

**Bibliothek  
und  
Wissenschaft**

**53 · 2020**

## Manuscripta americana

Indigene Handschriften aus  
Mittel- und Südamerika in Berlin und  
Krakau (16.–19. Jh.)

Indigenous manuscripts from  
Middle and South America in  
Berlin and Krakow (16th to 19th c)

**Harrassowitz Verlag**

BIBLIOTHEK UND WISSENSCHAFT

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Herausgegeben von  
Cornel Dora, Claudia Fabian, Michael Knoche,  
Monika Linder, Elmar Mittler  
und Wolfgang Schmitz

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## Foreword

This special issue of *Bibliothek und Wissenschaft* focuses on a unique collection of Mexican and South American manuscripts: the *Manuscripta americana*. It was initiated in 1806, when Alexander von Humboldt donated to the Royal Library at Berlin fragments of indigenous Mexican pictorial manuscripts from the sixteenth century. Known today as the Humboldt fragments, they are the most prestigious part of the collection which grew over time by incorporating different types of manuscripts predominantly in indigenous languages and Latin script.

During World War II, the holdings of the Library were evacuated to different places scattered all over Germany. As a protection against loss, the collection was also divided and brought to Baden-Württemberg, Pomerania and Silesia. The *Manuscripta americana* that were brought to Silesia remained there and are now kept in the Jagiellonian Library at Krakow.

The *Manuscripta americana* are of inestimable value in order to understand social, political and transcultural processes, among others, in the (early) colonial era of their countries of origin. In the two years from April 2017 to March 2019, the Staatsbibliothek zu Berlin – Preußischer Kulturbesitz (SBB) and the Bundesanstalt für Materialforschung und -prüfung (BAM) pursued a common scientific project on the *Manuscripta americana* collection, which was generously sponsored by the Deutsche Forschungsgemeinschaft (DFG): Material analyses and cultural-historical investigations of Mexican manuscripts from the colonial period in Berlin and Krakow<sup>1</sup>. It was directed by Eef Overgaauw<sup>2</sup>, Robert Giel<sup>3</sup> and Oliver Hahn<sup>4</sup>, project researchers were Angelika Danielewski<sup>5</sup> and Renate Nöller<sup>6</sup>.

The project's main objectives were to trace the provenance of the *Manuscripta americana* and, as they show a high degree of fragmentation, to determine how they are related to each other and to objects outside the collection. For this purpose ethno-historical and scientific methods were combined. Thanks to a good collaboration with the Jagiellonian Library we were able to see and study the *Manuscripta americana* in Berlin and Krakow alike, and could scientifically measure them.

1 »Materialanalytische und kulturhistorische Untersuchungen von kolonialzeitlichen Handschriften aus Mexiko in Berlin und Krakau.«

2 Head of the manuscript department of the Staatsbibliothek zu Berlin.

3 Deputy of Eef Overgaauw.

4 Head of the Division »Analysis of Artefacts and Cultural Assets« of the BAM and also engaged in the Centre for the Studies of Manuscript Cultures (CSMC), Universität Hamburg.

5 Employed as ethno-historian at the SBB for the cultural-historical part.

6 Scientist at the BAM who initiated the project for material analytical investigation on colors, inks and paper.

Colleagues pursuing similar projects broadened and enriched our knowledge significantly and we were happy to meet with them during our final reunion, a workshop organized in cooperation with the Ibero-Amerikanisches Institut – Preußischer Kulturbesitz (IAI, Ibero-American Institute) and held on 14th and 15th February 2019 in Berlin to discuss the project's results. The talks were given in an open and creative atmosphere; they have been the starting point for the present publication.

Due to various reasons, not all workshop contributions do appear in this special issue. Alternatively, we have included a paper that was not held at the workshop, yet which gives a voice from South America to some *Manuscripta americana*.

The contributions in this issue of *Bibliothek und Wissenschaft* address various topics. They start with an overview of the *Manuscripta americana* collection by Angelika Danielewski. It focuses on two related aspects: the provenance of the *Manuscripta americana* on the one hand and their high degree of fragmentation on the other hand, tracing relationships between these manuscripts and with external sources by comparing features such as content, written and painted form, or data derived from colonial archives. She inquires into the causes for that fragmentation, not only in their country of origin, but also in the institution where they were stored later, the Royal Library in Berlin.

Ursula Thiemer-Sachse<sup>7</sup> sheds light on a special case: the efforts made by Alexander von Humboldt to rescue indigenous manuscript fragments from the confiscated collection of the ill-fated Italian nobleman Lorenzo Boturini Benaduci. She summarizes the prevailing conditions in late-colonial New-Spain that had an impact on how indigenous manuscripts found their way into colonial archives and, in the special case of the Boturini collection, how neglect by colonial authorities led to the loss of many precious manuscripts.

Oliver Hahn and Renate Nöller approach the *Manuscripta americana* from a scientific perspective. In their first contribution they analyze different writing materials with Infrared-Reflectography (IRR) and X-Ray Fluorescence Spectroscopy (XRF). They focus on *Manuscripta americana* 03, 08, and 10, which are kept in Krakow today. Originally these three manuscripts, among others, formed part of an important sixteenth-century census from the Cuernavaca region in Mexico. The results refer to various iron gall inks or mixed inks, revealing a European influence on the indigenous culture and suggesting that the manuscripts were created over a long period of time.

In their second contribution Renate Nöller and Oliver Hahn provide insights into their scientific laboratory, introducing VIS spectroscopy as a mobile non-invasive method to analyze the colorants in manuscripts from colonial Mexico. They explain how the method works and how samples are collected to establish a database which allows to evaluate the different VIS spectra of the red, yellow, blue and green colors in the manuscripts. Examples from the colorful Humboldt fragments underline the validity of the method.

7 Freie Universität Berlin, and counselor of the project.



The second contribution by Angelika Danielewski treats Humboldt Fragment VIII, a leaf of an indigenous land register from Central Mexico which shows land parcels and their dimensions, location glyphs, soil qualities and their owners together with name glyphs and alphabetic glosses in Nahuatl. The fragment is discussed in its entirety, including its reverse side, which was discovered during the project. Emphasis is laid on the development towards syllabic writing as well as the use of mathematical methods for land surveying and, in this respect, the long underestimated mathematical skills of the Nahuas from the region of Tetzcooco.

Leonardo Cerno<sup>8</sup> and Thomas Brignon<sup>9</sup>, last but not least, studied two rare Guaraní manuscripts, *Manuscripta americana* 12 and 13. Both manuscripts belong to the corpus of doctrinal texts composed in the Guaraní language in the province of Paraguay during the Jesuit reductions period (1610–1768). The authors study textual characteristics, intertextual relationships and contextual references and shed light on how earlier doctrinal texts were adapted to new sociological conditions in the missions and how indigenous people participated in the writing process.

We are deeply indebted to the Deutsche Forschungsgemeinschaft for its financial support of our project and to Harrassowitz for giving us a publishing platform in the Yearbook *Bibliothek und Wissenschaft*. For that we express our sincere gratitude to the DFG, the editorial staff and the editors. Particular thanks also go to our language professionals Mitch Cohen (BAM) and Gerd Weidemann (SBB) for helping us with our English texts.

8 Universidad Nacional de Misiones – CONICET. He was engaged by the SBB for the project as a freelance specialist of the Guaraní language.

9 Université Toulouse Jean Jaurès – Casa de Velázquez.



Angelika Danielewski

## Provenance and Fragmentation: introduction to the *Manuscripta americana* collection

The heterogeneous *Manuscripta americana* are important sources for understanding indigenous cultures, languages and historical developments in the colonial era from different perspectives. They originated mainly in Mexico, especially in places where Nahuatl, Otomí or Purépecha was spoken, a few are of South American provenance and written in Guaraní or Quechua. The *Manuscripta americana* touch on various subject areas such as, among others, economy, law, religion and evangelization or history. They reflect, also among others, land rights, tributes and duties, statements of claim, history, and cultural techniques rooted in pre-Hispanic times and developed further after Spanish contact. With a few exceptions, they show various degrees of fragmentation.

It is well known that the Humboldt fragments form the core of the collection. In 1806 Alexander von Humboldt bestowed various fragments of indigenous painted manuscripts from Mexico to the Royal Library at Berlin. Later on more manuscripts became part of the small collection and were assigned their shelfmarks according to their date of entrance, until 1908, the year of the last acquisition.

In total, the collection covers 15 shelfmarks. Nonetheless, it was its fate to be divided. During the Second World War, beginning in November 1941, the holdings of the Library were evacuated to different places in Germany<sup>1</sup>. Apparently only the Humboldt fragments remained in Berlin and thus for a long time they were kept in the Deutsche Staatsbibliothek in East Berlin. The *Manuscripta americana* 2, 5 and 7 were brought to the Monastery of Beuron in Baden-Württemberg and eventually returned to the new building of the Staatsbibliothek zu Berlin – Preußischer Kulturbesitz (SBB) in West Berlin. After German reunification, the *Manuscripta americana* in the two Berlin houses of the Library were rejoined. As to the remainder of the collection, *Manuscripta americana* 3, 4, 6, 8–15 on the one hand and *Manuscripta americana* 10 on the other hand, were evacuated to places which today belong to Poland: Fürstenstein castle in Silesia and Alt Marrin in Pomerania respectively. The heterogeneous bundle that went to Alt Marrin is considered lost<sup>2</sup>, but the *Manuscripta americana* which went to Silesia survived the war. They were not brought

1 See Bankmann, Ulf: *Manuscripta Americana der Staatsbibliothek in Berlin*. In: *Verhandlungen des 38. Internationalen Amerikanistenkongresses*, Stuttgart-München 12. bis 18. August 1968, Band 2: pp. 127–138. München 1969.

2 For more detailed information see Schochow, Werner: *Bücherschicksale: die Verlagerungsgeschichte der Preußischen Staatsbibliothek; Auslagerung, Zerstörung, Entfremdung, Rückführung; dargestellt aus den Quellen*, Berlin, de Gruyter, 2003, pp. 135–136.

back to Berlin and are now kept in the Jagiellonian Library at Krakow. They were made known to the broader research community by Brígida von Mentz in 2003<sup>3</sup>.

Now a short overview of the collection will be given, followed by a discussion of selected items: the Humboldt fragments and three incomplete census manuscripts which belong together.

### The collection

*Manuscripta americana* 1 and 2 comprise the Humboldt fragments. Ms. americ. 1 contains the smaller pieces, namely fragments II through XVI, Ms. americ. 2 is known as Codex Humboldt Fragment I, a screenfold that is about 4.3 meters long when it is spread out in its entirety.

*Manuscripta americana* 3 is a part of a sixteenth-century census from the Cuernavaca region in Mexico. It was written in Nahuatl. A person called Kaufmann Herrmann gave it as a present to the Prussian king who then donated it to the Royal library in 1834.

*Manuscripta americana* 4 relates to the land tenure of Santa Isabel Tola, a village near Tepeyacac in the Valley of Mexico. It contains a court document in Spanish from the early eighteenth century and a painted and glossed indigenous manuscript in Nahuatl. Both fascicles are copies of an older manuscript now lost and were commissioned by Friedrich von Gerolt, a mining office secretary who in 1824 went to Mexico looking for new silver ore deposits. Later on he made a career in the Prussian diplomatic service as a chargé d'affaires. In the meantime he had the copies made, as the subtitle of the manuscript reveals: »copia novissime facta in urbe Mexico«. The painted manuscript has a watermark that points to the second or third decade of the nineteenth century. Another copy is kept in the Bibliothèque National de France. The lost original is related to Codex Cozcatzin from the sixteenth century.

*Manuscripta Americana* 5 is a partial copy of the well-known Codex Aubin and came to the library in 1841. It is assumed that it was made by José Pichardo<sup>4</sup>, a cleric who might also be involved in Humboldt's acquisition of the fragments (see below).

*Manuscripta Americana* 6 is a drawing of indigenous petroglyphs in Venezuela made by the botanist Herrmann Karsten and donated to the royal library in 1848.

*Manuscripta Americana* 7 is the land book of San Martín Ocoyacac or Techialoyan Codex 733. It has 20 leaves painted and written verso and recto and deals with the pueblo's land holdings ostensibly legitimized by pre-Hispanic and early colonial authorities. This manu-

3 Mentz de Boege, Brígida: Documentos en náhuatl en Cracovia. In: Desacatos, núm. 12, otoño, 2003, pp. 163–170. Online: <http://www.redalyc.org/articulo.oa?id=13901212> (last retrieved 2020-03-06).

4 Lehmann, Walter und Gerdt Kutscher, abgeschlossen und eingeleitet von Günter Vollmer: Geschichte der Azteken. Codex Aubin und verwandte Dokumente, Berlin, Gebr. Mann, 1981, p. XXI.

script type was based on oral tradition and, partially, on pure invention. Recent research points to a person named Diego García from Hidalgo, an Otomí who also spoke Nahuatl and Spanish very well and probably ran a workshop for such Codices to be sold to pueblos lacking documentation of their estates. As a muleteer he enjoyed good personal contacts to communities around Mexico City, Toluca and Hidalgo<sup>5</sup>. In the nineteenth century the Codex passed to the property of Carl Uhde, a trading house representative and Consul in Matamoros, Mexico, who brought together a famous collection which he opened to the public. It included manuscripts, grammars and also archaeological, zoological, botanical and mineral objects as well as coins from Mexico<sup>6</sup>. In 1862, a few years after his death, the collection was auctioned by Leopold von Ledebur, director of the Ancient Prussian Art Chamber, and the Codex was integrated into the library stock.

*Manuscripta Americana* 8 consists of only two leaves that clearly belong to the same census as No. 3 (above).

*Manuscripta Americana* 9 is a legal document in Spanish, probably from Mizquiahuala, Hidalgo. *Manuscripta americana* 8 and 9 were both acquired in the Uhde auction in 1862 mentioned above.

*Manuscripta Americana* 10 has two double leaves, also part of the census mentioned. They are the remainder of a very heterogeneous bundle lost during World War II (see above). The two leaves had been removed many years earlier by Walter Lehmann who had it placed with Ms. Americ. 3. The missing part can be reconstructed from copies made by Lehmann. Some of these copies have been published<sup>7</sup>; the others are kept in the Lehmann collection in the Ibero-Amerikanisches Institut, Berlin<sup>8</sup>. As to the bundle, it had entered the collection in 1867 from the possession of a certain Carl from Neustadt near Eberswalde about whom nothing more could be found out.

*Manuscripta Americana* 11 is a facsimile of Codex Vaticanus B made under the patronage of Joseph Florimond de Loubat and was erroneously incorporated into the collection.

*Manuscripta Americana* 12 and 13 come from South America. They contain missionary texts in Guaraní from Jesuit missions. At least one, Ms. americ 12, contains a partial copy of the book by Nicolás Yapuguay, an influential Guaraní native speaker. It was originally printed in Santa María la Mayor in 1724. Both came from the collection of Ignaz von Olfers, who was a diplomat, natural scientist and linguist who finally became director of the Royal museums in Berlin. Ms. Americ 12 bears a seal with a raised white fond, clearly an evidence for Olfers's ownership as his son, Ernst von Olfers, is known as the lord of the noble estate of Metgethen near Königsberg (Kaliningrad). It was he who inherited

5 See Castañeda de la Paz, María: Verdades y mentiras en torno a don Diego de Mendoza Austria y Moctezuma, especially chap. II, pp. 59–96; chap. IV, pp. 149–277, Mexico, UNAM, 2017.

6 The collection was housed in Uhde's mansion at Handschuhsheim near Heidelberg.

7 Lehmann, Walter: Einige Fragmente mexikanischer Bilderhandschriften, in 14. Amerikanisten-Kongress Stuttgart 1904 (1906), pp. 321–342.

8 Y 515 und Y 423 [2°].

the manuscripts and then sold them to the library. Their entry is listed in the accession catalogue for 1897<sup>9</sup>.

*Manuscripta americana* 14 is a very fragile book written in Purépecha, an indigenous language spoken until today in Michoacán, Mexico. The book contains sermon texts to be preached on Sundays and may have been the property of the cleric Maturino Gilberti, who also is the author of a grammar and vocabulary of the language. The State library bought it from the antiquarian bookshop Albert Cohn Nachf. in 1900.

*Manuscripta americana* 15, finally, is a collection of sermons and songs of the 14 stations of the Cross in Quechua: »Modo de visitar las catorce cruces o estaciones de la via sacra«. It was bought in 1908 from an unknown private person.

All in all, it is a heterogeneous collection, not only viewed from the manuscripts' side but also from the collectors', whose names in the SBB accession catalogue refer only to the last known possessors of the manuscripts before they came to the State library.

### The Humboldt Fragments

The beautiful Humboldt fragments have aroused much interest among researchers. Until the turn of the millennium they had been stored in a huge but partly damaged album from the nineteenth century. The fragments were carefully removed from the surface, cleaned from adhesive residues and dust, stabilized and then securely bound into matboards.

Today this manuscript group comprises 16 pieces. Almost all are colorfully painted on indigenous amate paper made of the bark of various ficus species, only one, number XVI, was drawn with black carbon ink<sup>10</sup> on brownish agave paper.

When trying to trace the provenance of these fragments one name keeps coming up: Lorenzo Boturini Benaduci, an Italian nobleman who visited Mexico in the early 1640s and brought together a huge collection of indigenous manuscripts. He had the misfortune to draw upon himself the malevolent eyes of the authorities of late colonial New Spain which confiscated his collection<sup>11</sup>. At this time they had an inventory made<sup>12</sup>, and it is some of these numbers that appear on many Humboldt fragment's reverses.

The fragments did not come directly from the confiscated collection to Humboldt. The vice royal authorities had given parts of the collection to the historian Mariano Echeverría

9 For a deeper understanding see the contribution by Leonardo Cerno and Thomas Brignon in this issue.

10 This information comes from Renate Nöller.

11 For the reasons why Humboldt was interested in acquiring them, see Ursula Thiemer-Sachse's contribution in this issue.

12 Inventario de los documentos recogidos a don Lorenzo Boturini por orden del Gobierno Virreinal (suscrito por el intérprete general Patricio Ana López) [1745]. In: Anales del Museo Nacional de Arqueología, Historia, y Etnografía, t. III, 5ª época [1745], pp. 1–55, México, 1925.

y Veytía. Upon his death, the documents passed to the astronomer and scholar Antonio León y Gama and were finally auctioned. It is, however, not proven that the cleric José Pichardo served as the intermediary for Humboldt<sup>13</sup>.

But provenance has to include the original possessors and creators what is undoubtedly the more complicated part. It has to be done for each fragment separately, comparing it with related manuscripts. In most cases at least the regional provenance can be traced as is shown in table 1, the fragments can be seen on plates 1–19.

Table 1: Content, Regional Provenance and related sources of the Humboldt fragments

Number	Content	Region of Provenance	Related Sources
I	Tribute register of Tlapa paid to the Aztecs	Tlapa, Guerrero	Codex Azoyú 2
II	Cadastral Map with parcels donated to Aztec officials by the ruler Moteuczoma II	Tenochtitlan (Mexico City)	
III–IV	War scenes, huge teotl-tlachinolli glyphs <sup>14</sup> , houses of indigenous lords	Huamantla, Tlaxcala, Otomí region	Codex Huamantla
V	List of taxes in money	Tezontepec, Hidalgo <sup>2</sup>	
VI	Lawsuit over land in Tetzaco showing a plot with measures and the litigants and judges around it	Tetzaco	Oztoticpac Lands Map, see also Humboldt Fragment VIII
VII	Painted invoice for products supplied to the Corregidor and receipt in Spanish	Mizquiahuala, Hidalgo	Mizquiahuala Sales receipts
VIII	Painted land register	Region north of Tetzaco	Códices Santa María Asunción and Vergara, Ramírez Collection, see also No. VI
IX–XII	statement of claim concerning supplied products, services and personal offences	Central Mexico or Puebla	
XIII	Painted invoice for services supplied to the Corregidor and receipt in Spanish	Mizquiahuala, Hidalgo	Mizquiahuala Sales receipts
XIV	Unlawful tributes of the ward of Tlatempa, alternately painted red and yellow	Central Mexico or Puebla	Rôle des Impôts de Tlatengo Código de los Alfareros de Cuauhtitlan

13 See Gutiérrez Mendoza, G., König, V., Brito Guadarrama, B.: *Código Humboldt Fragmento 1* (Ms. amer. 2) y *Código Azoyú 2* reverso: nómina de tributos de Tlapa y su provincia al Imperio Mexicano, Bilingual edition (Engl. transl. Pye, M. E.), México, D.F.: CIESAS; Berlin: Stiftung Preussischer Kulturbesitz (2009), pp. 29–31.

14 Glyphs of the ritual war in the form of spirals of red (blood) and blue (water) streams.

Number	Content	Region of Provenance	Related Sources
XV	List of turkeys given as tribute	Central Mexico or Puebla	
XVI	Catechism: Testerman Codex 817		Testerman Codices

Whereas a clear or at least probable regional provenance can be established for most Humboldt Fragments, it is seldom possible to find the previous indigenous owners or creators.

For Codex Humboldt Fragment I a previous ownership of the Mendoza cazique<sup>15</sup> family of Tlapa is discussed on the basis of a legal case begun in 1726. Essential for this assumption is that Codex Humboldt Fragment I and Codex Azoyú 2 are original parts of the same screenfold manuscript<sup>16</sup>. Both fragments show gold plates, gold dust and cloths given as tribute to the Aztecs in different periods of time. The chronology evidences a close relationship between the two: Codex Humboldt Fragment I registers the tributes between 1504 and 1522, Codex Azoyú 2 shows the tributes of earlier years. It also evidences that both are fragments. Alas, there is no direct chronological transition, the original document having been cut into portions and the intermediary leaves between the two Codices are missing. Certain differences in style and spatial organization gave rise to a controversial discussion whether Humboldt Fragment I is really an original part of Codex Azoyú 2 or it pertains to another codex<sup>17</sup>. The question cannot be settled without a material analysis of both codices, Humboldt Fragment I and the Azoyú 2.

As to Humboldt Fragments VII and XIII it is clear that they were issued by the community of Mizquahuala for the corregidor<sup>18</sup> Manuel de Olvera as payment receipts. No. VII was signed by the mayordomo<sup>19</sup> Miguel de Sanct Juan and Juan de Palencia, who was the royal scribe in 1571. No. XIII was dictated by the mayordomo Diego Hernandes and signed as witness by Melchior de Contreras, who was the encomendero<sup>20</sup> of Mizquahuala, and the royal scribe Pedro de Palencia in 1569.

It should be noted that the two objects from Mizquahuala are no fragments but stand-alone documents, and so are numbers II and XVI and perhaps also number VI which seems to have been painted for a legal case and which is not an original part of the related Oztoticpac Lands Map.

15 The term cazique comes from the Taino language of the Antilles and refers to an indigenous ruler or mayor.

16 See Gutiérrez et al., *Nómina de tributos de Tlapa...* (cf. note 13), pp. 35–36.

17 Ibid for pro; for contra see Vega Sosa, Constanza and Michel R. Oudijk: *Códice Azoyú 2: el señorío de Tlapa-Tlachinollan*, México, Fondo de Cultura Económica, 2012.

18 A local magistrate of the Crown. See Gibson, Charles: *The Aztecs under Spanish rule*. Stanford, Stanford University Press, 1964, p. 81.

19 A native officer in charge of the community properties, *ibid*, pp. 181–182.

20 See note 30.



But most Humboldt Fragments are truly parts of other manuscripts or maps. Codex Humboldt Fragment I was discussed above. Humboldt Fragments III and IV belong to the enormous Codex Huamantla, which is a map about 7 m long and 1.9 m high. Another seven fragments are kept in Mexico, but about one third of the map has been lost<sup>21</sup>. It was still complete when Boturini acquired it<sup>22</sup>. This is certainly an example of extreme fragmentation (see fig. 1).

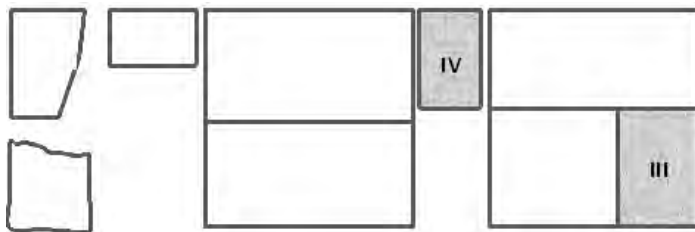


Fig. 1: the position of Humboldt Fragments III and IV on the Huamantla map.

© A. Danielewski, based on the croquis by Aguilera<sup>23</sup>.

Humboldt Fragments V, VIII, XIV and XV leave no room for doubts that they are fragments of larger documents. Humboldt Fragment XIV is considered part of the Tlatengo Tribute Roll (*Rôle des Impôts de Tlatengo*) kept in Paris. The two manuscripts are identical in style and coloring, but unlike the Parisian manuscript Humboldt Fragment XIV has no Roman year entries. In addition, it is about 5 cm narrower. Therefore, it may alternatively be a part of another manuscript from the same town as the Tlatengo tribute Roll. For fragments V, VIII and XV no possible supplementary documents are known today.

A special case are Humboldt Fragments IX-XII which belong together to form one large strip, with a fifth fragment now lost<sup>24</sup>. It was probably intact when Boturini acquired it because only one of the four extant pieces has an inventory number. It consisted of two pieces when Humboldt brought it to Germany. This makes clear that fragmentation did not exclusively occur in Mexico, due to the scattering of the Boturini collection. Before Humboldt donated the pictorials to the Royal library, he glued all except the screenfold codex on the pages of a huge folio in order to preserve the fragile pieces for the future<sup>25</sup>.

21 Aguilera, Carmen: *Códice de Huamantla: manuscrito de los siglos XVI y XVII*, que se conserva en la sala de testimonios pictogr. de la Biblioteca Nacional de Antropología e Historia y en la Biblioteca Estatal de Berlin. Tlaxcala (Mexico), Inst. Tlaxcalteca de la Cultura, 1984, p. 6.

22 Boturini Benaduci, Lorenzo: *Catálogo del Museo Histórico Indiano del Cavallero Lorenzo Boturini Benaduci Señor de la Torre, y de Hono. Madrid 1746*, §. XX, Nr. 2.

23 See Aguilera, *Códice de Huamantla* (cf. note 21), p. 35.

24 See Nöller, Renate and Oliver Hahn: *VIS Spectroscopy of Aztec colors* in this issue.

25 See Humboldt's letter to the Prussian king Friedrich Wilhelm III: »Ich würde mich glücklich schätzen, wenn Ew[er] Kön[igliche] Majestät diese Reste des Alterthums werth hielten, Ihre Bibliothek zu Berlin zu zieren und wenn Allerhöchst Dieselben diese Kleinigkeit als ein schwaches Zeichen meiner

At that time the number of the pieces in the folio was 13<sup>26</sup>. But as early as 1831 there were two more fragments reproduced as facsimiles<sup>27</sup>. Perhaps the painter Aglio was somehow involved, when he copied the Humboldt Fragments for Lord Kingsborough in 1826<sup>28</sup>. The mysterious increase went unnoticed until 1893, when Eduard Seler established the well-founded idea that fragments IX and X and XI and XII had constituted one document each<sup>29</sup>. In sum, it can be noted, that Humboldt acquired two pieces which were cut again later in Germany, and this under unknown circumstances between 1806 and 1831.

### The Cuernavaca Census and the *Manuscripta americana* 3, 8 and 10

The *Manuscripta americana* 3, 8 and 10 belong to an important census that registers the tributes of indigenous people in the region of Cuernavaca, Morelos between 1535 and 1544<sup>30</sup>. The region belonged to the so-called Marquesado, a huge territory held in encomienda<sup>31</sup> by the conqueror Hernán Cortés, who resided in the town of Cuernavaca. It is very likely that the census was produced for a colonial authority. It may have served the Spanish crown to find out how many indigenous tribute payers he controlled and if he demanded excessive tributes<sup>32</sup>. It has an enormous value for understanding economic and social structures in the indigenous communities in the early colonial epoch, with forms of organization deeply rooted in the pre-Hispanic past, notably the vigesimal mathematical system here used for

ehrfurchtsvollen Dankbarkeit huldreichst aufzunehmen geruhten. Um das leicht zerstöhrbare mexikanische Pflanzenpapier vor dem Untergange zu retten, habe ich die Fragmente einzeln aufgeklebt und in die bequeme Bücherform heften lassen.«

(Geheimes Staatsarchiv Preußischer Kulturbesitz, I. HA Rep. 96 A Geheimes Kabinett, Nr. 1B, Bl. 67v–68r, Transcription by Ingrid Männl, 2019).

- 26 See Wilken, Friedrich: Geschichte der Königlichen Bibliothek zu Berlin. Berlin, Duncker und Humblot, 1828, p. 155.
- 27 Kingsborough, Lord, Antiquities of Mexico: comprising fac-similes of ancient Mexican paintings and hieroglyphics [...], Vol. 2, London 1831.
- 28 For a discussion see Danielewski, Angelika and Renate Nöller: Zerfallen, zerteilt, zerschnitten: die Humboldt Fragmente IX–XII und ihre Rekonstruktion. In: Das Altertum, Band 64, pp. 99–116, 2019.
- 29 Seler, Eduard: Die mexikanischen Bilderhandschriften Alexander von Humboldt's in der Königlichen Bibliothek zu Berlin [1893]. In: Gesammelte Abhandlungen zur Amerikanischen Sprach- und Altertumskunde. Graz, Akademische Druck- u. Verlagsanstalt, 1960, p. 269.
- 30 Actually there is a publishing project at the University of Warsaw led by Julia Madajczak, so the reconstructed sequence and, of course, the transcription and translation of the census will soon be available.
- 31 The indigenous population of a territory being assigned by the crown as tribute payers and labor force to a privileged person. The encomendero had no legal power and did not own the land. See Gibson, Charles, The Aztecs under Spanish rule (cf. note 18), especially pp. 58–61.
- 32 See Mentz, Documentos en náhuatl (cf. note 3), p. 165.

counting in sections of twenty houses, and the corresponding tribute collection chains. All households are listed with names of their members, the size of the fields pertaining to the household, the tributes in kind and labor. It is also noted if a person is not baptized. People that had moved to or from the community are equally mentioned. A few sections refer to carpenters, who did not pay tributes in kind but with their craftsmanship.

The census is written on amate paper in Nahuatl and contains no pictorial elements at all. It consists of folios measuring about  $48 \times 43$  cm which were probably kept as unbound layers. At least such a circumstance would have facilitated and accelerated the fragmentation of the census. Binding took place much later in the libraries, where the various parts of the already fragmented census happened to arrive.

Virtually nothing is known about previous Mexican owners, and as we have seen above, the Royal library got its census parts via three different collectors in 1834, 1862 and 1867. Other parts of the census are the Ms Mexicain 393 in Paris and the CA 550–552 in Mexico City, the Parisian manuscript being more closely related to the three manuscripts of the collection than the Mexican ones, especially in terms of vocabulary and visual aspects.

Not one of the three *Manuscripta americana* is complete. The most extensive one is number 3 with 75 folios. The text begins with a sixth house in a count of twenty and, in addition, there are gaps between various layers. Number 8 consists of two unconnected leaves, each leaf beginning in the middle of an entry. Number 10 as well begins in an entry already begun on a missing page. The two small manuscripts as well as pages from the Ms Mexicain 393 can be used to reconstruct some missing parts in the Ms. Americ. 3, based on content, hands and material analysis of the inks.<sup>33</sup> Examples of hands can be seen in fig. 2–5 below.

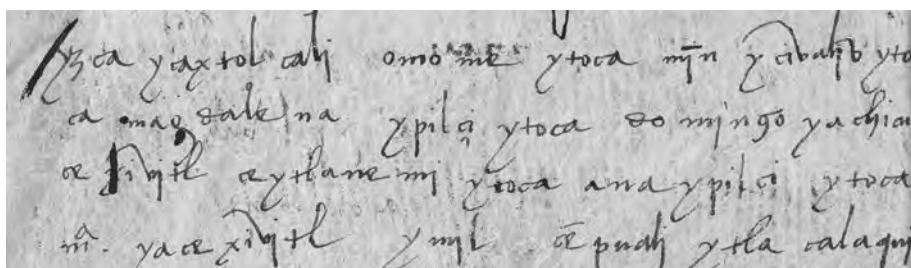
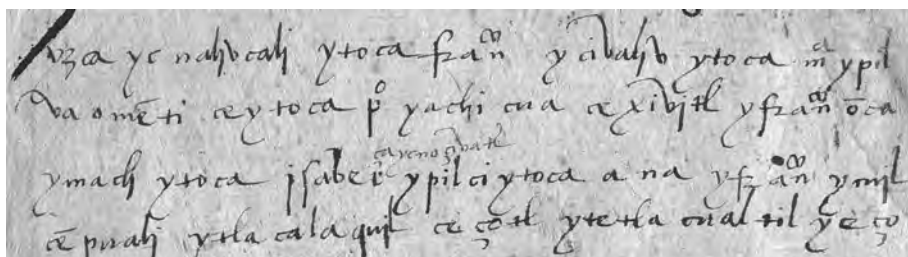


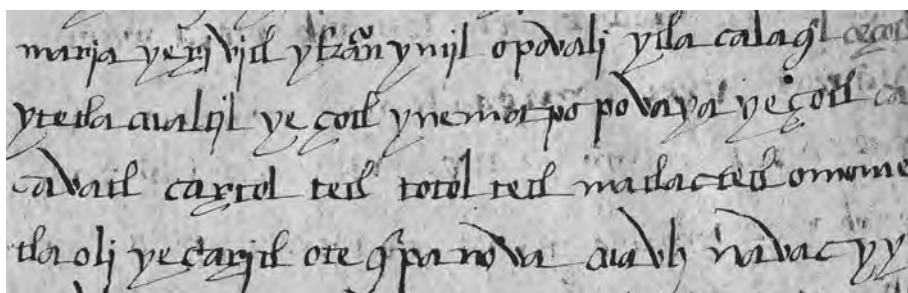
Fig. 2: Hand 1, *Manuscripta Americana* 3, fol. 13r (Detail).

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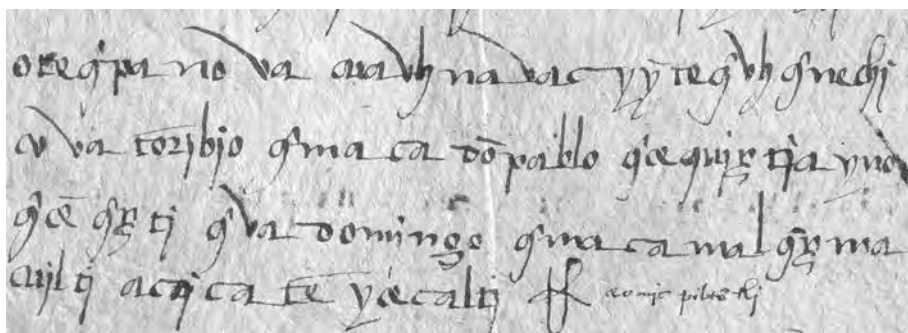
33 For material analysis see the contribution by Oliver Hahn and Renate Nöller in this issue: Writing inks in the *Manuscripta americana* – a pilot study.

Fig. 3: Hand 1, *Manuscripta Americana* 8, fol. 2r (Detail).

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Fig. 4: Hand 4, *Manuscripta Americana* 3, fol. 74r (Detail).

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Fig. 5: Hand 4, *Manuscripta Americana* 10, fol. 1r<sup>34</sup> (Detail).

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34 Reconstructed sequence of the two loose and unfoliated double leaves.