O
ver the course of the past three decades,
new research in the field of historical ar-
chaeology has extended Mesoamerican ar-
chaeology’s long established focus on the re-

gion’s rich pre columbian heritage into the period 
following the arrival of the Spaniards and estab-
lishment of European rule (Blackman et al. 2006; 
Charlton 1969, 2003; Charlton and Fournier 
1993; Charlton et al. 2002; Fernández and 
Gómez 1998; Fournier 1997; Fournier 2003a; 
Gasco et al. 1997; Kepecs and Alexander 2005; 
Monroy-Guzmán and Fournier 2003; Palka 2005; 
Zeitlin 2005). Within this area of study, the ar-
chaeology of haciendas has become an emerging subfield grounded—as much of historical ar-
chaeology in Mesoamerica is—in enhancing our under standing of continuities and change among indigenous communities during the nearly 500 years since the Spanish conquest. In the case of hacienda studies, this focus has also emphasized the ways by which these continuities and change were impacted by the dominant Spanish labor/power structure (Alexander 1999, 2004, 
2012; Benavides 1985; Fournier and Mondragón 
2003; Jones 1981; Meyers 2012; Meyers and 
Carlson 2002; Meyers et al. 2008; Sweitz 2012). 
Research at the Hacienda San Miguel Acocotla contributes to this growing body of literature with an interdisciplinary study of indigenous labor that draws on archaeology, ethnohistory, and ethnog-
rhapsody to offer a more complex picture of rural labor than is available to us through historical research alone (Juli 2003; Juli et al. 2006; Newman 2010, 2013, 2014; Newman and Juli 2008; Romano 2005). This report will summarize the archaeological evidence for daily life in one community of rural hacienda workers in central Mexico with a focus on the results of research carried out at the Hacienda Acocotla over the course of two field seasons in 2005 and 2007, as well as the subsequent analysis of more than 87,000 artifacts and faunal remains.

Historical archaeology has long been concerned with illuminating the lives of those left out of the historical record and has exhibited a particular interest in relations of production. Research at Acocotla owes its definition and form to this diverse heritage and articulates with several current disciplinary agendas in Latin American and historical archaeology, including studies of subaltern groups and the emergence of a scientifically grounded social archaeology (e.g., Benavides 2001; Fournier 1999; Funari 1997; Jamieson 2005; Politis and Gollán 2008; Rodríguez and López 2001); investigations of the African Diaspora in the Western Hemisphere with emphasis on studies conducted on former plantation/hacienda sites (e.g., Delle 2009; Fennell 2011; Franklin and McKee 2004; Funari 2006; Hauser 2011; Orser and Funari 2001; Singleton 1999, 2001; Singleton and Souza 2009); and studies of the archaeology of social inequality as manifest in the historical archaeological and documentary records (e.g., Delle et al. 2000; Little 1994; McGuire and Paynter 1991; Mrozowski 2000; Paynter 1989).

In the Mexican context, the archaeological study of hacienda workers also contributes new information regarding the forms and conditions of debt peonage, a topic that has been the subject of a long-running debate in Latin America’s historiographical literature (e.g., Alston et al. 2009; Bauer 1979; Bracamonte 1993; Brass 1990; Chevalier 1963; Cross 1979; González 1997; Katz 1974; Knight 1986, 2002; Machuca 2010, 2011; Meyers and Carlson 2002; Newman 2013; Nickel 1997; Tutino 1986; Villanueva 1984, 2009; Zavala 1944). Debt peonage was a system by which workers were freely extended credit in a hacienda’s “company store” (tienda de raya), credit that they were forced to draw on because their salaries were insufficient to cover their basic needs. The result of this unlimited offer of credit, at least within the traditional model of the system, was a debt impossible to repay. Debt tied the workers to the land and the hacienda, and they were unable to leave if working conditions were not to their liking.

The costs, benefits, experiences, and reasons underlying the development of debt peonage have been much debated. Following the traditional model, some have argued that this system was oppressive, turning the indigenous workforce into virtual slaves (Bracamonte 1993; Brass 1990; Chevalier 1963; González 1997; Meyers and Carlson 2002; Tutino 1986). Others have argued that debts were nowhere near as burdensome as traditionally portrayed (Alston et al. 2009; Bauer 1979; Cross 1979; Gibson 1964; Knight 1986, 2002; Nickel 1997) and that the aim of hacienda owners was to “acculturate” workers rather than “enslave” them (Knight 2002:84-97). The debate has been hard to settle, in large part because so little evidence on the daily lives of hacienda workers exists in the documentary record (Bauer 1979:34). Historical archaeology at the Hacienda San Miguel Acocotla is significant because (1) it allows us to augment this insufficient information and challenge assumptions about quotidian experiences of hacienda laborers, often made using only incomplete historical records, especially the idea that hacienda workers were a single, monolithic entity, and (2) it allows us to connect the ethnographic present with the prehispanic past by illuminating the transformative modernizing (or, in Knight’s words, “acculturating”) processes at work in rural Mexico during the nineteenth century.

History of Research

The Hacienda Acocotla is located in the Valley of Atlilco in the western portion of the modern day state of Puebla (Figure 1). The ruins of the hacienda’s casco (or architectural core of the property) sit at the edge of the valley floor approximately 1,800 m asl and just east of a line of hills that run south from the volcano’s summit. The rainy season lasts from late May through late September, but a portion of the valley is produc-
tive year-round, thanks to limited irrigation from the Atoyac River system. When Spaniards began to settle the area in the mid-sixteenth century, they found that conditions were ideal for the production of wheat. In the 30 years following its 1577 establishment, the Hacienda San Miguel Acocotla would become one of more than 90 small haciendas producing grain, and, within 50 years, the valley became one of the primary production centers for the European-introduced domesticate (Chevalier 1963:64). Indeed, during the colonial period, Atlixco became famous for this throughout the world. Writing in seventeenth-century London, Thomas Gage (1655:84) described Atlixco as “a valley much mentioned in all those parts, for the exceeding great plenty of wheat that is there reaped every year, and is the chief sustenance and relief of Mexico and all the Townes about” (italics original). Today, most of the valley continues to be used for agriculture. Crops are seasonally cultivated and include maize (harvested in late August or September), jícama (the primary cash crop, harvested in October), and peanuts (harvested in November), as well as flowers and ornamental plants that are grown year-round for markets and greenhouses in nearby cities and abroad.

The research discussed in this paper was started in 2001 by Dr. Harold Juli with an informal survey of a dozen haciendas in the state of Puebla. Juli ultimately chose the Hacienda Acocotla for a multi-year, interdisciplinary project precisely because it is in no way extraordinary for the region. Throughout its history, Acocotla was a mid-sized hacienda valued in the mid-range of its neighbors; its owners were neither richer nor poorer, more nor less famous than any of their neighbors (Newman 2014; Romano 2005). Acocotla’s casco comprised both living and working areas contained in just over 14,500 m² (Figure 2). The living areas would have housed anywhere from a few dozen people to more than 130, including the hacienda’s lowest status workers (outside the hacienda’s walls in the calpanería); the
higher status, more trusted workers (called caporales) and possibly the hacienda’s manager (inside the hacienda’s walls in the Patio de los Chivos); and, on the occasional weekend or holiday, the hacienda’s owner (in the exclusive and well-guarded Patio del Limón). The work areas would have provided storage for harvests of wheat (in storage sheds along the casco’s eastern wall) and agricultural tools, as well as housing for livestock such as cows, oxen, horses, goats, and sheep.

Although it was historically unexceptional, Acocotla’s ruined but identifiable architecture and its situation 2 km north of a small community inhabited today by descendants of the hacienda’s workers made it ideal for study. In 2003, Juli began a four-year ethnographic and ethnoarchaeological project exploring patterns of daily life and memories of hacienda labor (Juli 2003). Historical research, conducted in national, state, and local archives with the assistance of historical archaeologist Karime Castillo and historical anthropologist María del Carmen Romano, left us with few surprises: the Hacienda San Miguel Acocotla’s 25 owners were well-documented, and the hacienda’s workers, ranging in number anywhere from 10 to 121, were fleetingly visible (Newman 2014; Romano 2005). The best information about the workers came from irregular censuses taken during the latter half of the nineteenth century, but these data offered only the barest demographic sketch of life in the worker’s quarters (Newman 2014). Archaeological research would offer new insights into the day-to-day experiences of Acocotla’s indigenous workers.¹

Two seasons of archaeological excavations and an intensive architectural study were conducted at Acocotla in parallel with the archival and ethnographic research (Juli et al. 2006; New-
Excavations focused on the calpanería and the field fronting the structure. The initial four-week study in 2005 included detailed architectural recording, surface survey, and test excavations. Over eight weeks in 2007, five randomly chosen rooms in the calpanería and an extensive midden were excavated, and excavations of a large, randomly chosen unit begun in 2005 were completed (Figure 2). Excavations were conducted in 10 cm arbitrary levels constrained by natural stratigraphic breaks, and soil was screened using 6.35 mm (1⁄4 inch) mesh. The survey and excavations resulted in the recovery of 87,142 artifacts and ecofacts. Dates derived from the artifacts place the majority of contexts in the second half of the nineteenth century, although a few contexts may date to as early as the end of the eighteenth century. A handful of prehispanic artifacts were also recovered, although these appear to be secondary deposits (Juli et al. 2006; Newman 2010; Newman and Juli 2008).

San Miguel Acocotla’s Calpanería

The remains of 37 small rooms flank the casco’s main entrance; they are Acocotla’s calpanería, which documentary and archaeological research suggest date to the latter half of the nineteenth century (Newman 2014; Newman and Juli 2008). The 3.5-x-3.5-m rooms once housed the hacienda’s indigenous workers and may be the greatest extant material differentiator among hacienda laborers. Oral history collected in the descendant community indicated that housing in the village was of a much lower standard until the period following the Mexican Revolution, and that various classes of worker housed at the hacienda had varied classes of housing (Newman 2014). Because architectural differentiation was a signifier of social status across classes, we hoped excavations in the calpanería would illuminate possible variations within a single class of worker, as well—a dynamic invisible in the documentary record.

The calpanería is fronted by a field, which today is planted with maize; however, oral histories indicate that the space was once used by the rooms’ inhabitants for a variety of domestic activities. Research in the descendant community provided us with possible analogous domestic patterns. Today, households use both interior and, to a significantly greater extent, exterior space for cooking, preparing seeds for planting, gossiping, sewing, playing, repairing tools, etc. (Newman 2014). This pattern is well established in agrarian communities in both the past and present in Mesoamerica and throughout the world (e.g., Becker 2001; Blanton 1994; Cutting 2006; Hutsen et al. 2007; Johnston and Gonlin 1998; Kamp 1993; Killion 1992; Robin 2002). Indeed, in his cross cultural study of domestic architecture, Richard Blanton (1994:Table 2-3) found that Mesoamerican houses are the smallest of any in the world. This, along with the general absence of interior light and ventilation means that outdoor patio areas are heavily used for most domestic activities in many communities. For these reasons, our research proposal was designed to test for the presence of domestic activities in the calpanería’s field (Juli et al. 2006; Newman 2014).

Detailed mapping of the calpanería and field in front of it provided a record of the standing architecture (Figure 3), and five randomly selected rooms were excavated to supplement this record (rooms 11, 18, 20, 21, and 22; see Figure 2). Except for a few anomalies, each of the rooms presented similar features and stratigraphy. The calpanería was constructed primarily of poured adobe on brick or stone foundations (as was most of the casco). In places, ceramic or adobe bricks and faced stones were incorporated into the walls, and the walls had been plastered in white. Numerous, often prehispanic, ceramics were mixed with the adobe. In the southwest corner, each room had a doorway marked now by a large threshold stone or line of bricks; no evidence for windows remains. An intact, collapsed pan tile roof in each of the rooms capped the most recent living surface (except in room 22, which had no roof fall). The depth of this roof fall ranged from 10 cm to as much as 45 cm, depending on the amount of collapsed wall and other debris that had accumulated on top of the roof; however, all were at approximately the same level in relation to the field in front of the rooms and the rooms’ thresholds, suggesting a contemporary collapse of all of the rooms and abandonment of the calpanería, with the possible exception of room 22.

In rooms 20 and 21, the living surface below the collapsed roof was a compacted earth floor, as
Figure 3. Mapping the *calpanería*; isometric reconstruction of room 17.
was the case immediately below the level where a roof should have been found in room 22. In each of these rooms, a hearth lay in the northwest quadrant. The hearth was nothing more than a shallow depression in the earthen floor. The only variation to this pattern was found in room 21. There, in addition to the shallow hole dug for the fire, we also found a small, deep hole filled with ash and the broken neck of a ceramic jar in the middle of the hearth, likely a support for a cooking pot. There was a dense fill of mixed artifacts and a second compacted floor surface approximately 26 cm below the first. No hearth or other features occurred at this level, although we found a significant number of artifacts, including glazed and unglazed redware, mayolica, lithics, glass, and metals. Below this floor, we encountered sterile soil. In Rooms 11 and 18, we encountered a plaster floor directly below the roof fall (Figure 4). Unlike the other three rooms, however, these two had evidence of only a single occupation and neither showed any evidence of a hearth. Excavations below the plaster floor quickly reached sterile soil.

Excavations in these five rooms resulted in the recovery of 10,203 artifacts and ecofacts, which represent nearly 12 percent of all artifacts recovered at the site (Table 1). Of these, nearly 80 percent of the total was made up of ceramics, just over 11 percent was composed of faunal remains, and architectural materials contributed nearly 10 percent. Glass, lithics, and miscellaneous personal items (e.g., jewelry or toys) made up the remaining 2.5 percent. Two coins recovered in room 20

Table 1. Artifacts Recovered from Excavations in the Calpanería, by Type

<table>
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<th>Artifact Type</th>
<th>STR 11</th>
<th>STR 18</th>
<th>STR 20</th>
<th>STR 21</th>
<th>STR 22</th>
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Note: percentages refer to percentage of artifact type, by room.
provide information on construction dates for what may have been the second occupation or expansion of the calpanería. One coin recovered in the fill between the first and second floors dates to 1882, and a second, recovered on the floor below the collapsed roof, dates to 1906. Together, they suggest that the expansion and remodeling of the calpanería took place during the last two decades of the nineteenth century or the first decade of the twentieth. The earlier iteration of the calpanería (represented by the lower floors in rooms 20, 21, and 22) must have post-dated an 1859 property assessment found in the local archives, placing all phases of the structure firmly in the second half of the nineteenth and early years of the twentieth centuries (Newman 2014).

While coins helped date the calpanería, other artifacts hint at the shapes and faces of the structures themselves. Little glass was found at Acocotla and, in the calpanería, nearly all the glass was either fragments of table glass (e.g., fragments of drinking glasses or lamp shades) or bottle glass. Room 21 provided the only exception to the pattern. There, we found six fragments of plate glass, three of which were mixed with or below the roof fall. Plate glass may have been used for windows, mirrors, picture frames, etc., and glass used for these purposes is indistinguishable in the archaeological record. Room 21 was also the only room with any additional architectural elements. We found two hinges, a door knob, and a lock part in the southwest corner of the room (in the area adjacent to the doorway). All of these were found mixed in with or immediately below the roof fall. The existence and location of these objects suggests that room 21 may have had a wooden door, an amenity that none of the other rooms appear to have enjoyed. Regardless of whether the plate glass found was architectural or ornamental, these data together indicate that the inhabitants of room 21 had resources unavailable to their neighbors, differential access that their neighbors must have noticed.

The calpanería provides an unusual model of “home” in that the architectural space was not designed according to the needs of individual
families but rather would have been designed for maximum efficiency by the hacienda owner (Newman 2013, 2014). Further, rather than having dedicated outdoor space as is common in the descendant community today, each household would have had to share the field fronting the calpanería with dozens of other people. The vast majority of artifacts recovered came from this shared field and the midden associated with the calpanería, meaning that individual households and their associated activities are nearly invisible in the archaeological record. The only record of difference among the families living in Acocotla’s calpanería come from the careful study of the architectural remains. Our excavations allowed us to reconstruct the calpanería’s rooms in a general way, but we also found that there were observable differences in the architecture from room to calpanería room. These variations could be attributed to many things: differences in economic status, associated but perhaps more subtle differences in social status, or simply personal preference. The presence of a possible door with lock in room 21 might even have been a source of shame rather than pride. Archival records tell us that the hacienda had a prison structure during the first half of the nineteenth century; perhaps room 21 served as a confinement cell during the later period (Newman 2013). Although one might argue that the architectural differences were attributable to room use, the homogeneity of artifact types recovered from the various rooms argues against this assumption (Newman 2014).

Foodways

While architectural studies of the calpanería provided information about the physical structures that ordered the world of Acocotla’s workers, faunal remains and ceramics recovered within the rooms and the associated midden nuanced our understanding of their daily lives. Whether because of abandonment processes, post-abandonment scavenging, or because living spaces were regularly swept clean, the detritus expected in a home was largely (although not completely) absent in the calpanería, and the surface survey produced evidence of only a handful of activity areas. During test excavations, however, we identified a midden dating to the second half of the nineteenth century.³

The midden measured approximately 8 m east to west and 11 m north to south. The entire midden area was excavated to sterile soil at a depth of 80–90 cm below the ground surface. Weathering on faunal remains suggests deposition was relatively rapid, despite the recovery of an 1864 one-centavo piece at 50 cm below ground surface and a 1906 one-centavo piece in the upper levels (Newman and Juli 2008:32). In the southern end of the midden and directly on sterile soil, we identified a collapsed structure composed of a plaster floor of uncertain dimensions, a collapsed rubble wall, and a brick patio measuring 3.5 m x 3.5 m (the same size as the rooms in the calpanería). The purpose of this structure remains undetermined. The aforementioned coin dating to 1864 was found just above the wall rubble, suggesting that the building was destroyed during the second half of the nineteenth century, around the time the calpanería was constructed, and the midden was then deposited on top of it during the latter half of the nineteenth century and early years of the twentieth. Excavations in the midden produced more than 48,000 artifacts, more than half of all the artifacts collected at Acocotla. More than 90 percent of artifacts were ceramics and just over 6 percent were faunal remains. Together, these classes of artifacts speak to one of the most mundane and least well-understood aspects of the workers’ lives—foodways.

Faunal Remains

Excavations in the midden and calpanería resulted in the recovery of 3,263 bone fragments and teeth.⁴ Of these, 142 could be identified only to the level of vertebrate; the rest were put into the broad categories of mammal, bird, reptile, and fish (no amphibians were identified). During analysis, taxon, skeletal part, and portion were all recorded, along with any identified environmental (weathering and rodent/gnawing marks) or human (butchering and burning) modifications. Mammals made up more than 90 percent of the collection. Of these, domestic species such as cows, pigs, caprine (sheep or goats), and dogs prevailed. Wild animals were diverse in species but few in number and included animals such as the ringtail, opossum, nine-banded armadillo, rab-
bits, and marmots. We also found evidence of birds (primarily chicken and turkey, along with one duck bone), reptiles (turtles and/or tortoises), and a single fish bone (Table 2).

Only 37 bones came from animals that could be identified as wild, compared to 850 bones from domestic species. The animal remains suggest that the inhabitants of the calpanería were provided with or acquired cuts of meat or whole animals from the owners of the hacienda or local markets or raised small domesticates themselves but supplemented these foods with a very limited supply of animals that were either hunted or scavenged (Newman 2010). The shift to a reliance on domesticated animals is seen in many places in Mesoamerica and quite early following the arrival of the Spaniards (for exceptions, see Emery 1999; Oland 2009), but researchers have also linked this narrowing of consumed species and increase in domesticates to the transformation and industrialization of local economies throughout New Spain (deFrance and Hanson 2008; Emery 1999; Meyers 2012; Oland 2009; Pavao-Zuckerman 2011). At Acocotla, it may be a sign of the in-

Table 2. NISP, MNI, and Weight of Bird, Fish, Mammals, and Reptiles.

<table>
<thead>
<tr>
<th>Birds</th>
<th>Taxon</th>
<th>NISP</th>
<th>% of Class</th>
<th>MNI</th>
<th>% of Class</th>
<th>Weight</th>
<th>% of Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Chicken</td>
<td>Gallus gallus</td>
<td>5</td>
<td>3.3</td>
<td>1</td>
<td>14.3</td>
<td>5.4</td>
<td>5.5</td>
</tr>
<tr>
<td>Duck Family</td>
<td>Anatidae</td>
<td>1</td>
<td>0.7</td>
<td>1</td>
<td>14.3</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Turkeys, pheasants, etc.</td>
<td>Galliformes</td>
<td>3</td>
<td>2.0</td>
<td>1</td>
<td>14.3</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Wild Turkey</td>
<td>Meleagris gallopavo</td>
<td>46</td>
<td>30.3</td>
<td>4</td>
<td>57.1</td>
<td>50.9</td>
<td>51.6</td>
</tr>
<tr>
<td>Unidentified</td>
<td>Unidentified</td>
<td>97</td>
<td>63.8</td>
<td>.</td>
<td>0.0</td>
<td>40.2</td>
<td>40.8</td>
</tr>
<tr>
<td>Total Birds</td>
<td></td>
<td>152</td>
<td>100.0</td>
<td>7</td>
<td>100.0</td>
<td>98.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Fish

Unidentified           |                        | 1    | 100.00     | 1   | 100.00     | .80    | 100.00     |

Mammals

| Armadillos             | Dasypus novemcinctus   | 2    | .1         | 1   | 3.1        | .35    | .00        |
| Cattle                 | Bos taurus             | 205  | 6.9        | 4   | 12.5       | 2762.1 | 31.2       |
| Domestic Cats          | Felis domesticus       | 3    | .1         | 1   | 3.1        | 1.8    | 0.0        |
| Domestic Dogs          | Canis familiaris       | 3    | .1         | 1   | 3.1        | 3.8    | 0.0        |
| Goats and/or Sheep     | Caprinae               | 93   | 3.1        | 10  | 31.3       | 314.0  | 3.5        |
| Horses                 | Equus sp.              | 12   | .4         | 1   | 3.1        | 499.0  | 5.6        |
| Humans                 | Homo sapiens           | 1    | .0         | 1   | 3.1        | 1.7    | 0.0        |
| Large Mammals          |                        | 384  | 13.0       | .   | .0        | 2157.4 | 24.4       |
| Marmots                | Marmota sp.            | 2    | .1         | 1   | 3.1        | 5.0    | .1         |
| Medium Mammals         |                        | 304  | 10.3       | .   | .0        | 455.5  | 5.1        |
| Old World Rats         | Rattus sp.             | 2    | .1         | 1   | 3.1        | 7.3    | .1         |
| Opossums               | Didelphis marsupialis  | 1    | .0         | 1   | 3.1        | .8     | 0.0        |
| Pigs                   | Sus scrofa             | 94   | 3.2        | 3   | 9.4        | 302.3  | 3.4        |
| Pocket Gophers         | Cratogeomys sp.        | 3    | .1         | 1   | 3.1        | 4.2    | 0.0        |
| Rabbits                | Sylvilagus sp.         | 7    | .2         | 2   | 6.3        | 7.4    | .1         |
| Ringtails (Cacomistles)| Bassariscus astutus    | 1    | .0         | 1   | 3.1        | .2     | 0.0        |
| Rodents                | Rodentia               | 2    | .1         | 1   | 3.1        | .3     | 0.0        |
| Sheep                  | Capra hircus           | 2    | .1         | 1   | 3.1        | 21.8   | .2         |
| Small Mammals          |                        | 30   | 1.0        | .   | .0        | 15.1   | .2         |
| Unspecified Deer       | Cervidae               | 3    | .1         | 1   | 3.1        | 28.1   | .3         |
| Unidentified Mammals   |                        | 1800 | 60.9       | .   | .0        | 2266.8 | 25.6       |
| Total Mammals          |                        | 2954 | 100.00     | 32  | 100.0      | 8855.0 | 100.0      |

Reptiles

| Tortoises and Turtles  | Testudines             | 13   | 92.9       | 1   | 100.0      | 11.1   | 98.2       |
| Unidentified           |                        | 1    | 7.1        | .   | .0        | .2     | 1.8        |
| Total Reptiles         |                        | 14   | 100.0      | 1   | 100.0      | 11.3   | 100.0      |

Note: an additional 142 bone fragments were unidentifiable to any of these categories.
creasing industrialization of the hacienda’s operations and workforce (Newman 2013).

Concerning food preparation, 649 of the bones had evidence of butchering, and those bones had, on average, 2.05 marks per bone. The majority of the butchering marks were shears, caused by the bones being broken down into manageable pieces with a sharp instrument such as a machete. While butchering marks were reasonably common, burning appeared on only 160 bones. These two sets of data together suggest that meat was prepared in soups or stews. Hunks of meat would have been broken down to fit in pots, and the low incidence of burned bones tells us that only a small proportion of those cuts would have been roasted over an open fire.

The portion of the animal that a meat cut came from also provided hints about the organization of life in Acocotla’s calpanería. I calculated low (head, tail, and feet including carpals and tarsals— the least nutritious and least expensive) and high (the remainder of the body—the most expensive and nutritious portions) utility percentages for all identifiable body parts recovered (following Lym an 1994; see also Binford 1978; Klippel 2001; Schulz and Gust 1983). If animals had been raised, butchered, and consumed entirely on site, the actual high and low utility percentages of the collection would be close to the expected percentages for a single animal. If, on the other hand, the meat were market bought, high utility parts (or low utility parts depending on economic access to goods) would be overrepresented.

At Acocotla, cows and pigs are overrepresented by low utility elements, while goats and/or sheep are overrepresented by high utility elements (Newman 2010, 2014). These data suggest that the hacienda’s workers either had reduced access to whole pigs and cows (perhaps due to the hacendado’s preference for the choicer cuts) or supplemented their diet with additional cuts of meat purchased and carried to the site. The possibly supplemental meat cuts were the most inexpensive by modern standards and often the least nutritious, suggesting an economic disparity in access to food. In contrast, sheep or goat meat is overrepresented by the high utility cuts. Archival research indicated that both cattle and goats were raised at Acocotla (Romano 2005), but documentary and archaeological data from other parts of Mexico suggest that cattle ranching and access to beef products was largely restricted to Spaniards, while natives controlled sheep and goat ranching (Zeitlin 2005). In fact, in the seventeenth century, the price of sheep was so low that it was not considered worthwhile to send them to market for sale (Zeitlin and Newman 2005). The overabundance of high utility body parts belonging to sheep and/or goat at Acocotla may reflect a greater control over these resources by the indigenous inhabitants of the calpanería, the hacendado’s distaste for these low status animals (and thus willingness to feed them to the peones), their lack of market value, or a combination of the three.

Oral histories suggested that indigenous inhabitants of the hacienda did in fact have greater access to goats and possibly sheep. People who had lived at the hacienda as children identified one architectural area as the Patio de los Chivos (Patio of the Goats) and explained that the higher status workers (the caporales) who had lived in this area had controlled the goat herds. The bones found during our excavations indicate that the lower status workers in the calpanería had equal access to these animals, but perhaps the inhabitants of the Patio de los Chivos were willing to share their meat (or their trash). Regardless, a variety of cuts of meat from various domestic species would have been available to inhabitants of the calpanería as part of the meals provided by the hacienda owner or manager.

Ceramics
Ceramics recovered at Acocotla supported the interpretation that the majority of meals were taken as soups and stews, and they hint at access to resources that the workers would not have had without hacienda employment. Few nineteenth-century hacienda sites have been excavated in Mexico, making the analysis of ceramics especially complex. The study of colonial period ceramics, almost exclusively majolicas, has been steadily gaining ground over the course of the past 30 years (Blackman et al. 2006; Charlton and Fournier 1993; Charlton et al. 2002; Charlton and Katz 1979; Fournier 1997; Fournier 1990, 1998; Monroy-Guzmán and Fournier 2003; Rodríguez-Alegría 2005; Rodríguez-Alegría et al. 2003). Unfortunately, nineteenth century material cul-
ture, and ceramics especially, has been relatively understudied compared with the more numerous studies of the colonial period in central Mexico (for exceptions, see Fournier 2003b; Jones 1981; Juli et al. 2006; Newman 2014; Seifert 1977; Velásquez 2012).

Eighteen specific vessel forms were identified at Acocotla. Some showed a clear precolumbian heritage, while other forms were clearly introduced by Europeans post-conquest (Newman 2014). Of these 18 forms, 14 could be specifically linked to the storage, preparation, distribution, and consumption of food. The most common form (47 percent of all sherds) was the comal, which would have been used to prepare tortillas. Amphorae would have been used to store foods and liquids, and ollas would have served both this function and as cooking pots. The majority of the remaining vessel forms, which included cazuelas, brimmed platos, lebrillos, and bowls, would have been ideal for preparing, serving, and consuming soups, stews, and salsas.

The materials used to make these vessels include coarse earthenwares, refined earthenwares, and porcelains. The last two types were the rarest. Only 40 sherds of porcelain, less than .001 percent of the total, were recovered at Acocotla. Refined earthenwares (which were limited to whitewares
at Acocotla) were slightly more common than the porcelain. In Mexico, whiteware vessels were imported from both the United States and Europe until the period following the Mexican Revolution when Mexico began producing its own whitewares for the first time, although failed attempts at its production had been made in Puebla as early as 1837 (Castro 2003:253–256; Fournier 1990). With the exception of sherds from recently produced vessels found during the surface survey, most of those we recovered seem to have been imported from abroad. Porcelain and refined earthwares are frequently linked to elite contexts (Burgos 1995; Fournier 1997; Meyers 2012; Sweitz 2012); the rarity of these ceramic types at Acocotla makes sense, given the general dearth of elite materials found in the calpanería.

Although the elite wares of the nineteenth century were nearly absent, the calpanería’s inhabitants did have access to goods that are often interpreted as elite wares in colonial period contexts. For example, although utilitarian ceramic vessels for the preparation and storage of food were locally produced redwares, tablewares found in the calpanería and its associated midden were majolicas. Archaeologists have used the presence of majolica as an indicator of status in archaeological contexts (e.g., Deagan 1983; Fournier and Charlton 1998; Gasco 1993; Jamieson 2001, 2004; Monroy-Guzmán and Fournier 2003:149, 159; Seifert 1977) and have found that higher quality majolica is much more common in urban than rural areas (Charlton and Fournier 1993; Fournier 1997), but others argue against a link between status and the presence or absence of majolica (Rodríguez-Alegría 2005; Voss 2012). It is unclear from the available evidence if the presence of majolica at Acocotla signifies access to high-status goods. The presence may, in fact, be related to the extension of “urban goods” into rural areas as the Hacienda Acocotla engaged with processes of economic and social modernization and industrialization during the latter half of the nineteenth century. Alternatively, Rodríguez-Alegría (2010) argued that at Xaltocan during the early years of colonization, “lower elites and commoners” voluntarily adopted Spanish ceramics such as majolica as a vehicle for impressing their peers and advancing their social standing. If this interpretation is accurate, it may be that hacienda owners and managers at Acocotla were exploiting this pattern of use 300 years later, providing their workers with material that the workers themselves saw as signifiers of status and power in order to coopt them into hacendada labor.

The archaeological distributions of the majolica vessels suggest that Acocotla’s owner or manager provided these ceramics to the workers. Using minimum vessel counts, I compared the relative abundance of ceramics in private and public areas of the hacienda (Figure 6). With the exception of room 11 (which had a significantly smaller number of artifacts than the rest of the rooms), the relative abundance of majolicas and common redwares was matched in both public (the midden) and private (individual calpanería rooms) areas. Regardless of what the majolica did or did not signify to its users, everybody living in the calpanería seems to have had equal access to the material.

Together, ceramics and faunal remains speak to patterns of modernization and the attendant processes of rapid industrialization that characterized the last quarter of the nineteenth century throughout central Mexico. As with the architectural differentiation, the presence of majolicas, traditionally considered elite, at meal times may have signaled social differences among hacienda workers, but the predominance of European domesticates along with the substantial presence of majolica in the calpanería suggest that increasing industrialization in the Valley of Atlixco was the more important factor. Historical studies highlight the increasing presence of multi-national textile mills throughout the Valley of Atlixco (Bazant 1964; Bortz 2000). Archaeological remains recovered at Acocotla highlight the im-
pacts of these processes in rural contexts (Newman 2014).

**Conclusion**

The conditions of debt peonage have been much debated in the historical literature, but the documentary record lacks the detail required to settle the argument. Although there were undoubtedly substantial drawbacks to becoming enmeshed in the labor/debt structure of a hacienda such as San Miguel Acocotla (Newman 2013), the archaeological remains and oral history suggest that there were also attractions. Families who moved into the Hacienda Acocotla’s *calpanería* had a number of advantages. According to oral histories collected from the descendant community, hacienda workers were guaranteed full employment (and a salary) for all members of their family old enough to work (although this promise carried with it a requirement of work by all members of the family) (Romano 2005). The hacienda’s resident workers may have enjoyed a higher social status than their village-dwelling neighbors, thanks in part to this entrée into the cash economy that brought with it neat adobe and plaster rooms to which each family was assigned. Indeed, these sorts of advantages are often assumed to have made workers housed at haciendas the happiest and least likely to revolt when the Mexican Revolution began in 1910 (Katz 1974).

Rather than representing incentives, the material goods and architectural remains found at Acocotla may actually be evidence of attempts to transform rural lifeways. The last quarter of the nineteenth century was a period of rapid modernization in Mexico, the effects of which were felt in both urban and rural areas. The federal government’s efforts to reform rural Mexico included a transformation of the agrarian lifestyle through the introduction of industrial capitalist modes of labor control and organization—a process to which haciendas, as loci of acculturation, were central. Indian pueblos and their communal social organization were seen as a bar to “economic progress and the advancement of civilization” because they discouraged individuality (Kourí 2002). To be indigenous was to be “left-over”; it was an outmoded identity that belonged in the colonial past. To build a modern and wealthy nation, Mexico needed to eliminate indigenous practices and build an industrial, Western workforce.

Although differential access to food and ceramics is often interpreted as variations in status, the profile of faunal remains and ceramics found at Acocotla are more likely indicative of the expansion of industrial capitalist modes of production. Furthermore, the architectural differentiation in the *calpanería*, along with the provision of material goods by the hacienda owner, suggests attempts on the part of the hacienda owner to build a sense of individual identity and dismantle communal practices among his or her workers. By creating visible, physical differentiation not just across classes of worker (e.g., between those who inhabited the *Patio de los Chivos*, those who inhabited the *calpanería*, and those who came by day from the villages) but among a single class of worker (those living in rooms of differing quality within the *calpanería*), the hacienda owner may have been attempting to break down communal affiliations and effectively erase indigenous identity. Documentary and ethnographic sources suggest, however, that the hacienda owner was not successful and that material advantages were not a sufficient enough attraction to maintain a stable workforce at Acocotla. Censuses taken during the last half of the nineteenth century indicate that worker turnover was high: 75 percent of workers appeared on only one census (meaning they spent as few as six months at the hacienda); within five years, more than 90 percent of workers had moved on to new positions at different haciendas or gone back to their villages (Newman 2014:49).

The peoples of Mesoamerica did not disappear with the arrival of the Spaniards; their history continues to this day. Unfortunately, the biases of the documentary record are often skewed away from the indigenous perspective in favor of the dominant Euro-American experience. The hacienda, as a chief engine for the economic and social integration of Mexico’s people, presents an ideal locus for expanding our understanding of the post-conquest negotiations that transpired among Mexico’s diverse inhabitants, negotiations that did not end with the establishment of Mexican independence in the early years of the nineteenth century. The last quarter of the nineteenth century
was arguably as transformative a period for Mexico’s indigenous inhabitants as the conquest had been nearly 400 years earlier. Understanding this later period is essential for linking the ethnographic present with the ancient past. Although historical information about all but the hacienda’s wealthiest inhabitants is scant, historical archaeological studies such as that presented here offer the opportunity to rectify gaps in an imperfect archival record and expand our understanding of the indigenous experience of the past 500 years on more egalitarian terms. This study presents a step in the direction of bridging these gaps in our understanding of the post-conquest indigenous experience. Archaeological data speak to attempts to transform indigenous workers into an industrial capitalist proletariat alienated from their home villages and traditional social organization, but archival records tell us that these attempts were a failure; workers at the Hacienda Acocotla were not wooed by material goods and social advantages. Ultimately, workers rejected hacienda employment completely and, in the period after the Mexican Revolution, returned to their home villages and resumed their agrarian lifestyles.

Acknowledgments. Dr. Harold D. Juli of Connecticut College conceived of the Acocotla Project and began research in 2001. I joined the project, working with Dr. Juli from late-2004 onward, during which time I assisted him with the archaeological facets of the project. In February 2007, Dr. Juli lost an eight-month battle with cancer. His loss was a deeply felt blow to members of the project, his students, and the people of La Soledad Morelos; I continue this project in his memory. Although Dr. Juli collected some of the data included in this article, the interpretations of those data are mine alone. This article has greatly benefited from the comments of Rani Alexander, two anonymous reviewers, and the editors of Latin American Antiquity. The research discussed in this article would not have been possible without the support and permission of the people of La Soledad Morelos and the Instituto Nacional de Antropología e Historia (INAH), Mexico. Archaeological, ethnohistoric, and ethnoarchaeological investigations were made possible through the financial support of the Reed Foundation, New York; the Fine Arts, Humanities, and Letters Social Sciences (FAHSS) Fund, Stony Brook University; the Foundation for the Advancement of Mesoamerican Studies, Inc. (FAMSI); the Agrarian Studies Program, Yale University; the MacMillan Center, Yale University; the John F. Enders Fund, Yale University; the Josef Albers Traveling Fellowship, Department of Anthropology, Yale University; and two anonymous donors.

References Cited


Blackman, M. James, Patricia Fournier, and Ronald Bishop 2006 Complejidad e interacción social en México colonial: la producción, intercambio y consumo de cerámicas vidriadas y esmaltadas con base en análisis de activación neu trónica. Cuicuilco 36:203–222.


Bucamanete y Sosa, Pedro 1993 Amos y sirvientes: las haciendas de Yucatán, 1789-1860. Universidad Autónoma de Yucatán, Mérida.


Burgos Villanueva, Francisco Rafael 1995 El olimpo: un predio colonial en el lado poniente de la Plaza Mayor de Mérida, Yucatán, y análisis cerámico com-
parativo. Instituto Nacional de Antropología e Historia, México City.


Gasco, Janine, Greg Charles Smith, and Patricia Fournier Garcia (editors) 1997 Approaches to the Historical Archaeology of Mexico, Central, and South America. Institute of Archaeology, University of California, Los Angeles.

REPORTS

González Sánchez, Isabel

Hauser, Mark W.

Hutson, Scott R., Travis W. Stanton, Aline Magnoni, Richard Terry, and Jason Craner

Jameson, Ross W.


Johnston, Kevin J., and Nancy Gonlin

Jones, David

Jones, Olive, Catherine Sullivan, George L. Miller, E. Ann Smith, Jane E. Harris, and Kevin Lunn

Juli, Harold


Little, Barbara J.

Lyman, R. Lee

Machuca Gallegos, Laura
2010 Relaciones entre los propietarios y los indígenas en las haciendas yucatecas del siglo XIX. In El pueblo yaya and the sociedad regional. Perspectivas desde la lingüística, la etnohistoria and the antropología, edited by Jesús Lizama Quijano, pp. 83–113. Centro de Investigaciones Superiores en Antropología Social, Universidad de Oriente, Valladolid.


McGuire, Randall H., and Robert Paynter (editors)

Meyers, Allan D.

Meyers, Allan D., and David L. Carlson

Meyers, Allan D., Allison S. Harvey, and Sarah A. Levithol

Monroy-Guzmán, Fabiola, and Patricia Fournier

Mrozowski, Stephen A.

Newman, Elizabeth Terese


Newman, Elizabeth Terese, and Harold D. Juli
2008 Historical Archaeology and Indigenous Identity at the


Notes

1. Race (or ethnicity) is a complex issue in Latin America, and choosing ethnic labels for past peoples is difficult. Because archival records labeled all of Acocotla’s workers as, without exception, indigenous speakers of Nahuatl, and because descendants today label their ancestors the same way, I chose to identify them as indigenous. (For a complete discussion of my reasoning and the available evidence, see Newman 2014.)

2. The technology was introduced in the 1660s, but largescale production did not begin until the late eighteenth century (Jones et al. 1989:171).

3. It is worth noting that although we cannot know with any degree of certainty that the midden contains the trash of only the calpanería’s inhabitants, it was uncommon for hacienda owners to be in permanent residence at nineteenth century haciendas, and historical records suggest that Accocotla was no different (Newman 2014). So, although the hacienda owners may...
have contributed small quantities of trash on occasion, the 
bulk of materials from the midden are likely those of the ha-
cienda’s workers.

4. Unless otherwise noted, all numbers refer to the number 
of identified specimens (NISP) and include both the rare com-
plete element and, more common, portions of elements; how-
ever, because I catalogued information about not only ele-
ment but the portion of the element (distal, proximal, etc.), I 
was able to include that information in my MNI calculations 
to reduce the likelihood of over-counting.

5. Research in Yucatán is the exception to this rule. There, 
a number of studies have reported on nineteenth century ce-
ramics; however, because of Yucatán’s economic alliance with 
the United States and its political, social, and geographical dis-
tance from central Mexico during this century, applying stud-
ies conducted in Yucatán to that presented here is problematic.

6. Minimum vessel counts were calculated using rim 
shreds. Ceramic type, vessel form, rim diameter, and surface 
treatment were taken into account.

Submitted August 5, 2012; Revised August 23, 2013; 
Accepted January 9, 2014.