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Canary Red: Preserving Cochineal and Contrasting Colonial Histories on Lanzarote

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**Canary Red: Preserving Cochineal and Contrasting Colonial Histories on
Lanzarote**

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of the College of William and Mary in Candidacy for the Degree of
Master of Arts**

Historical Archaeology

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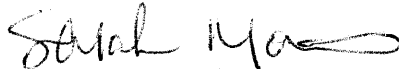
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ABSTRACT

The Canary Islands were a model for the colonization of the Atlantic World. Almost one hundred years of inter-European land grabs and eventual Spanish conquest set the stage for Europe's expansion westward. Despite this, the archipelago fades from Atlantic-spanning narratives in the 19th century. There is much that can be learned about Atlantic colonial commodity production and exchange from the Canary Islands, both from the early colonization period and in later centuries, but there has been scant research on the Canary Islands as part of this broader Atlantic network. More importantly, there is little research connecting historic commodity production and external political control in the Canary Islands to contemporary discourses on colonialism. The people of this archipelago have faced many booms and busts in response to volatile markets for Atlantic commodities—exemplified by the sudden collapse of the cochineal market in the 19th century and the attendant economic downturn that continues to this day. In this paper, I argue that Canarians use cochineal to reference their fluctuating place in colonial and Atlantic histories and curate the things associated with its ongoing production to fix local histories to the landscape.

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CHAPTER 1: INTRODUCTION

The radical failure of the Spanish colonial project left many formerly colonized islands without adequate infrastructure to maintain their local economies. This is particularly true for the Canary Islands, a small archipelago off the northwest coast of Africa. The Canary Islands were conquered by Spain in the late 15th century after over a century of inter-European disputes and colonization attempts (Abulafia 2008). Stevens-Arroyo (1993) describes the colonization of the archipelago as an initial success for Spain that proved unsustainable in the face of simultaneous efforts to manage conquests and colonizations in the Americas. Once the natural resources of the islands were depleted and the population had expanded, Spanish imperialists introduced a series of commodities to the archipelago and forcibly encouraged their production in order to maintain the geopolitically important port network that the Canarian archipelago provided (Mercer 1980).

The introduction of these commodities to the islands and the rhythm of these incursions reflected economic booms or busts elsewhere in the Atlantic. For example, early colonists cultivated sugarcane, a valuable commodity in the European market (Mintz 1985: 32). As Brazilian sugarcane production boomed in the 16th century, however, Canarian production waned and islanders instead focused on the production of fortified wine. Canarian wine was successful for many generations, but it too suffered setbacks with the expansion of wine production in the Portuguese island of Madeira, as well as in other Spanish colonies (Hancock 2009). Several Canarian islands began cultivating bananas

when the market for wine contracted in the 19th century (Fernandez-Armesto 1982: 70), though this crop flourished mostly in the southern, tropical islands (C. Perera, personal communication, 8/12/2013). Around the same time, cochineal, a parasitic scale insect that produces a red dye, was introduced throughout the archipelago and, contrary to bananas, it flourished only in the northern, drier islands (Greenfield 2005). Production of these commodities has now decreased to supply only local needs. The Canary Islands were once home to a bustling agriculture-based economy (Fernandez-Armesto 1982), though this is now only evident by the unused agricultural spaces, subsistence farms, and garden plots.

Material memories, via the farms of historic commodity production, are still present on the islands and draw visitors from near and far. Production sites feed into tourism, the main revenue stream for the islands, yet present a fickle revenue source in our current global economy. In addition to this, the contemporary people of the Canary Islands balance their desire to succeed in a global market with a desire to maintain a well-nourished, deep-rooted Atlantic heritage. Centuries of colonization (through land grabs, religious missions, and restructured political organization) severed the connections between the people, their land, their history, and their ability to impact their future. As a case study, the political economy of cochineal parallels the rise and fall of the Spanish empire and the ensuing Spanish turmoil and austerity. More importantly, cochineal entangles the social fabric of Canarians and their struggle to assert their political, social, and economic importance, both tethered to and detached from peninsular Spain.

American cochineal was, for several centuries, a significant source of red dyestuff valued for its permanence and vibrancy. Following its conquest of Mexico, Spain maintained a secretive and powerful monopoly over the commodity and forbade production outside of the insect's native Oaxaca. Mexican independence in 1821 left Spain desperate to find a new location for their cash crop. Largely failing on the Iberian Peninsula, cochineal flourished in the warm, arid environment of the Canarian islands of Fuerteventura and Lanzarote. Initially, Canarian farmers were resistant to adopt cochineal, as it required a major overhaul of landscape and agricultural infrastructure, but Spain drove down the profit for other locally-grown commodities to force its cultivation. Despite early opposition, and just a few decades after its introduction, the Canary Islands would, for a time, become the largest producer of cochineal in the world with a record export of 2,722 tons in 1875 (Cardon 2007: 631).

Unfortunately, the Canarian cochineal boom occurred almost concurrently with the discovery, in England and Germany, of an effective method to synthetically replicate the deep crimsons and scarlets of cochineal (Greenfield 2005: 221-223). This method involves the mechanical extraction of pigment from coal tar, rather than the manual harvesting and processing of cochineal, and vastly advanced Europe's ability to produce crimson in large quantities and at a low cost (Greenfield 2005: 227). The Canarian market for cochineal went almost completely bust, though cochineal producers began marketing and using the dye for products other than textiles and paint pigments, namely food and cosmetic colorants (Gerber 1978: 31-32). This flexible and productive response could not

make up for the fact that the huge financial outlay and irreversible conversion to cochineal fields left many farmers without a source of income.

It is because of this that cochineal has become a symbol of Canarian resistance against imposed government controls and a lesson in Canarian independence. Today, contemporary farmers and historians on Lanzarote resist the historic state-enforced production of agricultural commodities and the present state-controlled production of cultural and tourist-focused commodities in part through preserving the history of cochineal on the landscape. The Asociación Milana, a heritage organization dedicated to the preservation of the cochineal industry, does this through teaching schoolchildren and community members to cultivate and produce cochineal. The resistance inherent in these actions is evidenced by the fact that cochineal lacks profitability, both politically and socially, but for Lanzarote, the value of cochineal is more than economic. The Asociación Milana mobilizes pride in cochineal and Lanzarote through these heritage practices in the hope that it will net resurgence in the local cochineal industry.

To study this “memory work,” or the social practice of creating and shaping memories (Mills and Walker 2008), as it relates to the heritage and postcoloniality of cochineal, I traveled to Lanzarote in August 2013 to collect data on the physical and social production of cochineal through both archaeological survey and interviews with local farmers and historians. I focused my research on the historic cochineal production area between Mala and Guatiza and, in particular, on the abandoned Curbelo estate to the east of both villages.

Interviews with local cochineal farmers (descendants of the first Canarian families to adopt cochineal), members of the heritage association dedicated to the preservation of cochineal, and other residents conveyed contemporary perspectives largely absent in the historical and archaeological record. As discussed below, my survey of the island's museums and tourist attractions provided valuable information on the portrayal of Lanzarote culture and history to foreign visitors. The materiality of cochineal, and the tools and methods of processing, have changed little over time. Although Canarians are highly interested and invested in preserving cochineal production and affecting the dominant narratives of Lanzarote's history, it has been difficult to engage a larger local audience, particularly as cochineal cultivation is no longer an economically viable industry for the island.

Lanzarote is replete with cultural and historic sites but the potential for site interpretation is largely limited by its UNESCO designation, the goals of the tourist industry, and the historic narratives of the Canary Islands. UNESCO classifies Lanzarote as a biosphere alone, rather than a collection of world heritage sites (UNESCO 2007). UNESCO's Man and Biosphere Programme requires the cooperation of people to ecologically preserve the places in which they live (UNESCO 2014), which in itself is a noble enterprise. However, Lanzarote is both ecologically and historically important and the focus on ecology alone obscures many historical narratives. The Society for the Foreign Promotion of Lanzarote, a joint government and commercial entity, sponsors and directs tourist traffic to specific sites and narratives (see Sociedad de Promoción Exterior

de Lanzarote 2015). Channeling tourist traffic in this way helps to preserve the island's ecological interests and, with the addition of government and commercial funding, creates consumer experiences that will encourage increased visits and economic return. Still, the lack of attention and funding paid to alternative historical and agricultural narratives presents a message to visitors and residents alike that their perspectives are not valuable.

In addition to these internal and external portrayals and prohibitions on inclusive historical interpretation, the disciplines of postmedieval history and archaeology have been locally disconnected by the political goals of previous scholarship. Enlightenment and Romanticist scholars (of predominantly Spain, France, and Germany) sought to prove that the indigenous inhabitants of the Canarian archipelago were biologically and culturally similar to the peoples of Europe as a means of justifying European political control of the islands (Farrujia 2005). The use of archaeology to study pre-conquest Canarians alone obscured the impact that historic-era scholarship would have had on the archaeological practices of the present. Canarian archaeology now focuses on redressing the historic-era scholarship of the prehistoric past (Farrujia 2005; 2014) instead of enabling scholars and community members to use both disciplines to engage discussions of Lanzarote's colonial history.

To address these gaps in Canarian research and representation, it is critical to understand not just how to commodify cochineal heritage for Western European tourists, but how to argue for global recognition of the importance of Canarian cochineal heritage and how this heritage can foster community-led

efforts for site preservation and education. Cochineal, while largely forgotten by modern industry, provides resources for efforts to elevate Lanzarote heritage and cultural preservation to a larger, academic audience. This study addresses cochineal at two scales: 1) as a the prime mover that integrated the Canaries into the Atlantic political economy and 2) as the local common ground on which Canarians negotiate their relation to one another, a glorious cochineal past, and the oppression of metropolitan control.

CHAPTER 2: BACKGROUND

Historical Background of the Canary Islands

The Canary Islands have been neglected in the wider archaeological literature on the Atlantic World though they have been an important part of this network at least as early as Columbus's first expeditions to the Americas (Abulafia 2008: 10). Additionally, the peoples of the Mediterranean and Northern Africa had been in contact with the archipelago for at least at millennium (Farrujia 2005). The Canary Islands enter the written record in the 1st century in the works of Pliny the Elder (Stevens-Arroyo 1993: 521) but the archipelago is generally ignored until a missionary expedition to Lanzarote in the late 14th century (Mercer 1980: 155). Military and missionary expeditions set out as early as the late 13th century from Genoa, Majorca, and Portugal in order to spread Christianity and expand the territories of political religious entities (Abulafia 2008: 65-66; Tejera Gaspar and Vallejo 1992: 121). It is not until 1402, however, that a French military expedition began nearly a century of inter-European land grabs and

disputes (Mercer 1980: 160), culminating with Spanish conquest of the archipelago in 1496 (Fernandez-Armesto 1982: 3). Just before the close of this conquest period, Columbus departed from the Canary Islands and began Spain's expansion west across the Atlantic.

Lanzarote, as the northernmost island, was the first to experience European landfall in the colonial era, but it was quickly passed over for the more populous and politically-organized islands of Gran Canaria and Tenerife, which were also more difficult to conquer (Stevens-Arroyo 1993: 523). It was because of early conflicts with Europeans that the Spanish crown invested more time and resources in the colonization and subsequent economic development of the southern islands of the archipelago (Stevens-Arroyo 1993: 523). The treatment of Lanzarote parallels the treatment of the Canary Islands as a whole—though they were integral in the formation of the Atlantic world, the archipelago all but disappears from the written record following the colonization of the Americas.

This disappearance is due in part to how relatively easily and quickly, compared to the Americas, the Canary Islands were integrated into European empires. Stevens-Arroyo (1993) cites the similarities in diet and religion as possible reasons integration occurred more easily than it did in Hispaniola or Mexico. Additionally, Spanish colonists in the Canary Islands were encouraged to intermarry with the indigenous population (Fernandez-Armesto 1982). By the time Spain completed its conquest of the archipelago, the inhabitants were known collectively as Canary Islanders, rather than by any indigenous or European identities (Tejera Gaspar and Vallejo 1992: 121). This largely resulted

in the creation of the Canarian labor class, as lands and titles were predominantly given to wealthy peninsular Spaniards (Farrugia 2005). This is but one of many ways Spain maintained a separation between its mainland and the Canary Islands.

Agriculture was a particularly useful method for Spain to control the land and population of the Canaries. For the islanders themselves, agriculture was both subsistence and profit. Farmers attained agricultural success by deftly changing from crop to crop to match market fluctuations. The islands' natural resources, such as wood and the lichen-based orchil dye (Fernández-Armesto 1982: 71-74), were quickly depleted and a series of crops were introduced to varied success. As previously mentioned, sugar was introduced early and was widely profitable until the expansion of sugar in Brazil. Wine was exceedingly profitable for centuries but suffered from the expansion of wine on other Atlantic markets and from Spanish pressure to convert to cochineal. The brilliant red dyestuff was a highly valued luxury item and, once farmers adopted this crop, they gained the prestige and wealth afforded by its production.

Historical Background of Cochineal

Cochineal is a parasitic scale insect that grows on a variety of host plants and in a variety of regions, depending on the particular type of cochineal. There are several related variants that go by the same name, including Polish cochineal (also called St. John's Blood) and Armenian cochineal (Delamare and Guineau 2000: 70-71). These last two differ from the American variant in that they prefer

grass or shrub-like host plants (Cardon 2007). American cochineal develops on the pads of the Prickly Pear cactus, of which there are also many varieties, though *Opuntia ficus-indica* has proved to be the most effective (Cardon 2007). American cochineal is native to tropical and subtropical America, with both Mexico and Peru having been identified as possible locales of the earliest domestication (Phipps 2010).

In general, insect dyes produce a much more light-fast and heat-fast color than plant-based dyes but are substantially more expensive to produce. As with plant dyes, the organic material in insect dyes must be boiled, crushed, and dried; what primarily differs is the labor required to harvest an adequate quantity of material for dyeing (Vázquez et al. 2007: 133). In particular, American cochineal grows on cactus pads instead of the grass, shrub, or tree branches of other variants, and, while the insects must still be individually picked, it is somewhat less difficult to harvest them from the flat cacti pads (Robinson 1969: 25). Nevertheless, it still takes 70,000 insects to create one pound of dye (Robinson 1969: 25).

Harvesting techniques have changed little from the early days of cultivation. The cochineals are scraped from the cacti pads using a long handled tin scoop and collected in a cloth sack or a small tin box (called a *milana*, see Figure 1). Farmers boil the cochineals and then spread them on metal screens to dry. Despite the ease that the ability to scrape, rather than pick, affords to harvesting cochineal, the prickly *Opuntia* spines may be to blame for the lack of more industrial methods of cultivation. Little to no architectural evidence of

cochineal processing remains on the landscape of Lanzarote, suggesting that cochineal has been a cottage industry since its introduction.

After harvesting, the cochineal is rehydrated, and the liquid dye can be incorporated into a number of products; depending on the mordant, cochineal can produce a variety of brilliant reds (Greenfield 2005). In the colonial era, cochineal was predominantly used as a textile dye; contemporary Canarians now create artisanal products for sale and, when market conditions are favorable, sell the dye to cosmetics or beverage manufacturers (C. Perera, personal communication, 8/12/2013). Given the light-fast and heat-fast properties of this particular dye, the color produced from this insect can be preserved for centuries. Active conservation efforts were not necessary, however, as cochineal could produce far more brilliant reds than the more common, plant-based madder dye (Greenfield 2005; Phipps 2010). This brilliance made cochineal a luxury commodity, abetted by the Spanish empires fierce attempts to maintain a monopoly on its trade.

Throughout the Spanish-colonial period in Mexico, cochineal was an extremely valuable commodity (Greenfield 2005: 107) and, in fact, cochineal was the third most profitable export from Mexico, after gold and silver (Gerber 1978: 5). Cochineal was so economically important that Spain attempted to prohibit other Europeans from visiting Mexico. Despite this, many European agents continually attempted to obtain the cochineal insects and host plants or to buy American cochineal dye directly (Greenfield 2005: 108). The covert nature of these expeditions (in addition to Spain's efforts to create confusion about

cochineal) sometimes led to disastrous results. The English introduced cochineal to Australia but were unable to keep the insects alive. Moreover, the cactus colonized a large swath of land, forcing an *Opuntia* eradication in 1920 (Greenfield 2005: 188). Spain had tried introducing cochineal to the southern regions of the Iberian Peninsula but it was only in the Canary Islands, with an environmental tailor-made to this fickle insect, that the industry flourished.

Agricultural and Environmental Background of Lanzarote

Lanzarote is the north easternmost island in the Canarian archipelago, part of the Macaronesia subregion of the Atlantic, and located approximately 80 miles west from the coast of Morocco. It is heavily favored by trade winds from the north and east wind from the Sahara. The island is semi-arid and native plants are frequently low, thin shrubs. A volcanic range runs from north to south down the center of the island and the remaining landscape is covered with undulating hills. There is a large plain on the south end of the island largely dedicated to the production of wine and to a national park. This park, called Timanfaya, is the site of the last major volcanic eruptions between 1730 and 1736. The settlements destroyed by this eruption are preserved within the boundaries of this park (Sociedad de Promoción Exterior de Lanzarote 2015). Agriculture and animal husbandry are present throughout the island, though contemporary production is concentrated on the southern plain.

A large portion of Lanzarote presents evidence of historic agriculture (prehistoric agriculture remains evident in less navigable areas), and is marked

by the materials and methods used for water and soil retention. Farms and the demarcated plots within them are bounded by low walls of locally harvested lava rubble. These lava walls protect the plots from the wind and aid with water retention. Some walls are less than 0.5 m wide, while others are 1 m or more wide and include a narrow footpath along the top. Some lava walls, mostly found in villages, are covered and filled with a lime paste and whitewash to make an impervious concrete. A notable exception to the predominance of lava walls along plot borders are the small semi-circular walls used by contemporary vineyards, which are used for this crop alone and are unique to the wine industry as a whole (Champeney 2012). While the rectangular walls are perhaps less unique, their ubiquity asserts them as an iconic aspect of Lanzarote agriculture. Lava rubble that has been processed into fine to very fine, ash like pieces is called *picon*. This material is used to cover the arable land to additionally aid with water retention and prevent erosion. Contemporary irrigation is achieved by slowly percolating water through thin rubber tubes placed along the ground with intermittent piercings. Evidence of similar, historic methods is not readily apparent on the landscape, however, there is evidence of water collection cisterns, wells, and low channels used to convey water. In addition to water retention, the walls and *picon* layer also protect plants from the deposition of sand blowing off the nearby Sahara.

Though it was introduced across the Canary Islands and throughout the island of Lanzarote, cochineal is now concentrated in the area between Mala and Guatiza in the north east section of the island. In its heyday, this region, on the

borders of the Teguisse and Haria municipalities, was the epicenter of cochineal production (C. Perera, personal communication, 08/12/2015), as the temperamental cochineal favored this region above others on the island. Today, however, this area is less populated, sees little tourism, and there is less agricultural strain on this part of the island for other crops. I chose it as the focus of my research due to potential for preservation of the historic production of cochineal and the possibility of encountering alternative narratives of Lanzarote history.

CHAPTER 3: FIELDWORK

I traveled to Lanzarote in August of 2013 with two research goals: 1) to study contemporary cochineal production with the intent of addressing gaps in the historical narrative and 2) to see how the portrayal of Lanzarote history might differ from contemporary Canarians' perspective. To accomplish this, I planned to complete a small archaeological survey of a historic domestic cochineal cultivating and processing site in the hopes of identifying evidence of inter-European trade (despite historical record implications of insular Spanish control). I also planned to complete an ethnographic survey of local museums and tourist sites to catalog popular portrayals of Lanzarote history. Additionally, and most importantly, I intended to speak with members of the Asociación Milana and other local Canarians to learn more about cochineal processing and preservation efforts, and to inquire about local perspectives on the relationship between cochineal preservation and current Canarian politics.

My research centers around one estate within the boundaries of the historic cochineal production zone (see Figure 2), located in the western end of parcel 341 within the northern edge of the Teguisse Municipality. This estate, directly east of Mala and Guatiza and halfway between those villages and the coast, stands as a testament to the wealth and prosperity that cochineal once brought to Lanzarote. The estate is situated atop a hill with an expansive view of the fields rolling away toward the Atlantic, and the nautical trade route. From this vantage point, the estate's owners could easily see ships traveling to the main port at Arrecife, the capital and largest city on Lanzarote. Images from the Catastro office of the Ayuntamiento Teguisse (Figures 3-4) display both the estate within parcel 341 as well as the surrounding parcels that were once part of this large farm. The Curbelo family developed this farm in the 18th century and occupied this site until the mid-20th century (F. Curbelo, personal communication, 08/26/2013). This estate, now removed from the main tourist centers of Lanzarote, but abutting the villages of Mala and Guatiza, serves as a lasting monument to the historic production of cochineal.

I surveyed two small, walled plots directly north and south of the house and walked much of the surrounding area within the Curbelo farm for comparison. While many artifacts were present on the surface of the ground, I concentrated my observations on the ceramics due to their quantity and preservation. Additionally, more contemporary uses of this area, particularly near the house, have resulted in a large quantity of modern metal and glass detritus, complicating the identification of historical material.

Rough and refined earthenwares were most common throughout the estate with a few instances of porcelain. The ceramic sherds were small, mostly under 10 cm², but large enough to permit initial identification. The ceramics exhibit designs from as late as the 19th century and possibly as early as the 17th, including polychrome tin glazed earthenware, annular ware, Iberian olive jar and other large utilitarian vessels (Figures 5-8). The yard to the southwest served as the family's personal garden, nearest to the cistern (Figure 9, in the lower left) which stored water for this and the surrounding area. Artifacts in this plot, as opposed to the northern yard and surrounding farm, were sparser, smaller, and in general, more utilitarian than decorative. Preliminary analysis suggests that the artifacts follow a classic pattern of concentrating in sheet middens near preparation areas and having been swept to the edges of the yard. The family Curbelo developed a number of products, cochineal among them; Figure 10 demonstrates that not all of the plots surrounding the estate contain cochineal, though according to Sr. Curbelo, a few of the cactus plots had been cleared in the past. Figure 11 is a view from the north of the house showing a small plot with a circular feature. This area, with the full advantage of trade winds blowing from the north, originally served as the family's yard. A survey of the yard showed a higher concentration of artifacts than in other surrounding plots and a greater diversity of ware types and decorations. While the ceramics present spanned the peak of the cochineal-producing era and evidenced a prosperous estate, it is difficult to understand the precise impact of the introduction of cochineal from the archaeological record alone.

While even a cursory survey of the Curbelo estate demonstrates its erstwhile wealth and prominence, the impact of cochineal is most keenly felt in the contrast between the archaeological evidence and the present use of the land. Most of the cochineal plots in and around this area are no longer in use. Clearing the cactus is labor intensive, and with no other agricultural or commercial demands former cochineal-producing plots are overgrown and difficult to navigate (Figure 12). Well-tended plots are used predominantly for collecting the fruit of the *Opuntia* (called *tuna*). Despite my ambitions of meeting many cochineal farmers and learning cochineal processing in the fields, I learned that only a few older Lanzarote farmers collect and process cochineal, and only in their spare time (C. Perera, personal communication, 08/12/2013). I spoke with a local grocery store owner who showed me some processed cochineal he kept in his store for possible sale. Upon trying to locate other farmers, I learned that several had passed away or were unable to continue farming the land. The predominant portion of cochineal plots throughout Lanzarote are overgrown and deserted. This is in stark contrast to cochineal's 19th century boom and evidences that strong impediments exist to fostering a thriving contemporary cochineal industry on Lanzarote.

Preliminary analysis of the ceramics throughout both yards and in the surrounding farm is suggestive, but not conclusive, of broad inter-European trade. Conversations with local Canarians, especially Sr. Curbelo and Chana Perera of the Asociación Milana, were better indicators of the relationships between Canarian farmers of cochineal and the broader Atlantic network.

The members of the Curbelo family were successful farmers, skilled at capitalizing on the fluctuating agricultural opportunities on Lanzarote. The location of the Curbelo estate was unoccupied and undeveloped when Sr. Domingo Curbelo's family first developed the farm in the early 19th century. According to Sr. Curbelo, the local government was happy to allow the Curbelo family to develop the farm as the state greatly encouraged development of the land (F. Curbelo, personal communication, 08/26/2013). When news of cochineal's profitability reached the Curbelo family, they quickly began to plant *Opuntia* cactus and cultivate cochineal. Sr. Curbelo is fiercely proud of his family farm, citing the cistern in the family garden that was large enough to provide for the family and others in the community, even in times of heavy drought (F. Curbelo, personal communication, 08/26/2013). He also recounted traveling to a Cinzano factory (the makers of Campari) to sell the cochineal he developed and how the scientists there told him that his cochineal was of exceptionally high quality, 2-3 times more pure than the cochineal coming from Mexico (F. Curbelo, personal communication, 08/26/2013). Despite this, as the generations above Sr. Curbelo, passed away, the curation of the estate was left to a large group of descendants without the time or resources to continue cultivating and harvesting cochineal and other crops at the farm. Sr. Curbelo's family history is mirrored by the history presented by Chana Perera at the Asociación Milana.

Chana Perera, President of the Asociación, is a retired schoolteacher and full time advocate for cochineal. The Asociación Milana is headquartered in a local primary school in Mala, in the historic cochineal production zone. They

produce a number of cochineal derived products for sale and routinely exhibit their products and cochineal tinted artwork in local museums. The Asociación created a heritage trail that runs through the historic cochineal production area from Guatiza to Mala which they promote on their website and occasionally use for tours (Champeney 2012: 22-23). They not only distribute educational materials in schools and local markets, but also train a number of underemployed constituents to produce cochineal (C. Perera, personal communication, 08/12/2013). As far as they are able, the members of the Asociación also tend to the cochineal plots surrounding the heritage trail and process the cochineal cultivated there for education and sale. Chana has worked tirelessly to create a diverse organization of biologists, farmers, educators, artists, and other community members to produce research, art, educational materials, and commercial products. These efforts are of vital importance to increasing the number of community members invested in cochineal and involved in its production, and are instrumental to the Asociación's mission to, once again, create a thriving cochineal industry on Lanzarote.

The Asociación Milana is but one of many tourist attractions on Lanzarote, but one of the least visited. Lanzarote, via their government webpage (Sociedad de Promoción Exterior de Lanzarote 2015) and to European travel companies, promotes seven main tourist attractions, the "Centres of Art, Culture, and Tourism," and places like the Asociación Milana can be difficult to find. To understand more about this disconnect and varying portrayal, I visited five of the seven tourism centers (Cueva de los Verdes, MIAC – Castillo de San José,

Mirador del Río, and the Montañas del Fuego – Timanfaya) and an additional five museums (the Museo Agrícola el Patio, the Casa Museo Monumento al Campesino, the Museo de Aloe de Lanzarote, the Museo El Grifo, and the Museo de la Piratería). The state and commercial sponsored museums and attractions present information in Spanish, English, and German and are lively locations heavily frequented by tour buses and groups. Museums focusing on agricultural themes (the Museo Agrícola el Patio, the Casa Museo Monumento al Campesino, the Museo de Aloe de Lanzarote, and the Museo El Grifo) were surprisingly empty and quiet by contrast. The Castillo de San Jose, the “history” museum of Lanzarote is largely closed to the public with no posted hours. The Museo de la Piratería, located in the Castillo de Santa Barbara, had formerly been a museum dedicated to the immigration of Canarian peoples between the archipelago and the Americas, but was recently renovated and became a museum dedicated to the history of pirates on Lanzarote.

In contrast, the historical narratives presented throughout the busiest museums focused on the most sensationalist, and violent, periods of Lanzarote history. The Montañas del Fuego, in the Timanfaya National Park, take visitors on a bus tour through the part of Lanzarote covered by the volcanic eruptions of the early 18th century. Visitors are guided through the park with a musically-choreographed and dramatic narration, which details the ecology of the park, the volcanic environment of Lanzarote, and the volcanic destruction of the villages within Timanfaya. Missing from this narration is the immediate and long-term impact of dramatic landscape changes on the people of Lanzarote. The

agricultural museums, with their efforts on more human and individual portrayals of Lanzarote history, were often as dusty and deserted as the cochineal plots themselves.

This narrow, curated portrayal of Lanzarote is largely the legacy of César Manrique, a Lanzarote artist from the early 20th century who, after fighting with Francisco Franco in the Spanish Civil War, became very influential in making Lanzarote a tourist destination (Fundación César Manrique 2015). Manrique turned some existing tourist spots, popular in the late 19th and early 20th centuries, into government-sponsored tourist attractions that are now heavily frequented by tour companies from England and Germany. Manrique also created planning codes (Fundación César Manrique 2015) to ensure that all buildings are lime washed and no more than two stories tall, to create a consistent, bucolic island attractive to northern Europeans. Additionally, his sculptures and artwork abound in the island's traffic circles, logos (particularly for museums and tourist attractions), and buildings. In my conversations with residents of Lanzarote, Manrique is lauded as a hero by some and a fascist commercialist by others. While his artistic legacy could certainly be considered both beautiful and beneficial to Lanzarote, there is no doubt that it is also a dominant and exclusive representation. While opinions about Manrique's legacy differ, dissent about the portrayal of Lanzarote, and about the importance of preserving the cochineal industry are undermined by local resignation to political realities.

Highlighting this fact are the present uses of the Curbelo estate. Since the death of Sr. Curbelo's uncle, and the removal of the Curbelo family to nearby Guatiza, the estate has fallen into disrepair and both the house site and the surrounding area have been used frequently for recreation by local Canarians. Both Sr. Curbelo and the Asociación Milana describe this as an unavoidable shame. The older generation on Lanzarote reveres and holds on to this place as a special emblem of their past. Successive generations, however, and those not involved in agriculture, use the isolated, desolate location for recreational activities and potentially destructive use. Though this site is located in a historic area, its remoteness and state of disrepair is itself an emblem of the large scale abandonment of agriculture as the dominant industry of Lanzarote.

CHAPTER 4: DISCUSSION AND CONCLUSIONS

The former Curbelo estate site is worthy of preservation. The results of the archaeological survey are evidence enough that the Curbelo estate is a prime example of Atlantic trade in the Canary Islands and the wealth that the production of cochineal provided. The Curbelo family could afford fine ceramics, they were well respected among their peers, and the farm served as a boon to the less advantaged in their community (F. Curbelo, personal communication, 8/26/2015). Much like the estate once provided a prime vantage of the shipping traffic to Arrecife, it now provides a vantage from which we can understand a part of the larger history of Atlantic colonial trade. Mintz (1985: 33) states that "scholars of New World sugar have sometimes neglected Spain's early

Caribbean accomplishments in the sugar trade because their global significance was slight.” Spain’s contributions to the cochineal trade were enormous, but Lanzarote and the Canary Islands are an often overlooked part of this because their most impressive contributions were brief. More robust archaeological study of this or similar sites would help fill this lacuna in colonial commodity production.

More important than the history of this trade, however, is the impact it has had on the people of Lanzarote. The ceramics scattered about the Curbelo estate are not the only artifacts signifying the relationship of the people of Lanzarote to this place. For example, the derelict, overgrown cochineal plots and the crumbling, dilapidated Curbelo estate portray the large scale abandonment of agriculture and the resignation of many people to the lack of historical preservation. The size of this estate, however, and the vast quantity of cochineal plots here and throughout Lanzarote, show how important this industry once was to these people. Cochineal, and its production on Lanzarote, is now a symbol of the struggles of contemporary Canarians, internally and externally, to elevate portrayals of their agricultural history in ways that are economically and politically viable.

Complicating this struggle are the many obstacles local stakeholders face in advancing preservation. The characterization of Lanzarote and the Canarian archipelago as ecologically but not historically important, allocates preservation resources away from historical and cultural enterprises. The heavy and unavoidable reliance on tourism means that preservation efforts must fit within this dominant but potentially ill-suited system. The history of scholarship of the

Canary Islands also renders seen and unseen impediments to promoting alternative narratives. Understanding and engaging with these obstacles is necessary for charting a productive course for increased preservation of cochineal on Lanzarote.

The present UNESCO designations in the Canary Islands are at odds with the importance of many Canarian sites to world history. UNESCO World Heritage Sites are those that demonstrate substantial cultural or natural heritage by way of their “Outstanding Universal Value,” meaning “cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity” (UNESCO 2013). At present, there are only three World Heritage sites in the Canary Islands, Garajonay National Park (inscribed 1986), Teide National Park (inscribed 2007), and San Cristobal de la Laguna (inscribed 1999) (UNESCO 201). These three sites are located on the two main islands, Gran Canaria and Tenerife, and two of the three sites are natural, rather than cultural (UNESCO 2015). By contrast, there are 44 total World Heritage Sites in Spain and, of them, 39 are cultural (UNESCO 2015). The lack of cultural importance ascribed to the Canary Islands is clear and the focus within the Canary Islands on ecological importance helps to inhibit the cultural and historical preservation efforts of Canarians, particularly the people of Lanzarote.

Furthermore, Lanzarote’s inclusion in UNESCO’s Man and Biosphere Programme not only limits cultural interpretation, it reifies the existing dominant narratives and the ability of external entities to dictate preservation efforts on

Lanzarote. As previously stated, the Man and Biosphere Programme requires the cooperation and “social choice” (UNESCO 2007) of the residents of protected biospheres, implying the active participation of the people in preserving the land in which they live. It is clear from conversations with local Canarians, however, that there is substantial irritation with being told how they must care for their own land. Sr. Curbelo recounted a story where farmers hurled their tools at César Manrique for telling them they must not burn the gorse covering their farms (F. Curbelo, personal communication, 8/26/2015). Another Canarian joked with me about how we must not move a stone on the landscape for fear of disrupting the biosphere and, more seriously, how César Manrique’s domineering influence did more harm than good. UNESCO’s Man and Biosphere description of Lanzarote describes César Manrique as simply a “celebrated artist” (UNESCO 2007) who created the framework for what is now Lanzarote’s dominant industry. Despite the intent of the Man and Biosphere Programme, the preservation of Lanzarote’s natural and cultural resources is hardly democratic and the people of Lanzarote are left to negotiate historical portrayals through a difficult and economically tenuous industry.

César Manrique life’s work was to create a Lanzarote reliant on tourism but vastly limited by ecological preservation. The foundation dedicated to the preservation of Manrique’s legacy is quick to point out that, while a participant in the Spanish Civil War, Manrique despised Franco and demonstrated his resistance by burning his military uniform upon his return to Lanzarote (Fundación César Manrique 2015). It is ironic, then, that he should have had

such a domineering influence of the economy of his island and that it would be Manrique who would decide what was “traditional” and “authentic” for Lanzarote. According to his foundation, “nature was the fundamental reference” for Manrique’s work (Fundación César Manrique 2015)—not his neighbors and the people of Lanzarote. As previously indicated, directing tourist traffic to a limited amount of locations does reduce the stress on the land and helps to preserve Lanzarote’s vast and certainly important ecological resources. However, the control on consumer experiences is tight and the processes for determining how Lanzarote will be marketed to the tourist industry are hardly democratic. Manrique succeeded in creating an ecologically sustainable tourist-based economy, but it was at the expense of human, cultural perspectives and, in the present turbulent global economy, the reliance on small-scale tourism is not economically sustainable.

Further complicating the political economy of Lanzarote is previous scholarship about the Canary Islands—scholarship that has severed connections between history and archaeology and between Canarians and their ability to impact their future. Farrujia (2005) has described in detail the effects that Enlightenment ideology has had on past and present history and archaeology of the Canary Islands. Previous collections of the remains of indigenous Canarians were gathered hastily and without scientific rigor in order to prove biological similarity to the peoples of European world powers, especially France, Germany, and Spain (Farrujia 2005). Using spurious homological connections, scholars aligned the Canary Islanders with supposed “lost” cultures such as the sons of

Noah or the city of Atlantis (Farrujia 2005). To prove substantial biological and cultural similarity was to prove that the people of the Canary Islands were European, not an entity unto themselves, but actually part of Europe and, as such, subject to European control. The result was the removal of power from anyone born in the Canary Islands. The people of this archipelago have been a heterogeneous but distinct entity since early colonization, but feel (and are) separated from contemporary governmental control.

By the time cochineal was introduced, the Canarian population was already of thoroughly mixed indigenous and European descent. Continental European scholarship served to ensure that the Canary Islands were politically included in Europe while still exotic and peripheral enough to be politically powerless. France and Germany tried to prove, through this scholarship, that the Canary Islands should be under their control. The Spanish used this scholarship to try and create the kind of cohesive, nationalist identity that would lead to the Spanish Civil War. Additionally, the lack of industrial success, both from cochineal and other crops, perhaps became the basis of the idea to preserve the “authentic” agricultural Lanzarote through the aesthetic perspectives of one artist. Spain’s fascist movement of the 20th century imposed strict control on knowledge production. Despite the folkloric assertions that Manrique rejected Franco’s regime, he replicated the same model of power—Lanzarote was Manrique’s canvas upon which he asserted his idea of what Lanzarote had been and should be. The perception by the remaining inhabitants of the Canary

Islands that they cannot affect their governance disconnects them from their history and from the material remains of cochineal.

Without a thorough understanding of these impediments, their effects will continue to limit Canarian research. The efforts to correct past biases in the understanding of indigenous origins of the archipelago severely limit the academic study of the historic past. Increased study is vital to proving the “outstanding universal value” in Lanzarote to bolster arguments to large organizations for increased preservation funding. Encouraging scholarship on these issues and highlighting the present work conducted by Canarians may help mobilize interest on larger academic and political scales and result in such increased preservation. Providing increased funding to agricultural-based heritage enterprises led by community members can substantially increase local engagement and connection to history while still preserving the ecological interests of the island, though this must also balance the interests of the tourist industry and of archaeological preservation (Farrujia 2014). It is continually imperative to understand that there alternative narratives to Lanzarote history, particularly to those propagated by authoritative entities. It is also important to problematize the portrayal of heritage to a tourist audience and understand who is making the decisions about how and what should be portrayed.

Cochineal is entangled with the history and heritage of the Canary Islands and it provides a point of entry to understanding its contemporary political economy. Schmidt and Patterson’s discussion of neocolonialism (1995) illustrates the struggles of Canarians who were forced by Spain to adopt

cochineal, which busted, and left them to rely on a diminished agricultural economy. The people of Lanzarote and the Canary Islands resist this control and are active in creation of tourist economy but community-led efforts are inhibited by available and existing methodologies for creating and preserving sites. Farrujia (2014), himself a Canarian, argues for community-led preservation efforts and highlights political and economic impediments. The production of cochineal in the Canary Islands showcases these issues and makes the most persuasive argument for challenging dominant narratives.

It is not only important to fit the Canary Islands back into larger narratives, but to refrain from continuing to “other” and exoticize them in the same manner as past scholarship. In addition to fitting this into framework and working with community to elevate their perspectives, it is important not to continue to treat Lanzarote as unique. As an American historical archaeologist, I was exotic and it was unusual to people I spoke with that someone from so far away would want to know more about them and their history. However, there are many common experiences between formerly colonized islands and, more than focusing on the exotic, it would be productive to align the Canary Islands with other such Atlantic islands to show how the experiences of Canarians are shared.

In speaking with residents of Lanzarote, one might determine that there is insufficient desire or resources for site preservation. Present uses of the site certainly suggest that such stakeholders are resigned to the recreational use of the area by others. Additionally, Sr. Curbelo and others seem resigned to the lack of preservation and government sponsorship while Sra. Perera remains

hopeful that such sponsorship can and will occur. Though these two particular people are older, they are not alone in their desire to increase the local recognition of their island's contributions to global history. Sr. Curbelo told me how one of his ancestors once traveled to Tenerife to confront a government official (over the tyrannical running of Lanzarote) and who concluded his speech by saying "because we, the ones who were born here, are the ones who shall arrange things" (F. Curbelo, personal communication, 8/26/2013).

Though the people of Lanzarote may be divided on the best ways to market their island and preserve their history, it is evident from statements like these that they feel it is a decision that should be theirs to control. That the history of Canarian political control, scholarship, and the tourist industry has muted the perspectives of the people themselves makes it all the more important that historical archaeology serve as a tool in this archipelago to help Canarians elevate their sociopolitical negotiations to larger audiences. The perspectives of contemporary Canarians should foreground efforts to contrast representations of Canarian history and to preserve the Canarian production of cochineal. To paraphrase Sr. Curbelo, they are the ones who were born there and we should help them to arrange such things.

APPENDIX A: FIGURES

Figure 1: Tin scoop and *milana* used for cochineal harvesting



Figure 2: The Curbelo estate



Figure 3: Castastro office image showing the Curbelo parcels

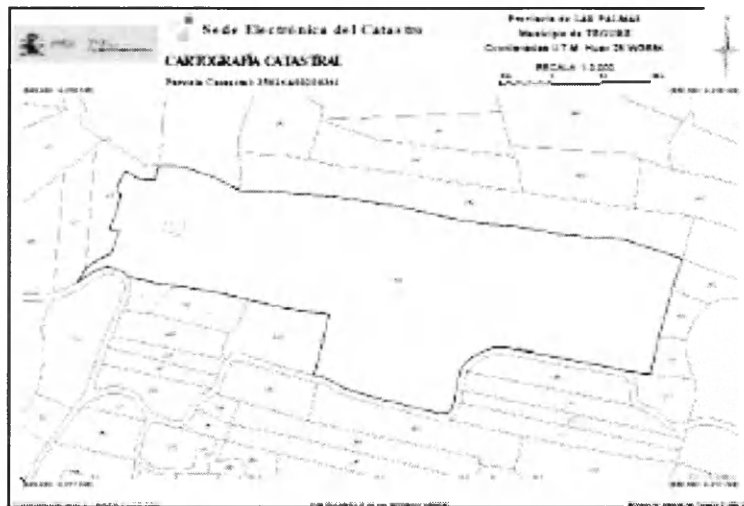


Figure 4: Satellite Catastro office image showing the Curbelo parcels

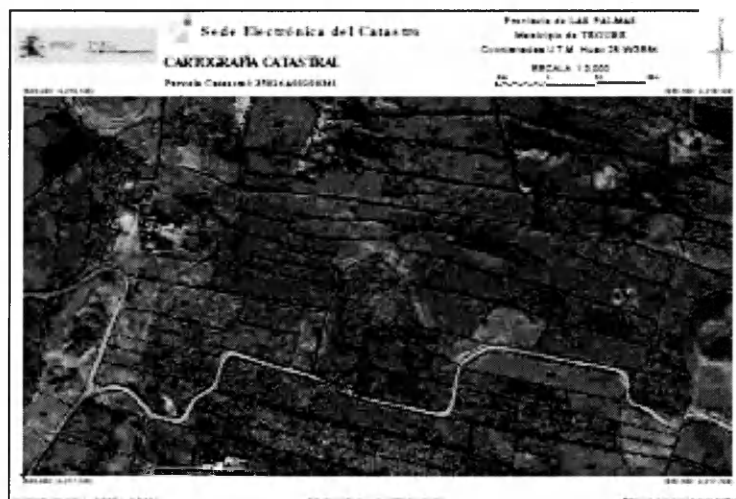


Figure 5: Polychrome tin-glazed earthenware sherd



Figure 6: Annular ware sherd

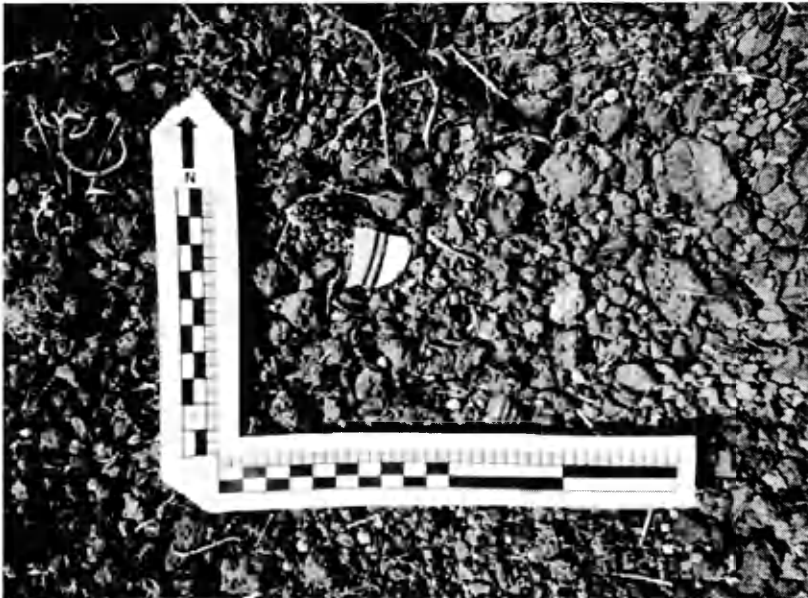


Figure 7: Tin-glazed earthenware sherd



Figure 8: Large utilitarian earthenware sherds



Figure 9: Southern yard and garden showing large cistern in lower left



Figure 10: Diversity of plots within Curbelo estate



Figure 11: Northern yard of Curbelo estate



Figure 12: Untended cochineal plot



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