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Addendum: Three Indigenous Maps from New Spain Dated ca. 1580

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Three indigenous maps were selected from the pictorial maps (*pinturas*) that accompany the official geographical reports (*relaciones geográficas*) prepared in Mexico in 1577–85 (see Robertson 1972; also Butzer, this volume). Of the seventy-five extant *pinturas*, thirty-seven are now at the University of Texas, and they illustrate a wide range of European, mixed, and indigenous cartographic techniques. The three chosen here represent a spectrum, suitable to introduce the reader by stages to the several levels of meaning embodied in Mesoamerican cartographies.

The heuristic advantages of the *pinturas* attached to the *relaciones* are several: (a) They were all drawn at about the same time, and their date is known. (b) Each was commissioned for the same purpose, with explicit instructions to draw a town plan and illustrate the "site" and "situation" of such a town (Robertson 1972, 246). (c) The text of the *relación* provides information on the indigenous officials and elders who were the source of much or most of the information collated in response to the various questions posed, and older indigenous maps were sometimes presented in evidence. (d) The information given by a



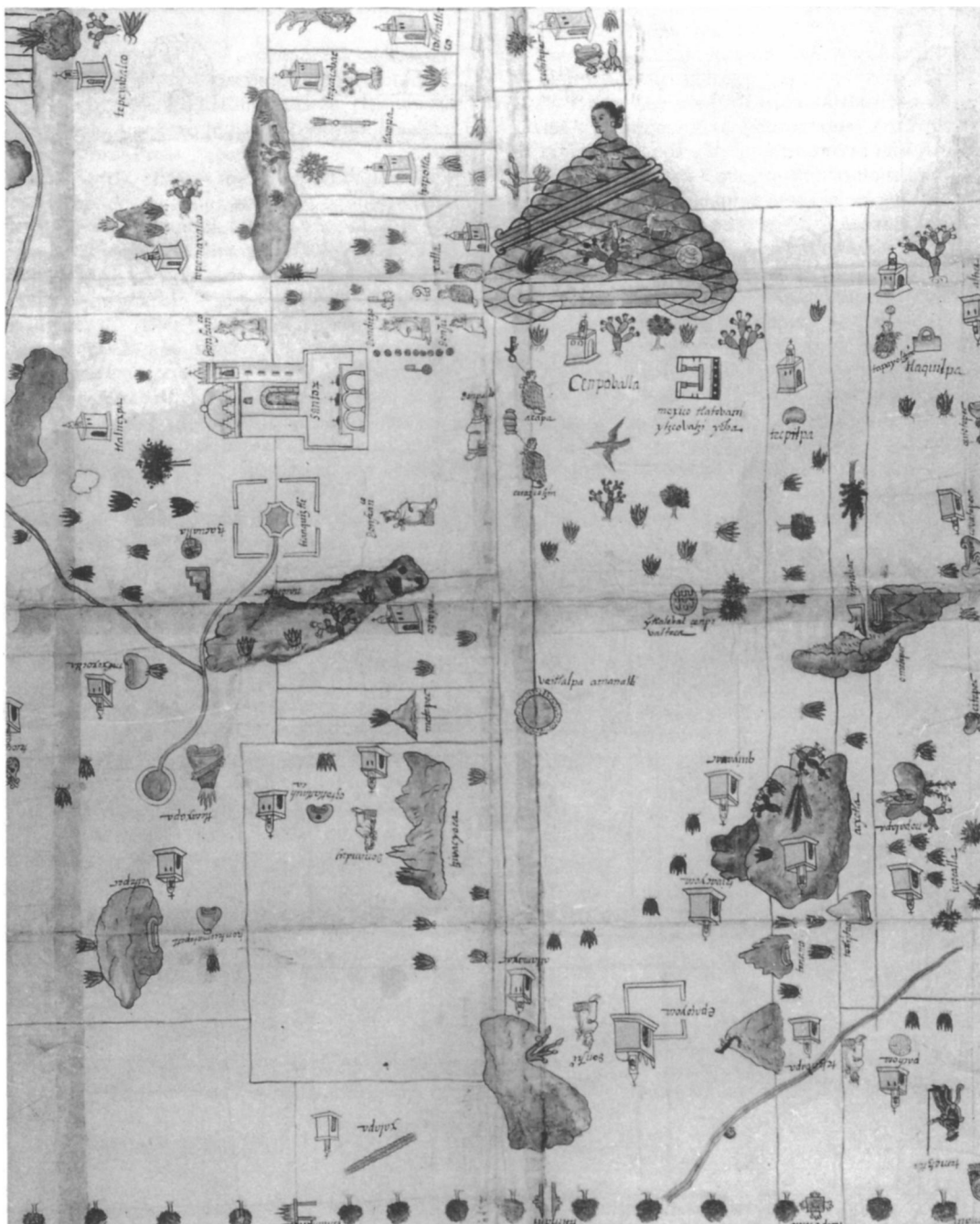


Figure 2. 1580 Map of Zempoala, Hidalgo. South at top. After Benson Latin-American Collection, University of Texas at Austin, Map JG1-XXV-10-4, with permission.

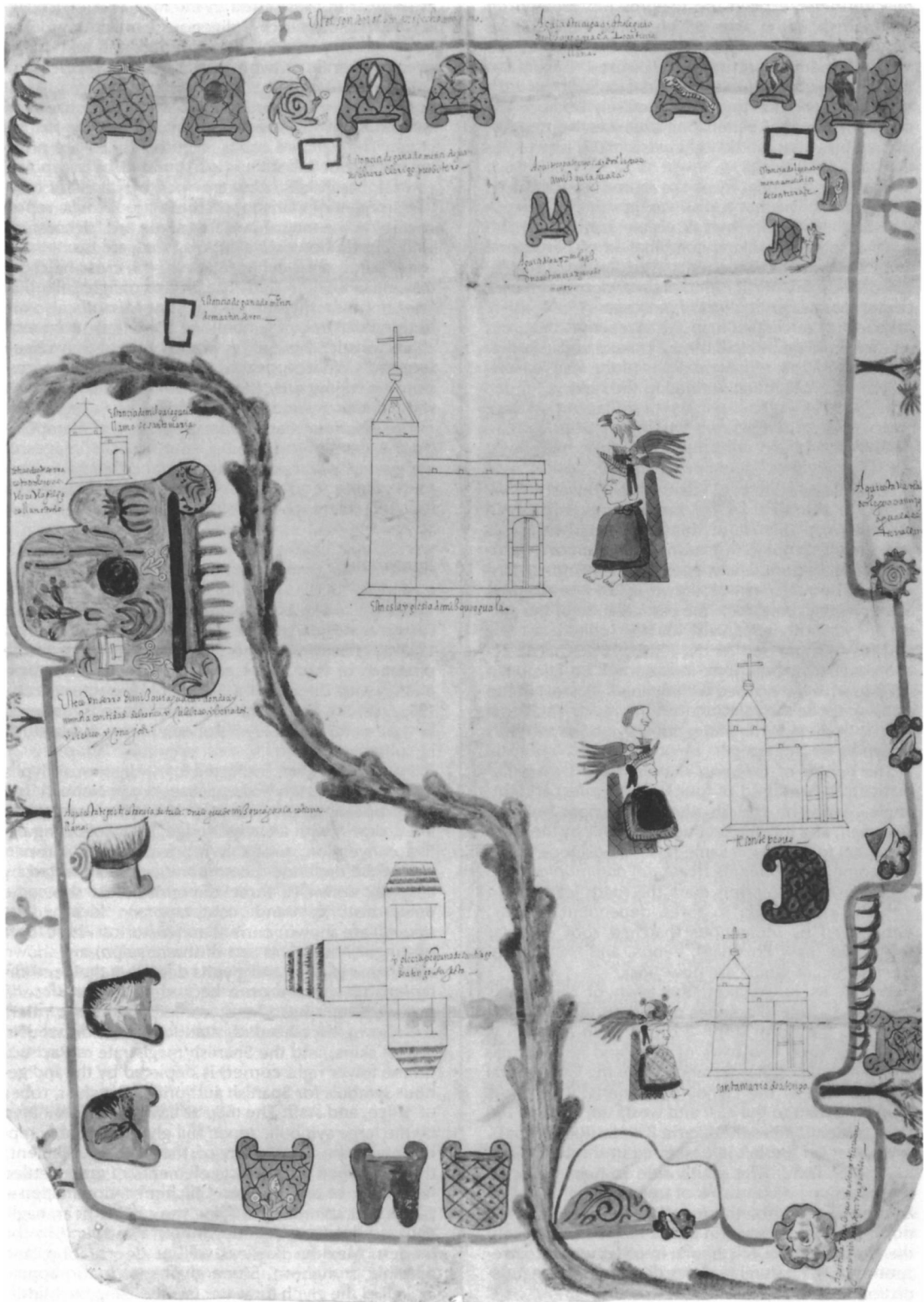


Figure 3. 1579 Map of Atengo and Mixquihuala, Hidalgo. East at top. After Benson Latin-American Collection, University of Texas at Austin, Map JG1-XXIII-12-3, with permission.

relación helps explain the features represented on the corresponding *pintura* (see Acuña 1985a, b). Although drawn in indigenous style, the *pinturas* are not Prehispanic, and they were devised to meet European objectives. But they are ideal as introductions to an unfamiliar cartography, precisely because the context is known, eliminating an excessive number of variables that would otherwise make interpretation unduly difficult.

The three pictorial maps are reproduced and analyzed below. The first appears to be strictly a perceptual map that delineates a visible landscape. The second shows a striking combination of perceptual and conceptual components (see Robertson 1972, 256–57)—an historical, symbolic world, overlain by a contemporaneous cultural landscape. The third is primarily a conceptual map, which seems to express a different idiom. Yet all three are valid and informative cartographic representations of the visible landscape, that have been verified in the field.

Misantla

Misantla is located 112 km north-northwest of Veracruz, in the state of the same name. When the pictorial map (Fig. 1) of this administrative district was drawn, in 1579, the town had an almost exclusively Indian population, speaking the Totonac language. The *relación* was drawn up by the resident Spanish magistrate, with the participation of the parish priest, another Spaniard, and the Indian governor and his officials (see Acuña 1985b, 181–94). The accompanying map is done in black ink on European rag paper. It is inscribed with Spanish glosses, in the same script as the *relación*, but the representational part is replete with indigenous symbols and was drawn by an Indian.

The center of the map is dominated by a schematic, free-hand grid of four streets (*calles*) at right-angles, with the church, the government building (*casa real*), and the market (indicated only by the gloss *tianguéz*) found in the same relative positions today. The community building (*[casa de] comunidad*) no longer exists. Footprints mark the roads leading out into the countryside to three dependent villages, symbolized by indigenous thatched roof chapels: Pozteclan (now Poxtitlan), Pilopa, and Nanacatlan, the last two of which are now “lost.”

Within its jurisdiction, the town of Misantla is shown adjacent to a series of hills to the west (left side). To the north (top), a broad plain (*cabana*) is indicated, then two rows of hills, and finally three Spanish cattle estates (*estancias*), on the Gulf coastal plain known as the Llanos de Almería. Two rivers frame the map to the east and west; the river on the right is identified as the Río de Palmas (Río Colipa?), while that on the left is described in the text as the Río de la Torre. The south side is marked by an irregular line and by a row of trees and hills symbolized by a variant of the *tepetl* or hill glyph. At the northern end, the margin of the map coincides with the Gulf coastline. The frame, in other words, corresponds to the natural features demarcating the jurisdiction.

The *tepetl* hill glyphs along the southern margin

are similar to those used in the map of Atengo (Fig. 3), and follow strict indigenous conventions. The trees cannot be identified, although the text of the *relación* mentions two tropical genera (*mamey* and *peruétano*) in addition to *cedro* (bald cypress). Most of the hills in the north approximate European conventions, but two are shown by the indigenous hill glyph. The hatched cones atop the “hills” are problematical, but Misantla is surrounded by steep and conical, basalt hills, now crowned by stands of tropical trees. Comparison of the various hills represented on the map shows that some are “decorated” with upside-down U symbols, that are sometimes used to indicate a cultivated field; the cross-hatching may mean uncultivated. The groups of light, elliptical lines between the hills and west of Misantla also are not decorative but symbolic of some environmental characteristic; these areas would probably have been forested. What appears, then, to be an impressionistic topography is in fact rendered by symbols with specific meaning.

The Misantla map differs from that of Zempoala (Fig. 2) or Atengo (Fig. 3) in that it lacks images of indigenous rulers, or toponyms rendered by indigenous glyphs. It appears to be a perceptual map, with no overt reference to the past.

Zempoala

Zempoala lies 22 km south of the mining center of Pachuca, in Hidalgo state. The *relación* was written in 1580 by a scribe for the Spanish magistrate, in the presence of four Aztec governors and many Indian elders, with the aid of a Spanish interpreter (Acuña 1985a, 67–82). The attached pictorial map is rendered in watercolor on heavy European paper. It is a study in cultural contrasts.

Place names are indicated by indigenous glyphs (the “symbols”) while the glosses are in Nahuatl, but in European script. The map is subdivided by red lines, drawn with a straight edge, that, following native convention, probably represent noble properties, while dependent communities are indicated by chapels, drawn in three dimensions. At the same time, historical and contemporary local rulers (*teuctli*) are shown: current and historical Aztec lords (distinguished in the text of the *relación*) are shown with name glosses and glyphs depicting their authority—mantle, seated on a backed straw mat (*icpalli*) and wearing a headdress; earlier, Chichimec rulers are shown bare-headed, standing, and dressed in animal skins; and the Spanish magistrate of Pachuca (in the lower right corner) is depicted by the indigenous symbols for Spanish authority—armchair, robes of office, and staff. The map as a whole is dominated by the large symbolic *tepetl* hill glyph, probably representing the foundation of the Aztec settlement; this is hatched and depicts elements of an unsettled landscape or one under Chichimec domination—plants and animals, including the prickly pear, eagle and serpent (foundation symbols also found in the modern Mexican flag), as well as deer, rabbit, and possible pronghorn. Stone glyphs (*tetl*) also appear as well as the glyph for water (symbolizing the Middle American concept of hills as vessels of water). This

great hill, surmounted by a female head rendered in a nonindigenous, perspective view, completely dwarfs the finely drawn Franciscan monastery.

This conceptual aspect of the map, as an historical statement, is completed by the "house" of the ruler of Mexico—depicted by a conventional symbol for *tecpan* palace, a flat-facade structure with a framed doorway and supralintel panel with a disk motif, below and to the right of the foundation symbol for Zempoala; this does not refer to an old palace, but to the site of Moctezuma's defeat by Cortés in 1520.

The visible or perceptual landscape is also shown. The terrain conforms with the plain and several hills described by the text, and the many agaves (*maguey*) and prickly pear (*nopal*, shown with red fruits) are also noted in the text. At least eight other kinds of trees are depicted, one a characteristic clump of yucca palms (right margin, at "Iszocalla"). A tree with small, projecting red fruits is a *capulí* cherry tree; another, with large yellow fruits, is a peach tree; and two trees shown with a dense canopy and hidden red fruits suggest apple trees. Other trees mentioned in the text of the *relación* are quince, walnut, and almond, but these cannot be identified among the remaining arboreal types on the map. Many of the hills shown, in part in three-dimensional form, are conspicuous in the field; some have glosses or place glyphs and may have had symbolic significance as well. The famed aqueduct of Zempoala is shown by four arches in the top left corner. It is linked by a blue line to a blue circle and to a blue octagon within an enclosure marked *tianguiz*; the line marks an irrigation canal fed by a spring, leading to the market square and to the aqueduct. Another blue circle, with a border, is located in the center of the map and the gloss identifies it as the spring "in the plain."

The visible topography and cultural landscape of 1580 is quite comprehensive. It includes natural vegetation, water sources, settlements, fields, and irrigation features, as well as indigenous and Spanish fruit trees. Except that most of the dependent villages have disappeared, the landscape looks much the same today, and the vegetation cover has not changed perceptibly. It appears that this visible landscape was intended to serve as a framework for a higher order of representation, namely the conceptual and historical landscape.

The only conspicuous frame to the Zempoala map is the schematic row of trees along the lower margin (north), which suggest the wooded mountains near Pachuca. However, the outermost "property" lines demarcate a jurisdiction identical to that of modern Zempoala.

Atengo and Mixquihuala

The third pictorial map selected here (Fig.3) includes three Indian towns along the Río Tula in Hidalgo state: Atengo, Tezontepec, and Mixquihuala, located 15–20 km north of Tula. The *relación* of 1579 says little about its indigenous informants (Acuña 1985a, 25–38), who were Otomí speakers. The color map on parchment is an Indian work, although the glosses are entered in Spanish.

The jurisdiction is sharply demarcated by a thick

and continuous orange line, along which scattered, unidentifiable trees and schematic prickly pear are shown. The text emphasizes agaves (*maguey*) and mesquites; the former remain common but the latter are now replaced by the South American pepper tree (*pirúl*). The Río Tula cuts across the map prominently, its configuration fairly accurate. The cultural landscape of 1579 is highlighted by the monastery churches of the three towns, as well as a small church (representing a dependent village) and a thatched-roof church complex whose three buildings front a courtyard. These symbols of the Spanish presence stand out from the remainder of the map by being drawn in ink, with the aid of a straight-edge. Three partial enclosures near the top show sheep *estancias*.

Far more prominent is the conceptual map, presumably representing a symbolic interpretation of the Prehispanic past. It is dominated by Mt. Tunititlan (left center), probably symbolizing settlement foundation, elaborately decorated with glyphs as well as a prickly pear and a branching cactus. The local rulers of the three towns are depicted with their name glyphs and symbols of authority: headdress, mantle, and "throne" (*icpalli*). The *tepetl* hill glyphs that demarcate the margins of the jurisdiction are drawn in bright colors and include glyphs related to toponyms and probably conceptual symbolism. These hills, including one between Atengo and Tezontepec (the two lower towns), approximate the visible topography, but the *relación* mentions temples (*cúes*) on very high hills that were once regularly used for religious offerings (Acuña 1985a, 33).

Although the topography is fairly realistic, the pictorial map of Atengo and Mixquihuala emphasizes a conceptual plan, apparently dominated by sacred points or places. The contemporaneous cultural landscape is shown in a perfunctory fashion, and territorial delimitation was one evident purpose, recalling the map of Misantra.

Towards an Interpretation of the Evidence

The relationships between the *pinturas* of the *relaciones* and traditional, Prehispanic representations are clarified by the 1579 *relación* for Coatepec, an Indian town near Texcoco, east of Mexico City. This detailed report was written by Francisco de Villacastín, "scribe and interpreter" to the royal magistrate (Acuña 1985b, 126–27, 132). His ability in Nahuatl is evident from the complex and sensitive account of indigenous tradition and cosmological symbols that he elicited from the Indian leaders and elders, who were summoned to provide the necessary information. How they presented their ancient charts in evidence can be inferred from the text:

The explanation [for the name Coatepec] given by the Indian elders and old people . . . and as can be seen by the old *pinturas* they have, which show their ancestors and former elders one on top of the other, so as to remember them . . . And according to the elders and as is apparent from their *pinturas*, there used to be a large white snake . . . above that hill . . . living coiled upon it. And, according to the *pinturas*, that snake disappeared after the founding of the town . . . [The origin of

its founders] is unknown except that the old *pinturas* which the inhabitants of the town have . . . indicate that [the founders] came from distant lands . . . According to these *pinturas*, the town was founded 415 years ago . . . (Acuña 1985b, 132–33).

It appears that the drawings in question combined genealogical histories and symbolic attributions of place with some form of geographical representation. The three maps accompanying the *relación* are primarily perceptual in character, except for one glyph and the symbolic representation of several

small (sacred?) hills. The maps that the informants prepared for Villacastín deleted all but the most important conceptual and historical aspects of their landscape, substituting a new iconography of churches and chapels.

The salient importance of the Coatepec report is that it underscores the antiquity of indigenous charts combining spatial, symbolic, and historical information. The maps with the *relación* and those shown in Figures 1, 2, and 3 imply that their traditional counterparts also included a variety of topographical and environmental details, together with a schematic representation of the built environment.