The PARI Journal

A quarterly publication of the Ancient Cultures Institute
Volume XXVI, No.1, 2025

In This Issue:

Submissions:
marc@ancientcultures.org

The PARI Journal
202 Edgewood Avenue
San Francisco, CA 94117
415-664-8889
journal@ancientcultures.org

Electronic version
available at:
www.precolumbia.org/
pari/journal/2601

ISSN 1531-5398

Some Considerations on the Founding of Tenochtitlan

Leonardo López Luján
Instituto Nacional de Antropología e Historia, Mexico

Eduardo Matos Moctezuma
Instituto Nacional de Antropología e Historia, Mexico

Translated into English by ***Scott Sessions***

In memory of Tomás Filsinger (*1953–2024*)

In 2025, the issue concerning when to observe the seven hundredth anniversary of the Mexica capital's founding has arisen once again (Figure 1). This leads us to formulate some basic ideas about that primal moment, although not without the caveat that searching for the exact day and year of such an event seems futile. In general, the cities of antiquity did not emerge and grow overnight; rather, they were the product of gradual, multifactorial processes whose origins are always uncertain.

All Roads Lead to Rome

Before going into the Mexica material and in order to broaden perspectives, let us first consider the paradigmatic example of Rome, the great imperial capital.

Figure 1. One of the portents of Tenochtitlan's founding in the year 2-House (1325) and the construction of Huitzilopochtli's primal shrine and the Tzompantli, from the *Codex Mendoza*, folio 2r. Photo: Biblioteca Nacional de Antropología e Historia.

Figure 2. The bronze Capitoline She-Wolf, depicting the portent of Lupa nursing Romulus and Remus. Sala della Lupa, Musei Capitolini, Rome, Italy. Photo: Jastrow, Wikimedia Commons (public domain).

Some written accounts (including those of Virgil, Livy, and Dionysius of Halicarnassus; see Grandazzi 1991; Dumézil 2016) mention with surprising precision that the city emerged at the foot of the Palatine Hill on April 21, 753 BCE, a temporal milestone that would serve for centuries to fix any Roman historical event in absolute time (*ab urbe condita* or AUC, that is to say, years elapsed "since the city's founding"). The deed's heroes, we are told, were the legendary Romulus and Remus, twin brothers who descended from the mythical Aeneas of Troy and were grandsons of Numitor—the deposed king of Alba Longa—and sons of the princess Rea Silvia and the god Mars himself. The infant twins were spared immediate execution by their uncle Amulius when he usurped the throne of Alba Longa and had them placed in a basket that was cast onto the waters of the Tiber. After drifting into the Velabrum marsh, the boys had the good fortune of being nursed by the she-wolf Lupa (Figure 2), fed by the woodpecker Picus Martius, and adopted and raised by the shepherd Faustulus and his wife Acca Larentia. As destiny dictated, Romulus and Remus would avenge their grandfather as adults, although they subsequently entered into a fratricidal dispute to determine the epicenter of a new kingdom—Remoria on the Aventine or Rome on the Palatine. A more numerous flock of vultures on the latter hill was the divine portent signaling it as the chosen site. Ultimately, Romulus would kill and bury his brother on the Aventine and then found the city of his designs on the Palatine.

In stark contrast to this rich narrative from the Latin classics where myth and history interact and enhance each other, archaeology offers less chronological precision but greater detail regarding the early occupations of ancient Rome. Various excavation teams have documented intense architectural activity in the city's deep strata during the seventh century BCE, which roughly coincides with the aforementioned April 21, 753 BCE date of written tradition. They revealed the construction of temples, walls, and terraces, not only on the Palatine, but also other areas within the modern metropolis, including the Capitoline Hill.

This would seem to partially support the founding myth of Romulus and Remus; however, we should emphasize that material evidence of considerably older occupations has also come to light, the earliest belonging to the seventeenth century BCE, that is, the Middle Bronze Age. At that time, for example, the Capitoline was inhabited, developed, and even fortified. In other words, archaeology offers an extremely intricate panorama where questions multiply as new discoveries are made. In fact, we may confidently suppose that in the near future other remains will be unearthed that will once again disrupt our conceptions of the process of urban generation.

Beyond specifically dating Rome's founding, a heated debate persists about how this phenomenon would have taken place. According to Alexandre Grandazzi (1991, 2007), an authority on the city's origins, there are two major opposing interpretive models. In spatial terms, scholars debate whether Rome was established by the merger of several villages or by

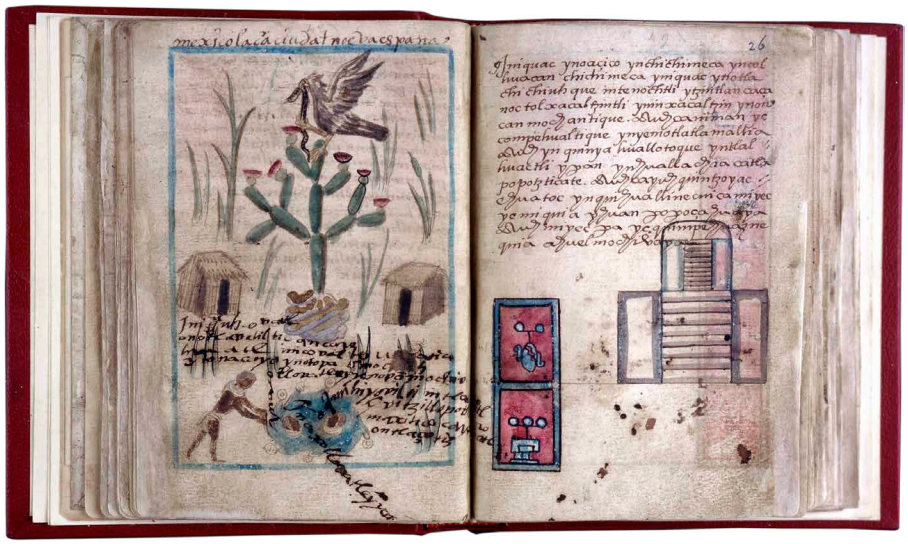


Figure 3. Alternate year date 2-Flint (1364) for the portent of Tenochtitlan's founding and the construction of the Templo Mayor, from the *Codex Aubin*, folios 25v–26r. Photo © The Trustees of the British Museum.

the progressive expansion of an original nucleus. In other words, did Romulus's city result from the unification of separate, independent, sovereign communities or from the linear nuclear development of a single settlement? And, in temporal terms, was it a sudden occurrence or a progressive evolution, a datable event or the unfolding of a slow process, a historically and archaeologically definable moment or a phenomenon of long duration? As the reader may well imagine, despite decades of painstaking research, such questions are far from being resolved.

The Mythohistorical Data for Tenochtitlan

Let us now head back across the Atlantic for an overview of the key information concerning the origins of the Mexica capital. In 1992, the art historian Elizabeth Hill Boone published a census of thirty-nine pictographic and alphabetic sources from Central Mexico generated during the sixteenth and seventeenth centuries that refer to the date of Tenochtitlan's founding and the consecutive reigns of its rulers from Acamapichtli to Motecuhzoma Xocoyotzin. Interestingly, fifteen of these sources assign an exact year to portents that supposedly indicated the location of the promised land to the Mexica (see Castillo Ledón 1925; Heyden 1988; López Luján 1993). All of the dates fall within the fourteenth century CE, although with discrepancies ranging some forty-eight years. This should not be surprising for we know that the real and the ideal are always inextricably intertwined within this documentary corpus, in addition to the fact that these sources reflect various historiographic traditions.

According to Boone's meticulous census (1992; see also Palacios 1925; Matos 1999), the years 8-Rabbit (1318?), 12-Rabbit (1322), 1-Flint (1324), and around 4-Rabbit (1366) appear just once (respectively, in the *Anales de Cuauhtitlan I*, *Historia de los mexicanos*, Mendieta, and *Tira de Tepechpan*); 2-Flint (1364) is found twice (*Codex Aubin*, *Aubin-Goupil 40*) (Figure 3); and, most frequently, 2-House (1325) occurs nine times (the *Codex Mendoza* paintings, *Codex Mexicanus*, *Anales de Tlatelolco 5*, *Anales de Cuauhtitlan* king list, *Leyenda de los Soles*, *Chimalpahin Relación 3*, *Chimalpahin Relación 7*, *Chimalpahin Historia*, *Crónica mexicayotl*).

This last date, 2-House, has its correlate in stone on the so-called Teocalli de la Guerra Sagrada (Sacred War Temple), carved around 1507 during the reign of Motecuhzoma Xocoyotzin (Figure 4). It is an exceptional scaled depiction of a temple topped with a shrine where the Mexica *tlatoani* and the god Huitzilopochtli offer their blood to sanctify an image of the Fifth Sun (4-Movement)—the definitive, final era in Nahua cosmogony. The stone temple's entire rear face is occupied by the most famous of the visions that led to Tenochtitlan's founding (Townsend 1979; see also Caso 1927): a golden eagle perched on a cactus full of prickly pears/hearts, growing out of a stone/visage resting on the womb of a divinity surrounded by an aquatic environment, with an *atl-tlachinolli* ("water–burnt earth" or "inundation-conflagration," that is, destruction resulting from cosmic war) glyph below its beak. In a suggestive manner, the shrine's flat roof has a rectangular

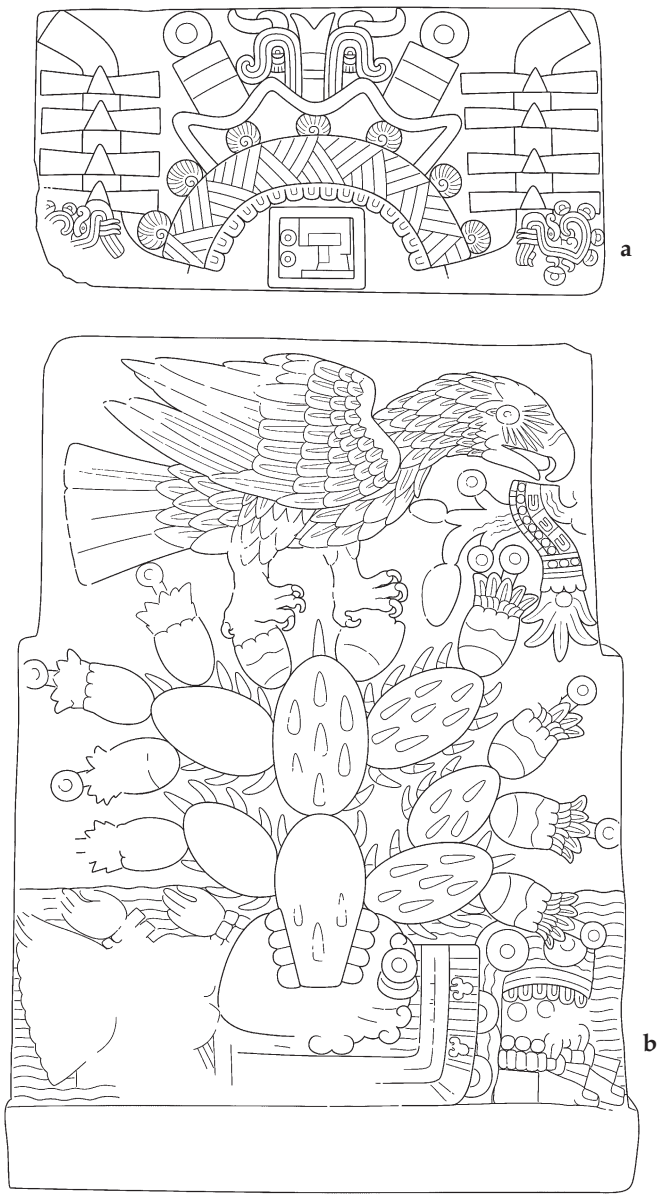


Figure 4. Teocalli de la Guerra Sagrada: (a) relief on the roof of the shrine atop the temple, with two fire-serpents (*xiuhcocoa*) framing a penance symbol (*zacatapayolli*) in the center, and a cartouche containing the year sign 2-House (*ome calli*) below it; (b) relief on the temple's rear face depicting one of the portents of Tenochtitlan's founding: an eagle (*cuauhtli*) perched on a nopal cactus with prickly pears (*nochtli*), which grows out of a stone (*tetl*), with the sacred war (*atl-tlachinolli*) glyph under its beak. Drawings courtesy of Nicolas Latsanopoulos.

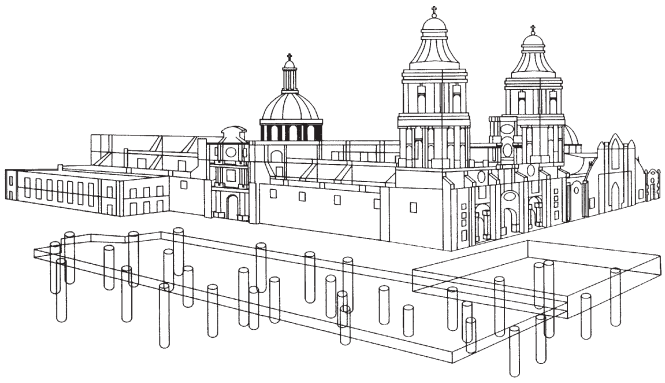


Figure 5. Distribution of the thirty-two cylindrical shafts called *lumbreras* excavated under the Metropolitan Cathedral and Sagrario in the 1990s (after Aguilar 2013:38).

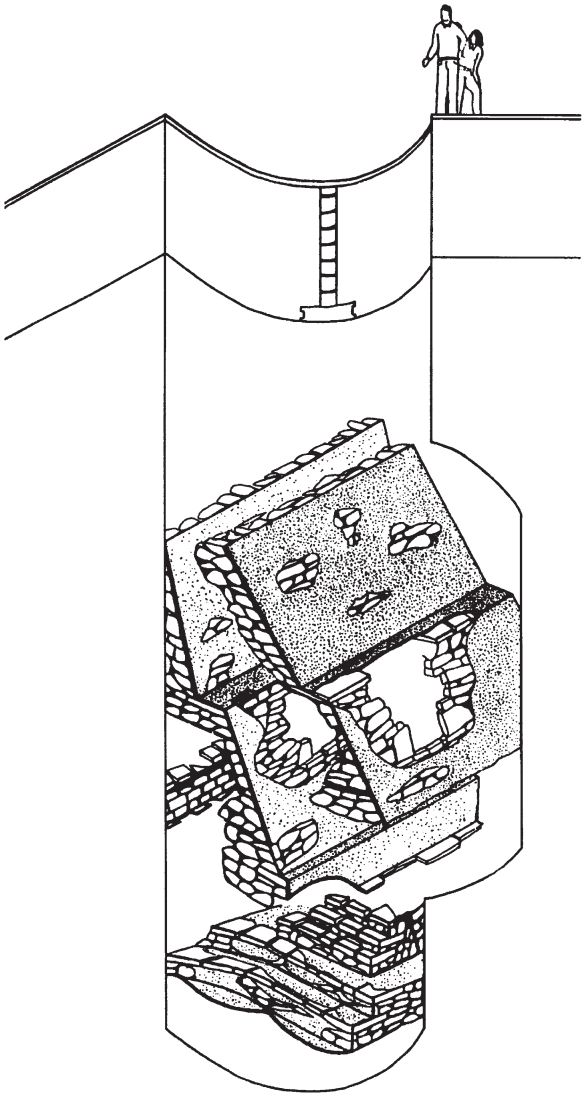


Figure 6. Schematic reconstruction of Lumbrera 24 below the Metropolitan Cathedral, explored by the Urban Archaeology Program, INAH. Drawing courtesy of Julio Romero.

cartouche containing the chronological sign 2-House, which, we should emphasize, has lent itself to various interpretations, including an allusion to the year 1325. Boone's census (1992) can be further augmented with the recently discovered *Tira de Tetepilco* (Castañeda and Brito 2024), where a beautiful scene and calendrical sequence convey that Tenochtitlan's founding took place in a 4-House year (1301). All told, although 1325 is the clear favorite for the founding hierophany, six other years (1301, 1318?, 1322, 1324, 1364, and c. 1366) appear in the corpus, while year 1321 defended by modern politicians is conspicuously absent.

The Archaeology of Tenochtitlan

The excavation of deep vertical shafts dug under Mexico City's Metropolitan Cathedral and Sagrario in the 1990s (Tamez et al. 1995; Aguilera 2013) offers a perspective that differs from the mythohistorical documents and is definitely worth considering. In the context of the "Proyecto de Rectificación Geométrica de la Catedral Metropolitana de México" (Project to Geometrically Rectify Mexico's Metropolitan Cathedral), thirty-two cylindrical shafts called *lumbreras*, 3.4 m in diameter and up to 26.5 m deep, were made in order to carry out a "corrective sub-excavation" to save this colossal colonial architectural complex from collapse (Figures 5 and 6).

Let us take Lumbrera 2, situated close to the apse, as a reference (Figure 7). Archaeologists from the Urban Archaeology Program (PAU) of Mexico's National Institute of Anthropology and History (INAH), working on the heels of engineers, found the stratigraphic layers pertaining to Mexico's colonial and independent periods nearest to the surface (0–8.8 m deep) (García Chávez et al. 1999; García Chávez 2004).

Next, they documented layers 1 through 9 (8.8–12.3 m deep), assigned to the so-called Azteca III ceramic phase, traditionally dated 1400–1521 during the Late Postclassic. This is supported by the hydration dating of obsidian artifacts recovered under the Cathedral and Sagrario during remedial concrete foundation work in the 1960s and 70s (García-Bárcena 1979), which correspond to the years 1411–1498, when, we must emphasize, the massive building construction in Tenochtitlan's sacred precinct was taking place.

Immediately below that, archaeologists found layers 10 through 12 (12.3–13.0 m deep) corresponding to the Aztec II ceramic phase (Figure 8), associated with the arrival of Chichimec groups to the Basin of Mexico in the Middle Postclassic. The hydration analysis of obsidian artifacts exhumed from these layers under the Cathedral and Sagrario shows a range of 1198 to 1294; however, according to new radiocarbon dates for the Basin (tables in García Chávez 2004; Parsons and Gorenflo 2021, 2023), the production of Aztec II Black-on-Orange ware would have occurred later, corresponding to 1331–1447

(median with standard deviation: 1358 CE ± 73). From stylistic and neutron activation analyses of the recovered pottery (García Chávez 2004), we know that it was produced in the western part of the Basin (Cuauhtitlan, Tenayuca, Azcapotzalco, Tacubaya, and Tenochtitlan), within the Tepanecan political and economic sphere.

Further down, in layer 13 (13.0–13.7 m deep), archaeologists ran into a surprising concentration of ceramic remains from the Tollan and Aztec I phases, and concluded the existence of a permanent Toltec settlement, perhaps a small hamlet. According to hydration analysis of the obsidian artifacts found there, they date back to the Early Postclassic between 910 and 1122. This is consistent with the new radiocarbon dates for the Basin, in which Mazapa-Tollan ceramic production is ascribed to the period 882–1166 (median with standard deviation: 941 CE ± 58), overlapping with Aztec I Black-on-Orange ware, whose range is 880–1390 (median with standard deviation: 1092 CE ± 157). According to neutron activation analysis, the Mazapa sherds recovered under the Cathedral were imported from the city of Tula. Here we should add that in these deep stratigraphic layers, ceramics from earlier phases such as Coyotlatelco (Epiclassic) and Xolalpan-Metepec (Classic) have also been recovered, although in lesser quantities, and that culturally sterile layers lie below 14–15 m deep (Figure 9).

A similar sequence of archaeological strata and materials was documented in the same area during excavations in the 1960s and 70s, also associated with foundation work on this massive religious complex (Reyes Cortés and García-Bárcena 1979; Vega Sosa 1979). For example, Stratigraphic Pits 1 and 2, north of the Sagrario (in the east garden of the Cathedral), attest to two "peaks" of Prehispanic settlement: one around 1480; the other, much earlier, around 1080. At that time, however, archaeologists wondered if they reflected a long, more or less continuous, single occupation or two successive ones separated by a great flood.

Before concluding this section, let us consider archaeoastronomical research which usually provides valuable information on the occurrence of comets, other lit objects in the night sky, eclipses, solstices, equinoxes, zenithal passages of the sun, and various alignments that had an extremely significant impact on the Prehispanic societies of Central Mexico to the point of their precise recording in historical sources, including chronicles and annals. Without ignoring the enormous influence these celestial phenomena had in the collective indigenous imagination, we do not believe that they determined such transcendental decisions as a city's founding. We base this opinion on the absence of such events linked to the end of migrations or the settlement of specific territories in the extant pictographic and alphabetic sources. Something similar can be said concerning architectural and sculptural monuments and other archaeological examples.

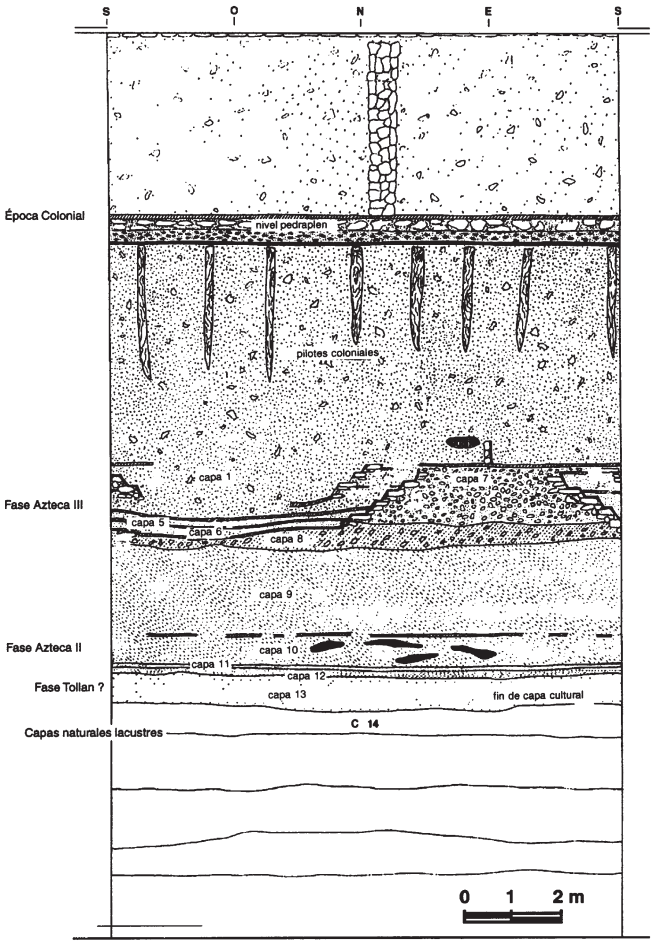


Figure 7. Stratigraphic profile of Lumbrera 2 from the Metropolitan Cathedral, according to archaeologist Raúl García Chávez. Drawing courtesy of Raúl García Chávez.

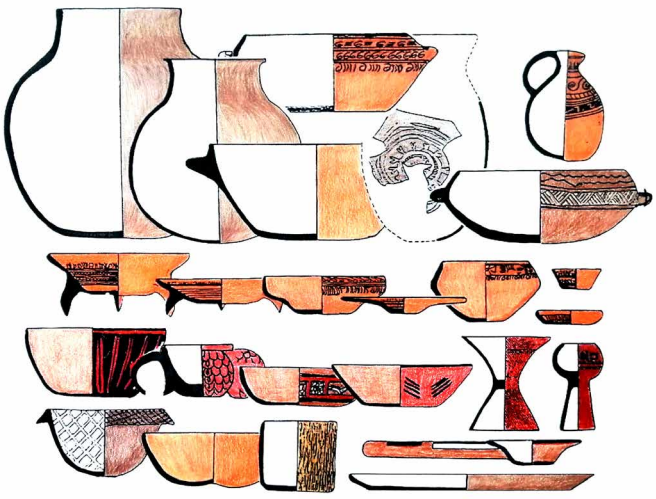


Figure 8. Aztec II ceramic group from the western part of the Basin of Mexico, according to archaeologist Raúl García Chávez. Drawing courtesy of Raúl García Chávez.

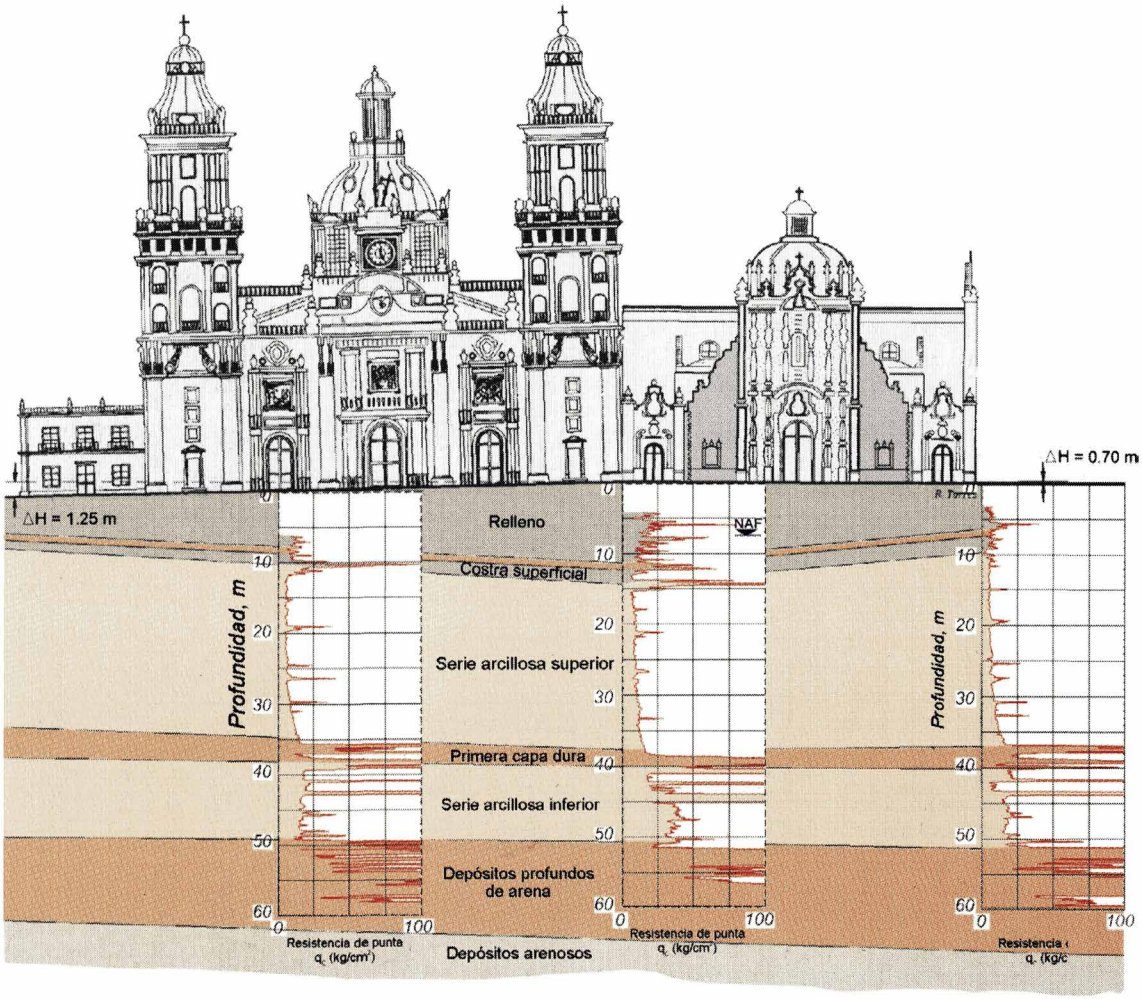


Figure 9. The subsoil of the Metropolitan Cathedral and Sagrario. The layers closest to the surface (down to about 14–15 m deep) is of anthropic origin; below them lie culturally sterile layers (after Aguilar 2013:21).

Final Reflections

So, what can we deduce from all this? First, it seems fundamental that, given the obvious discrepancies and unknowns inherent to the mythohistorical sources (especially, the seven different years: 1301, 1318?, 1322, 1324, 1325, 1364, and c. 1366), archaeological information is an indispensable resource for elucidating the process of Tenochtitlan's founding, as well as the nature of human settlements before and after its initial appearance. Second, it is significant that the stratigraphic layers associated with the emergence of the Mexica capital are chronologically situated in the fourteenth and fifteenth centuries (1331–1447, according to the most recent radiocarbon dates for Aztec II ceramics), so they agree in general terms with the mythohistorical sources that provide specific dates in the 1300s. Third, the hard archaeological data leave no doubt that before Tenochtitlan, there was a Toltec settlement, presumably a small hamlet, on the original island. Obviously, we cannot rule out the possibility of earlier permanent or seasonal settlements during the Epiclassic, Classic, Preclassic, and even the distant Stone Age of hunter-gatherer-fishermen; but this locale clearly has a long history of human activity spanning at least a thousand years! And finally, we consider it imperative to carry out new in-depth archaeological excavations in Mexico City, both in the areas occupied by Tenochtitlan's sacred precinct and surrounding palaces as well as the periphery of the original island, with the express purpose of recovering more and better material evidence of early occupations to determine their nature and chronology.

Acknowledgments

We would like to thank Víctor Cortés, Tomás Filsinger, Raúl García Chávez, Nicolas Latsanopoulos, Scott Sessions, and Samara Velázquez for their assistance. An earlier version of this essay appeared in *Arqueología Mexicana* (see López Luján and Matos Moctezuma 2025).

References

Aguilera Jiménez, Patricia
2013 *Catedral Metropolitana. Hundimiento y rescate*. Instituto de Ingeniería, Universidad Nacional Autónoma de México, Mexico City.

Boone, Elizabeth Hill
1992 The Founding of Tenochtitlan and the Reign Dates of the Mexica Rulers According to Thirty-Nine Central Mexican Sources. In *The Codex Mendoza*, edited by Frances F. Berdan and Patricia Reiff Anawalt, vol. 1, pp. 152-153 (Appendix A). University of California Press, Berkeley.

Caso, Alfonso
1927 *El Teocalli de la Guerra Sagrada*. Talleres Gráficos de la Nación, Mexico City.

Castañeda de la Paz, María, and Baltazar Brito Guadarrama
2024 Tira de Tetepilco. In *Códices de San Andrés Tetepilco*, pp. 6-9. Instituto Nacional de Antropología e Historia, Mexico City.

Castillo Ledón, Luis
1925 *La fundación de la Ciudad de México 1325–1925*. Cultura, Mexico City.

Dumézil, Georges
2016 *Mito y epopeya, III. Historias romanas*. Fondo de Cultura Económica, Mexico City.

García-Bárcena, Joaquín
1979 Apéndice 2. Fechamiento por hidratación de obsidiana de las excavaciones de la Catedral. In *El Recinto Sagrado de México-Tenochtitlan. Excavaciones 1968–69 y 1975–76*, edited by Constanza Vega Sosa, pp. 26–28. Instituto Nacional de Antropología e Historia, Mexico City.

García Chávez, Raúl
2004 *De Tula a Azcapotzalco. Caracterización arqueológica de los altepetl de la Cuenca de México del Posclásico temprano y medio, a través del estudio cerámico regional*. Doctoral thesis, Facultad de Filosofía y Letras, Universidad Nacional Autónoma de México, Mexico City.

García Chávez, Raúl, José Francisco Hinojosa Hinojosa, and Alma Martínez Dávila
1999 La cerámica prehispánica de Tenochtitlan. In *Excavaciones en la Catedral y el Sagrario Metropolitanos. Programa de Arqueología Urbana*, edited by Eduardo Matos Moctezuma, pp. 69-85. Instituto Nacional de Antropología e Historia, Mexico City.

Grandazzi, Alexandre
1991 *La fondation de Rome: Réflexion sur l'histoire*. Les Belles Lettres, Paris.
2007 Penser les origines de Rome. *Bulletin de l'Association Guillaume Budé* 2:21–70.

Heyden, Doris
1988 *México, origen de un símbolo. Mito y simbolismo en la fundación de México-Tenochtitlan*. Departamento del Distrito Federal, Mexico City.

López Luján, Leonardo
1993 *Las ofrendas del Templo Mayor de Tenochtitlan*. Instituto Nacional de Antropología e Historia, Mexico City.

López Luján, Leonardo, and Eduardo Matos Moctezuma
2025 Algunas consideraciones sobre la fundación de Tenochtitlan. *Arqueología Mexicana* 30(191):22-31.

Matos Moctezuma, Eduardo
1999 La arqueología y las fechas de fundación de Tenochtitlan. In *Orígenes de nuestra ciudad*, pp. 13-20. Archivo General de la Nación; Gobierno del Distrito Federal, Mexico City.

Palacios, Enrique Juan
1925 La fundación de México-Tenochtitlan. *Anales del Museo Nacional de México*, 5th ser., 1:230–254.

Parsons, Jeffrey R., and Larry J. Gorenflo
2021 ¿Por qué la cerámica Azteca II Negro sobre Naranja es escasa en la región de Zumpango? Una perspectiva regional desde la Cuenca de México sobre el colapso de Tula y sus repercusiones. *Arqueología* 63:109-127.
2023 Why Is Aztec II Black-on-Orange Pottery So Scarce in the Zumpango Region? A Regional Perspective from the Basin of Mexico on Tula's Collapse and Its Aftermath. In *The Legacies of The Basin of Mexico,* edited by Christopher T. Morehart and Carlos E. Cordova, pp. 89-117. University Press of Colorado, Denver.

Reyes Cortés, Manuel, and Joaquín García-Bárcena
1979 Estratificación en el área de la Catedral. In *El Recinto Sagrado de México-Tenochtitlan. Excavaciones 1968–69 y 1975–76*, edited by Constanza Vega Sosa, pp. 17-20. Instituto Nacional de Antropología e Historia, Mexico City.

Tamez González, Enrique, Sergio Zaldívar Guerra, et al.
1995 *Catedral Metropolitana. Corrección geométrica, informe técnico*. Asociación Amigos de la Catedral Metropolitana de México; Espejo de Obsidiana, Mexico City.

Townsend, Richard F.
1979 *State and Cosmos in the Art of Tenochtitlan*. Dumbarton Oaks, Washington, D.C.

Vega Sosa, Constanza
1979 La cerámica: Clasificación y cronología. In *El Recinto Sagrado de México-Tenochtitlan. Excavaciones 1968–69 y 1975–76*, edited by Constanza Vega Sosa, pp. 37–53. Instituto Nacional de Antropología e Historia, Mexico City.

Sylvanus G. Morley's Diary of the Fourteenth Central American Expedition of the Carnegie Institution of Washington, 1931, Part 3: On to Piedras Negras

Edited, Annotated, and with an Introduction by Peter Mathews

Introduction

Sylvanus G. Morley's 1931 diary continues here after the expedition's side trip to Palenque, as recorded in *The PARI Journal*, Volume XV, No. 2. On March 28, Morley and his party travelled up the Usumacinta River from Monte Cristo (modern Emiliano Zapata) to Tenosique, where Morley had friends and the Carnegie Institution of Washington had an agent, Francisco Villanueva ("Don Pancho"). Tenosique was the staging point for trips (usually by mule) into the rain forest to the south of the town. One trail led to the ruins of Piedras Negras, in Guatemala, and it was this that the expedition would follow, in a journey of two fairly rugged days' travel.

At Piedras Negras Morley and his team were to spend two days with another expedition that had reached the site less than two months earlier. This was the University Museum of the University of Pennsylvania project, which, under the directorship initially of J. Alden Mason, and subsequently Linton Satterthwaite, Jr., was to explore and excavate the site over eight seasons from 1931–1937 and 1939.

In 1930 Mason had visited Piedras Negras to investigate the suitability of the ruins for excavations and for the removal of some of the site's stone monuments. After negotiations with the Guatemalan government, an agreement was signed on May 31, 1930 between Mason and the Secretary of Public Education of Guatemala, Rodolfo A. Mendoza. Among the eleven points of the contract were: excavations by the University Museum were permitted; monuments and other objects could be removed from the site; half of those monuments and objects would be loaned to the University Museum for ten years; reports and publications would be given to the Guatemalan government; and 75% of workers were to be Guatemalan (Satterthwaite [1931]2018:14). The monuments were to be taken out of Piedras Negras to Tenosique, and from there to be transported to Guatemala City and Philadelphia. While in Guatemala, Mason hired an engineer, Terence Egan-Wyer, who went to Piedras Negras to investigate possible routes for extracting the monuments and to build the project's camp.

Before the University Museum project began in February 1931, there had only been a few visitors to Piedras Negras. Teobert Maler visited the site in 1895, 1897, and 1899, and published the results of his visits through the Peabody Museum, Harvard University (Maler 1901). It was Maler who began the numbering system of the monuments of Piedras Negras. He also made the first map of the site, which is quite impressive for its time (Maler 1901:Pl. 33). We can be grateful, however, that Maler's designations of buildings at Piedras Negras have subsequently been changed. For example, Maler's "The Temple of the Lintel with the Consecration of the Warriors and of the Stela with the God and the Victims on the Platform Above" (Maler 1901:58) has rather mercifully and prosaically been re-designated Structure O-13.

Sylvanus Morley visited Piedras Negras four times: in 1919, 1921, 1929, and on his expedition of 1931. In those visits he and his companions discovered many more monuments, which Morley designated by continuing Maler's numbering. Apart from the diary of his 1931 expedition which is published here, we also have the record of his 1921 diary, which has been published by Mesoweb (Ward et al. 2024:372-488). In 1937–1938 Morley published *The Inscriptions of Peten*, in which he published detailed discussions of the Piedras Negras monuments known to that time (Morley 1937-1938:3:1-312).

The excavations undertaken by the University Museum of the University of Pennsylvania project continued until 1939, as was said above. The results of the excavations were published in a number of "Preliminary Papers" (e.g. Mason 1933) and a series of "Piedras Negras Archaeology: Architecture" reports. These have all been republished in a single volume (Weeks, Hill, and Golden, eds. 2005). Numerous shorter articles were also published, especially by Mason, as well as one important monograph on the caches excavated at Piedras Negras (Coe 1959). In addition, the University Museum has made the archives of the Piedras Negras project available online (www.penn.museum/collections/archives/findingaid/552866). We are also fortunate to have the 1931 diary of Margaret "Peggy" Satterthwaite, who accompanied her husband Linton Satterthwaite, Jr., on the first University Museum expedition (she was also a member of all the subsequent University Museum expeditions to Piedras Negras). Like Morley's 1921 diary, Margaret Satterthwaite's 1931 diary has also been published by Mesoweb (Satterthwaite [1931]2018).

In his 1921 visit to Piedras Negras, Morley was

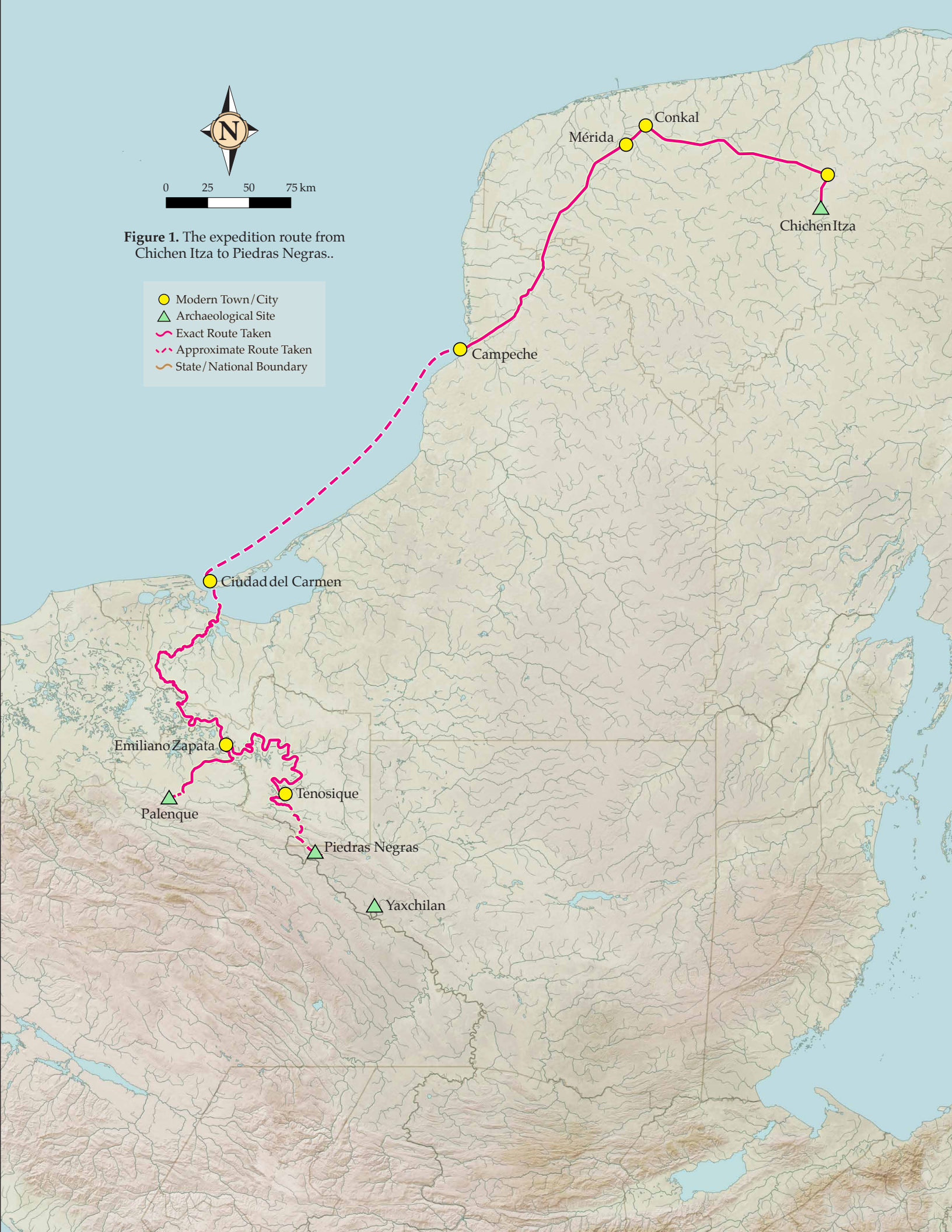


Figure 1. The expedition route from Chichen Itza to Piedras Negras..

Figure 2. The expedition's route from Emiliano Zapata (Monte Cristo) to Piedras Negras.

accompanied by Oliver G. Ricketson, who made a map of the site. He designated the Piedras Negras buildings with Roman numerals. Ricketson's map has never been published, but it was used as the basis for a new map made by Fred P. Parris of the University Museum project in 1932 and 1933; Tatiana Proskouriakoff added to the map during the 1939 season. The Parris / Proskouriakoff map has continued to be the most often reproduced map of the site. It divides the site into 200 meter square grids, and each square is given a letter designation. Each building is then given a number, in sequence: hence Structure R-1, Structure R-2, and so on (Mason 1933:1-4). Morley published a concordance between the Maler, Ricketson, and Parris building designations (Morley 1937-1938:3:6). The point here is that in his 1931 diary Morley uses Ricketson's (Roman numeral) designations

for the Piedras Negras buildings. Two years later Parris's map was completed, and in *The Inscriptions of Peten* Morley adopted Parris's designations (Morley 1937-1938:2:1-312).

Later maps of Piedras Negras have been produced (Stuart and Graham 2003:8-9; Nelson 2005:3): both are based on Parris's map, but add new details.

Maler and Morley contributed greatly to the documentation of the carved stone monuments of Piedras Negras. More recent documentation has been done by the Corpus of Maya Hieroglyphic Inscriptions project of the Peabody Museum, Harvard University (Stuart and Graham 2003). Another important resource is the collection of drawings of the Piedras Negras monuments by John Montgomery (2000).

Studies of the history of Piedras Negras as determined from its inscriptions have a long and glorious history. We can start, perhaps, with Charles Pickering Bowditch, who became interested in Maya civilization after a trip to the Yucatan Peninsula in 1888. A wealthy Boston financier, he was a major donor to the Peabody Museum, Harvard University. Bowditch funded Maler's travels of exploration in the Yucatan Peninsula, and wrote commentaries on Maler's reports on Piedras Negras and Yaxchilan (Bowditch 1901, 1903). His Piedras Negras commentary is particularly noteworthy—in it he wrote about the inscriptions of Stela 1 and 3, about which he speculated in historical terms. The inscriptions on both stelae began with the date now transliterated as 9.12.2.0.16 5 Kib 14 Yaxkin (AD 674); Bowditch discusses the intervals to later dates in the texts:

> In Stela 1, from 5 Cib 14 Yaxkin to 5 Ymix 19 Zac is ... 32 years 85 days.
>
> In Stela 3, from 5 Cib 14 Yaxkin to 11 Ymix 14 Yax is ... 37 years 60 days.
>
> Either of these terms would fit in very well with the reign of a chief, or with the lifetime of a warrior.
>
> Let us suppose the first date of Stela 3 to denote the birth; the second the initiation at the age of 12 years 140 days, or the age of puberty in those warm climates; the third, the choice as chieftain at the age of 33 years 265 days; the fourth his death at the age of 37 years 60 days. ...
>
> Could the two men represented on these stelae have been twins having the same birthday? ...
>
> All of this is of course speculation, but it shows that it is not inconceivable that the stelae may have some historical value. (Bowditch 1901:13-14)

Bowditch was certainly not correct on all his speculations (for example the first date on both monuments *is* a birth date, but it records in both cases the birth of a woman, Lady "K'atun Ajaw"—the wife of the king K'inich Yo'nal Ahk II—but as David Kelley said decades later:

> If Bowditch or some contemporary scholar had gone on to check the glyphic context of this acute idea, scholars studying the Mayan writing might have been saved some sixty years of dubious astronomical interpretations. (Kelley 1976:214)

Instead, hieroglyphic research for the first six decades of the 20th century concentrated on the dates in the inscriptions. Morley was perhaps the high priest of this development, and *The Inscriptions of Peten* (Morley 1938-1937), with detailed discussions of the dates on hundreds of monuments, was its bible. Gradually there evolved the view that there was no history recorded in the Maya inscriptions:

> No glyphs representing the names of persons (other than gods) and places have been identified. (Thompson 1950:50).
>
> I do not believe that historical events are recorded on the monuments. (Thompson 1950:64)

And Morley himself:

> The Maya inscriptions treat primarily of chronology, astronomy—perhaps one might better say astrology—and religious matters. They are in no sense records of personal glorification and self-laudation like the inscriptions of Egypt, Assyria, and Babylonia. They tell no story of kingly conquests, recount no deeds of imperial achievement; they neither praise nor exalt, glorify nor aggrandize, indeed they are so utterly impersonal, so completely nonindividualistic, that it is even probable that the name-glyphs of specific men and women were never recorded upon the Maya monuments. (Morley 1946:262)

I have gone on at some length on this matter because as it turned out Piedras Negras was to be at the center of the revolution that overturned this view. This took place in 1960, with the publication of an article by Tatiana Proskouriakoff, titled (in an echo of Bowditch) "Historical Implications of a Pattern of Dates at Piedras Negras, Guatemala" (Proskouriakoff 1960). Proskouriakoff had been "discovered" by Linton Satterthwaite when she was drawing studies for commercial needlepoint designs from archaeological objects in the University Museum in the early 1930s. Satterthwaite asked Proskouriakoff if she would like to draw artefacts from the Piedras Negras project. In 1936 she was asked to participate in the 1936 season at Piedras Negras, and she was also a member of the 1937 expedition. Later in her life, "Tania" liked to tell the story of how Satterthwaite sacked her from her work at the University Museum. The U.S. (and the world) were at the tail end of the Great Depression, and the University Museum could not afford to pay her, so Satterthwaite wrote to Morley. He knew (said Tania) that Morley would have ethical concerns in poaching her from the University Museum, so Satterthwaite told Morley that she was no longer employed by the University Museum. And that, according to Tatiana Proskouriakoff, is how she came to be hired by the Carnegie Institution of

Figure 3. Morley's expedition companions together with the personnel of the University Museum project. First row, left to right: Terence Egan-Wyer, María Teresa Marroquín de Egan-Wyer, J. Alden Mason, Margaret Satterthwaite, Linton Satterthwaite, Jr.; second row, Morley, Frances Rhoads Morley, John S. Bolles; third row: Dwight W. Rife, Franklin K. Rhoads, Karl Ruppert. May, 1931 (Piedras Negras Archive unnumbered, Satterthwaite [1931]2018:67).

Washington.

Back to 1960, in her paper Proskouriakoff investigated individual buildings associated with stelae at Piedras Negras. When she looked at the dates associated with each building, she detected a "pattern": each group of dates essentially spanned a human lifespan, and the lifespans overlapped, such that an important date emphasized in each group (it was commonly recorded on multiple stelae), chronologically in the middle of the individual date spans, followed the last date of the "previous" group of dates. The major date she called the "inaugural date"; the earliest date in each group she called the "initial date." The "implication" of the "pattern of dates" was that the "initial date" was plausibly the birth date of a ruler (the glyph associated with the date, in fact, was the same glyph which Bowitch had proposed as "birth"), and the "inaugural date" was the date of accession of that ruler.

Proskouriakoff's arguments were so well laid out and backed up with examples (from Piedras Negras and elsewhere) that they were immediately accepted; the field of Maya hieroglyphic research was turned on its head. Morley was not alive to witness it (he had died in 1948), but J. Eric S. Thompson, for years a colleague of Proskouriakoff at the Carnegie Institution of Washington and in 1960 the pre-eminent Maya hieroglyphic expert, immediately acknowledged the strength of her arguments.

The years since have led to a steady flow of decipherments. They are far too numerous to list here, but some of the most important works relating to Piedras Negras history are the publications by Schele and Grube (1994, 1995); Martin and Grube (2008); Clancy (2009); O'Neil (2012); and García Juárez (2015). Eleven Classic Maya rulers of the Piedras Negras have been identified, spanning from about AD 460 to AD 810 (Martin and Grube 2008:138-153). Throughout this period, Piedras Negras was one of the most powerful kingdoms of the region, and the artists and sculptors of its royal court produced some of the most beautiful of all Maya sculptures.

In 1997 a major new research program began at Piedras Negras, under the directorship of Stephen Houston (then of Brigham Young University) and Héctor Escobedo (of the Universidad del Valle, Guatemala). This broad-ranging interdisciplinary project ran from 1997 to 2000 and 2005, and has produced a large number of publications (e.g. Houston et al. 1998; Houston et al. 1999; Houston et al. 2000; the reader is directed to the bibliography published by Megan O'Neil [2012:225-246] for many more publications).

Regarding the monuments of Piedras Negras, there are now 46 stelae (9 of them probably uncarved), 4 altars, 4 thrones, 15 panels (formerly "lintels") as well as a few other carved monuments that are known from the site.

The designation "lintel" was first used by Maler, who thought that the stones which he called Lintels 1 and 2 originally spanned doorways of the building now called Structure O-13. In all Maler named six lintels, and the designation system was continued by the University of Pennsylvania project. But in fact none of the "lintels" appear to have spanned the tops of doorways (see footnote 150 below), so the Houston/Escobedo project proposed re-designating them as "panels." The current tally is Panels 1–10 and 12–16; the former "Lintel 11" is in fact the lower part of Stela 29 (Stuart and Graham 2003:12).

On his 1931 expedition Morley had seven companions (Figure 3). Frances Rhoads Morley (1898–1955) was Morley's second wife; in 1931 the couple had been married for three years. Franklin Koons Rhoads (1867–1943), "Frank," was Frances Rhoads Morley's father. Karl Ruppert (1895–1960) was an architect and archaeologist who worked for the Carnegie Institution of Washington from 1925 to 1956). He was a companion of Morley on many expeditions, and made an extensive architectural study of Yaxchilan while on the 1931 expedition. John Savage Bolles (1905–1983) was an architect who

worked with Morley at Chichen Itza; at the time of the 1931 Yaxchilan expedition he was twenty-five. He was responsible for the mapping of Yaxchilan. Bolles later became famous as the architect of Candlestick Park, San Francisco. Dr. Dwight W. Rife (1896–1958) accompanied Morley as the 1931 Yaxchilan expedition's physician and survey assistant. He later published a brief article on the blood group of 124 Maya people whom he tested in Yucatan and while on the Yaxchilan expedition (Rife 1932). Tarcisio Chang, or Chang Seok Hwan, of Korean ancestry, was Morley's trusted mayordomo at Chichen Itza. He was a man of many skills and was of great support to Morley at Chichen Itza and on the 1931 Yaxchilan expedition. Morley always spelled his name "Tarsisio." Finally, the expedition had a cook, Luis Chang, of Chinese heritage, who met up with the expedition at Ciudad del Carmen. The typescript version of Morley's diary calls him Luis Chiang.

As always, I apologize for the plethora of footnotes. And I hope I will be forgiven for including three rather lengthy footnotes on figures in the Mexican Revolution, but it should be remembered that the beginning of the Revolution had taken place just 20 years before Morley's 1931 expedition. My thanks to Daniel Martínez Gastélum for help on those biographical notes. And as always my effusive thanks to Joel Skidmore for the layout and to Chip Breitwieser for his superb work on maps and what are often (in the originals) rather murky photographs.

Saturday – March 28

The day was in great contrast to yesterday, cold, rainy and over-clouded. We pushed up the river swiftly. We put in occasionally at different villages, where Don Sal.[1] and the captain offered to buy plantains on the down trip tomorrow. Karl and I went ashore at the village of Cabecera,[2] where Pino Suárez[3] was born, he who was Madero's[4] Vice President and in the end came to

[1] Salustino Abreu Díaz (1878–1951) ("Don Sal."), scion of an old illustrious Campeche family, was a businessman and a good friend of Morley's. He had large landholdings in Campeche and Tabasco, including his huge hacienda at Chablé. "Don Sal." and his wife Vicenta Ochoa Jiménez had eight sons and nine daughters. "Don Sal." owned the "Nueva Esperanza" (footnote 14), in which Morley's party was traveling up the Usumacinta River to Tenosique.

[2] According to Morley's map of the various Carnegie Institution of Washington expeditions published in *The Inscriptions of Peten* (Morley 1937-1938:2:Pl. 179), Cabecera is located about 9 miles (14.5 kilometers) northwest (downstream) of Tenosique. Morley places it inside the last great bend of the Río Usumacinta (going upstream) before reaching Tenosique. It is not named on present-day maps of Tabasco, indicating that the town and its non-plaza have been abandoned. Morley in his diary spelled it "Cabacera," but in the map referred to above he names it "Cabecera."

[3] All the biographies of José María Pino Suárez (1869–1913) that I have read say that he was born in Tenosique (on 26th Street there is a plaque commemorating his birth). He was born into a distinguished Mérida family, and his family moved back there while he was a child. He studied law, but also was very involved in politics. He began a newspaper in Mérida, *El Peninsular*, which was opposed to the regime of Porfirio Díaz. Essentially an investigative journalist, Pino Suárez wrote articles exposing the slave-like conditions for Yucatec Maya and Yaqui people on the henequen haciendas in Yucatan (see Part 1 of Morley's diary, footnote 72). He supported Francisco I. Madero's opposition to Porfirio Díaz's dictatorship and the push for political and social reform in Mexico (see the next footnote). The Porfirio Díaz regime collapsed in mid-1911, and Pino Suárez was appointed interim Governor of Yucatan by the Yucatan State Congress. In the presidential election held in October 1911 Pino Suárez won over 53% of the vote for vice president. Pino Suárez was made Secretary of Education, and began widespread reforms in the sector. The reforms of the Madero government were considered too progressive by some (and not to be reforming fast enough by others) and there were several rebellions in 1912 and early 1913. These culminated in the overthrow of Madero's government in a period known as the "Ten Tragic Days" in Mexico in February 1913. The leader of the coup was General Victoriano Huerta; the coup is discussed in a little more detail in the next footnote. Pino Suárez and Madero were arrested and subsequently murdered on February 22, 1913.

José María Pino Suárez is considered one of the heroes of the Mexican Revolution.

[4] Francisco Ignacio Madero González (1873–1913) was President of Mexico, following the downthrow of Porfirio Díaz in 1911, until he was deposed and murdered in February 1913. Francisco I. Madero, as he is referred to in Mexico, came from one of Mexico's wealthiest families (his father was a prominent businessman and industrialist). He studied in Paris, and became a leading opponent of the dictator Porfirio Díaz as an advocate for social justice and democracy. He ran for President against Porfirio Díaz in the election of June and July 1910. Madero got 1.04% of the popular vote, against 98.93% for Díaz, but in one sense the result didn't matter much because Díaz had arrested Madero before the election was held. Madero escaped, and fled to San Antonio, Texas. From there he called for the overthrow of Porfirio Díaz's regime, in the *Plan de San Luis Potosí*, published on October 5, 1910. The *Plan* ("Document") cited Díaz's abuses and called for a revolution against his government: it is considered to be the start of the Mexican Revolution.

Madero's power base was in the north of Mexico (he was born in Coahuila), and initially that is where the early fighting of the Revolution was concentrated. By mid-1911 Díaz sued for peace and agreed to abdicate and go into exile. Madero won the ensuing election in October 1911, and with José María Pino Suárez as his Vice President (see the previous footnote) embarked on a series of reforms.

However, many thought that the reforms—especially land reforms—did not proceed quickly enough, and fighting in Mexico continued. Porfirio Díaz is reported to have said as he left for exile "Madero has unleashed a tiger; let us see if he can control it." Leaders of rebellions included two of Madero's former comrades-in-arms, Pascual Orozco and Emiliano Zapata. In April 1912 Madero sent General Victoriano Huerta (see the next footnote) to suppress Orozco's revolt in northern Mexico. By the end of the year support for Madero's regime was unravelling and unrest and violence spread, and in February 1913 a coup led by Félix Díaz (a nephew of Porfirio Díaz) and Bernardo Reyes led to the overthrow of Madero and Pino Suárez. The rebel forces gained control of the military arsenal in Mexico City and attacked the National Palace. Huerta had secretly changed sides, and the game was up. Madero and Pino Suárez were arrested and imprisoned, and on February 22,

violent death just after the Huerta[5] coup d'état. It was a miserable town. I asked a future citizen where the plaza was and he answered "no hay."[6] It's a poor town that has no plaza in Mexico or C. A.[7]

The Abreu[8] girls and their father also went ashore and indeed tarried so long, visiting parientes,[9] that they had to be summoned back to the boat by the whistle.

It rained, was chilly, cloudy – even misty – in great contrast to yesterday. I spent the entire morning with this diary and the early afternoon.

We had a delicious luncheon built around a roast turkey, which was sin rival.[10] Luis[11] turns out to be a really good cook and his rice is always to be depended upon.

At a bank some 2 leagues[12] (by land) we met Pancho Villanueva,[13] who was over about some cattle of his. He seems the same person we left two years ago. He said he would be in Tenosique as soon as we would, as the river winds so and a heavy draft boat – 4 feet – like the "Nueva Esperanza"[14] (Figure 4) has to follow the channel whereas a smaller boat such as he was in could cut corners.

1913 they were murdered, almost certainly on Huerta's orders.

Central to the downfall of Madero and Pino Suárez was the American Ambassador to Mexico, Henry Lane Wilson. Wilson was an attorney and diplomat, serving as Ambassador to Mexico from 1909–1913 under President Howard Taft, and not unsurprisingly he pursued a desire for political and business stability in Mexico as being in the best interests of the U.S., despite the fact that Porfirio Díaz's policies were creating almost slave-like conditions for the vast majority of poor Mexicans. When Díaz was deposed and Madero became President, Henry Lane Wilson began a campaign of disinformation and propaganda against Madero in newspapers; he was also a strong supporter of Huerta.

Effectively, the U.S. engineered a coup d'etat against Mexico. When Woodrow Wilson was elected President in 1912 and found out about Henry Lane Wilson's efforts in overthrowing the democratically elected President of Mexico, he sent a special agent, William Bayard Hale, in the middle of 1913 to investigate matters:

> Hale reported that Ambassador Wilson had been sending despatches "which are so exactly opposed to the truth as to be beyond all understanding," and, if that were not bad enough, Wilson also had been involved in Madero's murder. Victoriano Huerta's plot to overthrow Madero's government had been hatched and matured in the ambassador's presence, and "President Madero was not betrayed and arrested by his officers until it had been ascertained that the American Ambassador had no objection to the performance." Moreover, "Madero would never have been assassinated had the American Ambassador made it thoroughly understood that the plot must stop short of murder." President Wilson's special agent accused Taft's envoy [i.e. Henry Lane Wilson] of "treason, perfidy and assassination in an assault on constitutional government." ... Henry Lane Wilson was promptly recalled. (Schoultz 1998:240).

Francisco I. Madero is considered one of the heroes of the Mexican Revolution.'

[5] José Victoriano Huerta Márquez (1850-1916) was a Mexican army general who rose from poverty to become a powerful military leader in the Porfirio Díaz regime. In 1901-1902 he fought a military campaign against Yucatec Maya insurgents. Later he retired briefly from the army before re-enlisting toward the end of the Díaz regime. When Díaz resigned in 1911 Huerta led the military escort that took Díaz to Veracruz to begin his forced exile in Europe. Later that year Huerta conducted a campaign against Emiliano Zapata, who had rebelled against the Madero regime after Madero was elected president in October 1911. Initially Huerta supported Madero and was instrumental in putting down rebellions against the new regime, but his relations with Madero were always tense, and on February 18, 1913 Madero was arrested and murdered (almost certainly on Huerta's orders) four days later.

Victoriano Huerta declared himself President until a new election could be held. The election was finally held on October 26, 1913, but Huerta declared it null and void and announced that he was the President. As was said in the previous footnote, the U.S. administration of Howard Taft had supported Huerta, but the incoming (on March 4, 1913) administration of Woodrow Wilson did not. Wilson is regarded as a progressive, liberal president—and by many as one of the great U.S. presidents—so I won't talk here about his segregation policies, his opposition to women's suffrage and laws to improve child labor conditions, nor to the invasions under his regime of Nicaragua, Haiti, the Dominican Republic, Cuba, Honduras, and Mexico. But in this case—his relationship with Huerta—Wilson deserves credit.

Back to Mexico in 1913, Huerta quickly consolidated power and ruled with *la mano dura*, "the iron hand." He militarized the government, giving military officers key posts. Huerta forcibly conscripted over 300,000 men to serve in the army—over 4% of the population of Mexico. Nevertheless, ongoing fighting led by the Constitutionalist generals Álvaro Obregón and Francisco "Pancho" Villa, defeated his forces, and in July 1914—after a little more than one year in office—he resigned and went into exile. He died in suspicious circumstances in El Paso, Texas, in 1916.

Victoriano Huerta is not considered one of the heroes of the Mexican Revolution.

[6] Spanish *no hay* means "there isn't any."

[7] C.A. is an abbreviation for Central America.

[8] Morley is referring here to Salustino Abreu's daughters (see footnote 1).

[9] Spanish *pariente* means "a relation, relative."

[10] Spanish *sin rival* means "without rival."

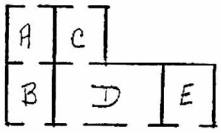
[11] Luis Chang, of Chinese heritage, was the cook hired by Morley for the 1931 Yaxchilan expedition. He joined the expedition in Ciudad del Carmen. The typescript version of Morley's diary calls him Luis Chiang.

[12] A nautical league represents three nautical miles, or 5.57 kilometers. Land leagues are different (see footnote 27).

[13] Francisco Villanueva (possibly Francisco Villanueva González [1881–??]) acted as the Carnegie Institution of Washington's agent in Tenosique (Morley 1931:132). "Pancho" is a diminutive form of Francisco. Margaret Satterthwaite ([1931]2018:42) describes "Senor Pancho" as "really quite a grand person." Morley often refers to him as "Don Pancho."

[14] The "Nueva Esperanza" was a 50-ton schooner owned by Salustino Abreu (see footnote 1) (Morley 1931:132). It had an auxiliary engine and was well maintained and comfortable, and one of the grandest boats on the Usumacinta River. As Morley notes here, the "Nueva Esperanza" had a draught of just four feet.

We reached Tenosique (Figure 5) in a drizzle about 3. The League of Stevedores[15] swarmed aboard, at least 8 of the 10, and after some friendly bickering we decided on 30 centavos[16] as a fair price. I went up town with a Señor Diaz to look at the house Don Pancho had rented for us. It is planned like this:



Frances and I took Room B, Tarcisio was to have slept just behind us in A, and had moved a bed from our B back into A to sleep in it. He confided to me later that Luis was afraid to sleep by himself (he had been given Room E), so T. moved into E with him, leaving A vacant. But I am ahead of my story.

Figure 4. The "Nueva Esperanza," 1931. Photograph by Frances Rhoads Morley (Gift of the Carnegie Institution of Washington, 1958. © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, 58-34-20/61829).

Figure 5. Aerial view of Tenosique in 1962, looking much as it did in the 1930s. Photograph by José Luis Lezama in the Archivo Histórico del Agua (photographic collection, box 571, file 16092). Courtesy of Historia viva de Tenosique y retazos de Tabasco, www.facebook.com/historiavivaTenosique.

When I found the rooms were all right I returned to the bank and found Frank and Frances waiting under a great ceiba[17] tree. It came on to rain suddenly and we took refuge in a nearby house until after it had passed.

I left Luis at the waterside to guard the baggage, which by this time had been brought up the bank out of the hold. Karl and John were checking off at the house as the baggage was brought into Room D, where we had decided to store it, the largest room in the house.

The baggage which is to go through to Yaxchilan direct was piled in one place, and the trip baggage in another. On the basis of 20 cargo animals, I will be able to send 12 direct to Yaxchilan, 8 going with us.

---

[15] Morley and his wife were staunch Republicans and he often had fairly fractious relationships with porters and stevedores (partly, one suspects, because they were often unionized and could drive a hard bargain), but in this case things seemed to progress smoothly.

[16] For the first few decades of independence from Spain the old Spanish Colonial currency, the *real*, continued in use. Eight-*real* coins were called *pesos* (*peso* means "weight" in Spanish), and the coins were minted from the rich silver deposits of Mexico. (Mexican silver pesos were actually legal tender in the United States until 1857!) It wasn't until 1863 that the real was dropped, and the peso was divided into 100 centavos.

In his diary Morley twice gives information allowing us to calculate the approximate exchange rate between Mexican pesos and U.S. dollars in 1931. In the March 25 entry of his diary he says he "sold two drafts for $500 U.S. currency each, receiving in turn a silver credit of $2387.90." This rate gives 2.388 pesos to one U.S. dollar. In the March 28 entry of his diary, Morley gives the approximate exchange rate when talking about a bill for hiring mules: "$1450. pesos plata [silver] or just about six hundred American currency." This rate boils down to "just about" 2.42 Mexican pesos to one U.S. dollar. In other words, the 1931 exchange rate seems to have been about 2.40 Mexican pesos to one U.S. dollar.

By this rate the $0.30 [pesos] that Morley paid the porters per piece of luggage would have been would have been equivalent to 12.5 cents U.S.

[17] The ceiba tree (*Ceiba pentandra*) is the king of the forest in the Maya world. Ceiba trees tower above the other trees of the tropical forest, reaching over 60 meters (197 feet) in height. The ceiba tree is the most sacred of all trees for the Maya, ancient and modern.

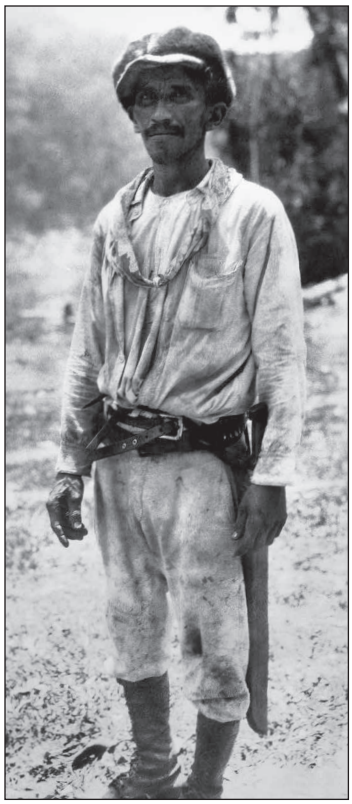


Figure 6. Rosendo Esparza. Courtesy of the Penn Museum, image no. 15969.

Figure 7. The Peabody Museum stone (Maler 1901:Pl. 11).

There were only 8 cargadores[18] to carry all the baggage – there are no carts and trunks in town – and it all had to come up on the shoulders of these 8 men. They made 8 or 9 trips, bringing up 73 pieces. At 30 centavos, this came to $21.90 and as they had worked hard and faithfully in the rain I allowed another $2.10 pesos for good measure.[19] Every one of those boxes and kyacks[20] weighed between 30 and 50 kilos.

Tarcisio took the tables and chairs out of the costales and we were soon at home. To finish with our sleeping arrangements, Karl slept in Room C, and Frank, John and Rife in the big Room D.

After all our baggage was in, I took the League of Stevedores down to Don Pancho's and had him pay them off. I stayed on for a business conference.

After considerable talking back and forth, the following schedule of prices was agreed upon. We are to pay $35.^{00} pesos plata[21] for each animal going in, and $25.^{00} pesos plata for each animal coming out. As we will stop at the ruins for about 4 weeks, it really amounts to two round trips for the mules at $30.^{00} per mule each trip.

Going in we will need 20 pack animals and 8 riding animals and coming out 10 pack animals and 8 riding animals or 46 animals altogether. The mule bill will be fuerte[22] $1450. pesos plata, or just about six hundred American currency.

This price includes, however, five arrieros[23] – both trips both ways. After talking this over with Don Pancho, I decided to let Rosendo Esparza[24] (Figure 6) take 2 other arrieros and bring the 12 cargo animals straight through to Yaxchilan. This patacho[25] will start at the same time we do, Monday morning, March 30, but will take at least 5 days and possibly 6 to get through to Salvamento[26] on the Guatemala side, about 3 leagues[27] below the ruins of Yaxchilan. Here we will

---

[18] Spanish *cargadores* means "porters, stevedores."

[19] The 24.00 pesos silver that Morley paid the stevedores would have equalled about US$10.00 in 1931 prices (see footnote 16), of which the $2.10 pesos tip would have been equivalent to 87.5 cents U.S.

[20] Kyacks are containers packed on both sides (for balance) of mules. The Carnegie Institution of Washington had them especially made for their expeditions. I have seen, and even used, Carnegie Institution kyacks (the Peabody Museum had some as late as the 1980s) in the field in Guatemala. From memory they are (very approximately) 22 inches high, 18 inches wide, and 12 inches deep, and made of a hard lacquered material (thick cardboard?). They have a lid that is tied to the main box with buckled leather straps. They are sturdy, waterproof, and a good size for mules and humans. Morley more often spelled them "kayacks."

[21] See footnote 16. By my calculations, $1450 pesos plata ("silver") equated to about $659.00 U.S.

[22] Spanish *fuerte*, in this context, means "steep, high."

[23] Spanish *arriero* means "a muleteer, the driver of a team of mules."

[24] Rosendo Esparza was an *arriero* (muleteer) who was recommended to Morley by Francisco Villanueva (Don Pancho). Morley, again on Don Pancho's advice, considered him to be the most experienced of the available arrieros, and entrusted him with taking the train of twelve cargo mules from Tenosique through to Salvamento (see footnote 26). Morley also calls him Rosendo Esperza and Rosendo Esparto.

[25] In Mexican and Central American Spanish *patacho* is a mule train.

[26] Salvamento is 6 miles (9.6 kilometers) due west of Yaxchilan, or 10.4 miles (16.7 kilometers) downstream by river from the site. It is on the Guatemalan side of the Usumacinta River. Morley (1937-1938:2:349) describes Salvamento as "a miserable insect-infested, dog-beridden collection of thatched huts." He is not consistent in the spelling of the place; in his diary he calls it both Salvamento and Salvamiento. In *The Inscriptions of Peten* (Morley 1937-1938) he refers to the place as Salvamento, and it is called Salvamento today—for example in the 1:50,000 "Salvamento" topographic map of Guatemala (Instituto Geográfico Militar 1990).

[27] Frans Blom in his 1953 map of the Lacandon rainforest of eastern Chiapas (Blom and Duby 1955-1957:2:End), lists two types of *legua*, "league": an "official" league of 4190 meters and a "muleteer's league" of 3500 meters. To add to the confusion, a Mexican league was often determined by the distance that could be traveled on foot in one hour—so some leagues could be a lot longer than others, depending on the terrain. Given that Morley would have been talking to locals about these places and distances, I think it more likely that the distances he discusses were calculated in muleteers's leagues.

leave the mule transport and take to the river for the remaining 12 kilometers, going up, bag and baggage, in cayucos.[28]

While I was talking with Don Pancho, an arriero came in, whom I recognized as one we had had two years ago, Baltasar by name. I remembered that Fanny had taken his picture at one time and had sent it down to Don Pancho to give to him. Rather proudly he (Baltasar) now produced a cheap-looking hand mirror set or framed in celluloid,[29] and on its back a reproduction of his own photograph, a touch of elegance, what?

Since Rosendo Esparza is more "de confianza"[30] and ranks higher in the arrieros' social scheme, and also since he has been in Don Pancho's service longer, he is to go straight through to Yaxchilan, while Baltasar with a single arriero as his aid will take us through to Yaxchilan, stopping the two days at Piedras Negras.

While I was there, Don Emiliano Palma, the discoverer of Piedras Negras, came in and we had a long and interesting conversation.[31] He thinks that he may well be mistaken in the number of sides the stone he had carried,[32] was sculptured. In his letter to me he said three sides, but when I asked him if after all these years he might not have forgotten this point he said "puede que ser";[33] later he was even surer that he was in error on this point and that the stone taken by Maler[34]

---

[28] In Latin American Spanish *cayuco* is a dugout canoe. Morley spells the word "cayuca."

[29] Celluloid is a material that was very popular from the late nineteenth century until the 1930s; it was the first synthetic plastic material. It could be molded, but was strong and flexible and could be produced cheaply in a range of colors. It was made into a wide range of objects, from toiletry articles to picture frames; it was also used for photographic film. By the late 1930s other materials such as bakelite and vinyl polymers began to supersede it. Today its main use is to make table tennis balls.

[30] Spanish *de confianza* means "reliable, trustworthy."

[31] Emiliano Palma was a citizen of Tenosique who has generally been credited with the (re-)discovery of Piedras Negras. Palma owned various *monterías* (small bush camps—particularly hunting camps, but in Mexico *montería* also refers to a logging camp: Palma was hunting mahogany). According to Morley, Palma's first *montería* was called "Piedras Negras," after "some large black rocks almost in front of the *montería*" on the bank of the Usumacinta River (Morley 1937-1938:3:4, n. 12). Palma owned several *monterías* in the Piedras Negras region in the 1880s and 1890s, and in a 1929 letter to Morley he said that he founded the Piedras Negras *montería* in 1894 (Morley 1937-1938:3:1). When Morley met Palma in 1931 the latter was probably in his 70s or even 80s, which possibly explains Palma's faulty memory, for by 1894 the ruins of Piedras Negras had been known for several years. In 1891 a Frenchman, Ludovic Chambon, visited the ruins from Tenosique; earlier he had met Alfred Maudslay in Palenque. Chambon published a brief account of Piedras Negras (Chambon 1892:119-122), and is another candidate for the discoverer of Piedras Negras (García Juárez 2015:50-53).

To continue this footnote digression, it is possible that Juan Galindo had seen the ruins a half-century before, in 1831, on an expedition from Peten to Palenque. While travelling down the Usumacinta River he apparently passed by Yaxchilan, "and somewhat lower down the stream there is a remarkable monumental stone, with characters" (Galindo 1833:60). This is almost certainly a reference to the so-called "Sacrificial Rock" (see footnote 101) which fronts the river and is the visible cue for people coming down the Usumacinta River that they have reached the ruins.

[32] The stone discussed here has a long history and is the source of some confusion (and not just in Sr. Palma's recollection). Maler (1901:Pl. 11) published a photograph of a stone now in the Peabody Museum, Harvard University (Figure 7). He gives its history as follows:

> I will add here, that the wood-cutters found in this ruined city—who knows where?—one of the little pillars of a small circular table, on the front of which were two perpendicular rows of five well-preserved glyphs each. As the stone—46 cm. in height, 21 in breadth—was not very heavy, they had carried it to Tenosique and as far down as Cármen, to show it as a curiosity to their friends there. When I returned by way of El Cármen, this long-forgotten stone, which I re-discovered in a hut outside of the town, was presented to me by the heads of the wood-cutting establishment. (Maler 1901:64)

Morley (1937-1938:3:294) reports that Maler presented the stone to the Peabody Museum and that he (Maler) was told that it came from Piedras Negras, although its original provenance within the site was unknown. In *The Inscriptions of Peten* Morley goes on to talk about a letter from Emiliano Palma in 1929 in which a stone is described which he took to Tenosique. In his letter Palma says that he found the stone in or beside a "small building . . . this still preserved a small part standing." He says that it was about three-quarters of a meter high and 40 or 45 centimeters wide and carved on three sides. It took three mules, "the strongest and most tireless that I had, alternating them at short distances" to get the stone to Tenosique (Morley 1937-1938:3:295). It was Morley's view that this stone is the same one that Maler found in Ciudad del Carmen and gave to the Peabody Museum. However the discrepancy between the two descriptions in dimensions (and resulting weight) and number of carved surfaces could lead one to question such a conclusion. Palma in his letter to Morley says that at Tenosique he gave the stone to a lumberman to take to the National Museum in Mexico City, but—if it is a different stone from the one in the Peabody Museum—there is no further record of it. Certainly there is no stone matching Palma's description in the inventory of Maya sculptures in Mexico's National Museum of Anthropology published by Amalia Cardós de Méndez (1987). Morley was of the opinion that Palma's memory was faulty as to the dimensions and number of carved surfaces of the stone.

A fuller discussion (or perhaps I should say an even fuller discussion) of this stone is published by Morley (1937-1938:3:294-298). It should be noted that there is nothing in the inscription to tie the Peabody Museum stone specifically to Piedras Negras, although stylistically it certainly belongs to the Piedras Negras region.

[33] Spanish *puede que ser* means "it could be."

[34] See footnote 32. Teobert Maler (1842–1917) was born in Rome (his father was a diplomat from Baden) who became an Austrian citizen in 1863. He arrived in Mexico in 1864 as part of the army supporting the Emperor Maximilian I in what is known in Mexico as the Second French Intervention. When Maximilian was defeated and executed in 1867, Maler decided to stay in Mexico, and later took up Mexican citizenship. He developed dual interests in photography and archaeological ruins, and from the 1870s documented a host of sites, especially in the Maya area. He made a number of expeditions deep into the forests of the Yucatan Peninsula, and wrote extensive

from Ciudad del Carmen[35] to Harvard was one and the same as the one he had sent down the river by a Señor Morales some 30 years ago to take to Mexico City.[36] I am confident myself that the stone at the Peabody Museum (Figure 7) is the stone Palma found and sent out 30 years ago.

He tells me today he sent it out by 3 of his best mules, each mule carrying the stone 2 leagues and then changing to another, each bestia[37] spelling the other every two leagues.

Don Saturnino[38] came in while we were still talking this matter over, and also Karl, whom Frances had asked to come and look for me. Emiliano Palma says that the stone he sent down the river was found near a standing wall not far from his old camp. The description after these 30 years is not clear, and I am doubtful about finding the other two or three supports; for this is surely an altar support.

It was supper time and I came back to our house. Don Pancho gave me a letter from Alden Mason[39] asking us to make our home with them at Piedras Negras, but I really think we are too much like a plague of locusts to descend on any one. Further, I can hardly let him know in advance, as we are leaving ourselves the day after tomorrow morning.

Supper we had at the house of Don Miguel,[40] where we ate 2 years ago. The daughter has grown somewhat fatter and the old man even more talkative, though 2 years ago I would have said that was impossible. Eggs, rice, chicken, and fish, black beans, bread, tortillas[41] and chocolate. Everything was successful except the fish, which had some herb cooked with it, which "had not resulted", as they say down here.

Frances and I were tired and decided to go to bed, or better to start to go to bed immediately after dinner, especially as there was a great deal of business connected with getting the pabellones[42] up for the first time. When we got ours out we found the Castillo woman[43] had left many holes in them.

Frances and I have decided to sleep under the same pabellón, swinging her hammock above my cot. We tried this out two years ago and find it works successfully enough, provided the hammock is swung high enough; otherwise Frances' underside is continually in contact with my elbow or shoulder whenever I turn over.

Just as I was going to bed – I had closed our front door – Tarcisio came around and said Rosendo Esparza was outside. I got up and there he was – the same homely though highly efficient arriero.

He brought very good news indeed. Mason has found another hieroglyphic lintel.[44] He didn't know just where, but was sure as to the hieroglyphs. He did not know either whether Mason had read the date tho' he said Mason had told him there was a date. The central fact of his story, the discovery of a new hieroglyphic lintel, remains unshakeable and I can hardly wait to get to Piedras Negras to see what its date will be, indeed just where it came from.

---

notes, accompanied by drawings and photographs, of numerous sites, many of which he was the first modern explorer to see. In 1898 the Peabody Museum of American Archaeology and Ethnology, Harvard University began to publish field reports by Maler, which remain very important sources. The relationship between the Peabody Museum and the irrascible Maler was always fraught, and the Museum ended their sponsorship in 1909, although the publications of Maler's submitted reports were not completed until 1912.

[35] Ciudad del Carmen (Morley often called it simply "Carmen") is a city on an island in the Laguna de Términos, at the southern end of the Gulf of Mexico. It was the major staging-post for boats headed up the Usumacinta River, and in the first part of the twentieth century it was a major port for timber (logwood, cedar, mahogany) from the hinterland of Campeche, Tabasco, and Chiapas. In the 1970s oil was discovered offshore, and it became a major oil town. In 1931 its population was a little over 7,000; today its population is about 200,000. Morley's party had passed through Ciudad del Carmen on their way from Chichen Itza to Yaxchilan.

[36] See footnote 32.

[37] Spanish *bestia* means literally "beast." In rural Mexico and Guatemala the term is used for beasts of burden, in particular mules. Morley usually spells the word "vestia."

[38] Don Saturnino was obviously a Tenosique native, and Morley seems to have known him from previous visits through the town, but I have not been able to identify him further.

[39] John Alden Mason (1885–1967) was an anthropologist and linguist, who spent most of his career as Curator of the American Section of the University Museum of the University of Pennslylvania. He did fieldwork in California, Puerto Rico, and Colombia before his work in the Maya area. Mason directed the first two field seasons at Piedras Negras in 1931 and 1932. His assistant for those seasons, Linton Satterthwaite, Jr., succeeded him as Director for the 1933-1937 and 1939 seasons.

[40] Miguel Casanova owned a hotel (the Hotel Fonda?) in Tenosique, and provided lodging and meals to the 1931 Morley expedition. Morley referred to him as "old Miguel, the loquacious mine host at the Fonda" (May 5 diary entry) and "our hotel heeper, old Miguel Casanova" (May 8). Margaret Satterthwaite, a member of the 1931 University of Pennsylvania Piedras Negras expedition, also mentions in her diary eating "at Don Miguel" (Satterthwaite [1931]2018:116, 118).

[41] Mexican tortillas are the thin, circular "flatbread" made of maize flour in which the maize has been soaked in a lime ash solution in a process called nixtamalization. Tortillas are cooked on griddles (originally ceramic, now metal), and were and still are the staple of Mexican cuisine.

[42] Mexican Spanish *pabellón*, literally "pavilion," is the term for a mosquito net, hung above a hammock or bed. The Spanish plural is *pabellones*. Morley did not accent the "ó," and spelled the plural form "pabellons."

[43] There are no further details as to the identity of the pabellón-destroying "Castillo woman."

[44] As was noted in the introduction, monuments designated as "Lintels" at Piedras Negras have subsequently been re-designated "Panels."

Well, I will know in another 3 days.

John and Rife went down to a bailecito[45] at Don Pancho's in celebration of the Abreus' visit but they did not stay long. One understands that John danced.

Sunday – March 29

I awoke about 6.30 and soon after others were astir. Had a pyjamas visit with Karl and when I came back to Room B found Frances already up.

Frank was shaving and Karl and I soon followed suit. We hung a mirror against the back wall of the house, and rinsing the razor now and then in a basin of water – not hot – we achieved a shave.

Breakfast at Don Miguel's. It was so cool we shut both the front doors, but as one whole side of the house was made of nothing but saplings, all the outdoors came in all the time.[46]

Breakfast itself was not bad – our own oranges, fried eggs, tortillas, French bread, pan dulce,[47] fried plantain – very good too – and chocolate, also the universal rice – also good.

A chicken roamed around the room and once got under the table.

Don Sal. had told me last night that they would be leaving this morning at 6.30, so I stationed Luis at the corner of our house, looking down toward Don Pancho Villanueva's with instructions to warn me when the Abreu contingent sallied forth. Just as we were finishing breakfast he came in and said "estan listando"[48] and fell to pecking at his face with his right hand. This I took to be a pantomimic imitation of powdering the face. Frances and I left breakfast at once and overtook the whole family before they reached the waterside.

A number of Don Pancho's friends came with them – the Abreus had stopped at Don Pancho's – and were a small gathering before we reached the shore.

We bid them all "goodbye", they all kissed Frances, whom they call Panchita,[49] and went on board. The engine had been going against the owner's arrival and, pushing out the stern, they backed out and were soon lost to view behind the sharp bend just below the landing place.

We returned to the house where everybody was packing. Our suitcases will all be left behind, but this entails some repacking, and everybody was doing it. Also, some additional food had to be bought. Luis was sent out to purchase some strings of the small dried sweet onions, which are so delicious here, especially in seasoning, as in eggs, rice, beans etc. Also, we needed more limes. In tea, in the bush, all the time one wants more and more and still more limes; the peculiar aromatic flavor is especially good at such times, so Luis was dispatched to gather some more in.

We had lunch at Don Miguel's at 12.30: the same things to eat, not so good now, but when we return through here a month hence, Don Miguel's cuisine will taste like Antoine's.[50]

It began to warm up after lunch and Frances and I decided to finish "The Imperial Palace Hotel."[51] When we finally reached the last page, it was nearly six and by the time we were ready for dinner it was ready for us.

The same fare, still good but getting a bit threadbare; I will be glad to be on our way tomorrow.

There was still a little packing to do. The suitcases and bags we are going to leave at Don Pancho's had to be packed and the last things rounded up.

I went down to Don Pancho's for a last few words and then we said good night. I came back and we went to bed immediately.

Monday – March 30

We got up at 4.45, just as it began to grow light, and, dressing quickly, began to pack the last few things.

Don Miguel appeared presently and said breakfast was being prepared, and by six we were eating it.

And then came the usual wait for the arrieros. I sent Tarcisio down to Don Pancho's finally to see what was delaying them, and he came back presently with the news that they were breakfasting. Shortly afterwards, Baltasar appeared, leading two pack animals, and presently Eugenio, our other arriero, came up the street with two others.

The saddling of the horses commenced. First Frances drew a white mule, a single pacer named "Avion."[52] I had a brown mule, "La India,"[53] which F. had had two

---

[45] Spanish *bailecito* is the diminutive form of *baile*, "dance."

[46] At this point the typescript version adds a sentence: "It was cheerless."

[47] Spanish *pan dulce* literally means "sweet bread," and refers to a variety of small, inexpensive baked treats that are typically eaten with hot chocolate or coffee.

[48] A Morleyism. Literally *están listando* means "they are listing." Presumably what Morley means is *están listos*, "they are ready," or perhaps more likely here "they are getting ready," which would be *(se) están preparando*.

[49] Panchita is a Spanish diminutive nickname for Francesca, of which Frances is an English equivalent.

[50] Antoine's, in New Orleans, is one of the most famous restaurants in the U.S. It was founded in 1840 by Antoine Alciatore and has remained in the hands of his descendents ever since. Antoine's serves cuisine that has been described as "haute creole," and is one of the best places that I have ever eaten at; evidently Morley thought very highly of it also.

[51] *Imperial Palace* was a popular 1930 novel, by Arnold Bennett, modeled after the daily happenings at the Savoy Hotel in London.

[52] Spanish *avión* means "airplane." Morley spells it "avion."

[53] *La India* means "the (female) Indian."

years ago. Frank's mule is named "Chachalaca"[54] and Karl's "Mantequilla."[55] Heaven knows why?[56]

Rife rides the largest, called "Águila,"[57] and John's is "Sombra."[58] Again why? Tarcisio's was saddled next, a sorry-looking mule with scarcely healed sores which T. says "went in".

Finally a rather good-looking horse was brought for Luis. Tarcisio was quite out of face about it, as compared with his own mount Luis' mount was an Arabian.

The cargo began to go on. It became apparent that we would need one cargo animal more, so they went down to fetch it. When all were loaded we went down to Don Pancho's from whose corral[59] the final start was made at 7.50, but oh what a false start. – I am writing this in the bush not 5 kilometers distant from Tenosique at 11. A.M. and one animal is still lost!

Fausto Aldecoa,[60] the brother-in-law of Don Pancho, is to accompany our patacho clear through to Salvamento.

We are thus 11 riding animals and 9 packs, or 20 in all.

This leaves for the second patacho 12 pack animals and 3 riding animals, with Rosendo Esparza as the head arriero. They will also leave today.[61]

The day goes or rather went, because thank God it is over as I write these lines – from bad to worse.

At the Poleva,[62] the bajo[63] of which was mud at least 18" deep, we were 2½ hours late, and after that we lost more time.

A variety of things were wrong:

1st It was the first day out, always the worst on any trip in the bush;

2nd The mulada[64] appears never to have worked together before. Mules, like men, learn to work together in teams, and it takes some time for a mulada to find itself;

3rd We have no bell mare.[65] Formerly I would have minimized the importance of this, but throughout the

---

[54] *Chachalaca* is a genus of gregarious birds that inhabit the Americas from southern Texas to Argentina. They are very noisy, especially when roosting in the evening: in Mexico and Central America *chachalaca* is also a term for a chatterbox.

[55] Spanish *mantequilla* means "butter."

[56] The typescript version has "He never knew why!" The original manuscript clearly has "Heaven knows why?"

[57] Spanish *águila* means "eagle." Morley spells it "aguila."

[58] Spanish *sombra* means "shadow, shade."

[59] Spanish *corral* is an enclosure for animals.

[60] Fausto Aldecoa Ferrer (1902–??) was a Tenosique native. Morley here and elsewhere sometimes spells his patronym "Alecoa." As Morley says, he was the brother-in-law of Don Francisco "Pancho" Villanueva (footnote 13), the agent of the Carnegie Institution of Washington in Tenosique.

[61] We have already seen that Morley was obsessed with travel routes and distances, in part to guide colleagues and others who came after him along remote jungle trails. It is perhaps best to discuss the whole route from Tenosique to Piedras Negras here in one place (the Piedras Negras to Yaxchilan route will be dealt with later), and confine myself in subsequent footnotes to briefer (!?) comments when Morley mentions particular landmarks and staging places.

Both in his diary (entry for March 31, below) and in *The Inscriptions of Peten* (Morley 1937-1938:2:349), Morley provides a summary of the various stages between Tenosique and Piedras Negras. The two sources agree as to distances, but *The Inscriptions of Peten* records more stopping points than Morley does in his 1931 diary. There are also differences in the spellings of the place names—so many in fact that for many names it is sometimes unclear which is the correct spelling.

The *Inscriptions of Peten* list is as follows (Morley 1937-1938:2:349):

Tenosique to Arroyo Chaxin	1 km.	}
Arroyo Chaxin to Río Poleva	5	}
Río Poleva to Arroyo Tutulla	1	}
Arroyo Tutulla to Arroyo Sayalito	4	}
Arroyo Sayalito to Rancho Tepescuintla	2	} *

* Jornada of 31 km.

Rancho Tepescuintla to Arroyo Saya	2	}
Arroyo Saya to railroad track	7	}
Railroad track to paraje La Parida	1	}
Paraje La Parida to Arroyo Santo Tomás	8	}
Arroyo Santo Tomás to Tepesco Hill	7	}
Tepesco Hill to paraje Nuevo Mundo	4	}
Paraje Nuevo Mundo to Arroyo Tres Champas	5	}
Arroyo Tres Champas to paraje El Pabellón	2	}
Paraje El Pabellón to paraje Cuatro Reales	0.5	} *

* Jornada of 33 km.

Paraje Cuatro Reales to paraje El Cabro	0.5	}
Paraje El Cabro to Porvenir Nuevo	11	}
Porvenir Nuevo to Piedras Negras	3	}

An *arroyo* is a small stream, a *paraje* is a stopping point (see footnote 88) and a *jornada* is a day's journey (footnote 72).

In his 1931 diary the Railroad track to Arroyo Santo Tomás leg is given as one stage of 9 kilometers, with no mention of La Parida, and the Arroyo Tres Champas to El Cabro leg is given as one stage of 3 kilometers, with El Pabellón and Cuatro Reales not mentioned. The diary however includes a staging post called Jolochero between El Cabro and Porvenir that is not mentioned in *The Inscriptions of Peten*.

[62] The Río Poleva is a tributary of the Usumacinta a few kilometers south of Tenosique. Morley refers to it variously as "Río Poliva," "the Poliva," and (as here) as "the Poleva." Most maps of Morley's day call the stream "Arroyo Poleva." Morley says that in the rainy season the stream can inundate the surrounding countryside (Morley 1937-1938:2:346).

[63] Spanish *bajo* (literally "low") is used as a noun to signify low-lying terrain. In the Maya area *bajos* are typically swampy and muddy, with tangled and thorny vegetation. Morley's implication here is that the Río Poleva is not a permanent stream, at least in its upper reaches, but at times is reduced to a muddy swamp.

[64] Spanish *mulada* is a group of mules. One would normally say a "team" of mules, but these were clearly no team.

[65] A "bell mare" is a female horse or mule that leads a team of animals and can be readily identified and heard by having a bell

Peten the big patachos always have them, and, after the way our mules kept separating yesterday, hiding out in the bush, losing themselves, darting into deshechos[66] etc., I am convinced the bell mare is a feature of prime necessity;

4th The baggage was very poorly arranged and kept slipping off all day long, causing further delays. Tomorrow Fausto (Don Pancho's brother-in-law) promises to have them better balanced; our chairs seem to have caused the most trouble;

5th I hesitate to add a head blaming the two arrieros, Baltasar and Eugenio, who worked like demons, so I won't; consider this head therefore as eliminated.

Tarcisio proves to be a wonderful arriero. Frances and I were convulsed with his breaking falsetto, which was a close imitation of Baltasar's and Eugenio's original. He would urge the mules forward with cries and curses and was of real service in bringing in our patacho intact.

At lunch we were lost or rather 2 mules were and during this enforced wait we ate lunch on mule back, Luis passing the crackers, cheese and oranges around.

Figure 8. Pack mules in camp.
Courtesy of the Penn Museum, image no. 16021.

Twice mules hung behind in deshechos and caused delays of almost an hour in each case. These delays in the precious middle of the day meant of course a very late getting in.

I had originally planned on camping at El Retiro,[67] but it became apparent very early that we would never make this. I then compromised by making our final stop for the night the Arroyo of Santo Tomás.[68]

Darkness began to come on so swiftly, however, that I saw we could make no further than the railroad.[69] They told me Mason's engineer[70] has a camp here and some champas,[71] and we only made this straggling in

around her neck.

[66] Spanish *desecho* (literally "something rejected, rubbish") in Latin American slang is a "shortcut," but Morley's use here seems to indicate bush or forest cover that hid the mules from the *arrieros*. He spells the word "deshecho," but this is an adjective meaning "violent."

[67] El Retiro was and is a small community on the right (east) bank of the Usumacinta River about 12.5 miles (20 kilometers) in a straight line south of Tenosique (about 35 kilometers by trail). It was near, but not directly on, the trail between Tenosique and Piedras Negras.

[68] The Arroyo Santo Tomás is a small stream which flows into the Usumacinta. The arroyo runs through the valley just a few kilometers north of El Retiro. Morley did not accent the "a" in "Tomás."

[69] A railroad seems a very strange thing in the middle of the remote Tabasco rain forest. According to Morley, a little later in his diary entry for March 30, the railroad ran for 8 kilometers (5 miles) west to San José from the point where it crossed the trail, and 20 kilometers (12.5 miles) east to the abandoned montería Santa Rosa. However on his return journey, in his diary entry for May 8, Morley says that the railroad goes 5 kilometers west to the river at the Paso de Santo Tomás, and that to the east the railroad goes 5 leagues inland from the river. Assuming that Morley is using muleteer leagues (footnote 27), this would be a total of 17.5 kilometers, or 12.5 kilometers east of where the trail intersects with the railroad.

To confuse things further, in *The Inscriptions of Peten* Morley desribes the railroad as going west for 8 kilometers to the river at the Paso de San José and east for 4 kilometers to the abandoned montería of San Marcos—i.e., not to Santa Rosa and only 4 kilometers long (Morley 1937-1938:2:347). I believe that the latter description is the more accurate; certainly the river end of the railroad was at the Paso de San José.

On his return journey Morley provides more information about the history of the railroad, in his diary entry for May 8. According to Enrique Rivas, who was the foreman of Egan-Wyer (see next footnote), the railroad was built around 1906 at the most improbable cost of 300,000 U.S. dollars. According to Rivas the montería of Santa Rosa was built for the extraction not of mahogany and cedar but of logwood, a timber used for dye. The montería buildings reportedly had zinc-plated roofs, and three abandoned engines were there.

By 1931 the railroad was long abandoned and trees were growing between the tracks. According to Morley the last five kilometers of Egan-Wyer's road (from Piedras Negras) ran along the railroad.

[70] "Mason's engineer" was Terence Egan-Wyer (see footnote 91), who was hired to make a road between Piedras Negras and Tenosique to enable the removal and transport of stone monuments from Piedras Negras.

[71] Latin American Spanish *champas* are thatch-roofed shelters or huts, usually without walls—just supporting poles.

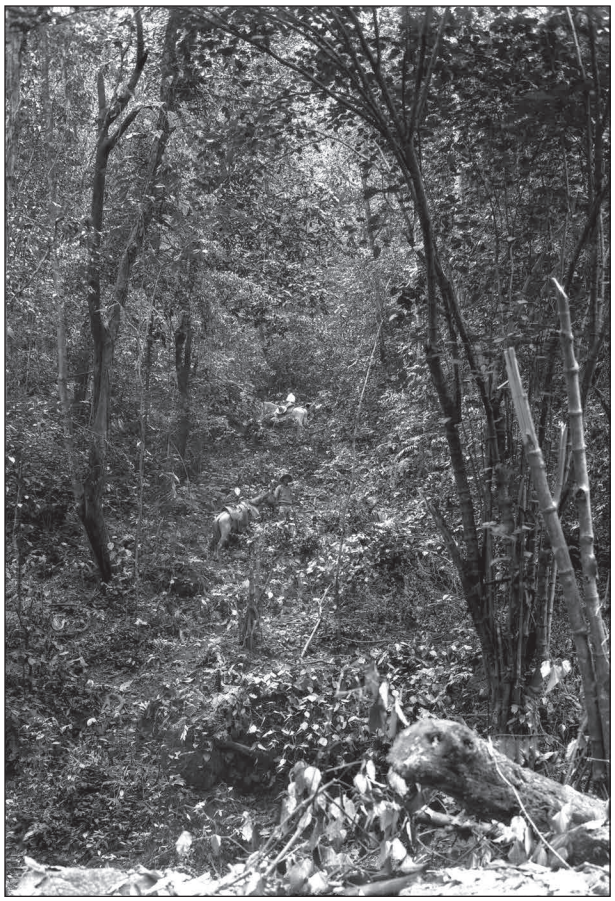


Figure 9. Tepesco Hill. Courtesy of the Penn Museum, image no. 15582.

one group after another in the dusk, literally by the skin of our teeth.

Frances, Frank, Fausto and I reached the champas at 6.^{oo} P.M., just 10 hours and 10 minutes after we started, a terrible jornada.[72] We brought with us 4 pack animals, and after tying our riding animals Fausto and I began unloading the animals (Figure 8).

Tarcisio came in about 10 minutes later with 2 more cargo animals, and in another 10 minutes Rife and Luis came in, followed by one pack animal.

Some time afterwards, we heard faint shouting in the darkness, and Karl and John came in with no animal. Karl's new Tenosique flash wouldn't work, went out en camino.[73]

Finally, Baltasar and Eugenio came in, each with a mule and, thank Heaven, the cargo animals were complete.

There are two champas at right angles to each other, and gradually most of the baggage was dumped; there was no time to arrange it in this space. One champa was used as a kitchen and Tarcisio slept inside; Frances and I outside in the corridor in the same champa. Everyone else slept in their hammock (Frank in his cot) under the other champa.

The first thing to do was to get dinner, a sketchy meal as it finally turned out; tea, hominy,[74] a delicious onion scrambled eggs, bacon and crackers. The tea tasted best of all, though the first report of the waterhole was that it was dry. T. said it smelled and really was almost dry.

This place is a veritable garrapatal.[75] We were covered soon after we got here and I guess we're taking more with us than we brought in.

The railroad running through the bush passes this camp. From here it runs east for another 20 kilometers to the abandoned montería[76] of Santa Rosa, and the other way west, 8 kilometers to San José.[77] Mason's new road, at least one section of it, commences just beyond here.

One Godsend was a lime tree growing right by the abandoned rails. The boys shook this down for a mochila full of very good limes. I hope we will find them at Yaxchilan; they make tea taste like nectar. John has a heavy cold, so has Luis, and others of us are sniffling and hawking.

The animals are parked in a corral! which I hope will hold them, having been stung many times; my only observation is "quien sabe."[78]

Gradually we all began to settle down for the night, crawling in under our pabellones and then, with electric flashes[79] making an illumination sufficient to remove the garrapatas from the person.

I got undressed completely and into pyjamas, and what a blessed relief it was to one's skin, tortured with heat and bites. Frances found several of them crawling free and I picked 'em off.

Tarcisio's last chore was to see that water was boiled, and boiled for 15 minutes too, and put into the canteens, all of

---

[72] Spanish *jornada* is "one day's journey." Spanish *en camino* means "en route, on the trail."

[73] Spanish *en camino* means "en route, on the trail."

[74] Most American readers know what hominy is, and most non-Americans probably do not want to know. Hominy is a food consisting of kernels of maize soaked in a lime solution, a process known as nixtamalization (the Nahuatl [Aztec] word for the process is *nextamalli*). The nixtamalization process makes the corn easier to grind and increases its nutritional value. Once ground, the nixtamalized maize can be made into tortillas (footnote 41), tamales, and other dishes. In the U.S. during the Great Depression of the 1930s hominy grits—a kind of porridge made from hominy—became a starvation food, particularly in the southern United States. Perhaps as a result some people have developed a dislike of hominy and have subsequently been trolled for their lack of taste—this has come to be known as an *ad hominy* attack.

[75] Latin American Spanish *garrapatal* is a place infested with *garrapatas*, "ticks."

[76] In Mexico and Guatemala, *montería* refers to a logging camp. Morley spells the word "monteria." See also footnote 31.

[77] San José (Morley does not accent the "José") was a community on the east bank of the Usumacinta River, and was a "port" from which it was possible to navigate downstream to Tenosique by motor launch, as will be seen later in Morley's narrative, in his diary entries for May 5 and May 8.

[78] Spanish *¿quien sabe?* means "who knows?"

[79] Morley means flashlights.

which he was instructed to fill.

Luis' last chore was washing the supper dishes; I could hear him at this after I turned in, which was about nine o'clock or a little later.

March 31 Tuesday[80]

It must have been about five when I awoke[81] and I could hear mules moving about then, so the arrieros must have gone to the corral even before this.

Slowly we began to get ready for the next leg of our journey. Luis achieved an admirable breakfast of fried eggs, bacon, coffee and some California peaches.[82]

While the loading of the mules went forward I sat down on a kyack and wrote in this diary. But I was driven hither and yon from pillar to post; first my kyack had to be packed and then my next seat – Box No. 19 – and so it went. It is maddening to watch the slowness with which the arrieros load the mules, and after all we only had 9. Today they profited by yesterday's errors to the extent of loading the chairs on the sides instead of above, as sobornal,[83] as they call it. In this position it rode so much more easily.

We were not ready to leave until 8.35, too late a start to be really effective.

Mason's new road started immediately after leaving the champas and is a fine wide, cleared highway. Two leagues beyond (i.e. 8 kilometers) we came to the Arroyo de Santo Tomás, where there is fine running water. It is a great pity we could not have made this delightful camp last night. We reached Santo Tomás at 10.05. The first 8 kilometers in 1½ hrs.

The new trail does not pass by El Retiro but when we came to the trail turning off to the right going down to the river, I got Fausto to undertake 2 commissions for me there – first to buy all the eggs in the village he could, and second to enquire for my old man Simón López,[84] who was to have met me at El Retiro last night, tho' I had failed to keep that rendezvous.

Not long after he had turned down the trail to El Retiro, two men carrying packs on their shoulders came out of the bush and one was my old Simón – the other proved to be a friend of his Salomon quien sabe – I didn't get the last name – and the latter had been brought along also looking for a job. He appeared to be a good boy so I told him I would give him a job.

Not long after this Fausto rejoined us and we began the long gradual climb to the foot of Tepesco Hill[85] (Figure 9). At the base of the ascent, we stopped for all of fifteen minutes while the arrieros tightened the cargoes.

Frances walked all the way up the hill as also Tarcisio and the two arrieros, the rest of us rode, except Karl who walked the latter part. It was just 11.55 when we reached the summit.

As quickly as we descended the hill which is much less of a descent than the ascent on the opposite side,

---

[80] From this date on, Morley changed the order within his date headings, putting the date first and the weekday last.

[81] I am struck by the fact that almost a full sentence has gone by without a footnote, and am concerned that there is no doubt a clamoring for a "footnote fix" among the majority of my readers. So here, for both of you, is a "freebie": a footnote on footnotes. The blame for the bloody things belongs to a man called Richard Jugge. 1577 was not a good year for him: he died—but not before inflicting the dreaded footnote on an unsuspecting world. A footnote (what else?) in his biography states that he had been educated at Eton and King's College, Cambridge—so he certainly should have known better. A printer (he became Royal Printer under Queen Elizabeth I), in 1568 he published the Bishop's Bible, a later edition of which was used as the basis for the King James Bible. The Bishop's Bible is "credited" (or vilified, depending upon one's viewpoint) as the first book to contain footnotes. Personally, I can only apologize for the man and his vile practice.

[82] The idea of preserving fruit was developed during the Napoleonic wars with the aim of providing a reliable source of food for Napoleon's Grande Armée. In 1809 glass jars with wax seals were developed by Nicolas Appert in France. Very quickly the use of cans made of sheet steel and sealed by soldering was developed. The first canning factory in the U.S. was begun in New York City in 1812, by Robert Ayers, and used for preserving meats, fruits, and vegetables. Canned food steadily gained in popularity, although opening the cans was a problem for decades: the main tools for getting at the food were knives and hammer-and-chisel, but some people resorted to shooting the cans. It wasn't until 1860 that the first can opener was invented! Del Monte came onto the scene in 1886, and in 1907 built a canning factory in San Francisco. "The Cannery," still a landmark in San Francisco, was quickly producing 200,000 cans of peaches a day. Anyone who has spent time in a remote bush camp knows how delightful it can be to open a can of peaches as a rare treat, and clearly Morley was no exception.

[83] In this context, Spanish *sobornal* means "counterweight, balance weight." Morley spells the word sobernal.

[84] I have not been able to track down any information about Simón López (Morley calls him Simon Lopez).

[85] The Tepesco Hill was the most difficult part of the trail between Tenosique and Piedras Negras. Located just south of El Retiro, it was a steep climb on both sides to a narrow shelf which formed the summit (and of course the steeper the grade the more slippery the trail was, both for mules and humans). The engineer of the 1931 University of Pennsylvania expedition, Terence Egan-Wyer, at first proposed a cart-and-pulley system to transport stone monuments up and over inclined trestles to get them over the hill. However, from Morley's comment on his return journey (diary entry for May 8) it appears that Egan-Wyer graded the top of the hill "out of existence." Morley called the hill the Pons Asinorum, "bridge of asses," a rather cruel thing to say when the expedition mules labored so valiantly to get up and over the hill. The Latin term refers to a critical test that may confound an inexperienced person. Morley also called the hill "Tepexco Hill," and in his 1921 diary "the Tapesco hill" (Ward et al. 2024:477); Margaret Satterthwaite referred to it as "Tapexco" (Satterthwaite [1931]2018:115).

we ate our lunch on horse back – cheese crackers, Educators,[86] cheese spread, vienna sausage and a lime to suck afterward – really delicious.

At 1.20 P.M. we crossed the Arroyo de Tres Champas[87] and at 1.45 reached the paraje[88] of El Pabellón[90] and at 2.00 the paraje of El Cabro[89] where Egan-Wyer[91] (Mason's engineer) has established one of his road camps. These last two parajes are in Guatemala. I should record here that after leaving Tepesco we had not yet reached Mason's road on the far side of that hill.

At El Cabro they told us Piedras Negras was only 3½ leagues away so that it looked as tho' we might get in at 5.30, which I had begun to doubt.

The trail was reached some time after passing El Cabro and when we were once on it again we moved forward more swiftly, at a good trot in fact.

We passed a place called Jolochero,[92] where a mulada bringing in a lot of Mason's stuff had stopped for the night, and here we were told it was 3½ leagues to Piedras Negras so I really thought we would get in.

It had been threatening to rain all afternoon and gradually settled down to it, first as a drizzle and later as a smart shower.

It is triste[93] business riding in the rain and we were all wet and a bit low in spirits though all contented in that we were to get to Piedras Negras tonight.

At 4.30 we passed El Porvenir[94] though we did not turn in to the right to the champas, though one of our precious mules managed to malinger here in the thick low bush of some old milpas.[95] Tarcisio tried to smoke it out but could not, and finally Eugenio had to put back to the paraje and look for it. He did not reach Piedras Negras in fact until after we got in.

The rain kept up but so did Mason's good road and

---

[86] Educator crackers were created in 1885 by a New England dentist, William L. Johnson (1825–1898). He had been worried that soft foods were harming his patients' teeth. He was a contemporary of Horace Fletcher (1849–1919), who advocated chewing food until it became liquid, which became rather a fad, called "Fletcherism." Johnson developed a hard cracker from wheat flour and water, which he baked in his home and at first gave away to his patients. He wanted to educate people about dental health and nutrition, and so he called them "Educator Crackers." With his daughter, Nora Bird, he opened a store in Boston and the business flourished, developing more products, including in 1913 the "Suffragette Biscuit." The Educator Biscuit Company passed through various hands until its dissolution in 1980.

[87] Arroyo de Tres Champas, or Arroyo Tres Champas, or more commonly simply Tres Champas, was originally a montería, but had been abandoned before Maler passed through in 1895 (Maler 1901:41). It remained as a stopping-point on the trail—Maler described the spot: "an open hut still stands on the bank of the brook and affords some shelter to the traveller" (Maler 1901:41). Arroyo Tres Champas lies just north of the Mexico-Guatemala border.

[88] Spanish *paraje* literally means a "stopping place." In the Mexican and Guatemalan hinterland it usually refers to a spot by a water source with a few thatched huts. In his diary Morley spells the word "parage."

[89] El Pabellón was a former paraje that was on the Mexico-Guatemala border (Morley 1937-1938:2:347). Morley spells the name without the accent.

[90] El Cabro was another paraje, presumably with a water source, because Egan-Wyer selected the spot as a camp for his road-builders.

[91] Terence Egan-Wyer (1898–1978) was an engineer who was hired by J. Alden Mason to build the field camp at Piedras Negras and to survey and build a road from Piedras Negras towards Tenosique for the removal of stone monuments by oxcart. Egan-Wyer was born in India, and worked in Ceylon (modern Sri Lanka), Jamaica, and British Honduras (modern Belize) before drifting to Guatemala, where Mason met him and hired him for the Piedras Negras project. Mason and Egan-Wyer signed his employment agreement on May 15, 1930. The agreement was for an indefinite period, and Wyer was to "make surveys for the road from Tenosique to Piedras Negras, to work upon this road and to do other preparatory work" (Egan-Wyer 1930). By mid-June he was working on his survey with a crew of about ten men, and on July 4 he submitted a detailed report on various possible routes for removing stone sculptures from Piedras Negras. In December 1930 Egan-Wyer married María Teresa Marroquín, the daughter of a Guatemalan engineer; she accompanied him in 1931 to Piedras Negras.

Most of the time Egan-Wyer and Mason seem to have been on good terms, but the relationship was not always cordial: Mason's diary entry for March 27, 1931 (just four days before Morley's arrival) notes "Wyer resigned but later reconsidered & withdrew after talk with Lint[on Satterthwaite]" (Mason 1931).

Morley (and Mason) sometimes refer to Egan-Wyer simply as "Wyer."

[92] Jolochero was between El Cabro and El Porvenir, on the "final leg" of the trail to Piedras Negras. Here and elsewhere Morley calls the place "Horochero."

[93] Spanish *triste* means "sad, miserable."

[94] Morley says that El Porvenir (also called simply "Porvenir") was originally founded as a montería by Emiliano Palma (footnote 31) and that it lay about four kilometers (2.5 miles) northwest of the ruins of Piedras Negras, and that it had been abandoned before Maler's first visit to the region in 1895 (Morley 1937-1938:3:2). Until recently, in Maya archaeological terms El Porvenir was most famous for a stone fragment ascribed to the site (Morley 1937-1938:5:Pl. 119a, b). The piece is carved on two sides and its surviving inscription names the sixth king of Piedras Negras, Ha' K'in Xook, who ruled the site between AD 767 and 780. The known provenance of this fragment is El Porvenir, but the piece could easily have been taken to El Porvenir by early visitors to the site from Piedras Negras itself: it was found at the logging camp. The fragment was given by one Clemente Viranco, native of Tenosique to the Peabody Museum, Harvard University, in 1905.

More recently, the mounds at El Porvenir have been mapped and investigated (Kingsley et al. 2012). Its 31 mapped structures include a ballcourt. Many of the structures were built during the Late Preclassic period (300 BC – AD 350), but by AD 400, with the rise of nearby Piedras Negras, its population seems to have moved, or been moved, to the growing capital. By the seventh century, however, El Porvenir was settled again—as a secondary center to Piedras Negras. The kingdom of Piedras Negras collapsed around AD 810 (although the site continued to have residents until about AD 930). El Porvenir continued to be occupied as a small settlement until around the same date (Kingsley et al. 2012).

[95] A *milpa* is a plot of land planted with maize and (often) beans and squash.

we swung along at a trot over the last league, presently we crossed over a hill and began to descend to the Piedras Negras Valley.[96]

Presently we left the main cleared road, we turned off to the right, and it was obvious to me that the main road continued on to the ruins while our right branch, which began to bend around to the right more and more was heading for the ruins and Mason's camp.[97]

There was shouting ahead and soon we were passing between a row of thatched huts, a garden, a well and finally a gate with PN or NP standing for Piedras Negras. Mason and the Satterthwaites[98] met us, and also the Egan-Wyers, the latter is a young and pretty Guatemaltecan,[99] they have only been married 3 months! It was 5.20 – 9¾ hours on the way and I understand we had done just 12 leagues or 48 kilometers.

But oh what a different arrival than that of Frances and me, two years ago on May 5, 1929.[100]

On that occasion we had camped on a sand bank down near the Rock of Sacrifice[101] (Figure 10) in a place which was alive – literally crawled with garrapatas.

Mason's camp on the other hand is palatial (Figure 11). He has a comfortable thatched house, the Satterthwaites another, the Egan-Wyers another; there is a big 3-room principal house with a porch in front – office, dining-room and specimen room, a kitchen, and a bath-house and W.C. combined (the last two, not the last three), a sizey bodega[102] and other buildings perhaps 12 or 15 altogether.

Mason had most kindly given us his house and the Satterthwaites wanted to turn theirs over to Frank, but we insisted in having him sleep with us so that they were not dispossessed. Karl, John and Rife slept in the pottery room. Tarcisio, Luis and Fausto found sleeping quarters somewhere.

Here I met an old friend, a chap by the name of Mendoza,[103] who used to be in charge of the Customs office at Laguna de Yaloch,[104] whom I had not seen for 9

---

[96] Piedras Negras and its immediate surroundings lie in quite broken country in terms of topography. Morley is probably referring to the low, relatively flat ground stretching from El Porvenir towards the southeast for a kilometer or two, but ending a couple of kilometers short of the ruins.

[97] Mason's camp was by the river, about a kilometer north of the ruins.

[98] Linton Satterthwaite, Jr. (1897–1978) had various careers before settling as an archaeologist. During World War I he trained as a flying officer for the Royal Navy Air Force. After the war he briefly practiced law, then was a reporter. By the late 1920s he was working on excavations in various U.S. states undertaken by the University Museum, University of Pennsylvania, during which time he met and worked for J. Alden Mason. He worked as archaeologist on the 1931 Piedras Negras expedition, and in 1932 he was the Assistant Director, before becoming the Director for the 1933-1937 and 1939 seasons. Later he worked on other major Maya sites, at Caracol and Tikal. Satterthwaite made important contributions in Maya epigraphy and also to the field of Maya archaeology in general: it was he who gave Tatiana Proskouriakoff her start in the field at Piedras Negras in 1936, and he also taught William R. Coe and Christopher Jones.

When Margaret "Peggy" Satterthwaite (1900–1977)—then Margaret Conway—had married Linton Satterthwaite (on May 21, 1930) she probably didn't anticipate that she would spend eight field seasons in the Guatemalan rain forest. As was said in the introduction, Margaret Satterthwaite kept a diary of her 1931 season in Piedras Negras (Satterthwaite [1931]2018).

[99] María Teresa Marroquín de Egan-Wyer (1906–1998) had married Terence Egan-Wyer (footnote 91) just a few months before the Morleys met her in Piedras Negras. She was the daughter of a prominent Guatemalan engineer. Morley often refers to her as "Mrs Wyer."

[100] Sylvanus and Frances Morley and Tarcisio Chang spent a week at Piedras from 5–12 May 1929.

[101] The "Rock of Sacrifice" is one of the most famous landmarks at Piedras Negras. It is a prominent rock on the bank of the Usumacinta River, and announces to anyone travelling downstream that they have reached the ruins. It was named the "Rock of Sacrifice" by Teobert Maler, who interpreted its design (erroneously) in rather lurid terms:

> [C]arved upon its steeply inclined surface [is] a circular design which resembles that upon the great sacrificial table on the esplanade before the temple of the eight stelae. This fact seems to justify the surmise that on the rock in question were performed the sacrifices intended to appease the water deities; the blood of the victims trickling from the rock and mingling with the waters of the river. I call this rock La Roca de los Sacrificios (Maler 1901:42).

[102] In Spain a *bodega* is a "cellar," especially for storing wine. In Latin American archaeological usage it commonly refers to a storehouse for archaeological artefacts, but here Morley is referring to the project's pantry and general storehouse.

[103] Santiago Mendoza was the Guatemalan government's representative assigned to the University of Pennsylvania's Piedras Negras expedition in 1932 and 1933. Morley knew him from his travels in Peten across the frontier between Belize and Guatemala. Why the Guatemalan Government would have appointed a customs official is perhaps explained by Clause 10 of the agreement between the Government and Mason to establish the excavation program: "10. During the duration of the contract the Museum will be exempted from payment of fiscal or municipal taxes on necessary materials which may be imported into the country through El Porvenir" (Satterthwaite [1931]2018:14). It appears that Mendoza served double-duty, both as the inspector of the archaeological project and as a customs official at El Porvenir. Mendoza seems to have been an easy-going official: later in his diary (7 May) Morley says that Egan-Wyer "told me last night that the Guatemala inspector Mendoza told him that any division of the material that Mason made would be acceptable to him (Mendoza)." Mendoza was succeeded in subsequent seasons by Victor M. Pinelo.

[104] Laguna de Yaloch (in Guatemala more commonly known as Laguna de Yaloche, or simply Yaloche, is on the border between Belize (in Morley's day British Honduras) and Guatemala. The Guatemalan Customs post, and Santiago Mendoza, were well known to members of Carnegie Institution of Washington expeditions, because it was the frontier post on the trail between Belize City and the Maya ruins of Uaxactun, which Morley (re-) discovered in 1916 and which was the subject of major excavations by the Carnegie Institution of Washington from 1926 through 1937.

Figure 10. The "Rock of Sacrifice" at Piedras Negras (Morley 1937-1938:5:Part 1, Pl. 117b).

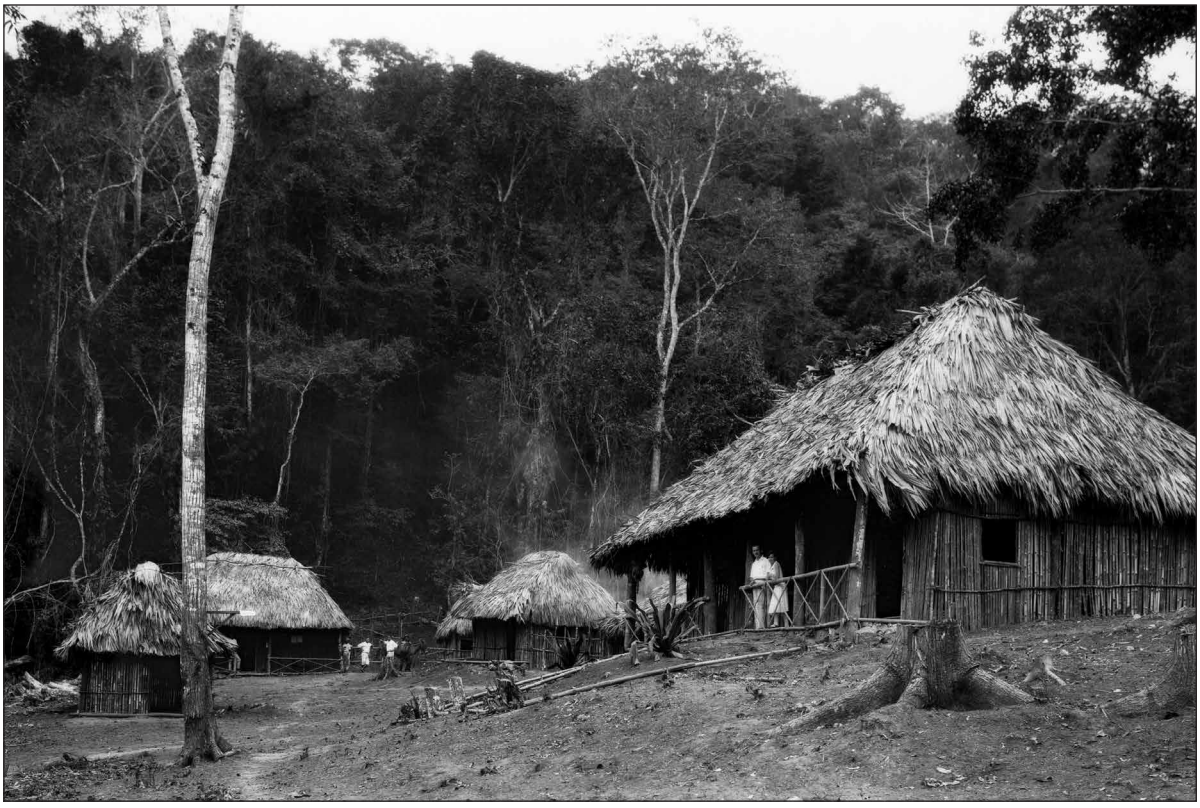


Figure 11. The University of Pennsylvania camp at Piedras Negras in 1931.
Courtesy of the Penn Museum, image no. 15507.

or 10 years.

Mason said their cook was rotten and so Luis was told to get to work and help in the kitchen. Frances got out some of our latería[105] and after changing into dry clothes we had supper at 7.30. And it was delicious. They had some native cheese from Ocosingo[106] which was delicious. I think we'd better take some of it up the river with us.

The new lintel is from Structure 42[107] just behind Stelae 38 and 39 and has the Initial Series 9.9.8.0.?, the kin, day and month are destroyed. If we may assume them to have been 0,[108] the whole Initial Series reads 9.9.8.0.0 10 Ahau 3 Uo. The style of the carving he describes as beautiful. He is also digging in the only standing building.

I talked with Egan-Wyer some about his road, which will be completed save for Tepesco Hill itself within the next 3 weeks, so that we ought to have much easier conditions going out even than coming in.

The distances between Tenosique and Piedras Negras according to Egan-Wyer are:

Tenosique to Río Chaxin[109]	1 K.
Río Chaxin to Río Poleva[110]	5 "
Río Poleva to Arroyo Tutuyeha[111]	1 "
Arroyo Tutuyeha to Arroyo Sahalito[112]	4 "
Arroyo Sahalito to Rancho[113] Tepescuintle[114]	2 "
Rancho Tepescuintle to Arroyo Saha[115]	2 "
Arroyo Saha to railroad tracks[116]	7 "
Railroad tracks to Arroyo Santo Tomás[117]	9 "
Arroyo Santo Tomás to Tepesco Hill[118]	7 "
Tepesco Hill to Nuevo Mundo[119]	4 "
Nuevo Mundo to Arroyo Tres Champas[120]	5 "
Arroyo Tres Champas to El Cabro, Guat.[121]	3 "
El Cabro to Jolochero[122]	2 "
Jolochero to Porvenir[123] (Aduana)[124]	9 "
Porvenir[125] to Piedras Negras	3 "
El Porvenir to Piedras Negras (new camp)	64 "[126]

[105] Literally meaning "tinwork," *latería* is used here by Morley to mean tinned goods, which his party contributed to the evening meal. Morley spells the word "lateria."

[106] Ocosingo, a city in a beautiful valley in central Chiapas, is regionally famous for its cheese. In Spanish it is called Queso de Bola de Ocosingo, *bola* meaning "ball": it comes in balls about 5-6 inches (13-15 centimeters) in diameter. It is a soft cheese made from cows' milk with added cream. It is creamy, slightly crumbly, and I can attest that it tastes delicious—it is one of my favorite cheeses. The ball of cheese is wrapped in a wax coat, which in practical terms makes it a great cheese for expeditions such as Mason's and Morley's: it keeps well even without refrigeration.

[107] Structure 42 is now designated Structure K-5. The "Lintel," numbered Lintel 7 by Morley and Mason, has been re-designated "Panel 7" (see the Introduction and footnote 44).

[108] Morley is talking here about the coefficients of the Long Count date and the corresponding Calendar Round date (see footnote 109 of Part 2). Morley is assuming that the last coefficient, the k'in coefficient, of the Long Count is "0" (Morley was working before the historical component of Maya inscriptions was understood, and he focused greatly on "tun-ending" dates—ones whose Long Counts ended with "0.0." Morley is proposing that this is the case of the Initial Series date of Panel 7, and that the date is 9.9.8.0.0 10 Ahau 3 Uo, or in modern orthography 9.9.8.0.0 10 Ajaw 3 Woh.

[109] Río Chaxin is described as a small arroyo 1 kilometer out from Tenosique (Morley 1937-1938:2:346).

[110] Río Poleva: see footnote 62.

[111] The Arroyo Tutuyeha is described by Morley as a small arroyo 1 kilometer beyond the Río Poleva (Morley 1937-1938:2:346, where he calls it the Río Tutulla). Today there is a nature preserve at the spot called Tutulliha.

[112] According to Morley the Arroyo Sahalito is 4 kilometers beyond the Arroyo Tutuyeha, and the trail crosses it several times (Morley 1937-1938:2:346). Morley also calls it the Arroyo Sayalito.

[113] A rancho is a small farm.

[114] Morley says that "in 1921 there was a rancho called Tepescuintla, 2 km. beyond the Arroyo Sayalito, but this had been entirely abandoned and overgrown with bush by 1929" (Morley 1937-1938:2:346). Today there is a "Rancho El Tepezcuintle" in what looks like the same location.

[115] The Arroyo Saha is 2 kilometers beyond the rancho Tepescuintle (Morley 1937-1938:2:346, where he calls it the Arroyo Saya, as he did in his 1921 diary).

[116] On the railroad see footnote 69, above.

[117] On Arroyo Santo Tomás, see footnote 68.

[118] On Tepesco Hill, see footnote 85.

[119] Nuevo Mundo is described by Morley (where he calls it Mundo Nuevo) as a rancho (Ward et al. 2024:421). To judge from Morley's distances and travel times, it must have been near the southern base of Tepesco Hill. In *The Inscriptions of Peten*, Morley says that Nuevo Mundo is 5 kilometers short of the next landmark, the Arroyo Tres Champas (Morley 1937-1938:2:347).

[120] On Arroyo Tres Champas, see above, footnote 87.

[121] On El Cabro, see above, footnote 90.

[122] On Jolochero, see above, footnote 92.

[123] On (El) Porvenir, see footnote 94.

[124] Something is erased after Porvenir (see next footnote). Following this "Aduana" is written in parentheses. Aduana means "customs"—its presence here is not clear to me, but it may be because Santiago Mendoza (see footnote 103), whom Morley had known from the Guatemalan Customs post at Laguna de Yaloch in Peten (see footnote 104), was living at El Porvenir while he was Guatemala's representative at Piedras Negras.

[125] Something is erased and overwritten after "Porvenir" on this line. It looks to me to be "Nuevo." I think what happened is that Morley couldn't make up his mind about changing the name of El Porvenir to Porvenir Nuevo, as it later appears in *The Inscriptions of Peten* (see footnote 61) and also in the typescript diary. And because of the illegibility caused by the erasure and overwriting, he carefully wrote "El Porvenir to Piedras Negras (new camp)" one line below where it should be. The "64" [kilometers] is of course the total distance between Tenosique and Piedras Negras.

[126] Morley may seem to have been obsessive over distances; he recorded them and the localities en route in meticulous detail. But in fact knowledge of distances between landmarks was critical for expeditions in the bush where one needed to calculate food, itinerary, travel time, and whether one had arrived at one's destination—and also to inform people coming in your footsteps as to the lie of the land and distances. But in any case Morley was obsessive, as the following anecdote, told by his friend and

April 1 – Wednesday

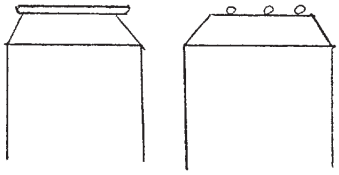
They ring three bells in the morning at Piedras Negras (Figure 12), one at four A.M. apparently to rouse the workers, one at five to get the staff out and one at six to go to work; the staff is supposed to breakfast at 5.30.

There was so much I wanted to see all at once and our time here was to be so limited that I decided to get up at five so I could start up the hill at six.

Mason, myself, Rife, Karl, John and Satterthwaite climbed the hill together and came into the group just north of Rick's[127] ballcourt, i.e. east of the Acropolis.[128] But what a tremendous change for the better since Frances and I had seen it two years ago in May. The whole area in front of the Acropolis has been thoroughly cleaned so that Stelae 1-8, 9-11 and 40, Altars 1 and 2 now stand or rather lie clear of all-encumbering bush (Figure 13).

We did not stop here as Alden (Mason) had to go down to the Middle Group[129] where he has his men excavating at the single standing temple.[130]

Here several interesting features had been uncovered. In the first place the chambers are so large and the arches so low that it seems necessary to assume that the roof had been made of vigas[131] or beams covered with lime mortar concrete,[132] exactly the same as the roofs of so-called "material" today throughout Yucatan.[133] The construction must have appeared like this:



This is entirely new and may not be the correct explanation, but it more easily explains what Mason has found than any other suggestion. A fact tending to confirm this suggestion is the small amount of debris on the floor of these big chambers.

---

colleague J. Eric S. Thompson, illustrates:

> ... in 1944 ... Vay [Morley], Mrs. Morley, my wife, and I made a trip to the ruins of Tonina, Chiapas. We hired a dilapidated truck in Comitán to take us to Ocosingo across some 27 leagues (if I remember aright) of the worst road I have ever seen. In fact, ours was the second vehicle ever to traverse that road, and both going and returning we stuck in the Jatate river. At the start of the trip, Vay cross-examined the driver on the distance; 23 leagues was the answer. Every 40 minutes or so Vay would ask the man how far we had come and how many leagues we had yet to go. The figures never equalled the original 23 leagues or any of the previous estimates, and each time Vay would protest: "You said, when we started, 23 leagues. Now you say we have come 6 leagues and there are 22 to go. That totals 28 leagues. Hombre, which is right?" "Pues ¿quién sabe? señor," ["Well, who knows, sir?"] would reply the driver in a totally disinterested manner. An hour later the total would drop to 20 leagues, and Vay would almost forget to cross-examine in a glow of pleasure, but a little later there would be 7 leagues done with 19 to go! We would stop at one of the very rare huts along the track to check with a local inhabitant, but that was always disastrous; none of the outside guesses checked with the chauffeur; all were as inexact as Dr. Gallup. So it went on, the chauffeur perplexed and almost angry with this gringo search for precise information; Vay still hoping for a reasonable agreement. He was always an optimist. (Thompson 1950a:255-256)

[127] Morley is referring here to his friend and fellow Carnegie Institution of Washington member Oliver Garrison Ricketson, Jr. (1894–1952), who travelled to Piedras Negras with Morley, A. K. Rutherford, and Alfred Harvey in 1921 (Morley 1937-1938:1:88). Oliver Ricketson's maternal great-uncle was Andrew Carnegie. He developed an interest in Anthropology while an undergraduate at Harvard, but after graduating he enrolled in the Harvard Medical School. He did not complete a medical degree (partly because of interruption due to the First Word War), but his medical training was of great value in the field, where he was able to help villagers far beyond the reach of medical help. After briefly working in the Southwest, he met Morley, and joined the Carnegie Institution of Washington expedition of 1921—in the process reportedly becoming the first Carnegie family member who worked for a Carnegie institution or foundation (Lothrop 1953:69).

Ricketson stayed with the Carnegie Institution of Washington until 1941 and was one of its stalwarts, working in Chichen Itza, Naranjo, and Uaxactun, among other sites. With Alfred Harvey he mapped Naranjo, and completed his doctoral dissertation in 1933 on the stratigraphy of Uaxactun (Ricketson 1933). In 1925 he married Edith Hill Bayles, with whom he published a major volume on Group E of Uaxactun (Ricketson and Ricketson 1937). While on their honeymoon in England he was asked by Morley to interview J. Eric S. Thompson for a position with the Carnegie Institution of Washington.

Oliver Ricketson also had a pet peccary—a badge of honor he shares with yours truly.

[128] The Acropolis of Piedras Negras, also called the West Group, is the complex of buildings lying to the west of the West Group Plaza, at the northern end of the site. It was the royal palace precinct of Piedras Negras, and is the highest part of the site in elevation.

[129] The "Middle Group" is Morley's term for what is conventionally called the "East Group"—the collection of buildings around the East Group Plaza. The two dominant buildings in the East Group are Structure O-13 on the north side of the Plaza, and Structure O-12 on the east side.

[130] The "single standing temple" is actually not a temple, but a sweatbath building, Structure P-7.

[131] Spanish *vigas* are wooden beams or rafters, as Morley goes on to explain.

[132] Lime mortar concrete is the term that Morley uses to describe a substance that is more common in northern Yucatan from later periods. It is composed of stucco mortar often containing small stone chips and the resin from bark of the chukum tree (*Havardia albicans*), which helps resistance to water. This is spread over a base of wooden beams and applied in a number of layers. The technique enables much wider roof spaces to be covered than the traditional corbel vaulting, but it is not as strong and requires constant maintenance including the application of new layers from time to time.

[133] The masons (*albañiles*) of Yucatan are famous throughout the peninsula and sought after for their craftsmanship. The lime mortar concrete they use today ("*material*") follows a tradition dating back centuries.

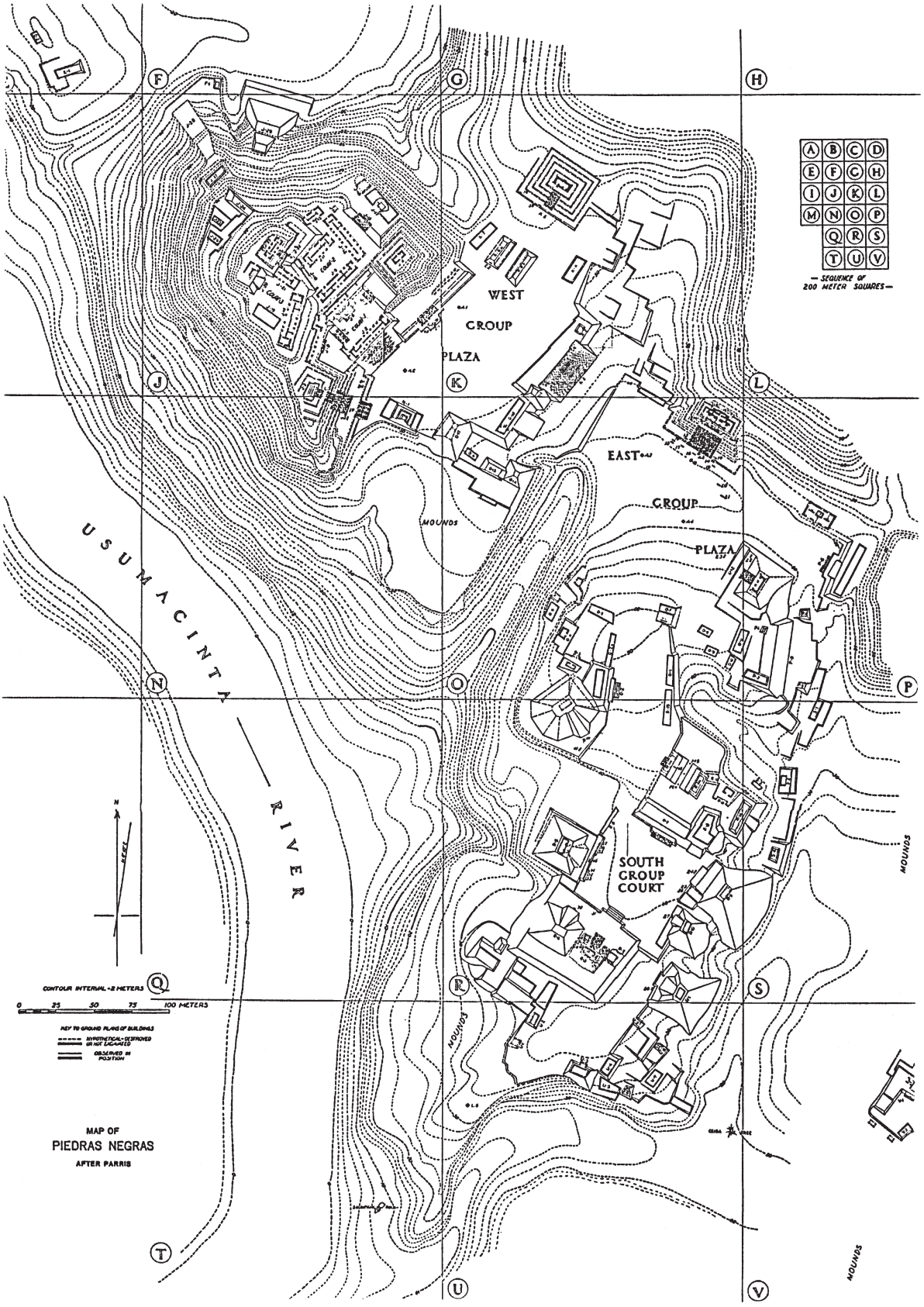


Figure 12. Site map of central and southern Piedras Negras adapted from Weeks et al. (2005).

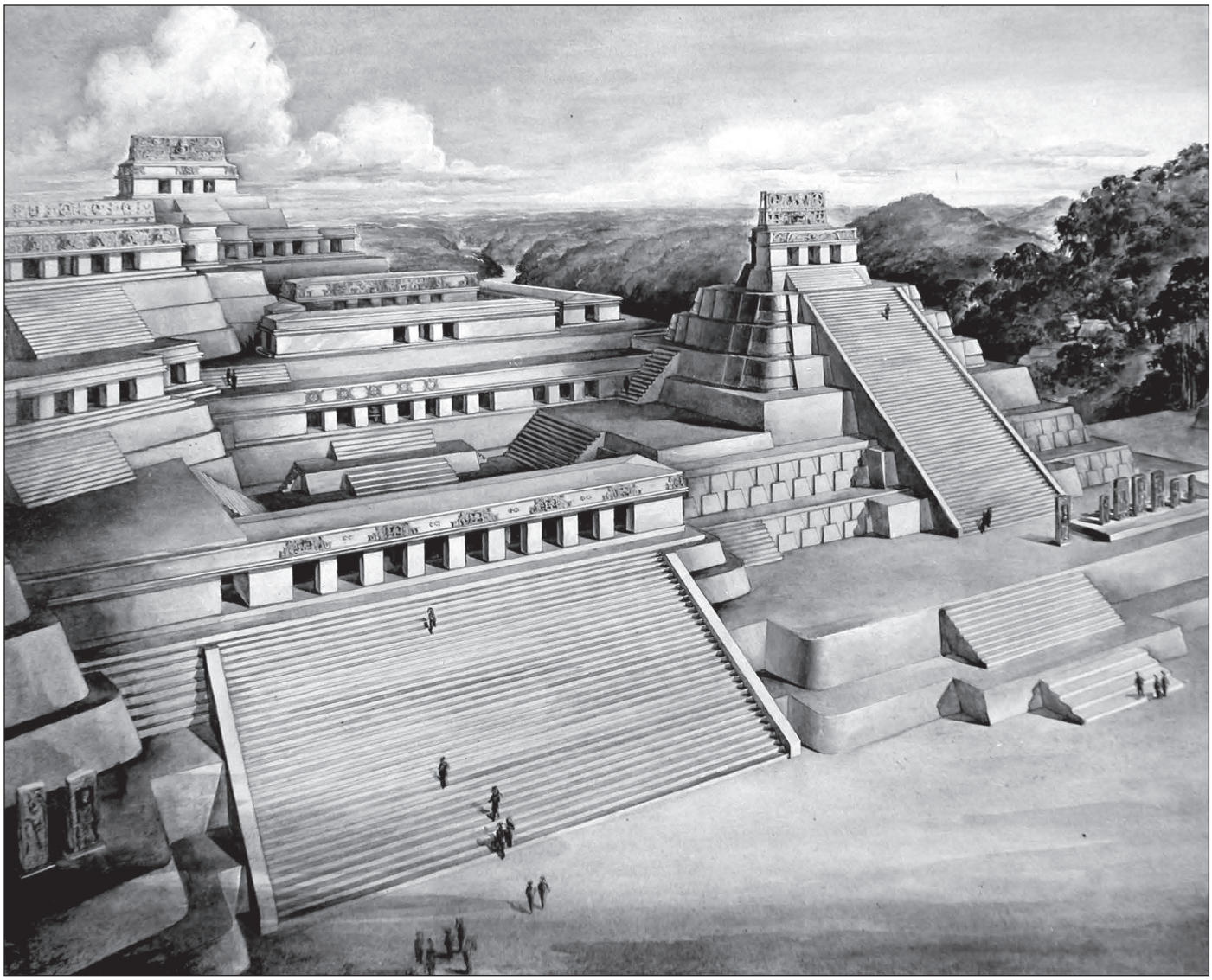


Figure 13. Reconstruction drawing of the Acropolis of Piedras Negras by Tatiana Proskouriakoff. Stelae 1–8 are at the far right. (Courtesy of the Peabody Museum of Archaeology and Ethnology, Harvard University, 58-34-20/56362.)

On the roof of the central enclosed section there had been a roofcomb,[134] the sides of this sloping inward may be traced to a height of more than 50 cm. before they are broken off.

A third feature of interest in this building is the altar in the single central chamber. This bears some resemblance to the altars in Temples E-I, E-II and E-III at Uaxactun.

Fausto Aldecoa came with us, but Satterthwaite had stopped behind at his excavation at the Acropolis.

We stopped for a few minutes at the Middle Group looking at Stelae 12 (Figure 14), the fragments below, 13, 14, 16, 17, 18, 19 and 20. We then looked at Altar 4 with the four death's heads under it (Figure 15), and then moved down to the South Group.[135]

We examined the six stelae (32-37) and the inscribed column which years ago (in 1921 to be exact) I dated as 9.11.5.0.0.[136]

---

[134] Roofcombs are masonry structures that were often built on top of Maya structures; they give added height and grandeur to the buildings. They were typically built over the medial or rear wall of the building, and they provided a "canvas" for a rich decorative façade which illustrated deities and/or kings as well as mythological scenes.

[135] The South Group, predictably, is at the southern end of Piedras Negras—a complex of buildings arranged around the South Group Plaza and the South Group Court.

[136] Stela 46 was discovered in front of Structure R-5 in 1899 by Teobert Maler, who thought it was a plain column. In 1921 Morley determined that it was carved. The stela is columnar in

Figure 14. Piedras Negras Stela 12, Front: (left) drawing by John P. O'Neill (Morley 1937-1938:5:Part 1, Pl. 51a); (right) drawing by David Stuart (Stuart and Graham 2003:61).

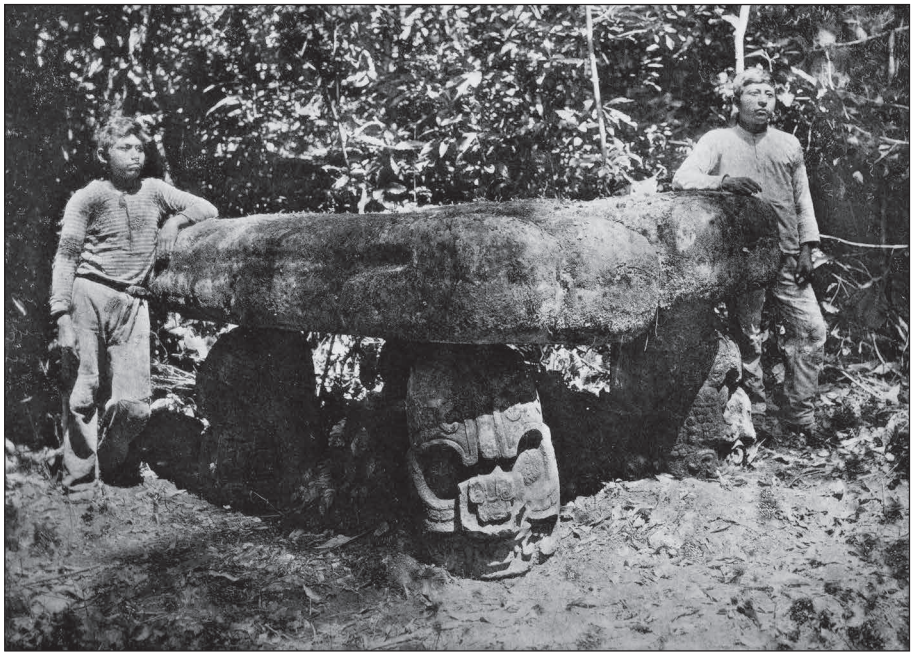


Figure 15. Piedras Negras Altar 4 (Maler 1901:Pl. 9).

Figure 16. Piedras Negras Panel 4 (Morley's "Lintel" 4) (Maler 1901:Pl. 32).

Karl cleaned the beautiful Lintel 4 (Figure 16) behind these stelae and it seemed to us that Mason would do well to take it home with him.

I showed them, next, Stela 31 with the fragment Rutherford[137] had recovered from the drain,[138] Stelae 29 and 30 and then over to Stelae 25 and 26.

K. wanted to see the drain and Fausto and Simón cleared this of debris.

I forgot to mention that Simón and Salomon slept last night at Porvenir Nuevo,[139] but came up so early to P. N. that I took them both to the ruins with me.

When we returned from the South Group we climbed the principal temple of the Middle or East Group[140] and saw Stela 12 (two fragments) and the beautiful Stela 15 found by us two years ago.

Alden hopes both of these may go to the University of Pennsylvania.[141]

We descended from this high pyramid and returned to the West Group.[142]

The Monumental Stairway leading to the Acropolis[143] has been completely freed of vegetation, and the effect is very impressive. The sides of this Monumental Stairway are flanked by a battered terrace, the facing of which is composed of enormous slabs of stone, like those facing the terraces surrounding some of the courts in the Palace at Palenque.[144]

These were plain except the second from the left (i.e. west) on the left side of the Monumental Stairway. This is almost certainly a reused stela with a panel of incised glyphs across the top.[145] This Mason agrees to call Stela 43, the next number in order in the series of the sculptured monuments at Piedras Negras.

Mason showed us some square masonry-lined wells or square pits in which Stelae 1-8 had originally stood. Near Stela 4 (fallen), probably in the well in which it had originally stood, he found a broken pot and a cache of eccentric shaped flints and obsidian flakes.

We climbed up to the Satterthwaite's dig, a large and long double-chambered building[146] somewhat to the west of and behind the Monumental Stairway.

The building has a number of doorways leading into a long front chamber. Climbing behind this we came upon a group of men digging into a stairway rising to the top of a higher bench of the hill.[147]

Here a Yucatecan named Luis was working, who said he knew me at Chichen Itza. Neither Karl nor I recognized him but we acted as though we did. The last thing I ever want to do in such cases is to make such chaps lose face before their comrades over such an innocent falsehood.

---

shape, and carved with just two glyphs (borders are clearly seen both above and below the glyphs, which indicates that the original inscription comprised only these two glyphs). Because the two partially preserved glyphs are numbers (in head-variant form), Morley believed that they represented a Calendar Round date, and he interpreted them to record the date 9.11.5.0.0 5 Ajaw 3 Sak (AD 657). This interpretation seems very reasonable. The other stelae associated with Structure R-5 are Stelae 32 (dedicatory date uncertain—Morley argued for AD 647), 33 (dedicated in AD 642), 34 (AD 652), 35 (AD 662), 36 (AD 667), and 37 (AD 672). These are all stelae of Itzam K'an Ahk II ("Ruler 2") of Piedras Negras, who acceded to power in AD 639 and died in AD 686. The stelae of Structure R-5 were erected at 5-year intervals during the early part of his reign. The only gap in the sequence is AD 657—which Morley proposed as the date of Stela 46.

[137] A. K. Rutherford was a member of Morley's 1920–1921 expedition and, along with Oliver Ricketson (see footnote 127), accompanied Morley on the final leg of the expedition to Piedras Negras. Morley called him "Ruddy."

[138] The "drain fragment" was discovered by A. K. Rutherford at the north end of Structure R-5:

> ...Rutherford had been digging in a drain at the north end of the platform, and to my delight and amazement he had found a fragment of stone with glyphs which had been used to cover the drain. The glyph side was not down, but on one edge were glyphs. I did not see anything decipherable as I passed tonight, but it was late. One thing very noticeable is that the glyphs are all incised, a feature I have noticed nowhere else here [at Piedras Negras], save possibly on Stela 30. I could not determine whether this is part of a lintel or a stela. It is interesting as showing secondary usage, which was so prevalent at Copan. (Morley 1921 diary, entry for May 27, reproduced in Ward et al. 2024:467)

The fragment is indeed a part of Stela 30, which was erected about 40 meters to the east.

[139] Porvenir Nuevo, "New Future," was a (new) montería that had been established at El Porvenir (see footnote 94) in 1927. Although it seems to have been the center of a fairly extensive logging operation, it was largely abandoned by 1929 (Morley 1937-1938:2:348).

[140] This is a reference to Structure O-13. In Morley's day it was designated Structure XXVII.

[141] The arrangement between the University Museum, University of Pennsylvania and the Guatemalan government is discussed in the Introduction. As it turned out, both Stelae 12 and 15 were removed from Piedras Negras during the University Museum's project at the site: Stela 12 went to the University Museum in Philadelphia; Stela 15 was transported to Guatemala City, where today it is displayed in the Museo Nacional de Arqueología y Etnología de Guatemala (O'Neil 2012:190). Stela 12 was returned by the University of Pennsylvania to Guatemala in 1947.

[142] The reader will be amazed to discover that the West Group is in the western part of the site. It is also called the Acropolis (see footnote 128).

[143] Morley (1937-1938:2:11) talks of five "megalithic stairways" at Piedras Negras, which are defined by having at least in part large stone slabs that make up the platform edges which flank the actual stairway. The stairway that Morley is talking about here is the megalithic stairway leading up to Structure J-1, which is the platform supporting Stelae 1 through 8.

[144] At Palenque large megalithic slabs are present as the foundations for Houses A and C of the Palace, and they also form the foundation of the north end of the Palace.

[145] Morley discusses Stela 43 in more detail below.

[146] This is Structure J-2.

[147] This is the stairway of Structure J-6.

Figure 17. Piedras Negras Stela 40, Front (Morley 1937-1938:5:Part 1, Pl. 135b).

We descended from here and saw Altar 2, Stelae 9, 10, 11 and 40, the latter the famous Corn Sower (Figure 17).[148]

I had showed admirable self-control up to this point, in not having gone to see his new lintel (Lintel No. 7) with its new Initial Series all morning long, and now we gathered up our belongings, camera, note-books, brushes etc. and began to climb the pyramid supporting Structure 42[149] (Figure 18).

I could see several places where Mason had dug for lintels and finally caught sight of the lintel itself against the back wall of the single-chambered temple, which had had three doorways in its front, or west façade. [illegible] The sculptured lintel he has found, which will be called No. 7, had originally stood over the middle doorway.[150]

This lintel had been magnificent though it is now broken, with at least half a dozen pieces and perhaps one or two still missing.

A figure seated cross-legged on a throne is the central figure, behind him on one of the steps of the throne, there is a subsidiary figure and in front a third in an attitude of supplication.

Across the top had been a panel of five or more rows of very small glyphs beautifully executed. A double column of these small glyphs run down the right edge. I noticed a Secondary Series of 11.5[151] leading to a day 5 ? 8 Kayab, the effaced day-sign probably being Ahau.

Mason had read the I. S. correctly as far as it goes, that is to say within 20 days, i.e. 9.9.8.0.?; the kins, day and month are missing.[152] The five glyph-blocks, which show I. S. introducing glyph, baktuns, katuns, tuns and uinals each occupy the space of four of the small glyph-blocks.

The glyphs are beautifully executed, the katun-sign, a head variant being an especially fine example of that glyph. It is obvious that the Initial Series is too early to correspond with the date of execution.

It may be, since the later of the two stelae at the base of this structure, Stela 38, was erected in 9.12.10.0.0 that this temple above and behind it may have been dedicated in 9.12.10.0.0 also. The style of glyphs is

---

[148] The "Corn Sower" stela is Stela 40. It is dated AD 746, and portrays Itzam K'an Ahk II ("Ruler 4"), in the act of scattering incense into the tomb of a woman, probably his mother. The tomb is indicated by the scalloped shape of the "roof" above the female ancestor, a shape which represents a portal into the Underworld. The text of Stela 40 indicates that the "scattering" event took place in December of AD 745 (Schele and Grube 1995:105).

[149] Again, Morley's Structure 42 is now designated Structure K-5.

[150] The number designation has stuck, but not the monument type. This monument is now known as Panel 7; it was not a lintel and did not stand over the central doorway of Structure K-5. The height of Panel 7 is 1.07 meters (Morley 1937-1938:3:120), and yet the front wall of Structure K-5 is 1.40 meters thick (Mason 1933:22)—a discrepancy of a third of a meter. In addition, Panel 7 has dressed edges, and the plain borders of the panel are only about 10 centimeters wide. In other words, there is no trace of any wide extensions on each side of the stone which could have been used to straddle a doorway and support a deal of masonry above.

[151] "Secondary Series" is a jargon term in Maya epigraphic studies now more commonly referred to as a "Distance Number." The terms refer to an interval of time added to or subtracted from one date to reach another. The Secondary Series or Distance Number is usually recorded in Long Count terms, transcribed by Mayanist scholars with the time periods—days or k'ins, 20-day months or winals, 360-day periods or tuns, and multiples of tuns—but unlike Initial Series and Long Count dates, Distance Numbers in Maya texts record the periods in reverse order—k'ins, winals, tuns, etc. Mayanists transliterate them, however, in the same way as Initial Series time periods, so the "11.5" that Morley records refers to 11 winals and 5 kíns, or an interval of 225 days.

[152] This date has been discussed above (footnote 108).

Figure 18. Piedras Negras Structure K-5-1st (Morley's Structure 42). Shown is the latest phase of the building, as reconstructed by Tatiana Proskouriakoff. (Courtesy of the Peabody Museum of Archaeology and Ethnology, Harvard University, 50-63-20/18484.)

very good, almost too good even for this date. The other possibility is that the early date 9.9.8.0.? may have been brought forward to a much later date by Secondary Series present in the panel of small glyph-blocks across the top.[153]

A third possibility, of course, is that the lintels over the other two doors may have brought the I. S. forward to a considerably later contemporaneous date.

As 11 o'clock approached the light on this lintel[154] grew better and better. A single small tree threatened to interfere and I had 8 men fell this; there still remained a single bejuco[155] or vine stretching to another tree. In pulling this down a great piece of dead vine fell within 3 feet of where I was sitting.[156]

I had made six exposures by 11.30 and we set out for camp perhaps ¾ of a kilometer.

Luncheon was ready by the time we were washed up for it, and a big feast it was. Their bodega supplemented with our own supplies made a table which if not groaning with plenty at least creaked with it.

---

[153] Morley is talking here about the fact that the Initial Series date of Lintel/Panel 7 is much earlier than the dates of the other monuments associated with Structure K-5. Those monuments are Stelae 39 (dedicated in AD 677) and 38 (dedicated in AD 682). The Initial Series date of Panel 7 is AD 621—over 50 years earlier. Morley's argument is that the lengthy inscription of Panel 7, sadly much eroded—would have gone on to record later dates. In *The Inscriptions of Peten*, Morley argues that the dedication of both Panel 7 and Structure K-5 was in AD 682 (Morley 1937-1938:3:118-124).

[154] As was said in the Introduction and footnote 44, Morley's "Lintel" 7 is in fact a Panel. Structure K-5 had three doorways, but it did not have carved lintels above those doorways like many of the buildings of Yaxchilan.

[155] As Morley goes on to say, a *bejuco* is a "vine," particularly the large, woody vines that hang from the high trees of the rain forest. Morley spells it "bejuca."

[156] Morley makes this comment because these vines can be quite thick and very heavy: a "direct hit" could potentially have done him a great injury.

After luncheon I did not go up the hill but wrote in my diary. Later I went up to the office and got hold of Wyer. I wanted some information about his new road. We were agreed that the distance from Tenosique to the rails is 22 Ks. I had calculated it formerly as 24 Ks, but Wyer says his measurements are actually such, so his distance is doubtless correct.

While I was getting these figures, which we could not make come out correctly from the rails to here, Frances and her father had gone down to the river to bathe. I was very hot and sticky and wanted to bathe myself, but was afraid to, at least in the river, because of this wretched nose cold that I have, an acute coryza[157] – dripping at the nasal bung in ordinary parlance.

I asked Rife if I could bathe in the shower bath, a very convenient affair in their bath house, and he said if I dried my hair thoroughly afterward, he thought there would be no harm.

I bathed thus and felt greatly relieved thereafter. We came to supper with the same appetite we had had from luncheon; again 12 of us at table: Alden, Frances, Frank, Wyer, Rife, Mrs. Wyer, Fausto and John Bolles at the end, Mrs. Satterthwaite, Karl, Linton Satterthwaite and I on the other side.

My cold kept running and I was so glad to be able to say goodnight and withdraw to our house, or rather Mason's.

Rife had put some ephedrine[158] in my nose and had given me some rhinitis tablets[159] and by the time I had taken two before dinner and two afterward, my throat was as dry as the Sahara.

I plugged both nostrils with Vicks Salve[160] salve got into my bedroom slippers, my skull cap made from the top of one of Frances' old stockings, my flannel pyjamas and a bathrobe, and I was glad to see all of them. And thus to sleep almost immediately.

April 2 – Thursday

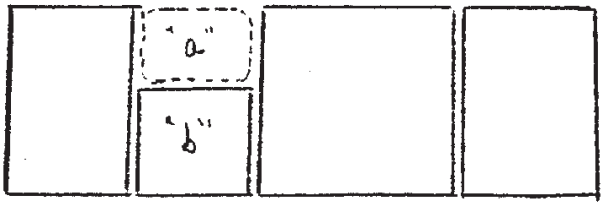
I did not get up at 4.30 this morning on account of my cold, so that it was after seven when Frances, Fanny, Mrs Wyer and I sat down to breakfast.

It wanted about twenty to eight when we went up the hill – Frances, Frank, Mrs. Satterthwaite, John and I.

We went first to the temple of Lintel 7, i.e. Structure 42, in front of which originally stood Stelae 38 and 39.

The latter, erected in 9.12.5.0.0, has a fairly good figure on the front – all details are gone but the outlines of the principal figure and two subsidiary figures in the two corners are fairly clear still. John stayed here to make a sketch of this, while the other four of us went up the pyramid supporting Structure 42. F. was delighted with the beauty of Alden's new lintel. While photographing here yesterday I was poised on the front wall, and asked Simon to pass me up a fragment of stone to block up a slab I had placed my camera on. He picked up a fragment of stucco, and when I turned it over it was the lower half of a beautiful face of stucco, the chin, mouth, and lower part of the nose showing two finely executed nostrils.

Next we went to the Monumental Stairway, where I began to examine the fragment of the terrace facing which had the double panel of glyphs across the top.[161] This had fallen forward from the position I have marked "a", the larger lower part of the slab marked "b" still being in situ.



Fragment "a" had fallen forward in front of Fragment "b" and lay on the ground; when Alden turned it, he found the double line of incised glyphs running across its top. He had examined the back of Fragment "b" superficially and had decided that it had not been sculptured.

I was not entirely satisfied with this, however, and after securing Linton Satterthwaite's permission, had Simón and Salomon and some of Linton's men dig directly in front of Fragment "b" in order to free the base so we could tilt it forward to examine the back more clearly.

Just below the surface humus, partly under a tree stump, we found another fragment, broken into two pieces which I may call "c" and "d". These had formed the upper right corner of the slab.

Digging still further around the stump another fragment was found "e" which proved to be the upper left corner. Finally two pieces, Fragments "f" and "g"

---

[157] Coryza, or coryzal, is—as Morley says—a "runny nose." Technically, it is inflammation of the nasal lining, most commonly caused by the common cold.

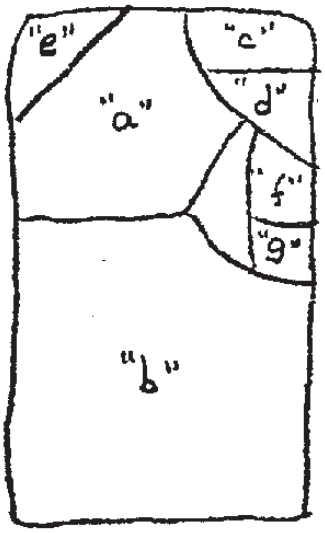
[158] Ephedrine (Morley spells it "ephedrin") was a drug commonly used to treat nasal congestion. It is no longer recommended.

[159] Rhinitis is another term for nasal inflamation with a runny nose. The tablets for rhinitis that Morley mentions probably contained antihistamines: one of the common side-effects of antihistamines is a dry mouth, whether "as dry as the Sahara" or not.

[160] Vicks Salve, also known as Vicks VapoRub, was a popular over-the-counter cold remedy made by the Richardson-Vicks company based in Greensboro, North Carolina. It was an ointment containing eucalyptus oil, menthol and camphor, and meant for rubbing on the chest, throat, and back (in the nostrils it could be dangerous). Richardson-Vicks was bought out by Proctor and Gamble in 1985, who still produce the ointment.

[161] This is Stela 43.

still remained "in situ" viz.



A single fragment from the center is still missing.

As soon as this stump was removed, we pulled out "b" sufficiently to examine its back, which, as Mason had said, was plain; it had been dressed smooth but was not sculptured.

When this had been ascertained beyond peradventure we let it (Fragment "b") back into position, and we began building back into their original positions, the fallen fragments, "e", "a", "c", "d", "f" and "g".

These all fitted back neatly and we were sure of our work. Unfortunately the batter of this terrace had subjected this reused slab to maximum weathering, with the result that practically all of the relief which was below the panel of glyphs had eroded. This may have been due in part to the fact that all below the glyphs had more water dropping over it than the extreme top of the slab, hence the glyphs were better preserved than any other part of the monument.

The closest stylistic analogues are Stela 30 and 31. Both because they are the only other two stelae in the city having their principal glyphs in incised technique and Stela 30 because it has a panel of incised glyphs across the top.

Since Stela 31 dates from 9.5.0.0.0 and Stela 30 from 9.10.5.0.0 I believe Stela 43 dates from this century.[162]

Six columns of glyphs now show across the top,

C1-G2, and the left halves of H1 and H2. Since no date shows in these glyphs that I can see, and since a P.E or C.R. date would have been recorded at A1-B1, it seems not unlikely that there had been two columns at the left, probably A and B. This would have made Stela 43 some 6' wide, which seems high to me though I can offer no other arrangement here.

The work around Stela 43 consumed the greater part of the morning. A little before 11 I went up to Structure 42 to take a few final pictures of Lintel 7. The tree at the north end of the single chamber had created such havoc with its enormous roots and shows so well what the vegetation does to Maya buildings that I photographed it also (Figure 19). I took several views of the fragment showing the Initial Series.

We came back to the Monumental Stairway where

Figure 19. Tree roots at Structure 42. (Courtesy of the Peabody Museum of Archaeology and Ethnology, Harvard University, 58-34-20/61596.)

I took a few more pictures and then we all came back down the hill to lunch.

As this is to be our last day at Piedras Negras I thought I'd better go up the hill again with Alden immediately after luncheon, i.e. at 1.^{oo}.

Our two arrieros had succeeded in permitting two of our mules to escape, and one went up river and the other down river to look for them.

Rosendo Esparza with 12 cargo mules reached Piedras Negras last night and left this morning for Texcoco[163] on the way to Salvamento.

We climbed the hill at one and went on to the building where Mason has been digging. Later we went on to Stelae 22 and 23. Karl had seen neither and Mason

[162] By "this century" Morley is referring to the roughly 100-year interval between the Maya dates 9.5.0.0.0 and 9.10.5.0.0. The actual interval is about 103½ years, from AD 534 to 637.

[163] Texcoco was in 1931 a small paraje near a lake of the same name, about 7.5 miles (12 kilometers) southeast of Piedras Negras. In his diary entry for April 3, Morley says that Texcoco lay a short

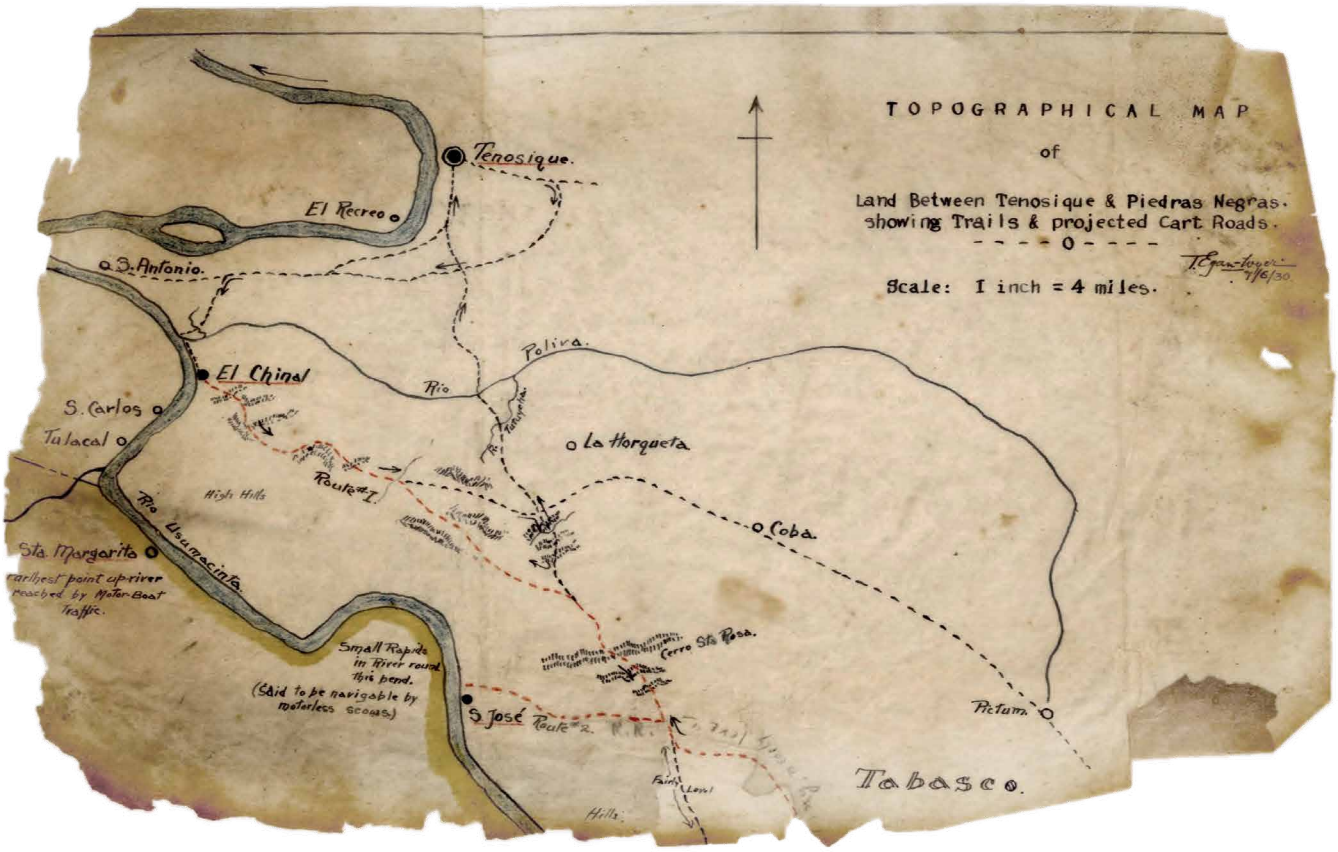


Figure 20. Terrence Egan-Wyer's 1930 map of the trail from Tenosique towards Piedras Negras from Egan-Wyer 1930. The lower half of the original map is missing.

had seen only Stela 22, which he said Rosendo Esparza had showed him last year.

Returning to the Monumental Stairway, I took some final notes on Stela 43 and then we came back to camp at 3.30 for tea.

Egan-Wyer had in the meantime secured the proper distances from his head foreman, one Enrique Rivas, and these I have given on page 8 of this book[164] (Figure 20).

Everyone was packing against an early start in the morning. When I got in, Frances was bathing in the river with Mrs. Satterthwaite and Mrs. Wyer. Later I took a shower in the bath-house. This has but one inconvenience: the floor is of poles to let the water through, but in the case of a clumsy person like myself who is always dropping things, this feature proved to be a fatal trap for the soap, which was continually falling through. I was always bellowing for Tarcisio to come and fetch it out from below.

Frances had really invested her afternoon well with the packing, so that there was very little to do after dinner and we all went to bed early against an early start tomorrow.

I had asked if we might have breakfast at 5.^{oo}, and it was agreed we were to rise at 4.30. The animals, which had strayed, had been found and all was in readiness.

distance to the right (west) of the trail between Piedras Negras and Yaxchilan. There is also an archaeological site called Texcoco nearby (Golden 2003:13-16). It appears that the site was a secondary center under the hegemony of Piedras Negras.

[164] Morley is referring to page II-8 of his 1931 diary, in his entry for Tuesday March 31, 1931 (see page 27 of this publication).

References

Blom, Frans, and Gertrude Duby
1955-1957 *La Selva Lacandona*. 2 vols. Editorial Cultura, Mexico City.

Bowditch, Charles P.
1901 *Notes on the Report of Teobert Maler in Memoirs of the Peabody Museum Vol. II. No. I.* The University Press, Cambridge, MA.
1903 *Notes on the Report of Teobert Maler in Memoirs of the Peabody Museum Vol. II. No. II.* The University Press, Cambridge, MA.

Cardós de Méndez, Amalia
1987 *Estudio de la colección de escultura maya del Museo Nacional de Antropología*. Instituto Nacional de Antropología e Historia, Mexico City.

Chambon, Ludovic
1892 *Un Gascon au Mexique*. Imprimerie Paul Dupont, Paris.

Clancy, Flora Simmons
2009 *The Monuments of Piedras Negras, An Ancient Maya City*. University of New Mexico Press, Albuquerque.

Coe, William R.
1959 *Piedras Negras Archaeology: Artifacts, Cached, and Burials*. The University Museum, University of Pennsylvania, Philadelphia.

Egan-Wyer, Terence
1930 *Topographical Map of Land Between Tenosique & Piedras Negras, Showing Trails and Projected Cart Roads*. Suppporting documents and map in the archives of the Piedras Negras, Guatemala Expedition records, University of Pennsylvania Museum of Archaeology and Anthropology. www.penn.museum/collections/archives/finding-aids/pdfs/1105/PUMu1105_01_06.pdf

Galindo, Juan
1833 A description of the River Usumacinta, in Guatemala. *Journal of the Royal Geographical Society* 3:59-64. London.

García Juárez, Sara Isabel
2015 *La historia de Piedras Negras a través de sus inscripciones jeroglíficas. Auge y ocaso del linaje de las tortugas*. Tesis de Licenciatura en Historia, Colegio de Historia, Faculdad de Filosofía y Letras, Universidad Nacional Autónoma de México. www.academia.edu/20791438/LA_HISTORIA_DE_PIEDRAS_NEGRAS_A_TRAV%C3%89S_DE_SUS_INSCRIPCIONES_JEROGL%C3%8DFICAS_AUGE_Y_OCASO_DEL_LINAJE_DE_LAS_TORTUGAS_2016_PREMIO_INAH_FRANCISCO_JAVIER_CLAVIJERO_2017

Golden, Charles
2003 *Sierra del Lacandón Regional Archaeology Project: First Field Season 2003*. Report submitted to the Foundation for the Advancement of Mesoamerican Studies (FAMSI). www.ancientamericas.org/sites/default/files/02020Golden01.pdf

Houston, Stephen D., Héctor L. Escobedo, Donald Forsyth, Perry Hardin, David Webster, and Lori Wright
1998 On the River of Ruins: Explorations at Piedras Negras, Guatemala, 1997. *Mexicon* 20(1):16-22.

Houston, Stephen D., Héctor L. Escobedo, Perry Hardin, Richard Terry, David Webster, Mark Child, Charles Golden, Kitty F. Emery, and David Stuart
1999 Between Mountains and Sea: Investigations at Piedras Negras, Guatemala, 1998. *Mexicon* 21(1):10-17.

Houston, Stephen D., Héctor L. Escobedo, Richard Terry, David Webster, Mark Child, Charles Golden, George Veni, and Kitty F. Emery
2000 Among the River Kings: Archaeological Research at Piedras Negras, Guatemala, 1999. *Mexicon* 22(1):8-17.

Instituto Geográfico Militar
1990 *Salvamento*. 1:50,000 topographic map, Series E754, Sheet 1966-I. Defense Mapping Agency, Hydrographic /Topographic Center, Fairfax, VA.

Kelley, David Humiston
1976 *Deciphering the Maya Script*. University of Texs Press, Austin.

Kingsley, Melanie J., Charles W. Golden, Andrew K. Scherer, and Luz Midilia Marroquin de Franco
2012 Parallelism in Occupation: Tracking the Pre- and Post-Dynastic Evolution of Piedras Negras, Guatemala through its Secondary Site, El Porvenir. *Mexicon* XXXIV (5):109-117.

Lothrop, Samuel K.
1953 Oliver Garrison Ricketson, Jr. – 1894–1952. *American Antiquity* 19(1):69-72.

Maler, Teobert
1901 *Researches in the Central Portion of the Usumatsintla Valley. Report of Explorations for the Museum, 1898–1900*. Memoirs of the Peabody Museum of American Archaeology and Ethnology, Harvard University 2(1). Peabody Museum of American Archaeology and Ethnology, Harvard University, Cambridge, MA.

Martin, Simon, and Nikolai Grube
2008 *Chronicle of the Maya Kings and Queens. Deciphering the Dynasties of the Ancient Maya*. 2nd ed. Thames and Hudson, London.

Mason, J. Alden
1931 *Diary, 1931*. Diary in the archives of the Piedras Negras, Guatemala Expedition records, Penn Museum (University of Pennsylvania Museum of Archaeology and Anthropology). www.penn.museum/collections/archives/finding-aids/pdfs/1105/PUMu1105_04_03.pdf

Mason, J. Alden
1933 *Piedras Negras Preliminary Papers. Number 1: Description of the Site with Short Notes on the Excavations of 1931–1932*. The University Museum, University of Pennsylvania, Philadelphia.

Mason, J. Alden
1935 Preserving ancient America's finest sculptures. *The National Geographic Magazine* 68(5):537-570.

Montgomery, John
2000 *The Montgomery Drawings Collection*. Foundation for the Advancement of Mesoamerican Studies, Inc. (FAMSI). http://research.famsi.org/montgomery.html

Morley, Sylvanus Griswold
1931 Report of the Yaxchilan Expedition. In *Annual Report of the Chairman of the Division of Historical Research*, pp. 132-139. Year Book 30. Carnegie Institution of Washington, Washington, D.C.
1937-1938 *The Inscriptions of Peten*. 5 vols. Publication 437. Carnegie Institution of Washington, Washington, D.C.
1946 *The Ancient Maya*. Stanford University Press, Stanford.

Nelson, Zachary Nathan
2005 *Settlement and Population at Piedras Negras, Guatemala*. Ph.D. dissertation, Department of Anthropology, Pennsylvania State University.

O'Neil, Megan E.
2012 *Engaging Ancient Maya Sculpture at Piedras Negras, Guatemala*. University of Oklahoma Press, Norman.

Piedras Negras, Guatemala Expedition Records
2026 *Piedras Negras, Guatemala Expedition Records*. Penn Museum (University of Pennsylvania Museum of Archaeology and Anthropology), Philadelphia. www.penn.museum/collections/archives/findingaid/552866

Proskouriakoff, Tatiana
1946 *An Album of Maya Architecture*. Publication 558. Carnegie Institution of Washington, Washington, D.C.
1960 Historical Implications of a Pattern of Dates at Piedras Negras, Guatemala. *American Antiquity* 25(4):454-475.

Ricketson, Oliver G., Jr.
1933 *Stratigraphy and its Interpretation at Uaxactun*. Ph.D. dissertation, Department of Anthropology, Harvard University.

Ricketson, Oliver G., and Edith Bayles Ricketson
1937 *Uaxactun, Guatemala. Group E – 1946–1931*. Publication 477. Carnegie Institution of Washington, Washington, D.C.

Rife, Dwight W.
1932 Blood Groups of Indians in Certain Maya Areas of Central America. *The Journal of Immunology* 22(3):207-209.

Satterthwaite. Linton, Jr.
1944 Structure K-6 (West Group Ball Court). In *Piedras Negras Archaeology: Architecture. Part IV: Ball Courts*, No. 3, by Linton Satterthwaite, Jr., pp. 30-44. The University Museum, University of Pennsylvania, Philadelphia.

Satterthwaite, Margaret Conway
2018 *Piedras Negras Diary. An Archaeological Field Journal, Guatemala 1931.* Edited and with an introduction by John M. Weeks. Precolumbia Mesoweb Press, San Francisco. Digitial version available: www.mesoweb.com/publications/Satterthwaite/Diary.pdf

Schele, Linda, and Nikolai Grube
1994 Tlaloc-Venus Warfare: The Peten Wars, 8.17.0.0.0-9.15.13.0.0. In *Notebook for the XVIIIth Maya Hieroglyphic Workshop at Texas, March 12-13, 1994*, edited by Timothy Albright, pp. 79-167. Department of Art and Art History, College of Fine Arts; Center for Mexican Studies; Institute of Latin American Studies, University of Texas, Austin.

Schele, Linda, and Nikolai Grube
1995 The Last Two Hundred Years of Classic Maya History: Transmission, Termination, Transformation. In *Notebook for the Maya Hieroglyphic Workshop at Texas, March 9-18, 1995*, pp. 87-211. Department of Art and Art History, College of Fine Arts; Institute of Latin American Studies, University of Texas, Austin.

Schoultz, Lars
1998 *Beneath the United States: A History of U.S. Policy toward Latin America*. Harvard University Press, Cambridge, MA.

Stuart, David, and Ian Graham
2003 *Corpus of Maya Hieroglyphic Inscriptions, Volume 9, Part 1: Piedras Negras*. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, MA.

Thompson, J. Eric S.
1950 *Maya Hieroglyphic Writing: Introduction*. Publication 589. Carnegie Institution of Washington, Washington, D.C.

Thompson, J. Eric S.
1950a Some anecdotes about Vay. In *Morleyana: A Collection of Writings In Memoriam Sylvanus Griswold Morley – 1883-1948*. School of American Research; Museum of New Mexico, Santa Fe.

Ward, Christopher, Prudence M. Rice, and Don S. Rice
2024 *The Archaeological Field Diaries of Sylvanus Griswold Morley: Explorations in Petén, 1920–1921*. Edited, annotated, and with introductions and illustrations by Christopher Ward, Prudence M. Rice, and Don S. Rice. The Morley Diary Project, Volume IV. Mesoweb online publications: www.mesoweb.com/publications/Morley/Morley_Diaries_1920-1921.pdf

Weeks, John M., Jane A. Hill, and Charles Golden, eds.
2005 *Piedras Negras Archaeology, 1931–1939. Piedras Negras Preliminary Papers; Piedras Negras Archaeology: Architecture*, by Linton Satterthwaite, Jr., Mary Butler, and J. Alden Mason. University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia.