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Citation for published version: Forde, JE 2022, 'Tangled strands of silk: Globalizing the local in Early Modern San Miguel Achiutla, Oaxaca', *Ethnohistory*, vol. 69, no. 3, pp. 287-311. https://doi.org/10.1215/00141801-9705922

Digital Object Identifier (DOI): 10.1215/00141801-9705922

Link: Link to publication record in Edinburgh Research Explorer

Document Version: Peer reviewed version

Published In: Ethnohistory

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Tangled Strands of Silk: Globalizing the Local in an Early Modern San Miguel Achiutla, Oaxaca

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Abstract: In this article I take the community of San Miguel Achiutla, located in the Mixtec highlands of Oaxaca, as a case study through which to examine the complex involvements of Indigenous *pueblos de indios* of Mexico in early modern dynamics of globalization. Drawing from both ethnohistorical and archaeological evidence, I show how residents of this community were not only affected by forces of globalization as they appropriated new goods and ideas from across the Pacific and Atlantic, but how they played an active economic role in driving colonial expansion during the sixteenth century, particularly through the silk trade. In tracing these connections, I argue that locally focused microhistories can shed light on aspects of early modern globalization that we might not otherwise attend to.

Keywords: Mixtec, Mesoamerica, silk, economy, globalization

Introduction

A single-page document dated to 1558 that was recently acquired by Dumbarton Oaks Research Library and Collection records the "donation" of a church in the town of San Miguel Achiutla made by Indigenous residents of the community to the priests of the Dominican order who had newly arrived to proselytize there (Fig. 1).¹ The brief document describes those in attendance for the official transferal, then describes a baptism performed and a mass given in Mixtec there by the vicar Fray Domingo de Aguiñaga on the occasion. It concludes with an enumerated list of various of the liturgical vestments held within the church. The inclusion of the latter inventory makes fairly clear that the document was by no means recording a mere donation—for the Native community this would have been something of a form of insurance. Were any of the items listed to go missing in the future—and they were rather expensive items the new Dominican priests would be held to account. A perhaps notable feature of this inventory is that the majority of the valuables documented inside the church were Eurasian-style textiles made of various kinds of silk—included in the list are a number of objects made of white damask, and of blue and crimson velvet.

The above document provides a glimpse into how people of this relatively remote mountain town of Achiutla, like those of many Indigenous *pueblos de indios* of New Spain during the mid-sixteenth century, were caught up in the emerging global economy as consumers, in this case expending considerable amounts of their own resources to purchase elaborate textiles and other objects that, while likely produced in Mexico for the most part, were modelled after material culture objects imported from Europe and Asia.² What the document does not show is the community's simultaneous involvement as producers in this same early textile industry, raising and at times reeling the raw silk thread used to fabricate objects like liturgical vestments. And it provides little hint as to what was subsequently done with the profits generated by that industry. As I trace out in this paper, residents of Achiutla not only used revenues from the silk trade to purchase goods like liturgical vestments—the fruits of their labors were at the same time being used to finance Spanish projects of global exploration and colonial expansion.

Relatively recent turns toward global perspectives in the disciplines of history and art history have expanded our perceptions on matters of colonialism and empire in important ways, with scholars often taking on large geographic scales of analysis to elucidate the interconnections between persons, objects, and ideas in disparate parts of the world (e.g., Beckhert 2014; Casid and D'Souza 2014; DaCosta Kaufmann, Dossin, and Joyeax-Prunel 2015; Mazlish and Buultjens 1993; Sachsenmaier 2011; Zijlmans and van Damme 2008). They have also provided useful checks on more regionally focused studies, highlighting how such studies need not fall into parochialism, putting scholarship from various parts of the globe in conversation with one another, and revealing broader social, economic, and ideological forces impacting communities across the Atlantic and Pacific during the early modern period. It need not always be necessary, however, to take on geographies as large as oceans as starting points of analysis in order to get at some of these global dynamics. As a growing body of scholarship has demonstrated, more narrowly focused micro-histories of individual communities, commodities, organisms, and objects, can also provide insights regarding aspects of globalization and transoceanic entanglements (e.g., Andrade 2010; de Vries 2019; Ghobrial 2019; Ginzburg 2015; Norton 2008; Putnam 2006). As Marcy Norton (2019, 120) writes, "Microhistory can reveal aspects of the entanglement of indigenous and European technologies, epistemologies, and even ontologies that otherwise remain undetectable." In this article, I take the previously mentioned community of Achiutla, located in the Mixtec highlands of Oaxaca, Mexico, as a case-study through which to

unravel some of these early modern colonial connections. I first provide some brief chronological perspective, explaining that Indigenous people here were no strangers to longdistance exchange prior to contact with Europeans. I then go on to examine colonial economic entanglements at Achiutla principally by way of tracking the tribute payments made to the first two *encomenderos* (Spanish colonists entitled to tribute from inhabitants of a given Indigenous settlement or multiple settlements) of the community. Particularly for the later part of the midsixteenth century, I focus on silk production within the town, and argue that the success of the industry during this time period likely helped the aforementioned encomenderos finance attempts to find a route to the Maluku or "Spice" Islands and to colonize Florida. In concluding, I argue that what we see at Achiutla are therefore not merely the effects of early modern globalization manifested on the ground in a single community, but how Indigenous pueblos de indios such as this one played significant roles in shaping these forces, in feeding the engines of colonial exploration and expansion through their labors, and how such exploitative economic relationships further entangled Native families here in transoceanic dynamics.

The Mixteca Alta and the Spice Islands

The community of Achiutla that serves as the starting point for this microhistory lies in the center of Mixtec-speaking region known as the *Mixteca Alta* (Fig. 2). This place was by no means a geographic isolate prior to the arrival of Europeans in Mexico. During the period just prior to contact—known to archaeologists as the Postclassic (900-1521 CE)—it was considered the most important religious center in the region, home to an oracle to which people made pilgrimage from throughout the Mixteca Alta and beyond, and so widely renowned that was purportedly visited by emissaries of the Aztec ruler Moctezuma II just prior to the fall of Tenochtitlan (Burgoa 1934, 277, 318-319). The community was also well connected to the wider

Mesoamerican world politically and economically. Archaeological research has demonstrated that the site was an important hub of interregional trade during the Postclassic, most notable for manufacturing large quantities of obsidian imported from central Mexico (Forde 2015, 2017). This imported obsidian, used to produce cutting implements in surplus, was then likely exchanged for other materials from the surrounding area and from the Pacific coast at regional markets. Perhaps interested to take control of this strategic position along a more extensive trade network, documentary sources indicate that the Aztec or Mexica Triple Alliance conquered Achiutla and several of its neighbors less than a decade prior to the arrival of the Spanish, in 1511 or 1512 (Hassig 1988, 232). The most direct evidence for this comes from folio 45r of the *Codex Mendoza*, which depicts Achiutla and the nearby polities of Tlaxiaco, and Tzapotlan as conquered by the Aztecs, forming a single, relatively small tributary province (Fig. 3).³ The materials these polities paid in tribute included locally available cochineal, but also cotton cloth-the raw material for which would have come from the coast-and quetzal feathers, which would have been acquired from the distant Guatemala highlands. Taking the evidence together, it is clear that at the time of contact with Europeans, Indigenous families at Achiutla were by no means strangers to long distance trade, nor to adopting new industries utilizing materials imported from abroad.

While historical documents are virtually silent regarding the Spanish conquest of Achiutla and most other communities in the Mixtec highlands, it is fairly clear that the major population centers in the region came under the control of Spanish colonists shortly after the fall of Tenochtitlan, likely by 1523 CE at latest (Spores and Balkansky 2013, 143-144). This may have occurred slightly earlier at Achiutla. In a document dated to 1528 CE, involving a dispute between two Spanish encomenderos over possession of the previously mentioned Tlaxiaco, it is stated that the original encomendero of Tlaxiaco, one Martín Vásquez, had held possession of that community for "six or seven years," while at the same time, the other party in the dispute, Francisco Maldonado, was encomendero of nearby Achiutla, Mitlatongo, and Chalcatongo during that same period (Romero Frizzi 1996, 239-240).⁴ Thus, this Francisco Maldonado likely held Achiutla as an encomienda beginning in 1521 or 1522.

The latter Francisco Maldonado was a person of considerable prominence in the early years of the colonization of Mexico. Born in Salamanca, he came to the Indies with his father Alvaro at an early but unknown date, and by 1518 had participated in the Grijalva expedition exploring the coast of the Mexican mainland (Himmerich 1991, 187). Evidently close with Hernán Cortés, the following year he served as captain on the expedition that led to the eventual fall of Tenochtitlan, and he helped lead a number of conquests in Mexico shortly thereafter (Álvarez 1975, 320-321; Himmerich 1991, 187). In the end, Cortés rewarded Maldonado not only Achiutla, but at least nine other cabeceras or "head towns" as encomiendas from which he could demand tribute. The vast majority of these were also in the western Mixtec region surrounding Achiutla, including Mitlatongo, Chalcatongo, Cuquila, Ocotepec, Atlatlahuaca, Atoyac-Yutacanu, Yucucuy-Tlazoltepec, and Tecomastlahuaca (Gerhard 1972, 285). Cortés also granted him the encomienda of Chicomeguatepec, located in the eastern Zapotec, Mixe, and Chontal region, though this may have been later, when he helped quell an Indigenous uprising in the area around the year 1533 (Gerhard 1972, 195-197). These grants of encomiendas would have made Maldonado a rather wealthy man, at least relatively speaking. As Himmerich (1991, 55) shows, of the 506 Spanish colonists to ever hold an encomienda over the course of the colonial period, only nine of them ever held more than five or more at one time; that is, less than two percent of all encomenderos. Thus, Maldonado, holding ten, likely would have been

receiving much more in tribute from Indigenous communities than the vast majority of his contemporaries during the first half of the sixteenth century, though bearing in mind that the specific amounts of tribute received from these different encomiendas could vary greatly.

An understanding of just how much wealth Maldonado would have amassed from his encomiendas is elusive due to the paucity of tribute records for these communities, particularly during the early decades following the arrival of the Spanish. Nevertheless, I attempt to provide an admittedly rough estimate here. Of Maldonado's encomiendas, data are only available for four of them, compiled from the Libro de las Tasaciones de Pueblos de la Nueva España (González de Cossío 1952), including Achiutla, as summarized in Table 1. The earlier records attributed to Maldonado in the *Libro de las Tasaciones* do not provide dates, though they likely correspond to the years surrounding 1550, given that in the Suma de Visitas (García Castro 2013, 68) dated to 1548-1550 Achiutla is listed as paying 70 pesos of common gold in tribute every 60 days. In the Libro de las Tasaciones they are described as paying 80 pesos every 60 days, a relatively modest increase (González de Cossío 1952, 13). As we will see later, the amount of tribute the community paid increased greatly in the next decade. In Table 1, we can see that Achiutla is paying by far the most actual gold in tribute of the four communities for which records exist, while Chicomeguatepec is paying none, instead paying the bulk of its goods in fanegas (bushels) of maize, a common tribute item. To approximate the value of the latter community's tribute, I have taken the price of bushels of maize shown in a purchase made in 1560, depicted on page 31 of the Codex Sierra, from the nearby community of Tejupan. In the Sierra, 150 bushels of corn are shown purchased for 150 pesos of common gold, or one peso per bushel.⁵ In the far-right column of Table 1, I have used these data to provide an estimated total amount paid per year in gold for each community, while omitting tribute items whose values are

more elusive, such as sandals and labor in mines in these figures. Taking the data for these communities together, we can infer that Achiutla likely represents the high end of the range in terms of tribute that would be paid by these encomiendas, while Atoyac-Yutacanu represents the low end, with Chicomeguatepec and Mitlatongo falling in the middle. With this range of variation, it is reasonable to take the average paid in tribute by these communities and multiply it by ten to arrive at an—again, very rough—estimate of the total annual tribute Maldonado received from his encomiendas during this time, amounting to 2330 pesos of common gold.

It is difficult to know how comparable the above figures are to what Maldonado was receiving in tribute upon first being granted his encomiendas. On the one hand, he may have been receiving less in earlier years, given that not all his encomiendas were necessarily granted to him in the early 1520s, as Achiutla was. On the other, he may have been receiving more, at least from the individual encomiendas in his possession, due to the fact that Indigenous populations would have been higher earlier on (Cook and Borah 1968), and because various Spanish legal restrictions had not yet been put in place to protect Native communities from exploitation. In any case, it is clear that by the early-to-mid-1520s, Maldonado had considerable disposable income. In 1526, Cortés placed him in charge of overseeing shipbuilding operations in the Isthmus of Tehuantepec, as has been discussed elsewhere by Pérez and Luna (2016; see also Moorhead 1949; Zeitlin 2005, 93-95). These operations were designed with the explicit goal of finding a route to the Maluku or Spice Islands in service of the Spanish Crown. In his efforts to carry this project out, Maldonado stated in a later legal proceeding that he had spent considerable amounts of his own funds in travelling to Villa Rica in Veracruz and to Medellín in Spain, bringing back with him persons to work in the shipyards, including master carpenters to direct construction of the boats.⁶ Here we can see how Maldonado was likely able to use the

income generated from his newly acquired encomiendas like Achiutla to help fund such a venture. While it is unclear whether Indigenous persons from these communities also came to Tehuantepec to labor in the shipyards as Pérez and Luna (2016, 33) speculate, this is perhaps likely, given that laborers from Achiutla were later obligated to construct a house for Maldonado in the city of Antequera (now Oaxaca City, see Álvarez 1975, 323), while Terraciano (2001, 236-237) notes that Native people from the Mixteca were still later required to work in the construction of a fortress at the port of Acapulco.

These efforts at shipbuilding in the Isthmus of Tehuantepec largely ended in failure, and a route to the Spice Islands was never navigated from this port during the early years of the colonial period. Maldonado claimed that when he arrived in the region with the Spanish craftsmen that he had brought from abroad, he found the Indigenous communities there in open rebellion, and had to arm his companions at considerable personal cost in order to subsequently "pacify" the local population (Zeitlin 2005, 94). By 1529, conflicts between Cortés and the first Audiencia in Mexico led the Audiencia to temporarily install Martín López as governor of the province while Cortés was absent in Spain, and López challenged Maldonado's authority, further complicating these operations (Moorhead 1949, 378; Zeitlin 2005, 93). López reported that by this time many of the master carpenters Maldonado brought to the shipyards had left to accompany conquest expeditions to Guatemala and Chiapas (Zeitlin 2005, 94), while completed boats were said to have been left to rot in the water (Moorhead 1949, 378). While Cortés regained his authority in Tehuantepec from López upon his return from Spain and attempted to revive shipbuilding there, further conflicts with the Viceroy led to the eventual closure of the port in 1535 (ibid., 378-379). In the end, though the attempt to navigate a route to the Spice Islands from Tehuantepec was unsuccessful, we can nevertheless see here how Indigenous

communities in the Mixteca like Achiutla, by way of their labor and tribute payments, would have been instrumental in enabling Maldonado to finance bringing Spanish shipwrights to the New World from across the Atlantic and to enlist them in efforts to cross the Pacific.

Before moving to later developments at Achiutla, it is worthwhile to revisit some of the tribute that the community paid to Maldonado. Of note is the labor in mining that the community performed collectively with Mitlatongo. In the Suma de Visitas, it is noted that lead mines existed at a distance of half a league from the community during the mid-sixteenth century (García Castro 2013, 68), where undoubtedly at least much of this labor was performed. It is unclear what this lead would have been used for, though it certainly could have been worked into ammunition for harquebuses and cannons, perhaps used in Maldonado's subsequent conquest ventures, and used to outfit ships in Tehuantepec. What is curious, as I have reported elsewhere (Forde 2017, 501-503), is that archaeological excavations of colonial Indigenous households at Achiutla indicate that Indigenous families were smelting lead ore within their own homes during the sixteenth century, for purposes that are elusive. Lead may have been used to produce green glazes for colonial imitations of European style ceramics here, but it otherwise does not appear to have been used in any local industry—save perhaps one. While this is admittedly highly speculative, I would like to suggest that one possible use for lead during this period was linked to the silk industry. In a 1581 guide to silk raising written by the encomendero of the nearby community of Yanhuitlán, the author, Gonzalo de Las Casas, stated that the eggs, or "seed," of silkworms should be kept in vessels made of lead when transported across long distances:

[The silkworm seed should be placed] in *a little leaden jar* which does not exceed two pounds capacity, for much [silk seed] together may spoil; and this leaden jar must be put in a rather wide sack full of bean flour, in such fashion that the flour surrounds all of the jar, for it is known to all that bean flour is medicinal and of a cold dry quality. The sack must be placed in a barrel filled either with barley straw well dried and cleansed or with

bran. According to Pliny, straw is better in winter and bran in the summer. Such barrels must be put in a pipe of salt *for better assurance that they can cross the sea…*" (Las Casas 1581, 92v-93f; translated in Borah 1943, 60, emphasis mine).

While silk is never mentioned in the tribute paid to Maldonado at Achiutla, in the aforementioned Suma de Visitas it is stated that within the community there were many mulberry trees, from which could be produced a large quantity of silk.⁷ Though native species of mulberry trees existed in Mexico prior to the arrival of Europeans, they tended to be dispersed across the landscape. Dense concentrations of mulberry trees in Mexico during the early colonial period, as the Suma de Visitas suggests existed at Achiutla, typically owed to deliberate planting of species introduced from Europe (Borah 1943, 53-54). By the seventeenth century, the Dominican friar Burgoa (1934, 321) described more than two consecutive leagues of mulberry trees existing in the community. While my suggestion that lead mining in Achiutla was tied to silk raising is perhaps fairly tenuous, there is little doubt the silk industry was well-developed in the community by the late 1540s period to which the Suma de Visitas dates. It is virtually impossible to believe that Maldonado did not have a significant hand in introducing silk raising here, though likely not until after his misadventures in Tehuantepec, as silk production in the Mixteca does not appear to have started in earnest until after 1530. From there on, however, he likely profited from this industry considerably despite there being no mention of silk in tribute payments to him. As Borah (1943, 41) writes, while most schedules of tribute during the 1530s and 1540s did not allow for silk raising at all, encomenderos paid little heed to these regulations and frequently encouraged Indigenous communities to engage in silk production despite efforts by the Crown and Viceroyalty to protect Native communities from exploitation. At the same time, however, it was not only Spanish colonists driving the development and growth of the industry in Oaxaca. Indigenous rulers and other community authorities facilitated silk raising for collective profit in

communities like Tejupan independently of any Spanish encomendero (Borah 1943), and we will see shortly that residents of Achiutla were obligated to raise a certain amount of silk solely for the town's Native *caciques* by at least the latter half of the sixteenth century. It was during this time that the importance of silk to the local economy came to be more explicitly acknowledged in the documentary record. Similarly to the Postclassic period, when residents of Achiutla imported obsidian from abroad to engage in large-scale manufacture and surplus exchange of the material, during the sixteenth century Indigenous families brought silkworms and mulberry trees into the community to develop another significant industry.

The Silk Boom and an Expedition to Florida

By at latest 1550, though likely a few years earlier, Maldonado had passed away, and his widow, Isabel de Rojas, inherited his encomiendas as the couple had no legitimate children (Álvarez 1975, 323). Also by this year, Rojas had remarried another Spanish colonist, by the name of Tristán de Luna y Arellano. Luna originally hailed from Borovia and first arrived in New Spain in 1530 on a ship with Cortés, though he ostensibly returned to Europe at some point not long after, as documents have him coming back to Mexico in 1535, this time with his cousin Antonio de Mendoza, New Spain's first viceroy (Priestley 1936, 64-65). Already apparently well connected, Luna joined the Coronado expedition as a captain in 1540, ranging into the southwest and midwest of what is now the United States, gaining the title of lieutenant to the general in the process (ibid., 65-69).

By the time of their marriage, it appears that Rojas and Luna would have still held the vast majority of, if not all, the encomiendas that were initially granted to Maldonado. Reconstructing this is a bit of a muddled task, for a number of these communities, including Atlatlahuaca, Chalcatongo, Cuquila, Yucucuy-Tlazoltepec, do not appear in any records

attributed to Rojas and Luna (Álvarez 1975, 323). However, a 1585 document does list Chalcatongo, Cuquila, and Yucucuy-Tlazoltepec as still owing tribute to the couple's son, Carlos, one generation later.⁸ Luna was also granted half of the tribute from Justlaguaca as an encomienda, following his participation in the Coronado expedition, but this escheated to the Crown at approximately 1550 (Himmerich 1991, 186). Putting the latter aside, the encomiendas inherited from Maldonado nevertheless formed an estate for Luna and Rojas that remained exceedingly valuable, though particularly in the case of Achiutla, the nature of the tribute paid to them through their encomiendas changed.

Similarly to the previous section on Maldonado, here in Table 2 I summarize the tribute paid by these encomiendas to Luna in 1560 (at this point, his spouse Rojas had passed away), the earliest date for which such records exist, compiled in the *Libro de las Tasaciones*. In comparison with the records of tribute paid to Maldonado, apart from Chicomeguatepec, all of these encomiendas were paying substantially more to Luna in 1560. The most fundamental change that we see is in Achiutla, where the community was no longer paying a fixed amount of tribute in gold pesos, but with half the silk that the community produced, in addition to bushels of maize, and in lengths of *hierba*, which likely referred to grazing lands or feed for livestock.

While this is the first time that silk appears in a tribute schedule for Achiutla, it is clear that the community was raising it well beforehand, as in the 1560 schedule it is stated that the Indigenous community was also obligated to repair the multiple silk houses that already existed in the town at their own cost (González de Cossío 1952, 14).⁹ The community was likely obligated to shoulder this type of cost in part because they were reaping considerable profits from the silk industry. Not only were the town's residents entitled to collectively keep the revenues generated from half of the silk that they raised from 15 *libras* or pounds of seed, they

were also required to raise another pound and a half exclusively for the Indigenous *caciques* Doña Inés and Don Antonio (ibid.). These Native rulers may very well have played a more significant role in the development of the silk industry here than the encomenderos in some ways. Doña Inés appears to have been a rather important figure in general, and she was described as in attendance for the transferal of Achiutla's church to the Dominican order described at the beginning of this paper, two years prior to the establishment of the 1560 tribute schedule. Don Antonio is listed second in the outlining of the tribute schedule, and not at all in the document transferal of the church, suggesting he was of lesser importance. It may be that Doña Inés married him after the passing of her first husband-other documents indicate that Inés was the widow of a cacique who took the same name as Achiutla's first encomendero, Francisco Maldonado, and the two had a daughter, named Isabel de Rojas after the encomendero's spouse, who later went on to marry the ruler of the major silk producing center of Yanhuitlán.¹⁰ It is possible that Doña Inés and her first husband, Don Francisco, were instrumental in first bringing the silk industry to Achiutala, or perhaps this was initiated by their predecessors. Unfortunately, the documentary sources currently available do not allow this to be ascertained.

Returning to the 1560 tribute schedule, the 15 pounds of silk seed Achiutla was raising, plus the additional pound and a half raised for the caciques, was a considerable amount. For comparison, the neighboring community of Malinaltepec during this same year was only obligated to raise three pounds of seed in total (ibid., 221-222). Moreover, an earlier tribute record is known for Malinaltepec, dated to 1543, during which they are described as raising this exact same amount. We can assume fairly confidently then that, analogously to Malinaltepec, Achiutla was raising similarly large amounts of silk going back to the early 1540s, and perhaps as far back as the 1530s as well. Indigenous rulers and other community officials would have

helped maintain a measure of continuity in production over the years, even as the encomienda changed hands from Maldonado to Luna.

Thus, by 1560, Achiutla was then required to raise silk from 15 pounds of seed, with half of what was produced paid in tribute to Luna, and the other half kept collectively by the pueblo in their *caja de comunidad* or community chest, in an arrangement similar to what we see for the community of Tejupan in the aforementioned *Codex Sierra*, which documents funds going in and out of that town's community chest during the mid-sixteenth century. The obvious difficulty in assessing how much revenue a community like Achiutla was generating through silk production is determining just how much silk would have been raised from these 15 pounds of seed. In a 1564 tribute assessment for Tejupan (González de Cossío 1952, 468), Gonzalo de Las Casas, the encomendero of Yanhuitlán and author of the guide to silk raising mentioned previously, stated that 75 pounds was a typical yield from one pound of seed. Borah (1943, 66), however, argues that this was an overly optimistic estimate and suggests that 48.5 pounds of silk per pound of seed is a more realistic figure. Be that as it may, Borah's estimate was based on later data from Europe and it is unclear how well it applies to the colonial period Mixteca. There is perhaps a way to find an informed middle ground between these figures, however, if we indulge in a bit of arithmetic. Thanks to the *Codex Sierra*, we have figures for the amounts of silk raised in Tejupan from the years 1561 to 1564, summarized in Table 3. The year 1563 must be immediately thrown out as a statistical outlier, as in the codex itself it is written explicitly on page 55 that this was a disastrous year for silk raising in the town, as a plague led to many of the worms dying. Thus, taking the remaining three years, we find that the community was raising on average 483.5 pounds of silk per year. In the aforementioned 1564 tribute schedule for Tejupan, we also have the amount of seed that the town was supposed to raise their silk from, namely eight pounds

(González de Cossío 1952, 467-468). Assuming that over the rest of this four-year period they also raised their silk from this same amount of eight pounds of seed, we can then divide the aforementioned average yield of 483.5 pounds of silk by eight to arrive at an estimate of 60.44 pounds of silk raised per pound of seed, an amount which happens to fall nicely between the figures offered by Las Casas and Borah.

Returning to Achiutla, we can then multiply this figure of 60.44 pounds of silk raised per pound of grain by 15 to arrive at an estimate of 906.6 pounds of silk raised by the community in 1560, also summarized in Table 3. While we do not have a figure for the price of silk in Mexico in 1560, we do for the following year of 1561, also derived from the Codex Sierra, in the amount of 4.37 pesos of common gold per pound. Multiplying the estimated silk yield in 1560 at Achiutla by the latter figure, we can estimate that the community would have generated approximately 3961.84 pesos through the silk industry in that year. Finally, dividing this figure in half, then adding the 300 pesos that would have been the rough value of the maize that Achiutla would have also paid in tribute, we can estimate that Luna would have received approximately 2280.92 pesos of common gold from the community in 1560. This was a considerable amount of revenue, and Achiutla was likely the most lucrative of Luna's encomiendas. Taken together, during the years surrounding 1560, Luna was probably drawing more than 4000 pesos per year from his encomiendas in total, and he would have been receiving substantial amounts of revenue from them for at least a decade prior to this date, leaving him considerably affluent.

Relatively wealthy and well-connected, as well as a veteran of the Coronado expedition, Luna was appointed by New Spain's viceroy Luís de Velasco to lead an expedition to colonize the peninsula of La Florida (now the modern state of Florida in the United States) by

the beginning of 1558, amid fears held by the Spanish Crown that the region might be taken by the French (Priestley 1936). In fact, one of the arguments made on Luna's behalf for the appointment, in a petition for a salary, had to do precisely with his encomiendas, as it was written that he had "in this New Spain a good allotment of Indians in the name of his Majesty, and good estates, whereby he is able to maintain himself properly" (Priestley 1928 v. II, 205). Upon his appointment, it was then largely left to Luna to the preparations for the journey, which he evidently did at considerable financial cost to himself. In order to arrange everything for the expedition, he claimed to have spent over 24,000 pesos of his own funds, raising this money in part by selling off an estate in the city of Granada in Spain (ibid., 187). Revenue from his encomiendas in Oaxaca would have undoubtedly been put to this purpose as well, and in fact, he also was able to borrow more money from the royal treasury and other sources by putting these encomiendas up as collateral (ibid., 204-205).¹¹ Having done so was of a source of significant anxiety for Luna, as the two children he had with his by-then late wife Rojas were slated to inherit these encomiendas, and in his petition to the Crown for a salary he asked that this debt be remitted, such that it not be passed on to his heirs (ibid., 189). This request was apparently granted, as he continued to collect tribute from these communities in 1565, and in 1573 these encomiendas passed on to his son Carlos (Gerhard 1972, 285), as mentioned previously.

In the end, Luna was able to recruit some 500 soldiers (presumably Spanish), and over 1000 other men, women, and children—many of whom would have been Indigenous and of African descent—to participate in the expedition and to arrange everything else needed (Priestley 1936, 73). Ostensibly none of the Indigenous participants came from his encomiendas in the Mixteca, but were instead comprised of Nahuas from central Mexico.¹² The colonists set sail from Mexico in the summer of 1559, and landed at the bay of Ochuse, now known as Pensacola,

just over one month later. Yet only a few days after their arrival a hurricane struck and destroyed the majority of their fleet, along with the bulk of their supplies which were largely still onboard. The party remained in the region for well over a year, struggling to maintain the colony until eventually disbanding in 1561. Luna was licensed to leave by Spanish officials and departed for Havana, and then to Spain (ibid., 187-188). He eventually returned to Mexico and continued to collect tribute from his encomiendas through the 1560s.

Globalizing the Local

Much like Maldonado's shipbuilding ventures in Tehuantepec, Luna's attempt to colonize Florida largely resulted in failure. Neither of these projects had enduring direct impacts for the creation of the Spanish empire. Nevertheless, failure or success aside, the point I wish to make here is that this is how most such efforts at imperial expansion were carried out during the sixteenth century—as semi-privatized ventures funded in significant part by individual Spanish colonists, described by Restall (2003, 35) as essentially "armed entrepreneurs." Particularly following the fall of Tenochtitlan, when so many of Mesoamerica's Indigenous polities were divided up amongst these colonists as tribute-paying encomiendas, such communities provided important revenue streams that made subsequent imperial projects viable. In the case of the Luna Expedition, the voyage, albeit failed, was only made financially viable due to Native communities like Achiutla adopting an industry first developed in China and introduced to the New World by the Spanish via Muslim merchants who had earlier brought it to Granada.

In attenuating to micro-scale phenomena like the silk industry at Achiutla and tracing out their broader connections and implications, we can reveal aspects of globalization and Indigenous contributions to the construction of early modernity that we might otherwise not fully appreciate. While relatively recent studies have certainly moved beyond casting Europeans as the

lone "conquerors" of the Americas, examining the participation of Indigenous groups as well as both enslaved and free Africans in various episodes of conquest (e.g., Matthew 2012, Matthew and Oudijk 2007, Restall 2003), comparatively little attention has been paid to the economic roles played by such peoples in these developments. By untangling the webs of connections that the encomienda system fostered in Indigenous pueblos de indios on the margins of New Spain like Achiutla, and following the circulation of commodities like silk, we come to see how these communities played a significant part in financing transoceanic projects of empire that otherwise may never have been feasible.

The encomienda system was indeed exploitative of Native communities. In Oaxaca, Indigenous families in places like Achiutla were obligated to raise silk and pay much of it in tribute to Spanish colonists. Most commonly, they would then collectively sell the remainder of the fruits of their labor to Spanish craft guilds in colonial centers like Mexico City, Antequera, and Puebla, for profit. At the very same time, however, they directed much of these profits toward purchases of finished textiles from the latter producers in order to outfit their local churches with requisite liturgical vestments demanded by the newly imposed Catholic faith. In combination, the simultaneous demands of colonial taxation and liturgy formed something of a feedback loop of economic exploitation for sixteenth century Mixtec communities, all held together by the silk industry.

To illustrate how this was the case at Achiutla, it is worth returning to the 1558 document discussed in the introduction, which recorded an inventory the most valuable objects held within the community's church at the time. As noted at the start, a notable feature of the inventory is how this assemblage of objects was dominated by liturgical vestments made of

various types of silk. Following a mention of the church itself, the itemized list reads as

follows¹³:

- Two chasubles of crimson velvet with their adornments.
- One chasuble of white damask with its adornments.
- One black chasuble with its adornments.
- One cap of white damask.
- Two small bells to ring during mass.
- Two silver chalices.
- Three sleeves of the cross, two of crimson velvet, and the other of blue velvet.
- Two *andas* (frames for carrying a holy image) of velvet and another of feathers.
- A box of large flutes and eight trumpets.
- One large carpet for the front of the altar.
- Three mantles with which to cover the altar.
- Three corporals with which to say mass.
- Three crosses of golden wood.
- Two altar stones that are placed upon the altars.

These items, frequently made of the very same silk that was being raised in Mexico at the time, would have been purchased by the community at considerable cost, making it clear in part why Indigenous officials went out of their way to enumerate them in the document. Already compelled to produce the raw materials from which these objects were crafted, residents of Achiutla went out of their way to acquire finished products made of these materials at a handsome markup. For example, page 30 of the *Codex Sierra* shows that a single red satin chasuble, along with a stole and maniple, would have cost 50 pesos of common gold during the mid-sixteenth century (Fig. 4). In 1558, the same codex shows a black covering for a cross, also described using the Spanish loanword *manga* or "sleeve," being purchased for 53 pesos (Fig. 5). The three similar sleeves purchased by Achiutla, made of crimson and blue velvet, may have been more expensive still. Certain of the non-silk items would have been rather costly as well, as page 5 of the *Codex Sierra* shows the community of Tejupan purchasing a box of flutes for a notable 180 pesos (Fig. 6). As such, much of the profits that pueblos de indios like Achiutla reaped after meeting their tribute obligations through the silk industry were nevertheless

consistently funneled back into this exploitative system. It is perhaps no surprise then that, in 1565, when the amount of tribute that Achiutla was obligated to pay to Luna was readjusted, the community ostensibly insisted as part of the agreement that the encomendero would be responsible for providing everything necessary for the church and its adornment, rather than shouldering these costs themselves (González de Cossío 1952, 15).¹⁴

Nevertheless, despite such exploitation, in the ensuing decades residents of Achiutla continued to participate in the silk industry, enriching their community economically while continuing to willingly direct some of these profits toward even more lavish religious objects, taking advantage of the further transoceanic connections that their engagement with the silk trade fostered. This was best encapsulated in 1587, after the construction of a new Dominican church and monastery had been completed in the town. At this time, while apparently no longer obligated to provide funding for the adornment of their church, the Indigenous community nonetheless contracted the Master Spanish painter Andrés de Concha, who had worked in a number of other prominent towns in the region previously, to paint the retablos within the nave of the church for a rather considerable expenditure of 700 pesos (Frassani 2017, 29; Terraciano 2001, 236). It was precisely the silk industry that made such relatively lavish expenditures possible here. Yet this period of affluence was not to continue much longer in the Mixteca, however, for either the pueblos de indios in the region or for the encomenderos who continued to collect tribute for them. As has been well documented, the silk industry collapsed near the end of the sixteenth century (see Borah 1943, 85-101). Factoring significantly in this collapse were the aggregate effects of waves of epidemic diseases introduced from Europe that successively ravaged Indigenous populations from the time of contact, and brought the region to its demographic nadir at the end of the century, putting tremendous strain on the availability of

sufficient labor forces necessary to sustain the industry. At the same time, however, perhaps an equally significant factor was economic competition with China. Following the opening of the Manila galleon trade in 1565, more cheaply priced Chinese silk was imported to Mexico in increasing quantities over the rest of the century, reducing prices of the material on the whole, and further discouraging production in Indigenous communities (ibid.; Spores and Balkansky 2013, 148; Terraciano 2001, 235).

This collapse highlights how while Indigenous communities and encomenderos, as well as myriad other actors in New Spain, were all intimately involved in fostering connections that spread across oceans during the early modern period, the global dynamics and flows that these entanglements further spurred laid well beyond the control of any one of these groups. The connections forged through materials like silk, extending from Achiutla to disparate parts of the globe, brought considerable wealth into the community during the sixteenth century, but at the same time formed relationships of dependence that left people inextricably vulnerable to broader geopolitical developments that they could not foresee.

¹ The document is titled "A description of the welcome given by Mixtecs in Oaxaca to the first Dominican friars" (Dumbarton Oaks RARE-OVERSZ F1219.8.M59 D47 1558). While the document is dated to 1558, the handwriting might suggest that it is a later copy of an original (Nancy Farriss, personal communication, and I extend my gratitude to Farriss for her help with transcription of the document). A 1555 document (AGN, Mercedes, vol.4, 1555. "Para que don Tristan de Luna y Arellano libremente deje entrar a los religiosos...". f. 258v.) records an order from the Viceroy to Achiutla's encomendero Tristan de Luna y Arellano that the Dominican order be allowed to evangelize there after having been previously blocked from entering by the town's resident (presumably secular) cleric.

² The contemporaneous *Codex Sierra Texupan* from the nearby community of Santa Catalina Texupan, shows the latter community purchasing similar objects in both Mexico City and Puebla on pages 15 and 17, respectively, at considerable costs.

³ Tlaxiaco was a large and fairly prominent polity that the rulers of Achiutla were known to have maintained marital alliances with, both from the prehispanic codices and colonial historical records. Tzapotlan, meanwhile, likely corresponds to the modern community of Yucuañe, more commonly known in the early colonial period as Malinaltepec. Gerhard (1972, 288) points out that in 1548 one of Malinaltepec's two principal barrios is listed as Zapotitlan. I have found no record of another community in the region with a similar name.

⁴ The original document transcribed by Romero Frizzi (1996) is AGI, Justicia, 134, ff. 3r-4v.

⁵ Oddly, León (1982, 43) gives the amount of bushels as 160 in his translation of the document, which would make for a strange price on its face, and is likely a typographical error. In the Nahuatl text, the amount is given as "Chicom puali on mactlatli," clearly corresponding to the number 150.

⁶ The original document is a 1529 petition by Maldonado in a suit between him and Martín López, AGN Hospital de Jesús, leg. 300, exp. 107. A portion is transcribed in Zeitlin 2005, 277-278.

⁹ "y que a costa de la dicha comunidad se han de reparar las casas en donde se criare la dicha seda."

¹⁰ ÅJT, Civil, leg. 01, exp. 29. 1564. See also Spores and Balkansky 2013, 189-190.

¹¹ The Spanish text in Priestley 1928 v.II, 204 reads: "A gastado muy gra Suma De pesos de oro y para Ello a vendido muchas haziendas y enpeñado los tributos de los pueblos que tiene en encomienda".

¹² A 1560 document transcribed in Priestly 1928 v.I, 142-145 contains a request by indigenous Mexicans who accompanied the expedition and were in Florida at the time for a ship to return to Mexico. In it, they are described as "yndios principales y naturales de la cibdad de mexico y tatebula". "Tatebula" appears to be a mistranscription of Tlatelolco. Folio 8r of the 1565 *Codex Osuna* also describes the participation of indigenous Nahuas of Mexico in the expedition to Florida.

¹³ See note 1. The Spanish text of the inventory portion of the document reads as follows:

Y se entregaron primeram[ent] en el cuerpo de la iglesia sacristia capilla y patio

2 en dos casullas de tercipoelo carmesi con todos sus adereços

3 una casulla de damasco blanco con sus adereços

4 una casulla negra con sus adereços

5 una capa de damasco blanco

6 dos campanas pequeñas para tañer a misa

7 dos calices de plata

8 3 mangas de cruz, las dos de terciopelo carmesi la otra de terciopelo azul

9 dos andas de terciopelo y otra de pluma

10 una caxa de flautas grandes y ocho trompetas

11 una alfombra grande para adelante del altar

12 3 manteles con que se cubren los altares

13 3 corporales con que se dice misa

14 3 cruzes de palo doradas

15 dos aras que estan en los altares

¹⁴ "Y es cargo del dicho encomendero de proveer lo necesario para la sustentación de los religiosos que reidieren en el monasterio del dicho pueblo, conforme a lo ordenado y mandado por esta Real Audiencia, y lo demás necesario al ornato y servicio del culto divino." Another notable change from 1560 is that in 1565, the community was no longer obligated to pay half of the silk they raised (now from 17 pounds of seed rather than 15) but instead a flat amount of 1365 pesos and six tomines of common gold per year.

 ⁷ "Hay muchos morales de los cuales se puede sacar mucha cantidad de seda." (García Castro 2013, 68).
⁸ AJT, Protocolos, leg. 01, exp. 02.08, fojas 11r-12r. Pérez and Luna (2016, 32) speculate that some of Maldonado's encomiendas may have escheated back to the Crown during the 1520s and 1530s, but the authors were ostensibly unaware of the latter document that indicates various of these were eventually inherited by the son of Maldonado's widow.

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Abbreviations

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AGN: Archivo General de la Nacion, Mexico City, Mexico.

AJT: Archivo Juridico de Teposcolula, Oaxaca de Juarez, Oaxaca, Mexico

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Tables

Table	1
Lanc	

Pueblo	Tribute to Maldonado	Gold/year to Maldonado
Achiutla	Every 60 days: 8 pieces of	480
	gold @ 10 pesos each.	
	Maintain half of labor gang	
	in the mines (lead mines).	
Atoyac-Yutacanu (Atoyaque)	Every 60 days: 2 pesos in gold	12
	powder, like those of	
	Tlaxiaco	
Chicomeguatepec (Totolapa,	Every 30 days: 25 Indians go	200
Totolapilla, near Nejapa)	to the mines; every year: 200	
	cargas of maiz; every 30	
	days: 40 pairs of sandals	
Mitla (Mitlatongo)	Every 60 days: 4 pieces of	240
	gold @ 10 pesos each.	
	Maintain other half of labor	
	gang in the mines.	
Atlatlauca (San Esteban	NA	NA
Atlatlahuaca)		
Chalcatongo	NA	NA
Cuicuila (Santa Maria Cuquila)	NA	NA
Ocotepec	NA	NA
Tecomastlaguaca (near	NA	NA
Tlaxiaco)		
Yucucuy-Tlazoltepec (near San	NA	NA
Mateo Peñasco)		

Table 2

Pueblo	Tribute to Maldonado	Gold/year to Maldonado
Achiutla	Every year: half the silk produced from 15 pounds of silk seed, 300 bushels of maize, two measures of fodder	300 + ?
Atoyac-Yutacanu (Atoyaque)	Every year: 36 pesos of common gold, 18 bushels of maize	54
Chicomeguatepec (Totolapa, Totolapilla, near Nejapa)	Every 30 days: 30 Indians go to the mines; Every year: 200	200

	loads of maize, 40 pair of sandles	
Mitla (Mitlatongo)	Every year: 842 pesos of common gold, 421 bushels of maize	1263
Ocotepec	NA	NA
Tecomastlaguaca (near Tlaxiaco)	NA	NA

Table 3

Silk yield for Tejupan, 1561-1564, raised on eight libras (pounds) of silk seed:

Year	Yield in libras of silk	Yield/8 libras silkworm seed
1561	710 lbs	88.75
1562	510 lbs	63.75
1563	120 lbs	15
1564	230.5 lbs	28.8

• Average silk yield (excluding 1563) per libra of seed at Tejupan: 60.44

- Achiutla, raising 15 libras per year (15 x 60.44): **906.6** pounds of silk thread per year.
- Price of silk thread in Oaxaca in 1561: **4.37** pesos of common gold.
- Average revenue from silk per year at Achiutla (906.45 x 4.37): **3961.84** pesos of common gold.
- Half the silk paid to Luna in tribute (3961.19/2): **1980.92** pesos of common gold.
- Additional 300 bushels of maize (1 peso per bushel): 300
- Total estimated tribute paid to Luna, 1560: 2280.92 pesos of common gold.

Figure Captions

Figure 1: Document dated to 1558 describing the "donation" of Achiutla's church and associated vestments to friars of the Dominican order. Photograph courtesy of Dumbarton Oaks Research Library and Collection.

Figure 2: Map of Oaxaca, showing location of Achiutla and other major communities in the region. Drawing by the author.

Figure 3: Folio 45r of the *Codex Mendoza*. Toponyms on the left margin depict, from top to bottom, Tlaxiaco, Achiutla, and Tzapotlan.

Figure 4: Depiction the purchase of a red satin chasuble, stole, and maniple for 50 pesos on page 30 of the *Codex Sierra*.

Figure 5: Depiction the purchase of a black covering or "sleeve" (*manga*) for a cross for 53 pesos on page 19 of the *Codex Sierra*.

Figure 6: Depiction the purchase of a box of flutes for 180 pesos on page 5 of the Codex Sierra.

Table Captions

Table 1: Tribute paid to Francisco Maldonado in the mid-sixteenth century as documented in the *Libro de los Tasaciones de los Pueblos de la Nueva España* (González de Cossío 1952).

Table 2: Tribute paid to Tristán de Luna y Arellano in 1560 as documented in the *Libro de los Tasaciones de los Pueblos de la Nueva España* (González de Cossío 1952).

Table 3: Estimating the amount paid in tribute by Achiutla to Luna in 1560.