Mixquiahuala Receipt 1: A 16th Century Otomi Pictorial Manuscript

El Recibo 1 de Mixquiahuala: un manuscrito pictórico otomí del siglo XVI

David Charles Wright-Carr
University of Guanajuato, Mexico
https://orcid.org/0000-0002-0213-8623
dcwright@ugto.mx

Abstract: Mixquiahuala Receipt 1 is part of a group of six pictorial manuscripts painted during the second half of the 16th century in an Otomi town in central Mexico. Dated to 1568 on internal evidence, it is probably the earliest of the set. A novel format was created by a native official to represent the days, weeks, and months of the European calendar. On this graphic scaffolding, the goods and services provided by the indigenous town council to the Spanish governor were recorded using the native system of visual communication. In this study, the nature of central Mexican graphic communication, and its use by the Otomi, is briefly discussed. A history of the six receipts is provided for context, including their origin, dispersal, and treatment in previously published studies. Material, formal, cultural, and linguistic aspects of the receipts are discussed. The remainder of this study focuses specifically on Receipt 1, providing a detailed interpretation of the manuscript's contents: the representation of time and the goods and services recorded on its surface. The article closes with a brief reflection on the value of this manuscript for understanding indigenous history, and how native graphic communication was creatively restructured as a tool for economic interaction between native and Spanish authorities.

Keywords: Otomi; Mixquiahuala; economic codices; calendar; New Spain; 16th century.

Resumen: El Recibo 1 de Mixquiahuala es parte de un conjunto de seis manuscritos pictóricos pintados durante la segunda mitad del siglo XVI en un pueblo otomí del centro de México. Fechado en 1568 por la evidencia interna, es probable que sea el más temprano del grupo. Un oficial indígena creó un formato novedoso para representar los días, las semanas y los meses del calendario europeo. Sobre este armazón gráfico, se registraron los bienes y servicios proporcionados al corregidor español por el cabildo de indios, usando el sistema nativo de comunicación gráfica. En este estudio, se abordan sintéticamente la naturaleza de la comunicación gráfica centromexicana y su uso por los otomíes. Se proporciona una historia de los seis recibos para contextualizar, incluyendo su origen, dispersión, y tratamiento en estudios previamente publicados. Se abordan los aspectos materiales, formales, culturales y lingüísticos de los recibos. El resto del estudio se enfoca concretamente en el Recibo 1, aportando una interpretación detallada del contenido del manuscrito: la representación del tiempo y los bienes y servicios que se registran en su superficie. El artículo se cierra con una breve reflexión sobre el valor de este manuscrito para comprender la historia indígena y cómo la comunicación gráfica nativa fue reestructurada creativamente como herramienta para la interacción económica entre las autoridades indígenas y españolas.

Palabras clave: otomíes; Mixquiahuala; códices económicos; calendario; Nueva España; siglo XVI.

Recibido: 29 de marzo de 2023; aceptado: 3 de agosto de 2023

INDIANA 40.2 (2023): 111-136
ISSN 0341-8642, DOI 10.18441/ind.v40i2.111-136

Introduction

During the second half of the 16th century the native population of central Mexico was adapting to the changes brought about by the integration of this region into Spanish imperial control. In Mixquiahuala, an Otomi town in the Mezquital Valley, a native *cabildo* (town council) was responsible for governing the local population and mediating between the townspeople and the Spanish authorities. In this context, from ca. 1568 to 1573, six pictorial receipts were drawn up by *cabildo* members. They register the goods and services provided by the *mayordomo* (steward) to the Spanish *corregidor* (governor). These documents, painted on *amate* (fig-bark paper), make use of a graphic communication system with pre-Hispanic roots, adapted to the new cultural, social, and economic situation that emerged in the context of Spanish colonization.[1]

Central Mexican graphic communication and the Otomi

To understand the role of the Otomi in central Mexican culture we must transcend conventional wisdom and ethnic stereotypes. At the time of the Spanish invasion there was a relatively homogeneous culture in central Mexico, in which speakers of various languages participated. Most of these belonged to the Otopamean family, with a presence in this region going back thousands of years: the Otomi, Mazahua, Matlatzinca, and Ocuiltec. Also present were the Nahua, of the Yutonahuan family, with roots in western Mexico. The ancestors of the Nahua had arrived here in a series of migrations that took place over several centuries. It has been said that the Otomi were dominated by the Nahua during the Postclassic period, from the 10th century until the Spanish invasion, but a closer look reveals a more complex reality. Political structures did not necessarily align with language distribution. Kingdoms conquered and exacted tribute from other kingdoms, while many of these were plurilingual. When Hernán Cortés arrived in 1519, the dominant political structure was the Triple Alliance of Tenochtitlan, Texcoco, and Tlacopan. The population of the latter kingdom was mostly Otomi, with minorities speaking Mazahua, Matlatzinca, Nahuatl, Chocho, and a Chichimec language (Carrasco Pizana 1950; 1996; Wright-Carr 2005, vol. 1, 17-275).

When comparing the words used in the 16th century by the Otomi and the Nahua to express concepts pertaining to diverse semantic fields, we find an abundance of calques, or semantic borrowings without the phonological form, that is, with a correspondence of ideas but not of sounds. This occurs in names of places, people, and deities, as well as terms designating calendrical cycles, social structures, and metaphorical couplets. This situation reflects the essential cultural homogeneity of the Otomi and Nahua peoples (Wright-Carr 2015).

1 This article is based on a portion of my doctoral thesis (Wright-Carr 2005). It has been updated, revised, and translated, adding a new drawing of Mixquiahuala Receipt 1 by Gabriela Guevara Sánchez. Please see the separate insert in this print edition.

This homogeneity favored the use of a graphic communication system that was intelligible to speakers of languages from diverse families. With roots in Olmec iconography of the Preclassic period and antecedents in Classic period Teotihuacan, a common pictorial language emerged during the Postclassic period. This communication system is fundamentally semasiographic; most signs express ideas, independently of the elements of a specific language. Semasiography lies on the blurry border between Western concepts of 'iconography' and 'writing' (Sampson 2015). It could be 'read' by speakers of any language of this cultural region. Within these essentially semasiographic pictorial 'texts', however, central Mexican scribes occasionally inserted glottographs, expressing linguistic elements – words, morphemes, or phonemes – through the use of homophony, in which pictorial signs represented words in a specific language that had identical or similar sounds to the linguistic element they wanted to represent, as in rebus writing. In these cases, knowledge of the language of the scribe is required to decipher the signs (Wright-Carr 2019).

There is an ample corpus of pictorial manuscripts from Otomi towns in New Spain. Some of the more noteworthy are the Mixquiahuala Receipts, pertaining to the economic genre, described in this article; the Huamantla Map, a cartographic-historical document (Wright-Carr 2020); the Huichapan Codex, the final section of which follows the usual form of historical annals, with a band of year signs at the bottom of each page (Wright-Carr 2012); the Aubin Tonalamatl, a codex recording the cycles of the 260-day mantic cycle[2] a few pictorial catechisms of the type called Testerian (Wright-Carr 2006, 135-145); and a large number of cartographic manuscripts that preserve native conventions.

History of the receipts

The six receipts from Mixquiahuala[3] were painted ca 1568-1573, five decades after the fall of Tenochtitlan. Over time these manuscripts were dispersed, eventually reaching collections in Germany and the United States. Two were returned to Mexico from the latter country in the 20th century. In the course of their wanderings, the receipts captured the attention of scholars.

2 Calendrier religieux et divinatoire (n.d.). The Aubin Tonalamatl and the Huamantla Map probably have a common origin in the Otomi region of eastern Tlaxcala, judging by their stylistic similarity (Barlow 1995; Boone 1996, 191; 2007, 212-213; Nicholson 1967, 82; Quiñones Keber 2001, 62).

3 I have assigned numbers to these manuscripts, following a hypothetical chronological order, avoiding traditional names (see Glass 1964, 174-176; Glass and Robertson 1975, 169-170) for several reasons: these names are heterogeneous, obscuring the common origin of the receipts; some include the surnames of their former owners, this being of scarce relevance; others contain a distorted form of the name of the town ('Mizquiahuala'), which does not correspond to the Nahuatl name (Mizquiyahuallah or Mizquiyahuallān) nor to the modern name (Mixquiahuala de Juárez); several begin with the word 'fragment' despite the fact that the manuscripts are complete (except Receipt 3, which appears to have been mutilated shortly after its creation); some contain the word 'tribute', despite the lack of evidence that the goods and services recorded were intended as tribute payment.

Origin

Receipt 1 was painted in 1568, as can be inferred from internal calendrical evidence. Receipts 2 and 3 bear the date May 29, 1569 in alphabetic texts on the reverse of each manuscript, so we know they were painted on or shortly before that date. Receipt 4 is dated February 4, 1571. Receipt 5, like Receipt 1, is attached to a cardboard backing, so any text it might have on its reverse is inaccessible. It appears to have been painted around 1571-1573, based on stylistic similarities with Receipts 4 and 6. Receipt 6 is lost, but we have a photograph and a transcription of the text on its reverse made by Walter Lehmann (1906, 324), according to which this manuscript had a semi-legible date: "November third ... three years". It was probably painted in 1573, considering this date and the manuscript's resemblance to Receipts 4 and 5.

The alphabetic texts reveal that the receipts document foodstuffs and domestic services provided by the *cabildo* of Mixquiahuala to *corregidor* Manuel de Olvera and payments made by Olvera, in Spanish currency, in exchange for these goods and services. We have information about the historical context of these manuscripts, thanks to a series of contemporary documents, notably a legal file dated 1570-1572 (Proceso de oficio 1570-1772).[4]

Dispersal

We lack information regarding the history of the receipts in the decades following their creation. The alphabetic texts on the reverse of four of them, stating that the *mayordomos* of the *cabildo* of Mixquiahuala received payments from Olvera, suggest the receipts may have remained in the *corregidor's* hands after their creation. Perhaps they were presented as evidence when the native people complained about the abuses of the *corregidor*; in this case the receipts would have furthered Olvera's cause, proving that the natives had been paid.

The receipts first appear in the historical record ca 1736-1742, when most of them were acquired by the Milanese caballero Lorenzo Boturini. In his catalog, five receipts from Mixquiahuala, called 'tribute maps', are recorded (Boturini Benaduci 1746, second pagination, 44). Boturini's collection was confiscated by Spanish authorities in 1743. Some of the receipts were later separated from this collection.

In 1803, Receipts 3 and 4 were acquired in Mexico City by Alexander von Humboldt (Seler 1904, 127-128; 1990, 49; Valentini 1893; 1895). We do not know when or how these manuscripts were separated from the Boturini collection or who sold them to Humboldt, but we have some clues. Humboldt declared having bought another

4 Other pictorial-alphabetic manuscripts were produced in the same region around the same time: the Pintura del Pueblo de Tepatepec (ca. 1570-1573), the Códice de Santa María Nativitas Atengo, from 1569 (Sterpone 2001) and a map from Atengo, drawn up in response to a royal questionnaire (Padilla 1579.

pictorial manuscript at the public sale of the collection of antiquarian Antonio de León y Gama (Humboldt 1972, 52), who died in 1802 (Márquez 1990, viii). Humboldt informs us that León y Gama's manuscripts passed into the hands of priest José Pichardo (Humboldt 1972, 80-81; 1984, 127). In 1806 Humboldt deposited his collection at the Royal Library at Berlin (Bankmann 1970, 127-128; Glass and Robertson 1975, 139-140, 169). In 1888 these manuscripts were exhibited there during the 7th International Congress of Americanists. In 1892 the Royal Library published an album with photographic reproductions of each of the 'Humboldt fragments', including Mixquiahuala Receipts 3 and 4 (Seler 1904, 128).

According to Manuel Orozco y Berra (1954, vol. 1, 356), a select set of the pictorial manuscripts from León y Gama's collection was inherited by Pichardo, upon whose death, "the collection passed into the hands of Dr. D. José Vicente Sánchez; some of it went to the National Museum, the rest disappearing, to increase the acquisitions of private collectors in Europe".

In the inventories of the Boturini collection made in 1823 and 1825, Ignacio de Cubas recorded certain manuscripts that may be related to the Mixquiahuala Receipts: "Five strips of maguey paper one-quarter wide, which are receipts for payments and agreements for the sale of forage" (González de Cossío 1952, 45).[5] The mention of forage is significant, because there are signs representing bales of fodder on Receipts 2, 5, and 6, as well as Receipt 4, which was in Berlin when Cubas compiled his inventories.

Joel R. Poinsett served as the first United States ambassador to the Mexican Republic from 1825 to 1829. He left the country on January 2, 1830, after a less than commendable diplomatic performance (Moyano Pahissa 1987, 45-59). Poinsett collected thousands of items of Mexican antiquities. In 1826 he deposited part of this collection at the Academy of Fine Arts in Charleston, South Carolina. In 1830 he placed some 2,500 pieces at the American Philosophical Society in Philadelphia (Rippy 1935, 104-129, 197-198). Among the items taken to Philadelphia were four pages of the Matrícula de Tributos (an Aztec codex painted around the time of the conquest of Tenochtitlan) as well as Receipts 1 and 5 from Mixquiahuala. Despite the separate origins of these manuscripts, they were united and called 'The Tribute Roll of Montezuma or Codex Poinsett'. In 1877 this collection was put on display in the gallery of the Academy of Natural Sciences at Philadelphia (Alcina Franch 1955, 427, 440-441; Brinton, Phillips, and Morris 1893, 59-61; Phillips 1891). The Codex Poinsett was returned to Mexico in 1942, on the occasion of the inauguration of the Benjamin Franklin Library in Mexico City (Castillo Farreras 1997, 23). Today this material is preserved in the National Library of Anthropology and History in Mexico City. Receipt 1 is filed as Manuscript

5 The quote is from the inventory of 1823. The corresponding entry in the inventory of 1825 is similar but omits the measurements (Torre Revello 1936, 568).

35-117; the titles registered in the catalog are 'Códice de Tributos de Mizquiahuala' and 'Fragmento Poinsett 1'). Receipt 5 has the signature 35-118 and is intitled 'Códice de Tributos de Mizquiahuala' and 'Fragmento Poinsett 2' (Glass 1964, 174-176; Glass and Robertson 1975, 139-140, 169-170).

Receipt 2 was in the National Library of Mexico in 1918, when Ramón Mena prepared an inventory of 31 manuscripts formerly in the Boturini collection. The following year these were deposited in the National Museum (Mena 1923-1924). Sometime between 1919 and 1936, Receipt 2 was separated from the rest of the collection and passed into private hands. In 1936 the manuscript was for sale at Dawson's Book Shop in Los Angeles, California (Glass 1975b, 446; Roskamp 2003, 24-25). Shortly thereafter it was acquired by Tulane University of Louisiana in New Orleans. Today it is held by the Latin American Library at Tulane (Glass and Robertson 1975, 170; Robertson 1991, no. 3).

During the late 19th and early 20th centuries, Receipt 6 was in the Royal Library at Berlin, bound in a volume with other Mesoamerican manuscripts. In 1867 these documents had been purchased in Mexico by a traveler identified only as "Carl" from Neustadt-Eberswalde (Lehmann 1906, 321). Receipt 6 was lost during World War II, when several volumes from the American Manuscript series were relocated to Fürstenstein Castle, Altmarrin Castle, and Beuron Monastery, while others remained in Berlin (Bankmann 1970, 128, 132; Glass 1975b, 415). We know of this receipt thanks to the study published by Walter Lehmann (1906, 321-326), including a photograph, in the proceedings of the 14th International Congress of Americanists.

Two additional manuscripts, recorded in Mena's inventory of 1918, have been linked to the Mixquiahuala receipts. The first, called by Mena 'Fragmento de Tributos', disappeared from the National Museum sometime between 1919 and 1964. Its current location is unknown (Mena 1923-1924, 53). John B. Glass (1964, 125) published a description of this manuscript, based on an unpublished study by Alfonso Caso, in which various stylistic features apparently relate it to these receipts. However, a reproduction of the lost manuscript published by Glass (1964, plate 77) shows differences between this manuscript and the Mixquiahuala Receipts. Although they share some features there are also contrasts: in the former document the days of the week are not recorded with circles, while distinct graphic conventions are used to represent monetary values.

A second additional manuscript was registered under the title 'Tributos de Mezquiahuala' in Mena's catalog (1923-1924, 54). It also disappeared from the National Museum after 1919. It is possible that it is the manuscript called the 'Huetamo Codex', from southern Michoacán, now held in the library of the Ibero-American University in Mexico City, having been mistakenly attributed to the town of Mixquiahuala (Roskamp 2003, 19-31).

Published studies

The first published record of the Mixquiahuala Receipts is a brief description in Boturini's catalog. He rightly observes that these manuscripts have numerical signs specifying the quantity of goods delivered by the townspeople, which he mistakenly considered tribute payments. Beyond this, he only mentions that the documents are made of indigenous paper and that two of them are longer than the others (Boturini Benaduci 1746, second pagination, 44).

One of the two receipts brought to Berlin by Alexander von Humboldt was the first to be reproduced, when Humboldt included a detail of Receipt 3 in a color lithograph illustrating his work *Vues des cordillères*, published in 1810. Unfortunately, the author of this partial copy altered the sequence of graphs within the composition (Humboldt 1972 [1810], plate 36, fig. II).

When Receipts 1 and 5 were in Philadelphia, two articles describing them were published. In an article in *L'Anthropologie*, Henry Phillips (1891) identifies these receipts as a kind of calendar and promises to publish them in color, together with the pages of the Matrícula de Tributos that Poinsett had deposited in the same collection. Two years later the promised publication appeared in volume 17 of the *Transactions of the American Philosophical Society*. The article includes an essay by Daniel Brinton on the painted script of the ancient Mexicans, a study by Phillips of these manuscripts, and a description by J. Cheston Morris. The latter author states that these receipts are calendars. He correctly identifies the circles as days but is unable to determine the reading order or the periods represented. He states that the lunar graphs with human faces represent phases of the Moon. Regarding the signs representing goods and services, Morris merely calls them 'illustrations'. The most relevant contribution is the publication of large photographic reproductions of both receipts. Colors were printed with transparent ink over the black and white photographs. The reproduction of Receipt 1 is the only complete image of this manuscript that has been published to date (Brinton, Phillip, and Morris 1893).

In 1892 the Royal Library at Berlin published photographs of Receipts 3 and 4 in an album commemorating the 400th anniversary of Columbus's first voyage (Glass and Robertson 1975, 140). Eduard Seler wrote two texts for the album. The first consists of a few brief notes, by way of presentation, including a paragraph referring to Receipts 3 and 4, mentioning their relationship to Receipts 1 and 5, then in Philadelphia. In 1893 these notes were published in the memoirs of the Berlin Geographical Society (Seler 1990, 50). The second text, also issued in 1893, includes in-depth studies of each of the manuscripts collected by Humboldt. It was republished with revisions in 1902, without illustrations of all the manuscripts. An English translation of the study of 1893 was published in 1904, with copies or photographs of each of the 'Humboldt fragments', including copies of Receipts 3 and 4, as well as copies of the signatures appearing on the alphabetic texts on the reverse of these manuscripts (Seler 1904). Seler's study is rigorous, despite a few

errors and the speculative interpretation of some of the signs. In addition to Receipts 3 and 4, Seler comments on Receipts 1 and 5, including drawings of some of their graphs.

In his study of Receipt 4 (Humboldt Fragment VII), Seler correctly identifies the reading order. Based on the comparison of this manuscript with other pictorial documents of the economic genre, Seler interprets the signs that represent foodstuffs, numerical quantities, and monetary values. He concludes that Receipt 4 is a bill. He transcribes the alphabetic text on the reverse, which he discovered after separating the manuscript from its cardboard support, although he fails to decipher the scribe's name. He places Mixquiahuala in the historical geography of central Mexico, mentioning that it was in Otomi territory. He notes the similarity of Receipt 4 to Receipt 5 (Poinsett Fragment 2) and provides a description of the latter manuscript (Seler 1904, 196-200).

In the same article, Seler discusses Receipt 3 (Humboldt Fragment XIII). He identifies the reading order in boustrophedon (alternating the reading direction of each successive band: from right to left, then left to right, then right to left, and so on), although he is wrong regarding the starting point. He mentions the similarity of this manuscript to Receipt 1 (Poinsett Fragment 1). He deciphers the calendrical structure of the latter manuscript, with lunar signs marking the beginning of each month, yellow circles for the days of the week and red circles with whorled motifs marking Sundays. Seler is mistaken as to the number of days in the second and sixth months, claiming that consecutive months have 31, 30, 31, 30, 31, and 31 days; he infers from this sequence that the range of months must be March-August or August-January. Actually, the respective quantities are 31, 29, 31, 30, 31, 30, and 19, so the recorded months must be January-June plus the first 19 days of July. Seler, using a comparative method, interprets the signs of Receipts 3 and 1. He commits several errors in his transcription of the alphabetic text on the reverse of Receipt 3. He concludes that Receipts 1 and 5 come from the same place and time as Receipts 3 and 4. He notes the relationship of these receipts to the 'tribute maps' from Mixquiahuala that Boturini mentions in his catalog of 1746 (Seler 1904, 212-217). Seler's study is the first in-depth analysis of these receipts.

Philip Valentini summarizes Seler's studies on the 'Humboldt fragments' in two texts. The first was published in 1893 in the journal *Science*. He includes brief mentions of Receipts 3 and 4. In the second article, which appeared in *The Cosmopolitan* in 1895, he describes both receipts in slightly more detail than the previous article. In the article of 1895 there is an inaccurate copy of part of Receipt 3.

A conference paper by Walter Lehmann (1906) on several manuscripts from central Mexico includes a study of Receipt 6. This study was presented in Stuttgart at the 14th International Congress of Americanists in 1904. As mentioned, Lehmann provides a black and white photographic reproduction of the manuscript. He aptly calls it *Rechnung über gelieferte Naturalien* (invoice for delivered goods). He describes its content, making use of Seler's study of Receipts 3 and 4, also citing the article by Brinton, Phillips, and

Morris (1893). He notes the price of each food item, interpreting the painted signs, albeit with some errors. He attempts to transcribe the alphabetic text on the reverse with limited success (Lehmann 1906, 321-326). The chief contribution of the study is the publication of a photograph of Receipt 6 and the transcription of its alphabetic text, without which the study of this manuscript would be impossible, as it was lost during World War II (Glass 1975b, 415).

In 1918, Receipt 2 was in the National Library of Mexico. Ramón Mena was commissioned to write a catalog which was published in three parts, from 1918 to 1919, in the Bulletin of the National Library of Mexico. After the transfer of these documents in 1919 to the National Museum of Archaeology, History, and Ethnography, the catalog was republished in the Annals of this institution. Mena's description (1923-1924, 52) is brief; he records the measurements, erroneously states that the support is made of maguey paper, and transcribes the alphabetic text on the reverse of the manuscript. He interprets the graphs representing bales of fodder, coins, and days as "bundles of reeds, *chalchihuites*, and gold". In 1946 this receipt was on display in the museum of the Middle American Research Institute at Tulane University, New Orleans. The same year photographs of both sides of the manuscript were published, without comment, in a guide to the museum prepared by Robert Wauchope (Echenique March 1992, 90; Glass 1975a, 719; Glass and Robertson 1975, 170).

José Alcina Franch (1955, 440-441) records Receipts 1 and 5 in a catalog of Mesoamerican painted manuscripts, published in the *Revista de Indias*. He includes them in the section 'Nahua Manuscripts', without taking into account that Mixquiahuala was an Otomi town. His description of what he calls the 'Codex Poinsett' is based on the article by Phillips (1891). After clarifying that the first part of this document comes from the 'Libro de Tributos to Moctezuma', he states that the following pages, consisting of Receipts 1 and 5, "seem to be of a calendrical or ritual nature". Alcina unfortunately did not take advantage of the studies by Seler and Lehmann.

Glass (1964, 174, 176) describes Receipts 1 and 5 in his catalog of codices in the National Library of Anthropology and History. He places the origin of the 'Tribute codices' or 'Poinsett fragments' at around 1570 in Mixquiahuala, apparently based on their similarity to other receipts from this town. Glass relates these manuscripts to the record in the Boturini catalogue of 1746, mentioned above. He mentions the relocation of Receipts 1 and 5 to Philadelphia and their return to Mexico City. He provides their measurements, briefly describes their contents and cites the article by Brinton, Phillips, and Morris. He includes photographs of the top portion of Receipt 1 and all of Receipt 5.

Glass and Robertson published records of all six receipts in volume 14 of the *Handbook of Middle American Indians* (1975, 139-140, 169-170). For each manuscript information is provided on origin, materials, measurements, and bibliographical references, as well as a brief description of its content.

Ulf Bankmann, in a conference paper presented in the 38th International Congress of Americanists, held in Stuttgart in 1968, provides interesting data on the provenance and dispersal of Receipts 3, 4, and 6, with especially relevant information on their history after Humboldt brought them to Berlin (Bankmann 1970, 127-128, 132).

Lawrence Feldman and Alba Guadalupe Mastache (1990, 480-483) include records of Receipts 1 and 5 in their index of central Mexican maps. The data were taken from the Glass catalog (1964). They include black and white photographs of Receipt 5 and the upper part of Receipt 1.

In 1991, on the occasion of the 47th International Congress of Americanists, the Latin American Library of Tulane University published a catalog of all the originals and facsimiles of pictorial manuscripts in its collection. A black and white photograph of Receipt 2 is included, with the caption "Tira de tributos, Mizquiahuala, no. 3". The author of the catalog, Martha Barton Robertson, took the title from Mena's catalog of 1923-1924 (Robertson 1991).

Felipe Echenique March (1992, 90-91) includes the six receipts in a catalog of sources on the native peoples of New Spain, in a section on 'tribute-type' codices from the state of Hidalgo. He registers the most important published studies on these manuscripts and reproduces Glass's descriptions of Receipts 1 and 5 from his catalog of 1964.

In 1994 I included a brief mention of the Mixquiahuala Receipts in a paper presented at the Second International Symposium: Codices and Documents on Mexico, with information from the catalogs by Glass (1964) and Glass and Robertson (1975) (Wright-Carr 1997, 444). The purpose of this paper was to identify and briefly comment on the corpus of manuscripts produced by speakers of the Otomi language during the Colonial period.

In the book *Códices del estado de Hidalgo* there is a study of the receipts, written by Manuel Hermann Lejarazu (2001), intitled "Códices tributarios de Mizquiahuala". Included are color photographic reproductions of portions of Receipts 1, 2, 3, 4, and 5. It should be noted that the reproduction of Receipt 5 represents the tenth horizontal band (counting from bottom to top) inaccurately, apparently due to an editorial error. Following a brief introduction, Hermann provides a section on their history, from the time when Boturini collected them until the publication of his chapter. He suggests that the name 'Recibos de Mizquiahuala' is more appropriate than 'Codices tributarios' because they contain lists of receipts of the sale to Olvera of goods and services, not tribute payments. At the bottom of the photograph of Receipt 2 the graphs representing bales of fodder, identified in the text on the reverse as "forage [...] for the mounts [of *corregidor* Olvera]", are interpreted by Hermann as loads of firewood. An important contribution of this study was determining that Receipt 1 covers the months from January to June and part of July, a fact not noted by the previous commentators, although he does not mention that the month of February contains 29 days, a datum that allows us to date the manuscript.

Another contribution to the study of these receipts is found in a book by Hans Roskamp (2003) about the codices from Cutzio and Huetamo, two towns in Michoacán. Roskamp provides fresh information on the history of Receipt 2, from its acquisition by the National Museum in 1919 until its purchase by Tulane University around 1936.

In 2005 I presented a detailed study of the six receipts in the fourth chapter of my doctoral thesis. An appendix includes a catalog of all the graphs appearing in the six receipts (vol. 2, 469). In chapter 2 information is provided about the broad historical and cultural context of these manuscripts. This study was the basis for a chapter on the history of Mixquiahuala in the 16th century (Wright-Carr 2009).

In 2011 a summary of the history of the receipts, written by Hermann Lejarazu, was published in *Arqueología Mexicana*. This article was published under the title "Códices tributarios de Mizquiahuala", following tradition, in spite of Hermann's earlier objection to the use of this name. Hermann summarizes the history of each of the six receipts. Photographic reproductions of portions of Receipts 1 and 5 are included.

Material description

In this section I describe the physical properties of these receipts: their supports, the material aspects of the graphs, and the alphabetic texts in Spanish on the reverse of some of the manuscripts.

Support

The six receipts were painted on light yellow-brown *amate*. This support was not treated with a primer; the graphs and alphabetic texts were painted directly on the paper. In some cases the support is unusually thin, particularly Receipts 3 and 4, where the ink of the texts written on the reverse is visible on the obverse of each manuscript, while the paint from the signs on the obverse is visible on the reverse. Traces of the grooved stone tools used to hammer the bark-fibers pulp are apparent. Dimensions vary: Receipt 4, the smallest, measures 18 by 25 cm; Receipt 1 is the largest, measuring 20 by 108 cm (Glass 1964, 174).

Marie Vander Meeren summarizes the results of her analysis of the paper used in Receipts 1 and 5:

> The Mizquiahuala Tributary Codex (Poinsett Fragments 1 and 2) were also made with *amate*. Both documents have a strip format, perhaps currently incomplete. Poinsett Fragment 1 was manufactured from five *amate* fragments spliced together to form a strip 1.08 m long by 20 cm wide. Regarding Poinsett Fragment 2, only two *amate* leaves were used to make the strip that measures 82 cm long by 19 cm wide.
>
> In the Mizquiahuala Tributary Codex, traces of the crushing tools on the surface of the *amate* are clearly observed. These traces allow the recovery of information about the manufacturing processes of the *amate* (Vander Meeren 2001, 144-145).

The same author published a photograph of the lower part of Receipt 5, where the traces of the stone tool can be seen, and a detail of Receipt 1 showing the union of two sheets of *amate* (2001, 140, 144).

Ink and paint

In the six receipts the pre-Hispanic technique has survived. On the obverse of each receipt the graphs recording the supply of goods and services by the native community were painted. We do not know the substances used for the pigments and binding medium; the vehicle was probably water. The outlines of the graphs and the lines separating the bands were drawn with black ink using brushes or pens. On Receipts 1 and 2, from 1568 and 1569, the circles representing days were drawn with a template; this is evident by the roundness of the signs and by the homogeneity of their diameters. At times the ink smeared when the template was moved. On Receipts 3 to 6 the day signs were drawn without templates.

Several pigments may be observed on Receipts 1 to 5. The colors used on Receipt 6 are unknown, as we only have a black and white photographic reproduction for study. Black ink fills the contours of some signs, being used as a color for its symbolic value. There are corrections made with white paint, used like the correction fluid of our times, although it was not used as a pigment, since the idea of whiteness was expressed by leaving the light color of the paper exposed. However, many signs were left without color in their interiors, despite the fact that the things represented were not white, so we cannot take the absence of pigment as an indication of their color. Other signs were highlighted with red, yellow, and green paint, applied as transparent washes within the outlines. Orange, visible in two circular calendrical signs in the lowest band of Receipt 3, is the result of two corrections: one Sunday sign was accidentally painted yellow, a color corresponding to the other days of the week, then overpainted with red, the color normally used for Sunday; one Friday sign was filled with red then overpainted with yellow. By applying the correct colors on top of the mistaken colors, the red and yellow pigments were mixed.

Alphabetic texts

Three of the five receipts that survive today have alphabetic texts on their reverses. Receipt 6 also had a text, indirectly accessible in a transcription by Lehmann (1906, 324). Receipt 5 has alphabetic glosses on its obverse. These texts are written with pen in a semi-linked procedural calligraphy, common in documents from 16th century New Spain. As mentioned above, if Receipts 1 and 5 have texts on their backs, these are not accessible, as the manuscripts have been glued to cardboard backings. Transcriptions of all known alphabetic texts may be found in my thesis (2005, vol. 1, 491-495; vol. 2, 253-255).

Formal aspects

In this section I provide a formal description of the six receipts, taken together, since the compositions and the repertoire of native graphs are shared among these manuscripts. First I describe their compositions, then I provide a general interpretation of the graphs. The content of Receipt 1 will be treated in depth in another section.

Composition

Each of the six receipts was painted on a rectangle of *amate* with its long axis oriented vertically. The dimensions and proportions vary. All are divided into horizontal bands, defined by lines drawn from one side to the other. The reading order is from bottom to top, although the direction varies within the bands. The formal aspects of the receipts, taken together with dates in the alphabetic texts on their backs – and, in the case of Receipt 1, internal calendrical evidence – allow us to infer a chronological sequence. The earlier receipts have one compositional scheme while the later ones have another.

Receipts 1, 2, and 3 belong in the first type. In each of these there is a linear sequence of circles, placed in bands divided by horizontal lines. The circles constitute a form of calendrical notation, representing sequences of days. Circles with crescent moons and human faces in profile – found only on Receipt 1 – mark the beginnings of months and were not intended to be counted as days. Circles indicating Sundays are highlighted by the addition of whorled elements in their interiors and the application of red paint. Thus the native scribes invented a novel format for recording time in the European calendar. Above some day graphs are signs representing goods and services. The reading order of these receipts is in boustrophedon. The pictorial text of Receipt 1 starts in its lower right corner; Receipts 2 and 3 begin in their lower left corners. The orientation of the anthropomorphic signs indicates the reading order, since they face the graphs that follow in the sequence.

The second group includes Receipts 4, 5, and 6. In these the scribes opted for a more expansive format that admits more graphs next to each day sign. Each band represents the goods provided on a specific day. The graphs representing goods delivered are arranged within the space to the left of the circular day sign. Bands are read from bottom to top; within each the order is from right to left, as indicated by the orientation of the anthropomorphic graphs.

Pictorial signs

The graphic system in these receipts is like that found in other pictorial manuscripts from colonial central Mexico, with a set of norms and conventions deriving from the pre-Hispanic tradition. Although the content of these receipts reflects the changes brought about by Spanish colonization, the basic formal principles were little affected by contact with European writing and iconography.

The surface of each manuscript was used efficiently. The *pars pro toto* principle is employed extensively. In these signs the depiction of a part of an entity signifies its totality; for example, the head of a turkey stands for the whole bird. The semasiographic system used in the receipts is somewhat related to European writing, in the sense that individual graphs are highly conventional and economical, in spite of the fact that they express ideas rather than elements of a specific language.

The graphs are defined by thin black lines. While the thickness of the contour lines generally varies little, the thinnest lines usually delineate the smallest signs. Black lines, stripes, and dots are sometimes placed within the contours to express the tactile qualities of the objects represented. The contents of two baskets, one in Receipt 5 and another in Receipt 6, are represented with small curved lines or dots to indicate the texture of the baskets' contents.

Color plays a minor role in these receipts. Only four hues were used, aside from the neutral color of the paper: black, red, yellow, and green, as discussed. The outlines, dashes, and dots in black ink carry most of the load in communicating meaning. The other colors are used to specify the semantic values of some of the signs, marking weekdays and Sundays, as well as expressing the nature of the foodstuffs, thus aiding in the correct interpretation of the signs.

Culture, language, and graphic communication

The receipts document economic transactions between an Otomi *cabildo* and a Spanish *corregidor*. We have detailed information on the linguistic background of the members of the *cabildo* and neighboring towns. We also know that these receipts were drawn up by *cabildo* members. For this reason, the study of the relationship between the visual language employed in the receipts and the verbal languages spoken by their authors can help us understand the interplay between culture, language, and graphic communication among the Otomi of the Mezquital Valley during the 16th century.

Cultural aspects

The six receipts reflect aspects of the economic and political reality of this Otomi town from 1568 to 1573, if our chronological estimates are correct. Fortunately, we have several alphabetic documents that allow us to approach the historical context from which these manuscripts emerged. Notably, the *Proceso de oficio de la justicia ecclesiástica* (Proceso de oficio 1570-1572) and the ecclesiastical report of the priest Juan de Cabrera, written in 1570 (García Pimentel 1897, 184-187), permit independent confirmation of part of the information recorded on the receipts. Both documents are contemporary with the receipts and provide data regarding their signatories.

During this period Mixquiahuala was a mid-sized town located in the heart of the region known in Nahuatl as the Teotlalpan, in what is today considered the eastern

Mezquital Valley. The town's population, after a series of epidemics, was less than 4000. The town of Tula, upriver, had over 14 500 indigenous inhabitants. The region had been assimilated into the political, social, and economic system of New Spain. Mixquiahuala and surrounding towns – Atengo, Tezontepec, and Tepatepec – had been evangelized by the Franciscans from the convent at Tula and the Augustinians from the convent at Actopan. In 1568 the first secular priest arrived to administer the sacraments in the parish church of Saint Anthony of Padua in Mixquiahuala. The same year a new *corregidor* arrived: Manuel de Olvera, son of conquistador Diego de Olvera, to govern, administer justice, and collect the tributes owed to the Crown. Another portion of the tributes from Mixquiahuala were paid to the *Encomendero* (a Spaniard granted the right to extract tribute from a native town) Melchor de Contreras, owner of cattle ranches in this region; he was also the son of a conquistador. The era of indigenous kingdoms was over. The towns were administered by native *cabildos*, modeled on the Spanish *ayuntamientos* (town councils). *Cabildo* posts were rotated among the members of the indigenous nobility, educated by European missionaries. Native rulers were under the surveillance of Spanish officials (Wright-Carr 2009).

The nearly simultaneous arrival of the *corregidor* and the parish priest in 1568 altered the fragile social balance in Mixquiahuala. Olvera, like other Spanish officials of his time, saw in his position an opportunity for personal enrichment. Cabrera, like other clergymen, was more interested in exercising his power over the natives, taking advantage of his ecclesiastical position, than in serving the needs of his parishioners. Soon Olvera and the priest became enemies. For over two years there were legal controversies. One of the roots of the conflict was the competition to take advantage of the economic surpluses of the indigenous communities. In this context the receipts were painted. Faced with the demand for food and services from the representatives of the Crown and the Church, the natives complied, keeping detailed graphic records of everything they provided. The native *cabildo* attempted to charge the Spaniards for these goods and services, seeking the fairest prices they could, despite their disadvantageous situation in the asymmetric power relations that resulted from the colonization of their homeland (Wright-Carr 2009).

The native official in charge of collecting payments was the *mayordomo*, in charge of managing the properties and assets of the community. The signatures of two *mayordomos* appear in the alphabetic texts on the backs of the receipts. A document in the *Proceso de oficio* reveals how Olvera made the natives "come at his call and provide service and food". Another document from the same file tells of how Olvera insisted that the natives charge the priest for the goods and services they supplied him with, specifically mentioning the existence of painted receipts. At the end of Olvera's term as *corregidor*, the natives of the neighboring town of Tepatepec produced a hybrid manuscript, with painted signs and an alphabetic text, documenting the goods Olvera had received without paying for them. A careful analysis of the prices on the receipts and of the

payments made shows how Olvera took advantage of his position of authority. These receipts are not the only manuscripts painted by the Otomi nobles of Mixquiahuala and the surrounding towns. The ancestral visual language continued to be used, adapted to the sociocultural transformations of the early Colonial period. The painted manuscripts served as legal tools in the natives' efforts to defend the interests of their communities (Wright-Carr 2005, vol. 1, 192-218, 507-519; vol. 2, appendix V).

The composition of each receipt reflects the change in the way of calculating the passage of time. Without straying far from their ancestral graphic tradition, the authors of these manuscripts expressed the seven-day weeks of the European calendar. In the case of Receipt 1, they recorded the months of the Julian calendar, including the additional day that corresponds to a leap year, a fact that allows us to infer the year of its creation. This shows the degree of acculturation of the native nobility, acquired in the classrooms of the mission centers. It also shows the usefulness, validity, and vitality of the indigenous system of graphic communication.

Linguistic aspects

The officials of the *cabildo* of Mixquiahuala spoke Otomi as their native language. Some of them also spoke or at least understood Nahuatl. The Nahua had arrived in central Mexico several centuries before the Spanish Conquest, so this language was not unknown to the Otomi. Documentary sources from the early Colonial period register Mixquiahuala, Atengo, and Tezontepec as monolingual Otomi towns. There was a Nahua minority in the mainly Otomi town of Tepatepec, to the east. In Tula, to the southwest, there were speakers of both Otomi and Nahuatl (Wright-Carr 2005, vol. 1, 134-147).

From other documents we know that *corregidor* Olvera, born in New Spain shortly after the Conquest, spoke Nahuatl. The parish priest Juan de Cabrera also spoke Nahuatl and there are indications that his knowledge of Otomi was rudimentary. Some of the Otomi nobles serving on the *cabildos* of Mixquiahuala, Atengo, Tezontepec, and Tepatepec had some working knowledge of Nahuatl (Wright-Carr 2009, 30-31). Unlike the Jilotepec province to the west, in Mixquiahuala and neighboring towns there is no evidence that a tradition of Otomi alphabetic writing developed. The parish registers of this town were written in Nahuatl beginning in 1574; from 1590 on entries are in Castilian (Christensen 2003).

The graphic registration of goods and services facilitated communication between the Otomi nobles and the *corregidor*. Verbal communication between Olvera and the native officials was possible, with or without the help of interpreters, through the use of Nahuatl as a *lingua franca*. The pictorial language served as an auxiliary means of intercultural communication. The semasiographic nature of these signs facilitated communication when the time came for delivery or payment. It is not difficult to imagine the negotiations, with the Otomi officials on one side of the table, the *corregidor* with the

royal scribe and his witnesses on the other. Receipts are spread out on the tabletop. The natives present their painted accounts. Both sides haggle and quibble over details. The *corregidor* pays the *cabildo* officials in Spanish coin. The Spaniards add alphabetic texts to the receipts, which are signed at the end of the session to formalize the deal. The documents are understandable to all parties. The pictorial system of graphic communication, developed over more than two millennia by the inhabitants of central Mexico, continues to function in the context of the multilingual and multicultural society of New Spain.

Mixquiahuala Receipt 1: content

The six receipts were painted with a purpose: to document the foodstuffs and domestic services supplied by the Otomi *cabildo* to *corregidor* Olvera and the money paid in return. In this section I present a detailed interpretation of the content of Receipt 1 as a sample of this interesting corpus of Otomi pictorial manuscripts.[6]

The representation of time

Receipt 1 is probably the oldest of the six. The surface of this long strip of *amate* is divided into 20 horizontal bands. At the bottom of each band is a row of circles, nine to 11 per band. Most of the circles are filled with yellow paint. These signs resemble solar disks, each standing for a day. Other circles, containing whorled motifs, were painted red. They are adapted from the traditional central Mexican sign for ritual 20-day periods and represent Sundays. A third type of circular graph represents a crescent Moon, with a face in profile painted red and a yellow background. This sign has antecedents in Old World lunar symbols. These signs indicate the start of each month and are not counted as days.

The study of these calendrical signs reveals that the reading order is in boustrophedon, beginning at the lower right corner of the manuscript. The first band is read from right to left, the next from left to right, continuing in this fashion until the twentieth band is reached, at the top of the strip. Only by following this order does the arrangement of the red Sunday signs make sense, so that between each of these there are always six yellow signs representing the days Monday through Saturday. The faces of the lunar signs also indicate the reading direction of the bands where they appear, changing orientation to face the future, as mentioned.

The initial graph of Receipt 1 marks the beginning of a month. Following is a circle representing a Thursday. The first month has 31 days and occupies three bands. The second month starts with a Monday and has 29 days. This is important, since it reveals that the first month is January, the second is February and that the year represented is a leap year. March continues in the same way, with 31 days; April has 30; May has 31;

6 For a study of the six receipts, see Wright-Carr (2005, vol. 1, 478-525).

June has 30. At the top of the receipt the first 19 days of July are recorded. Thus we know the precise date of each of the 201 day signs. There was only one leap year during the 16th century that began on a Thursday: 1568 (Perpetual calendar 1998). This coincides with the first year that Olvera served as *corregidor* in Mixquiahuala and is close to the year 1569 that appears in the alphabetic texts of Receipts 2 and 3, which have similar compositions.

Goods and services

After creating a chronological structure the author of Receipt 1 made a detailed record of the delivery of food and the provision of domestic service provided by the *cabildo* to the *corregidor*, with the purpose of keeping the accounts and collecting the payments due.

The format is tight because the scribe had to record all the foodstuffs and domestic services in the spaces above the day signs corresponding to the date of delivery. Here I present an interpretation of the graphs representing these goods and services. Associated with these are numerical signs indicating quantity. These employ the vigesimal system used throughout Mesoamerica during the pre-Hispanic era: units, from one to 19, are represented by small circles arranged in rows; 20 units are recorded by a sign resembling a rectangular flag on a short pole.

The first 11 bands record a period that begins on the January 1 and ends on April 21. This part of the document contains only calendrical signs, so its purpose is to record the passage of time, allowing the calculation of dates registered in the upper part of the document. In the 12th band, above the sign representing Sunday April 25, we see a representation of a Spaniard seated in a folding chair, holding a staff of authority. This set of signs records the arrival of *corregidor* Olvera, as there are no deliveries of goods or services recorded before this date.[7] The next day the natives brought him food. On Monday April 26 he was given 30 tortillas, represented by a basket with a number sign[8] and a turkey. On Tuesday the 27th, 60 tortillas and two turkeys were delivered. On Wednesday the 28th the delivery of the previous day was repeated. The next delivery was on Thursday May 6, when Olvera received 30 tortillas, nine fish, and a rooster or hen. Two architectural signs are associated with this date; perhaps they represent buildings

7 On September 22, 1570 Olvera declared under oath that he was "*corregidor* of Atengo and Alcalde Mayor [Mayor] in Mixquiahuala", and that he had taken possession of these offices two and a half years earlier (Proceso de oficio 1570-1572, 27r). Subtracting 2.5 years from the date of this testimony, we obtain the date March 22, 1568. Considering the lack of precision of the phrase "two and a half years", the date April 25, 1568 could well coincide with Olvera's arrival.

8 These graphs could be interpreted as representing 30 baskets of tortillas, but this quantity would be inconsistent compared to the other foodstuffs, while the price would be too low. There are no graphic indications that these baskets contained tortillas, but they probably did, since in this receipt, beginning on the 15th of May, the basket signs are replaced by others recording the service of women preparing tortillas.

erected for Olvera.[9] On Thursday the 13th Olvera received two turkeys and 80 tortillas. On Friday the 14th he received 20 units of something, probably food, represented by a yellow oval, with 14 fish and 80 tortillas. On Saturday the 15th the natives provided a bushel of corn, nine yellow ovals, and 14 fish. The same day a woman worked in the *corregidor's* house, probably making tortillas; this is expressed graphically by the head of a woman from which two lines associated with day signs emerge, indicating that she worked for Olvera for two days. A sign representing a grinding stone, next to another woman's head, indicates the task that these women performed.[10] Since May 15 the baskets of tortillas were substituted with *fanegas*[11] of corn and women served hot tortillas at Olvera's house.[12] Four times over the span of a month, the officials of the *cabildo* delivered bushels of corn, on May 19, 23, and 27, as well as June 19.[13] The women's service was provided without interruption from May 15 to June 25 and then from July 2 to 5. In bands 16 and 18 vertical lines associate heads of Indians with anthroponymic graphs: 'Rain', on June 7, and 'Maguey spines' (?) on June 19. These signs may represent the names of the indigenous officials in charge of coordinating the work of the women who prepared the tortillas.

Prices and payments

There is a third layer of information in several of the receipts, after the recording of time and the account of the goods and services provided by the *cabildo* to the *corregidor* Olvera: the prices of each item, expressed through the native system of graphic communication, and the payments made by Olvera, expressed in alphabetic texts in Castilian. In Receipt 1, probably the earliest of the series, the prices of the goods are not recorded, so the effectiveness of this document as an instrument for charging the *corregidor* is limited. This situation is remedied in Receipt 2, in which the prices of the bales of fodder are recorded in a redundant but unequivocal manner. There are no monetary signs painted on Receipt 3, where feminine domestic service provided in Olvera's house is recorded, but it is possible to infer the cost from the signs painted on the manuscript's

9 These graphs appear to have been added by another hand and with different ink.

10 Similar heads are explained in the alphabetic text on the reverse of Receipt 3: "the Indian women [...] that have made tortillas in his house".

11 A *fanega* is a unit of volume, used mainly for grains and salt. Villasana Haggard and McLean (1941, 76) define its volume in New Spain as 2.577 bushels or 93.72 liters. According to a definition from 1732, a *fanega* corresponded to a fourth of a load of wheat, while a load was that which can be carried by a *macho* (Diccionario 1726-1739, vol. 2, 260; vol. 3, 719-720).

12 After May 15, the only goods and services reported are *fanegas* of corn and domestic service, although there are three signs, partly visible, cancelled with white paint: the first, associated with May 16, remains unidentified; the second, corresponding to May 19, consists of a turkey head and an unfinished graph of the same type; the third, from June 4, represents a *fanega*.

13 Due to the absence of the line that normally connects the *fanega* graphs to a specific day, the date of this delivery is uncertain. It could be May 27 or 28.

obverse and the payment written on the reverse. Receipts 4, 5, and 6 include the monetary values of the delivered goods, in pesos and *tomines* (eighths of pesos), next to signs expressing foodstuffs and quantities.[14]

Final thoughts

To understand any native central Mexican pictorial manuscript it must be placed it in its historical and cultural context, as far as the evidence allows, taking into account other documents from the same space and time. It is essential to review everything that has been written about the manuscript, taking advantage of the contributions and learning from the errors. A comprehensive study of the manuscript should includes its materiality, formal aspects, and content. The presence of alphabetic texts is useful for interpretation, although there may be inconsistencies between the pictorial graphs and the alphabetic glosses.

The six receipts record, in the visual language developed during the pre-Hispanic era and preserved after the Spanish invasion, day-to-day interactions between the *cabildo* and the *corregidor*. The information they contain is useful for broadening our knowledge about daily life in New Spain, revealing details that are scarce or nonexistent in other types of documents.

In Receipt 1 we see how the native *cabildo* of this Otomi town took advantage of the native tradition of graphic communication to negotiate power – in this case in the economic sphere – with a representative of the Spanish government. The scribe used a novel compositional scheme to represent a specific period in the European calendar. Over this framework he inserted information about the products and services provided to Olvera in mid-1568. These innovations reveal the flexibility of this visual language. It is possible that there is an alphabetic text on the reverse of this receipt, recording the money paid by Olvera, as is the case with other receipts, but we will only know when the manuscript has been restored or analyzed with appropriate technology. Meanwhile we can appreciate an exemplary case of the use of central Mexican semasiography by the Otomi during the early Colonial period.

Acknowledgment

The preparation of this article was supported by the grant CIIC 055/2022, provided by the University of Guanajuato.

14 For an analysis of prices and payments in the six receipts, see Wright-Carr 2005, vol. 1, 507-519.

References cited

Primary sources

Calendrier religieux et divinatoire

n.d. Calendrier religieux et divinatoire, servant à la fois de rituel et de diurnal pour la célébration des fêtes et de base aux prognostics généthliaques. Bibliothèque nationale de France. Département des Manuscrits. Mexicain 18-19. http://gallica.bnf.fr/ark:/12148/btv1b530134076/ (17.10.2023)

Mixquiahuala Receipt 1

1568 Mixquiahuala Receipt 1. México, D.F., Biblioteca Nacional de Antropología e Historia, Testimonios Pictográficos, no. 35-117 (Fragmento Poinsett no. 1).
[a new drawing of Mixquiahuala Receipt 1 by Gabriela Guevara Sánchez is attached to this volume of INDIANA]

Mixquiahuala Receipt 2

1569 Mixquiahuala Receipt 2. New Orleans, Latin American Library, Tulane University, LAL F1219.T5 (Tira de tributos de Mizquiahuala).

Mixquiahuala Receipt 3

1569 Mixquiahuala Receipt 3. Berlin, Staatsbibliothek zu Berlin, Preussischer Kulturbesitz, Manuscripta Americana 1, fol. 3, obere Seitenhälfte (Seler, Fragm. XIII [Mizquiahuala-Codex]).

Mixquiahuala Receipt 4

1571 Mixquiahuala Receipt 4. Berlin, Staatsbibliothek zu Berlin, Preussischer Kulturbesitz, Manuscripta Americana 1, fol. 6, obere Seitenhälfte (Seler, Fragm. VII [Mizquiahuala-Codex]).

Mixquiahuala Receipt 5

ca 1571-1573 Mixquiahuala Receipt 5. México, D.F., Biblioteca Nacional de Antropología e Historia, Testimonios Pictográficos, no. 35-118 (Fragmento Poinsett no. 2).

Padilla, Juan de

1579 Relación geográfica de Atengo y Mixquiahuala. University of Texas at Austin, Benson Latin American Collection, Joaquín García Icazbalceta Collection, vol. 23, ms. 12.

Pintura del pueblo de Tepatepec

ca 1570-1573 Pintura del pueblo de Tepatepec. University of Texas at Austin, Benson Latin American Collection, Genaro García Collection, ms. 71.

Proceso de oficio

1570-1572 Proceso de oficio de la justicia eclesiástica, Manuel de Olvera, corregidor de Mixquiahuala. México, D.F., Archivo General de la Nación, Inquisición, vol. 72, expediente 7, 14r-89r.

Secondary sources

Alcina Franch, José

1955 "Fuentes indígenas de Méjico: Ensayo de sistematización bibliográfica". *Revista de Indias* 15, no. 61-62: 421-521.

Bankmann, Ulf

1970 "Manuscripta Americana der Staatsbibliothek in Berlin". In *Verhandlungen des XXXVIII: Internationalen Amerikanistenkongresses, Stuttgart-München, 12. bis 18. August 1968*, 127-138. München: Kommissionverlag Klaus Renner.

Barlow, Robert H.
1995 "Algunos apuntes sobre el Códice de Huamantla". In *Obras de Robert H. Barlow*, edited by Jesús Monjarás-Ruiz, Elena Limón, and María de la Cruz Paillés H., vol. 5, 467-477. México, D.F./Puebla: Instituto Nacional de Antropología e Historia (INAH)/Universidad de las Américas.

Boone, Elizabeth Hill
1996 "Manuscript painting in service of imperial ideology". In *Aztec Imperial Strategies*, editado por Frances F. Berdan 181-206. Washington, D.C.: Dumbarton Oaks.
2007 *Cycles of time and meaning in the Mexican Books of Fate*. Austin: University of Texas Press.

Boturini Benaduci, Lorenzo
1746 *Idea de una nueva historia general de la América septentrional/Catálogo del museo histórico indiano*. Madrid: Imprenta de Juan de Zúñiga.

Brinton, Daniel G., Henry Phillips Jr., and J. Cheston Morris
1893 "The tribute roll of Montezuma". *Transactions of the American Philosophical Society*, new series, 17: 53-61. https://doi.org/10.2307/1005420

Carrasco Pizana, Pedro
1950 *Los otomíes: cultura e historia prehispánica de los pueblos mesoamericanos de habla otomiana*. México, D.F.: Instituto de Historia, Universidad Nacional Autónoma de México (UNAM)/ Instituto Nacional de Antropología e Historia (INAH).
1996 *Estructura político-territorial del imperio tenochca: la Triple Alianza de Tenochtitlan, Tetzcoco y Tlacopan*. México, D.F.: El Colegio de México/Fideicomiso Historia de las Américas/Fondo de Cultura Económica.

Castillo Farreras, Víctor M.
1997 "La Matrícula de tributos". In *Matrícula de tributos: nuevos estudios*, reprint, edited by Ramón Galindo Villasana, 19-102. México, D.F.: Secretaría de Hacienda y Crédito Público.

Christensen, Alexander F.
2003 "Ethnicity, caste, and rulership in Mixquiahuala, Mexico". FAMSI: Foundation for the Advancement of Mesoamerican Studies. Availabe online: http://www.famsi.org/reports/00066/index.html (17.10.2023)

Diccionario
1726-1739 *Diccionario de la lengua castellana*, 6 vols. Madrid: Imprenta de Francisco del Hierro, Impresor de la Real Academia Española/Imprenta de la Real Academia Española. http://bdh.bne.es/bnesearch/detalle/4199974 (17.10.2023)

Echenique March, Felipe I.
1992 *Fuentes para el estudio de los pueblos de naturales de la Nueva España*. México, D.F.: Instituto Nacional de Antropología e Historia (INAH).

Feldman, Lawrence, and Alba Guadalupe Mastache
1990 *Índice de documentos sobre el centro de México y cartografía antigua del área de Tula*. México, D.F.: Instituto Nacional de Antropología e Historia (INAH).

García Pimentel, Luis, ed.
1897 *Descripción del Arzobispado de México, hecha en 1570, y otros documentos*. México, D.F.: José Joaquín Terrazas e Hijas Impresores. https://cd.dgb.uanl.mx/handle/201504211/12014 (17.10.2023)

Glass, John B.
1964 *Catálogo de la colección de códices*. México, D.F.: Museo Nacional de Antropología, Instituto Nacional de Antropología e Historia (INAH).
1975a "Annotated references". In *Handbook of Middle American Indians. Volume fifteen: Guide to ethnohistorical sources. Part four*, edited by Howard F. Cline, Charles Gibson, and Henry B. Nicholson, 537-724. Austin: University of Texas Press.
1975b "A checklist of institutional holdings of Middle American manuscripts in the native historical tradition". In *Handbook of Middle American Indians. Volume fifteen: Guide to ethnohistorical sources. Part four*, edited by Howard F. Cline, Charles Gibson, and Henry B. Nicholson, 401-472. Austin: University of Texas Press.

Glass, John B., and Donald Robertson
1975 "A census of native Middle American pictorial manuscripts". In *Handbook of Middle American Indians. Volume fifteen: Guide to ethnohistorical sources. Part three*, edited by Howard F. Cline, Charles Gibson, and Henry B. Nicholson, 81-252. Austin: University of Texas Press.

González de Cossío, Francisco
1952 "Nuevos datos sobre el catálogo histórico de Boturini". *Boletín del Archivo General de la Nación* 23, no. 1: 15-58.

Hermann Lejarazu, Manuel A.
2001 "Códices tributarios de Mizquiahuala". In *Códices del estado de Hidalgo – State of Hidalgo codices*, edited by Laura Elena Sotelo Santos, Víctor Manuel Ballesteros García, and Evaristo Luvián Torres, 88-99. Pachuca: Universidad Autónoma del Estado de Hidalgo.
2011 "Códices tributarios de Mizquiahuala". *Arqueología Mexicana* 18, no. 108: 16-17.

Humboldt, Alexander von
1972 [1810] *Voyage de Humboldt et Bonpland: Première partie. Relation historique, Atlas pittoresque, Planches*. Amsterdam/New York: Theatrum Orbis Terrarum/Da Capo Press.
1984 [1808] *Ensayo político sobre el reino de la Nueva España*, 4th ed., edited by Juan A. Ortega y Medina. México, D.F.: Porrúa.

Lehmann, Walter
1906 "Einige Fragmente mexikanischer Bilderhandschriften". In *Internationaler Amerikanisten-Kongress: Vierzehnte Tagung, Stuttgart 1904*, vol. 2, 321-342. Stuttgart: Druck und Verlag von W. Kohlhammer. https://archive.org/details/internationalera02inte (17.10.2923)

Márquez, Pedro
1990 "Biografía de don Antonio Gama". In *Descripción histórica y cronológica de las dos piedras*, facsimile, by Antonio de León y Gama, edited by Carlos María de Bustamante, v-viii. México, D.F.: Instituto Nacional de Antropología e Historia (INAH).

Mena, Ramón
1923-1924 "La colección arqueológica de Boturini: ejemplares existentes en la Biblioteca Nacional". *Anales del Museo Nacional de Arqueología, Historia y Etnografía* 2 (cuarta época): 35-70. https://mediateca.inah.gob.mx/islandora_74/islandora/object/revista%3A32# (17.10.2023).

Moyano Pahissa, Ángela
1987 *México y Estados Unidos: Orígenes de una relación, 1819-1861*. México, D.F.: Secretaría de Educación Pública.

Nicholson, Henry B.
1967 "A 'royal headband' of the Tlaxcalteca". *Revista Mexicana de Estudios Antropológicos* 21: 71-106.

Orozco y Berra, Manuel
1954 *Historia antigua y de las culturas aborígenes de México*, 2nd ed., 2 vols., edited by Enrique Navarro O. México, D.F.: Fuente Cultural.

Perpetual calendar
1998 In *Encyclopædia Britannica,* CD 99. Chicago: Encyclopædia Britannica.

Phillips, Henry, Jr.
1891 "Le Codex Poinsett". *L'Anthropologie* 2: 201-202.

Quiñones Keber, Eloise
2001 "Aubin tonalamatl". In *The Oxford encyclopedia of Mesoamerican cultures: The civilizations of Mexico and Central America*, vol. 1, edited by David Carrasco, 61-62. Oxford/New York: Oxford University Press.

Rippy, J. Fred
1935 *Joel R. Poinsett: Versatile American*. Durham: Duke University Press.

Robertson, Martha Barton
1991 *Mexican Indian manuscript painting: A Catalog of the Latin American Library Collection*. New Orleans: Tulane University.

Roskamp, Hans
2003 *Los códices de Cutzio y Huetamo: Encomienda y tributo en la Tierra Caliente de Michoacán, siglo XVI*. Zamora/Zinacantepec: El Colegio de Michoacán/El Colegio Mexiquense.

Sampson, Geoffrey
2015 *Writing systems: A linguistic introduction*. Sheffield/Bristol: Equinox.

Seler, Eduard Georg
1904 "The Mexican picture writings of Alexander von Humboldt in the Royal Library at Berlin". In *Mexican and Central American antiquities, calendar systems, and history*, edited by Charles P. Bowditch, 123-229. Washington, D.C.: Bureau of American Ethnology/Smithsonian Institution. https://repository.si.edu/handle/10088/15494 (17.10.2023)
1990 "Publications in honor of Christopher Columbus issued by the Royal Library at Berlin and by the Mexican Government". In *Collected works in Mesoamerican linguistics and archaeology: English translations of German papers from* Gesammelte Abhandlungen zur amerikanischen Sprach- und Alterthumskunde, 2nd ed., edited by Frank E. Comparato, J. Eric S. Thompson, and Francis B. Richardson, vol. 1, 49-53. Lancaster: Labyrinthos.

Sterpone, Osvaldo José
2001 "Códice de Santa María Nativitas Atengo". In *Códices del estado de Hidalgo – State of Hidalgo codices*, edited by Laura Elena Sotelo Santos, Víctor Manuel Ballesteros García, and Evaristo Luvián Torres, 64-69. Pachuca: Universidad Autónoma del Estado de Hidalgo (UAEH).

Torre Revello, José, ed.
1936 "Documentos relativos a D. Lorenzo Boturini Benaduci (concluye). IV: Segundo inventario de los objetos y papeles recogidos a Boturini". *Boletín del Archivo General de la Nación* series 1, 7, no. 4: 565-595.

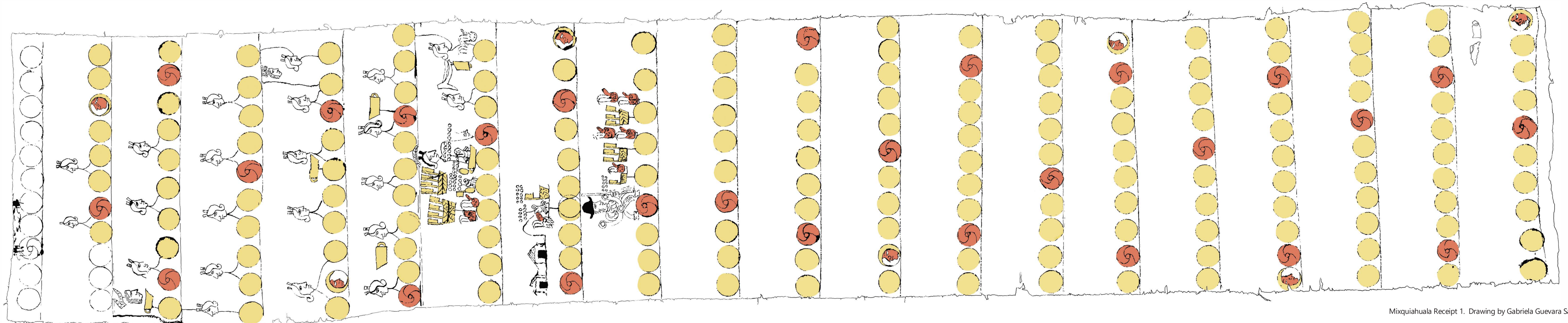
Valentini, Philip J. J.
1893 "Collection of Mexican maguey paintings". *Science* 22, no. 557: 185. https: 10.1126/science.ns-22.557.185
1895 "Humboldt's Aztec paintings". *The Cosmopolitan* 18, no. 3: 331-339.

Vander Meeren, Marie
2001 "El soporte de los códices". In *Códices del estado de Hidalgo – State of Hidalgo codices*, edited by Laura Elena Sotelo Santos, Víctor Manuel Ballesteros García, and Evaristo Luvián Torres, 140-145. Pachuca: Universidad Autónoma del Estado de Hidalgo (UAEH).

Villasana Haggard, J., and Malcolm Dallas McLean
1941 *Handbook for translators of Spanish historical documents*. Austin: The University of Texas.

Wright-Carr, David Charles
1997 "Manuscritos otomíes del Virreinato". In *Códices y Documentos sobre México: Segundo Simposio*, edited by Salvador Rueda Smithers, Constanza Vega Sosa, and Rodrigo Martínez Baracs, vol. 2, 437-462. México, D.F.: Dirección de Estudios Históricos, Instituto Nacional de Antropología e Historia (INAH)/Dirección General de Publicaciones, Consejo Nacional para la Cultura y las Artes (CONACULTA).
2005 "Los otomíes: cultura, lengua y escritura", 2 vols. PhD thesis in Ciencias Sociales, El Colegio de Michoacán. https://colmich.repositorioinstitucional.mx/jspui/handle/1016/418 (17.10.2023)
2006 *Manuscritos otomíes en la Biblioteca Newberry y la Biblioteca de la Universidad de Princeton*. Guanajuato: La Rana.
2009 "Mixquiahuala en el siglo XVI: dominio y resistencia en un pueblo otomí". In *Estudios de antropología e historia: historia colonial*, edited by Verenice Cipatli Ramírez Calva, and Francisco Luis Jiménez Abolledo, 21-54. Pachuca: Universidad Autónoma del Estado de Hidalgo (UAEH).
2012 "*Códice de Huichapan*". *Arqueología Mexicana*, ed. especial 42: 54-57.
2015 "One culture, two languages: What Calques Tell Us About Central Mexican Society at the Time of the Spanish Conquest". In *Perspectivas sobre la investigación cualitativa – Perspectives on qualitative research*, edited by M. Martha Lengeling, and Irasema Mora Pablo, 457-468. Guanajuato: Universidad de Guanajuato.
2019 "On the classification of graphs in Central Mexican pictorial writing". In *Indigenous graphic communication systems: A theoretical approach*, edited by Katarzyna Mikulska, and Jerome A. Offner, 25-40. Louisville: University Press of Colorado.
2020 "Embodied space and time in the Huamantla Map". *Indiana* 37, no. 2: 275-301. https://doi.org/10.18441/ind.v37i2.275-3

Figure 1. Mixquiahuala Receipt 1. Left: photograph published by Brinton, Phillips, and Morris (1893). Right: drawing by Gabriela Guevara Sánchez (see insert).



Mixquiahuala Receipt 1. Drawing by Gabriela Guevara Sánchez

INDIANA 40.2 (2023), 111–136
ISSN 0341-8642, DOI 10.18441/ind.v40i2.111-136