

Before the End of the World: archaeological investigations about Maya Terminal Classic processes on the Middle Candelaria River, Campeche, Mexico

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Abstract: After my undergraduate studies in the Faculty of History (Archaeology Section) of the "Babeş-Bolyai" University in Cluj-Napoca, Romania, after my graduate studies in Mexico-City and my employment as full-time professor-researcher at the University of Zacatecas in northern Mexico, I continued my investigations about certain aspects of the history and social dynamics of the Maya society in one of its poorly-known regions: the southwest of the Yucatan Peninsula, in the southern part of the state of Campeche, along the Candelaria river and near to the Guatemalan border; a research commenced in 2003. Maya culture is, for sure, one of the most famous, spectacular and public manifestations among the ancient human societies. I intentionally avoid the word "civilization" because that one can be considered as an effect of the racist, Eurocentric and colonialist point of views. This amazing culture developed during at least two millennia in a fascinating natural environment full of difficulties and challenges. Despite the great amount of anthropological, archaeological, historical, ethnographic or linguistic research undertaken along more than a century in the jungles and savannas of Mexico, Guatemala, Belize, El Salvador or Honduras, there are still empty spots on the map of our relevant knowledge about this ancient society. Traditionally, archaeology focused more on spectacular settlements, on the sites full of monumental pyramids, plazas, platforms and elite residential centers, leaving aside the more humble settlements, the secondary centers and rural areas. Archaeologists' attention oriented more toward the so-called "Classic" period (3rd to 9th centuries A.D.), when the architectural, sculptural and epigraphic climax gave birth to the most impressive monuments. I had at least three initial reasons to start this project in that remote area of the Candelaria River, in a zone characterized by wetlands, swamps and anthropic savannas. First, because I noticed the necessity for a multi-site regional investigations meant to fill a great regional and theoretic gap in the Lowlands Maya archaeology. Second, the need to study a less monumental, less spectacular zone, to understand more deeply second-range settlements and rural sites. Third, I looked for answers in a region that had previously captured my attention several years before. Starting from the settlement known as El Chechen, the surveys led to the discovery of four important archaeological sites apparently dated to the end of the Classic period. After a couple of seasons focused on the use of surface archaeology techniques (air photos, usual and digital cartography, GPS, GIS, surface material collecting), we started the detailed topographic survey of the sites and the elaboration of digital maps. During the topography of the site called El Astillero, we noticed the presence of human bones into the profile cut by a machine that had recently affected a small architectural platform during the construction of a rural path. The rescue digging revealed the presence of various human burials, which were excavated extensively during a subsequent season. This happened to be one of the most important funerary contexts in that part of the Yucatan Peninsula. It is important especially because of its direct connection with one of the most disturbing aspects of the Maya history: its "collapse", its passing to a new age, the Postclassic, the phase before the arrival of the Spanish conquerors. Several theories came out related to this problem, but I adopt the hypothesis that assumes that the "collapse" occurred because of a chain of social rebellions initiated by lower class social groups in a context of environmental crisis, hunger and crescent exploitation over the poor sectors of the society. In our specific case, the excavations show a probable small temple buried under a fill made of dirt, many sherds and other artifacts, and on top of that fill they built a few huts made of perishable materials. Into the fill, beneath the huts, dead were buried during several generations; their bones show physical stress and bad nutrition. This is only the beginning of a research planned to continue for a few more years on a wider scale, with extensive excavations focused on the problem of the collapse and its social implications.

Rezumat: După absolvirea Secției de Istorie Antică și Arheologie a Universității "Babeş-Bolyai" din Cluj-Napoca, România, urmată de studii post-universitare în Mexico-City și apoi angajarea mea cu normă întreagă de profesor-cercetător la Universitatea Autonomă a Statului Zacatecas, în central-nordul Mexicului, am continuat în mod mai extins cercetările asupra anumitor aspecte ale istoriei și dinamicilor sociale ale culturii Maya în una din zonele cele mai puțin cunoscute ale acesteia: sud-vestul Peninsulei Yucatán, în sudul statului Campeche, de-a lungul fluviului Candelaria, foarte aproape de frontiera cu Guatemala, cercetare începută în 2003. Cultura Maya este fără îndoială una dintre cele mai faimoase, spectaculoase și mediatizate manifestări ale societății umane. Mă feresc de folosirea termenului "civilizație" dat fiind că acesta poate fi considerat, fără îndoială, ca o manifestare a punctelor de vedere rasiste, eurocentriste și colonialiste. Această admirabilă cultură s-a desfășurat de-a lungul a cel puțin două milenii într-un mediu natural fascinant dar plin de provocări și dificultăți. În ciuda marelui număr de cercetări istorice, arheologice, etnografice și lingvistice desfășurate de-a lungul a mai bine de un secol în junglele și savanele din Mexic, Guatemala, Belize, Salvador sau Honduras, persistă destule pete albe pe harta cunoștințelor noastre relevante asupra acestei societăți. Arheologia s-a orientat în mod tradițional mai ales asupra așezărilor antice spectaculoase, pline de piramide, enorme piețe, platforme și centre rezidențiale ale elitelor politice ce guvernaseră complexa și misterioasa societate mayașă, lasând la o parte așezările mai umile, centrele

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de rang secundar sau zonele rurale. Atenția s-a axat cu precădere asupra epocii numite "clasice" (secolele III – IX d.Hr.) când splendoarea arhitectonică și epigrafică a creat cele mai importante monumente. Motivul pentru care am ales acea zonă specifică, de-a lungul impunătorului dar prea puțin cunoscutului râu Candelaria, într-o zonă inundabilă de mlastini și savane, se datorează înainte de toate necesității de a realiza un proiect de cercetare arheologică regională, axat pe mai multe situri, care să umple în primul rând golul geografic din acea regiune și în al doilea rând să abordeze caracteristicile unei zone prea puțin monumentale, rurală, marginală într-un anumit fel. În plus, cautăm să aprofundez cercetarea unei regiuni care îmi atrăsese în mod special atenția în urmă cu câțiva ani. Plecând de la situl numit El Chechen, explorările de suprafață și perieghezele au dus la identificarea a patru așezări importante mayase aparent databile către sfârșitul epocii clasice. După câteva sezoane inițiale în care am aplicat tehnici specifice arheologiei de suprafață (fotografie aeriană, hărți cartografice clasice și digitale, GPS, GIS, recolectare de materiale arheologice de suprafață), ne-am dedicat realizărilor ridicărilor topografice detaliate a tuturor așezărilor descoperite, catalogarea structurilor arhitectonice și elaborarea hărților digitale. În timpul realizării topografiei în situl numit El Astillero, am notat prezența oaselor umane în profilul creat recent prin tăierea accidentală a unei mici platforme arhitectonice de către un buldozer în timpul construirii unui drum rural. Săpăturile de salvare au revelat existența mai multor morminte umane care au fost apoi săpate în mod extensiv într-o campanie ulterioară. Acesta este cel mai important context funerar din sud-vestul Peninsulei mai ales datorită importanței sale în legătură cu unul dintre aspectele cele mai neliniștitoare a „civilizației” mayase: colapsul său, trecerea sa la o altă fază, cea a Postclasicului, fază anterioară sosirii spaniolilor. Mai multe teorii s-au enunțat asupra acestei problematice, dar eu înclin asupra aceleia care susține că a fost vorba de o revoltă socială desfășurată în mod complex, într-un crescendo temporal și geografic, pe fondul unei puternice crize a mediului inconjurător și a exploatării excesive a grupurilor sociale inferioare. În cazul nostru, cercetările sugerează probabil existența uni templu care a fost „înmormântat” în foarte scurt timp cu un strat de umplutură bogat în materiale arheologice ca bază pentru ridicarea unor colibe din materiale perisabile proprii segmentelor sociale ne-elitiste. În același strat de umplutură și nivelare au fost înmormântate mai multe persoane, probabil de-a lungul câtorva generații, arătând clare indicii de sărăcie și efort fizic. Acesta este doar începutul unei cercetări care va continua pe parcursul a câtorva ani în viitor, pe o scară mai extinsă și orientată în mod expres asupra problematicei „colapsului” și implicațiilor sale sociale.

Keywords: Maya, archaeology, settlement patterns, Candelaria, Mexico, collapse, funerary contexts, social processes.

Cuvinte cheie: Maya, arheologie, modele de așezare, Candelaria, Mexic, colaps, contexte de înhumatie, procese sociale.

Introduction

This article intends to present, in a succinct manner but as completely as possible, some advances of the archaeological research I currently undertake in a forgotten region of the Mexican Southeast, in the southwestern part of the well-known Yucatan Peninsula, along the impressive Candelaria river. That region is just a part of the world-famous Maya Area, land of fascinating nature, amazing archaeological sites and inspiration for adventurous dreams. The "El Chechén Archaeological Project" started in 2003 under my direction, two years after my employment as full-time professor-researcher in archaeology at the University of Zacatecas, a city in northern Mexico, far away from the Maya heartland.

Since my undergraduate studies in "Babeș-Bolyai" University of Cluj-Napoca, Romania (from 1994 to 1998), I developed a vivid interest for the Maya culture and its inherent mysteries. I came to Mexico in 1999 to start my graduate studies at the most prestigious school in anthropological disciplines in Latin America¹, and during a two or three-year period I focused more on theoretical and epistemological issues. Once I get the job in the above-mentioned university, I felt free to develop my own archaeological project wherever I wanted, as liberty of decision in scientific fields is one of the most precious treasures of the Mexican schools. During my master studies in Mexico-City, I had the opportunity to participate briefly as practice student in an excavation campaign in the Maya Area, the region I have always wanted to study, although that short-lived project was developed in a very poorly known region of the famous culture, an almost unknown region along a river that was seldom mentioned in texts and almost absent from the popular conscience, the Candelaria (Gamboa *et alii* 2000). It was a small site called Pozas de Ventura, lost in the jungle amidst swamps and mangroves, in the Candelaria County of the state of Campeche, far away from Chichen Itza, Palenque, Uxmal, Calakmul, Tikal, Bonampak or other worldly famous Maya sites. It is also away from the traditional tourist routes and the Maya-speaking indigenous towns; a region destroyed by the intensive cattle farming and deforestation. Nothing resembling the usual idyllic image a European young man could

¹ Escuela Nacional de Antropología e Historia (ENAH, National School of Anthropology and History), in Mexico-City, a prestigious institution that since 1938 prepares the new generations of archaeologists, anthropologists, historians, ethnographers and linguists from Latin America and all over the world.

have about the lost cities of the Mayans and their surrounding environment. Nevertheless, my meteoric participation in that extinct project opened my eyes toward a series of interesting issues of the Maya society, beyond any clichés induced by the popular visions on that culture. In that winter of 1999 I discovered (or guessed) the enormous scientific potential of that forgotten and apparently marginal micro region. Moreover, I knew that perhaps more than one crucial question about the Maya world could find their answers there, among the swamps of the Candelaria wetlands.

This investigation rests both on scientific and personal motivations, as all the scientific initiatives use to. Scientifically it promised a lot of new and unusual data about social processes and cultural manifestations of the northwestern zones of the Maya Lowlands. Personally, it allows me to satisfy a long time passion about a culture that attracted me since my childhood, and because I felt an intimate compromise with an almost forgotten area of that remote part of Mexico. Under my direction, there are always students from our faculty of archaeology in Zacatecas as well as graduate archaeologists and colleagues from other institutions who occasionally collaborate on specific matters. The financial aspect of this research is a recurrent difficult problem, something that reflects a wider situation visible in many parts of the world in academic milieus. The work team is large, the distance to the research place is long (about 1800 km), and the campaigns use to be extended. Therefore, the investigation is expensive and requires still more field seasons. That means continuous and exhausting negotiations for funding with federal, state and local institutions, as our University can only support a small part of the needed money. We can see, in nowadays archaeology, a clear and conflictive contrast between the incrementing expectation of sophisticated and expensive field and laboratory techniques and the decreasing available money for archaeological investigations. Nevertheless, we hope we will complete the rest of the research up to 2011. Because the archaeologist cannot simply wait for funds to show up, he has to look for it and almost invent funding².

In this text, I will categorically avoid the use of the word "civilization". I consider it is a term whose meaning became chaotic and empty, and it has colonialist and racist manifestations. It was born inside the European (especially British) colonial mentality and it assumes there is a qualitative distinction between "civilized" and "no-civilized" (barbarian-like) societies. I largely agree that unilineal evolutionism is an obsolete idea in modern historical and anthropological postures. I also consider it is highly inappropriate to assume that the human society is divisible in less or more civilized, mainly because it assumes that the causes of that qualitative separation are to be found in the internal characteristics and potential of the societies themselves; and that is wrong. It also assumes that there is a single frame of reference in evaluating societies and it always happens to be the European or the Occidental way of life. In our daily conversations, we will always employ this term, as it is part of the universal language and it is an easy and comfortable etiquette when we speak about the sophistication and material splendor of ancient people. However, we cannot delete it from our vocabulary. I have no intention to insist on this problem, so I simply affirm that the word "civilization" is no longer appropriate for an academic use.

Some general words about the Mayans

The cumulus of cultures we generically call "Maya" occupied a wide territory of more than 320000 km² over a large variety of landscapes³. It extended from the actual southern and southeastern Mexico including the Yucatan Peninsula, partially the wetlands of Tabasco, and the Highlands of Chiapas, continued over the entire territory of modern Belize and Guatemala and marked its easternmost borders in El Salvador and Honduras (fig. 1). This vast extension of land has no precise inland frontiers. The oceanic coasts mark clear limits of this culture around the Yucatan Peninsula, the northern coasts of Guatemala and Honduras, and the southern coasts of Chiapas (Mexico), Guatemala and El Salvador. We could trace the western border slightly west of the Grijalva

² As a tip, it worth mentioning that money for field investigations can be obtained from local county administrations (for example money for food, rent, and transportation), small companies as tax-free donations, wealthy individuals, etc. Projects should convince local governments and city counties about the importance of the research and the benefits it might bring to the community. The famous foundations (in America the most common are the National Geographic Society, Foundation for the Advancement of Mesoamerican Studies and Investigations, Wenner-Gren Foundation, etc.) give very little amounts of money (about 10 thousand dollars) that will not satisfy the entire cost and they do not cover very important aspects of field costs, as salaries and food. The funding from this kind of institutions is more suitable for specific laboratory analyses.

³ Some of the best and most complete recent general studies about Maya culture are Sharer 1994, Freidel *et alii* 1993, and their subsequent editions and translations.

River and the monumental settlement of Comalcalco (the westernmost major Maya site) on the Gulf of Mexico shore and going southward across the Tehuantepec Isthmus to the Pacific coast. To the east, the inland border could be drawn connecting the Lempa River valley on the Salvadorian Pacific coast up to the opposite Ulúa valley and the Caribbean coast in Honduras.

This extended and heterogenic territory can be roughly divided in several regions whose environmental and cultural characteristics impact on our archaeological comprehension of the ancient societies. I will simplify the divisions here. First, the most important and the most notorious geographical and cultural component of the Maya territory are the Lowlands. It stands in the very heart of Maya land and it represents low plains covered by abundant tropical rainforests and drained by a number of rivers and minor streams. The southern Lowlands start in northern Guatemala, in the exuberant jungles of the Petén region and extend northward to Belize and the Caribbean Sea, to the center of the Yucatan Peninsula (including most of the Mexican states of Campeche and Quintana Roo), and westward till the coastal wetlands of Campeche and Tabasco. Most of the Classic development of the Mayans took place inside this subdivision. A second territorial component points to the Highlands, mountains and plateaus situated in the southern half of the Maya Area in the Mexican state of Chiapas, on most of Guatemalan territory and close to the above-mentioned easternmost periphery. This is a less known zone, with richer cultural development during the very early and the very late stages of their history. The third greater division is the drier northern half of the Yucatan Peninsula, which is a part of the Lowlands but differentiated by the lack of surface watercourses and a much drier climate, where droughts are frequent and the forests are low, alternating with large extensions of short bushes adapted to lack of water. Instead of rivers, northern Yucatan has subterranean water courses that carves invisible rivers through carstic geology. It is the land of the famous *cenotes*, wide and deep holes formed by the collapse of calcareous domes, with circular mouths on surface level, usually filled with water and used as ceremonial centers especially during the late Maya history. The coasts could stand as a fourth subdivision, but the settlements along the seashore could be culturally included in specific cultural divisions that partition the above-mentioned regionalization.

Properly speaking, there is no such thing as Maya ethnicity. "Maya" is a generic name that in the Colonial times started to name a large number of ethnic groups that inhabited all those territories. Maya does not refer to a nation or an ethnic group. It rather refers to a great linguistic group: a plurality of languages with a common background. There were more than 30 different Mayan languages during the late part of their history and only about thirteen of them survived today. There are about three million people still speaking Mayan languages today across southern Mexico and Central America. The speakers of two different Mayan languages can hardly understand each other. Nevertheless, there are also very similar languages according to their geographic vicinity. There is probably less linguistic and cultural similarity between all the ethnic groups we call "Mayas", than between the nations we use to call "Romanic". People living today in those regions would never define themselves as Mayas, but using the ancestral names of their ethnicity: yucatec, chontal, lacandon, chol, tzotzil, tzeltal, mam, mopan, cakchiquel, chortí, tzutujil, quiché, tojolabal... Visible competition and conflicts occur sometimes between the different Maya-speaking ethnic groups. Still there are numerous cultural, behavioral and ideological traits shared by all the ancient inhabitants of the Maya Area, as well as by their modern grandchildren.

The various aspects of the Maya culture (architecture, settlement patterns, artifacts) manifest clear heterogeneity through space and time. Not only the transformations from the Preclassic to the Postclassic times make this vast area look differentiated and complex, but also the internal regionalization expressed through the distinct manners of architectural manifestation we use to call *styles*. There are many characteristics in Mayan architecture, city planning, artifact production and settlement patterns, which are common to all the regions and even across the chronologic segmentation. Nevertheless, the styles are a reality, in spite of the historical-cultural assumptions that background their definition; they divide the Maya Area in another scale of variations, although we still cannot understand the meanings and implications of those styles into the rest of the aspects of their lives.

The Peten style defines a cumulus of features typical for the Early Classic times and proper to Guatemalan lowlands and the southern Yucatan Peninsula: very high and abrupt pyramids with stone temples on top, staircases that lead to the upper ceremonial chamber where the thick walls left very

little space inside the sacred room. Tall *cresteria*⁴ rest over the posterior wall of the superior temple, as a support for official imagery and ideology. This feature replaces the anterior fashion in Preclassic times when stucco figures molded in bas-reliefs displayed along the stairs and platforms of the ceremonial buildings. Elites, kings and nobles, lived and ruled in palaces constituted as successions of *patios* (courtyards) enclosed by structures of multiple rooms. Further north, the Rio Bec style, slightly later and typical for the southern peninsular lowlands shows lower structures with more emphasis on width and less on height. The basements of the pyramids have rounded corners. This style borrows from the Peten the shape of the vertical pyramids in order to use them as decorative item like towers in form of fake pyramids on top of low, elongated buildings. The impressive Rio Bec façades display fine masonry bas-reliefs depicting telluric monsters whose opened jaws encircle the doorways: the temple becomes a metaphor for the access to another world. Going northward, on the northern half of the Yucatan Peninsula, starting from the western coast, the Puuc style marks the step during the end of the Classic and the initial Postclassic times. In sites like Uxmal, Edzná or Labná, the use of porches and columns stands as a new tendency in local architecture, as well as the so-called "triumph arches", ceremonial portals that seem to be passages between different spaces inside the settlement. The *cresteria* returns, while massive pyramids alternate with enormous palace-like structures characterized by large courtyards closed between by one-storey buildings. Finally, the northern end of the Peninsula, in the area of the famous site of Chichen-Itza, we can admire the last manifestations of the Maya architecture, the late Yucatec style with obvious and vivid influences from the central Highlands of Mexico, especially Toltec influences. There are few other styles, but these are the most important.

We cannot assure that the territorial distributions of the style signify any other kind of territory like ethnic distribution. I have serious doubts about the supposed relationship between ethnicity and cultural (artifactual) manifestations and I am very skeptic about the archaeology's capability to identify ethnicity through material remains. In the Maya case, as well as in many archaeological cases around the world (with special emphasis on Europe), the pertinence of a community to a specific style (ceramic, architectural, artistic styles) is caused by political rather than ethnic reasons. Therefore, I do not think these regional styles reflect any ethnic distribution across the territory, as the spatial extension of the styles is clearly larger than the territory normally occupied by an ethnic group in the Maya area.

It is precise now to clarify a few aspects about the chronology. The chronological divisions we use in Maya archaeology are the same as for the rest of Mesoamerica. *Mesoamerica* is a concept first defined some six decades ago as "Mesoamerican complex" by Paul Kirchhoff (1943) and represents the biggest cultural-history inheriting in Mexican archaeology. This concept refers to a geographical extension and a sum of cultural traits shared over that territory, as for example: pyramidal basements with temples on top, architectural monumentality, ballgame courts, the employment of combined solar and lunar calendars, hieroglyphic writing, sunken patios, corn cultivation, fine arts, the practice of human sacrifice, polytheism and the dual symbolic systems, etc. Geographically, it goes as far south as the eastern limits of the Maya area in Central America, while the northern frontier approaches the vast northern Mexican deserts where the cultural traits shift into a shape more similar to the southwestern United States archaeological cultures. In spite of many critics, polemics, discussions around the relevance of this concept, it survived for convenience. The reader can easily notice that it resembles the Gordon Childe's famous "prescription" for the identification of a state, a city or a civilization, altogether. Anyway, Mayans are part of this Mesoamerican macro region, then. Moreover, they are proud holders of the majority of its diagnostic characteristics.

The Mesoamerican chronology is the same as Maya's and it clearly manifests strong cultural-history hues tracing back to Winckelmann. The main Mesoamerican period is the Classic (*El Clásico*). This is a time of splendor, of climax, the high development of states, of arts, of artifact manufactures, of trade networks between the Mesoamerican regional components. It usually goes between 200 and 800 AD. Before it, the Preclassic (from about 2000 BC until 150/200 AD), an epoch of crystallization of complex societies and chiefdoms, the emergence of monumental architecture, of trade networks and the incipient constitution of the future classic features. After the Classic, we obviously have the Postclassic, considered as a time of militarization, the effect of the "collapse" of the Classic way of life, the time for empires, the reordering of the Mesoamerican world. It is the time of the Toltec and later

⁴ *Cresteria* is the term used for a false wall made of masonry and covered in platered materials, which usually rests on top of the upper temples of the Maya pyramids and contains molded and colorful images of religious and political nature, in order to continuously communicate the official ideology to the masses.

of the Aztecs. It is the time of their influence on the Maya. It starts around the year 1000 and ends with the Spanish conquest. Two buffer periods are usually managed. One, the Protoclassic (about 100 BC – 150 AD), marks the transition between Preclassic and Classic. Second, the Epiclassic (called *Terminal Classic* by Mayanists) resumes the transition processes to the Postclassic and it occupies about two centuries, 9th and 10th AD. Actually, today nobody believes in the historic and processual relevance of this time partition, especially because the criteria for their definition are obsolete. Anyway, everybody use them merely as comfortable time referents. When I say Classic, I do not necessarily mean anything in valuation terms; I simply use a synonymous for “3rd to 8th centuries”.

Mayans formed part of the complicated and highly sophisticated trade system of the ancient America. In a world without coins, it is still difficult for us to understand the concrete mechanisms of functioning of this system, the equivalencies in the markets, and the agreements between political entities. Nevertheless, they surely existed. Black, grey and green obsidian, greenstones, clay, ceramics, timber, precious feathers, animal furs, fruits, cacao for making chocolate were just some of the articles Mayans exchanged between themselves and with the outside world. On tough land roads, through the jungles, across the Gulf of Mexico and the Caribbean Sea, but, especially, by rivers. There were three main high-traffic aquatic routes: the Usumacinta, the Grijalva, and the Candelaria rivers. They all flow into the Gulf of Mexico and form the principal outward communication route for the Mayas. There were important rivers flowing eastward into the Caribbean, like Hondo and Belize Rivers. However, none of them could compare to the size and traffic intensity on the former three. Among them, Candelaria River is the one we are interested in for the purpose of this discussion. It born in the Peten region Guatemala as Río San Pedro and flows northward into southern Campeche where it joins Caribe River and together they form a new course, Candelaria, flowing eastward into the Terminos Lagoon and Gulf of Mexico. A route that permits connection with all the numerous settlements of the Totonacs along the coast and northward into the US southeast, while indirectly it forms a shortcut to the Mexican Highlands. The importance of this river as major trade route is still poorly understood mainly because this region remained almost unknown for more than a century after the beginning of the first explorations in the Mexican southeast. The irregular topography, the sudden changes in the altitude of river's bed, the unusually fast accumulation of calcareous material on top of any sediment or heaping of vegetal remains inside the water, these are all factors that transform Candelaria into a difficult-to-navigate river and simplifies the local's work to control, supervise and tax the commercial traffic.

For nearly a century, scholars liked to believe that Mayas were a sort of peace-loving people, interested in religion, philosophy, mathematics, astronomy and so on, far away from warfare and crimes. The writing was deciphered starting with the late 60's of the 20th century and before that the Maya monuments with epigraphy seemed to depict only priests and calendar information. Now we know they are kings, generals, priestly monarchs, warriors. Perhaps some other factors influenced in that idyllic image about the Mayas: the need to discover a “wise civilization”, a different one, a pacific one; the mathematic perfection of their calendars and their astronomic calculations; the beauty and fascination of the monuments and architecture; the great number of temples. Today we know the Mayan's life was full of wars, conflicts, military expeditions, the destruction of enemy cities, shifting alliances, human sacrifices, ritual self-mutilations, and excessive social exploitation.

The Maya settlement pattern has a few general characteristics and many local particular traits. B. Trigger (1968) considers there are three analytical levels of the settlement patterns: i) the regional level (and the interaction between different sites), ii) the site level (the internal spatial organization inside a settlement), and iii) the structure level (the spatial and physical features that constitute a habitation unit). On regional level, Mayans had three main site levels. First, enormous political, administrative, religious, economical centers, the famous Maya metropolis with thousands of buildings and dozens of thousands of inhabitants. Those were the residence of the fierce *ahau*, the king, the lord⁵. Second, the middle-range settlements, the provincial centers, monumental sites on a lower scale, residence of the vassal lords. Finally, the rural settlements, agricultural and hunter hamlets scattered through the landscape; some of them later got included into the major centers as they grew enormously by the end of the Classic. The general image of a Maya settlement is that of clusters of buildings dispersed over a determined territory. The pattern shows relatively low density, but there is a clear contradiction between the disperse pattern on the site level and the highly dense pattern inside the spatial compounds. There are different kinds of spaces and articulations of proxemic

⁵ The plural for the maya word *ahau* is *ahau'ob*.

patterns and proxemic levels (C. Ardelean 2000-2001). The old centers, those settlements that had continuous occupation for centuries or millennia show high nucleation in their cores, literally buildings over buildings. I recently stressed the importance of proxemics and of property relationships in the internal formation of ancient settlements, and I am sure Maya is one of the best examples. The causal factors that contribute to the internal constitution of ancient sites go from property relationship and territory management, ecological factors, culture and technology, and ideological traits (C. Ardelean 2000-2001, 2003, 2004). Mayans had specific areas designated for religious, administrative, or residential buildings, so they apparently intended to fit into those spaces, perhaps originally sacred spaces like the Roman *templum*. Moreover, every new king or every new dynasty needed to rebuild the temples, to add new parts to previous constructions, to emphasize their own power, so every certain time new pyramids showed up in the center of the Mayan cities, on top of older temples, covering the older buildings with the very core of the new ones. In addition, the Mesoamerican cosmic cycles of 52 years required the renewal of certain religious buildings and; in some cases the Mayans were not the exception to that ritual. That is why the tourist remains astonished with the amazing puzzle of buildings in the great Maya centers.

In older scientific and divulgation literature, authors divide the Maya history into Egyptian-fashioned periods: Old and New Empires. We now know for sure that there never existed such thing like empires in Maya history nor an empire-based historical division. In fact, the Mayans have never had any sort of territorial unification. Their political organization pretty much resembled that of city-states in Sumer or Greece. They had independent political organizations led from a major urban center and having in its territory a number of similar or lower-range centers gathered through alliances and conquest. Those were states, incipient forms of states. Actually, I prefer to consider them *archaic states*, not from chronological but structural point of view, as defined by modern theory (G. Feinmann, J. Marcus 1998, W. Wiesheu 1996, 2002). An archaic state occurs when a certain political entity shows evident characteristics of a state but conserves clear features of chiefdoms: theocratic power, kinship-based organization, vertical articulation of lineages, among others. Maya society showed such traits along its whole history. The kings were monarchs, gods and priests, the iconography shows an exaggerated emphasis on political ideology and state manipulation of the masses, the rituals show the primacy of worshiping ancestors and elders, the religion remain chamanic even on its institutionalized levels, the state survived through the successful articulation of the lineages. Another eternal polemic in Maya archaeology is whether the major settlements were cities or not. That is a complex and rich problem, so I will not intend to deepen into it here. I will simply affirm that Mayan settlement were not only ceremonial centers, they really were cities, real urban centers despite their lack of planning and shallow density.

We know more about the social and political organization during the Late Postclassic and the Colonial times, but virtually nothing about these aspects during earlier times. Archaeologists use to assume that the organization during Classic can be inferred from the information of later historical documents. We know for sure that the king (*ahau*) was the top of the hierarchy and the main contact with the other world, with the dimension of the ancestors. The king was an archaic priest, a shaman, he led ascetic dances and self-sacrifices by bloodletting and self-induced pain while drinking or eating stimulating substances able to open his communication channels with the ancestors. On the *stelae* displayed in public plazas and platforms and on wall paintings, we see lords executing, humiliating or torturing prisoners or captured foreign kings, decapitating them, receiving embassies and sharing meals with court in royal feasts. The dynasties had emblems that were used as glyphic names of the capital cities. Exhausting wars occurred all the time between the main territorial powers, involving all the secondary and tertiary centers. The lineages seemed to have been arranged transversally to the social hierarchy, that means that a single lineage could include royalty, nobles, middle-class and poor people. That allowed kings and nobles to manipulate through the kinship discourse the low-class mass in order to use the people in public activities and monumental construction campaigns. When the social structured collapsed at the end of the Classic, the inferior levels of the "sacred blood" lineages inverted the hierarchy and raised at the top of the society preparing the Maya world for a completely new and reformed epoch.

One of the most delicate and complicated issues of the Maya history and archaeology is the religion. At a first glimpse, there seem to be far too many gods in the Maya pantheon, complicated by the typically Mesoamerican syncretism and dual religious system. With so many temples, everyone would expect a multitude of deities. Nevertheless, we can name some of Maya gods: Itzamnah (dual god, god of the heaven, creator, god of the original swamps), Ix Chel (goddess of the Moon, of the catastrophic rains, of birth), K'awiil (spirit or god of the royalty, protector of the dynasties), K'inich

Ahau (god of the Sun, of the day, possible hierophany of Itzamnah), Nal or Yuam Kax (god of maize), Yum K'ímil (god of Death and Underworld), Chaak (rain god), Ek Chuak (god of the roads and traders), Kukulcan (the feathered quetzal, the Late Maya version of the Toltec and Aztec Quetzalcoatl) and many others. These are supposed to be the Maya gods as recognized by the today literature. Nevertheless, there are some serious problems with this pantheon. First, all the information we have about these gods comes from Postclassic and Colonial sources. They all seem to have Mexican influences from the Highlands and, in addition, only during the last part of the Maya history we can notice certain ordering of a polytheist pantheon. Second, during Preclassic and Classic times we do not even have clear information about specific gods! None of the thousands of Maya temples alludes to any of the known gods or to any other anthropomorphic gods. The only category of supernatural beings alluded in epigraphy and iconography is formed by kings, ancestors, spirits and hermetic calendar deities. The temples were dedicated to kings, to dynasty events, to cosmic events, but not to gods. Until the Postclassic and the arrival of Central Mexican influences, the Maya religion was a shamanic one, a religion based on the continuous communication of shaman-priests and shaman-kings to the world of spirits and ancestors. A religion that rose around the sacred image of the monarch. After the radical transformations suffered by the Maya society at the end of the Classic, the crescent influences from the Highlands brought the polytheism and systematized pantheons (Baudez 2004).

Some cosmological elements were clearly common to all epochs, as iconography and epigraphy show. Maya universe was divided into two major dimensions, the Heaven and the Earth, the Sky and the Underworld. The Sun, always a major deity in Mesoamerican religions, climbed the six steps of the day pyramid from sunrise to zenith and then the next six down to the dawn, crossing the critical threshold and entering the opposite dimension, the night, stepping over the nine-stepped stair of the underworld back to the sunrise. The earth was square, with the angles oriented to the cardinal points. Every corner had a color: east is red, west is black, south is white, and north is yellow, while the center is of bluish green, the color of jade. On the center of the world, there was an axis, represented as a maize plant or as a *seiba*, the sacred Maya tree. That was the main support of the Earth and the ascending ladder for the souls. In Maya imagery, we can see the dead kings climbing up that axis to the celestial world. On the top of the sacred tree, the Mwuán Bird, metaphor of the skies. Among the tree's roots, the hideous face of the Kawak monster, the telluric spirit. Four other *seiba* trees supported the four corners of the Earth, with four protective *bacab* deities as sentinels. As mentioned above, the famous Quetzalcoatl (Kukulcan, in Maya), the "Feathered Serpent", did not exist during the Classic Maya history. It is a Postclassic introduction from the Highland cultures of central Mexico. Before it, another snake-like element was present in their beliefs: the sacrificial snake; that was the image of a snake, sometimes only the skeleton, which represented the path that opened during the sacrificial ceremonies between the two worlds. Finally, the famous Mesoamerican ballgame (*juego de pelota*, in Spanish) was not a sport, it was a ritual, a cyclic one. Its function was to represent periodically the epic of one of the most important Maya religious books, the *Popol Vuh*,⁶ as we know it today in its Colonial quiche language version. In that text, two primordial twin brothers, repeating their fathers' adventure, went to the Underworld to play ballgame with the Death Lords. After a series of dangerous tests, they are defeated during the play and their bodies chopped and scattered on the infernal waters. They finally reborn as different beings and destroy the Death Lords. A victory of life over death, the same message as in Christianity. That cosmic magic game was played in the majority of Maya settlements and human sacrifices reproduced the ancient defeats.

The subsistence base of that ancient people was, as it remains today, the maize (*Zea mays*). There are many discussions about how much this plant actually involved subsistence, if it was the absolute dominant in the diet or just an important crop among others. Despite any conflictive ideas, corn was a fundamental part of Maya's life. There were many other cultigens of high importance, as squashes, beans, peppers, fruits. Although many of the fruits that anyone can find today in the Maya area (as banana, coconut, lemon, oranges, etc.) were introduced by the Europeans, there were other excellent trees of tasty and nutritive fruits, like mango, zapote (sapodilla), mamey, avocado and so on. One particular tree was of enormous utility to the Mayans: the *ramón* (*Brosimum alicastrum*), a very tall jungle tree whose fruits resembling small yellowish cherries contained a seed perfect for

⁶ *Popol Vuh*, in Maya Quiché language (still spoken today in the mountains of Guatemala) literally means "The Book of the Counsel". It was written down in Quiché with Latin characters, perhaps during the 16th century, as a petition from Spanish evangelizers. It is an example of the very few ancient literature that survived. During the Classic Period it probably circulated as an oral tradition in many different regional versions.

making flour. The agriculture was complemented with recollection and hunting. Maya culture did not know domestic animals but dogs, and they used to eat them. Sometimes, Maya residential units had small poultry yards where some captured birds or animals were occasionally raised. Inside the jungle, the white-tailed deer, the peccary (a wild pig), the tepezcuintle (a marsupial) and the armadillo were hunted for food; the jaguar or the puma were holly beings associated with the telluric spirits, but they were also hunted for their skins and trophies used for high-status and ceremonial clothing.

The common Maya agricultural system, still used today in those regions, is known as swidden or slash-and-burn technique. It means people cut trees down, burned them and cleared the space for agricultural field, the *milpa*. Jungle soils are poor and shallow and depend on their forest burden. When forest disappears, there is no source for the nutrients necessary to maintain soil alive and productive, so it decays and washes away. The renewal cycle of an abandoned milpa before becoming a jungle again is of about twenty years, so every year or every second year Mayans had to destroy another parcel while leaving the anterior to be slowly swallowed by jungle again. Nevertheless, there were also intensive techniques, like terraces and raised fields used for agriculture in wetlands, but those systems were very localized and rare.

Maya artifact universe is extremely rich and varied, more than in most of the cultures of the world. For example, there are literally hundreds or perhaps more than a thousand ceramic types and varieties. Mayans seemed to have been obsessed with distinguishing themselves through ceramic types. We have everything: common wares designated for everyday cooking and storage, most of them very simple vessels, nevertheless impressively successful over the time as Maya types survived for centuries; fine common use vessels, for serving food in special occasions and delighting with drinks as chocolate and *balché*⁷; ceremonial high-valued pottery as the extraordinary polychrome bowls (called "Codex-style vessels") incredibly well painted with epic scenes and used in funerary offerings, high rituals and symbolic exchange. There is an interesting contradiction between the amazing number and variety of ceramics and the relative homogeneity of lithic complexes. Ceramics vary during time and especially in space, as every region, every city, every town and village seem to have contributed to the infinite corpus of Maya pottery. Perhaps that is why there is no general study about Maya ceramics in American archaeology, not even one synthetic publication. All we have are particularistic work about the ceramic discoveries in specific sites, usually with bad and contradictory descriptions of the types and very bad illustrations. The study of this kind of artifacts becomes a personal odyssey for every archeologist intending to involve into that field.

From the lithic point of view, things could be considered slightly easier in certain manner. There are clearly less taxonomic units and there seem to be a sort of commodity among the ancient Maya artisans, as the lithic types repeat over time and use to inscribe in a reduced number of forms. One detail is very important: Mayans did not know the bow and arrow during most of their history. Archery appeared in Maya world only during the Postclassic, after the 9th century, when the Mexican influences penetrated the Peninsula. Before that, Maya stone tools used to fit into several large categories: spears, *atlatl* darts⁸, hand axes (called *celts*), knives and grinding stones. Microlithic pieces were common too, but they did not have too much use before Postclassic neither. All Maya stone tools were multifunctional and there are far too few studies about the actual functionality of those artifacts. Archaeological typologies use to elaborate morphologic-technomic taxonomies, assuming implicitly some general functions for the material but without clear scientific approaches about their actual former use. A stone projectile could have been used as a spear or as a knife; a celt could have been hafted in different ways and used for land or wood. Some versions were chipped in form of adzes almost surely used for carpentry and canoa making. Obsidian was a precious trade article, but its use as labor device remained restricted to the upper social groups, while the most elaborate obsidian artifacts normally formed part of ritual offerings and high-status exchange objects. Maya warfare required direct-contact strategies, the battles were carried out with spears and knives only and almost none body protection, an elite kind of war. By the end of their history, Maya land was almost completely deforested, as they needed more and more space for settlements and agricultural fields. The fire and that simple and magic artifact, the "hand ax", did it all.

⁷ *Balché* is one of the most common Maya alcoholic drinks. Mayans did not have a much extended alcohol culture as the societies in Mexican Highlands or South America. But this beverage could offer the needed stimuli in social or ritual circumstances and they obtained it from the juice of a local tree combined with honey as ferment.

⁸ *Atlatl* is the Mexican thrower or launcher, the device used to launch short spears to a greater distance than naked arm.

Hypothesis and mysteries of the Maya "Collapse"

It is common to hear in divulgation texts or in TV documentaries: "What happened to the Maya civilization? Why did they disappear?" A list of astonishing reasons from catastrophic diseases to alien abductions helps to keep the mystery alive. Well, first, Mayans did not disappear; there are millions of Maya-speaking people living in Mexico and Central American countries. Second, the "collapse" of Maya world did not mean its destruction, but its transformation into something else around the 9th-11th centuries AD. Third, the problem of Maya's Terminal Classic mutations remains fascinating even without thinking in extraterrestrial interventions.

An increasing literature about the so-called "collapse" exist today, most of it in English (J.E.S. Thompson 1954, P. Culbert 1973, A. Demarest 2004, A. Demarest *et alii* 2004, A. Demarest 2006, D. Webster 2002, L. Wright 2006). During the last decades, scholars debated if there really has been a collapse, or if the phenomenon does not deserve such a drastic name. From one point of view, we cannot actually talk about a collapse, because that would mean a complete destruction of a structure. From another point of view, the depth and quantities of transformations inside the Maya society by the end of the Classic would properly correspond to a collapse, because the entire social, cultural, economic and political structures became seriously affected and mutated. I agree this last posture, so from now on I will use the word collapse without quotation marks.

Traditional studies about the cumulus of processes and historical facts that led to the final strike against Terminal Classic Mayas use to take into account three major symptomatic characteristics of those times: the failure of the elite-class structure, the apparent rapid depopulation of rural and urban centers, and the fast development of the facts over a period perhaps no longer than a century. The most important archaeological indicators about this events are: the obvious rapid abandonment of major urban and ceremonial centers, especially of temples and palaces; the reoccupation of former religious and political buildings by low-class people using them as homes; the cessation of the major dwelling campaigns and the cancellation of the manufacturing processes of luxury items; the cessation of monumental architecture, of epigraphic stelae and Classic writing systems (R.E.W. Adams 1973, p. 22). In fact, *all* the archaeological data we have about the collapse show it occurred only (or especially) on the high-class levels. It means that when we talk about Maya collapse, in fact we must refer to the plunge of the upper levels of Maya social structure.

Hypothesis about the collapse could be classified in different ways using several distinct criteria. One analytical separation would be between hypotheses that emphasize one or more causes for the collapse. The single-cause theories are proper to older interpretations and the plural causality theories are more common in recent years. As the post-processual archaeological theory sustains, our approaches on archaeological contexts and socio-historical processes must base on the principles of equifinality and pluricausality. That means that one single phenomenon could have been caused by several different causes, and that completely different processes could generate identical archaeological data. A view I agree with, a radically different view from that previously sustained by the now old "new archaeology". A second categorization envision hypothesis that proclaim internal versus external causes. It succeeds the same as in the previous case; in older studies, scholars used to work with internal causes or exclusively external causes, while today we try to integrate models that connect these phenomena with wider regional processes. Many authors preferred to understand the collapse as a strictly Maya event, isolated from the rest of the Mesoamerican world. Now we understand that what happened to the Mayas was the effect of a much larger process that occurred throughout entire Mesoamerica but with more particularized expressions (cf. J. Sabloff 1973, p. 35-38).

There are two great and opposite sides of the collapse problem: the ecological versus the social explanations. There is not necessarily an ontological rather political separation between them. Most of the profound studies and reflections on Maya collapse developed during the three decades following the half of the twentieth century, especially by U.S. scholars, during the Cold War. Julian Steward (1955) had opened new theoretical and methodological perspectives in archaeological founding the cultural ecology and, indirectly, the modern environmental archaeology. His studies further formed the base for Binford's statements that launched the New (Processual) Archaeology. Climate, nature, environment were strong words during the 60's until the 80's of the last century, so most of the investigations on Mesoamerican social and cultural aspects followed that path. Moreover, the social theories (that inevitably would have involved the picture of social movements, revolutions, rebellions, class conflicts, etc) sounded much too "red", much too socialist, and such postures would not have been too dear to American archaeologists living on the western side of the Iron Curtain.

Thompson's social theory was the first and remained for long the most cohesive explanation of that kind (J.E.S. Thompson 1954).

The ecological theories insist mainly on climate changes, droughts, hurricanes, earthquakes, and diseases. Actually, some archaeological data in the southern Maya Lowlands show that some climate changes manifesting in major droughts may have been a cause contributing to serious environmental crisis. All the other mentioned causes are very improbable as the phenomena they refer to only occurred on localized spots across the Lowlands. There is no trustful data about any ecological catastrophe able to shake by its own the entire Maya social construction. The ecological causes obviously contributed to the final of the Classic Maya, but they must be considered in combination with social causes.

The Mayans were not perfectly but well adapted to their environment. There are curious theories as Meggers' (1954) that assume that there is a contradiction between the reduced agricultural potential of that region and the increased complexity of the society, and that led to an inevitable disequilibrium; in addition, probably Mayas developed their cultural sophistication outside the Lowlands in some other more prolific areas and settled it there a posteriori. Such theories practically situate outside the common sense. Maya culture survived successfully for at least two millennia before its major transformation and continued to create impressive developments afterwards, during Postclassic until the Spanish arrival. Thompson's theory alluded above considers that by the end of the Classic the exploitation over the peasants and low-class social groups increased too much and that caused a final rebellion against the ruling class, destroying the former social and political order. This famous author, one of the great pioneers in Maya studies, also added external causes as the use of Mexican mercenaries in order to restore the order, followed by an increasing militarism and the transformation of the traditional values, the loss of trust in rulers and gods (J.E.S. Thompson 1954). I have doubts about these last arguments, but fully agree the main aspect of thompsonian theory: the excessive exploitation of the inferior social groups by a parasite ruling class depending on the trans-mesoamerican trade routes of status items and on the fragile ideology of the holy lineages.

The collapse actually occurred in the Lowlands, mainly. It affected less the Maya Highlands or at least in a different and less known manner. Moreover, the northern Yucatan Peninsula remained as peripheral during the Classic developments in the southern Lowlands of Mexico (Campeche, Tabasco, Quintana Roo), Belize and Guatemala. The Yucatan region (roughly corresponding to the modern state of Yucatan) was the place where the Maya culture revived after the collapse and where the Central Mexican influences manifested stronger. Chichen Itzá, the most famous archaeological and tourist site, flourished during the Postclassic, centuries after the Lowlands collapsed. During the Classic, the contacts between Mayas and the rest of Mesoamerican were strong although little known by archaeologists. Teotihuacan, the enormous metropolis in Valley of Mexico, next to modern huge Mexico-City, was the cultural and economic capital of ancient Mesoamerica, especially from first until 7th centuries. Teotihuacan had emporia in Maya lands and monopolized trade routes and obsidian mines in Guatemala and elsewhere. Complicated traffic routes depended on Teotihuacan leadership and those routes moved not only subsistence goods and raw materials, but also something equally important: status items. Feathers, furs, precious stones, precious metals (although gold was scarcely used by Maya), jade, high-value obsidian artifacts, power and authority emblems, elaborate hairdresses, all of them vital objects for the maintenance of the official "show-business" in the ceremonial parades of Mesoamerican centers. Elites depended on them, because the elites were interconnected by alliances and by showing off powerful contacts and vassal ties. By the year of 700 AD, Teotihuacan collapsed, as many other states, across the entire Mesoamerica, begun to plunge. The Maya collapse is the particular manifestation of a continent-scale phenomenon.

When the regional networks started to shortcut, elites in Maya region felt the absence of special foods, special items, special treatment and the vanishing of fancy political shields. Wars between Mayan states became pathological as archaeological data show in more and more sites every year. Genocides and massive executions of members of royal families prove extreme political crisis. The environment had already been destroyed in previous decades by excessive slash-and-burn agriculture, by enormous need for timber because of dwelling campaigns, because of alarming demographic increase, and cities practically unite one to another over a nude landscape transformed in savannah (C. McNeil 2005). By the 9th century, in Terminal Classic times, the jungle had disappeared, the humidity decreased, droughts became common and the winds increased from both coasts. In this context, ruling groups increase their exploitation, ask peasants for more food, more rituals, and more offerings. Common people, who probably practiced slightly or radically different

familiar religious beliefs, lost any faith in their rulers and in the official religious system based on the praise of the rulers. The wars must have been the perfect milieu for the social uprising. The bottom levels of the sacred lineages must have led the rebellion. We will never know where and when it started, but it swallowed the entire region extremely fast. The destruction of the socio-political structure of the major states (Tikal, Calakmul, Palenque, etc.) must have conducted to a snowball effect among the rest of political entities. The few skeletal remains of low-class inhabitants of that period show bad nutrition, infections, anemia, hunger, extreme physical effort. The image of a social collapse.

The archaeological research I undertake along the Candelaria River in southwestern Yucatan has lots to do with the collapse. My discoveries begin to sustain the social explanation of the phenomenon, as the findings of other similar projects do. It had started as a regional survey project, when an accidental discovery led to an emergency excavation and from there the entire story changed and absorbed us into an intriguing history.

The region of study and the reasons for starting a research there

Candelaria once was a heavily forested ecosystem, with numerous areas of wetlands along the riverbed. The average altitude of the region goes from only a few up to 50 meters above sea level. Smooth hills plot the landscape; they are of maximum 100 m high. The river is long and sinuous. As told above, it comes from Guatemala as San Pedro River and joins the Caribe River in a place called Bocas Santa Isabel, forming together the Candelaria. It snakes across the southwestern corner of the Yucatan Peninsula changing its direction from west to south, from north to west and it finally reaches a small lagoon, Laguna de Panlao, connected to a bigger one, the Terminos Lagoon, the entering door to the Gulf of Mexico. The riverbed is wide and deep, from 50 to 200 m wide and up to 30 m deep, a true scar into the calcareous yucatecan bedrock. The wetlands (*humedales*, in local terms) border the river especially on its north shore and become more dominant just on the middle part of the basin where this investigation is undertaken. There are wetlands also on the upper and inferior course of the river, but their incidence is not as important as on the middle sector where the river actually disappears and melts into hundreds of capillary channels, swamps, lagoons and mangrove tunnels. That is the El Chechén Wetlands region, a labyrinth of aquatic paths crossing a magic and fascinating landscape with surviving jungle patches, mangroves, and *cibalares*, the vast extensions of tall aquatic grasses full of crocodile nests and dangerous snakes, animals that are far away from extinction.

The temperatures average 28°C during a year, but during the humid summers or during the dry winters, the thermometer seldom raises up to 55° or 60°C where we do our fieldwork, combining with 90 per cent humidity. These extreme values became usual in the region because of the accelerated and aggressive deforestation during the last century. Candelaria city and its rural surroundings were founded during the third up to the seventh decades of the twentieth century. Before that, the region had stayed uninhabited for three hundred years. After the Spanish conquest, the catholic monks faced great difficulties in penetrating the area, in crossing the enormous jungles and sail over a river full of natural traps, so the evangelization seemed practically impossible. Consequently, they persuaded the Crown to decide the complete move of the entire local Maya population to the coastal harbor of Tixché, a former Postclassic successful economic center. From the seventeenth century, the region remained human-free until the official colonization during the twentieth century when the federal Mexican government decided to populate the Candelaria region as a solution for the land and agrarian crisis in the northern desert regions of the country. That was the beginning of the end for the native ecosystems, because the new colons, unfamiliar with the exuberant local vegetation and accustomed to the open spaces of the northern deserts, began to cut all the trees around in order to create pastures or simply because they could not stand so many trees in front of their eyes⁹. Today, Candelaria county is mainly a cattle-ranching region (especially cows and sheep, and exclusively for meat), with almost no agriculture at all, but with a good exploitation of aquatic resources by fishing. Despite the five decades of extensive cattle-farming and continuous deforestation, the jungle survived in distinct portions of the area, especially around the wetlands. The swamps are not good for cattle raising neither for agriculture, so the humid ecological niches (swamps, mangroves, lagoons and rainforest) remained almost untouched over important surfaces.

⁹ It might sound incredible, but this reason is sustained by the very inhabitants of the Candelaria River. The jungle was something bad, evil and annoying for the desert-born people arriving to the region, so everybody started to make the jungle vanish.

The first explorers and professional archaeologist invaded the Maya Area almost a century after the official and spectacular discovery of that culture by the adventurers J. L. Stephens and F. Catherwood during the nineteenth century (J.L Stephens 1843¹⁰). Curiously, the Candelaria River remained almost unexplored for nearly another half of century. There are two main causes for the situation. First, because the region has been depopulated centuries before and there were no locals available to guide the explorers into the renewed jungles. Second, because the archaeological sites in the region were not as big and monumental as the rest of the Yucatan Peninsula and the Peten Lowlands, so it did not attracted the explorers the same way. Of course, local people and traders knew about the presence of great number of lost cities along the Candelaria River, as *chicleros*¹¹, hunters, looters and wood traders wandered the zone. Nevertheless, the information did not reach the academic circles.

E. W. Andrews (1943) approached the area while surveying the southwestern Campeche and traveled along the river. However, he did not reach the El Chechen Wetlands, perhaps because of the difficult access in those times when no roads existed in the region. Later, several other surveying projects envisioned the region and reported a great deal of archaeological sites, but none of them insisted on the specific micro region we are investigating now. There were mentions about the existence of the sites, some authors even named them, recollected surface sherds, and elaborated quick incipient planimetric maps (A. Siemens and D. Puleston 1972, J. Eaton 1978, S. Pincemin 1989, L. Ochoa, E. Vargas 1985, S. Pincemin 1993, E. Vargas 2001).

The first reason for commencing an archaeological research on the middle course of the Candelaria River was the lack of any systematic studies on that part of the Maya territory. The abundant and lasting investigations in northern Yucatan or Petén or any other surrounding region contrasted with the lack of knowledge about the archaeology of the wetlands of Candelaria. A second reason was that the ancient settlements in the region seemed to be of less size and monumentality than the usually explored Maya sites and I wanted to contribute to the study of minor settlement levels. A third reason was personal, as I knew the region from a previous participation in a research and I maintained a close interest to that unusual area. Finally, a political reason: there was little or no academic struggle in the region, so I felt it was a peaceful territory from that point of view.

The Candelaria basin was more familiar to the historians than it has been to the archaeologists. That was because the region used to be mentioned in connection with Late Postclassic, Contact and Colonial Events. That was the legendary Acalan Kingdom of the Putun people. The Putun (also known as Chontal) were a Maya group that probably came from the Caribbean coast during the intense migrations that followed the Collapse. As Maya oral tradition compiled during Colonial times affirms, the Putun conquered local political entities and established their urban centers in Potonchan, Tixchel, and Itzamkanac, their capital. Fellow archaeologists consider that the original Itzamkanac, capital of the Acalan-Putun people is the actual site of El Tigre, some 40 km upstream from our research area. The name of Acalan actually comes from nahua language, spoken by the Mexica people (the Aztecs), and it means "place of canoes", alluding to the main art of the putun: sailing. The Putun Mayas were the major traders of the Postclassic world. They also worked for the Aztec Empire, a superpower dominating inclusively the Maya region from the remote capital in Tenochtitlan, where the modern metropolis of Mexico-City. The classic wonderful work of F.V. Scholes and R.L. Roys (1968, 1996) present us an historic and analytic view about the Postclassic and post-contact historical picture of the Candelaria River. The Spanish conqueror Hernan Cortés was in Candelaria, he lived briefly in Itzamkanac while traveling to Honduras in order to suffocate an internal army rebellion against him. In that very city or somewhere closely he executed the last Aztec king Cuauhtemoc, a prisoner in his cortege. Nevertheless, the amount of historic data referring to the Postclassic strongly contrasted the actual lack of Postclassic material in the archaeological data recovered in the region. That was another intriguing cause for my decision to investigate the region.

The first steps of the research

In 2002, I started to analyze the available bibliography for the southwestern Campeche and the Candelaria region and I began to delimit the future investigation area. I noticed there was one archaeological site previously visited by modern explorers (S. Pincemin 1993), El Chechén, and I

¹⁰ That was the first edition of Stephen's astonishing book *Incidents of Travel in Yucatán*, but today the interested reader can consult the 1963 Dover edition or any subsequent original and translated editions.

¹¹ "Chiclero" is the word used to name the people who collected the natural rubber (chicle, caucho) from the bark of a special zapote tree.

decided to start my project from that point. With funds from my university, I bought topographic charts and air photos from the Mexican National Institute of Statistics, Geography and Informatics (INEGI), a federal institution that owns and maintains an amazing database. They have actualized maps, charts and aerial photographs, in impressed and digital formats, for the entire national territory. Together with my undergraduate students, I started to analyze stereoscopic air photographs and identify the major architectural basements (the pyramids) visible as small round elevations. In Mesoamerican archaeology, we have that advantage: almost all the cultures erected their buildings on top of short or tall platforms trying to avoid flooding and stress status. These platforms survived for thousands of years, so most of the architectural units stay visible on surface. Air photographs analyses is useless if the sites are covered by dense vegetation like jungles. In our case, the region is deforested in more than fifty per cent, so the archaeological features are visible on the anthropic savannas covered by grass. Anyway, this technique is only useful for marking the presence or absence of a settlement, because only large structures are visible from the standard flying altitude (about 3500 m). In this initial phase, we confirmed the existence of a major settlement where previous scholars mentioned the site of El Chechen and discovered the existence of at least two other important concentrations of large structures to east and southeast. That helped us define the general shape of our surveying area, so that the three main pyramid concentrations fall inside.

In the summer of 2002 and the spring of 2003, I made my first initial trips to the region, 1800 km away from my University. The scope was to observe on field the actual existence of the sites and establish the first contacts with the local people. All the land is private property, large *ranchos* of dozens or hundreds of hectares entirely used for extensive cattle farming. That means that cows roam freely over large extensions of pasture introduced after the systematic destruction of the jungle. The contacts were positive, owners gave me permission to trespass their lands and the local city council offered us logistic and financial support. After that, I wrote the project design and presented it to the National Council of Archaeology (CNA), the superior organ in archaeological matters included in the National Institute of Anthropology and History (INAH). No surveying, excavation, or artifact analyses can be done in Mexico without the written permission of this institution. And the permit must be renewed for every campaign.

The fieldwork

From 2003 to 2005, we had four field seasons (see C. Ardelean 2005, 2006). The investigations commenced in the site of El Chechén, the eponym site of our project. There is no connection between its name and the former soviet country; it is just a strange phonetic coincidence. "Chechen" is a Maya word referring to a species of tree, common in the region. In Maya, *che* means wood, timber, and *chen*¹² means well, water hole. This is a sort of an oak, a precious wood that grows in tropical environments near to rivers, lakes and swamps. There are two variants, the black chechén (*Metopium brownei*) and white chechén (*Sebastiania longicuspis*). This tree was long exploited for expensive furniture manufacturing. There is a special detail about the tree. Its sap is highly caustic and it may cause serious burning-like injuries on skin, penetrating into the flesh. The name of the ranch that contains the site comes from the tree, and it extrapolated to the site itself. During one of the field seasons, I decided to give this name to the entire wetland region, and that is how this regional project got its name.

The main methodological component of the project was surveying. The first objective was to identify the totality of the visible architectural units of the sites, the site limits, to name and register the structures¹³. Starting from the core of the sites where the main buildings concentrate, we investigated every inch of the site until where no structure was visible anymore. The structures were named with the letter E and a number: E1, E2, ..., E45, etc. In each case, a label was provisionally attached to a nearby tree for further visual identification. Every structure was recorded on GPS, by standing on the top of the mound for about five minutes, allowing the device to obtain correct signal and stabilized data from the satellites. During the surveys, we had to employ a few locals or members of the owner's family who knew the place perfectly. We all used machetes all the time because we seldom needed to cross extremely dense portions of high tropical pastures and young jungle segments.

At the same time as surveying and mapping, we did surface material collecting. We recovered every possible ceramic fragment or lithic instrument visible on surface, recording its precise location.

¹² In Romanian, the word must be pronounced "cecen".

¹³ We use the term "structure" (*estructura*, in Spanish) to refer to any archaeological dwelling visible on surface.

Those were our first cultural and chronological indicators. From the very beginning, we noticed the dominating Late and Terminal Classic stuff, especially common ceramics. Nevertheless, there were also Preclassic materials showing up, the clearly diagnostic Sierra Red ceramics, good quality fine-slipped sherds indicating Preclassic occupation all over the region. That meant our sites had occupations from as early as 2nd century BC until at least 9th century AD, the time of the collapse. In several occasions, we had the fortune to discover *chultuns*, the Maya's subterranean storage rooms. Those are bottle-shaped holes carved into the soft calcareous bedrock beneath the thin soil, with narrow circular mouth on surface level. The internal walls could be covered in mud or plaster for isolation, but that was not a rule. Originally, they had a capstone sealing them, but in most cases, the lid is missing. Mayans used them to storage food, water jars and personal belongings. Today, farmers fill them with earth or garbage in order to avoid accidents for their cattle. That is a good practice, because it prevents or slows further damage. We numbered chultuns like CH1, CH2, and so on.

We also explored the wetlands properly. Using an engine boat, we studied the swamps, the mangroves and the flooded jungle fragments. No isolated structures or ancient farming facilities were discovered, but it is highly probable that the wetland conditions might have mitigated their presence. Nevertheless, we discovered an important but small settlement on a sort of island, a spot of dry land among swamps and mangroves.

The result of our surveys consisted of four Maya archaeological sites, and all the information suggested by the previous cartographic and air photo analyses was confirmed on the field. The four main sites are El Chechen, El Astillero, Las Palmitas and Isla Montuy (fig. 2). The last one is the small village discovered beyond swamps. Two other sites were recorded, but they surely are peripheral sectors of the major sites. El Palmar is an individualized northwestern sector of El Chechén, while El Achotal is a specialized craft sector of Las Palmitas. More than four hundred architectural structures were recorded in the four settlements together. That number indicates a very low population even if all the structures were all in use at the same time. Of course, many perishable non-platform huts must have existed across the surveyed territory, but there is no way to identify them by naked eye. The approximate limits of our surveying area enclosed about 50 km². It is not much, but it marks a clearly definable area with a relevant concentration of settlements inside an ecological niche.

It is probably worth mentioning that the architectural units we discover in those sites show no constructive and architectural elements on surface. Everything we see is a mound, a small artificial hill covered by grass and dense vegetation. The medium-size and large structures are easily visible not only because of the size (from 2 to 12 meters high) but also because the farmers do not use to clean them off because the cows do not climb them, so their vegetal cover contrasts the surrounding pastures. Nevertheless, there are extremely low mounds, sometimes only 20 cm tall that are very difficult to identify through the tropical vegetation. In some cases, there are tiny structures that become visible only after the elaboration of the detailed topographic maps. Anyway, the experienced eye can identify even the smallest ruin beneath the dense jungle cloth.

After the complete structure recording, surface collecting and GPS positioning, we reach an important step that happens to be ignored in everyday archaeological practices. Every site must receive its "zero point", the reference point. That is a physical point on the ground that must be permanent and it is indispensable for the future topographic process and excavations, because the entire horizontal and vertical values of the research will be referred to that particular point. This mark has precise geographic coordinates and a registered altitude above sea level. The "zero point" must be carefully chosen, because it must be visible from most of the angles and from most of the important structures. We looked for a good sight position, normally on the floor of the characteristic Maya plazas (squares) but never on top of the pyramids. The zero point must be situated on inferior altitudes so that the pyramids may have higher altitudes than the point, and also because the future excavations on the pyramids could affect or remove the point. Once chosen the approximate location of the bank, we use the GPS receiver to identify the right position¹⁴. For that purpose, we first set the device on UTM coordinates, because those are metric values, more precise and more easily to manage than geographic degree coordinates. It is recommended to establish the final point where the

¹⁴ It is very important to select the right Datum from the receiver's Menu options. For example, in Mexico archaeologists were used to employ the NAD27 datum (North American Datum from 1927) in GPS and analogue cartography. Today we know that this is not correct, because the starting point of the grid is physically situated on the ground and during the last century has moved about 200 meters on south-north direction. All the GPS coordinates obtained with that datum result displaced from the correct position. So, it is recommended to use more recent virtual grids like WGS84 or ITRF92 datum.

UTM coordinates finish in zeros or easy-to-recognize values. The GPS needs to rest for as long as half an hour on that place so that the computing result more precise and with less error. After its recording as zero point by GPS, some permanent element will be placed to mark the point definitively. It could be a pile of concrete with a PVC tube vertically settled in the middle and filled with concrete. The use of metal is forbidden, because it will affect the compass and transits.

Before topography, we made simple plans of the sites using a Brunton-type professional compass and a tape. The mapping took into account the inferior and the superior contours of the mounds. These plans are very useful in field before the elaboration of digital maps. For the proper topographic mapping, we used two theodolites, an optic and a digital one. I decided not to employ the in-vogue total station because of several reasons: the digital transits do exactly the same job like the extremely expensive total station, the extreme heat, the humidity and the rainfalls would have menaced the integrity of the apparatus, and also because the dense vegetation could have interfered with the laser beam. We had to employ micro-topographic techniques able to reflect the most subtle topographic differences. Back to the university, the field data was processed in specialized software and digital tridimensional maps were obtained¹⁵.

During the explorations in the core area of El Astillero, we noticed that one small structure, an ancient platform, has been recently affected by the construction of a rural road inside the ranch. The bulldozer actually cut it off by the middle. I believe worker's arguments when they say that they did not know that was a structure, because it is very low and almost invisible on the surface. The road left a good vertical profile so I asked my students to clean and draw it. Several plastered floors were visible and more than one occupational episode manifested on the stratigraphy. During cleaning, distal parts of human femurs appeared on the upper levels of the profile suggesting the presence of at least one human burial. The National Council authorized us to dig as an emergency excavation, because the rains could have washed the bones away. That event, in January 2005, changed my project's perspectives and led it to the complex problems of the Maya collapse. There were two skeletons we dug first and an extensive systematic excavation was planned for the next summer. That operation started with a grid that covered the entire surface of the structure, using a reticule of more than 40 squares of 2 x 2 meters each. A funerary complex showed up and we were facing interesting questions.

The preliminary results of the investigation

This research is only at its beginnings. The high costs and the difficulty to obtain funds in a country where there are literally hundreds of thousands archaeological sites waiting to be studied made us keep away from fieldwork during the last couple of years. The problems and challenges resulted from the first seasons are waiting for their resolution in future campaigns that are about to start soon.

The settlements. It is neither possible nor recommended to start a full description of the Maya sites we work on, as it would take a lot of space. Anyway, some characteristic traits must be presented in order to offer a resumed image of the discovered settlements.

El Chechén, the first site we surveyed and mapped, manifests the intelligent use that Candelarian Mayas made of the topography in order to defend their structures against flooding. The site is located exactly on the actual border of the wetlands, and probably in Late Classic times the shore of the water was even closer. The core of the settlement consists of two main spatial compounds separated by wide *bajos* (low terrains suitable to flooding and conserving water after rainy seasons). The main structures are not very tall, actually short by general Maya standards, and do not surpass 8 or 10 meters in height. The spatial distribution of the mounds respects the typical Maya model, with two to four structures closing a small patio (yard) between. A wide and long plaza end with two major structures on its northern and southern extremes; the northern is one of the most representative mounds of the region in shape and size, a good candidate for future excavations (E12). The southern one (E1) is a large and massive rectangular platform with another platform on it. A slightly elevated cluster dominated by the structure 2 defines the western side of the plaza. The type of that structure is a particular characteristic of the region: a rectangular platform that supports the actual ceremonial building on one of its short sides, having an additional small structure on one of the corners. Confusion persists about the architectural styles of the El Chechén region. As we have not developed yet extensive excavations in any major structure, we do not know if they are only stone-

¹⁵ For that purpose, we use the ArcView and Surfer programs.

and-earth basements supporting upper structures entirely made of perishable materials or if they really contain, beneath the debris, the remains of masonry buildings.

The "sunken patios" are an interesting characteristic of the site. These are small patios whose floor level appears to be much lower than the rest of the surrounding areas; they are bordered by small structures and seem to have funnel-like shape on one corner. I think these are a sort of artificial bajos, artificial depressions as additional water-managing devices made for absorbing the excess of water during flooding. The water could have been used to simulate mythical aquatic environments for ceremonial purposes.

El Chechén has several residential sectors, some of them very close to the nuclear area and others located at considerable distance, across the great-flooded area that occupies a major surface southeastwardly. The spatial pattern is of very low density. Nevertheless, the most important residential compounds situate immediately south and southwest from the core and present good-size mounds which might have supported large pole-and-thatched houses, probably an elite residential sector.

At about one and a half km to the northwest, the small sector called El Palmar ("place of palm-trees", as the rancho is called) seems to be a related site, probably a specialized sector or a residential compound separated because of political, religious or kin-related criteria. It has several medium-size mounds and about a dozen of very small, almost invisible residential platforms. The typical swampy intrusion separates the site in two groups; the northern one has a very long and narrow platform, probably supporting a series of perishable huts. More to the north, close to the edge of the dry land, there seem to be an area presenting debitage debris, probably the remains of stone tool manufacturing workshops.

About five km to the east, the settlement of Las Palmitas ("the small palm-trees", by the name of the nearby hamlet) raises its acropolis-like nucleus at the periphery of the site, on a natural hill, between a stream and a small lagoon. That lagoon is now dry most of the time, but in prehispanic times it probably connected with the rest of the wetland system allowing Palmitas an access to the riverbed. There are several interesting features about this settlement. It has its ceremonial core up on a small hill, like a veritable acropolis, not a very usual trait in the area. Moreover, this ceremonial core is located on the southern periphery of the settlement; the site develops northwardly, along the lagoon shores and over the slopes of the smooth hills facing the lagoon. The site goes for more than two km in that direction; at least that was the reach of our survey. Usually, the ceremonial nucleus is located in the center of the settlement or at least there are residential compounds all around it. In this case, there is no archaeological presence across the small seasonal river that borders the nucleus on its southern and western sides.

The monumental core itself has a typical Peten-like aspect: great plaza surrounded by tall structures. The main pyramids rest on large massive platforms around the Great Square. We assume them as temples, as the usual interpretative inertia in Maya archaeology. E1 closes the plaza on the western side; it is 12-meter tall, steep-sloped and well-preserved contours beneath the ruin shell that covers it (fig. 3). Worked stone blocks seen between the debris suggest there are masonry walls and stone platforms under the dirt. E2, on the northern side, is of that typical local style, a large platform sustaining a pyramid just on one of the short sides and that leaves room for a wide surface on the resting platform floor facing northward. There are visible staircases on the western slope of the platform. A large pyramid severely looted during the 70's of the twentieth century (as the locals confess) forms the eastern closing together with another two smaller structures. Behind those buildings, the eastern slopes of the acropolis descend into a posterior and lower plaza that connects the ceremonial core to a fascinating building: the Palace. This is the structure 23 and I consider it a "palace" because it closely resembles the typical residential and administrative elite building of the Lowlands, as there are in Tikal, Calakmul, Palenque and elsewhere. It consists of two and a half groups of low buildings enclosing inner patios between them. They link together as the patios share structures. A human femur found on surface suggests human burials inside. That probably was the residence of the local ruler and the siege of the political power. As far as I know, it is the only building of its kind in the Candelaria region.

The small site of El Achotal ("place of achiote", the name of a bush whose fruits are used to elaborate a spice) was thought to be a small village dedicated to stone tool production. It situates to the northwest of Las Palmitas, on the shore of the wetlands. Our surveys during the last field season proved that it actually might have been a sector of Palmitas' urban area. El Achotal is a very interesting site, because it is almost surely a complex of lithic workshops. It consists of several small mounds but all of them are associated with debitage accumulations and lithic pre-forms of flaked

cherts in various stages of production. Actually, most of the mounds could have been storage facilities where raw material and nuclei were kept. There is a close analogy between the Achotal mounds and the famous "chert mounds" reported in Becan and around the Río Bec region (P.M. Thomas 1981, M. Thompson 1991).

A similar settlement is Isla Montuy ("island of Montuy", the name of one of the first colons in the region), located about three km north from El Chechen, across a vast portion of the wetlands. The settlement rests on a small dry portion of land surrounded by mangroves, swamps and river channels. It consists of three groups of structures separated by *bajos*. Here the surface materials seem to support an exclusively Postclassic occupation. That means that probably this settlement lived long after the other towns disappeared. The mounds are very small and low, although some of them are almost 2 m high. The distinctive feature of the site is the great number of native chert flourishing from the bedrock and accumulations of debitage in numerous spots over the island. Despite that, very few unfinished tools were recovered from surface. Careful analyses and excavations could further establish the function of this late village.

El Astillero is perhaps the most important site of our area and it is about 3.5 km southeast from El Chechén in straight line. Its name usually means shipyard, the place for making boats, but in this case, it refers to a homonym, a place for "astillas", the Spanish for splinter, chip. A name that alludes to the accelerated deforestation started from the first decades of the twentieth century even before the massive colonization. Mexican and foreign companies exploited the rainforest for timber and "palo de tinte", a precious wood used for extracting natural pigments for cloth industry. The El Astillero stream, which during dry season is simply a dry bed scattered with puddles, while in rainy seasons it grows enormously, reaching more than 50 m wide and 2 m deep, crosses the site. In ancient times, it must have had a more stable and equilibrated hydrological behavior. The locals affirm that during the peak of the wood exploitation, the large and heavy logs were transported floating along the stream to the Candelaria River and then to the Terminos Lagoon and the Gulf of Mexico to be shipped to Europe and other parts of the world. That could suggest that in pre-Columbian times the Astillero riverbed was even more active and suitable for navigation as the main connection route of the inhabitants with the rest of the basin.

The little river forms the axis of the settlement and crosses its most important area. First coming from east it turns north, borders the eastern side of the low platform that sustains the core of the site and then forms a loop pointing west; inside its trajectory it delimits the nuclear sector of the site that unites the majority of the civic-ceremonial buildings. We already see an interesting sharing feature of the three main settlements of the region: El Chechén erected its temples and civic buildings very close to the swamps, bordered by large natural bajos and artificial water-regulating patios; Las Palmitas has its administrative and ceremonial sector on the southern periphery of the site close to the local stream that connects it with the lagoon and the wetland system; El Astillero repeats the model and approaches its nucleus to the available communication artery.

There are about two hundred mounds in El Astillero. They cover about eight km², four km from east to west and about two from north to south. It is not much for Maya standards but it is a usual, even large size for the local referents. If the majority of the structures were in use at the same time and adding at least half that number of perishable non-platform huts inside the jungle, then the original population of the site could have reached about one thousand inhabitants, but definitely not more. When we hear about approximations of sixty thousands or hundreds of thousands in major Maya metropolis like Tikal or Calakmul, the estimations for El Astillero sound ridiculous. Nevertheless, we must consider several factors, as for example that the traditional demographic estimations use to be exaggerated and ignore the problem of the functionality and time-correspondence of the structures. Moreover, as I will stress below, the sites we study along the Candelaria River seem to have lasted less and managed different socio-political dynamics than in the core of the Maya Lowlands. El Astillero divides its nuclear area in two: one is west and south of the loop of the river, the other is east and north from that. The architectural structures south of the river seem to be of higher importance in civic and ritual activities, while the opposite side was useful for elite residential purposes. The local pyramids are of similar or perhaps slightly less height than in Las Palmitas and they dispose in two different manners. On one hand, those pertaining to the main concentration in the core, as the E1, E4, E7, massive structures of about 8-10 meters high. On the other hand, lower pyramids dispose along an east-west line tangent to the core in the south, in an "autonomous" clustering. The small architectonic group including the E27 (where burials were found) is part of that elongated southern cumulus of relevant buildings.

Crossing the stream to the east, the last residential mounds are behind the modern facilities of the ranch, that is no more than 400 m. To the west, the shallow border of the site consists of the constant decreasing in mounds density until there are only a few small platforms on top of low natural elevations. It is interesting to say that a final architectural group dominated by a fine pyramidal dwelling close to a natural water-containing depression marks the northern periphery of the site. Beyond that, there is not a single hut. This is a characteristic settlement pattern trait shared with its neighbor Palmitas, whose northernmost clusters mark the extreme extensions of the site close to the river. The presence of these possible temples on the margins of the sites is an interrogation that will be worth investigating in the future.

South from the nuclear zone and south from the stream and the modern infrastructure of the site, on the northern smooth slope of a low natural hill, there is an important residential complex formed by articulations of platform-and-patio groups of medium and large residential structures. Some of the mounds, more than 30 m long and about one and a half meters high, resemble the residential sector located south of the ceremonial core of El Chechén. Still southward, where the residential complex seems to finish, there is a large segment of the original jungle, curiously intact among completely deforested savannas. Inside the jungle, there is only one mound. Then another small stream running from east to west, probably connecting somewhere with the Astillero stream. Beyond that small stream, there is not a single archaeological trace. Perhaps like in Palmitas, this might be a stream that marks a border, the final reach of the community, its buffer zone with neighboring sites. It is important to remember that about 10 or 13 km southward from that point, starts the great settlement of El Ruinal ("place of ruins"), one of the most impressive ancient settlements of the region.

The surface archaeological materials consisting as usual of many potsherds and intact or fragmentary lithic instruments show the same general cultural and chronological panorama as in the previous cases. All the materials are typically Maya artifacts corresponding to Late Preclassic and Late or Terminal Classic epochs. Practically, as the excavations also confirmed, there are no truly Postclassic materials, so the sites were abandoned by that time. In general terms, our settlements were surely inhabited with more density from the 2nd century BC to the 3rd century AD and then from the 7th to the 10th centuries AD. That does not mean there was an occupational gap during the period between, but the surface materials show only weak presence. Anyway, surface archaeology by itself is never a trustful confident.

A few hypotheses about the spatial relationship between the settlements. I mainly think about the relationship between the three major sites: El Chechén, Las Palmitas and El Astillero. The small village of Isla Montuy probably forms part of distinct dynamics from later times. The three mentioned sites have similar sizes, comparable structure and probably equivalent number of inhabitants. Maybe around four thousand people, as a maximum, inhabited the territory defined by the three urban or proto-urban centers to the end of the Late Classic. There is no enough space to commence a polemic and never-ending discussion about the pro and contra arguments of the urban character of these sites. But something is sure: they had a small population, a reduced number of monumental building, they had still wide-opened and sufficient public spaces in their core areas and were the residence for elites and commoners. The interesting aspect is the blind separation between sites; that means there are wide structureless territories separating the settlements. There are no visible mounds between El Chechén and Las Palmitas, or between El Chechén and El Astillero, neither between Las Palmitas and El Astillero. Small archaeologically invisible huts could have plotted the zone, but I seriously doubt that those would have been residential facilities counting for the demography. In 1999, I excavated a Late Classic temporary agricultural hut on a small island in the middle of the swamps close to Pozas de Ventura, a site located upstream, some distance from our research area. That hut, even as a little temporary facility used as a storeroom and a refuge against storms, had a strong basement. In a wet environment like Candelaria, it is expected that any dwelling had at least a small solid platform beneath. Moreover, such a neat spatial separation between sites is unusual for such late dates, as in the most part of the Maya area the Terminal Classic was marked by overpopulation.

I believe that there must be a direct and common-caused relationship between the empty spaces between sites and their relatively not crowded nuclei. I manage a series of hypothesis to approach the issue. First and the most important hypothesis, is that the Middle Candelaria settlements were relatively young. The population did not grow too much and there was no necessity to expand beyond some traditional borders and invade neighboring territories. I am sure that property relationships functioned well in Maya society although we have little possibility to identify them archaeologically. Verbal agreements and customs established the territoriality of the communities

inhabiting the various settlements. Rivers, lagoons, streams must have been obvious territorial markers. The low population allowed the three neighbors maintain their frontiers. Inside the city, the political and social situation could have been more stable than in the major Mayan metropolis. Less dynastic shifts and less socio-political segregation allowed them maintain a more quite spatial anatomy in the nuclei. There was no need for continuous public building construction, as the rulers did not change so often. In addition, the religious spectrum might have been less construction demanding. That relative stability maintained the settlement pattern less crowded. This conjuncture could be tested by further fieldwork and very careful analyses of the data. A second plausible hypothesis claims that the sites were of inferior range and the population did not congregate in minor centers because of the socially absorbing effect of the major cities from Peten and other densely populated regions. The minor rank did not allow the local elites to develop large architectural works or made no necessity for it. Politically speaking, the three sites were vassals of larger political units and their territorial politics depended on higher decision-making levels. A third hypothesis might suggest that, independently from the socio-political aspects, the apparently empty spaces between the sites were agricultural fields and forests used for subsistence means. These crop fields and jungle segments for hunting and gathering were subject to territorial and use agreements. This is a verifiable hypothesis by palaeobotanic and soil analyses. A fourth hypothesis, the less probable one, claims that the empty territories were frontiers, buffer zones implemented to separate three potentially conflictive political entities. This is a hard-to-contrast hypothesis and the less probable if we see it through the facts we already know about Maya political and territorial behavior. Anyway, some other new hypothesis could occur during the next phases of this research, because, as K. Popper suggests from the positions of the fallibilist epistemology, the data we find during our scientific investigations generate conjunctures that are further contrasted with empirical data on field and so on.

The excavations

During the surveys of the nuclear zone of El Astillero in late December of 2004, we noticed an almost perfect profile cut through the middle of a small platform during the construction of a road a couple of years before. The owners of the ranch decided to move the original road on a higher position to avoid its flooding and the bulldozers destroyed the entire northern half of the low structure we named E27. The small structure rests on the northern side of a compound formed by a relatively tall pyramidal structure and three low rectangular structures arranged around a plaza. The group stands over a large terrace just above the eastern shore of the Astillero stream. My students cleaned the vegetation and the profile and proceeded to the drawing of the 12 meters-long stratigraphy recording ten stratigraphic units corresponding to successive *sascab*¹⁶ floors and filling layers associated to distinct constructive and remodeling phases. The small building knew at least four construction phases but there are no clear traces of demolition or abandonment (C. Ardelean 2006).

There are at least four *sascab* floors visible on the profile. Between them, there are different kinds of fillings, generally consisting of dirt, garbage, potsherds and riverbed stones. The most recent floor (stratigraphic unit 2) is about 15 cm thick, very compact and of smooth polished surface. On the profile, that irregular hard and compact fill made of earth, stones and rich broken ceramics covered that floor. The fill seemed to be directly under the humus and there was no trace of posterior floors on top of it. We felt strange that such a compact layer had nothing but humus above and started to suspect that some other posterior phase existed on top but was washed away by the high erosion parameters of the region. That last *sascab* floor had had an immediately previous phase represented by a similar floor covered by a thin leveling of clay and small stones as a preparation for the next thick floor. At about the middle of the profile there was an erosion cone produced by the material accumulated by water erosion after the falling of a major stone or maybe a tree from the edge of the profile. That deposit was full of mixed archaeological material, mainly ceramics and bone fragments. Above that, just a few centimeters below surface, two long human bones, apparently femurs, were clearly visible. That was how we decided to program a rescue digging in order to retire the human bones or perhaps a burial menaced by imminent further erosion. At the beginning of that excavation, we did not think about anything else but a fast rescue excavation, mainly because that was a survey project with no excavations among its immediate goals. We were in the middle of the topographic mapping of Las Palmitas and El Astillero simultaneously and there was still lot of work ahead.

¹⁶ The *sascab* is a fine and soft calcareous rock typical for the Yucatan Peninsula. It is of bright white color and is extracted as white dust from the low hills of the region. In Mayan language, it means "white earth".

We started with a simple 2 x 2 excavation hoping that there was only one buried body. After removing the humus, the extremely compact fill showed up. The earth in that Maya region becomes hard like concrete when dehydrated. It requires slow micro-excavation and continuous careful humidifying because otherwise the large resulting clods destroy the archaeological material inside. The sieving becomes almost impossible, so the careful excavation must replace its function. In addition, the ancient builders had mixed the dirt with stones, sascab pieces and enormous amounts of potsherds, up to a thousand fragments per cubic meter. The intention was to create a solid fill. The first skeleton appeared buried in that fill and we named it Skeleton 1 (figs. 4 and 10)). It was lying on flexed right lateral decubitus, head to the south, face looking east, and the arms along the body; the right arm beneath and the left arm resting over with hands on the pelvic area. The feet and legs were missing from the knees, cut off by the bulldozers and the subsequent erosion. This body and all the posterior similar discoveries have something in common: large and medium-size stones were used to delimit the inhumation hole and fix the body in position. Many heavy coarse stones were put on the head and along the body. The skull resulted flattened. That was a curious practice; it is little known in the Maya area and that is mainly because we normally discover elite burials and these seemed to be low-class people with particular inhumation customs less reported in the archaeological record. The rock material that covered the bodies worked as grinding stones, it fit inside the bodies as flesh decayed and crushed and pounded the bones. It was closely associated with a large cooking pot of the Terminal Classic types, although the horizontal relationship did not made clear if it really belonged to the funerary context or if it simply was thrown in the fill during the construction. The stratigraphic analyses of the funerary contexts of E27 is very difficult because all the dead were buried in the same fill but in different periods of time, and the fill normally contains many ceramics, so sometimes it is difficult to say which artifacts came with the dead and which were thrown with the fill. Inside its mouth, actually behind the chin, we found a tubular bone bead, 4 cm long. It probably was part of a necklace or they placed inside his mouth as payment for the passage to the Underworld. The shape of the section suggests it could be made of human bone (a forearm).

The skeletal analyses have been done recently by Dr. Vera Tiesler Blos from the Department of Bio-Archaeology of the Autonomous University of Yucatan in Merida, a world-famous authority in skeletal anthropology of the Mayans (V. Tiesler 2008). All the related information resulted from her observations. The skeleton one was a medium age adult male with a robust body and some indicators of physical stress as a healed impact on his forehead. It has skull deformation, a widely-used cultural practice among the Mayans. They loved to modify the shape of their skulls by applying increasing pressure over the skull bones during the early infancy, manipulating the form and growth direction of the bones. The practice related to social status but ended as a common practice among all social layers motivated by aesthetic values (see V. Tiesler 1998). Most of the burials in our excavation presented that bio-cultural practice. Another usual practice was the teeth intentional mutilation, present in this skeleton as well in all the other adult individuals. It consisted in the shaping the form of the teeth by filing them down with some instruments (fig. 9). It usually involved canines and incisives and presents various different types. This individual, as well as the rest of the sample, had cronic infectious processes manifested in his bones probably because of diseases encouraged by nutrition deficiencies.

Close to that body, another skeleton appeared soon, lying in extended dorsal decubitus, hands together on the abdomen and with a fine orange bowl inverted over the face. We called that Skeleton 2 (fig. 4). It is another adult male, with serious infectious affections on his legs. He is oriented in diagonal with respect to the first individual with the head pointing northwest, and his skull almost touched skeleton one's skull. This man had worked hard with his hands as the phalanges show and bad nutrition left hypoplastic strays on his teeth. We modified the trace of the excavation in order to uncover this body and the laborious process together with the imminent end of the season obliged us to stop at that level in February 2005. The lack of visible posterior phases maintained the interpretational challenge until the following season in the summer of that year.

Because of the short remaining time and the fragility of the bones, the skeletons were kept on "witnesses" obtained by the deeper excavation of the surrounding space. We dug tunnels beneath and introduced wooden planks through them in order to elaborate the bottom of a sort of coffin. Then we built up the box's walls over the bottom and around the skeletons still resting in their original position. The students and our local employees manufactured everything using locally available wood from fallen trees. When the lids were ready, the coffins were complete and the two skeletons traveled to the Campeche State INAH offices in Campeche City, 300 km north. They remained in custody there and the rest of the bodies joined them few months later. More than a year passed until we had the

necessary funds to transport them, in coordination with the Institute, from Campeche to Zacatecas at the university's facilities.

In that second 2005 season, the only methodological goal was the extensive excavation of E27. Starting from the contours of the first digging, we traced the grid for the extensive excavation. From the very first day, we found out the truth about the posterior phases. There really has been an architectonic occupational phase posterior to that of the thick sascab floor. We discovered a compact and continuous layer of stones forming the substructure for the now-disappeared floor of at least two huts made of perishable materials (fig. 5). Why have we not noticed that in winter season? Simply because we were digging in the yard, right between the structures. Therefore, the compact fill containing the burials was the preparing layer for these final residential huts. Over the filling, they settled many medium size stones (from 10 to 30 cm, approximately), and that was the substructure of the floor probably made of clay, now washed away by centuries of erosion. There are no visible traces of pole holes or walls. Actually, I still have serious doubts about the interpretation of that context, but there is no better explanation. The whole west half of the mound was covered by those stones, while on the other half there were fewer. As the machines had destroyed the mound, any high expectations about the function of the stones made no sense at all. Provisionally, I maintain the residential huts version, hoping that future diggings will corroborate the hypothesis. Anyway, there was another architectural phase following the thick with floor phase.

New skeletons began to show up (fig. 6). Very close to the first two bodies, there was an incomplete adult body, Skeleton 3, probably the remains of an inhumation affected by later burials or other kind of intrusions. Close to it, the remains of a young infant, Skeleton 4, in extended dorsal decubitus, oriented to the northwest, and badly preserved. Just a meter to the south, a double inhumation, probably of a pair of adults, apparently man and woman. These two remained in situ, awaiting a future season to be rescued and analyzed. Just next to them, to their right and only centimeters away from second skeleton's feet, Skeleton 11 is perhaps the best preserved one (fig. 8, fig. 9). Its inhumation pit crossed the entire layer of fill and affected the sascab floor. This is an old-aged woman lying in extended dorsal decubitus, head to the north, and the arms along the body. Just as the rest of the burials, stones forming a small tumulus inside the filling had covered it. Across the excavation to the east, but only about six meters away, another similar inhumation reveals the remains of a middle-aged adult female, Skeleton 10, lying in the same position as number 11 but with the hands resting on the belly (fig. 7). Twelve stone axes (celts) have been deposited over and along the body. They mark the contour of the body or of the pit, but it remains unclear if they are meaningful offerings or were conceived like stones covering a body. On the center of the excavation, close to its southern side, the contours of an inhumation pit cutting the floor surface indicates the presence of an adult. Nevertheless, a few fragile bones of a baby's arms stood on a higher level, perhaps revealing a female buried with her baby. The young creature seems to wear a small bracelet made of three fish vertebrae.

As a general consideration, some of the bodies might have been buried tied up in funerary wrapping or deposited in very narrow pits as the position of the skeletons show, while others were freely deposited in wider holes. There are scattered human remains across the excavation, as teeth, phalanges, an infant skull (skeleton 5), fragments of bones, and that could mean that the place represented an inhumation site for several generations. At least two other burials were hypothetically identified by us, following the characteristics of the stone interface that marks an inhumation pit. A very interesting feature is the concentration of shells close to the inhumation area, to the northern side of the excavation. Hundreds of oyster shells buried in the fill. Most of them are marine comestible oysters, but we also have a species that lives among the mangrove roots¹⁷. The shells seem to have been in contact with fire, so we think they were cooked for some funerary feast.

Most of the skeletons were extracted in block from the excavation, together with the surrounding earth. In 2006 all the materials arrived to Zacatecas and we started the final excavation of the burials, as well as the treatment and analyses of the rest of the findings, as ceramics, lithics, bone, shell. The soil inside the wooden boxes had dehydrated during the storage time and cracked, increasing the fragmentation of the bones. The in-doors micro-excavation was difficult and slow. After the complete removal of the soil and stones, we washed the human remains and prepared them for study. The skulls were practically kept as they were extracted from the excavation because the complete removal of the earth would have caused the separation of the fragments. During the study,

¹⁷ The majority of the shells are *Crassostrea virginica* (marine) and *Crassostrea rhizophorae* (mangrove).

we extracted bone samples for further laboratory specific analyses. The samples were intact teeth, arm and leg bones as well as ribs, and they will be used to do DNA, strontium stable isotope and histomorphology analyses. These studies will allow us know the relationship between the buried individuals, their precedence as and their precise ages. Nevertheless, these analyses will proceed when the future excavations will provide more mortuary material.

The connection with the Collapse

This funerary complex is perhaps one of the most important among the recent discoveries in the southern Yucatan Peninsula and the only multiple inhumation context in the Candelaria region. But how does it relate to the Terminal Classic Collapse?

After penetrating below the level of the last phase represented by the probable domestic huts, we removed the most part of the stratigraphic unit number one (the repeatedly mentioned filling) and reached the well-done sascab floor. We noticed that the fill had some localized variations across the mound and it probably was due to the different working teams bringing material from different places. The large amount of potsherds is symptomatic. There are no connecting sherds, an additional prove that all the material was thrown inside when already broken. There are many ceramics from Preclassic times inside the fill, fragments of vessels produced perhaps one thousand years before their insertion in the filling. It shows how Maya workers brought earth from special dumping areas with garbage from previous centuries or maybe extracted from Preclassic contexts while digging out the earth for the construction. It is obvious that the informational potential of the great amount of potsherds in that excavation is very low.

In the southeastern corner of the mound, stratigraphically corresponding to the white floor, we discovered a circular element, probably the basement of a circular altar. It is made of simple masonry, stones connected by some earth, about 40 cm high and 3 meters in diameter. On the northern part of the low circular basement, we discovered the skull of a child built in the wall. The skull faces inside, the occipital and parietal bones are visible from the outside. That is the skeleton 9. We cannot tell if it is a decapitated head, a removed skull or the extreme of a body buried inside the altar. We had no time to verify it as the end of the campaign and the hurricane season hurried our work. The circular altar reminds the religious features dedicated to Ehecatl, the Mexican Wind God, an hypostasis of Quetzalcoatl, although this is supposed to be a much later import from the Highlands. The Maya equivalent, Ik, could be taken into account. But, as mentioned above, we are not sure about the character of the Maya religion during Classic and Terminal Classic times, so the meaning of a circular feature like that stays in the field of speculation (fig. 6).

More to the west, an alignment of parallelepiped sascab blocks marks a sort of a threshold, or maybe the line of the entrance, with wooden poles as a sort of porch resting over the blocks. The white floor stops there, it is the limit of the roofed area. Together with other architectonic elements that I cannot detail here, and considering the stratigraphic analyses, it is possible to say that the white sascab floor, the alignment and the altar form the remains of a possible small temple. It was oriented to the south, with the entrance facing the plaza encircled between structures 27, 28, 29 and 30. And the possible story developed as following.

The temple-like building we call 27 was a civic or ceremonial facility by the Late or Terminal Classic times, that is around 9th century AD. It formed part of a ceremonial clustering in the southern part of the urban core of El Astillero. Suddenly, some fast changes in the social and political structure of the Maya society reflected in the building's destiny. The temple was quickly disaffected, it ceased to function as such, and the building was dismantled and buried under a 40-50 cm-thick filling. But that inhumation was not aggressive, neither destructive. Before throwing the earth and the heavy stones on it, the floor was carefully and uniformly covered, protected with a thin and homogeneous layer of fine grey clay. The altar was carefully protected with stones and after that covered with the fill. The fill contained earth, stones, broken stone artifacts, ceramics used by the workers and ceramics brought together with the dirt. Probably the layer was constantly compacted with mallets. On top of the new substructure, some perishable structures were erected, with clay floors made over a previous preparation with pebbles. The new buildings probably were residential, as grinding stones and domestic garbage indicates. The people who occupied the former temple seems to be different at least socially, as their burials show few inventory or do not have any inventory at all. Their skeletons suggest a hard and physically stressful life. They built their homes over a mound that previously has been a temple. Nevertheless, they protected the temple before burying it, they still felt some kind of respect, or maybe fear to that special place. They also buried their dead in the fill. In several successive episodes, during several generations, maybe along a century as V. Tiesler (2008) suggests.

In some cases, the mourning rituals allowed them eat oysters recollected from the local mangroves and imported fresh from the Gulf of Mexico. Who were they?

The excavation was very small and very short so we cannot say too much. Nevertheless, the data we own allow us propose conjunctures, hypothesis to be tested in the next field seasons. The archaeological material found scattered in the filling rise interesting questions. It is not possible to talk extensively about the materials in this pages, because it would require large introductions and numerous suggestive illustrations and the space is limited. But I will refer to some of the most relevant aspects. The burials seem to indicate low-class people. It is not certain, but it is plausible. They show physical effort in life, poor nutrition, diseases, infections, etc. They have no rich offerings, and lack funerary chambers. We have arguments to consider them proceeding from the inferior stages of the social hierarchy. Moreover, we discovered many fragments of rich ceramics as the fine-orange potsherds of the Provincia Plano Relief type of the Balancan group (figs. 11 and 12). This is a ceramic type characteristic for the Late to Terminal Classic in the region. These vessels are of fine paste and high quality; they have glyphic and iconographic designs with incised contours and white slip. These are usually considered as elite ceramics. We found them simply rejected and broken between the refuse and dirt of the filling. That could mean several things, for example that those ceramics did not have the same value for the last inhabitants of E27 as for the anterior ruling class. We also discovered similar treatment for some lithic articles, for example a fragment of greenstone earring. Fascinating silex and chert knives and spear points appeared in different parts of the excavation roughly concentrated in the area of the altar, but as they were thrown inside the fill, with no clear association to the burials, difficult any intent of contextual interpretation (figs. 13 and 14). Vargas demonstrated that in El Tigre, the greatest settlement of the Candelaria River, very fine silex and obsidian artifacts with absolutely no traces of use, were deposited as offerings in a variety of contexts¹⁸. It teaches us that if unused high-valued stone instruments are thrown into a fill, that does not mean a loss of significance, but rather a highly-appreciated offering. The future excavations planned in several buildings in El Astillero will try to clarify these aspects.

The domestic huts over a temple or high-status building; a shift in the use and social pertinence of a structure. In my opinion, as a worth-testing hypothesis, the last occupants of E27 were members of the inferior social groups that took part in the rebellion against the Maya ruling class and, after the destruction of the established social and political order, settled over the vanishing symbols of the extinguished world. Nevertheless, they still recognized the sacred imprint of that kind of platforms, their connection to the divine, to the Metnal (the Underworld) or the Classic equivalent. Maybe that is why they did not just destroy the remains of the previous phase; they protected it and buried it as a dead being¹⁹. The place was good for the eternal rest, so they buried their dead in the same place. The long-lasting exploitation of the low social groups by the ruling elites led to a generalized rebellion, stimulated by the environmental crisis and the destruction of the Mesoamerican exchange routes. The new order of the inverted social pyramid started with the settling of the revolted winners in the formerly exclusive central ceremonial spaces. They built their houses over the former temples and palaces. A situation that is visible in many other sites across the Maya Lowlands by that time. They continued to practice their particular culture and bring into the archaeological record customs and rituals that were different from the previous Classic elite way of life. After a while, the new social differentiation began to establish new elite, probably kin-related to the ancient defeated elites. The new process resulted successful only in some regions; many others never recovered their previous splendor and their cities progressively lost their population as new urban centers attracted the peasants, the artisans, the traders. That was the beginning of the Postclassic society.

Concluding remarks

The Middle Candelaria basin offers an interesting settlement pattern closely related to the ecological niche of the El Chechén wetlands. Three major sites of very similar size occupied a relatively small territory in close connection between each other. The archaeological materials suggest an occupation from the Preclassic until the collapse processes of the Terminal Classic, during about one thousand years. The low internal density of the sites and the empty spaces separating them talk about social, political and demographic realities somehow different from the rest of the Maya

¹⁸ Ernesto Vargas, personal communication, 2008.

¹⁹ In the Mesoamerican cultures, the buildings were believed to have souls, to be alive, like humans and animals. The essence of the foundation sacrifices and offerings rests on that belief.

Lowlands of that time. The settlements discovered and mapped in the wetlands region share some spatial and architectural characteristics that make them define a specific cultural subregion. The discovery of a funerary complex in a small platform at El Astillero leads the research to the problem of the collapse at the end of the Classic period and hypothetically supports the social rebellion theory. A small civic or ceremonial building from Late Classic times was carefully buried under a layer of fill and a new construction phase erected residential huts on top. The apparent inferior social condition of the defunct together with the stratigraphic panorama seems to indicate that low-class people occupied the core of the site in Terminal Classic. The future investigations are meant to verify the hypothesis by searching the probable repetition of similar contextual data in other points of the site and in the neighboring settlements.

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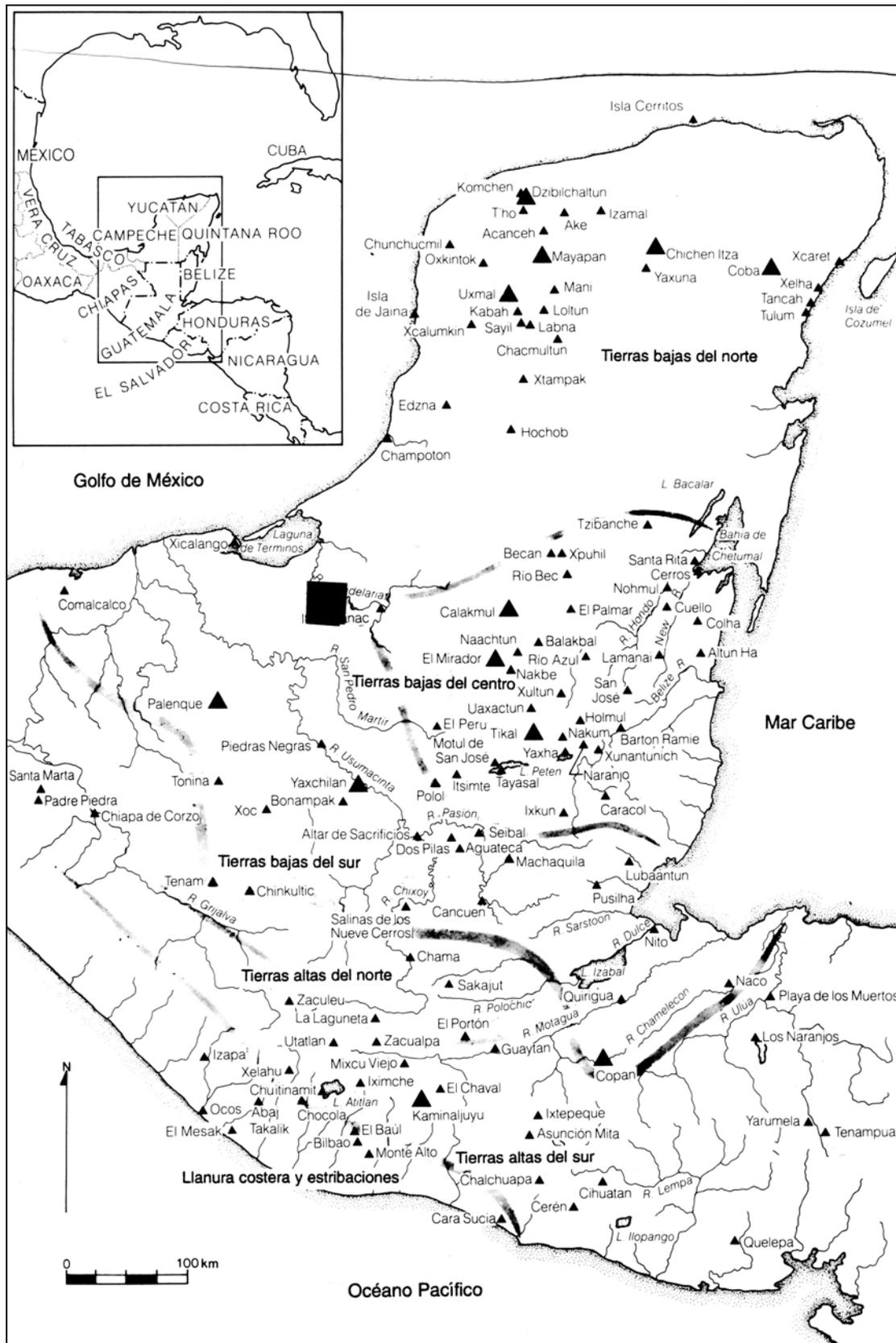


Fig. 1. General map of the Maya area showing the main archaeological sites. The black square marks the location of the El Chechén Wetlands on the Candelaria River (adapted from Sharer 1998, p. 37, fig. 1.1).
 Harta generală a zonei Maya, cu indicarea principalelor situri arheologice. Pătratul negru delimitază poziția zonei umede El Chechén, pe râul Candelaria (după Sharer 1998, p. 37, fig. 1.1).

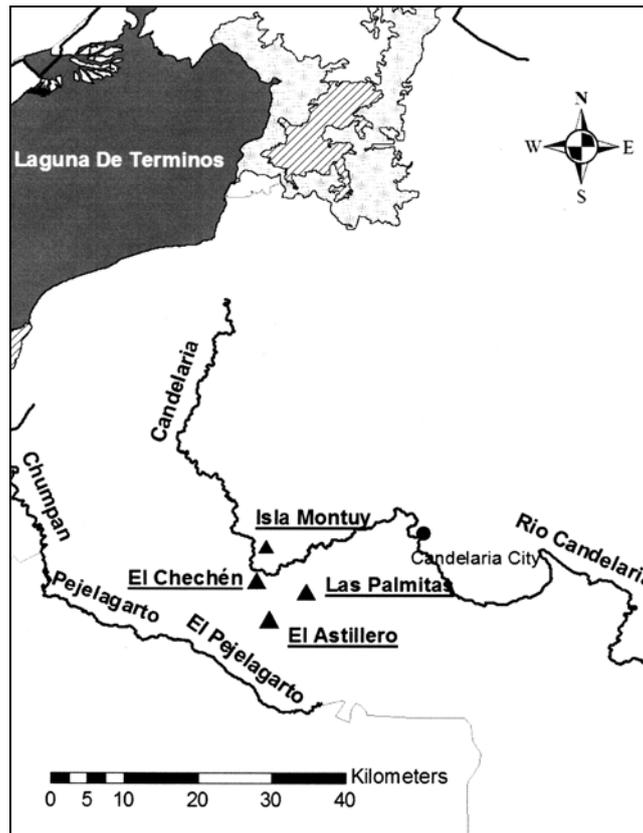


Fig. 2. The four main sites around the El Chechén wetlands of the Middle Candelaria River.
Cele 4 așezări principale din jurul zonei umede El Chechén de pe cursul mijlociu al râului Candelaria.



Fig. 3: E1, one of the major monumental buildings in Las Palmitas, covered by sediments and huano palm-trees. The photo was taken in May, soon after the cyclic cremation of the vegetation, a practice the local farmers employ to increase the fertility of the soil. The shape and general aspect of this mound is typical for most of the local Maya "pyramids" (photo: C. Ardelean).

E1, una dintre principalele clădiri monumentale din Las Palmitas, acoperită de sedimente și palmieri. Fotografia a fost făcută în luna mai, puțin după arderea periodică a vegetației, o practică curentă pe care fermierii din zonă o folosesc pentru creșterea fertilității solului. Forma și aspectul general al mivei sunt tipice pentru majoritatea "piramidelor" Maya din zonă (foto: C. Ardelean).

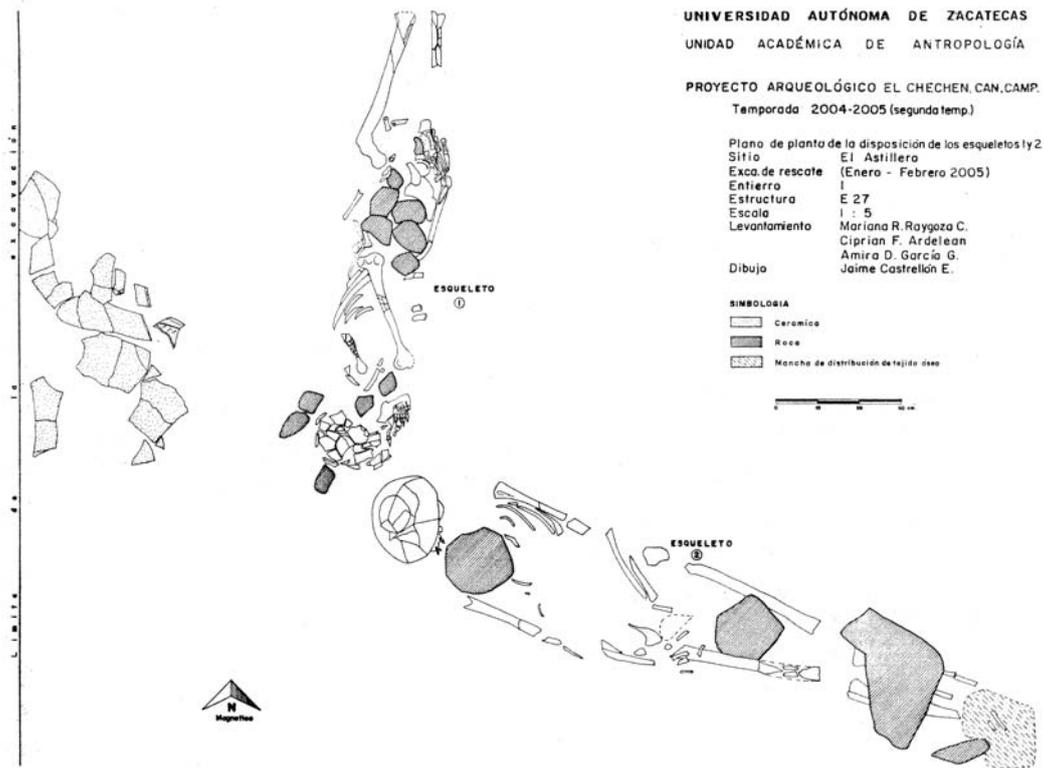


Fig. 4. The first two skeletons discovered in the inhumation complex of E27 at El Astillero (C. Ardelean 2006, p. 67, fig. 3).

Primele 2 schelete descoperite în complexul de inhumație E27 de la El Astillero (C. Ardelean 2006, p. 67, fig. 3).

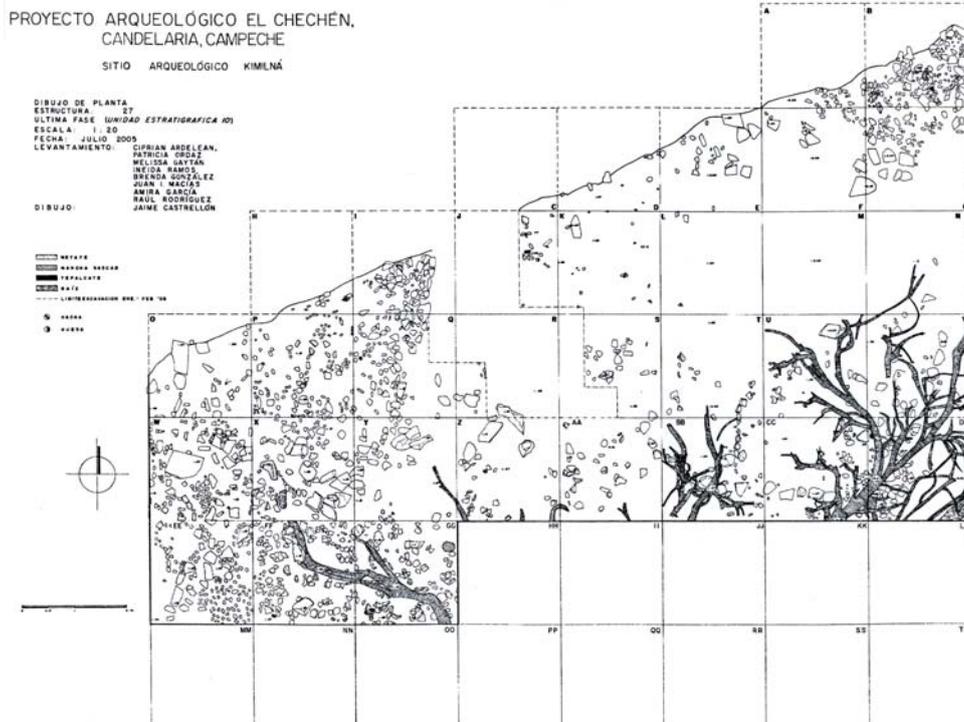


Fig. 5. The last occupational phase of structure 27: the accumulations of stones that sustained the floors of perishable material residential huts (C. Ardelean 2006, p. 68, fig. 4).

Ultima fază de locuire a structurii 27 : acumulări de pietre care susțin podelele locuințelor realizate din materiale perisabile (C. Ardelean 2006, p. 68, fig. 4).

PROYECTO ARQUEOLÓGICO EL CHECHÉN,
CANDELARIA, CAMPECHE.

SITIO ARQUEOLÓGICO KIMILNÁ

DIBUJO DE PLANTA
ESTRUCTURA 27
ESCALA 1:20
FECHA JULIO 2005
LEVANTAMIENTO CIPRIAN ARDELEAN
PATRICIA GORDAZ
MELISSA GAITÁN
INEIDA RAMOS
BRENDA GONZÁLEZ
JUAN I MACÍAS
AMIRA GARCÍA
RAÚL RODRÍGUEZ
DIBUJO: JAIME CASTRELLÓN

■ CERÁMICA (OFRENDA)
 ■ ÁREA DE RAÍZ
 ■ CERÁMICA
 ■ RAÍZ
 ■ PARED
 ○ CAPA M.
 □ ENTERRAO
 ○ HACHA
 ○ VENTERAS DE VIDUA
 ○ CRANEO ESQUELETO 8
 ○ HUESO
 ■ ÁREA SUD-OCCIDENTAL
 ■ ESQUELETO 10
 --- LÍMITE DE BORDO
 --- DELIMITADOR DE SACA
 --- LÍMITE EXAMINADO
 ENL. FEB. '05

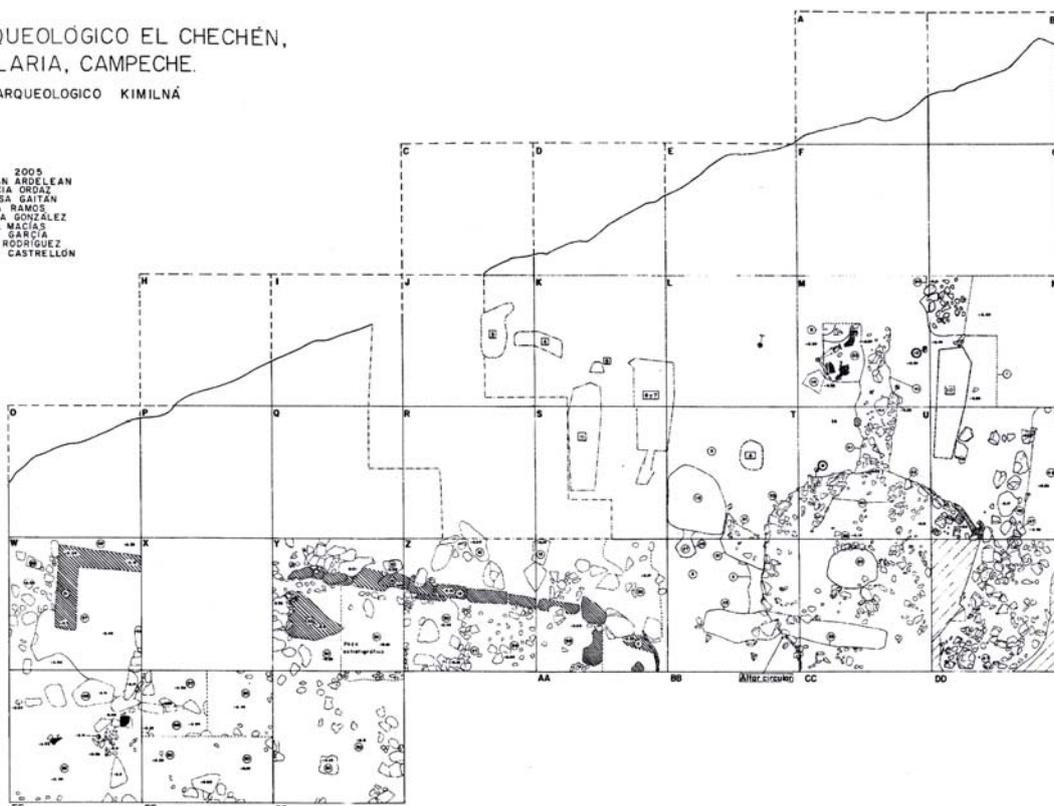
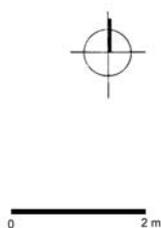


Fig. 6. The phase of the temple: a possible ceremonial facility manifested as a plastered floor, a circular altar in the southeastern corner, and an alignment of sascab blocks at the entrance. The drawing also shows the contours of the burials excavated in the 2005 summer season (C. Ardelean 2006, p. 69, fig. 5).

Faza templului : o posibilă amenajare pentru ceremonii reprezentată printr-o podea, un altar circular în colțul sud-estic și un aliniament de blocuri de piatră la intrare. Desenul arată de asemenea conturul mormintelor săpate în vara anului 2005 (C. Ardelean 2006, p. 69, fig. 5).

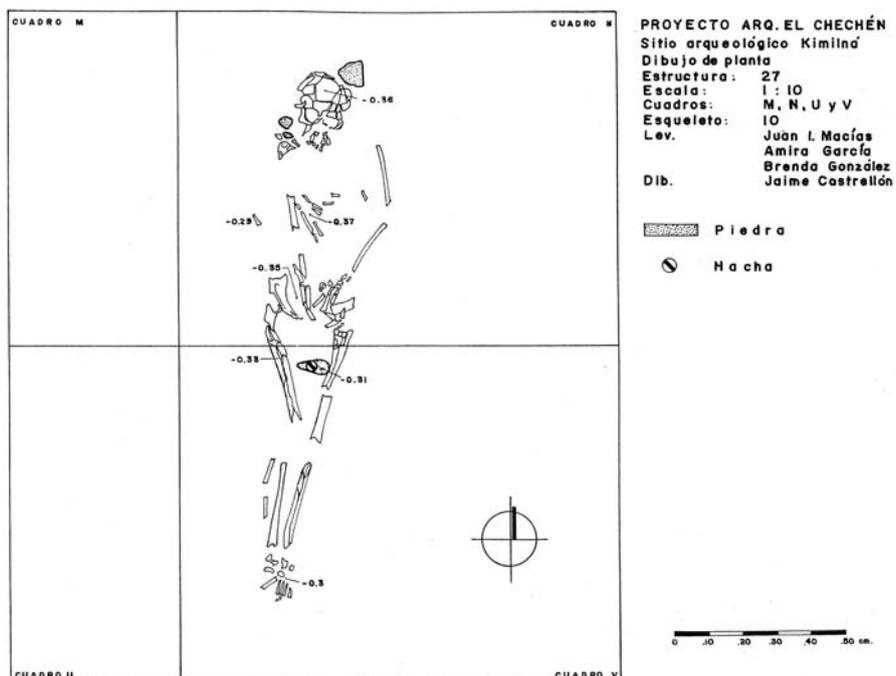


Fig. 7. The drawing of the skeleton 10 (C. Ardelean 2006, p. 70, fig. 6).
Planul scheletului 10 (C. Ardelean 2006, p. 70, fig. 6).



Fig. 8. Burial 11 during excavation. The bottom of its inhumation pit affected the previous-phase plastered floor (photo: C. Ardelean).
Mormântul 11 în timpul săpăturilor arheologice. Baza gropii de inhumație afectează faza anterioară a podelei (foto: C. Ardelean).



Fig. 9. Detail of the skeleton 10's dentition showing aesthetic dental mutilation on superior incisives (photo: C. Ardelean).
Detaliu al scheletului 10 cu mutilarea estetică a incisivilor superiori (foto: C. Ardelean).



Fig. 10. Skeleton 1 during excavation (photo: C. Ardelean).
Scheletul 1 în timpul săpăturilor arheologice (foto: C. Ardelean).

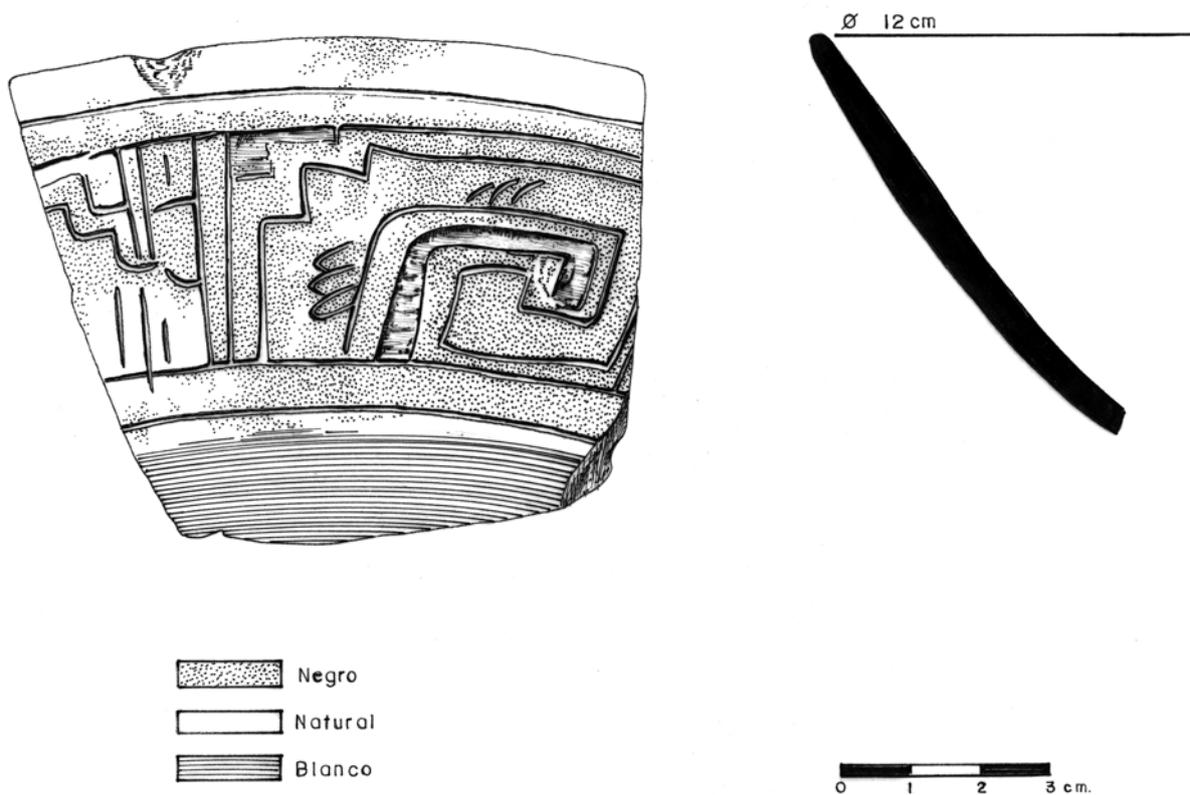


Fig. 11. Fine Orange potsherd, a Balancan Plano Relief variety, high status vessels diagnostic for the Terminal Classic period (drawing: Jaime Castellón).
Fragment de vas fin, o varietate a tipului Balancan Plano Relief, vase cu standard ridicat diagnostice pentru perioada Clasică finală (desen: J. Castellón).

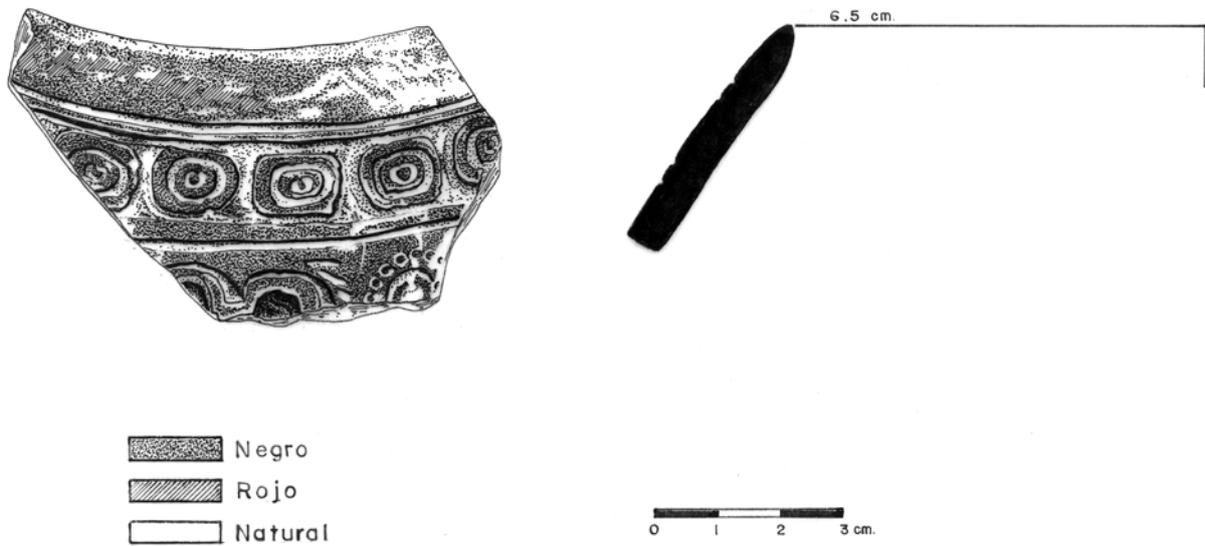


Fig. 12. Another variety of a Balancan Fine Orange (drawing: J. Castellón).
O altă varietate a ceramicii de tip Balancan.

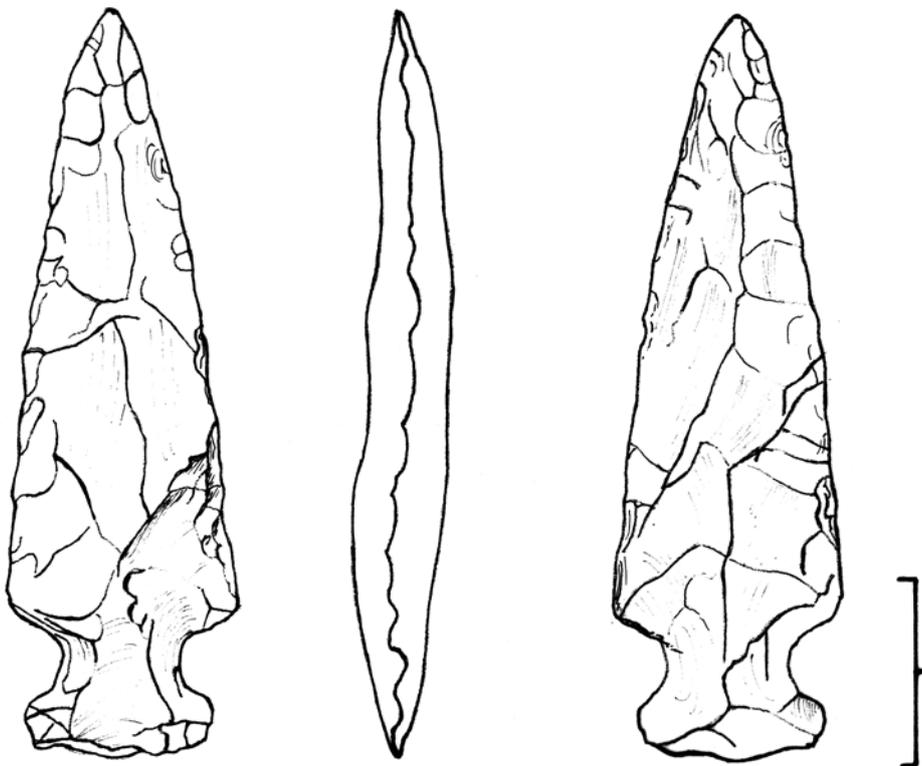


Fig. 13. Dart points typical for the initial Postclassic period. This was not a proper spear, but the active part of an atlatl (thrower) projectile (drawing: J. Castellón).
Vârf de suliță tipică pentru perioada Postclasic. Aceasta nu a fost o suliță propriu-zisă, ci partea activă a unui proiector/aruncător (desen: J. Castellón).

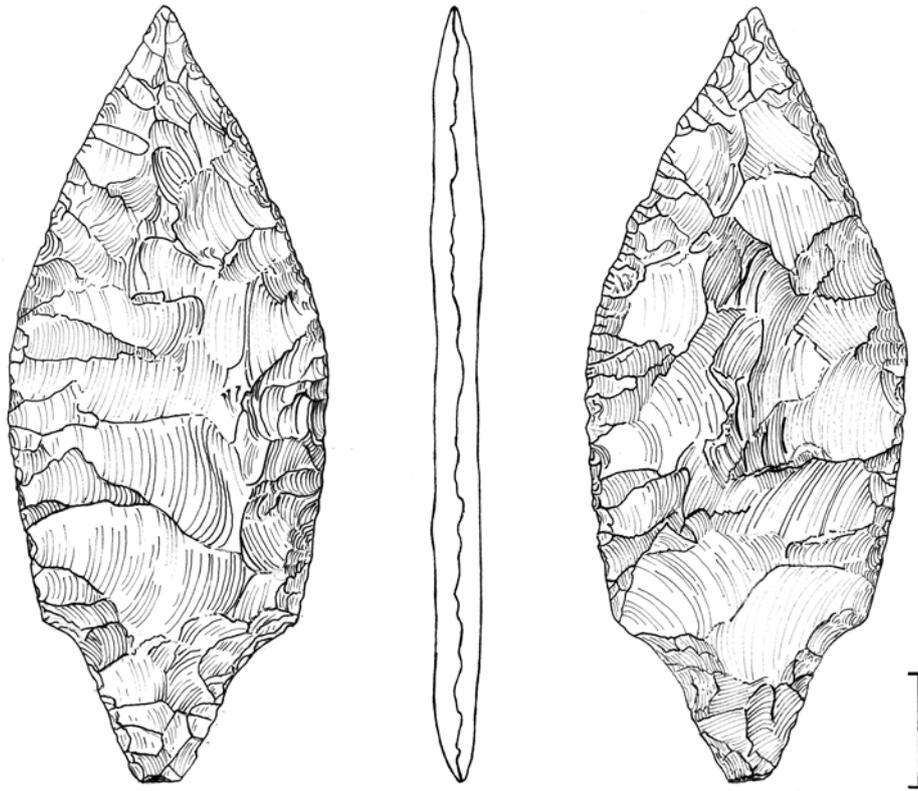


Fig. 14. This finely made biface is one of the finest findings of the project: a white transparent silex knife, completely intact, probably thrown as an offering in the filling layer (drawing: J. Castellón).
Această bifacială este una dintre cele mai deosebite piese descoperite în cadrul acestui proiect: un cuțit de silex alb transparent, complet intact, probabil depus ca ofrandă.