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## Some Considerations on the Founding of Tenochtitlan

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In This Issue:

**Some Considerations on the Founding of Tenochtitlan**

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and Eduardo Matos Moctezuma

PAGES 1-7

**Sylvanus G. Morley's Diary of the Fourteenth Central American Expedition of the Carnegie Institution of Washington, 1931, Part 2: On to Piedras Negras**

edited and annotated by  
Peter Mathews

PAGES 8-40

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*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.

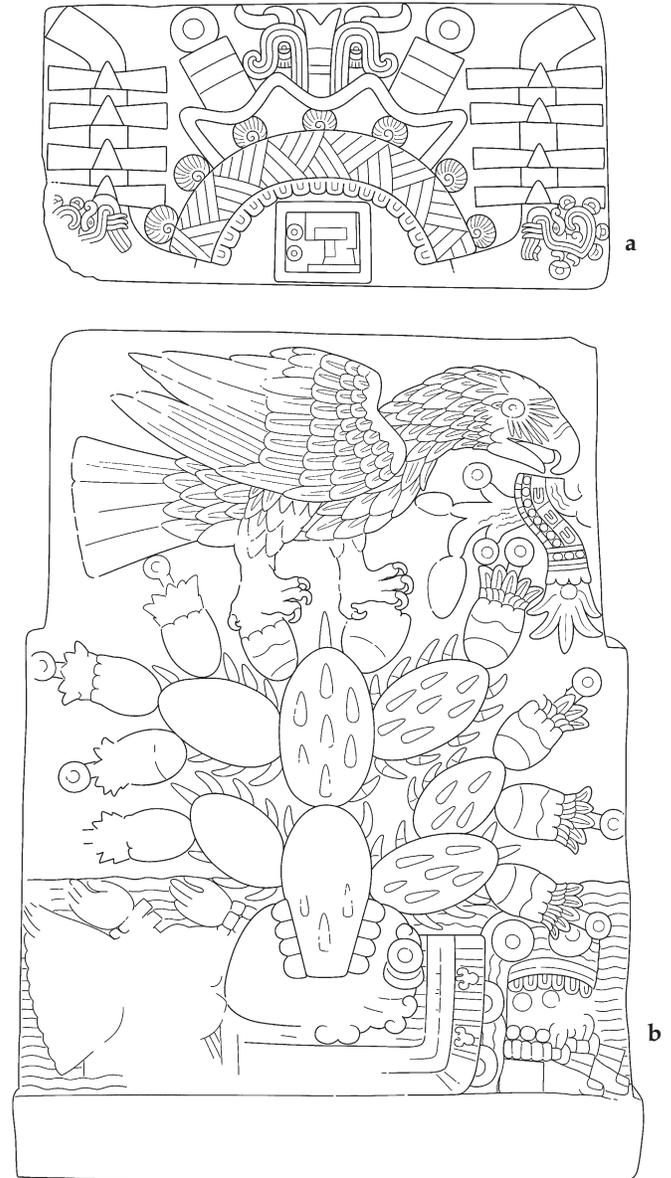
### The Mythohistorical Data for Tenochtitlan

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.

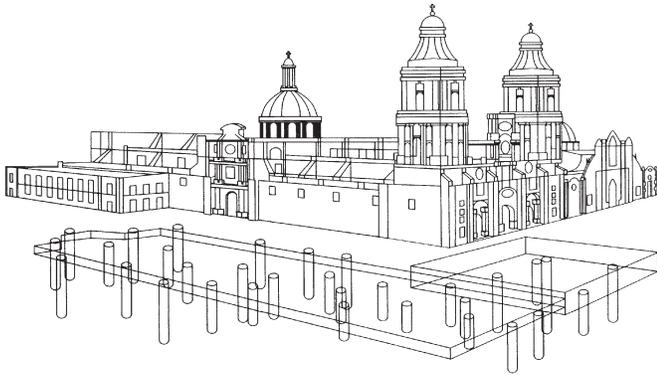
According to Boone's meticulous census (1992; see also Palacios 1925; Matos 1999), the years 8-Rabbit (1318?), 12-Rabbit (1322), 1-Flint (1324), and around 4-Rabbit (1366) appear just once (respectively, in the *Anales de Cuauhtitlan I*, *Historia de los mexicanos*, *Mendieta*, and *Tira de Tepechpan*); 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

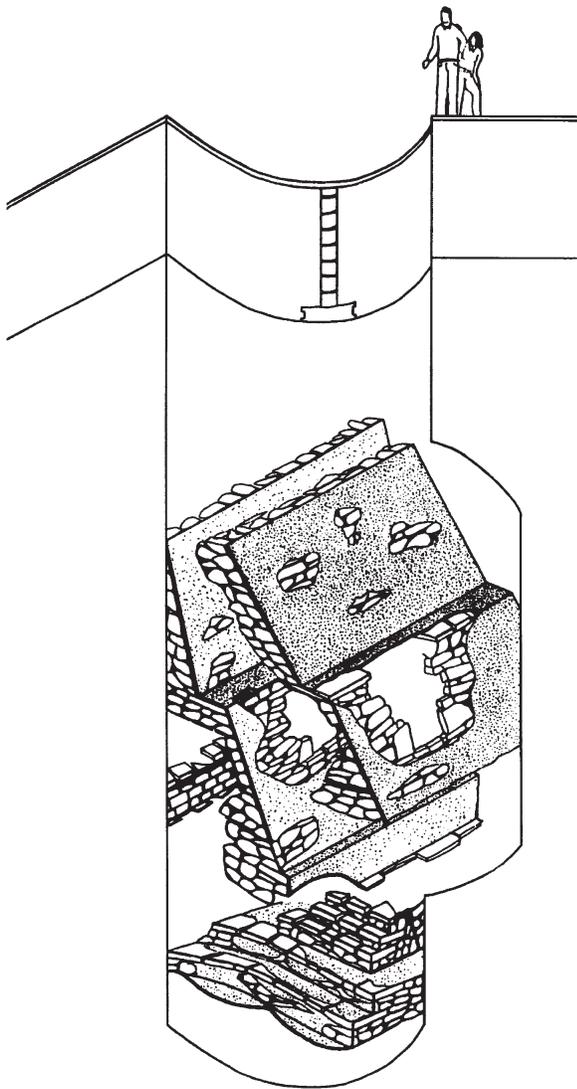
out of a stone/visage resting on the womb of a divinity surrounded by an aquatic environment, with an *atl-tlachinolli* ("water-burnt earth" or "inundation-conflagration," that is, destruction resulting from cosmic war) glyph below its beak. In a suggestive manner, the shrine's flat roof has a rectangular



**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.

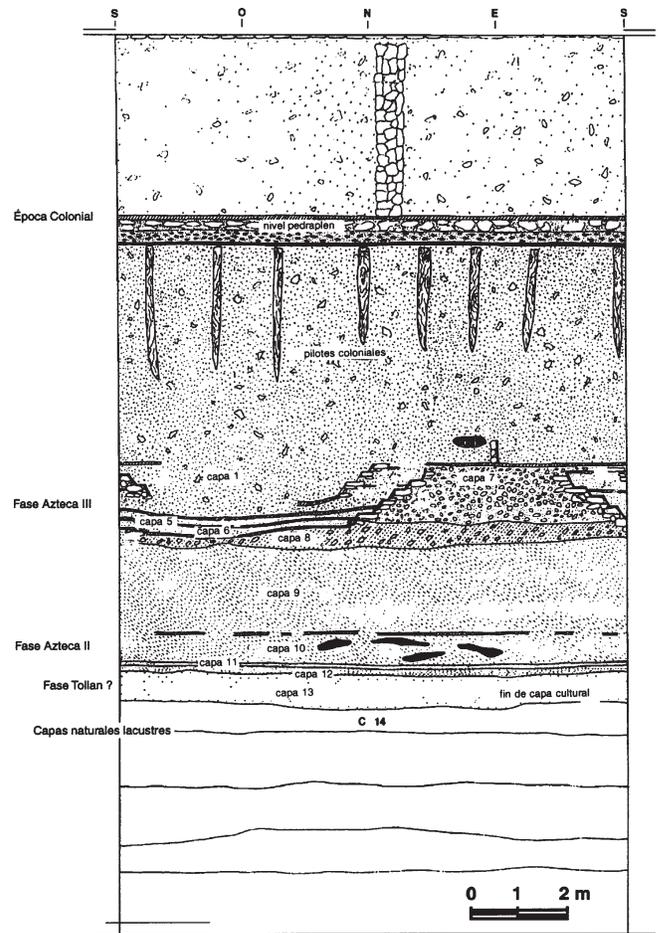


Figure 7. Stratigraphic profile of Lumbra 2 from the Metropolitan Cathedral, according to archaeologist Raúl García Chávez. Drawing courtesy of Raúl García Chávez.

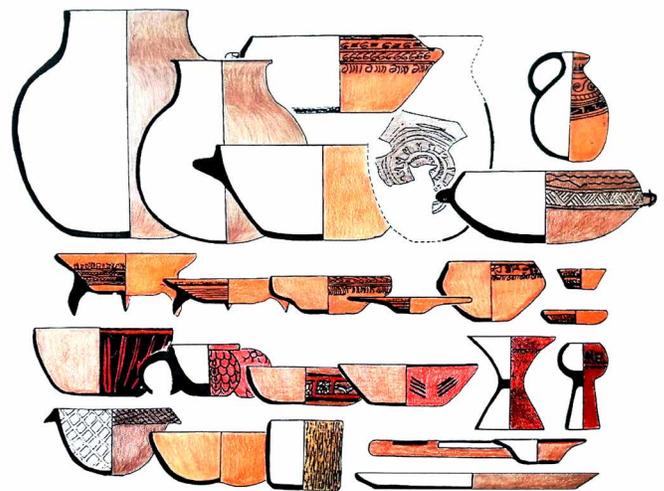
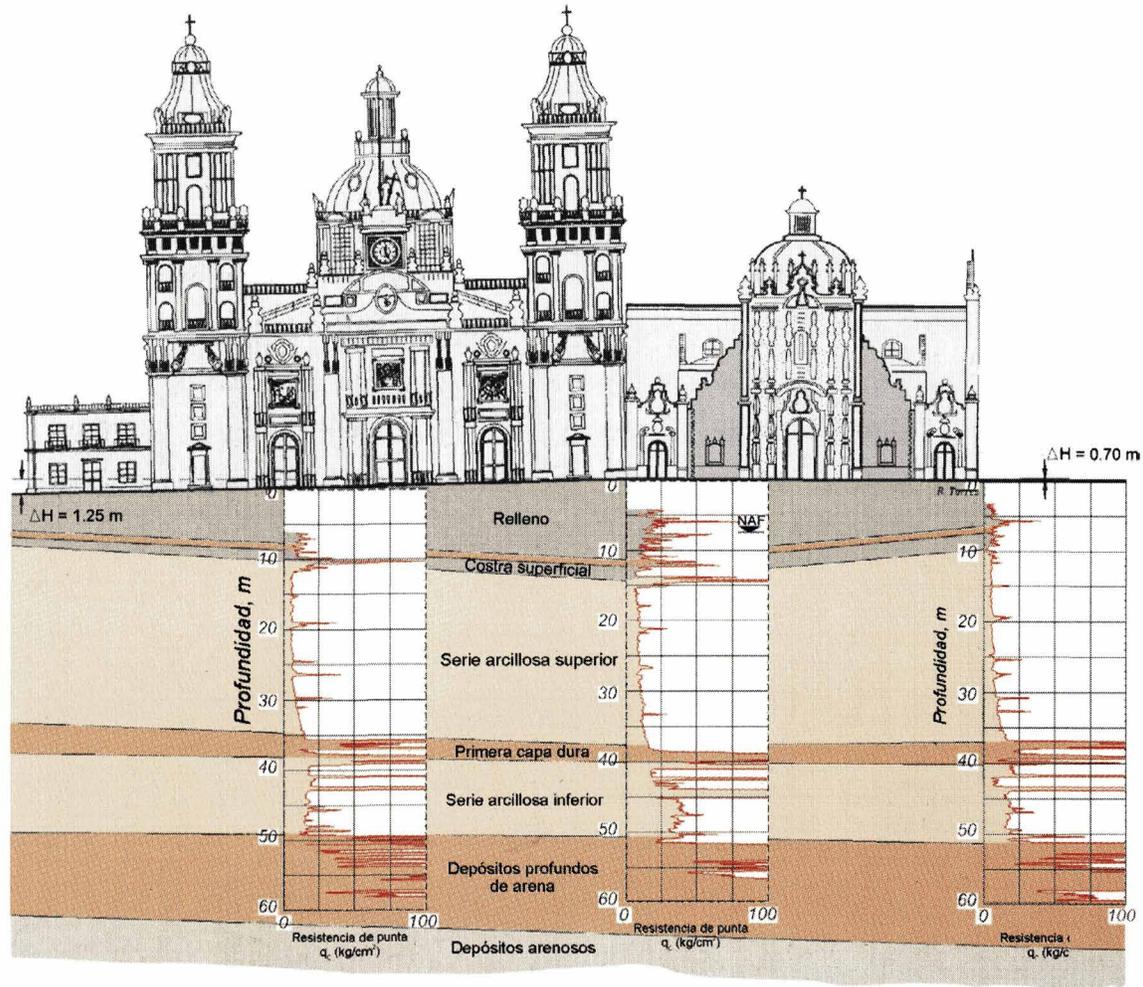


Figure 8. Aztec II ceramic group from the western part of the Basin of Mexico, according to archaeologist Raúl García Chávez. Drawing courtesy of Raúl García Chávez.



**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.

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