A MEXICAN CALIFORNIO KITCHEN: ARCHAEOLOGICAL EXCAVATION
OF ROOM 105 IN THE CASA DE BANDINI, SAN DIEGO, CALIFORNIA

STEPHEN R. VAN WORMER
SUSAN D. WALTER
WALTER ENTERPRISES, CHULA VISTA, CALIFORNIA

Archaeological work in Room 105 of the Casa de Bandini / Cosmopolitan Hotel in Old Town San Diego State Historic Park encountered remains of the Casa de Bandini kitchen. Excavation revealed a series of packed earthen floors and a number of ash and charcoal concentrations representing fire hearths where cooking had taken place directly on the floor. Intruding through the early floors was a brick-and-sandstone drain that is contemporary with the later Bandini-era expansion of the kitchen and room additions. The hearths in Room 105 provide testimony that this very Mexican practice for food preparation was used not only at the missions of California but also in the kitchens of the wealthiest families of the ranchero aristocracy.

The Juan Bandini House is registered State Historical Landmark No. 72. This building is located on its original site at the northeast corner of the Plaza at Old Town San Diego, at the intersection of Calhoun and Mason streets. The Casa de Bandini has had a complex past. Originally constructed by Don Juan Bandini in 1829, by the late 1860s the family had moved out and the building was abandoned. In 1869, portions were torn down and a second story added to create the Cosmopolitan Hotel. During the late nineteenth century through the mid-1940s, the building became a boarding house. It was remodeled in early 1930s by one of Bandini’s grandsons, Cave Couts, Jr. In 1950, it was again remodeled and opened as the Casa de Bandini Motel. The building was acquired by the California Department of Parks and Recreation in 1968. In 2008, archaeological excavations were undertaken in and around the building by ASM Affiliates, Inc., as part of a restoration project to return it to its ca. 1870 Cosmopolitan Hotel appearance. As part of that project, extensive excavations occurred in Room 105, which had been the original kitchen during the Bandini family’s occupation (Schaefer et al. 2012).

Room 105 is located in the eastern portion of the south wing of the original Casa de Bandini, facing Calhoun Street (Figure 1a). It is identified on the “Vallejo Plan” of the building, as it appeared in the 1830s, as the cocina or kitchen (Figure 1b). Outside the east (back) wall of that original kitchen were an horno and a structure that appears to represent three cooking hearths. This may have been a typical Mexican elevated brasero or hornia, still used for cooking in many parts of rural Mexico (Lewis 1951:183) (Figure 2). This structure is identified on the drawing as “Lugares” which translates to “places” in English. Some translators have interpreted this to mean cooking hearths. More recently, others have identified it as a polite word for an outhouse.

Excavation revealed a series of packed earthen floors and a number of ash and charcoal concentrations representing fire hearths where cooking had taken place directly on the floor. These features spanned the early and later Bandini eras. Intruding through the early floors was a brick-and-sandstone drain that is contemporary with the later-Bandini-era occupation. Examination of the foundations and drain trench suggested that sometime after 1847 the kitchen was expanded and the south wing of the adobe extended eastward to its current length with the addition of Room 106.

ROOM 105 EXCAVATION

Excavation began in Room 105 with a 4 x 7 ft. unit in the northwest corner, where the ghost of a former stairway from the Cosmopolitan Hotel era could be seen on the north and west walls. The purpose of this unit was to examine floor remains within the room and foundations beneath the north and west walls. Removal of a layer of loose plaster and concrete rubble overburden, 1 to 2 in. thick, revealed a
packed earthen floor. This floor was cut every 24 in. by north/south running joist trenches, approximately 7 in. in width and 4 to 5 in. deep. Similar trenching patterns have been found on packed earthen floors in other Mexican-period adobe houses where wooden floors were installed during the American period, most notably in San Diego County at Wing A of the Peñasquitos Ranch House (Hector and Van Wormer 1985). They are the result of trenching into existing packed earthen floors to accommodate wooden floor joists that supported the later wooden floors. The trenches in Room 105 probably represent the installation of the first wooden floor in the room in 1869, when Albert Seeley remodeled the building into the Cosmopolitan Hotel. Juan Bandini did have wooden floors in portions of the building prior to that time, but they seem to have been limited to the sala and other main rooms along Mason Street. In addition to the floor joist trenches, a fire hearth was identified on the surface of the floor.

As a result of this discovery, it was decided to clear the loose overburden within a 7 x 10 ft. area along the northern wall to further define the packed earthen floor and the pattern of joist trenches that bisected it. The original unit area retained the Unit 11 designation, and the expanded area was called Floor Exposure Expansion.

Removal of the remainder of the overburden within the Floor Exposure Expansion area revealed that most of the earthen floor was covered with a layer of hard, compacted tan-brown silty loam with

---

*Figure 1. Room 105 location (a) on a modern floor plan of the building’s first floor, and (b) on the Vallejo plan, showing the building ca. 1830.*
plaster fragments. This layer was designated Stratum 1. The stratum filled a utility pipe trench and covered the packed earthen floor along the southern and eastern edges of the Floor Exposure Expansion. It would ultimately be discovered that Stratum 1 covered the entire rest of the room and was probably a result of demolition during Cave Couts, Jr.’s remodel of the early 1930s. It appears to have been deposited just prior to the pouring of the concrete floor that was in the room until the 2008 restoration work began.

Stratum 1 was removed so that the packed earthen floor surface, cut every 24 in. by the north/south-aligned joist trenches, could be seen within the entire 10 x 7 ft. area. The joist trenches were given letter designations, with "A" closest to the west wall.

Excavation then continued within the area of Unit 11, which was extended slightly to the east to include the third joist trench from the west wall (C), making it a 5 x 7 ft. unit. Excavation proceeded by
stratigraphic levels. The joist trench fill, Stratum 2, was removed. Within the joist trench sidewalls, layers of packed earthen floor and ash lenses could be seen. In addition, an alignment of sandstone blocks within a layer of tile, sandstone fragments, and other building rubble was encountered in the bottom of Joist Trench C. Further excavation would reveal this to be an intrusive trench for a brick-and-sandstone drain.

After the joist trench fill was removed, excavation continued with removal of the packed earthen floor layers, revealing the following stratigraphic sequence. As already noted, beneath the rubble overburden was the Stratum 1 packed soil and plaster layer which covered most of the top earthen floor. This uppermost dirt floor was designated Stratum 3. It was bisected by the joist trenches. The joist trench fill had been designated Stratum 2. Two small intrusive pits, Pit A and Pit A’ were encountered near the northwest corner of the room under the former Cosmopolitan Hotel stairway landing, and may have held supports for that structure.

The Stratum 3 floor was removed, revealing an ash lens on a lower packed earthen floor designated Stratum 4. Removal of the upper Stratum 3 floor also revealed the north/south-trending drain trench excavated into the Stratum 4 floor. It was filled with rubble consisting of broken pieces of tile and sandstone in a tightly packed silty loam, which surrounded the alignment of sandstone blocks found in the bottom of Joist Trench C. The rubble layer was designated Stratum 5. A fire pit, designated Fire Pit A, had been excavated into Stratum 4 and filled with ash and charcoal. Stratum 4 rested on still another packed earthen floor designated Stratum 6. This floor was also covered with an ash layer. It sat on original red silty loam ground surface.

As stratigraphy became more complex and more features were discovered, the area of excavation kept expanding. It was first expanded from the unit to the entire 10 x 7 ft. area of the Floor Exposure Expansion and then to the northern two-thirds of the room. The complete area was excavated to the top of Stratum 4, with a 3 ft. square area in the southwest corner of Unit 11, excavated to the bottom of Stratum 6, at approximately 12 in. below the surface. A number of fire hearths were revealed resting on the Stratum 4 floor surface (Figure 3).

At this point, it was determined to excavate the entire room. For this purpose, the room was divided into quarters designated Southwest (Unit 16), Southeast (Unit 15), Northeast (Unit 14), and Northwest (Unit 13). A 10 in. wide balk was left in between each quarter. The remainder of the room was excavated to the top of Stratum 4. Overall, the stratigraphic sequence was the same in the Southwest as it had been in the Northwest quarter, which included the original Unit 11 and the Floor Exposure Expansion Unit.

In addition to ash lenses that covered packed earthen floors, several fire and concentrated ash pits were discovered on and dug into these surfaces, including features B, C, D, E, F, G, H, J, and K. These consisted of circular to oval-shaped dense lenses of ash and charcoal 6 to 12 in. in diameter and from 1 to 4 in. thick, as opposed to the approximately 0.25 in. thick gray ash lenses that covered the individual floor layers. These features gave evidence that cooking took place directly on the dirt floor (Figure 4). Many contained burned mammal, bird, and fish bone. Mammal and bird remains included cow, sheep/goat, and chicken. Beef bones retained butchering scars that indicated various processing activities, including reduction of meat-bearing skeletal elements, meat removal, and marrow extraction. The bone assemblage reflects a clear reliance on cattle processed with tools and butchering techniques indicative of traditional Hispanic butchering methods. According to faunal analyst Susan Arter (2012), “Of considerable significance is the small number of sawn bones processed according to Euro-American tradition.” Butchering was done with hand axes and/or cleavers and knives. Only a handful of specimens were hand-sawn. Articulated fish skeletons suggested roasting gutted whole fish over coals and then removing the flesh.

In the east half of the room, different stratigraphic sequences were encountered. The Northeast quarter had no packed earthen floor surfaces or joist trench outlines beneath the overburden and Stratum 1 deposits, except along the western edge. Here the ephemeral remains of Joist Trenches J and F were revealed, along with portions of Joist Trenches G and H, which were visible only on the southern edge.
against the balk. After the overburden was removed, this quarter was tested with Test Unit 12 in the northeast corner of the room and a test trench running east/west across the entire Northeast quarter. The area consisted of a homogeneous brown silty loam fill. Previously existing earthen floors, joist trenches, or other features in this corner of the building had evidently been destroyed and replaced with the homogeneous silty loam fill. In addition, excavation of Unit 12 revealed that in this area the north exterior and eastern interior dividing walls of the room were built directly on the ground without underlying cobblestone foundations. This is in contrast to the western dividing wall and northern and southern exterior walls in the western portion of the room that are supported by cobble foundations, and suggested that the western portion of the room may have been built at a different time than the eastern portion.

Additional major disturbances were encountered in the form of plaster-and-concrete-filled plumbing trenches, designated Pits B and C, which had been excavated through all layers beneath the overburden in the Northeast quarter and extending along the north side of the Southeast quarter.

Stratigraphy in the Southeast quarter also differed from the rest of the room. Here the Stratum 4 surface rested directly on the sterile basement soil with no earlier floor layers beneath it. This suggests that in this area it may represent a packed earthen surface on the exterior east end of the first kitchen as shown on Vallejo’s drawing of this portion of the house. Features included posthole molds and an elongated lime-filled pit. Five posthole molds designated A through E were encountered in the southeast corner of the room. They were clustered together in an irregular random pattern. The fill was removed from A through D. The postholes were irregularly square to oval in shape, measuring approximately 8 in.
across and from 5 to 8.25 in. deep. An elongated ash-and-lime pit designated Feature I was encountered resting on and excavated into Stratum 4 in the eastern two-thirds of the south half of the room (Figure 5). The posthole molds found here may have held supports for the structure shown outside the kitchen on Vallejo’s map.

After exposure of the Stratum 4 packed earthen floor and surface in the north half and Southeast quarter, the Stratum 5 rubble layer that filled the trench containing the line of sandstone blocks was removed. This revealed a line of sandstone pieces running across the room from north to south. They capped a drain built of English-style American-period (1847 and after) bricks which formed the sides of the drain and rested on sandstone slab base stones. The silt inside the drain was designated Stratum 7 (Figures 6 and 7).

**ROOM 105 STRATIGRAPHIC SYNTHESIS**

Excavation in Room 105 encountered three packed earthen floors identified as Strata 3, 4, and 6. The Stratum 3 floor was bisected with a series of intrusive trenches that had been used to support floor joists for a wooden floor presumably installed by Alfred Seeley around 1869. The Stratum 3 floor and trenches were covered with a packed overburden. This in turn was covered with a layer of loose plaster.
rubble overburden. These upper two layers were apparently brought in during the early 1930s when Cave Coutts, Jr. removed the wooden floor and replaced it with a poured concrete floor. This Stratum 3 floor overlaid the drain feature.

The stratigraphic profile of the southern balk of the Northwest quarter is shown in Figure 8. Elements to be noted, from bottom to top, include the lowest and earliest surface at Stratum 6, the drain capped with sandstone blocks and lined with American-period bricks, the Stratum 7 drain fill, the Stratum 4 packed earthen floor, the Stratum 3 packed earthen floor, and the Stratum 5 rubble-filled drain trench excavated into Strata 4 and 6 floors. The profiles of the joist trenches and their fills (Stratum 2) labeled A through E, as well as Fire Pit J and Stratum 1, show packed overburden. The loose plaster-and-concrete rubble overburden top layer is represented by the dotted line across the top of the drawing. Figure 9 shows the stratigraphic sequence for the Southwest quarter and much of the Southeast quarter. It is essentially the same as that for the Northwest. However, note how in the Southwest quarter on the right side of the balk, Stratum 4 is sitting on sterile basement soil with no features beneath it, suggesting that at this location it may have been the exterior surface outside the original kitchen, although now enclosed by the expanded kitchen.

In summary, the packed earthen floors represented by Strata 4 and 6 had been bisected by a drain trench. Stratum 4 appears to have been the working floor at the time of drain construction. The trench was excavated through Stratum 4 and the underlying Stratum 6 and into the clay basement soil. It was lined
Figure 6. Sandstone capstones in the drain trench in the Northwest quarter of the room. The drain trench has been dug into the Stratum 4 floor.

with flat sandstone slabs along the bottom and American-period (1847 or later) brick along the sides, and capped with sandstone slabs over the top. The area above the capping stones was filled in with a rubble layer, designated Stratum 5, to repair the Stratum 4 floor after the drain was installed. The floor continued to be used after the drain construction, as indicated by fire hearths built directly on the Stratum 5 rubble. Eventually this surface was covered with a new earthen floor which became Stratum 3 described previously.

The drain entered the room through the north wall and exited under the south wall. Where it passed through the walls, the 15 in. wide opening to accommodate the drain was lined with cobbles ranging in size from 5 to 10 in. in diameter. These smaller cobbles are covered with large cobble “lintel” stones to support the adobe wall resting over the drain. The oval-shaped waterworn lintel cobbles are around 20 in. in length and 5 in. thick. Their width could not be determined. The bottom of the drain within these openings is covered with dense sandstone slabs. The sides are lined with American-period English-style brick. Excavation of additional units in the courtyard and the Calhoun Street porch encountered segments of this same drain. Its purpose appears to have been to convey rain and wastewater runoff from the courtyard to the street.
NORTH WALL FOUNDATION AND EXTERIOR DRAIN IN UNIT 3A EAST EXTENSION

In order to examine the construction of the drain and its impact and relationship to the standing walls and foundations of Room 105, excavation was undertaken on the Calhoun Street porch against the exterior face of the south wall where the drain exited Room 105. Unit 3A East Extension was laid out as a 5 x 4.5 ft. excavation to the east of previously excavated Unit 3A to investigate the continuation of the drain. Excavation revealed the continuation of the drain and evidence suggesting that the western portion of the Room 105 foundation predated the drain’s construction, while the portion east of the drain trench was built at the same time as the drain.

The unit was dug in stratigraphic levels. Stratum 1 was a tan silty loam with plaster fragments that extended from the surface to a depth of around 3 in. Stratum 2 consisted of moderately compacted brown silty loam with building rubble that extended to a depth of about 13 in. and covered the drain trench. Stratum 3 was a layer of water-deposited silt on the west side of the drain. This was an extension of water-deposited silts encountered in the east half of Unit 3A. The silt layer did not cover the drain and was not present on its east side, suggesting that it may have been in place prior to the drain’s construction and removed in the area of the drain trench and further east when the drain trench was excavated. Stratum 4 was a brown silty loam fill that had been deposited in the drain trench after it was no longer in use. At around 24 in. below the surface, Stratum 4 rested on Stratum 5, a layer of dark brown silt deposited during the drain’s use that extended to a depth of around 27 in.

Drain construction at this point consisted of a trench approximately 24 in. wide at the top, 6 in.
Figure 8. Stratigraphic profile Northwest quarter of Room 105. Looking south into the balk dividing the Northwest and Northeast quarters. See Figure 9 for scale.
Figure 9. Stratigraphic profile of the Southwest quarter and western portion of the Southeast quarter looking north into the balk dividing the north and south half of the rooms.
Figure 10. Cleaned-out drain in Unit 3A Extension. Note the sandstone slabs in the bottom of the drain, and the lintel and cobble stone forming the opening where the drain exits the wall. The inset figure shows the drain configuration. The thicker arrow from the photograph points to the unit location. The thin arrows point to excavated segments of the drain showing its course from the courtyard on the right, through Room 105, and into the street on the left.

wide at the bottom, and 12 in. deep. It had been excavated into reddish brown silty loam basement soil. Unlike the interior portion of the drain, encountered in Room 105, here it was not lined with brick or capped with sandstone blocks. The bottom of the first 30 in. as it extended from the southern wall of the building was paved with sandstone slabs. The remainder had a bottom lining of small pebbles and cobbles.

Under the standing southern wall of the building, the drain showed a similar construction to what had been encountered under the wall in the interior of Room 105. As noted above, where it passed through the walls, the 15 in. wide opening to accommodate the drain was lined with cobbles ranging in size from 5 to 10 in. in diameter. These are covered with cobble “lintel” stones that support the adobe wall over the drain. The bottom of the drain within these openings was covered with dense sandstone slabs. The sides were lined with American-period English-style brick. In Unit 3A Eastern Extension, only the brick against the east wall of the drain remained in place (Figure 10).

On the north side of the unit, examination of the building’s southern wall foundation around the drain revealed evidence of its construction in relation to Room 105’s evolution. On the east side, the wall foundation was a layer of small cobbles and pebbles similar to the footings exposed in Units 4 and 5, running beneath the remaining south wall segment of Room 105 and the south wall of Room 106 on the
Figure 11. Stratigraphic profile of foundations and drain construction under the south wall of Room 105. Note on the left side the original foundation of fist-sized cobbles and bottoms of adobe blocks, foundation break, the area between the break and the drain filled in with patching of mud, tile fragments, and cobbles, suggesting this foundation and wall were in place before the drain was built and were impacted by its construction. On the right side, the rubble foundation of small pebbles is unbroken and shows a uniform fit to the drain, suggesting that it and the drain were built at the same time.

east end of the southern porch. The foundation on this side ran to and abutted the drain trench as if it had been laid in place at the same time as the drain construction.

West of the drain, the foundation was different and consisted of a single row of fist-sized cobbles covered with small pebbles. The foundation does not form a continuous, unbroken line of stones, but appears to have been removed within 20 in. of the west side of the drain. This space had been filled in with mud patching, small cobbles, and tile fragments, suggesting that this portion of the foundation was in place prior to the drain’s construction and was disturbed while it was being built (Figure 11).

**DATA SYNTHESIS**

**Time Frame**

Dated artifacts from Room 105 are shown by stratum on Table 1. Most of the items consisted of ceramics with fairly long manufacture date ranges, so they are not that helpful in narrowing down use periods for the different floors. Unfortunately, no datable material was recovered from the Stratum 6 floor. Its position as the lowest, and therefore first, of the packed earthen floors, indicates it is undoubtedly from the Mexican (pre-1847) period and probably in use by the early 1830s if not before. Stratum 4 was in use and cut by the drain trench at the time of its construction. Thin-section analysis compared samples of brick from the drain to known examples of brick manufactured in San Diego by the
Table 1. Room 105 dates, by stratum.

<table>
<thead>
<tr>
<th>Item</th>
<th>Mark / Pattern</th>
<th>Date</th>
<th>Mean</th>
<th>#</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stratum 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cup</td>
<td>&quot;COPELAND AND GARRETT&quot;; underglaze teal stamp.</td>
<td>1833-1847</td>
<td>1840</td>
<td>1</td>
<td>Kowalsky and Kowalsky 1999:158(B625); Lage 2004:319</td>
</tr>
<tr>
<td>Misc. unident. ceramic frags.</td>
<td>&quot;J &amp; T…”; underglaze blue transfer</td>
<td>1835-1855</td>
<td>1845</td>
<td>1</td>
<td>Kowalsky and Kowalsky 1999:524</td>
</tr>
<tr>
<td>Toy marble</td>
<td></td>
<td>1880-1910</td>
<td>1895</td>
<td>3</td>
<td>Carskadden and Gartley 1990: 55-69</td>
</tr>
<tr>
<td><strong>Stratum Mean / Total</strong></td>
<td></td>
<td></td>
<td>1864</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td><strong>Stratum 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misc. unident. ceramic frags.</td>
<td>&quot;FELS… / PORCELAIN / LATE SP…”; underglaze purple</td>
<td>1833-1847</td>
<td>1840</td>
<td>1</td>
<td>Kowalsky and Kowalsky 1999:159(B628); Lage 2004:317</td>
</tr>
<tr>
<td>Saucer</td>
<td>Molded white ironstone</td>
<td>1850-1900</td>
<td>1875</td>
<td>1</td>
<td>Felton and Schulz 1983:42-45; Stoltzfus and Snyder 1997:33; Wetherbee 1985:76-78</td>
</tr>
<tr>
<td><strong>Stratum Mean / Total</strong></td>
<td></td>
<td></td>
<td>1842</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Stratum 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stratum Mean / Total</strong></td>
<td></td>
<td></td>
<td>1832</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Stratum 4</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plate</td>
<td>Andalusia Pattern</td>
<td>1800-1864</td>
<td>1832</td>
<td>1</td>
<td>McCoy TMI 2007:16:4 (P1116-176-43); Williams 1978:185; Williams and Weber 1986:544</td>
</tr>
<tr>
<td>Plate</td>
<td>Hong Kong Pattern</td>
<td>1835-1861</td>
<td>1848</td>
<td>1</td>
<td>Williams 1981:29; web printout in possession of Walter Enterprises</td>
</tr>
<tr>
<td><strong>Stratum Mean / Total</strong></td>
<td></td>
<td></td>
<td>1843</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td><strong>Stratum 5</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2. Room 105 Strata 3-6 activity group profile.

<table>
<thead>
<tr>
<th>ACTIVITY GROUP</th>
<th>NUMBER</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building materials</td>
<td>113</td>
<td>24.3</td>
</tr>
<tr>
<td>Consumer</td>
<td>52</td>
<td>11.2</td>
</tr>
<tr>
<td>Garment</td>
<td>6</td>
<td>1.3</td>
</tr>
<tr>
<td>Household</td>
<td>14</td>
<td>3.0</td>
</tr>
<tr>
<td>Kitchen items</td>
<td>276</td>
<td>59.4</td>
</tr>
<tr>
<td>Munitions</td>
<td>3</td>
<td>0.6</td>
</tr>
<tr>
<td>Personal</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Total</td>
<td>465</td>
<td></td>
</tr>
</tbody>
</table>

Mormon Battalion in 1847. There were enough similarities to suggest that the drain brick was probably manufactured during the same period, indicating the floor was trenched during the earliest years of American occupation. Stratum 4 and the drain trench rubble fill of Stratum 5 both produced ceramics with introduction dates of 1846, confirming what had already been indicated by the brick, that the trench was filled in following construction and that the Strata 4 and 5 surfaces continued in use as kitchen floors during the early American period. The uppermost Stratum 3 floor had only two dateable items. Both were pieces of transfer-ware ceramics with the Colonna pattern manufactured between 1828 and 1860 (Coysh and Henrywood 1982:89, 160, 1989:60, 93; Snyder 1997:64). Since this floor was constructed to replace the one represented by Strata 4 and 5, it probably dates to the late 1850s through the early to mid-1860s.

Activity Profile

An activity profile for the floors represented by Strata 3 through 6 is shown in Table 2. Not surprisingly, kitchen artifacts dominated the profile, at 59 percent, followed by building materials at 24 percent. Consumer items rank third at 11 percent and then household items at 3 percent. Other activity groups made up 1 percent or less of the assemblage.

The domination of the collection by kitchen and consumer items (70 percent), confirms what had already been indicated by the numerous fire hearths found on the earthen floors and the Vallejo plan: that this was the kitchen for the Bandini home. Kitchen items included butchered large and small mammal and bird bones and numerous fish bones, fish scales, shellfish, Euro-American ceramics, and Native American Tizon Brown ware. Consumer items included remains of glass bottles. One was a Bordeaux-style wine bottle, and another a Swain’s Panacea tonic bottle. The rest consisted of dark green (black) glass, and
could not be identified as to type. Building materials included adobe, tile, plaster, and brick fragments; machine-cut square nails; lumber fragments; and window glass.

**Kitchen Evolution**

Based on the archaeology of Room 105 described above and additional excavation on the south side of the southern exterior wall in Unit 3A Extension, where the drain exits the building, the following chronological sequence can be suggested for the room’s evolution.

The kitchen began as a small addition to the east end of the south wing of the Bandini Adobe as shown on Vallejo’s Plan. This original kitchen was originally square in shape, as opposed to the present rectangular configuration of Room 105. It was identical in north/south width to the present room 105 but only about three-quarters of the current east/west length. It is depicted as a small room in the early Bandini era, very likely with a ventilated roof to allow smoke to escape. Outside the east (back) wall of that original kitchen were an *horno* and a structure that may have had three cooking hearths. This was probably a typical Mexican elevated *hornia*, still used for cooking in many parts of rural Mexico. The areas where the *horno* and hearth were located would currently be in the Southeast quarter of room 105, and possibly extending into the Northeast quarter of Room 106.

The remnant foundation in Unit 3A and 3A Extension on the exterior of the room’s south wall, west of the drain trench, suggested that prior to drain construction, a foundation made of a single row of fist-sized cobbles supported the original square-shaped kitchen. This is also indicated by a similar cobble foundation along the north side of the Northwest quarter of Room 105, west of where the drain passes under the north wall of the room.

Based on the fact that the drain is excavated through the floors represented by Strata 4 and 6, it appears that these bottom two packed earthen floors are associated with this first kitchen. The Stratum 4 floor with Stratum 5 rubble patching over the drain continued in use as part of the enlarged kitchen after the drain construction, as evidenced by the fact that it was capped and patched with Stratum 5 fill level to the top of Stratum 4. In addition, Ash Pit Feature E rested on both Stratum 5 fill and Stratum 4 packed floor surfaces, indicating the floor continued in use after the drain was built.

Further evidence of enlarging the kitchen at this time was encountered in the Southeast quarter, where Stratum 4 rests on the sterile basement soil with no earlier floor layers beneath it. This suggests that in this area it may represent a packed earthen surface on the exterior east end of the first kitchen. The posthole molds found here may have supported the structure shown outside the kitchen on Vallejo’s map. The surface was later incorporated into the expanded kitchen floor after the drain was built.

Sometime after 1847, the kitchen was expanded and the south wing of the adobe extended eastward to its current length with the addition of Room 106. The walls of the original kitchen were torn down, the drain was installed, and the rubble pebble foundation was laid east of the drain for the southern exterior wall. For the northern exterior wall and the eastern interior dividing wall, no foundations were used on the new portion. The floors of Stratum 3 and the surface of Stratum 4 with the Stratum 5 drain trench fill represented this later kitchen. An 1853 map of Old Town by George Derby shows the south wing of the Bandini Adobe constructed eastward to its present length. This indicates that the expansion of the kitchen in Room 105 and addition of Room 106 occurred sometime during the six-year period between 1847 and 1853.

Additional evidence of later American-period dates for the Stratum 3 and the upper Stratum 4 floors was the presence of small fragments of sea grass in the soil matrix of these levels. Mats of sea grass were encountered in excavations around the exterior of the building, where they appear to have been used during the 1850s and early 1860s to help stop erosion (Schaefer et al. 2012). The small bits of sea grass in Strata 3 and 4 floors appear to have been tracked in from the outside during the period that Strata 3 and 4 functioned as kitchen floors, suggesting the 1850s and early 1860s for their use.

In 1869, Alfred Seeley rebuilt the structure into the Cosmopolitan Hotel. This involved the installation of wooden floors and resulted in the joist trenches that bisected the previous earthen floors.
the early 1930s, Cave Couts, Jr. remodeled the building. At this time he removed the wooden floor, filled the joist trenches, put in trenches to install plumbing, leveled the surface with overburden and plaster rubble, and poured concrete floors.

**Analysis of Kitchen Hearths**

A total of nine individual cooking hearths designated Fire Pits A-H and J were identified. Although layers of ash covered many of the earthen floor surfaces, especially on Stratum 4, these hearths were discreet areas of densely burned material. They consisted of irregular ovoid to rectangular-shaped concentrations of ash and charcoal from 1 to 4 in. thick. The hearths ranged in size from 14 to 18 in. across in smaller examples such as Fire Pits C and F, to over 20 in. across and 30 to 40 in. in length at Fire Pits A and E. Due to the crosscutting by joist trenches, it was sometimes difficult to tell where one hearth feature ended and another began. For example, Fire Pits E and H were separated by a single joist trench, and these two features may actually represent a single hearth more than 60 in. in length. In addition to ash and charcoal, the hearths contained butchered and burned large and small mammal and bird bones, fish bones and scales, shellfish, Native American Tizon Brownware pottery, and transfer-decorated English ceramic fragments.

All of the hearths occurred in the west half of the room. Fire Pits A, B, C, and J were in the Northwest quarter. The highest concentration, D, E, F, G, and H, were in the Southwest quarter. All but two of the fire pit features were clearly associated with Strata 4 and 5. Fire Pit J was the earliest of the hearth features, resting on Stratum 6. This floor undoubtedly had more cooking areas, but only a small area of this surface was uncovered. Fire Pit A, in the Northwest quarter, was the only hearth that appeared to be associated with the Stratum 3 floor. Although it rested on the Stratum 5 drain trench fill, the top was encountered within Stratum 3, suggesting the pit of this hearth may have been excavated into this later floor. The very slight use of this surface for cooking, as indicated by only one fire hearth associated with it, may indicate the short life of this floor as a result of its construction during the late Bandini period.

All the remaining hearths were clearly associated with the Stratum 4 floor. They were all located under Stratum 3 and had contact with the Stratum 4 floor or Stratum 5 drain fill. These included Fire Pits B and C in the Northwest quarter, and D, E, F, G, and H in the Southwest quarter. Fire Pit D rested directly on the western portion of Fire Pit E. Fire Pit C was on Stratum 5, as were portions of E, G, and H, indicating the continued use of the floor as a kitchen after the drain was constructed.

The numerous fire pit hearths encountered in Room 105 provide ample evidence of cooking directly on the earthen kitchen floor. This practice has been documented elsewhere in California, especially at mission sites (Allen 2010; Farris 1991:24; Hoover and Costello 1985:17). Rebecca Allen (1998:35) noted that at Mission Santa Cruz, “Each Mission Room had several features in common including a centrally located fire pit. The condition and contents of the pits varied in configuration. Many rooms had secondary fire pits as well.” One room varied slightly from this pattern with “several small pits clustered haphazardly in the center of the room” (Allen 1998:37). In her survey of Mexican-period kitchens in California, Edna Kimbro commented,

> the humblest form of cooking hearth was the *tecuile*, or fire pit dug into the earth with encircling stones to elevate the *comal* or cradling the olla above the heat source, an open flame or charcoal. The tecuile is considered a pre-conquest aboriginal style hearth in Mexico, yet is still in use today. In California, such fire pits are considered diagnostic of neophyte quarters at California mission sites [Kimbro n.d.].

Although most archaeological evidence to date associates these types of hearths with mission sites, the practice of cooking on a small fire built directly on the floor is well-documented in nineteenth-century paintings of Mexican and Mexican California homes (Narjot 1884; Nebel 1836) (Figure 12) and continued into modern times in Mexico (Lewis 1951:183-184). The hearths in Room 105 provide testimony that this very Mexican practice for food preparation was used not only at the missions of California but also in the kitchens of the wealthiest families of the ranchero aristocracy.
Figure 12. Mexican cooks prepare tortillas over a fire built directly on an earthen kitchen floor in this lithograph of an 1836 painting, “Tortilleras,” by Carl Nebel. (Public domain image originally printed in Nebel 1836).

ACKNOWLEDGEMENTS

The authors would like to thank Jerry Schaefer for proofreading this manuscript and Rebecca Allen and Larry Felton for their generous sharing of information on Spanish- and Mexican-period cooking hearths.

REFERENCES CITED

Allen, Rebecca

Arter, Susan
Birks, Steve

Carskadden, Jeff, and Richard Gartley

Cooper-Molera TMI

Coysh, A. W., and R. K. Henrywood

Farris, Glenn J.
1991 Archeological Testing in the Neophyte Family Housing Area at Mission San Juan Bautista, California. Manuscript, California Department of Parks and Recreation, Cultural Heritage Section, Sacramento.

Felton, David L., and Peter D. Schulz

Godden, Geoffrey A.

Hector, Susan M., and Stephen R. Van Wormer

Hoover, Robert L., and Julia G. Costello (editors)

Kimbro, Edna E.

Kowalsky, Arnold A., and Dorothy E. Kowalsky

Lage, Chad

Lewis, Oscar

McCoy TMI

McKearin, George S., and Helen McKearin
Narjot, Ernest Étienne

Nebel, Charles

Schaefer, Jerry, Scott Wolf, Stephen Van Wormer, Susan Walter, and Susan Arter

Snyder, Jeffrey B.

Stoltzfus, Dawn, and Jeffrey Snyder

Wetherbee, Jean

Williams, Petra

Williams, Petra, and Marguerite R. Weber
1986 Staffordshire II: Romantic Transfer Patterns. Fountain House East, Jeffersontown, Kentucky.