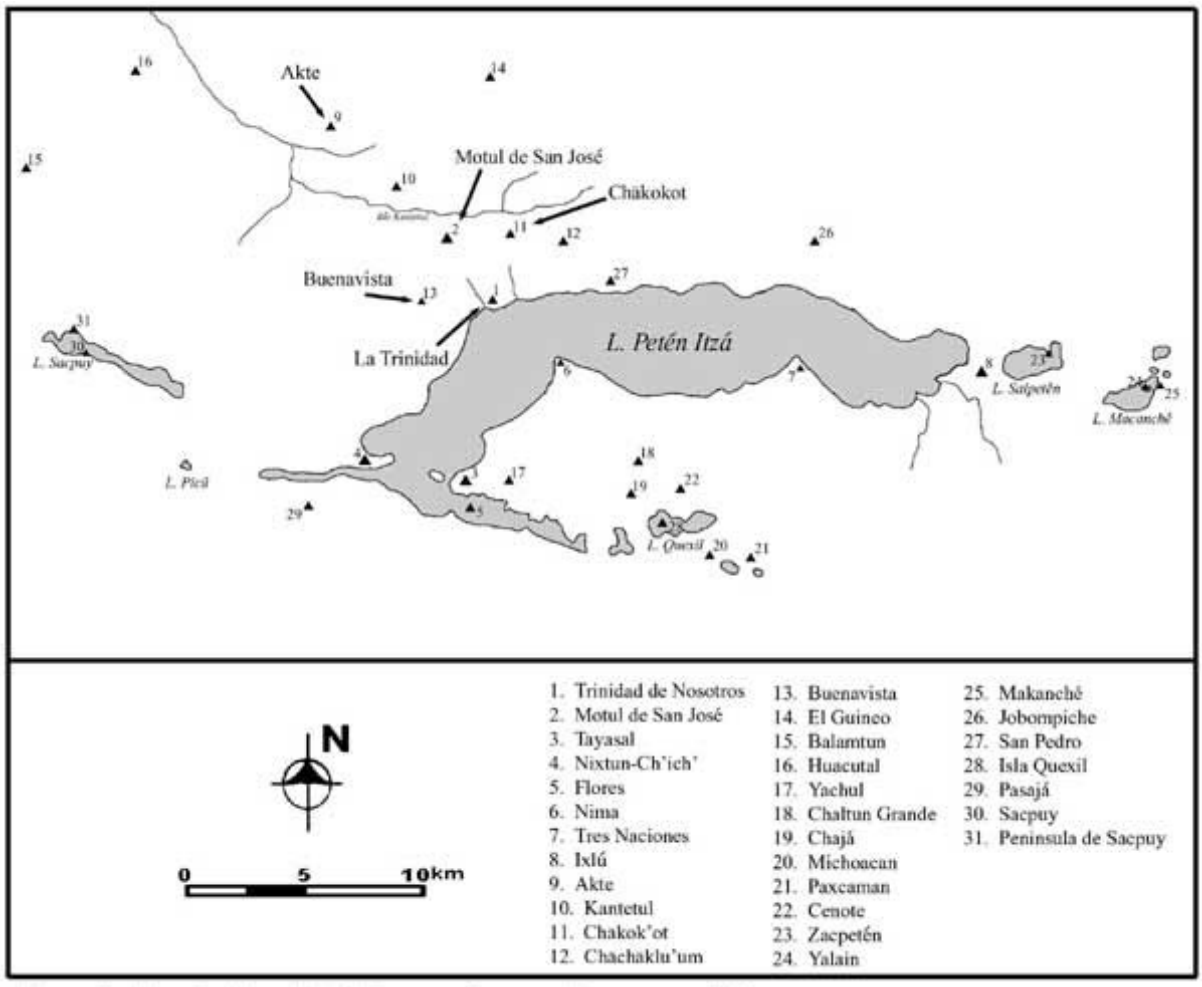

Figure 1. Map of Lake Petén Itzá with some archaeological sites.

REGIONAL INVESTIGATIONS OF THE MOTUL DE SAN JOSE PROJECT IN 2001

CHAKOKOT

The site of Chakokot is located 2 km east of the Motul de San José Main Plaza, and was surveyed in 2001 as part of the reconnaissance operations of the East Transect (Moriarty *et al*. 2002). Chakokot (Figure 2) is a rather small site, consisting of 59 structures arranged around a small plaza on a flat hill with a view of the *bajo* that

separates it from Motul. A series of 17 test units excavated in 2001 revealed two major occupations dated to the Late Preclassic and Late Classic periods. Chakokot features two basic characteristics that are found with some frequency in the Motul de San José area. First, the main structure of this site is a 10 m tall temple that forms the east side of a wide residential group. Groups with a similar layout were defined as corresponding to the Plaza Plan 2 in Tikal (Becker 1971, 2003), where they form a significant portion of residential groups.

Within the Motul de San José Area, groups with this type of pattern display an interesting distribution. While they are common in the epicenter of Motul, where at least seven groups are forming this type of pattern, these groups have not been found in the peripheral areas. Nonetheless, the satellite centers investigated or visited generally have this type of pattern as their main residential group. Although we are now far from being prepared to offer an interpretation about their distribution, future comparisons between these types of groups within the Motul area could be of great importance for gaining knowledge about the political entity of Motul.

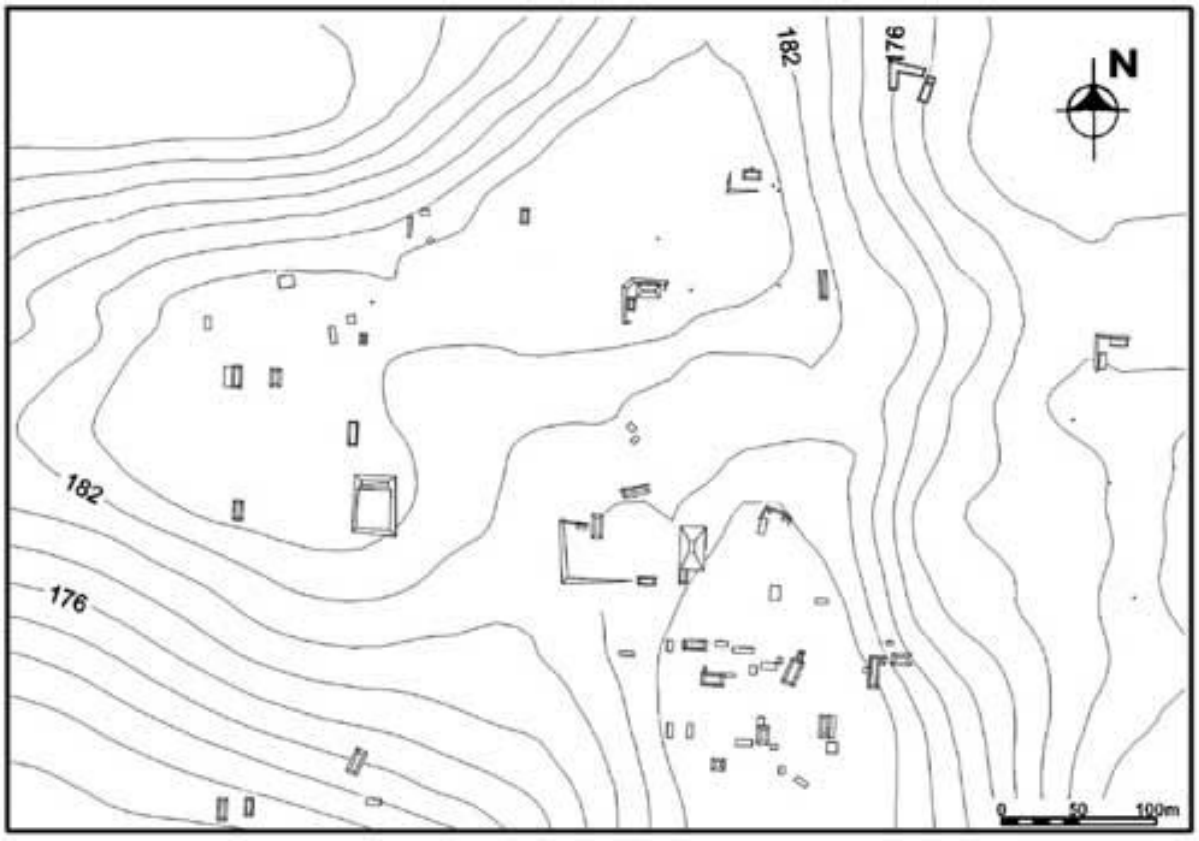

Figure 2. Preliminary map of the archaeological site of Chakokot.

The second basic characteristic exemplified for Chakokot is its association with specific kinds of soils. As part of the regional investigations of the Project, a study of the system of soil classification used by the Itzas at San José has been conducted (Jensen *et al*., n.d.; Moriarty 2002). This classification identifies five basic kinds of soils fit for agriculture (Figure 3): *Sacnis, Ek Luum, Ek Luk, Kan Luum*, and *Chachak Luum*. Like soils have a variety of uses, this classification provides a good tool to ascertain the quality of soils in the Motul area. Among these, for instance, *Sacnis*

and *Ek Luum* are generally acknowledged to be the more useful ones for milpa crops.

Itzaj	**Spanish**	**English**
Säk Ni'is	*Tierra Blanca*	*White Earth*
Ek Luum	*Tierra Negra*	*Black Earth*
Ek Luk	*Barro Negro*	*Black Clay*
Kän Luum	*Tierra Amarilla*	*Yellow Earth*
Chächäk Luum	*Tierra Colorada*	*Read Earth*

Figure 3. Names of different soils fit for agriculture in San José.

The Classic settlement in the Motul area is almost invariably associated with one of the two soils. The site of Chakokot, for instance, is situated on *Sacnis* deposits generally known to be the very best for a milpa. Although additional research on pedology and settlement patterns is needed, the initial evidence of correlation between these soils and the localization of the settlements is suggestive, both for the intra-settlement nature and use of the earth, and for the ancient settlement strategies of the Maya.

BUENA VISTA

During the 2001 field season, preliminary investigations were undertaken at the site of Buena Vista (Figure 4). Located 3 km at the southwest of Motul de San José, the mapped portion thereof consists of 13 structures around a small plaza with a small temple on the east side, placed on top of a large hill. Buena Vista was initially a much larger site, but nowadays most of its ancient surface lies under the neighborhood of Nuevo San Juan.

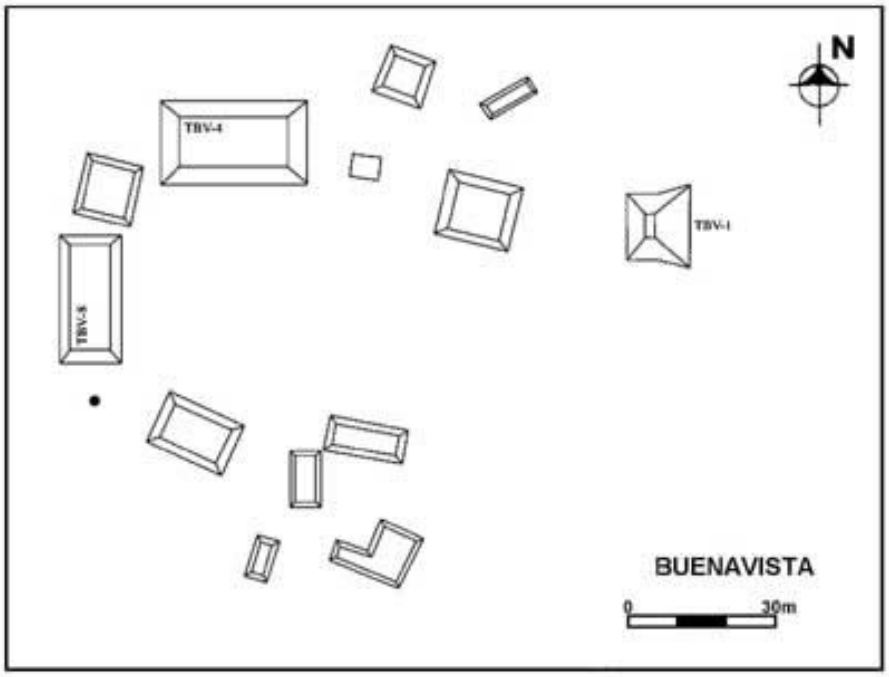

Figure 4. Preliminary map of the archaeological site of Buena Vista.

Excavations carried out by Castellanos and Guffey (2002) revealed a good number of interesting details in regard to its occupation. Excavations in two mounds of this site –Structures 4 and 8- allowed for recovering the remains of platforms that were likely occupied from the Middle Preclassic to the Late Classic periods, with a much lesser occupation verified during the Early Postclassic period. The residents of these structures were probably involved in the production of flint tools, just like in the adjacent hill, where Scott Brian recently identified a flint source and extensive evidence of a workshop.

Perhaps the most interesting discovery verified in Buena Vista was the identification of a possible Pre-Mamom level (early Middle Preclassic period). Foias (2003:219) suggested that the materials in this level may correspond to the Eb complex of Tikal or the Xe complex of Altar de Sacrificios. Although the excavations in the lowest levels of the site remained unfinished due to time restraints, and the sample is very small, future investigations could provide abundant and crucial information about the earlier occupation in the area of Motul de San José.

REGIONAL INVESTIGATIONS OF THE MOTUL DE SAN JOSÉ PROJECT IN 2002

AKTE

In 2002, the site of Akte was the main focus of investigations of the Motul de San José Archaeological Project. The investigations at Akte sought to find an answer for two main questions:

- The first, although a good number of authors have suggested that Motul de San José may have been one of the many *Ik* sites, few have suggested other possible candidates.

- The second, although it is probable that at least some of the famous *"Ik style"* polychromes were produced in Motul de San José, it has been suggested that at least five other workshops engaged in the production of this pottery may have existed (Reents-Budet 1994).

Therefore, and considering that Akte is located exactly 7.1 km northwest of Motul and is widely known for its carved monuments (Graham 1982; Mayer 2000), it would possibly be an obvious candidate to be identified as an additional alternative for an *"Ik"* site.

Research at Akte during 2002 was of a preliminary character and consisted in surveying and test pitting the central portion of the site (Figure 5). This zone covers an area of 35 hectares, with 32 structures placed on top of a heavily modified hill. Besides, structures unmapped to this date were found widely spread across the surrounding area.

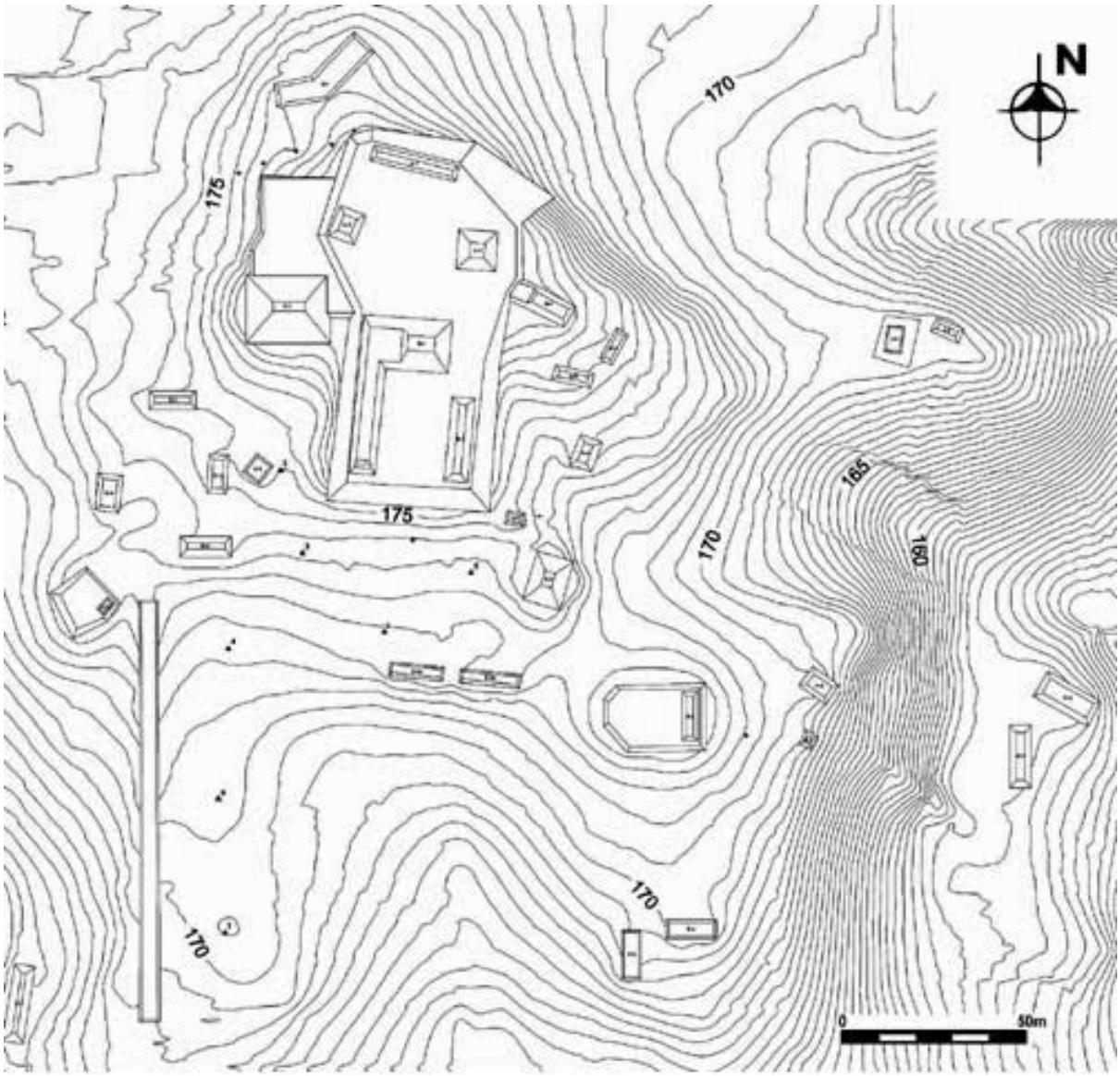

Figure 5. Preliminary map of the archaeological site of Akte.

A water spring can be observed from the hill, as well as the confluence of the Kantetul and Akte rivers. The analysis of ceramic materials conducted by Suzanna Yorgey suggests that Akte had two main occupations dated to the Late Preclassic and Late Classic periods, with overlapping occupations during the Terminal Classic and Early Postclassic periods.

Perhaps, the most surprising result of the research at Akte is the number of stone monuments found. When Ian Graham visited the site in the 1960's, he identified two monuments: Stela 1, the best preserved at the site, and Stela 2, a much fragmented monument. During the initial reconnaissance in 2001 (Moriarty and Wyatt 2002), and the survey in 2002, an additional assemblage of four, probably five monuments was identified. Besides, one additional stela may have been stolen from the site sometime in the past decade.

Although all the monuments are heavily eroded, a few details have been preserved. The front side of Stela 1, for instance, depicts a standing male figure, with the

posture and garments usually associated with the Late Classic divine lords. One very fragmented date from the Long Count on the opposite side of the stela suggests a date corresponding to the final part of the VII century, or the mid-VIII century AD.

In 2003, a short follow-up season was conducted to provide a better context for their locations, and to spot other better preserved texts. To this purpose, three monuments were excavated and turned over. Near the base of two of the stelae – Stela 1 and Stela 3- there are irregular concavities cut in the bedrock, which probably served to provide the foundations to the stelae bases. Although the base of Stela 1 seems to have been disturbed at some recent time, the basal area of Stela 3 appears to be untouched, with a large amount of artifacts. For example, in this context 44 obsidian flakes were recovered, probably placed there as a cache when the stela was erected.

Interestingly, excavations within this area and the disturbed part of Stela 1 led to the recovery of certain Early Postclassic ceramic concentrations. Even though the contexts of the stelae varied in degree of disturbance and included certain amounts of earlier ceramics, the mix with ceramics of the final period around the stelae led to several interesting issues. One is the possibility that the monuments were relocated in Akte, probably brought from some site elsewhere, during the Postclassic period. However, this possibility cannot be considered as final until the area of Motul de San José is known in full detail.

REGIONAL INVESTIGATIONS OF THE MOTUL DE SAN JOSÉ PROJECT IN 2003

LA TRINIDAD DE NOSOTROS

In 2003, the main focus of the regional investigations was switched to the site of La Trinidad de Nosotros. La Trinidad, or *Sik'u* (in Itzaj Maya), is located at the north shore of Lake Petén Itzá, 2.6 km southeast of Motul de San José, and close to the middle point of the north arm of the lake.

Investigations at La Trinidad were focused on its possible function as an ancient Maya port. The identification of La Trinidad as an ancient port is based upon several lines of evidence, including its strategic localization, the presence of port facilities, and its historic use. La Trinidad rests on the closest point of the Lake to Motul, as well as to the Kantetul River, which eventually joins the San Pedro Mártir River. In addition, local informants claim that La Trinidad is situated at the base of a natural route across the field, north of the lake. If Lake Petén Itzá formed an important part of the trade routes, then La Trinidad may have been well located to participate in, and to take advantage of, this commerce (Rice 1996).

Besides, the strategic position of La Trinidad is enhanced by the physical setting. Along the north shores of Lake Petén Itzá, several stepped natural terraces descend to a rocky beach. At La Trinidad, however, the sediments of a brook have created an extended swampy beach, perfect for canoes and other lacustrine boats willing to go ashore. In turn, this situation is also enhanced by a narrow peninsula that extends off the beach, making of it a protected harbor. Although many of these characteristics

are the result of natural processes, one of the goals of the 2003 field season was to ascertain whether the extension of this port was natural or whether it was a construction of the ancient Maya.

Finally, during the first half of the XX century, during the boom of gum, La Trinidad was one of the main *chiclero* ports in the north shores of Lake Petén Itzá. Local informants claim that gum loads were transported from very remote camps, like Uaxactún and Dos Aguadas, to La Trinidad, where they were unloaded in canoes and barges to be further sent to Isla de Flores.

PORT MODELS

As a way of orientating the field seasons at La Trinidad and of complementing the investigations at Motul de San José, the field work is focused on putting to test a number of port models and coastal sites. Three such models are presented below:

Model 1. Sites for Extraction of Coastal Resources

At least basically, La Trinidad may have functioned as a site wherefrom to "extract coastal resources". Such coastal sites functioned primarily to exploit "coastal sustenance sources" (Andrews 1990:162). These sites have been identified based on evidence of fishing, salt production, the hunting of aquatic birds or the general collection of other aquatic resources. Though probably coastal sites were engaged in the constant trade of consuming resources with the nearby inland centers, in general, coastal sites are not characterized by a high degree of commitment in long distance exchange (Andrews 1990; Graham and Pendergast 1989).

Model 2. Transfer Ports

At a slightly more complex level, La Trinidad may have functioned as a "transfer port". Such ports are primarily devoted to providing transportation services, working as stations in long distance trade, and as places where commodities were changed from routes of water transportation to terrestrial transportation or vice versa (Andrews 1990: 163-166; Guderjan 1995). These ports were deeply engaged in long distance exchange, though only in terms of providing transportation services. Normally, the distribution of commodities was carried out at other centers connected with the transfer port through transportation networks.

Model 3. Specialized Trading Ports

Finally, and at a much higher level of complexity, La Trinidad may have functioned as a "specialized trading port". Such ports, in their character of transfer ports, provided as well transportation services but at a larger scale. Moreover, these ports were central nodules in long distance exchange networks and provided a variety of managerial and logistical services. Specialized trading ports were crucial points for the distribution of trading articles (Andrews 1990: McKillop 1996).

Understanding the degree through which such models apply to the different chronological occupations of La Trinidad and their comparative perspective may help

to gain knowledge about the political and economical operations of Motul de San José during the Late Classic period. If, for instance, long distance trade was highly centralized under the tutelage of the *"Ik lords"* during the Late Classic, La Trinidad may have functioned as a transfer port. If long distance commerce was not that much centralized in Motul de San José, then La Trinidad may have functioned as a specialized trading port.

PRELIMINARY RESULTS OF THE 2003 FIELD SEASON

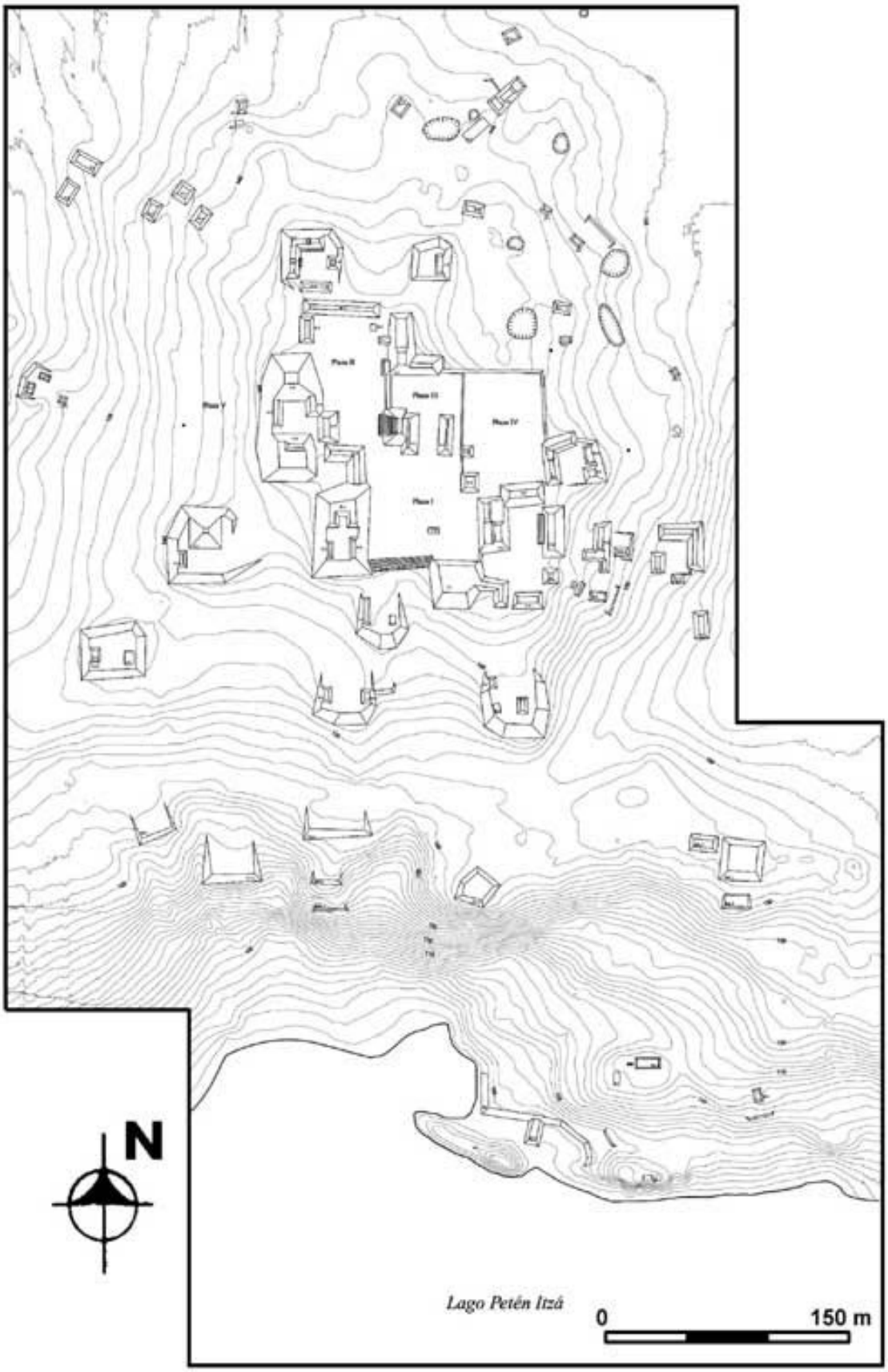

Figure 6. Preliminary map of the archaeological site La Trinidad de Nosotros.

Lake Petén Itzá

The 2003 field season at La Trinidad was designed as the first of several research seasons. First, the survey revealed that La Trinidad (Figure 6) was a secondary site within the area controlled by Motul de San José. Within an area of approximately 35 hectares, over 115 structures and other traits were identified. This area, however, did not cover the entire site, and based on the reconnaissance of the surrounding area, it is estimated that once the map of La Trinidad is completed in 2005, it will involve an area of approximately 55 hectares, including around 150 structures.

Settlement at La Trinidad may be divided into two semi-discrete zones (Figure 7):

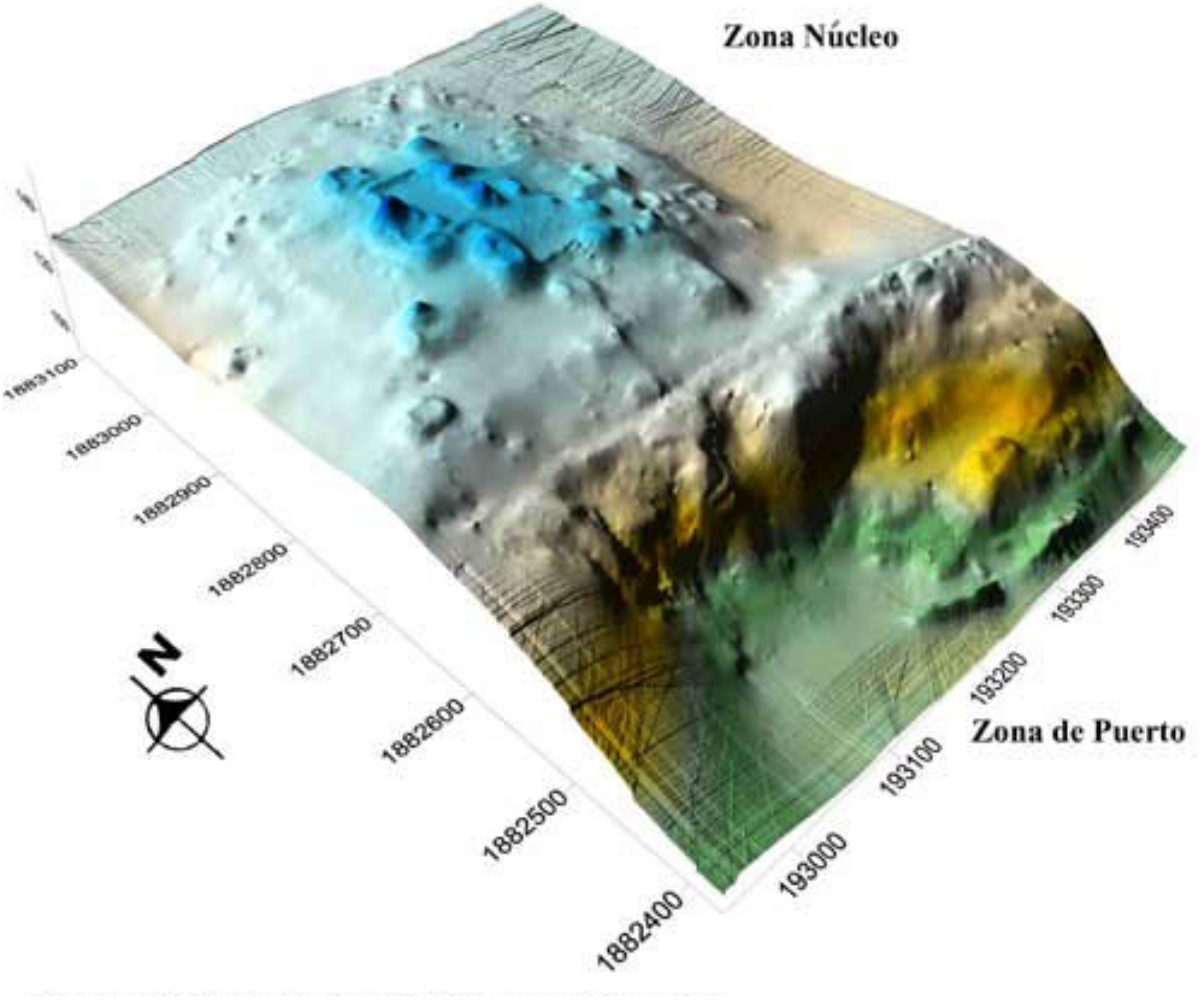

Figure 7. Three-dimensional map of La Trinidad.

- A zone with the architectural core located at a height of 40 m with a view to Lake Petén Itzá.

- A slightly differentiated settlement area, focused on the lake, situated along the lake shore and on the main slope.

The core zone (Figure 8) consisted of at least 80 structures arranged around a series of five formal plazas. Although the vast majority represents residential

structures, La Trinidad includes a considerable amount of public and ceremonial architecture for a small site. Structure A-1, the main structure at this site, is a radial pyramid of 12 m with two appendixes. An additional important trait is Structure E-1, one that may have had, in origin, a circular plan. However, the most interesting finding was the identification of the Ballgame at La Trinidad.

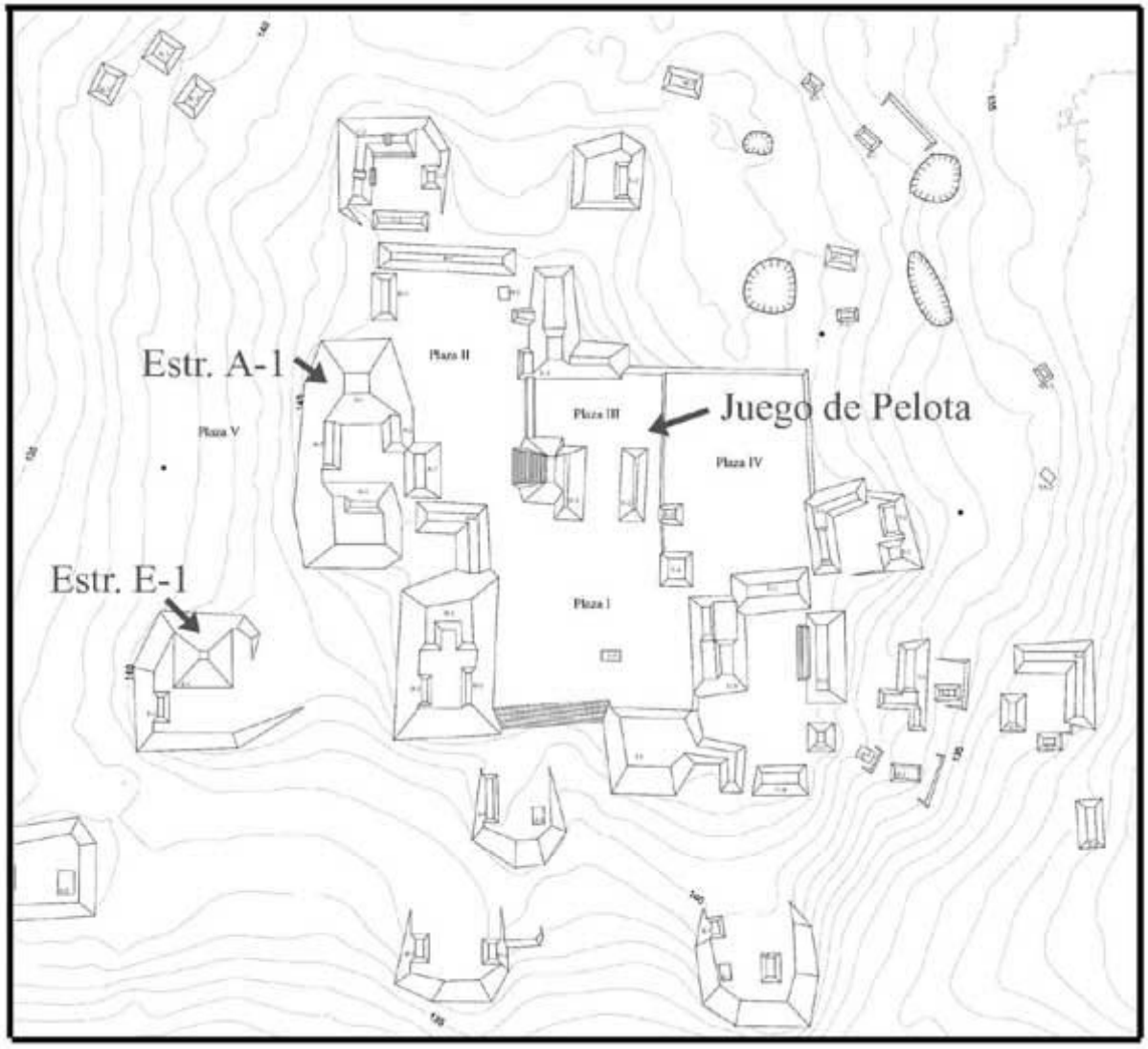

Figure 8. Core zone, La Trinidad.

The Ballgame at La Trinidad (Group F) has a "T"-shape with lateral structures 25 m long and a small temple annexed to the West Structure. Based on a single test pit excavated at the court, the last construction phase dates to the Late Classic period, although a last modification, occurred perhaps during the Terminal Classic, may have taken place there. The identification of the Late Classic Ballgame at La Trinidad is particularly interesting, as similar complexes have not been identified in Motul de San José. If, like a good number of authors have argued (Gillespie 1991:340), the Ballgames worked as a mechanism for preserving the boundaries between political entities, then the presence of a court at La Trinidad could be pointing to a special politico-religious function for the site at the heart of the political entity of Motul.

The coastal settlement at La Trinidad consisted of a number of platform and terraces that descend to the lake from the upper portion of the sites (Figures 9 and 10). On the lake shores, like previously noted, several traits defined the port as a possible breakwater, a dock and an inner wall for the port. One of the main goals of the 2003 season consisted in defining whether these traits were natural or if instead, they were built by the ancient Mayas.

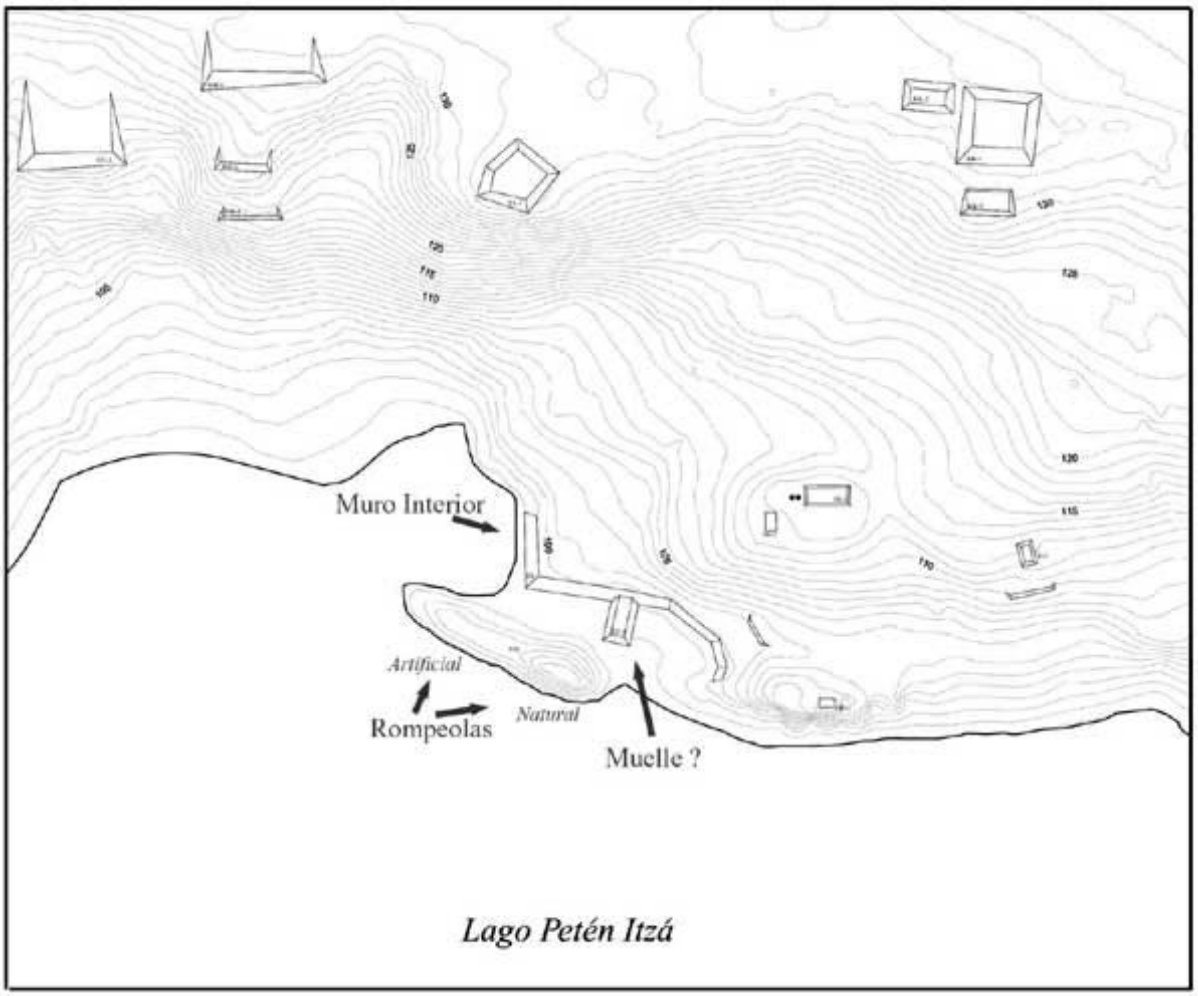

Figure 9. Coastal zone, La Trinidad.

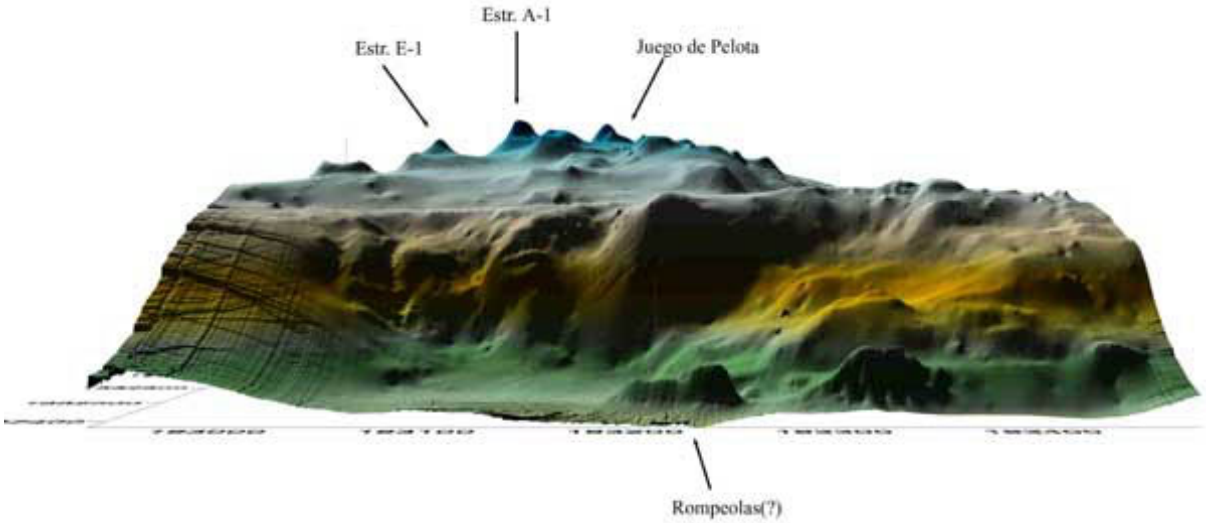

Figure 10. Three-dimensional map of La Trinidad: View from the lake.

Based on the port excavations by Ellen Spensley (2004), there is good reason to believe that the port of La Trinidad was heavily modified by the ancient Mayas. Excavations at the inner wall of the port defined that it was an artificial platform, originally covered by a retaining wall. This platform was built at least during the Late Classic period. Other excavations in the area may have found the original port level covered with artifacts, 0.75 m below the present surface.

Excavations at the narrow peninsula that protects the port established that it was partially artificial. The third eastern portion of the peninsula was a natural trait, which featured stuccowork at some points during the occupation of the site. Besides, the other low two thirds of the peninsula could be altogether artificial. Several tests in this area found a thick mix of clayish soil and massive refill stones. It is hypothesized that the western portion of the peninsula may have been an artificial extension built to protect the port from the natural breaking waves that moved along a south to southeast direction.

Finally, one of the surprises of the field season at La Trinidad was the long and complex stratigraphic deposit. Altogether, 29 excavations were devoted to gaining knowledge about chronology at La Trinidad. With the excavations, it was established that La Trinidad was occupied from the Middle Preclassic period (BC 600-300) to the Early Postclassic period (AD 950-1200), with two major occupation peaks during the Late Mamom-Early Chicanel phases (BC 350), and the Late Classic (AD 650-830). A considerable amount of construction was executed across the site during both periods, and most of the structures tested in 2003 included phases corresponding to those two periods. Also, La Trinidad featured relatively significant occupations during the Terminal Classic and the Early Postclassic periods. Structures G-1 and C-1 of the Late Classic, excavated in 2003, had evidence of occupation and modification during the Terminal Clasic period. Although the Early Postclassic occupation was primarily limited to the lake shores, this area was heavily occupied during this interval.

DISCUSSION

Although it is premature to define what kind of port La Trinidad was, or how its function might have changed throughout time and in relation with the events that unfolded in Motul de San José, the preliminary results are promising. For example, the presence of a relatively large amount of public plaza spaces within the zone of the site core –La Trinidad has five public plazas covering a total area of 17.000 m2-, as well as the presence of the Ballgame, tentatively dated to the Late Classic period, suggest a significant role played by La Trinidad in the political entity of Motul. Besides, the presence of clearly artificial port traits, no doubt identify La Trinidad as an ancient Maya port.

The function of the port for La Trinidad may also be inferred as of the nature of the artifacts recovered in 2003. Although the frequency of raw materials for trading articles should not be overemphasized, because these represent almost 2000 years of occupation, there are several suggestive indications for such a consideration. Imported artifacts such as obsidian and exchange ceramic wares were recovered in rather high frequencies. Almost 600 obsidian artifacts, for instance, were recovered in 2003. Although final conclusions must wait for a more detailed analysis, the density of obsidian and other imported goods seem to favor La Trinidad over other sites in the area of Motul de San José.

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REFERENCES

Andrews, Anthony P.

1990 The Role of Trading Ports in Maya Civilization. In *Vision and Revision in Maya Studies* (edited by F.S. Clancy and P.D. Harrison), pp. 159-167. University of New Mexico Press, Albuquerque.

Becker, Marshall J.

1971 *The Identification of a Second Plaza Plan at Tikal, Guatemala, and its Implications for Ancient Maya Social Complexity.* Ph.D. Dissertation, Department of Anthropology, Harvard University, Cambridge.

2003 Plaza Plans at Tikal: A Research Strategy for Inferring Social Organization and Processes of Cultural Change at Lowland Maya Sites. In *Tikal:*

Dynasties, Foreigners, & Affairs of State (edited by J.A. Sabloff), pp. 253-280. School of American Research Press, Santa Fe.

Castellanos, Jeanette E., and Francine Guffrey
2002 Excavaciones en un centro secundario de Motul de San José: Buena Vista. In *Proyecto Arqueológico Motul de San José Informe #4: Temporada de Campo 2001* (edited by A.E. Foias), pp. 67-85. Williams University, Williamstown.

Emery, Kitty F.
2003 Natural Resource Use and Classic Maya Economics: Environmental Archaeology at Motul de San José, Guatemala. *Mayab* 16: 33-48.

Fedick, Scott L. (ed)
1996 *The Managed Mosaic: Ancient Maya Agriculture and Resource Use.* University of Utah Press, Salt Lake City.

Foias, Antonia E.
1999 Introducción: Proyecto Arqueológico Motul de San José. In *Proyecto Arqueológico Motul de San José Informe #1: Temporada de Campo 1998* (edited by A.E. Foias), pp. 1-8, Williams University, Williamstown.

2000 Entre la política y la economía: Resultados preliminares de las primeras dos temporadas del Proyecto Arqueológico Motul de San José. In *XIII Simposio de Investigaciones Arqueológicas en Guatemala, 1999* (edited by J.P. Laporte, H. Escobedo, A.C. Suasnávar and B. Arroyo), pp. 945-973. Museo Nacional de Arqueología y Etnología, Guatemala.

2003 Perspectivas teóricas en las dinámicas del estado Clásico Maya: Resultados Preliminares del Proyecto Eco-Arqueológico Motul de San José, 1998-2003. *Mayab* 16: 15-32.

Freidel, David A.
1981 The Political Economics of Residential Dispersion among the Lowland Maya. In *Lowland Maya Settlement Patterns* (edited by W. Ashmore), pp. 371-382. University of New Mexico Press, Albuquerque.

Gillespie, Susan D.
1991 Ballgames and Boundaries. In *The Mesoamerican Ballgame* (edited by V.L. Scarborough and D.R. Wilcox), pp. 317-346. University of Arizona Press, Tucson.

Graham, Elizabeth, and David M. Pendergast
1989 Excavations at the Marco Gonzalez Site, Ambergris Cay, Belize, 1986. *Journal of Field Archaeology* 16: 1-16.

Graham, Ian
1982 Corpus of Maya Hieroglyphic Inscriptions, Vol. 3, Part 3: Yaxchilan. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge.

Guderjan, Thomas A.
1995 Maya Settlement and Trade on Ambergris Cay, Belize. *Ancient Mesoamerica* 6: 147-159.

Jensen, Christopher T., Matthew D. Moriarty, Richard E. Terry, Kris D. Johnson, Kitty F. Emery and Sheldon D. Nelson
n.d. Soils Resources of the Motul de San José Maya: Correlating Modern Itza Maya Soil Classification and Soil Science within a Classic Maya Archaeological Zone. Manuscript submitted to *Geoarchaeology* magazine.

Marcus, Joyce
1976 *Emblem and State in the Classic Maya Lowlands.* Dumbarton Oaks Research Library and Collection, Washington, D.C.

Masson, Marilyn A.
2001 Introduction. In *Ancient Maya Political Economies* (edited by M.A. Masson and D.A. Freidel), pp. 1-30. Alta Mira Press, New York.

Mayer, Karl-Herbert
2000 Stela 1 of Acte, Peten. *Mexicon* XXII (4): 72-74.

McKillop, Heather
1996 Ancient Maya Trading Ports and the Integration of Long-Distance and Regional Economies: Wild Cane Cay in South-Coastal Belice. *Ancient Mesoamerica* 7: 49-62.

Montmollin, Olivier de
1988 Settlement Scales and Theory in Maya Archaeology. In *Recent Studies in Pre-Columbian Archaeology* (edited by N.J. Saunders and O. de Montmollin), pp. 63-104. BAR International Series 421. BAR Press, Cambridge.

Moriarty, Matthew D.
2001 Notas preliminaries sobre la clasificación indígena de suelos en San José, Petén, Guatemala. In *Proyecto Arqueológico Motul de San José, Informe #4: Temporada de Campo 2001* (edited by Antonia E. Foias), pp. 131-135. Williams University, Williamstown.

Moriarty, Matthew D., Jeannette E. Castellanos and Antonia E. Foias (ed)
2004 *Proyecto Arqueológico Motul de San José, Informe #6: Temporada de Campo 2003.* Tulane University, New Orleáns.

Moriarty, Matthew D., Fredy Ramírez, Ellen Spensley and Jeffrey Buechler
2002 Reconocimiento, mapeo y sondeo en la periferia de Motul de San José: El Transecto Este. In *Proyecto Arqueológico Motul de San José, Informe #4: Temporada de Campo 2001* (edited by A.E. Foias), pp. 86-103. Williams University, Williamstown.

Moriarty, Matthew D., and Andrew Wyatt
2003 Reconocimiento preliminar de algunos sitios menores en la zona de Motul de San José. In *Proyecto Arqueológico Motul de San José, Informe #4, Temporada de Campo 2001* (edited by A.E. Foias), pp. 104-107. Williams University, Williamstown.

Reents-Budet, Dorie J.
1994 *Painting the Maya Universe: Royal Ceramics of the Classic Period.* Duke University Press, Duke University Museum, Durham.

Rice, Don S.
1995 Hydraulic Engineering in Central Peten, Guatemala: Ports and Inter-Lacustrine Canals. In *Arqueología Mesoamericana: Homenaje a William T. Sanders* (edited by A. Guadalupe Mastache *et al.*), pp. 109-122. INAH, México.

Spensley, Ellen
2004 Excavaciones en el area de Puerto en La Trinidad de Nosotros: Operación 2. In *Proyecto Arqueológico Motul de San José, Informe #6, Temporada de Campo 2003* (edited by M.D. Moriarty, J.E. Castellanos, and A.E. Foias), pp. 105-132. Tulane University, New Orleans.