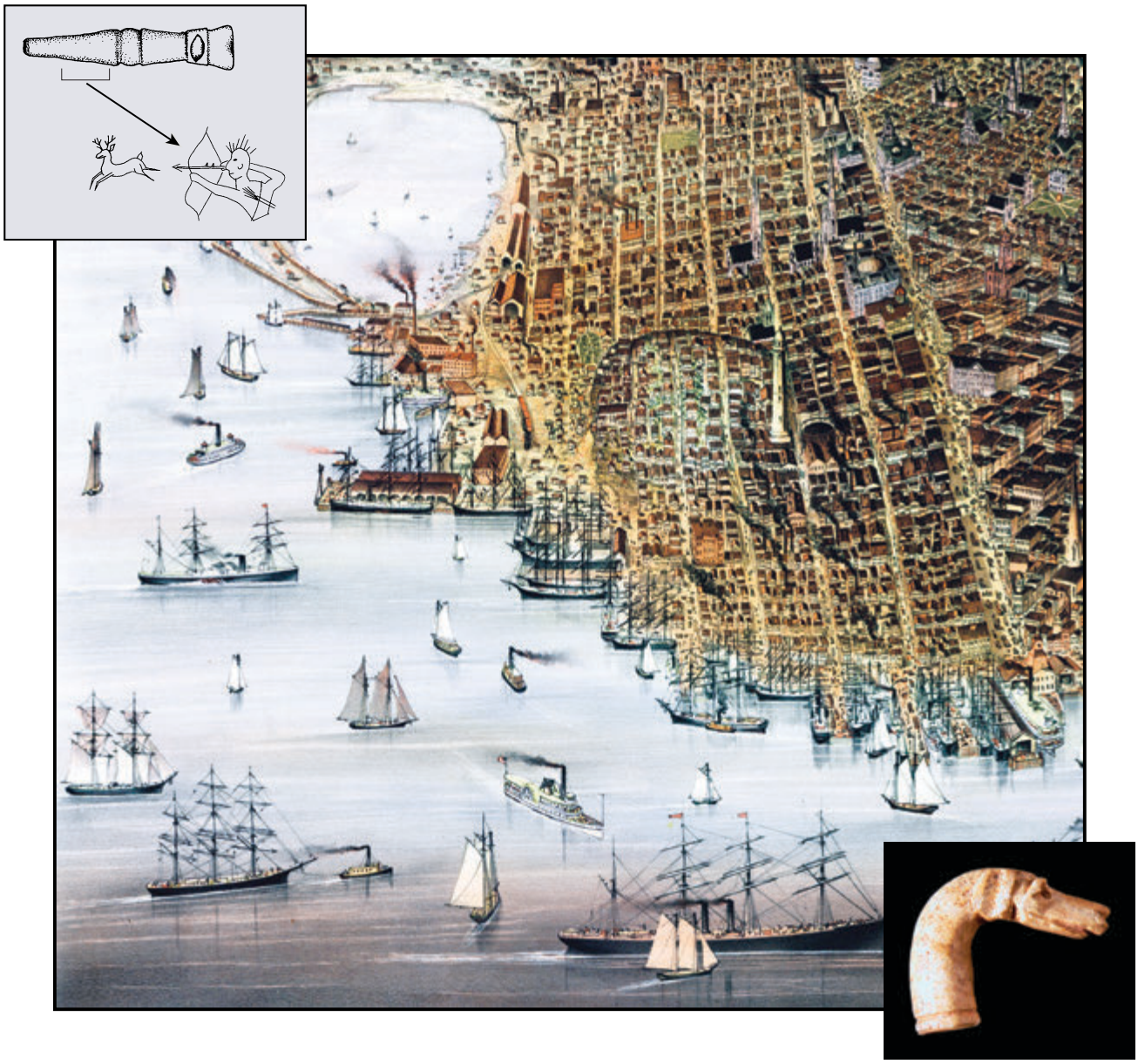
SOUTH OF MARKET:
HISTORICAL ARCHAEOLOGY OF 3 SAN FRANCISCO NEIGHBORHOODS

The San Francisco-Oakland Bay Bridge West Approach Project

VOLUME I



Prepared for the California Department of Transportation

ASC
ANTHROPOLOGICAL STUDIES CENTER
SONOMA STATE UNIVERSITY

Cover illustration: SOUTH OF MARKET examines life in the San Francisco Bay Area at a variety of scales. Our cover illustration shows an 1878 birds-eye view of the neighborhood between Market Street on the right and Mission Bay on the left (courtesy of Library of Congress, Geography and Map Division). Dropping to the small scale, we show two tiny bone artifacts: a handle carved in the shape of dog's head and an unidentifiable object that bears an etching of a hunting scene (illustration by M. Stoyka). About ½-inch long, this miniscule image is barely visible to the naked eye.

SOUTH OF MARKET:
Historical Archaeology of 3 San Francisco Neighborhoods

The San Francisco-Oakland Bay Bridge West Approach Project

(SF-80 P.M. 4.9/5.9 in the City and County of San Francisco, California)

Volume I

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2009

Prepared in cooperation with the State of California Department of Transportation and the Federal Highway Commission. The contents of this report reflect the views of the authors, who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the State of California or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation.

EXECUTIVE SUMMARY

The West Approach to the San Francisco-Oakland Bay Bridge (SFOBB), a project of the California Department of Transportation (Caltrans) District 4, involved seismic upgrades to the bridge approach on 14 city blocks from the West Anchorage of the SFOBB between Fremont and Beale streets to the beginning of the SF-80 Bayshore Viaduct between Fourth and Fifth streets. As part of its plan to comply with Public Resources Code 5024, Caltrans contracted with the Anthropological Studies Center (ASC) at Sonoma State University to examine the right-of-way and construction easements along the alignment. An archaeological sensitivity study combined with logistical constraints reduced the portion of the impact area likely to contain important archaeological remains from 14 city blocks to portions of 6 city blocks.

The ASC conducted archaeological excavations on these six city blocks between May 2001 and January 2003 and found archaeological features on each of them. After careful evaluation, archaeologists found the contents of 37 privies, 5 wells, and 1 cesspool, as well as the St. Mary's Hospital complex and one prehistoric midden, to be potentially eligible to the National Register of Historic Places (NRHP) and to the California Register of Historic Resources (CRHR) under Criterion D for their importance to the history of California. The trinomials assigned to the West Approach Project are CA-SFR-150H (Block 4), -151H (Block 5), -152H (Block 7), -153H (Block 9), -154/H (Block 10), and -137H (Block 11). The artifacts and field notes are curated at the Archaeological Collections Facility, Sonoma State University, in Rohnert Park, California.

Due to the enormous quantity of data, three separate reports were planned for the investigations: a report on the prehistoric deposit, the Block Technical Report (BTR) series—all included on a compact disc at the back of this volume—and this, the Interpretive Report. The goal of the BTRs is to allow archaeologists easy access to all the data on eligible historic features, while this report interprets these data.

We designed the Interpretive Report to present insights afforded by the combination of archaeological stratigraphy, material remains, and historical research presented in the BTRs. We intentionally made the content of the volume eclectic and its format visually diverse. Individual authors, from within and outside of ASC, were given the freedom to take their interpretations in whatever directions they felt appropriate. Some studies rely heavily on quantitative, statistical data; others are qualitative; while some use archaeological imagination to weave together fact-based stories.

The report is divided into four parts. Each part contains main essays (structured as chapters), short essays, and sidebars. The short essays connect thematically with the main essay and are focused on specific self-contained topics. Some cover relevant historical topics, others cover purely archaeological manifestations, and others range between both sources. Sidebars present "minor illustrative material," either of an archaeological or a literary nature, in hope to catch the general reader's interest.

Part I contains two main essays. The first presents an introduction to the West Approach Project and briefly describes our methods and research questions. The second presents a brief history of the South of Market. Topics of short essays/sidebars range from shoring, to prehistoric remains, to the musings of Bret Harte. Part II moves up two levels and provides context for the volume with a look at neighborhood. Moving outward from the household and using statistical findings, a single chapter discusses life in the three project area neighborhoods. Short essays/sidebars cover cats, rats, and the community store, among other topics. Part III examines project

findings from the household scale in five wide-ranging chapters. The first traces immigrant women and their household possessions; the second covers the various resident dressmakers and tailors; the third examines tobacco; the fourth, "life at home"; and the last, the archaeological visibility of ethnicity and socioeconomic status. Short essays/sidebars run the gamut from baby shoes to taxidermy and from guinea pigs to fraternal societies and glass whimseys. Part IV brings in statistical findings from the Cypress Project in West Oakland to work at the city level and includes three chapters: Maritime Workers, Rivals Across the Bay, and the Power of Numbers—Material Status Index and Moving Forward. Topics of short essays/side bars range from uniform buttons to earthquakes.

The compact disk at the back of Volume II contains the appendixes: Feature Associations by Block (A), Feature Snapshots (B), Block Technical Reports and Prehistoric Site Report (C), Faunal Data and Artifact Catalogs (D), Beads by Karlas Karklins with Lester A. Ross (E), and Statistics by Bruce Owen (F).

ACKNOWLEDGMENTS

It has been nearly 20 years since the Loma Prieta Earthquake both damaged the San Francisco-Oakland freeway system and created an unprecedented opportunity for historical archaeology in the densely urban areas in Oakland and San Francisco. Janet Pape, the Caltrans archaeology project manager for our work in both cities, initially identified the potential for historical archaeology, secured the funding, and oversaw the vast majority of the work. This was no easy task. We commend Janet for her effort, and hope that she feels we made the best of the opportunity she provided.

ASC's freeway reconstruction work began in July 1991 and has continued almost without a break since then. Hundreds of individuals contributed to our studies. Our memories have faded with time and we no longer recall some of those without whom our work would have failed. We readily acknowledge the field workers who toiled through the seasons, the lab workers who sorted through the artifacts, the researchers who never gave up, the support staff within ASC, SSU, and Caltrans who enabled the project, and those interested professionals and community members who cheered or jeered us on.

Mary Praetzellis and Adrian Praetzellis

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Preferred Report References

Please cite as:

Praetzellis, Mary (series editor)

2007 *Block Technical Report: Historical Archaeology of the San Francisco–Oakland Bay Bridge West Approach Project.* Three reports of two volumes each. Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Prepared for California Department of Transportation, District 4, Oakland.

Praetzellis, Mary (editor)

2007a *Block Technical Report: Historical Archaeology of the San Francisco–Oakland Bay Bridge West Approach Project, Tar Flat Neighborhood (Block 4).* Two volumes. Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Prepared for California Department of Transportation, District 4, Oakland.

2007b *Block Technical Report: Historical Archaeology of the San Francisco–Oakland Bay Bridge West Approach Project, Edge of Rincon Hill Neighborhood (Blocks 5, 7, and 9).* Two volumes. Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Prepared for California Department of Transportation, District 4, Oakland.

2007c *Block Technical Report: Historical Archaeology of the San Francisco–Oakland Bay Bridge West Approach Project, Shore of Mission Bay Neighborhood (Blocks 10 and 11).* Two volumes. Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Prepared for California Department of Transportation, District 4, Oakland.

Praetzellis, Mary, and Adrian Praetzellis (editors)

2009 *South of Market: Historical Archaeology of 3 San Francisco Neighborhoods. The San Francisco–Oakland Bay Bridge West Approach Project.* Two volumes. Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Prepared for California Department of Transportation, District 4, Oakland.

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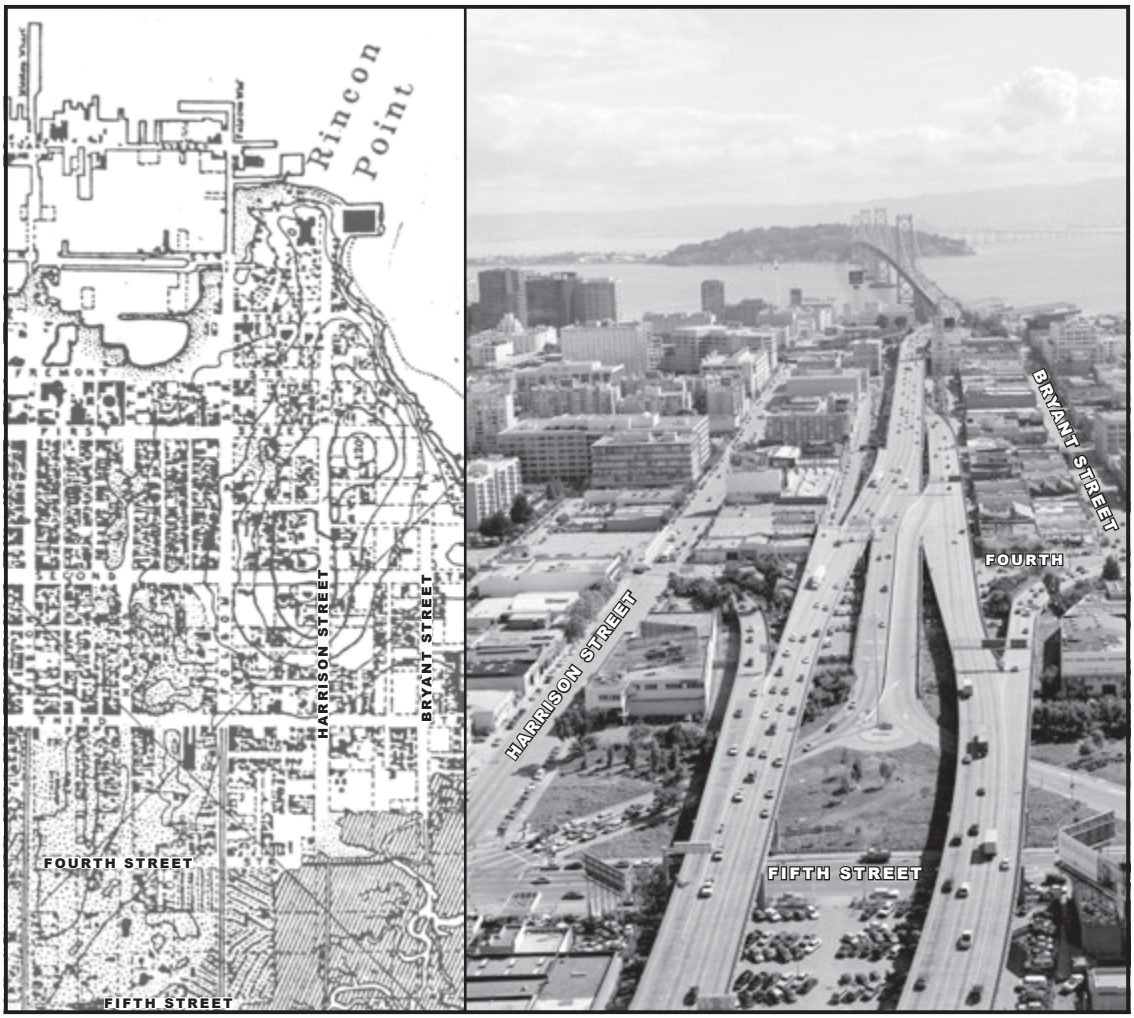
PART I: SETTING

South of Market: Historical Archaeology of 3 San Francisco Neighborhoods is divided into four parts. Each part changes the scale of analysis in the interpretation of the archaeological and historical data developed by the San Francisco-Oakland Bay Bridge West Approach Project. Part I is an introduction to the project, where it took place, how it was envisioned, and how the report addresses the project research design, as well as a brief narrative history of our portion of the South of Market District in San Francisco.



Left: Detail from San Francisco, 1857/1859, U.S. Coast Survey map. Right: Aerial view of San Francisco approach to the Bay Bridge, May 1998 (photographer: Frank Deras Jr.). (Courtesy of the Library of Congress Prints and Photographs Division, Washington, D.C.)

CHAPTER 1

THE LOMA PRIETA EARTHQUAKE AND ITS AFTERMATH

MARY PRAETZELLIS AND ADRIAN PRAETZELLIS

5:04 P.M., 17 OCTOBER 1989

Before the shaking, disheartened San Francisco Giants' fans jested that even an earthquake could not save their home team from losing the 1989 World Series to neighboring rivals across the bay. They were right; the Giants still lost in four games. No one at the time, however, could have predicted the effect that such an event would have on regional transportation. A powerful, rolling, 6.9-magnitude earthquake struck just as the Giants and Oakland A's took the field on the afternoon of that third game. Fortuitously, many people rode out the shaking in the safety of their living rooms, where they had gathered in anticipation of the big game, preventing untold additional deaths on the freeways and bridges that collapsed during what was normally rush-hour traffic (Figure 1.1).

Centered over 50 miles from the San Francisco–Oakland Bay Area, the Loma Prieta Earthquake did significant damage and exposed the region's vulnerability. The California Department of Transportation (Caltrans) immediately began work to rebuild the damaged freeway system and to identify and retrofit structures that might fail in future major seismic events. San Francisco residents found they liked the views that appeared following demolition of damaged freeway structures, and planners took the opportunity to rethink the transportation system. Some freeways, most notably the Embarcadero and SF-480, were never replaced; the Central Freeway became a wide boulevard; and planners redesigned the Cypress Freeway in West Oakland to go around, rather than through, the historic African American community. Archaeologists and historians from the Anthropological Studies Center (ASC), Sonoma State University, and Caltrans collaborated on many studies connected to the redesign, replacement, and retrofit of these freeways in Oakland and San Francisco.

Figure 1.1. Two aerial views of the collapsed section of the San Francisco–Oakland Bay Bridge. (Photo: C.E. Meyer, USGS)

For the West Approach portion of the San Francisco–Oakland Bay Bridge (SFOBB) Project, archaeologists worked in advance of freeway construction between 1997 and 2003. They located 90 historic-era archaeological features. After careful evaluation, archaeologists found 37 privies, 5 wells, 1 cesspool, St. Mary's Hospital complex, and 1 prehistoric midden to be potentially eligible to the National Register of Historic Places (NRHP) and to the California Register of Historical Resources (CRHR) under Criterion D/4 for their importance to the history of California. They analyzed the resulting 211,680 artifacts and ecofacts and summarized the findings in a recently published series of Block Technical Reports (BTRs; Praetzellis, ed. 2007). The excavation at the prehistoric site (CA-SFR-154/H) is reported upon elsewhere (Martin 2006; see Stewart's sidebar, also Appendix C). The present volume is the last in the series that documents the results of the West Approach Project. While the BTRs are intended to provide contextualized data for future use by archaeologists and historians, this volume uses the data to tackle important research themes in a format accessible to public and professional audiences alike. As the final volume in the series of collaborative earthquake-related projects, an effort has been made to widen the scope to include findings from the other studies, primarily the adjoining SF-80 Bayshore Viaduct Seismic Retrofit (Praetzellis, ed. 2004) and the Cypress Freeway Replacement in Oakland (Praetzellis, ed. 2001; Praetzellis and Praetzellis, eds. 2004) (Figure 1.2).

The Construction Project: Where and What

The West Approach to the SFOBB, a portion of Interstate 80 located in the City and County of San Francisco, was built as part of the original SFOBB structure in the 1930s. It is a vital transportation link in the chain of structures that make up the Bay Bridge. As part of the California Seismic Safety Retrofit Program, the West Approach—which begins at the Fifth Street ramps and continues eastward to the San Francisco anchorage of the SFOBB—the connecting entrance and exit ramps and the west loop of the Transbay Transit Terminal will be retrofitted or replaced. The West Approach Project is scheduled to be completed in 2009.

The West Approach Project encompasses 14 city blocks, from the West Anchorage of the SFOBB West Bay Span between Fremont and Beale streets to the beginning of the SF-80 Bayshore Viaduct between Fourth and Fifth streets, and from Bryant Street between First and Second streets northwest to Mission Street between Main and Second streets (Figure 1.3).

The Legal Context

As a state-only funded project and legislatively exempt from the California Environmental Quality Act (CEQA) because of its emergency status, the West Approach Project was required to achieve compliance with California Public Resources Code 5024. This was achieved by the implementation of an archaeological study that meets standards set by Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations.

The archaeological study area was defined as that area within Caltrans' right-of-way and construction easements along the proposed alignment, totaling 14 city blocks. ASC studied portions of these blocks for their potential to contain important archaeological properties in areas to be affected by construction. When these data were combined with logistical and cost constraints, the areas to be archaeological investigated reduced to portions of 6 city blocks.

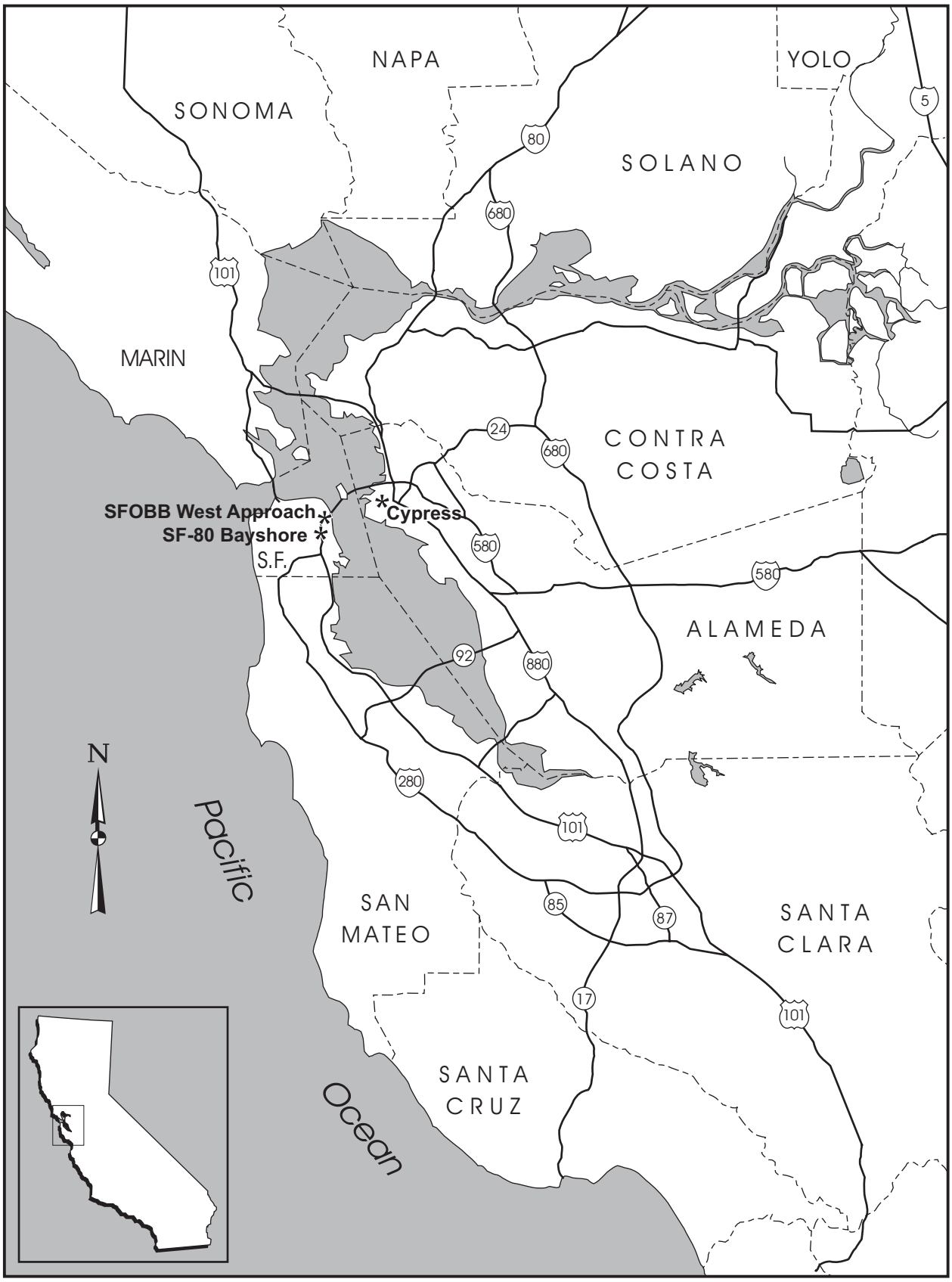


Figure 1.2. Location of San Francisco and Oakland projects.

THE SEARCH FOR MIDDEN

Suzanne B. Stewart

Overview of inital discovery of prehistoric deposit (Context 1215) under modern and historic fill at 112–112-1/2 Silver Street, West Approach Block 10.

Among the scores of archaeological deposits identified in the West Approach Project area was a single site dating to prehistoric times: a midden deposit on Block 10 given the official state designation CA-SFR-154/H (and referred to here as the West Approach midden). The midden is the intact remnant of a small, marsh-side camp where people processed shellfish and captured waterfowl, and where they sometimes spent a night or two away from home during extended collecting forays. Home might have been the seasonal Costanoan village of Sitlantic, sheltered at the mouth of Mission Creek, or Chutchui, 2 to 3 miles distant in a creek valley (Milliken 1995:60).

The site was found to be in good condition, a rare occurrence on the San Francisco peninsula, with its turbulent history of natural and manufactured landscape changes. Many prehistoric sites, including SFR-154/H, had been buried by drifting sands over the millennia. Others were still visible along the bayshore in the mid-1800s, but most of these disappeared within a few decades, the victims of historical development. First came the filling of the bay margins to create more buildable land; then steam shovels began carving up adjacent hilly terrain, cutting into any shellmounds in the way and using them as fill elsewhere. Over the years, some buried sites have come to light again, usually when deep excavations for basements or other construction have struck dark midden deposits with shell, artifacts, and—occasionally—human skeletal remains.

Only one shellmound, CA-SFR-2, made a reappearance in the vicinity of the West Approach Project in the first half of the 20th century. Edward Gifford from U.C. Berkeley was the first and last archaeologist to see the site when he visited the deposit found by construction workers nearly 6.5 feet below street level. There, in a matrix of midden more than 3 feet thick, Gifford found shell,

bird bones, ash, and charcoal, and the skeletal remains of two adult humans (Rudo 1982:40). The most spectacular of the accidental finds, however, was the BART Skeleton (CA-SFR-28), on Market Street between Seventh and Eighth streets, within 1 mile of the West Approach midden. It was found in 1969 during construction of the Bay Area Rapid Transit (BART) Civic Center Station, at a point almost 100 feet below street level. Organic clay near the skeleton produced a radiocarbon date of 5640 years before present (B.P.)—the earliest known human presence on the northern San Francisco peninsula. The BART skeletal remains were from a young adult, who died or was buried in a matrix of clayey silt ("bay mud"); then, about 2,000 to 3,000 years ago, the brackish marsh was covered with 20 feet of sand by migrating dunes, followed—years later—by a deep layer of fill.

Since that find, another half-dozen midden sites have been discovered within a mile of the West Approach Project blocks, all at depths from about 15 to 20 feet below the modern ground surface. Construction of the Yerba Buena–Moscone Convention Center in the 1980s uncovered the Surprise Shellmound (SFR-114), with an array of artifacts, faunal remains, and structural features, and at least 11 human burials; radiocarbon analysis dates the mound to between 1000 and 1600 B.P. The nearby Market Shellmound, CA-SFR-113, discovered about the same time, was a buried collection of shell midden loci beneath layers of sterile sand, historic fill, and native dune sands, with evidence of intensive use at an earlier date: from about 2100 to 1850 B.P. A third site encountered near the project area in the mid-1980s was the Stevenson Shellmound, CA-SFR-112, associated with the dunes just west of Yerba Buena Cove, dating between the other sites (from 1800 to 1250 B.P.). The site had an even broader array of artifacts (including beads, whistles, awls, and punches) and faunal remains, with sea otter and deer bone dominating, along with elk, rabbit, and harbor seal.

In the first years of the 21st century, more sites have appeared, doubling (to a total of 10) the number of sites in the West Approach neighborhood. These include CA-SFR-135, a shell midden near the west side of Yerba Buena Cove, in the West Approach's Tar Flat neighborhood, discovered during construction monitoring in 2000 (Estes et al. 2001); and CA-SFR-147 and -155 found during Jessie Square Garage Project construction

Control Units (CU) 1 and 2; historic Well 866 in foreground, West Approach Block 10.

in the spring of 2003, in dunes covered by fill. In contrast with the West Approach midden's setting on a brackish marsh, these nearby sites had been nestled among tall sand dunes about 20 to 40 feet above mean sea level, upslope from Mission Bay. The sites are relatively small and sparse and date from about 2000 to 1700 B.P. (Pastron, Gottsfield, and Vanderslice 2004).

The West Approach midden's discovery resulted from geoarchaeological analysis of the project area's natural landscape and subsequent changes (based partly on a series of soil cores produced for engineering purposes), along with the locations of known sites, which led to predictions of prehistoric archaeologically sensitive areas (ASAs). Six blocks were considered likely to contain prehistoric archaeological deposits, but only Blocks 9 and 10 would incur project impacts in areas sensitive for prehistoric archaeology. The Block 10 ASA was near the location of recorded SFR-2, where the edge of the Mission Bay marsh was displayed on an 1853 Coast Survey map. At first, a series of deep exploratory trenches (measuring up to 15 ft. deep and 16 ft. long) did not locate a midden deposit on Block 10. Testing for historic deposits, however, encountered a prehistoric midden. Once the ground was cleared down to the historic surface, flecked midden soil could be seen in the western edge of the exposure, revealing a midden deposit about 28 feet long and 1 foot thick lying on an old land surface at about 7 feet below the modern paved parking lot.

The prehistoric deposit was in close proximity to the historic finds on Block 10; in fact, a historic-era well was dug down through the deposit. Despite an absence of formal implements, ornaments, features of domestic activity, or human

burials, SFR-154/H was seen as a unique resource among the sites in the Mission Bay–Yerba Buena Cove area. Containing information on human occupation and subsistence in the San Francisco Bay area in the Late prehistoric period (perhaps from about 900 years ago up into the historic Mission era); the site was considered eligible to the California Register of Historical Resources. Data-recovery excavations took place over 10 days in August 2002, with a modest sample of site matrix (approximately 3 cubic meters, or 4 cubic yards) excavated, screened, and analyzed. Archaeologists excavated all of the midden deposit available within areas to be destroyed by freeway construction (Martin 2006).

A few years earlier, another Caltrans project had initiated a similar search for midden in San Francisco, using an alternative method. Instead of a backhoe, the ASC geoarchaeologist used a hydraulic coring device, known commercially as a "Geoprobe," to explore subsurface deposits for buried archaeological resources within the SF-80 Bayshore Seismic Retrofit Project (Meyer 2004). The Geoprobe was used because of the significant depth of the fill soils (beyond the 15-ft. reach of a backhoe arm) and for various engineering concerns. A total of 39 locations were tested by the probe, with locations selected based on geological and soils studies of the northern San Francisco peninsula. The resulting Geoprobe cores, only 1-1/4 or 2 inches in diameter and stored in 3- to 4-feet lengths, were large enough (1) to determine the nature and extent of the subsurface deposits; (2) to verify the presence (but not the absence) of archaeological materials; and (3) to capture any available organic samples for radiocarbon dating. The soil samples and a suite of 17 radiocarbon dates allowed identification of a datable sequence of Early to Middle Holocene dunes, with well-developed buried soils that formed an undulating surface. At lower elevations, these dunes were later inundated and replaced by marsh deposits with the rising sea levels filling in the Bay about 6000 B.P.; at higher elevations, the dunes remained stable until they were covered by migrating sands around 2,000 years ago. Thus, stable surfaces that would have been available for human occupation—through most of the Holocene and Historic periods—lie beneath each of the explored project blocks of the Bayshore Freeway corridor. Construction monitoring around areas of existing freeway footings that were being enlarged and strengthened discovered no prehistoric deposits.

Midden excavation in progress. Archaeologists are laying out Control Unit (CU) 3: historic Well 866 and the corner of CU 1 are visible in the foreground, West Approach Block 10.

Archaeological work for the Cypress Freeway Replacement Project in West Oakland, following Loma Prieta earthquake of 1989, represented the first large-scale attempt to predict site locations under urban surfaces in northern California. While historic-era sites could be anticipated from maps and documents, prehistoric sites could be predicted based only on geological maps and some early reports of accidental finds. Site ALA-17 had first been reported in the 19th century, in an area now occupied by a United States Postal Service building. During housing construction in 1876, human burials were removed from the site. Eighty years later, in 1956, human bones were found in the area by Pacific Gas & Electric crews; U.C. Berkeley archaeologists collected the highly fragmentary remains, identifying them as those of a young female adult.

While a few other prehistoric sites had been recorded in the area, only ALA-17 was adjacent to the project corridor, apparently just outside the construction zone's area of potential effects. The site was positioned along the edge of an early historic-era marsh, as shown on the 1850s Coast Survey maps; subsequent landfill had set it

Geoprobe setting up to drill cores at Bent L72 on Block 3 of the SF-80 Bayshore Seismic Retrofit Project.

well back from the shoreline by the 20th century. The Caltrans archaeological research design for prehistoric resources (Pape 1995) called for drilling through the newly exposed historic ground surface to test for buried deposits at each archaeologically sensitive area; if none were found, the historic-archaeological exposures would be regularly inspected for signs of prehistoric use. While this careful work was proceeding, excavations for utilities realignment encountered human remains just outside the freeway construction zone on Project Block 9. The skeletal remains were associated with a midden deposit that appeared to be the base of a once much larger mound. Despite the disturbance, large pockets of intact deposit had survived, and the site—recognized as ALA-17—was considered eligible to the National Register of Historic Places.

Data-recovery excavations involved 150 cubic meters, or 196 cubic yards, of site matrix; two human burials and at least two discrete features were recovered, along with a fairly modest quantity of formal artifacts and faunal remains. Analysis and reporting of this investigation, by Dr. Terry Jones of California Polytechnic State University, San Luis Obispo, was recently completed. Artifacts from the site are indicative of an Early- and Middle-period occupation, while radiocarbon analysis dates use of the site from between 3700 and 1500 cal B.P., with the earlier date placing it among the oldest known occupations on the bayshore. It differs from sites like West Berkeley and University Village in that it seems to represent a seasonal shellfish-collection locus rather than a major residential base. Unlike the San Francisco sites, with their mussel and clam, the primary shellfish remains were of oyster, indicating a different stage in the bay's evolution when the site was in use (Jones and Darcangelo 2007). Geoarchaeological studies by Jack Meyer worked out the landscape history of the ALA-17 dunes: active dune migration between 5,000 and 4,000 years ago had preceded the site's initial occupation, after which stable land surfaces prevailed.

A geoarchaeological approach to the search for midden in urban settings has become a standard element of the research design for Caltrans archaeological projects. As information on landscape evolution in urban settings accumulates, and as site prediction is given appropriate attention for all urban projects, damage to prehistoric archaeological sites can be minimized—relegated to a thing of the past.

Due to time and construction constraints—and because parking lots, elevated freeways, and other features of the urban landscape masked all evidence of archaeological features—a consolidated approach to compliance was undertaken. The approach collapsed the three-phased process of identification, evaluation, and treatment into a single phase, necessitating preliminary significance determinations of archaeological discoveries in the field. This approach had been used successfully on previous earthquake-related projects.

THE ARCHAEOLOGICAL RESEARCH DESIGN

The West Approach Project research design and treatment plan (RDTP; Ziesing, ed. 2000) has a long history. It is based on those developed for the cities of San Francisco (Mc Ilroy and Praetzellis, eds. 1997; Praetzellis and Praetzellis, eds. 1993; Praetzellis and Ziesing, eds. 1998), Sacramento (Praetzellis and Praetzellis 1993; Ziesing, ed. 1999), Oakland (Praetzellis, ed. 1994), and Los Angeles (Costello et al. 1996). The version developed for the RDTP for the West Approach Project was subsequently revised for the cities of San Francisco (Van Bueren et al. 2003; Walker and Ziesing, eds. 2002) and Santa Rosa (Stewart, ed. 2002). Archaeologists outside the ASC have adapted the research design for other areas, including Stockton (Costello and Marvin 1999). Reports on the application of the research design are available for San Francisco (Mc Ilroy, Meyer, and Praetzellis 2001; Praetzellis, ed. 2004), Sacramento (Meyer 2002; Praetzellis and Praetzellis 1997), Oakland (Praetzellis, ed. 2001; Praetzellis and Praetzellis, eds. 2004), Los Angeles (Costello et al. 1998; Costello, ed. 1999), and Stockton (Waghorn 2004), among others. Research designs are a place to begin. As should be expected in the application of an archaeological research design, the questions applicable to the West Approach Project have developed throughout the life of the project, as can be seen in the following chapters.

A Contextual Approach

Contextual archaeology emphasizes the specific historical, social, and cultural contexts of behavior rather than the supposed universal influences sought by the practitioners of processual archaeology. This approach parallels the trend in the social sciences in general toward problems of "contextuality, the meaning of social life to those who enact it, and the explanation of exception and indeterminants rather than the regularities in phenomena observed" (Marcus and Fischer 1986:8). Structuralism, symbolism, critical theory, and "meaning" (Leone 1986) are stressed in interpretation. Contextualists also recognize the active role of both material culture and the archaeologist in the creation of the past.

An important element of the contextual approach is that the research issues it emphasizes are not as amenable to hypotheses testing as those of processual archaeology. Many archaeologists have found the processualist hypothetico-deductive model useful in achieving methodological rigor. Others, however, feel that the approach has solidified into a canon that does not tolerate alternative ways of knowing. Historians of science have been insisting for some time that rigor in archaeology does not require an exclusively hypothetico-deductive approach (Feyerabend 1988; Wylie 1992). Most notably, the insistence that archaeological data are important to the degree that they help scholars "answer questions" about the past is based on a naive and misleading model of historical archaeology as a set of techniques for discovering specific facts—missing tidbits of

Figure 1.3. Overview of SFOBB West Approach Project Area, June 1993.

CONSTRUCTION IMPACTS

Michael D. Meyer

This 1935 construction photograph from Block 9 across Third Street shows bent footings in place and false work piles being driven on Block 10. (Photo courtesy of Bay Bridge Archive, Caltrans District 4, F15-206)

Most of the archaeological deposits of the West Approach Project had been affected by at least three episodes of construction or demolition. Typically, after a feature was initially filled it was impacted by small-scale grading or construction activities. The space was either reclaimed as open space, built over, or—in the case of some privies—was plumbed to house the flushing toilet. The 1906 earthquake and fire impacted each of the blocks with demolition, fill, and, in many cases, reconstruction. Lastly, 1930s freeway construction affected each block in different ways. Block 4 had additional impacts from freeway ramp demolition after the Loma Prieta Earthquake of 1989.

Blocks 4 and 5 were impacted by the footings for off-ramps, and by the Bay Bridge Railway Viaduct that took trains from the lower deck of the bridge to the Transbay Transit Terminal. On Block 7—the site of St. Mary's Hospital and early large estates—Rincon Hill was cut down by as much as 10 feet for the western bridge anchorage. The upper elevations of Block 9 on Rincon Hill were also graded. Rincon Hill slopes down toward Third Street as part of Block 9 and continues across the lower flats of Blocks 10 and 11; the freeway through this area is an elevated viaduct as high as 40 feet above the street level.

Freeway construction impacts from the 1930s typically resulted from one of three actions: excavating footings or foundation trenches; installing underground utilities and drainage trenches; or placing false work piles. The false work piles, as shown on this Block 9 photograph, were pairs of piles used to support the roadway deck during construction. A small trench was excavated and the piles driven into the ground. Once work was completed, the piles were cut off at the base. The paired pile stumps were found throughout Blocks 9 and 10. Some had been driven into features as shown here.

A pair of pilings is shown here in and adjacent to Well 17 on Block 9. The false piles were cut to ground level after construction of the concrete viaduct.

information—that can "fill in data gaps." While the analogy functions well when applied to the construction of chronologies, it reveals a naiveté about the process of historiography and the potential contribution of historical archaeology under other paradigms.

James Deetz characterizes the nature of research in archaeology as follows:

> In the nonexperimental sciences (if archaeology is indeed a science), precise certainty is rarely achieved. Rather, research takes the form of a gradual refinement of explanation, as more and more factors are incorporated into the construction of the past that one is attempting to create. In historical archaeology, this refinement is best accomplished by maintaining a balance between the documentary and the material evidence, being always mindful that, to be a productive exercise, the results should provide a more satisfactory explanation than would be forthcoming from either set of data alone [1988:367].

For the historical archaeologist and the social historian alike, questions serve to guide research not to constrain it. They are not answered in the conventional meaning of the word, for "there is no final and definitive account of the past as it was" (Shanks and Hodder 1998:70). Archaeologists have themselves taken up the banner, finding it desirable to "seek alternative models of science that resolve the problems of positivism" while retaining "general scientific goals" (Whitley 1998:24). Contextual or interpretive archaeology is such an approach.

The differences between processual and postprocessual models reflect quite dissimilar conceptualization of the meaning of artifacts. While processual archaeologists strive for predictability, postprocessualists insist that this is a vain search—that the meaning of artifacts is dependent on the context of their use (Hodder 1986; for several California examples, see Praetzellis and Praetzellis 2001).

While processual archaeologies are concerned with development of general principles in relation to grand explanatory models, seeing individual cases as only means to an end, postprocessualists often work in very different territory: they examine at the smallest of scales, the (re)constructed experiences of families and even individuals within those elements of contemporary social life to which the researcher feels they have access. Our research approach is based on something that historical archaeologists have known for years: some of our most effective work is done at the small scale, emphasizing the commonplace and bringing the lives of the disenfranchised into focus. It is this very characteristic of the data—their placement in the realm of the small-scale, mundane, and personal—that puts household-level historical archaeology in a position to undermine and offer an alternative to universal interpretive models. According to theorist Matthew Johnson (1999), the result of processual archaeologists' insistence on finding coherence and pattern in human history through large-scale and normative analyses is masking and homogenizing a diversity of past human experience that can only emerge through small-scale analyses. Historical archaeology, he claims, has access to "a space between often very powerful master narratives of cultural and social identity and much smaller, stranger and potentially subversive narratives of archaeological material" (Johnson 1999:34).

Historians are also moving away from "global perspectives and meta-narratives," focusing instead on events, biographies, and local vantage," in what has been coined "microhistory" (School for Advanced Research 2006:28).

BRET HARTE: GOLD RUSH STORYTELLER EXTRAORDINAIRE

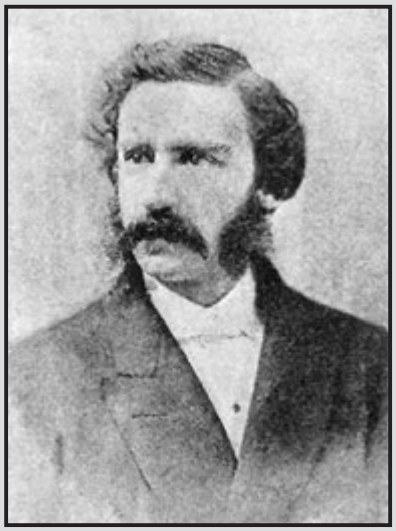
Mary Praetzellis

Bret Harte arrived in San Francisco in 1854 at the age of 17; he found his fortune in the goldfields, not as nuggets but as stories. His short stories set in mining towns, populated by colorful characters, opened the West to readers around the world. Harte enlarged the subject matter and scope for writers of fiction and set the stage for the modern Western. Newspaper and magazine markets created interest in his work and life, making him the first writer-celebrity in the West and its highest paid author for a time (Nissen 2000).

Bret Harte's father, Henry Harte, an educator and gypsy scholar, died in 1845 when Bret was a child. His mother, Catherine, set out for California in 1853; here she married Andrew Williams, who would eventually become the mayor of Oakland. Her children joined her shortly thereafter. Bret worked at various jobs around northern California, including clerk, teacher, miner, express agent, and printer's assistant before turning steadfastly to writing and settling in San Francisco.

In April 1860, Bret Harte joined the staff of the *Golden Era,* California's only literary weekly, as a typesetter. He also wrote his own column, which reportedly he set as he composed. Harte's early work caught the eye of Jessie Fremont, who collected around herself the local literary antislavery intellectuals. Through her patronage, Harte secured a number of federal government jobs, most notably secretary at the U.S. Mint. Between July 1862 and May 1864, Hart published 21 poems and 23 sketches in the *Golden Era*, after which he co-founded a new literary weekly the *Californian*, which afforded him a greater role and salary. He published therein 35 poems and 78 prose pieces through August 1866. Subsequently, Harte wrote for the *Morning Call* as their drama critic and for the *Christian Register*, a Unitarian weekly published in Boston, and the *Springfield Republican*, as their California correspondent. His real breakthrough came in 1868, when he became editor of the new *Overland Monthly.* Never warming to San Francisco, Harte left California in 1871 and never returned (Scharnhorst 2000:16–36).

Bret Harte lived in San Francisco for just over 10 years and created many volumes of short stories, poems, and of most interest to the West



"Bret Harte in 1868" (O'Day 1920). This image was published in O'Day's article about Bret Harte in the August 1920 edition of the *Overland Monthly*.

Approach Project, commentaries and sketches on various aspects of city life. For whatever reason, Bret Harte felt compelled to move annually: "Draymen have grown rich at my expense. House-agents have know me and were glad, and landlords have risen up to meet me from afar" (Harte 1864c). According to City Directories, some of his movements are as follows:

Year	Address	Neighborhood
1861	315 Second Street	Rincon Hill
1862	524 Sutter	Union Square
1863	312 Post	Union Square
1864	40 Silver Street	Happy Valley (edge of Rincon Hill)
1865	609 Folsom	Rincon Hill
1866	Not published	
1867	618 Greenwich	North Beach
1868	"too late"	
1869	13 Monroe	Union Square

Thus, for much of the time that Harte wrote local commentary, he lived near or within project area neighborhoods. 1861 would seem to find him on West Approach Block 6, 1864 on Block 9, and on Rincon Hill just adjacent to the project area in 1865. His writings during this period predate his

fame and fortune and touch on many mundane aspects of San Francisco life. Frequent musing out his window or reflections while out and about fill column after column. Or as Harte (1862) described it: "I was engaged in filling a void in the literature of the Pacific Coast. As this void was a pretty large one, and as I was informed that the Pacific Coast languished under it, I set apart two hours each day to this work of filling in."

Often paid by the word, Bret Harte used a lot of them; concise would not describe his style. He often wrote about things he had seen, enlarged with literary and historical references, now long obscured. Just Bret's musings on San Francisco weather could fill a book. The following discussion of "sanitary winds" is but one example:

> Ventilation was complete and thorough. The opening of the bay-window produced a current of wholesome air which effectually removed all noxious exhalations, together with the curtains, the hinges of the back door, and the window-shutters. Owing to this peculiarity, some of my writings acquired an extensive circulation and publicity in the neighbourhood, which years in another locality might not have produced [Bret Harte 1864a].

Bret Harte had a wonderful sense of irony and wrote very popular parodies in verse and prose mimicking the popular authors of the day. Much of his wit is lost to us with his historical and literary references spanning back nearly 150 years. The San Francisco weather, however, remains unchanged and provides a glimpse into the genius of Bret Harte (see sidebar, Chapter 3).

Research Themes and Questions

The main framework for the West Approach Project research is a question of longstanding importance to social historians: the processes by which people from traditional, pre-modern cultures—both immigrant and native-born—adapted to life in an industrial society (Gutman 1977). The research design has focused on three main issues: modernization, Victorianism, and working-class culture, each of which has discernible archaeological correlates.

While the great exhibitions of the 19th century were displaying the newly available products of the industrial revolution, the very process of industrialization was transforming Western society and culture. In 19th-century America, this process involved a change from a traditional, "face-to-face" society (Redfield 1955) to one that emphasized rationality in economic relationships, specialization, and efficiency, and in which attainment of the goal of an improved future was to be measured by material progress (Brown 1976:29; Wallerstein 1983). Bender (1978) proposed that the modernization of 19th-century American urban dwellers was multilinear and complex: multilinear because various class and ethnic groups participated to varying degrees; and complex since individuals and families were simultaneously involved with both traditional and modern ways of life. Through the mechanism of family and social networks, national, religious, and ethnic ties remained strong and encouraged traditional, communal values and practices (Bender 1978:122; Haraven 1978). At the same time, industrial time discipline, the cash economy, and relationships with government institutions necessitated that individuals be able to function within the modern order (Rodgers 1978).

It has been suggested that a set of cultural values, practices, and aesthetics known as "Victorianism" (Howe 1976; Wiebe 1967) or "gentility" (Lawrence 2000) came to predominate among the Euroamerican cultural and political establishment of this modern society. Victorianism is said to have been a "homogenizing force" (Hardesty 1980) upon the cultures of immigrants and the native-born working class alike, which attempted to replace traditional mores with modern values and patterns of behavior suited to their new roles in an industrial society. Archaeological

research is in a unique position to assess both the relative pervasiveness of Victorianism, as well as the degree of resistance to the values of the emerging industrial society in the form of the development of a distinctive working class and other cultures. This is because these archaeological remains are the material outcomes of household-level decision-making that was conditioned by powerful social and cultural forces. By theorizing the relationship between material culture and these mores, we can have access to the process of cultural change as it operated at levels from individual families to entire ethnic populations, and even to social units whose characteristics we have yet to define.

The final project research questions listed on the second column of Table 1.1, as well as their associated data requirements, were constructed to help evaluate the importance of each archaeological deposit as it was encountered in the field. It is important to note that questions generated in this way and for this purpose may not have definitive "answers," since the contextual approach stresses gaining general insights into important historical issues rather than providing answers to questions. The struggles between labor and capital, and modernism and traditional culture, between individual households and the world that encompassed them, were played out on the streets of San Francisco and in its homes, lodgings, shops, and public houses. The method of historical archaeology is to weave together the data from the archives and from maps and photographs with the material remains left by the participants in these processes. In this way, we aim to create a richer, more human history of San Francisco and the people who once lived there.

Table 1.1 West Approach Project Research Themes and Questions

Theme	Evaluative question	Research questions
Consumer Behavior/Strategies	Does this resource enable us to describe the consumer practices and disposal behavior of a household or business with specific social, occupational, economic, and/or ethnic characteristics?	How did consumer practices vary between various social, occupational, economic, and/or ethnic groups? To what degree do these differences correlate with wealth or other immediately apparent characteristics or with emic social categories? How were households, neighborhoods, and/or cities influenced by fashion, advertising, and/or social movements? How did households manage their finances: did they live within their "means," did they take risks, and were the outcomes of their financial practices visible? How did households respond/adapt to life-cycle changes, stresses, and outside interventions? What role did household wealth or poverty play in consumer behavior?
Ethnicity /Urban Subcultures	Does this resource reflect the rise or relative influence of Victorianism as a class-based ideology?	What was the influence of the class-based ideology known as Victorianism on various segments of the urban population? To what degree can Victorianism be said to have exerted a "homogenizing" influence on the cultures of ethnic or class subgroups? Is there evidence that other groups co-opted Victorian symbolism? What role did the "cult of domesticity"—including approved modes of child-rearing techniques, genteel entertaining, and social display—have in this household, neighborhood, or city? In what way did barter and "pre-modern" forms of exchange have a role in this household/neighborhood? How were ethnic, economic, and cultural differences expressed in this household/ neighborhood/city?

Table 1.1 West Approach Project Research Themes and Questions *(continued)*

Theme	Evaluative question	Research questions
Institutions	Does this resource enable us to describe life within an institution?	What were the social dynamics within this social institution as embodied in its material culture? How did material remains reflect the gender, economic, racial, ideological, political, or religious influences of those controlling the institution and those controlled by it? What role did artifacts or faunal remains have as symbols to define and/or maintain boundaries between groups within the institution? What was the relationship between the institution and its patrons through time? Can change in this relationship be demonstrated? How did the services provided by the institution differ from what it advertised or can be expected to have provided? Can resistance to the aims of the institution be seen within the material culture?
Industrialization/Technology	Does this resource contain evidence of undocumented or poorly documented industrial processes that could add significantly to our knowledge of the development of a specific industry?	How did industries develop, innovate, decline as seen through material culture? Evidence for reuse of equipment, sites, buildings, or artifacts? What was the impact of industrialization on landscape, environment, and public health?
Urban Geography	Does this resource help us to understand the characteristics of the natural environment and the landscape modifications made during the historic period?	Were modifications made to the natural landscape that influenced the city's development and growth? How were these modification processes implemented on individual parcels and blocks? How did households/neighborhoods/cities use/adapt their backyards and open spaces? How did perceptions of the cultural landscape and modifications change over time and how did this impact the parcel/neighborhood/ city? What influence might "place" have on households and their decision-making processes? How are the differences in neighborhoods and cities reflected in the material culture of those who live within them?

METHODS

In the Field

The project research design emphasized the use of data derived from caches of artifacts that could be associated with historically documented households. Since these collections could most often be found in hollow filled features, such as refuse pits and disused privies and wells, the initial task was to find these features. To this end, and before any test excavation was begun, surveyors laid out the 19th-century parcel lines—for privies and other hollow features were commonly placed along the rear of domestic lots. A health and safety plan was also developed before fieldwork began. The plan described precautions to be taken to avoid exposure to contaminated soils and other potentially dangerous conditions.

Sheet refuse, the second expected resource type, accumulates on living surfaces and may be the product of either primary or secondary deposition, or a catastrophic event. Such deposits may appear as either a relatively thin layer of debris located at an archaeological layer interface or as a series of superimposed layers of substantial thickness. Secondary depositions of sheet refuse tend to be relatively thick, reflecting their historic function as fill to raise low ground. Since primary deposits often occur at the interfaces of these layers, care is always taken when exposing these surfaces in areas such as domestic backlots. To the degree that the artifacts contained in a secondary deposition of this kind can be assigned to an identifiable historical unit at an interpretively useful scale, they are of potential value as sources of important data. Artifacts were not, however, recovered simply "because they are there," since the important information in such a deposit may often be recovered by simply recording its structure. On the West Approach Project, sheet refuse often provided the 1906 fire interface and sealed earlier deposits beneath, in which case, the artifacts were not collected. Earthquake-related, sheet refuse deposits from St. Mary's Hospital were excavated and collected.

The archaeological deposits were covered by varying depths of fill soil, which was scraped away by a hydraulic backhoe/loader with a 36-inch, flat-edged bucket. The object was to expose previous ground surfaces (interfaces) in plan view so that the tops of features were exposed in the trench floor, not in its sides.

The evaluation phase involved determining a feature's structure and stratigraphic integrity, its approximate date of deposition, and the range and quantity of artifacts. The content and integrity of each feature was assessed by excavating a portion of it by hand. In the case of refuse-filled pits, for example, each feature was cross-sectioned. In general, excavation was done stratigraphically, according to the physical layers of deposition. Where deep features and saturated soils prevented the identification of physical stratigraphy, 1-foot arbitrary levels were used instead. The Field Director determined the proper level of effort for each feature as it was investigated. Layers were given context numbers and recorded on context sheets using the Harris Matrix (Harris 1979; Harris, Brown, and Brown, eds. 1993) (Figure 1.4). All units of excavation were recorded on detailed field forms, on which the excavator and/or field supervisor noted site structure and/or content. Field forms are based on those developed by the Museum of London, Department of Urban Archaeology (Museum of London 1980, 1994).

Excavations were mapped in relation to permanent datum points and recorded on plan and cross-section drawings drawn to scale; they were also recorded by black and white print photographs, color slides, and videotape. Excavated soils were passed through 1/8- or 1/4-inch

Privy 801 – MATRIX AND EXCAVATION PROFILE
142 Silver (West Approach Block 10)
Sheridan Family

916 Asphalt
917 Gravel Base
918 General Post-1906 Fill and Debris
919 General 1906 Fire/Demolition Debris
922 = 957 Privy Fills
924
926
931
940
927 = 932
958
942
944
951
941 Wood Lining
801 **Privy 801**
921 Sand Fill

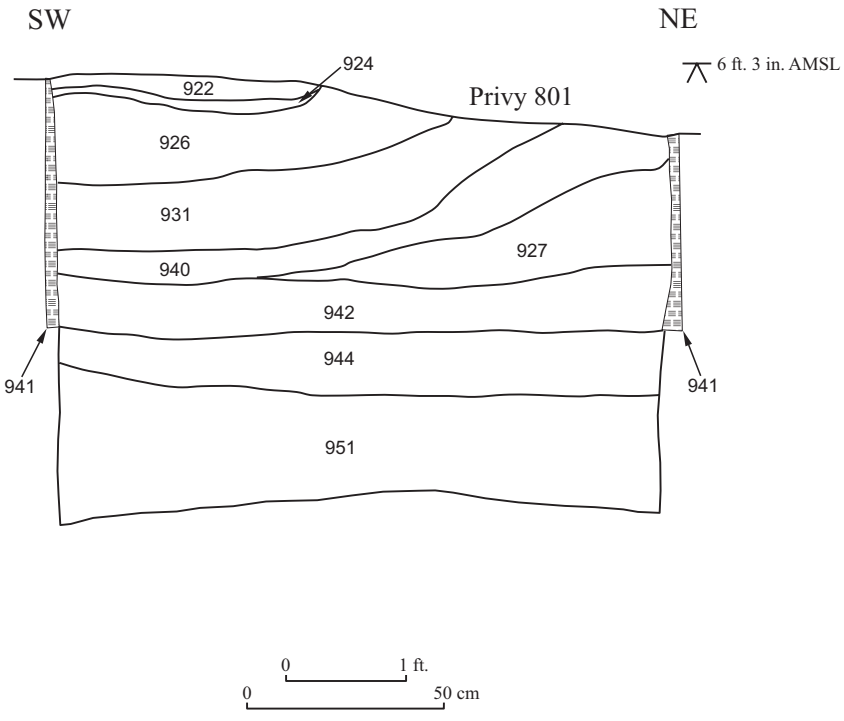


Figure 1.4. Matrix and excavation profile for Privy 801.

WHAT OUR "AIMS-R"

	ALL ELSE BEING EQUAL…
Association	…the research potential of an archaeological deposit that has reliable and precise historical or chronological associations will be higher than one whose associations are less certain.
Integrity	…a feature that retains good integrity will have more research potential than one whose integrity has been compromised.
Materials	…the research potential of a cache of materials from a domestic context will increase with the number of items and the variety of types present.
Stratigraphy	…remains that meet the other criteria and have vertically or horizontally discrete stratification retain importance. Remains from a feature with a complex stratigraphic sequence representative of different events over time may provide a chronological check on artifact diagnosis and the interpretation of the sequence of environmental or historical events.
Relative rarity	…remains from a group that is poorly represented in the sample universe will be more important, because of their rarity, than remains that relate to a well-represented entity.

From the initial letter of each of these principles, we derived the mnemonic AIMS-R.

screen, as appropriate, to document the presence of all classes of artifacts. Artifacts were initially identified and, when possible, dated in the field. As a general rule, a minimum amount of excavation was performed to allow the Field Director to evaluate the feature's research potential by applying the "AIMS-R" principles delineated in the treatment plan (see sidebar above). The extensive prefield historical research allowed most decisions to be made in the field regarding the research potential of each feature by associating archaeological deposits with specific households and businesses. Historians conducted additional research on remains that could not be associated with the households, industries, and businesses on the basis of information collected during the archival research phase. Materials belonging to features potentially eligible for the NRHP/CRHR were returned to the archaeological laboratory for verification of the initial description and subsequent cataloging. Materials from features determined to be ineligible were reburied in the features from which they were excavated. To keep pace with the construction schedule, the soil matrix from some features was bulk-bagged and returned to the lab for processing and later evaluation.

Site trinomials were then obtained from the Northwest Information Center of the California Archaeological Inventory (CA-SFR-150H, -151H, -152H, -153H, -154/H, and -137H).

CUSTOM SHORING

Michael D. Meyer

Section of Well 2000, 1820 Goss Street, Block 29, Cypress Project, West Oakland.

Archaeological investigation for the West Approach Project was contracted so that the excavation contractor, rather than the archaeologists, set the schedule. They also provided heavy equipment to expose archaeological features. One of the early excavation challenges was Well 6 on Block 9. During the Cypress Project in West Oakland, archaeologists excavated wells by digging safety trenches to expose the exterior of the feature so that it could be sectioned from outside (see photo of sectioned well), or the well was excavated to a depth of 4 feet before the safety trench was widened or benched. This was possible due to the freeway's collapse and the lack of obstructions. In San Francisco, there were limitations due to the presence of bent footings for the existing freeway. In July 2001, archaeologists excavated Well 6 by hand to a depth of 4 feet below the benched ground surface. The well was located too close to a bent to excavate a safety trench to reach the estimated depth of deposit—at least an additional 10 feet. An alternative to trenching or benching is to use shoring. Instead of renting a commercial shoring system to achieve the project goals, the contractor decided to design a custom system. The design and installation of the custom shoring took several months.

From the archaeologists' perspective there were a few obvious design flaws (see photo). As designed, the archaeologists would have to use ladders both inside and outside of the shoring until the side plates could be slid down to ground level. The shoring box was so narrow that all excavation of the subsoil surrounding the well shaft would have to be done by hand, rather than backhoe or excavator, and the material carried out in buckets. Excavation would also have to be done with the ladder in the hole. It was not clear how additional shoring would be added in the event the well was deeper than the side panels. The custom system was rejected due to safety concerns and the estimated weeks of hand excavation required. Instead, the slide-rail box

Shoring for Well 6, Block 9. After several months' delay this custom shoring (shown on left, as installed), designed by the construction contractors was deemed too dangerous and ineffective to use. It was replaced with this commercial version (on right). (Photo on left, courtesy of Dani Renan)

system (see photo) was rented from a local rental equipment supplier.

Once on site, the system took two days to install and prepare for archaeological excavation. By the time the slide-rail system was installed, however, the dry weather of July—when excavation was started—had given way to a wet December. By their very nature, wells contain groundwater that needs to be removed to facilitate excavation. The rains during the delay and excavation compounded the problem. In addition, the archaeological deposit in the well went to an ultimate depth of 22 feet below ground surface. This required two pumps, in series, to remove water out of and away from the hole. Layers were excavated to a depth of 4 feet and the bucket soil mechanically lifted using the excavator. The remaining well fill was then covered with plastic and the surrounding soil within the box removed to the excavated depth so that hand excavation could resume and the process continue. The saturated soils were typically reduced on site and then sent to the lab at Sonoma State University for wet-screening. Samples were taken for screening through fine mesh to search for small finds such as seeds preserved in the anaerobic environment. After the contractor's four-month delay, the lower 16 feet of the well was excavated in three days.

After the excavator scraped surrounding soils to depth, any loose material was shoveled into the bucket by hand to create a clear work area. Well fill was placed in buckets on plywood outside the well and loaded into the excavator bucket, which lifted them to the surface. An air monitor was used as a safety precaution.

In the Lab

In historical archaeology, the "site" is often an artificial construct that consists of the totality of archaeological remains in a circumscribed location, regardless of their period of deposition or historical association. Defined in this way, the site is meaningless as an analytical unit. The products of each excavation site (in this case, the city block) were geared toward the interpretation of individual proveniences or a number of proveniences that had demonstrable historical associations. Hence, there were numerous analytical units within each "site" and even within each building lot.

Initially, artifacts were cataloged according to archaeological provenience and material (Figure 1.5). Although specialists divided materials into appropriate categories for presentation in their analyses, for interpretation and synthesis the catalog of historic period artifacts was reorganized according to functional categories: activities, domestic, indefinite, industrial, personal, storage, structural, and unidentified use. After analysis, artifacts were stored according to material and provenience at the David A. Fredrickson Archaeological Collections Facility at Sonoma State University, where they are available for future research.

The lab archaeologists used the same procedures and categories on the West Approach materials that had been applied on previous projects in San Francisco and Oakland. This enabled the sophisticated statistical studies that are reported in this volume. We can be confident that our findings are not the result of differences in methods or labels, but reflect true patterns.

In the Libraries and Archives

Work with historical records and accounts, as well as the writings of historians, contributed to two crucial elements of the West Approach Project research:

- identifying the households whose artifacts were found, as well as reconstructing their demographic and social characteristics; and
- developing the context in which these families lived by providing both general and local focus for the research themes that guided this work.

Project historians and historical researchers examined primary sources—such as the U.S. Census population schedules, water-tap records, tax rolls, real-estate records, and photographs. Much of this information has been assembled into the detailed Documentary Research Tables associated with each archaeological collection (see BTRs on attached CD).

Doing research on San Francisco properties presents a special challenge, because many of the pre-1906 records were destroyed by fire. While some records did survive, the missing documents covering property and vital statistics limit historical reconstructions, which are possible in neighboring cities. The earliest available Sanborn map for San Francisco is 1887. A City of San Francisco land-use map from 1874 shows that some of the city blocks had alleys that no longer existed in 1887, and that the residential pattern of some blocks had a different configuration. The earliest Tax Assessor's Block Book available for San Francisco is 1894. Most of the archaeological features excavated and evaluated had associations at least a decade earlier. There are no pre-1906 deeds available, seriously limiting the ability to find early landowners.

On the other hand, San Francisco has an excellent collection of city directories from the 1850s onward, water-tap records dating back to the 1860s, early Great Registers of Voters, and

numerous photographic collections. Other sources include the *San Francisco Morning Call* for birth, death, and marriage records; county histories, and various documents at the Bancroft Library and the California Historical Society. One unique source, *The South of Market Journal*, provides a window into the life of the South of Market neighborhood at the turn of the 20th century. The journal was first published in 1925 by The South of Market Boys Association, a group of men who had grown up in the neighborhood during the 19th and early 20th centuries. The journal published numerous accounts through the 1940s based on the memories of these men—descriptions of the neighborhoods, stories about their neighbors, and accounts of ordinary activities, as well as special events, as far back as the 1870s.

Figure 1.5. Reconstructing glass artifacts. In this photo, bottles and other glass containers are being reassembled in order to determine type, quantity, and artifact category.

The Statistical Methods

By Bruce Owen

The unprecedented volume of archaeological data for 19th- and early 20th-century domestic deposits in the San Francisco Bay Area has recently become ripe for synthesis. The first attempt at a grand-scale statistical analysis of specific issues raised by researchers was done for the SF-80 Bayshore Viaduct Project (Praetzellis, ed. 2004). Questions included whether apparent patterns noted in bottle recycling, meat consumption, or other activities were statistically significant for any of a number of important social and economic variables, such as nativity and occupation. For that report, Bruce Owen compared SF-80 data with those from the Cypress Freeway Project in West Oakland and the preliminary findings from the West Approach Project. For the current study, Owen has expanded on the topics and refined the approach based on the previous statistical treatments. Owen used two statistic tests: The Wilcoxon rank-sum test, which compares one category to another, and the Spearman rank correlation, which compares more than two categories when the variables have a logical rank order.

The statistical analyses in this report share a common approach and methodology, which are summarized briefly here (see Appendix F for full details). The analyses all seek statistically significant patterning in the distribution of general categories, such as beef bone or beer bottles, among excavated features divided according to potentially meaningful cultural categories established from documentary sources.

Most of these analyses use percentage data in order to look at the composition of the assemblage from each "analytical unit," without considering the relative amounts of material

from each context. The assumption in using percentage data in this way is that, over the long run, households consumed relatively similar amounts of meat, glass, ceramics, and so on. Thus, comparing the proportions of specific types of bone, glass, and so on relative to the total amount recovered should bring out differences in consumption that would otherwise be masked by culturally unimportant differences in the size and artifact density of features excavated. This is clearly an imperfect assumption, and it should be borne in mind that these analyses refer to percentages of items within their artifact classes (as in "15% of all identifiable meat weight from Feature X was beef"), not to absolute amounts consumed.

The analytical units in these analyses are single or multiple stratigraphic units that are taken to represent a single sample of refuse from a single residential context. Each feature is taken to represent just one residential context, although the residential context may contain more than one household. By analyzing the percentage composition of artifact types (animal bone, bottle glass, etc.) from each analytical unit, differences in the size of these features and their depositional history are eliminated from consideration. Features not meeting the minimum thresholds for analysis were not included. Faunal analysis required 100 identifiable bones; artifact analysis required an MNI of 35 identifiable items.[1]

Wilcoxon Rank-sum Test

The first statistic used here is the Wilcoxon rank-sum test (also called the Mann-Whitney-Wilcoxon test) for cases with two classes (such as a comparison of percent alcohol bottles in Professional features vs. Unskilled features (Gibbons 1993). In essence, the test arranges all the values in rank order, from smallest to largest, disregarding the size of the differences between them. If the percentage of alcohol bottles was greater for Professionals than for Unskilled, the values from Professionals would mostly be towards the high end of the list, and the values from Unskilled would mostly be towards the low end. If the percentage of alcohol bottles was the same in Professional and Unskilled, then the values for each would be uniformly scattered through the whole list. The tests evaluate whether or not the list is significantly unbalanced by calculating the odds of getting a pattern at least that unbalanced if you were to put the values in order by chance, such as by randomly drawing "Professional" or "Unskilled" from a collection of slips of paper with the appropriate number of each type. If the chance of getting a list as unevenly distributed as the observed one is low (less than 10%, or less than 5%), then the pattern is deemed to be significant, that is, probably due not to chance, but to a real difference between the two categories.

The Wilcoxon rank-sum test is used to compare all the possible pairs of categories, such as Professional vs. Unskilled. These results are easy to interpret: a significant result means that the variable (such as percent alcohol bottles) is significantly different in the two categories. "Significantly different" means that the difference is consistent enough that it is unlikely to be random, so it is appropriate to look for a cultural explanation. A difference with a probability of 5 percent has only a 5 percent chance of having occurred randomly, so we can consider it probably the result of some systematic process, rather than the luck of the draw. A significant result does not mean that the difference is large. A real, significant difference might be subtle and not very important.

1. Artifact MNIs are the minimum number of individual items, not the number of fragments, represented in a collection (e.g., a plate broken into five fragments is still only one plate). For artifact analysis requirements, only MNIs of non-trivial items (excluding nails, wire, eyelets, beads, etc.) were assessed (see MNI discussion in Block Technical Report).

The statistics used give equal weight to each feature. In effect, each analytical unit represents the mix of artifact types discarded by a single residential unit. The analyses are comparisons of the artifact-type mixes of these residential units.

The analyses proceed in steps, summarized here.

1. Select features suitable for the particular analysis.
2. Print a table showing the average values of each of the variables of interest (such as meat type or social drugs) for each category (such as occupation, nativity, or neighborhood).
3. Compare pairs of categories (such as Professional vs. Skilled) to see if any variable (such as type of meat) is significantly different in the two categories of contexts.
4. Do similar pairwise comparisons using lumped categories (such as Irish vs. all non-Irish).
5. Do additional pairwise comparisons between comparable categories in San Francisco and Oakland (such as Professionals in San Francisco vs. Professionals in Oakland).
6. Interpret the results.

The statistics were run on SAS software, using programs and data files specified in their respective sections in Appendix F. Percentages are shown rounded to the nearest percent, but all calculations were done to the full precision of the original data.

Spearman Rank Correlation

The Spearman Rank Correlation analysis tests for an ordered relationship between values such as "pounds of beef" and a ranked series of categories, such as Unskilled, Semi-skilled, Skilled, Professional, and Wealthy professional status. This is appropriate when there are more than two categorizing variables, and when those variables have a logical rank order. Such is the case for the series of occupation ranks and, apparently, the three San Francisco neighborhoods, with Rincon Hill being of highest status, Mission Bay intermediate, and Tar Flat lowest. In accordance with the conservative, non-parametric approach used with the Wilcoxon rank-sum tests, the Spearman rank correlation considers only the relative order of the categories and the values. No assumptions are made about the magnitude of the differences between the categories, and no consideration is given to the magnitudes of the values aside from their relative order or ranking. As with the Wilcoxon tests, this approach suits modest-sized archaeological samples. While it is not as sensitive in detecting patterns as more common parametric statistics such as Pearson correlation analysis or ANOVA, it is less likely to produce misleading significant results due to outliers or other serious deviations from normal distributions of values that are common in archaeological datasets.

A correlation coefficient of 1 indicates a perfect positive correlation (higher categories have higher values); 0 indicates no relationship between the categories and the values; and -1 indicates a perfect negative correlation (higher categories have lower values). That is, the correlation coefficient indicates how strongly the category is related to the value. Associated with the correlation coefficient is a probability value that measures the likelihood of the correlation being produced by chance.

FINDINGS

Datasets: How to Find and Use Them

The West Approach Project generated a wealth of information, as did the Cypress and SF-80 projects, to which it is compared in this volume. These data can be overwhelming and difficult to control. A number of aids are presented in this section to guide readers through this volume, the attached BTRs, and the important statistical categories used in our analyses, so that others can readily use or reuse the data presented herein.

Analytical Categories

Some of our studies required that households be categorized for analysis into one of several occupational categories. Our divisions are similar to those commonly used by American social historians since Thernstrom (1964) and subsequently employed by Ethington in his 1994 work on San Francisco. What we call Wealthy Professional, or P+, is Ethington's High White-Collar; our Professional, or P, is his Low White-Collar; Skilled, Semi-skilled, and Unskilled are the same in both classifications. Our classification is summarized as follows:

- WEALTHY PROFESSIONAL (P+, HIGH WHITE-COLLAR): Brewer (own business), capitalist, consulate, merchant, real-estate developer.
- PROFESSIONAL (P, LOW WHITE-COLLAR): Barber (own business), bookkeeper, bridge builder, cashier, carriagemaker (own business), clerk, copyist, dentist, druggist, drummer (i.e., commercial traveler), farmer, foreman, insurance agent, master mariner, merchant (paint store), musician, plumber (own business), salesman, saloonkeeper, sea captain, shipping agent, stock dealer, surveyor, teacher, teaching assistant, wharfinger (own business).
- SKILLED (S): Barber, blacksmith, boilermaker, brakeman, brewer, brickmason, butcher, carpenter, carpet layer, compositor, cooper, dressmaker, engineer, fireman, fisherman, glass cutter, gold miner, hairdresser, machinist, marble polisher, painter, paperhanger, peddler, plumber, printer, railroad conductor, sailmaker, sawyer, seamstress, sewer contractor, ship's carpenter, ship's fireman, shipwright, shoemaker, tailor, typesetter, towerman, upholsterer.
- SEMI-SKILLED (SS): Bartender, expressman, gardener, longshoreman, porter, seaman, stevedore, steward, teamster.
- UNSKILLED (U): Apprentice, boxmaker, car cleaner, car repairer, cordmaker, framemaker, laborer, washerwoman.

West Approach Addresses and Features

This volume discusses features at dozens of addresses on six city blocks that we have divided into three neighborhoods for analytical purposes. Figure 1.6 is a map indicating block numbers and neighborhoods that are referred to throughout the volume and used for statistical analyses. Table 1.2 is a concordance by address that will enable the reader to quickly tie addresses to the blocks and neighborhoods used in this study. The BTRs are organized by neighborhood, block, and address. Authors in the current volume refer parenthetically to feature numbers when discussing findings. Working with Feature Associations (Appendix A) and Table 1.2, the reader can find the appropriate BTR, where all the data are presented in a standardized format. Parcel-

Table 1.2. San Francisco Study Block Concordance by Address and Neighborhood

Address	Block	Neighborhood	Address	Block	Neighborhood
7 Baldwin Court	4	Tar Flat	16 Perry Street	9	Rincon Hill
9 Baldwin Court	4	Tar Flat	20 Perry Street	9	Rincon Hill
11 Baldwin Court	4	Tar Flat	109–111 Perry Street	10	Mission Bay
13 Baldwin Court	4	Tar Flat	115 Perry Street	10	Mission Bay
19 Baldwin Court	4	Tar Flat	123 Perry Street	10	Mission Bay
21 Baldwin Court	4	Tar Flat	125–127 Perry Street	10	Mission Bay
49 Clementina Street	5	Rincon Hill	129 Perry Street	10	Mission Bay
First Street (St. Mary's Hospital)	7	Rincon Hill	131 Perry Street	10	Mission Bay
412 Folsom Street	4	Tar Flat	133 Perry Street	10	Mission Bay
414 Folsom Street	4	Tar Flat	137–139 Perry Street	10	Mission Bay
416 Folsom Street	4	Tar Flat	207–209 Perry Street	11	Mission Bay
540 Folsom Street	5	Rincon Hill	64 Silver Street	9	Rincon Hill
546 Folsom Street	5	Rincon Hill	108 Silver Street	10	Mission Bay
236 Fremont Street	4	Tar Flat	112 Silver Street	10	Mission Bay
240 Fremont Street	4	Tar Flat	114 Silver Street	10	Mission Bay
242 Fremont Street	4	Tar Flat	120 Silver Street	10	Mission Bay
12 Perry Street	9	Rincon Hill	142 Silver Street	10	Mission Bay
14 Perry Street	9	Rincon Hill	423 Third Street	9	Rincon Hill

specific historical data are presented on Documentary Research Tables and described in Parcel Overviews. Excavation data are presented in Matrix, Section, and Parcel Plan drawings. The artifact collections and faunal remains from each feature are presented in various standardized tables and photographs. Table 1.3 lists some of the historical variables used for statistical analyses conducted on domestic sites; institutions (including schools) and commercial sites (including stores) were not included. The statistical studies themselves were more complex and looked at other variables not tabulated here. See Chapters 3, 8, 10 and 11, and Appendix F for details.

SF-80 Bayshore Addresses and Features

The SF-80 Bayshore Viaduct Project, another Caltrans seismic retrofit project, abutted the West Approach Project to the west. It is entirely within the Mission Bay neighborhood (Figure 1.7). The report is available online at <http://www.sonoma.edu/asc/publications/sf80bayshore/index.htm> (Praetzellis, ed. 2004). Historical variables for the SF-80 Bayshore Project are listed in Table 1.4.

Cypress Replacement Addresses and Features

Between 1994 and 1996, ASC archaeologists tested 22 archaeologically sensitive city blocks that would be affected by construction of the I-880 Cypress Freeway Replacement Project, a 3.1-mile section of freeway in Oakland and Emeryville, California (Figure 1.8). Nearly 2,600 archaeological features were discovered, including 120 significant ones containing more than 400,000 artifacts and ecofacts dating from between the 1850s and 1910. The Cypress Archaeology Project database is unprecedented in the West. A wide variety of groups are represented, from unskilled working-class households to upper-middle-class families, immigrants from a dozen

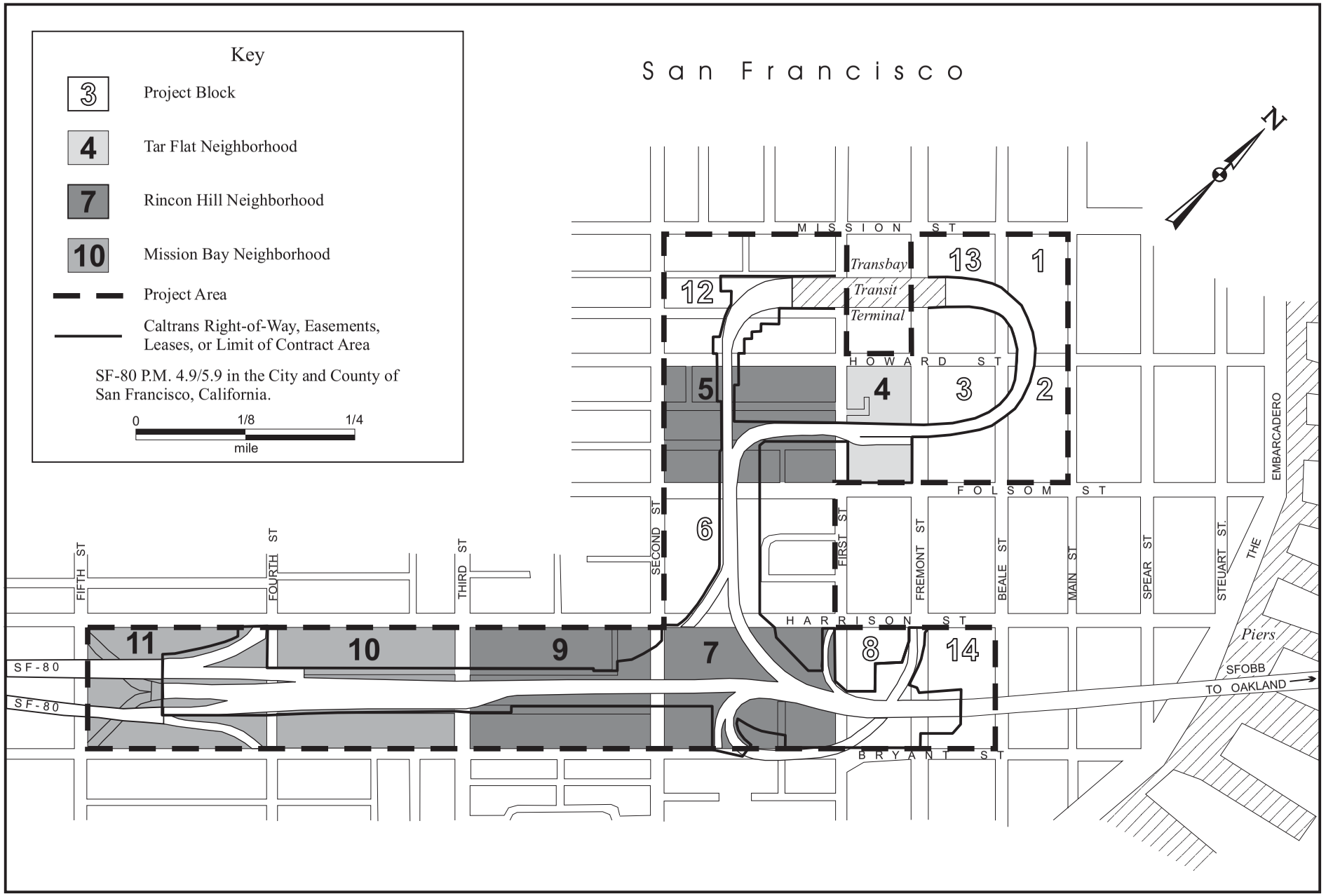


Figure 1.6. Neighborhood and Project Block locations in the West Approach Project Area, San Francisco.

Table 1.3. West Approach Archaeological Features and Historical Variables

Block	Feature	Date	Ethnicity/Origin	Primary Occupation	Tenure	Frontage	Neighborhood
4	1300	1885	Polish, U.S.	S	Tenant	Main	Tar Flat
4	1301	1870	Irish	SS	Owner	Main	Tar Flat
4	1303	1880	Irish	S	Unknown	Interior	Tar Flat
4	1304	1895			Tenant	Interior	Tar Flat
4	1305	1880	French, Irish	S, SS	Tenant	Interior	Tar Flat
4	1307	1870	Irish	U	Tenant	Interior	Tar Flat
4	1310	1870	Irish	U	Tenant	Interior	Tar Flat
4	1311, 1320	1870	Irish	S	Tenant	Interior	Tar Flat
4	1316	1870	Irish	S	Tenant	Main	Tar Flat
4	1318	1880	Irish	U	Owner	Interior	Tar Flat
4	1322	1890	Irish, Australian	U, S	Tenant	Main	Tar Flat
4	1326	1875	U.S.	P, W	Owner	Main	Tar Flat
4	1333	1890	Irish	SS	Tenant	Main	Tar Flat
5	505	1880	U.S., Canadian	S, S	Tenant	Main	Rincon Hill
5	507	1870	English	P+	Owner	Main	Rincon Hill
5	515	1880	Irish	SS	Tenant	Interior	Rincon Hill
5	516	1880	English	W	Owner	Main	Rincon Hill
9	18	1870	U.S.	P	Owner	Interior	Rincon Hill
9	2	1880	U.S.	SS	Tenant	Interior	Rincon Hill
9	6	1895	Irish, U.S.	S, W	Owner	Interior	Rincon Hill
9	8	1885	U.S.	S	Unknown	Interior	Rincon Hill
9	9	1880	U.S.	S	Tenant	Interior	Rincon Hill
10	801	1885	Irish	SS	Tenant	Interior	Mission Bay
10	806	1880	Scots, English	P+, SS	Tenant	Interior	Mission Bay
10	807	1870	German	P	Owner	Interior	Mission Bay
10	808	1880	German, Danish, Irish	SS, SS, U, P	Tenant	Interior	Mission Bay
10	810	1880	Irish	P, S	Owner	Interior	Mission Bay
10	812	1880	Irish, Canadian, U.S.	P, P, S	Tenant	Interior	Mission Bay
10	813	1880	Irish	U	Owner	Interior	Mission Bay
10	814	1875	Polish	S	Owner	Interior	Mission Bay
10	849	1870	German	S	Tenant	Interior	Mission Bay
10	851	1880	German	P	Owner	Interior	Mission Bay
10	853	1870	U.S.	P	Owner	Interior	Mission Bay
10	857, 858	1880	Irish, Norwegian	P, P	Owner	Interior	Mission Bay
10	866	1885	Irish, U.S.	U, P	Tenant	Interior	Mission Bay
11	1600, 1601	1880	Scots, Irish	S, S	Tenant	Interior	Mission Bay

Key
Occupation: P+ = Wealthy Professional, P = Professional, S = Skilled, SS = Semi-skilled, U = Unskilled, W = Widow.

Table 1.4. SF-80 Bayshore Archaeological Features and Historical Variables

Block	Feature	Date	Ethnicity/Origin	Occupation	Tenure	Frontage	Neighborhood
3	3	1895	German	P+	Owner	Main	Mission Bay
4	1	1875	Irish	S	Owner	Interior	Mission Bay
4	30	1880	Irish	W	Unknown	Interior	Mission Bay
4	38	1880	Irish	SS	Unknown	Interior	Mission Bay
4	39	1880	German	SS	Unknown	Interior	Mission Bay
4	41	1880	Irish	SS	Unknown	Main	Mission Bay
6	20	1885	Irish	S	Tenant	Interior	Mission Bay

Key
Occupation: P+ = Wealthy Professional, P = Professional, S = Skilled, SS = Semi-skilled, U = Unskilled, W = Widow.

countries, and native-born whites and African Americans. The Cypress Interpretive Report (Praetzellis and Praetzellis, eds. 2004) is available on-line at <http://www.sonoma.edu/asc/cypress/finalreport/index.htm>.

To achieve comparability of data with San Francisco features, post-1900 Cypress Project domestic deposits are not used in the current statistical study; neither are commercial sites (hotels, stores). The Cypress features originated from three distinct neighborhoods: East of Market, West of Market, and Oakland Point. Cypress features and associated historical variable categories are listed in Table 1.5.

Reporting What We Found

With dozens of discrete features and hundreds of thousands of artifacts, a different approach was needed for presenting information and our interpretations of it. The conventional model would have involved the creation of a single technical report containing long, detailed, narrative descriptions of the history and archaeology of the various project sites, followed by the reports of various specialists in ceramics, food bone, glassware, and so on. The end result would have been a multi-volume set of urban-telephone-directory-sized tomes. Instead the project team used a previously designed series of reports, each with its own goal and audience, as a model. The concept had been successfully applied to the SF-80 and Cypress materials and has made the results of the three studies easy to use for comparative purposes.

The previously prepared Block Technical Reports (BTRs) are contained on a compact disc included with this report. The goal of the BTRs is to present the massive quantity of data in a standardized format that will be easy for other archaeologists to use. Behind the BTR concept is the principle that the artifacts are important for their context. Each BTR focuses on a single neighborhood within the project area, made up of one or more related city blocks. While the number of features per block varies, each BTR in the West Approach Project covers 13 or 14 features. The BTR is organized by analytical unit (a feature or group of related features), giving the history of the household that created it, as well as standardized tabulations of the content, and depiction and analysis of the structure. Thus, a researcher wanting to study working-class Irish families from the 1880s can easily locate suitable candidates in the BTRs. Furthermore,

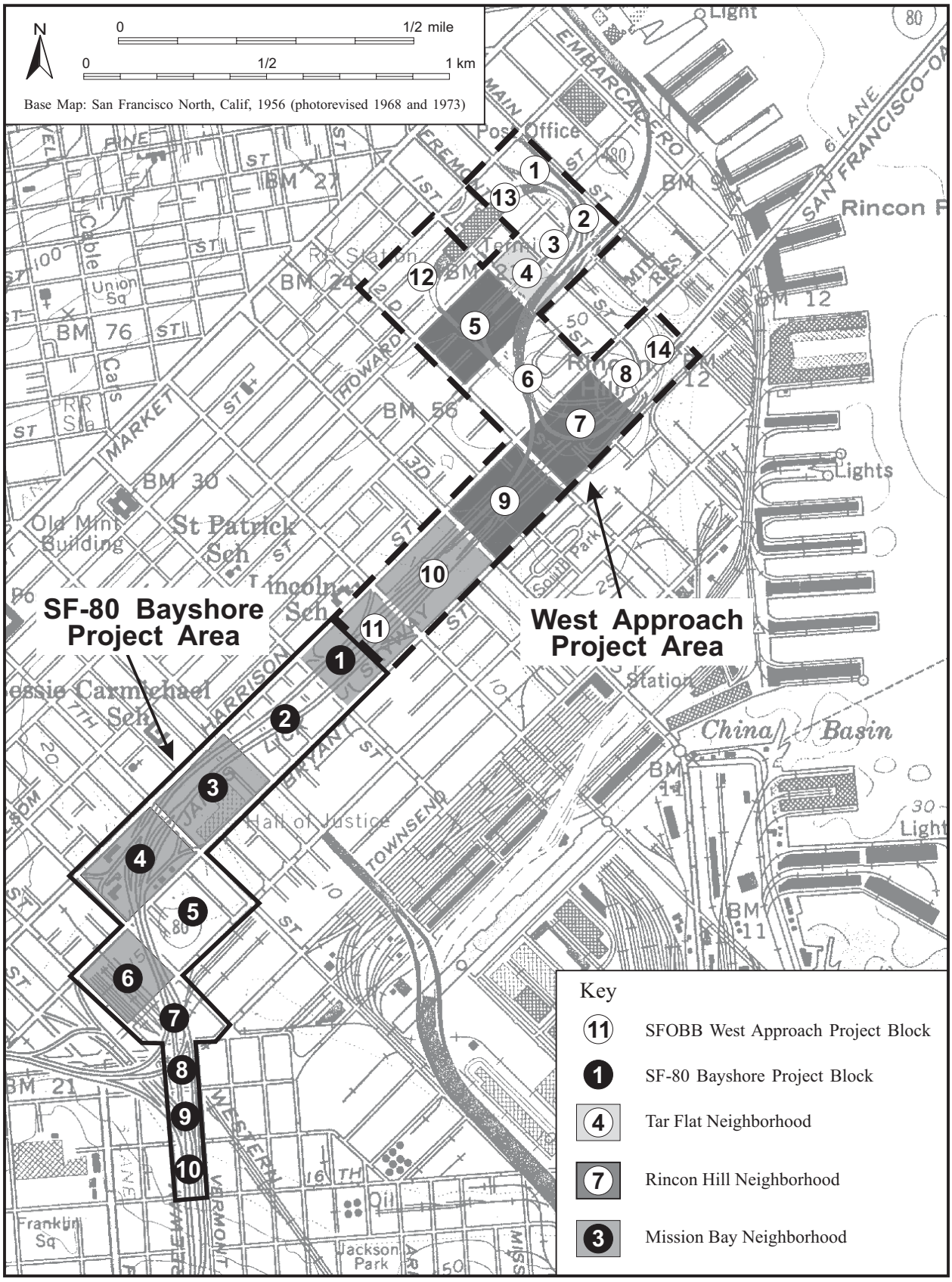


Figure 1.7. Location of SF-80 Bayshore and SFOBB West Approach project blocks; and Tar Flat, Rincon Hill, and Mission Bay neighborhoods in San Francisco.

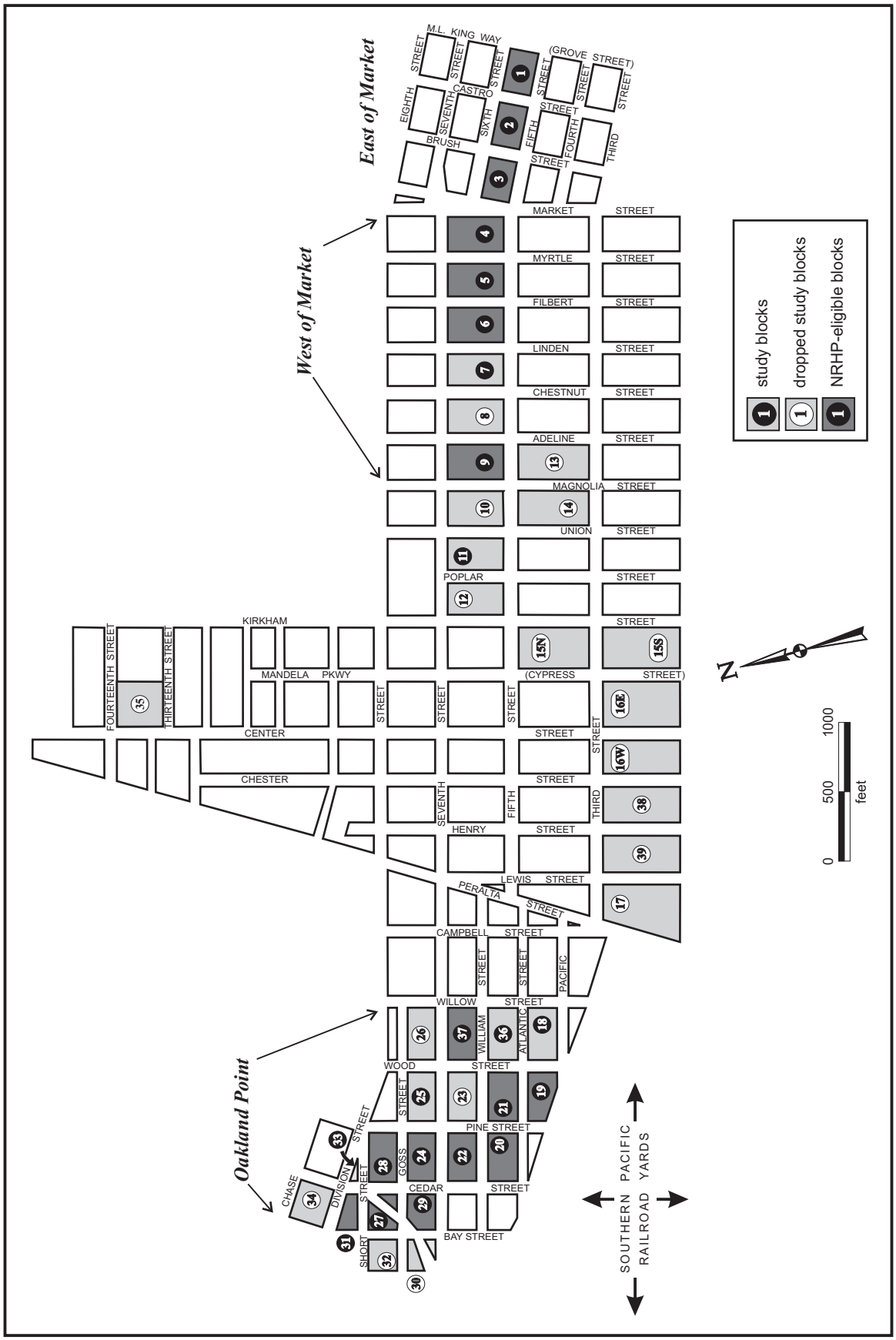


Figure 1.8. Neighborhood locations in the Cypress Freeway Replacement Project, West Oakland.

Table 1.5. Cypress Archaeological Features and Historical Variables

Block	Feature	Date	Ethnicity/Origin	Occupation	Tenure	Neighborhood
1	900	1885	U.S.	P+	Owner	East
1	933, 1112	1880	African-American	SS	Tenant	East
1	947	1880	Irish	S	Tenant	East
1	951	1880	U.S.	S	Tenant	East
1	953	1885	African-American	SS	Tenant	East
1	954	1880	U.S.	S	Tenant	East
1	955	1880	Scots	P	Owner	East
1	968	1900	Irish	P	Owner	East
1	985	1880	German	P+	Owner	East
2	1300	1880	Irish	U	Tenant	East
2	1321B	1885			Unknown	East
2	1354	1900	German	S	Tenant	East
2	1358, 1372	1880			Tenant	East
2	1376	1880			Unknown	East
2	1387	1880			Tenant	East
2	1404, 1452, 1461	1880	African-American	P	Owner	East
2	1409	1885	German	S	Tenant	East
2	1431	1880	U.S.	S	Unknown	East
2	1454	1890	Irish	W	Owner	East
3	1747	1880	U.S.	S	Tenant	East
3	1753	1885	U.S.	S	Tenant	East
3	1785	1875	U.S.	P+	Owner	East
3	1858	1880	Irish	U	Tenant	East
4	3106, 3119	1880			Tenant	West
4	3137	1880	U.S.	P	Owner	West
4	3139	1880		P	Tenant	West
4	3178	1880	Canadian	S	Owner	West
4	3185	1880	Irish	SS	Owner	West
4	3196	1880	U.S.	P	Tenant	West
4	3300, 3301	1895	U.S.	S	Tenant	West
4	3346	1890	U.S.	P	Owner	West
4	3382	1875	U.S.	P	Tenant	West
5	3800	1880	Irish	W	Owner	West
5	3802	1880	Scots	P	Tenant	West
5	3828	1880	U.S.	P	Owner	West
5	3830	1880	Irish	S	Owner	West

Table 1.5. Cypress Archaeological Features and Historical Variables *(continued)*

Block	Feature	Date	Ethnicity/Origin	Occupation	Tenure	Neighborhood
6	4220	1880	Irish	U	Owner	West
6	4234	1890	Irish	S	Owner	West
6	4236, 4237	1890	U.S.	S	Owner	West
6	4239	1880			Tenant	West
6	4243	1880			Tenant	West
6	4245	1880	Irish	S	Owner	West
6	4281	1880			Tenant	West
19	8445	1895	U.S.	S	Tenant	Point
20	6239	1880	German/English	S, U	Tenant	Point
20	6260	1880	German	S	Tenant	Point
20	6270	1870			Tenant	Point
20	6282	1880	U.S.	S	Tenant	Point
20	6292	1885	U.S.	S	Tenant	Point
20	6300	1880			Tenant	Point
20	6325	1885	Canadian	P	Owner	Point
21	7175	1900			Tenant	Point
21	7511	1895	African-American	SS	Tenant	Point
24	300	1895	Irish	P	Owner	Point
27	A2719	1890	U.S.	S	Tenant	Point
27	2784, 2877C	1880			Tenant	Point
27	2786, 2864, 2873, 2874	1880	U.S.	S	Tenant	Point
27	2809, 2812	1880	Irish	S	Owner	Point
27	2822	1880	Irish	S	Owner	Point
27	2855	1900	U.S.	S	Tenant	Point
27	2870	1900	U.S.	S	Tenant	Point
28	2007	1900	English/U.S.	S, S	Owner	Point
28	2404	1900	U.S.	U	Tenant	Point
29	4648	1880		U	Tenant	Point
29	4714	1870	German	P	Owner	Point
29	4724, 5112	1880	Irish	U	Owner	Point
29	4731, 5167, 5169	1880			Tenant	Point
31	2504	1895	U.S.	U	Tenant	Point
37	100	1880	U.S.	S	Tenant	Point
37	101	1880	U.S.	S	Tenant	Point
37	141	1880	Irish	W, S	Tenant	Point
37	156	1880	German	S	Tenant	Point

Key
Occupation: P+ = Wealthy Professional, P = Professional, S = Skilled, SS = Semi-skilled, U = Unskilled, W = Widow.

sufficient primary data are presented that the scholar can re-assess our dating of the features and their associations.

This Interpretive Report is not intended to present the raw archaeological facts or the technically analyzed data. Rather, this is where we present the insights afforded us by the combination of archaeological remains and historical research into this place and time. Our presentation is organized into a series of essays addressing some of the themes that structured life in industrializing America. Our premise is that material culture in all its forms both reflects and had a continuing influence on the lives of San Franciscans. Thus, the essays do not privilege written records or archaeology: both are used freely in the pursuit of our goal.

We have intentionally made the content of this volume eclectic and its format visually diverse. Individual authors have been given the freedom to take their interpretations in directions that they feel appropriate. Some studies rely heavily on quantitative, statistical data; others are qualitative. On occasion, authors approach the boundary between the archaeological imagination and contemporary practice, writing imaginative narratives or fact-based stories that weave together archaeological remains and historical accounts into vignettes of daily life. The narrative approach itself is controversial: Some readers may feel that the line between fictionalized accounts and documented events has been inappropriately blurred; others may agree with archaeological theorist Rosemary Joyce, who has written that "archaeological *writing* is storytelling" (2002:4).

Finding Research Design Topics in this Volume

The Interpretive Report on our investigations consists of several components:

- This volume, which contains essays about the social history of San Francisco on various scales, from family to neighborhood to regional;
- Appendixes on compact disc, which contain the feature associations by block (A); brief feature "snapshots" with artifact photo layouts and standard data (B); West Approach Block Technical Reports and Prehistoric Report (C); West Approach faunal data and artifact catalogs (D); bead study by Karlas Karklins with Lester Ross (E); and statistical analyses by Bruce Owen (F).

Table 1.6 guides the reader to topics of interest in this volume. The research design defined five principal THEMES to which data developed by the West Approach Project might contribute: Consumer behavior/strategies, Ethnicity/urban subcultures, Institutions, Industrialization/technology, and Urban geography. Each of these was further subdivided in the research design into TOPICS, many of which are addressed in Table 1.6 as FOCI. The results of field, lab, and analytical work were not applicable to some themes; these cases are so noted. The comparative analyses presented in Part IV move well beyond the research questions posed in the original research design.

Questions Asked, Answered, and Posed

We have brought in various collaborators and asked them to address the themes posed in the West Approach research design from their particular theoretical perspective. We gave these authors the freedom to explore topics of interest to them, using the data presented in the BTRs. Their individual findings may bolster or contradict those of others in the same volume. Even interpretations of feature associations and meaning may differ. This is to be expected and was a goal of the BTR format—to allow other researchers to interpret the data for themselves.

This volume in no way exhausts the research potential of the West Approach material; many questions posed in the research design have yet to be fully explored; other new questions are posed in the concluding chapter. We do not have all the questions and certainly lay no claim to all the answers. The BTRs are available through Caltrans and the ASC on a compact disc in hopes that readers will be inspired to use the data in their own work for comparative purposes or to build upon what we have started here.

San Francisco research designs created for Caltrans have long endorsed comparative studies between households, neighborhoods, cities, and regions, from the initial attempt for the SF-480 Terminal Separator Rebuild in 1993 (Praetzellis and Praetzellis, eds. 1993). Even then, it was suggested "whether or not one can associate particular deposits with given families on any of these blocks, the block-by-block variation in architecture, use of household space, and integration with the commercial life of the city indicates significant differences in 'block identities' within the social and ethnic organization of San Francisco" (Yenstch 1993:277). Municipal improvements, social and political considerations, economics and engineering all contributed to the development and protection of the archaeological record, as it would eventually be read in the 21st century. With its unique Gold Rush setting, the city of San Francisco itself was the backdrop for a variety of ethnic and urban subcultures, organized along social (including education, training, family or regional background, family composition, and shared values/lifestyle/orientation), as well as economic lines. With its frontier venue, luck and/or skill contributed to a person's trajectory in ways that were not as clear-cut or predictable as they might have been in small-town America or long-established cities of the East or South. Factors both quantitative and qualitative contributed to lives lived by 19th-century San Franciscans.

Beginning with block and inter-block similarities and differences, the original Tar Flat, Rincon Hill, and Shore of Mission Bay research design suggested that comparisons be sought with cities in California, on the West Coast, and in the East. Caches of artifacts found in privies and wells have proven to be the archaeological features best suited for comparative studies. These receptacles can be found around the world, time capsules ready for discovery and analysis. It is only recently that the required quantity of well-studied collections necessary for statistical analysis has made such comparative studies possible. The Cypress Project used statistics to define differences between households of various characteristics and enlarged the household analysis to study neighborhoods. In this report, we attempt citywide analysis, looking at statistically significant differences between artifact patterns representing San Francisco and Oakland. Eventually, it should be possible to bring in other cities as well. The cities of London and Melbourne, to name but two, are presently developing methods and funding to analyze their 19th-century collections and the ASC is to be a part of this endeavor. Comparisons only imagined are now within reach between globally diverse cities, which were in the sphere of the Victorian British Empire.

This Volume

This volume is divided into four parts. Each part contains main essays (structured as chapters), short essays, and sidebars. The short essays, some of which are actually quite long, connect thematically with the main essay and are focused on specific self-contained topics. Some cover relevant historical topics, others cover purely archaeological manifestations, and some range between both sources. Sidebars present the "minor illustrative material," generally archaeological or literary in nature. These "lost treasures, guilty secrets" are for entertainment value, in hopes of catching a reader's interest in what was found. Each chapter, essay, and

Table 1.6 Research Foci and Where to Find them in this Volume

Theme	Topic	Foci
A. Consumer Behavior and Strategies	Consumer and disposal practices of well-documented households.	Assemblages linked with households documented in BTRs [CD in envelope]. Influence of occupation, nativity, neighborhood [Chs. 3, 8, 9, 10, and 11]. Symbolic dimension of consumer artifacts, domesticity and aesthetics [Ch. 4].
	Commercial assemblages as indicators of the availability of consumer goods.	Corner store [Ch. 3].
	Adaptive behavior in the acquisition/consumption of food and use of space.	Evidence of fishing, hunting, and home food production [Ch. 7]. Butcher retrofits [Ch. 4]. Repair of clothing [Ch. 4]. Rabbits [Ch. 7].
	Landscape alteration and waste/water management in relation to household change.	Fill [Ch. 3].
B. Ethnicity and Urban Subcultures	Influence of and resistance to Victorianism and consumer culture.	Crafts [Ch. 4]. Taxidermy [Ch. 7]. Religious and educational artifacts [Ch. 8]. Pets [Ch. 3]. Games [Ch. 8]. Fish [Ch. 3].
	Dynamics of cultural pluralism and stratification. Women's lives. Influence of wealth and nativity on household material culture.	Women's lives [Ch. 4]. Relationship between food, material culture, wealth neighborhood, occupation, and nativity [Chs. 3, 8, 9, and 10]. Fraternal societies [Ch. 8].
	Material symbols and social boundaries.	Tobacco [Ch. 6].
C. Institutions	Documentation of life within an institution.	Social dynamics as embodied in its material culture [Ch. 3]. Material remains as reflective of ideological or religious influences [Chs. 3 and 8]. Material remains as reflective of services or resistance [Ch. 3].
D. Industry and Technology	Documenting industrial processes.	Evidence for reuse of materials; glass whimsies [Ch. 7]. Impact of the sewing machine [Ch. 5]. Clothing trade [Ch. 5]. Printers' type [Ch. 7].
	Management/worker relations	Maritime trades [Ch. 9]. Clothing trade [Ch. 5].
	Industrialization, environment, and public health	Impact of industrialization on landscape, environment, and public health in Tar Flat [Chs. 3 and 10]. Pests and pathologies [Ch. 3]. Wells and privy [Ch. 7].
E. Urban Geography	Urban infrastructure	Filling of lots [Ch. 3]. Buried prehistoric site [Ch. 1]. Earthquakes [Ch. 11].
	Relationship between environmental perception and public policy.	Decline of Rincon Hill [Ch. 3]
	Residential/neighborhood differentiation.	Material culture differences between neighborhoods and cities [Chs. 3, 9, 10, and 11]. Influence of "place" on household decision-making [Chs. 10 and 11]. Material Status Index [Ch. 11]

sidebar is a stand-alone piece; readers need not feel compelled to read from start to finish, but are encouraged to move around the volume at will.

Part I contains two main essays. This, the first, presents an introduction to the West Approach Project—the project's how, why, when, where, and whom. It briefly describes our methods and research questions, while referring the reader to the research design and treatment plan for further information (Ziesing, ed. 2000). It outlines the project history and the resulting reports. As an introduction to later analyses, Chapter 1 also provides background and summary data for the SF-80 and Cypress projects. Additional supporting data are included in six appendixes: a feature-association list by block, feature snapshots, which provide a one-page graphical representation of findings for each feature, the BTRs and Prehistoric Report, artifact and faunal catalog, bead report, and lastly, the detailed statistical analysis in full. Short essays/sidebars cover prehistoric deposits in the South of Market (Stewart), impacts of the original SFOBB construction (Meyer), short biography of project area resident Bret Harte (M. Praetzellis), and the custom shoring used to excavate deep wells (Meyer). The second chapter condenses the excellent historical background chapter written by Nancy Olmsted and Roger W. Olmsted (2000) for the project. It contains sidebars on two neighborhood institutions: St. Mary's Hospital and the Miners' Foundry.

Part II moves up two levels and provides context for the volume with "Life in the Neighborhoods," Chapter 3, by Mary Praetzellis. Following a discussion of the archaeology of neighborhood institutions—St. Mary's Hospital, the California Collegiate Institute for Young Ladies, and the Silver Street Kindergarten—by Annita Waghorn, the chapter describes the three distinct project area neighborhoods: The Edge of Rincon Hill, Shore of Mission Bay, and Tar Flat. Rincon Hill was San Francisco's first exclusive address and its edges housed a mix of elite and ordinary residents. By its moniker, Tar Flat hints at a less than salubrious setting. Working people lived there in small houses on small parcels surrounded by industry with its attendant pollutants of sights, sounds, and smells. The Shore of Mission was midway between the two. What was family life like in each of the three neighborhoods studied? How did the neighborhoods differ? Chapter 3 explores these topics using case studies from each neighborhood and statistics from the Owen's study. Short essays cover a variety of topics from the corner market (Waghorn)—to pets and pests—dogs (Solari), cats (Stoyka), rats and pathologies (Stoyka), birds and fish (Solari)—to fill (Meyer) and the weather (M. Praetzellis).

Part III continues the discussion of project findings at the household scale in five chapters. Chapter 4, "Tracing Immigrant Women and their Household Possessions in 19th-Century San Francisco," by Anne Yentsch, makes women the center of analysis to delineate women's lives within their homes. When women are central, different aspects of life are revealed. One looks at assemblages with life cycles, family cycles, rites of passage, motherhood, sexuality, and home oriented activities (both income production and consumer behavior) in mind. Short essays cover baby shoes (Psota), washing and repairing clothes (Psota), crafts (Psota), and home butchering (Stoyka). Chapter 5, "Needleworkers and Sewing Implements," by Sunshine Psota and Mary Beaudry explores the historical context and material culture of 19th-century dressmakers and tailors. Short essays cover the impact of the sewing machine (Psota), hand-stitching (Psota), sewing artifacts (Beaudry), and beads (Gibson). Chapter 6, "Tobacco" by Michael Meyer explores its topic in a wider-ranging discussion of the context and material culture of tobacco through the decades. Chapter 7, "Life at Home," by Erica Gibson tackles the flip side of consumerism: What did households acquire for their sustenance and pleasure outside the marketplace—through hunting, gathering, growing, repairing, adapting? What did they recycle, reuse, or discard? What did they produce for sale and how is this mixed use reflected in their material culture?

Short essays cover taxidermy (Stoyka), rabbits (Stoyka), a unique stone-lined privy (Meyer), well construction (Meyer), glass whimsies (Gibson), tintype plates (Gibson), and the recovery of remains of a Chihuahua and guinea pig (Stoyka). The last main essay in Part II is Chapter 8, "Ethnicity and Socioeconomic Status" by Adrian Praetzellis. It reviews the literature on Jews and Irish before using Bruce Owen's statistical findings to investigate how ones' religion, ethnicity, and/or class is or is not reflected in the archaeological record with the goal of disentangling the influences of ethnicity from those of socioeconomic status. Short essays cover religious, educational, and gaming artifacts (Gibson), contrasting dining experiences (Stoyka), and the Fenian Brotherhood (Waghorn and Solari).

Part IV shifts scale again and looks at the larger differences at the city level as seen through material culture recovered from archaeological contexts. Chapter 9, "Maritime Workers," by Mark Walker explores the lives of 19th-century maritime workers in San Francisco and compares them with railroad workers in Oakland. Short essays cover uniform buttons (Psota), men's footwear (Psota), and the Workingmen's Party (Walker). Chapter 10, "Rivals across the Bay," by Mary Praetzellis uses literary views from above and sophisticated statistical analyses from below by Bruce Owen to look at the differences between San Francisco and Oakland and introduce the importance of place. One sidebar focuses on the ongoing cycles of "Boom and Bust" that plague the region. Chapter 11, "The Power of Numbers—Material Status Index and Moving Forward," by Mary Praetzellis, Adrian Praetzellis, and Bruce Owen concludes ASC's earthquake-related studies of Oakland and San Francisco. It frames the Material Status Index, developed by Owen using 98 comparable features from the two cities, with historical context provided by 19th-century economist Henry George and makes suggestions for future research and a global archaeology that can be truly quantitative and comparative. Three sidebars on earthquakes, bloomers, and Thanksgiving complete the volume.

CHAPTER 2

A BRIEF HISTORY OF THE SOUTH OF MARKET

Adapted from Olmsted and Olmsted (2000) by Robert Douglass

INTRODUCTION: THE SOUTH OF MARKET NEIGHBORHOODS

Three geographic features molded the development of the neighborhoods of the West Approach Project study area. Two of these, Yerba Buena Cove and Mission Bay, are entirely gone now, and the third, Rincon Hill, has been substantially reduced in size; all fell victim to human modification of the natural landscape in the century following the Gold Rush. The six project area blocks are associated with three South of Market neighborhoods. In the north, Tar Flat evolved from the former shoreline and filled-in waters of Yerba Buena Cove, and is represented by Block 4. A little to the south, the Edges of Rincon Hill—comprising remnant residential areas around the pared-down rocky hill that now supports the western landing of the Bay Bridge—takes in Blocks 5, 7, and 9. At the south end of the study area, Blocks 10 and 11 represent the Shore of Mission Bay neighborhood, consisting of land built up over the former shorelines, salt marshes, and estuaries of the now-vanished Mission Bay.

COLONIZATION TO GOLD RUSH, 1776–1850

Pre-contact Native Americans, attracted by the fresh water and profuse resources, created two villages in the West Approach Project vicinity. *Sitlintac* was their summer home on Mission Bay, while the winter village of *Chutchui* was a couple of miles upstream on Mission Creek. In 1776 Spanish Sonoran settlers under Lt. José Joaquín Moraga arrived from Monterey to found the Mission San Francisco de Asís near *Chutchui;* Moraga also established the Presidio of San Francisco as a military reserve near the Golden Gate to the northwest. As colonists increased around the fort, the Spanish government converted the four California presidios to pueblos, each with four square leagues of land for distribution to soldiers and nonmilitary colonists. What was to become the South of Market district was part of the Pueblo de San Francisco grant, but it was likely used for little more than grazing land through the Spanish period and most of the subsequent Mexican period. Over the next 40 years, virtually all of the surviving native people in the Bay Area became attached to the missions (Milliken 1995:1, 53, 61). By 1817 a thousand native "converts" lived in squalid conditions around the San Francisco mission (Beechey 1831[II]:20). That population declined along with the political power of the Franciscans, and as secularization of mission lands began in 1833, there were but 204 native converts living near Mission Bay (Hittell 1878:70). After the mission breakup, another grant, Potrero Nuevo, was created from former church lands a little farther to the south.

As American and other foreign commercial interests in California grew in the mid-19th century, a small settlement sprang up near the north end of Yerba Buena Cove, where deeper

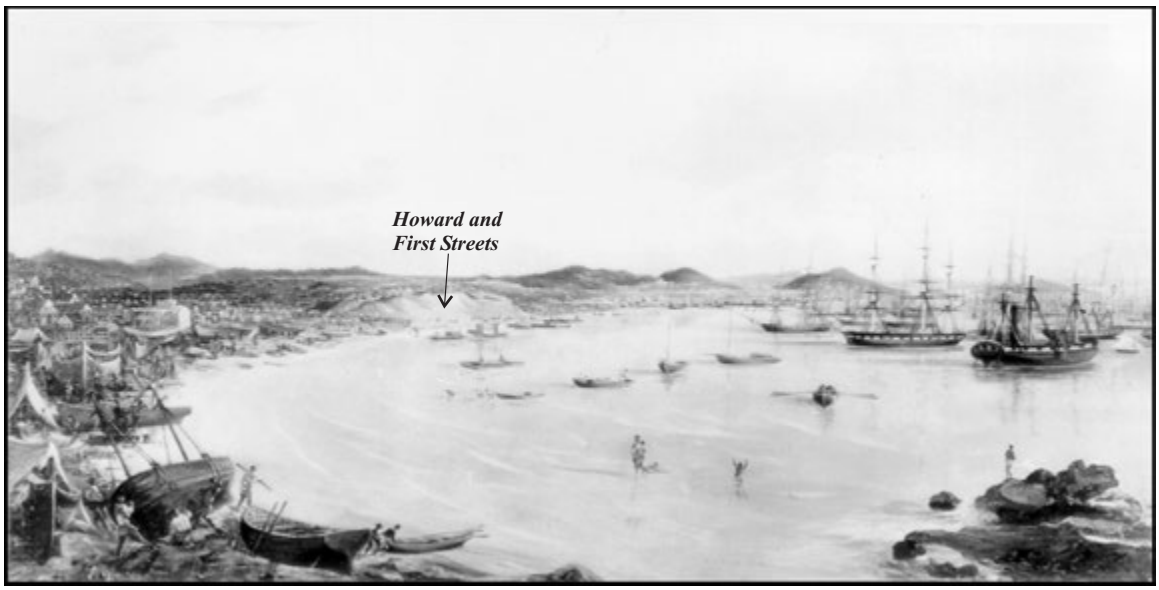
Figure 2.1. "View of San Francisco, formerly Yerba Buena, in 1846–7. Before the Discovery of Gold." This early view of San Francisco is north of what would later become South of Market. (Illustration courtesy of Library of Congress Prints and Photographs Division, LC-DIG-pga-00251)

water provided a better anchorage than the shallow south end. The first recorded development in the village of Yerba Buena occurred in 1840 and 1841, when Jean-Jacques Vioget built a cluster of one-story buildings and applied for a license to operate a saloon and billiard hall. This village of perhaps 50 residents, including 16 foreigners—mostly British and Yankee sailors who had jumped ship—was north of present-day Market Street (Figure 2.1). While access to the South of Market area was blocked by 80- to 100-foot sandhills, villagers and maritime visitors would likely have made the trip to collect firewood, a scarce commodity by the shore. By the time of the U.S. takeover in July 1846, the village population had grown to 200, with 50 buildings; two years later it had become a town of 850 residents and 200 buildings (Soule, Gihon, and Nisbet 1855:173, 200). The original name of the settlement, taken from nearby Yerba Buena Cove, was officially changed to San Francisco in 1847. During this period the shoreline of the cove was reported as the scene of various diversions—including picnicking, clam digging, and mussel collecting—while horse races were run on the beach below the south cove bluff in the project area. Farther south, the rich wildlife resources of the Mission Bay marshes and estuaries would also have attracted nearby settlers.

Early on during the American era, temporary military governor General Stephen Kearny gave the town the right to sell beach and water lots between Fort Montgomery (near present-day Broadway and the Embarcadero) and Rincon Point for its own benefit (Bancroft 1884, V:563–564), paving the way for future sales of submerged tidal lands near the present project area. Years later, in 1868, the Tidelands Act established a commission to sort out ownership claims to squatter-occupied watery lots, primarily in and around Mission Bay, and to legally sell the lots to successful claimants. Physical possession was one requirement, resulting in some violent skirmishes among rival occupants. The Tidelands Act also paved the way for the entry of the railroad into the area, setting aside 150 acres, mostly Mission Bay water lots, for a freight terminal.

The South of Market was given much of its identity as a separate place within the city when surveyor Jasper O'Farrell created Market Street in 1847. By then the Yerba Buena townsite consisted of about 40 acres surrounding Portsmouth Square that functioned as the commercial center for much of the sparsely settled Pacific Coast. O'Farrell cut off the established (roughly north/south) town grid of Yerba Buena diagonally, laying out what he envisioned as a broad future boulevard across what was then an uninhabited sandhill wasteland. Streets to the south conformed to this diagonal layout: historian John S. Hittell observed that O'Farrell "correctly appreciated the importance of making the main streets in the southern part of town agree in general direction with the route followed by people going from Yerba Buena Cove to the Mission" (1878:116). Other defining features of this survey were larger blocks and lots, and wider streets in the lands to the south of Market Street. The view in those pre-Gold Rush times that the area was of limited value resulted in the oversized blocks, each containing six 100-vara lots (each lot about 1.7 acres in size). The broader grid of streets also reduced the amount of grading necessary to access the lots.

By the summer of 1848, just months after discovery of gold at Sutter's Fort, most able-bodied San Franciscans had dropped everything to set off for Sacramento and the mines. With President Polk's authentication of the finds in December of that year, the rush was on, bringing gold seekers from every region of the U.S. and its territories, and from countries around the globe. The fledgling city on Yerba Buena Cove was soon teeming with new arrivals. As 1849 came to a close, San Francisco's population had risen to between 25,000 and 30,000 (Soule, Gihon, and Nisbet 1855:215–216). The only surviving 1850 view of the shore of Yerba Buena Cove, called



(annotated for this report)

Figure 2.2. "The Shore of Happy Valley," 1850, Augusto Ferran. (Courtesy of the Bancroft Library, University of California, Berkeley: 1963.002:1356--FR)

Happy Valley by the artist, is the painting by August Ferran (Figure 2.2) that depicts chaotic tent camps along the shoreline, in what would become Tar Flat.

CUT AND FILL: CITY EXPANSION AS THE GOLD RUSH RUNS ITS COURSE, 1850–1859

Survey of San Francisco in 1852 by the U. S. Coast Survey resulted in the first accurate map, published in 1853, of the streets, buildings, and underlying natural topography of the young city (Figure 2.3). In the South of Market district, it shows the grid of city blocks aligned with Market Street, running into the edge of Yerba Buena Cove in the north and across the tidal marshes of Mission Bay to the south. In the northern part of the project area, what would become Blocks 1, 2, and 13 was submerged under the waters of Yerba Buena Cove. The cove itself was shallow, with an extensive mud flat laid bare at low tide. As the first protected anchorage on the bay, it had become the port of choice for vessels of all sizes, with the largest moving in only on high tides. The shoreline from Mission Street to Rincon Point became known as Happy Valley, an area of "free land" where the early gold seekers of 1850–1852 could put up their tents at no fee, and stay in the convivial society of new arrivals on the move to the mines. Pleasant Valley, whose name appears on only a few maps in the 1850s, lay between the 60-foot-high sandhills that blocked Howard Street and the slopes of Rincon Hill just to the south. The sandhills traced by the 1852 topographic contour lines would soon be largely leveled into the low spots and small valleys, and into the bay waters and marshlands as city real estate pushed outward.

The radical changes necessary to convert the South of Market area from sand dunes and wetlands into a vital part of the new city happened quickly and efficiently. O'Farrell's 1847 survey had laid out the theoretical framework for this development, and the 1852/53 Coast Survey map shows that by that time substantial construction was already underway along the streets in the district regardless of the topography. Nonetheless, planners were not content to grow the city

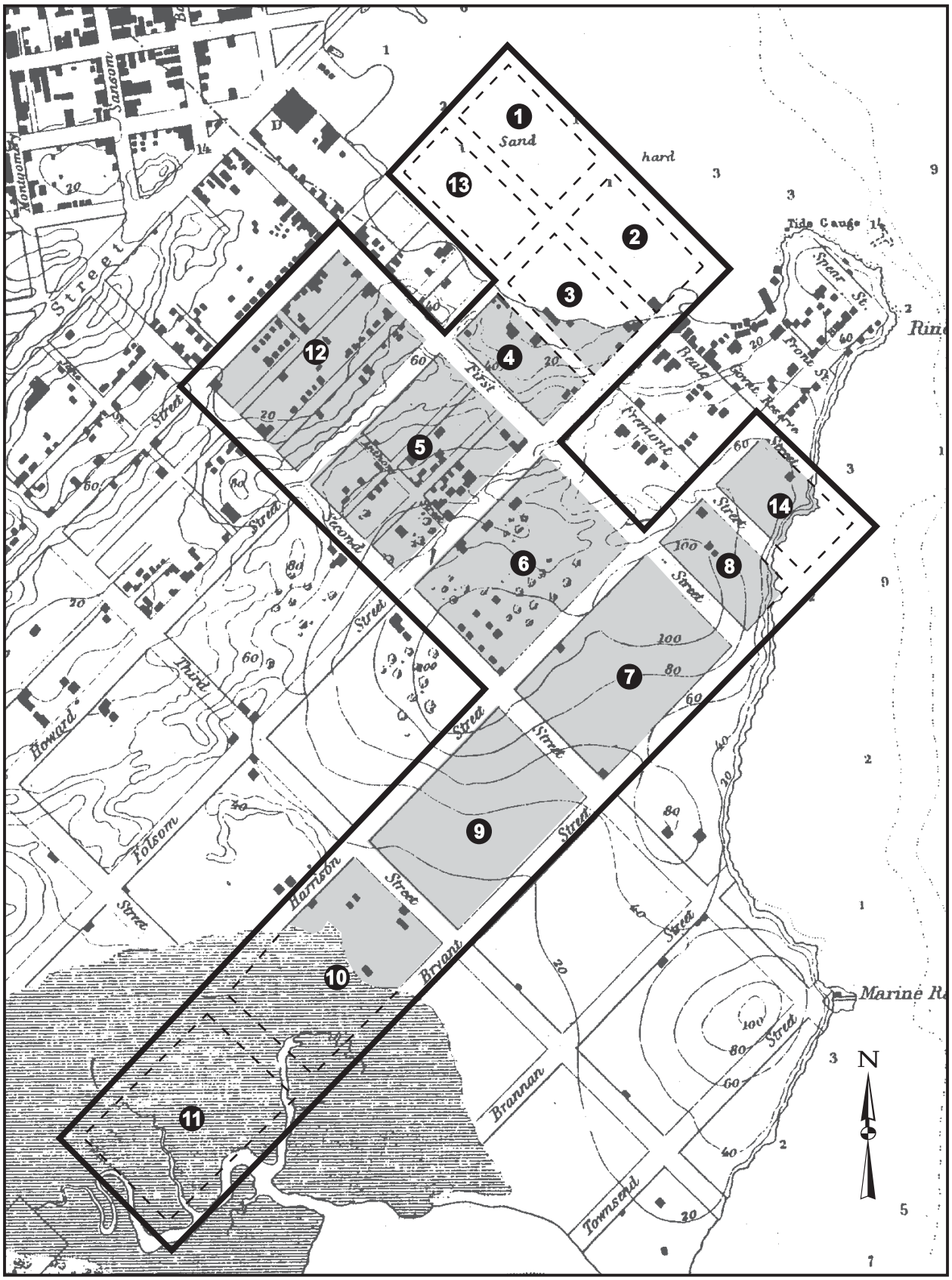


Figure 2.3. San Francisco, 1852/1853, U.S. Coast Survey map showing project blocks.

on the natural landscape of steep sandhills and valleys, and began to transform the landscape to better suit urban use and growth. Before long, existing terrain was flattened and new land was created by filling in the edges of the bay.

Initial response to South of Market real estate had been tepid at best, but Gold Rush population growth soon spurred development. By 1852 the Mission Dolores Plank Road Company, franchised to collect tolls for seven years, had built planked roads on Mission and Folsom streets, each over two miles long. A City-funded, toll-free planked road authorized in 1853 was built on Brannan Street, at the time more of a causeway along the northern edge of Mission Bay than a road. The planked roads were only part of a temporary solution. City-owned streets as well as private lots needed permanent filling and grading. With marshy wetlands to be filled and steep hills north and south of Market to be leveled, all that was lacking was the means to move the sand. The answer was provided by David Hewes, who combined a steam shovel with movable tramways for hauling the sand. The resulting system was dubbed the "Steam Paddy," a reference to the ubiquitous Irish workers who provided much of the non-mechanized earthmoving labor of the time. From 1852 to 1854, and from 1858 to 1873, Hewes's steam paddy was at work shaping the terrain of San Francisco (Hittell 1878:438). An upscale townhouse development on the block immediately south of Rincon Hill and project Block 9 was opened in 1855. The slowdown in the steam paddy cut-and-fill operation from 1855 to 1857 reflects a general local depression that began in 1854, brought on by the dishonest dealings of lumber and real-estate speculator "Honest Harry" Meiggs. Eventually, the city's real-estate market rebounded, and both Yerba Buena Cove and Mission Bay soon disappeared under the relocated sand fill.

The 1850s saw the establishment of the upper part of Rincon Hill as an upscale neighborhood of semi-countrified mansions and cottages for San Francisco's social elite. This trend continued into the 1870s and lingered longer. Adjacent to the hill, just to the south of project Block 9, South Park—a planned development of tony townhouses built around an oval park—was created in 1855, reinforcing the area's identity as an enclave of the wealthy.

The 1857/59 (Figure 2.4) Coast Survey map recorded the South of Market District as the massive and rapid transformation of the landscape led by Hewes's steam paddy was underway. In the north, substantial advances had already been made in the filling of Yerba Buena Cove, visible in the amount the shoreline had crept out into Blocks 1, 2, 3, and 13 since the 1852 survey. In the south, the portion of Block 10 mapped as Mission Bay marshland is half the size shown in 1852. Over the same period, the overall number of buildings in the South of Market appears to have increased geometrically. The 1857/59 map also shows the three planked roads connecting to downtown via the Third Street thoroughfare, as well as by a wagon road on the Sixth Street alignment. The Brannan Street free road was the preferred corridor for development: the 1857/59 map shows most lots accessible by this road as already filled and graded, while marshes, pools, and sandhills remained on many lots along the toll roads. Much of this substantial Brannan Street traffic would have flowed along Third Street between West Approach Project Blocks 9 and 10.

Mission Bay marshlands remained largely isolated during the 1850s, with lands such as Block 11 used primarily for hunting and fishing. Shellfishing and market hunting of waterfowl—to supply the city's many boardinghouses, restaurants, wholesale markets, and street peddlers—were still profitable trades. The southwestern third of Block 10 also remained a marshland, with the 1857/59 Coast Survey map showing a rectangular structure that suggests a hunter's blind at its edge. While largely vacant, the rest of the block exhibited some development along Third Street.

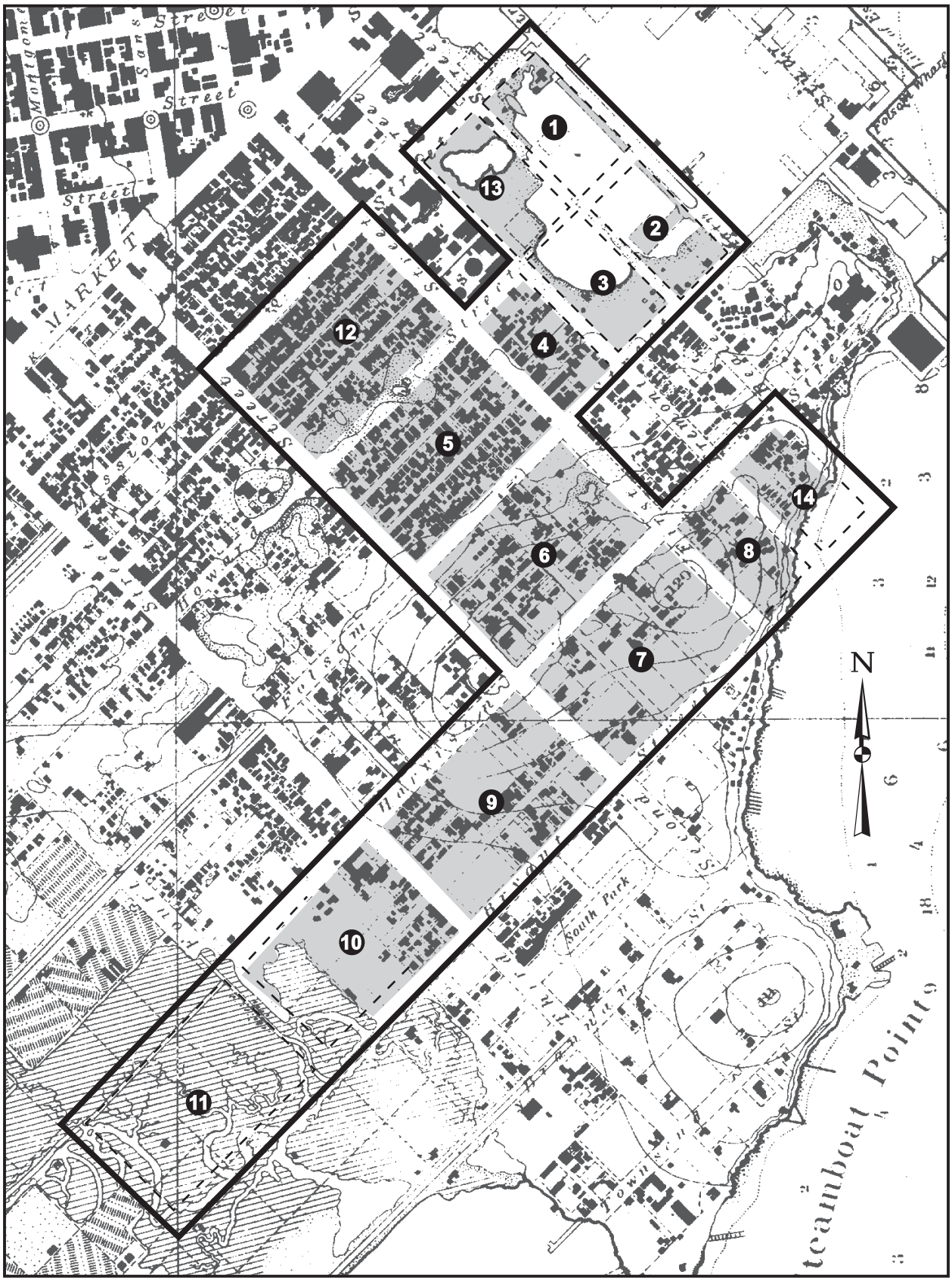


Figure 2.4. San Francisco, 1857/1859, U.S. Coast Survey map showing project blocks.

COMSTOCK BOOM PROSPERITY, 1859–1875

While the rush was over in the California goldfields, the discovery in 1859 of the Comstock Lode and the ensuing silver boom in western Nevada set the tone of the decade of the 1860s. It was a time of increasing high hopes for progress and development in San Francisco and resulted in further changes in the landscape South of Market. Comparing the bird's-eye views of 1864 and 1868 (Figures 2.5 and 2.6); the most striking change is the presence of Long Bridge. The construction of the bridge as a continuation of the Fourth Street horse-car route, across Mission Bay and beyond to Potrero and Hunter's Point, was a major stimulus to South of Market development; in the West Approach Project area, Blocks 10 and 11 near Mission Bay were most directly affected.

As the steam paddy chugged away through the 1860s, San Francisco grew steadily southward into an increasingly homogeneous South of Market cityscape (Figure 2.7). The area was a focal point of a building and real-estate boom in the city that continued to expand until the

(annotated for this report)

Figure 2.5. Detail from Gifford's Bird's-eye View of San Francisco, 1864. (Illustration courtesy of Library of Congress, Geography and Map Division)

(annotated for this report)

Figure 2.6. Gifford's Bird's-eye View of San Francisco, 1868. (Illustration courtesy of the Bancroft Library, University of California, Berkeley: 1963:002:0577--D)

1869 completion of the transcontinental railroad. Several factors spurred growth in the district, including the final clearance in 1867 of land titles on the Potrero Nuevo grant just to the south, the nearly completed work of the steam paddy, the labor needs of growing industry, and advances in transportation and its infrastructure.

Public transportation in San Francisco's early years took the form of omnibuses and cabs. The Omnibus Road, which ran large, stagecoach-like vehicles from South Park in the South of Market district to North Beach, converted to tracked horse cars in 1862 to become the city's first street railroad (Hittell 1878:182). The 1860s saw the building of horse-car lines on many South of Market streets. The Sixth Street horse-car line, running from north of Market Street down Sixth to Brannan, then down Brannan to Mission Creek, started in the mid-1860s and operated with horses until it became one of the city's earliest electric lines around the turn of the 19th century.

One undated view (probably taken ca. 1860–1861) looks southeast from the 600 block of Harrison Street (Figure 2.8). The smoke from a sugar refinery down at Eighth Street would place this view in the 1860s. Blocks 10 and 11 still show virtually no development. One large, two-story building sits in isolation mid-block on Block 10; another isolated, one-story building faces Harrison Street on Block 11 and appears to have washing hung out near the street, as well as a fenced yard above a marshy area in the backyard. More than anything else, this photograph emphasizes the continued isolation of Blocks 10 and 11, in sharp contrast to the considerable number of homes and commercial buildings on the northwest side of Harrison (in the 700 and 800 blocks), which face the marshland to the south.

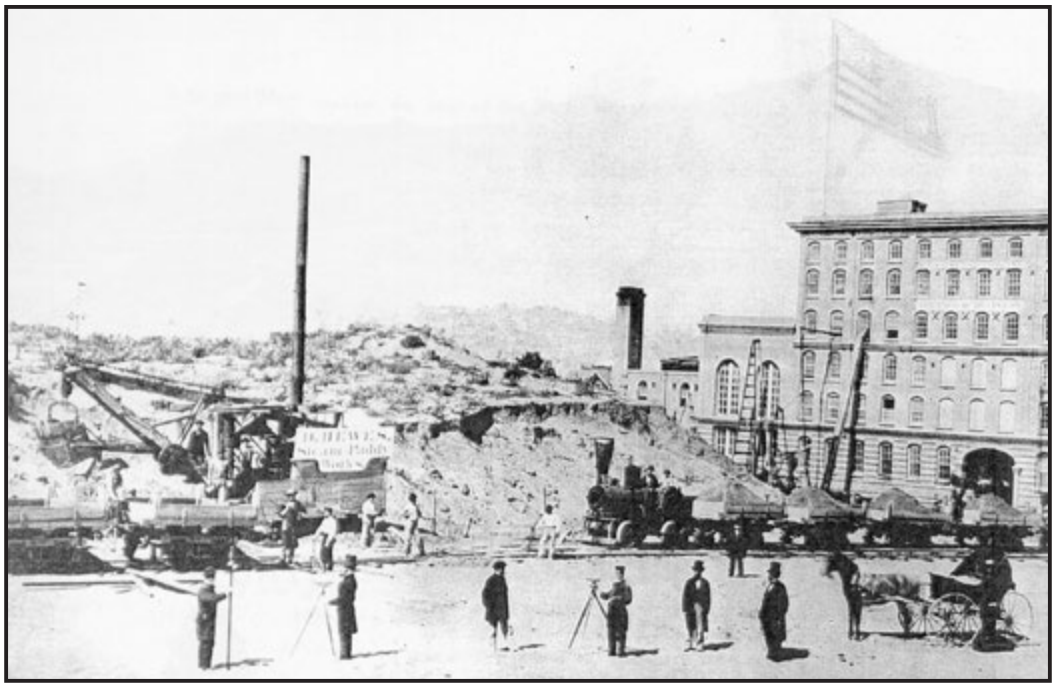


Figure 2.7. David Hewes and the Steam Paddy at Eighth and Harrison. David Hewes poses with his workmen and associates in front of the steam shovel and train system that spread the sandhills north and south of Market Street into Yerba Buena Cove and Mission Bay in the 1860s. George Gordon's sugar refinery was located in the six-story building on the right. This building was damaged by the 1868 earthquake. (Photo courtesy of the Bancroft Library, University of California, Berkeley: 1905.17500 v.10:82--ALB)

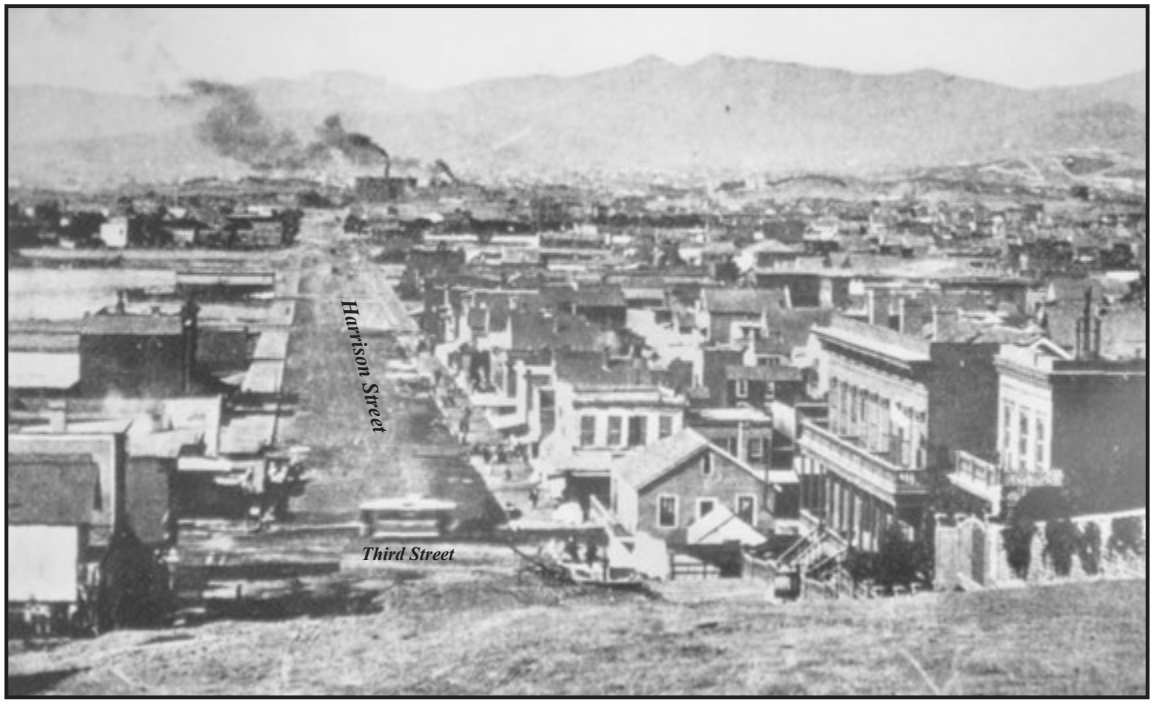


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Figure 2.8. View down Harrison Street from Rincon Hill, looking southwest, ca. 1860/61. This undated view was taken from the 600 block of Harrison looking west as far as Eighth Street. Third Street has just been crossed by a horsecar from South Park. Undrained marshes account for the low level of development on the left, or south, side of Harrison that encompasses project Blocks 10 and 11. (Photo courtesy of the California Historical Society)

NEW POVERTY SOUTH OF MARKET, 1875–1890

Post-Gold Rush San Francisco had enjoyed 15 years of prosperity, from the discovery of the Comstock Lode in 1859 to the crash that occurred in 1875. The long-anticipated completion of the transcontinental railroad in 1869, which was behind much of the speculation of the period, was expected to usher in a new, even greater era of prosperity for San Francisco. While the four proprietors of the Central Pacific reaped spectacular rewards, for most other segments of the economy the railroad had an opposite effect. By directly tying California to the national economy, the railroad brought East Coast industrial competition, and with it falling wages and the effects of distant speculative busts. Along with cheap eastern goods, the railroad brought in a wave of new European immigrants needing jobs. Overall, the city's population increased from 150,000 to 235,000 between 1870 and 1880. Much of the increase was concentrated in the South of Market, where living conditions grew more congested as the district absorbed numerous German, Irish, and English immigrants. The Chinese, while competing for the work with the South of Market laborers, lived in the Chinese enclave of Chinatown. Another group whose origins were tied to the development of the nation's rail systems also began arriving in significant numbers: transient single men following seasonal work, later to be stigmatized as hobos.

From 1876 to 1877, in a modest two-story row house on Harrison, lived Block 9's most famous resident: Henry George, the radical economist. George supported his small family by writing articles for the *Overland Monthly* and *Alta California*. Later he moved to 417 Second Street, on West Approach Block 7. It was while he lived on these two blocks that he wrote *Progress and Poverty*, the only 19th-century American book on economics to sell over two million copies and to be appreciated for its original ideas several generations later. While in the neighborhood, George worked as a meter reader for a gas company, a job that would have given him ample opportunity to move through the back streets of San Francisco, like Perry and Silver, and observe the conditions of family and business life. George identified the unique character of life in California: "a certain cosmopolitanism, a certain freedom and breadth of thought and feeling, natural to a community made up from so many different sources . . . a feeling of personal independence and equality, a certain hopefulness and self-reliance, and a certain large-heartedness and openhandedness." All these characteristics contrasted with the highly structured Victorian urban world. In San Francisco, individuals rose or fell according to ability and the revolutions of circumstance; the latter so often shifted dramatically that a person's fortune might suddenly collapse, and not too much later be restored in some novel form, just as unexpectedly. In short, it was a much more human-centered society than that of America's more established, socially stratified cities. George predicted that the railroad would change all of this, first bringing on an economic crisis, and then steadily and ruinously undermining the independence and freedom of the individual, which was San Francisco's most valuable characteristic. The importation of the class struggle was one expected result of contact with the East Coast. George, it appears, was right.

The sharp depression of the mid-1870s marked a watershed in the social and economic history of the South of Market. Outside of the wealthy enclave of Rincon Hill, most residents of the project area lived payday to payday, working for wages. San Francisco had grown so rapidly from the Gold Rush right up through the Comstock boom because unemployment was usually low and wages relatively high in comparison to the nation as a whole; much of the city's economy had been driven first by local and then by regional demand. This favorable labor situation had its roots in the Gold Rush-era settlement of San Francisco and California as a whole. Dependence on wage labor could provide an adequate income in good times, but in bad times

the inherent insecurity of wage-labor income spelled disaster for many, dramatically shifting the balance of power in the labor market toward the employer. After 1875 a labor surplus in San Francisco continued to prevail, to varying degrees, for three decades—keeping wages down and unemployment up until the 1906 fire created an insatiable demand for hands to rebuild the devastated city.

An example of the desperation of 1875 is this advertisement taken out in a San Francisco newspaper: "Wanted: 100 men to work as day labor for $1 a day, bring your own pick and shovel" (*Alta California* 16 April 1875). Over a thousand men, a significant proportion of the city's white male population of 50,000—were desperate enough to show up for a backbreaking day of cutting a railroad grade through the rock at 10 cents an hour. Fights broke out between the desperate men, and a riot was narrowly averted by promising more work the next day for the disappointed.

With the depression of the 1870s, many speculative enterprises built in anticipation of the railroad folded or barely stayed afloat. Most dramatic in the West Approach Project area was the Kimball Carriage Works on Block 11. Opulent carriages for railway cars—costing $20,000 per car while holding only 11 passengers—were in limited demand in an economy on the skids. The company soon experienced financial disaster, ending in the presumed suicide of its chief investor, Bank of California manager William Ralston, in 1875. The shops closed in 1876.

In addition to the large-scale losses when industries went under, small businesses were often hard-hit, especially those whose operation depended on credit. The family grocery stores that characterized the South of Market sold food on credit to their regular local customers. When enough of his customers lost their jobs, the grocer could lose his business. For every big business that failed, there were countless individual enterprises that slowly drained away any assets that their proprietors possessed.

With devastating unemployment in the South of Market, an intricate network of social clubs and benevolent societies gave formal organization to the principle of mutual aid. Fraternal orders, trade unions, and neighborhood religious and social groups had regular meetings: who could have known better if someone failed to show up because of illness or personal tragedy? Outside charitable institutions were also moved to respond to the despair, in tune with a diverse nationwide, social-reform movement. Block 9, the southernmost of the Edges of Rincon Hill blocks, became a magnet for schools: Silver Street Kindergarten, Longfellow School, and Rincon Grammar School covered large parcels between Perry and Silver streets. This concentration of schools was the result of the social work undertaken by dedicated workers devoted to improving the lot of area children. Silver Street, one of Block 9's interior streets, became locally famous in the late summer of 1878, when a group of well-educated young women led by Kate Wiggin promoted the kindergarten movement from the Silver Street Kindergarten, the first of what would grow to 66 kindergartens in San Francisco by 1880.

Nearby on the steep northeast corner of Block 7, the Sisters of Mercy order built St. Mary's Hospital in 1861. Here the Sisters also operated an employment office and shelters for at-risk young women and older women. Our Lady of Mercy Academy was built along the north end of the hospital property in 1871; by 1886 it enrolled 435 students.

THREE NEIGHBORHOODS

The three neighborhoods in the West Approach Project area—industrial Tar Flat, marginally prosperous Edges of Rincon Hill, and the working-class homes and industry of the Shore of Mission Bay—had each developed its own unique personality; there was also a degree of internal division within those neighborhoods. Below, brief histories of the neighborhoods—from their beginnings to the eve of the 20th century—give a sense of how the broad-scale events described above played out at the local level. Detailed histories of the neighborhoods and the blocks that comprise them are provided in the three Block Technical Reports for the West Approach Project (Praetzellis, ed. 2007).

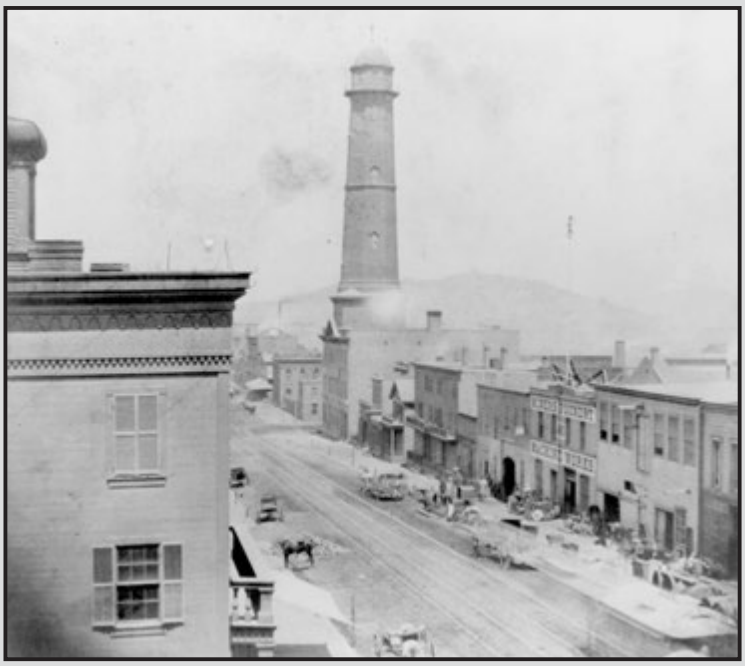
Tar Flat

The Tar Flat neighborhood developed in the late 1840s in the area of Happy Valley and the subsequently filled blocks that grew out into Yerba Buena Cove. The chaotic campground of would-be miners soon evolved into an area of scattered residences and small workshops and stores. Isolated from the industrial east and Europe, local industry had to be created to supply needed machinery to the mining and milling that drove the West Coast's economy, as well as to make the domestic items required by a growing population. This ironworks industry developed in the only real city on the coast, San Francisco. The construction of the San Francisco Gas Works in Happy Valley in 1854 set the stage for that area to become the center of the first heavy industry in the coastal West. Perched on the original shoreline at Howard and Fremont streets, the plant discharged the residual coal-tar byproduct of gas generation directly into the as-yet-unfilled tidal mudflats of Block 3 to the east. The smelly dumpsite that grew there as new wharfs were built on open waters to the east gave a name to the neighborhood: Tar Flat. The degraded environment made it suitable for little else than industry. The combination of level ground, access to shipping and a labor force, and cheapened real estate attracted the metalworking and related industries to Tar Flat, a specialty that defined its character well into the 20th century.

The Miner's Foundry, later known as the Golden State and Miners' Ironworks, opened its doors in 1860 on First Street near Folsom Street on Block 4, operating there for about 75 years (see sidebar). Following soon were the Aetna Ironworks, Eureka Foundry, Mechanics' Foundry, Metropolitan Ironworks, Western Ironworks, and Union Ironworks, as well as a range of other heavy industries. Tar Flat became the acknowledged world leader of precious metals mining technology during the 1860s, and had begun to export its machinery to new and expanding markets throughout the world. The financial panic of 1875, however, deprived the mines of the speculative capital they needed to grow, and the resulting depression began to erode Tar Flat's industrial prominence. Some foundries moved to the Potrero, where they increasingly specialized in shipbuilding and repair; others successfully found export markets in the Pacific. The Miner's Foundry remained, continuing in the mining machinery business on its original First Street site through the construction of the Bay Bridge in the 1930s, but its technological leadership had ended by the 1880s.

Although industry was dominant in Tar Flat, a dense and fairly diverse residential component developed in the alleys and along portions of the main streets. The metals industry of Tar Flat required entrepreneurs and inventors, skilled craftsmen and laborers. The top-level workers generally lived in the adjoining neighborhoods of Pleasant Valley and Rincon Hill

MINER'S FOUNDRY



Miner's Foundry and the Shot Tower, First Street, San Francisco, 1866. (Library of Congress, Prints & Photographs Division, Lawrence and Houseworth Collection, LC-USZ62-28976)

Block 4, situated on the original shoreline of Yerba Buena Cove, early on attracted iron foundries due to abundant beach sands suitable for making molds for iron casting. In 1859 on the eve of the Comstock Lode discovery, William H. Howland, Horace B. Angell, and Errin T. King established the Miner's Foundry on Block 4, eventually extending from 237 to 257 First Street. By the mid-1860s, 150 workers were using 2,600 tons of iron a year to turn out an amazing array of products, including steam engines and boilers, grain- and sugar-milling machinery; monitors and other hydraulic-mining equipment; stamp mills and replacement shoes for the ore stamps; circular, Muley, and sash saws, and planers for the lumber industry; rail-car wheels, and hundreds of other items. Ownership changed over the years, and when Wales Palmer, a partner in the nearby Golden State Iron Works, acquired an interest in Miner's Foundry in the early 1870s, it became the Golden State and Miners' Ironworks. The 1906 earthquake and fire destroyed the foundry's complex of earthen-floored frame buildings, but the firm rebuilt on the same site and continued there into the 1930s.

Although the Miner's Foundry produced machinery for a broad range of industries, as the name suggests, it was most closely linked with mining. The foundry was conceived as a cooperative venture, with individual inventors working under the same roof while still competing against one another. With this unusual approach the company played an important role in the rapid development of mining technology. Many of the foundry's craftsmen had been miners themselves in the 1850s, giving them a practical familiarity with mining and ore processing. The Miner's Foundry represented a one-stop, mining-machinery emporium, where visiting miners could compare different existing designs or have machines made to their own specifications, and even test machinery on their own ore samples in an on-site assaying room. The enterprise presents a picture of competitive innovation closely engaged with the industries it served, a bustling place where a steady flow of customers in from the mines, forests, and farms interacted with machinists and mechanics to continually refine evolving technologies.

(Blocks 5 and 7), while residents of Block 4 ranged from Irish day laborers, living in the Miner's Hotel on First Street, to families of skilled craftsmen and shopkeepers living on Baldwin Court. There were also the people who catered to the workers' needs—grocers and saloon keepers—as well as a Jewish tailor who lived and worked on Folsom Street for nearly three decades. Census data reveal a surprising diversity of ethnic groups, including substantial numbers of Swedes and Portuguese. Often, families of different nationalities shared the same crowded tenement house.

The Edges of Rincon Hill

The second neighborhood, the Edges of Rincon Hill, was in sharp contrast to Tar Flat. The rocky prominence of Rincon Hill—reaching 120 feet above sea level (amsl)—became San Francisco's first residential neighborhood for the moneyed elite, starting in the early 1850s. With lofty views and apparently far enough removed from the smoke and noise of Tar Flat, the upper parts of the hill became a bucolic island attracting residents ranging from successful to very wealthy; along its quiet streets and lanes they built genteel cottage- to mansion-sized homes. Kimball Carriage Works investor and Bank of California manager William Ralston was one early resident. Steeper side slopes were more suitable for institutional development: in 1861 the Sisters of Mercy acquired four 50-vara lots on Block 7, where the hill drops from 120 to 40 feet amsl above First and Bryant streets. Here they built St. Mary's Hospital, facing the bay to the southeast. Block 5, on the lower edge of the northwestern slope of Rincon, was an area of more modest homes transitioning into the flat lots of Block 12 to the northwest and the Tar Flat industrial zone to the northeast (Figure 2.9). To the southwest, Block 9 comprised the easy southern slope toward the Mission Bay marshland.

Within the Edges of Rincon Hill district was a good deal of socioeconomic variety. The division between major and minor streets expressed relative degrees of importance and wealth: in Block 5 the Folsom Street frontage had a distinctly middle-class character, while houses located on the secondary streets were plainly working class, drawing residents from the industries of Tar Flat. The development of Block 9 was related to the 1855 establishment of the upscale South Park townhouse block just to the south, which brought the horsecars down Third Street to Brannan. Like Block 5, the houses on Block 9's exterior streets of Harrison and Bryant reflected middle-class residency, while the interior streets were working-class in nature, albeit a little better-off economically than was the case on Block 5. Block 7, while also evidencing this interior/exterior economic divide to a degree, was generally representative of the tonier neighborhood on the top of Rincon Hill.

Eventually, with the 1869 re-grading of Second Street where it crossed the hill, the high-end character of upper Rincon Hill real estate literally began to erode. The project was pushed through the State legislature and benefited not only the bill's author, who owned a lot at Second and Bryant, but the Southern Pacific Railroad, which thus obtained better access to a new railroad ferry terminal at the foot of Second Street. The re-grading resulted in lowering the roadbed 70 feet by carving an unstable canyon through the center of Rincon Hill. High above the gaping chasm, Harrison Street was routed across an iron viaduct. Before the cut was stabilized, more than one house was said to have slid down its steep banks. The unsightly Second Street Cut irreparably altered the character of the hilltop neighborhood, contributing to a growing general movement of wealthy residents away from the city center. Improved rail transport, including the innovation of the cable car, made living farther down the peninsula and in the hilly districts north of downtown more attractive. The slow exodus of the city's elite away from the once-

(annotated for this report)

Figure 2.9. Panoramic drawing by Dr. F. N. Otis, looking north from Rincon Hill, 1855. Drawn from the middle of Block 6, the artist encompassed a 180-degree view that took in Blocks 1-6 and much of the adjoining area. About 200 feet southeast of Folsom, the artist stood on a rise at least 60 feet above the street. He detailed Tar Flat, where Main and Beale streets can be seen as long wharves on pilings, stretching from Folsom to Mission and Market streets. (Illustration courtesy of the Bancroft Library, University of California, Berkeley: 1963.002:0576--F)

fashionable Rincon Hill continued through the turn of the century. The hill itself would continue to be whittled down over the years to accommodate new development—the last episode being the construction of the West Approach to the Bay Bridge in the 1930s.

Shore of Mission Bay

Blocks 10 and 11 represent the third neighborhood in the West Approach Project area: the Shore of Mission Bay. Formed by filled marshlands and their former margins, this part of the South of Market was entirely at sea level around the former Mission Bay. The SF-80 Bayshore Project area is a continuation of this neighborhood to the southwest. In 1852/53 none of Block 11 and only the northeast third of Block 10 could be considered dry land; the rest waited to be filled in gradually over the years. Third Street, running along the southeast base of Rincon Hill, became the physical dividing line between that more upscale area to the north and the only partially reclaimed Mission Bay marsh lots starting on Block 10. In the early years of the city, this area was mostly the province of market hunters and shellfish foragers. The removal of sandhill barriers on Third Street and the construction of the Brannan Street free, planked road in the mid-1850s opened up the Shore of Mission Bay blocks to eventual complete filling and development. By the 1880s a busy working-class neighborhood of densely packed, two-story row houses had sprung up along the long outer sides of the blocks and the streets/alleyways that now divided block interiors. Third and Fourth streets, cutting across the ends of the blocks, were more highly commercial, lined with shops, and with grocery stores and saloons strategically occupying every corner. On the upper floors were a variety of hotels and less formal lodging houses.

An exception to the general pattern of residential use was in the northeastern quarter of Block 11, where the Kimball Carriage Works operated its carriage and rail-car factory from 1868 to 1876. The 1887 Sanborn map shows the former Kimball premises filled with a busy complex of manufacturers, including the West Coast Furniture factory and two other furniture makers, a Chinese cigar-box factory, a marble works, a sausage factory, a blacksmith, and a plating shop. In the adjacent lot is the yard of the Spring Valley Water Company. Despite this roughly quarter-block of industrial use in Block 11, and a few other exceptions in other parts of the neighborhood beyond the West Approach Project area, the predominant character of the Shore of Mission Bay was one of crowded blocks of working families and supporting retail businesses. This remained true through the end of the 19th century.

THE BEGINNINGS OF A NEW URBAN PATTERN, 1890–1906

A new urban pattern developed in the late 1880s as the economy began to grow again, linked to two emerging technologies: telephone service and electric power. Telephones allowed businesses to function without face-to-face communication, both internally within departments and at a distance from other businesses. For manufacturing processes, electric power eliminated the need for individual steam power—with its boilers, engines, belts, and pulleys; the attendant smoke and fire danger; and the required fuel supply and storage space for fuel. Along with telephone communication and electrically powered machinery, the innovations of electric lighting and elevators all combined to make multistory, multiple-use buildings more prevalent. The improved communications and increased flexibility of manufacturing processes made concentrated neighborhoods of like heavy industries, such as the foundry district of Tar Flat, less necessary. Although a national depression in 1893 affected the city sharply, this trend toward a different type of city continued, becoming very evident in the late 1890s and the first years of the 20th century. From the late 1880s to 1906, a tension developed between the growing, dynamic parts of the city—notably the Market Street corridor—and the static, slowly decaying, residential streets (tenement and Rincon Hill mansion alike) and Victorian-era industrial clusters south of Market. The density of the South of Market neighborhoods, combined with relatively homogeneous structures built to conform to the standards of the 1860s, made the area more resistant to change than were less dense and more heterogeneous neighborhoods north of Market. Nonetheless, during the 1890s, technically modern urban architecture began to rapidly spread throughout the downtown area and into parts of the South of Market closest to downtown, such as Tar Flat and Pleasant Valley. Electrically equipped industrial loft buildings serving new and expanded light industries came to characterize the South of Market, with its printing factories, ink works, and paper fabricators.

Although the new technology of the 1880s and 1890s changed the pattern of industrial development in the South of Market, it had much less immediate effect on working-class domestic life. By the turn of the century, the houses on Blocks 10 and 11 were mostly over 30 years old. Though often cheaply built as rental units, and substandard compared to, much rental housing in 1900, they might have housed new waves of immigrants from Italy and Eastern Europe and endured for decades more. Instead, they were fated to be reduced to piles of kindling for the great fire of 18 April 1906.

THE 1906 EARTHQUAKE AND FIRE AND ITS AFTERMATH

In the South of Market neighborhoods, initial seismic destruction from the earthquake of 18 April 1906 was variable, ranging from light to severe. In areas of sand-filled bay lands, damage was considerable. On Rincon Hill, despite the 8.2 Richter intensity of the tremor, damage was relatively minor, with St. Mary's Hospital structurally unscathed but soon overwhelmed with the injured from surrounding neighborhoods. The fires that began to race across the city soon burned over the entire West Approach Project area, ultimately destroying the hospital (its patients evacuated in time to Oakland on the sidewheeler *Modoc*) along with nearly everything else.

The City Beautiful movement, which had arisen near the end of the 19th century as part of the general climate of Progressive social reform, found many supporters among San Francisco's

ST. MARY'S HOSPITAL

St. Mary's Hospital from the corner of Rincon Place and Bryant after the additions of 1891. The Home for Aged and Infirm Females is along Rincon Place and the House of Mercy to its right. (Photo courtesy St. Mary's Hospital)

Catherine McAuley, a resident of Dublin, Ireland, inherited a substantial fortune around 1818 at the age of 40; interested in charity work, she decided to start a lay Catholic social-service organization of like-minded women. McAuley opened a young women's shelter, the House of Mercy, in one of Dublin's better neighborhoods. Local clerics and churchgoers alike looked askance at this community of unvowed and unregulated females, and by 1831 McAuley and her associates took vows and founded the Sisters of Mercy order so that their work could continue in perpetuity (Sisters of Mercy Regional Community of Dallas 2007).

At the request of San Francisco Archbishop Alemany, eight Sisters of Mercy led by Sister Mary Baptist Russell traveled to California via the Isthmus route in 1854 to establish a ministry for the city's sick. They began working at the State Marine and County Hospital on Stockton Street, and were soon asked by the County to assume control of the hospital under contract. The Sisters eventually bought the building and, when the County defaulted on contract payments, they renamed the facility "St. Mary's Hospital" and began running it on their own. The building was inadequate for the growing city's needs, and in 1861 the Sisters built a new state-of-the-art hospital on the edge of Rincon Hill on Block 7, where they cared for the city's sick and poor until 1906 (Sanfilippo 2003).

Sister Mary Baptist became Mother Russell; during her long tenure a number of other social enterprises joined the hospital on the Rincon Hill site: a House of Mercy for young women, Our Lady of Mercy School for Girls (Academy), Our Lady's Home for the Aged, and an employment agency (Sanfilippo 2003). The 1887 Sanborn map also shows a Church of the Passion, a Mortuary Chapel, and a three-story "Lacallette Home" of unknown purpose. Mother Russell died in 1898.

The earthquake on the morning of 18 April 1906 did no damage at all to the well-built brick hospital. But as it filled with the injured from the surrounding city, it soon became apparent that it would not escape the inferno that followed. The patients and staff were evacuated to the sidewheeler *Modoc* between 1:30 and 5:00 to be taken to Oakland; and later St. Mary's burned to an empty shell. An unidentified Sister recalled:

> Many an eye was turned to St. Mary's as they sat on the deck. A sudden change in the wind had driven the smoke from the hill, and the building stood clear against the

A rear view of the ruins of St. Mary's Hospital after the 1906 fire from across Rincon Place. (Photo courtesy St. Mary's Hospital)

evening sky while the dense pall of smoke covered the whole City. For some of the Sisters it had been their home for half a century, and as they saw it intact amidst the surrounding desolation they cried: "It is saved! We shall be in our old home tomorrow."

About 11 o'clock at night the fire touched the old Home. The hospital burned slowly. A blue whirlwind of flame seemed to pass over the hill. The cross on St. Mary's glowed to the last like a beacon, and fixed forever on the eminence the title of The Red Cross Hill [*The Catholic Voice* 2006].

social elite. Proponents believed that complete reorganization and rebuilding of American cities along Beaux-Arts lines would cure their social and moral ills and make them the equals of the great cities of Europe. Chicago architect and City Beautiful proponent Daniel Burnham began to design a plan for San Francisco in 1903, delivering the finished plan literally on the eve of the earthquake of 18 April 1906. The plan's completion, just as much of the city was leveled by the quake and ensuing fire, would have seemed to be ideal timing for City Beautiful promoters.

In the end, however, the individual property rights of small businessmen and householders camping in the ruins of their businesses and homes won out over the Progressives' desires for a complete aesthetic remodeling of the city grid. Starting with sheds and shacks, new buildings sprang up on the old lots, with San Franciscans rolling up their sleeves and beginning reconstruction before the Burnham plan could be implemented. Costs to rebuild the infrastructure to accommodate Burnham's vision would have been far too great in any case; the planned rebirth of San Francisco as a City Beautiful was a futile exercise from the start. Nonetheless, local architects associated with Burnham enjoyed more than two decades of profitable commissions rebuilding downtown San Francisco and the Civic Center into a scaled-down approximation of a Beaux-Arts City Beautiful, perhaps the closest practical version that was possible in a democratic society.

Figure 2.10. Post-fire housing northwest of Block 9, 1906. The electrical works, with its huge water tank and sprinkler system, and with no adjoining buildings, had survived the fire, apparently intact. (Photo courtesy of the Wells Fargo History Room)

Surviving in the South of Market

Individual shanties built of salvaged sheet metal and lumber were common housing solutions for those who came back to live in the ashes of the South of Market neighborhoods. A view of shanty life is found in Figure 2.10, looking west from Hawthorne Street from a point just northwest of Block 9. On an abandoned houselot, an army tent is visible on the far right, its flaps kept closed by a salvaged rocking chair. In front of it stands a group of low-roofed sheet metal shanties, surrounded by assorted salvaged detritus. In the South of Market in 1906, the choice for many of the very poor was between closely policed barracks or shanties such as these. Given the choice, many ranked the dignity of their freedom ahead of any comforts gained by assuming an institutional lifestyle.

A step up from the salvaged material shanties were earthquake cottages: city-built emergency homes for refugee families modeled on the portable bunkhouses used in western railroad logging camps. Earthquake cottages were mass-constructed during the fall of 1906; the frame cottages replaced army tents in refugee camps located on public land throughout San Francisco. These simple cottages were designed from their inception for eventual removal to privately purchased individual houselots in 1907–1908, where they became the permanent property of the refugee families who occupied them. A third housing option consisted of hotels or boardinghouses and tenements that provided homes for many, especially the large portion of the South of Market population that was single and male. Except for a flurry of construction soon

after the fire—most of it focused on the large lots of Rincon Hill—little, if any, new housing was built in the South of Market after 1913.

> The great rise in wages and full employment in the several years following the fire allowed many South of Market refugees to move to outlying neighborhoods, especially to the adjacent Mission District. The middle class had all but vanished from the project area with the destruction of individual family dwellings. The 62,000 South of Market population of 1900 had dropped to 24,500 by 1910—and of those, 80 percent were single males [Averbach 1973:203].

After 1906 the character of Tar Flat changed from the low, crowded foundry and heavy industry district toward a new emphasis on light industry. It was in this part of the West Approach Project area that the 20th-century South of Market first appeared. Clean businesses such as furniture manufacture, electrical equipment production, printing, and paper products moved into the area, housed in new two- to six-story buildings, lit by electricity and equipped with elevators. In post-fire Tar Flat, brick and less-costly corrugated sheet metal were the materials of choice, defining a new more homogeneous look for the neighborhood. In the post-fire period the Shore of Mission Bay Blocks 10 and 11, already part of a largely uniform and artificial flatland, changed from a crowded working-class residential neighborhood to a largely open, light industrial zone.

In contrast, for almost 30 years following 1906, the summit of Rincon Hill remained a quiet and lonely place, its apartments and infrastructure slowly decaying. When major remodeling of the hill's topography finally occurred, it was not for more level industrial lots—this time it was to clear a broad path for the building of the bridge across the bay.

THE BAY BRIDGE COMES TO THE SOUTH OF MARKET

By the late 1920s, so many transbay bridge schemes were being proposed that the San Francisco Board of Supervisors appointed a commission of prominent experts to work with the Chief City Engineer William O'Shaughnessy to assess them. A suspension design was ultimately chosen for strategic military reasons. Suspension spans require strong land anchorages, and San Francisco's waterfront hills were ideal for this purpose. Although Telegraph Hill was considered, Rincon Hill became the preferred western anchorage for reasons of local urban economic geography. As the city's major industrial service district, the South of Market and the industrial sections of the Potrero and Mission would be the destination of much of the bridge's truck traffic; looking toward the future, close and direct access to East Bay suppliers and markets would be a necessity for the continued prosperity of San Francisco's remaining industries. Perhaps most importantly, Jaspar O'Farrell's large street grid and broad thoroughfares South of Market were well suited to transmit and diffuse the volume of traffic that the bridge would carry.

Bridge construction destroyed the remaining Rincon Hill community (Figure 2.11). In 1934–1935 bulldozers leveled the tenements on Block 7, the earthquake cottages on Block 8, and most of the flats on Block 9. The elementary school on Block 9 also lay in the path of the bridge approaches and was demolished, no longer needed by a neighborhood that had ceased to exist. Only small residential enclaves remained on Rincon Hill by 1936: a little community clustered around South Park, one block southeast of the project area; a few flats near Third Street on Block 9; and a group of tenements along the truncated minor streets of Block 6.

While still rare in 1906 San Francisco, the automobile was hailed as one of the heroes of the fire, connecting the city when the established communications infrastructure broke down. Although the bridge came 30 years later, the reasons for its construction were already in motion by then. The rise of the automobile had made the bridge and freeways inevitable, just as it doomed the interurban railways and severely curtailed the streetcar systems. The earthquake and fires of 1906 cleared large parts of the South of Market, but it was the timing of those events, coinciding as they did with a period of great technological change, that reshaped the district and molded its modern character.

annotated for this report

Figure 2.11. Grading on Block 7 for the San Francisco–Bay Bridge (SFOBB) West Approach, October 1935; looking northeast. The bridge is under construction in the right background, and the newly graded Harrison Street is in the left background. Sterling Place is in the foreground with a caterpillar crane sitting on it; Rincon Place is in front of the large white warehouse building toward the top of the photograph. The leveled area between Sterling and Rincon had been cut down by as much as 10 feet on the Rincon side and 2-4 feet on the Sterling side. The raised area in the background, to the right of the white warehouse building, is the site of the St. Mary's Hospital complex. Part of this rise was graded to accommodate the lower deck of the bridge and a wide, at-grade off-ramp. (Photo courtesy of Bay Bridge Archive, Caltrans District 4)

PART II: NEIGHBORHOODS

Part II moves up two scales and provides context for the volume. Following a discussion of the archaeology of neighborhood institutions—St. Mary's Hospital, the California Collegiate Institute for Young Ladies, and the Silver Street Kindergarten—the chapter describes the three distinct project area neighborhoods: The Edge of Rincon Hill, Shore of Mission Bay, and Tar Flat. What was family life like in each of the three neighborhoods? How did the neighborhoods differ?

CHAPTER 3

LIFE IN THE NEIGHBORHOODS

MARY PRAETZELLIS

San Francisco has always been more than just a city. Born an adolescent during the Gold Rush; destroyed as a somewhat decadent young adult by the 1906 earthquake; then reborn anew, San Francisco is a mythic place encompassing the dreams and desperations of those within its domain. The California Gold Rush changed the world, not just for those who ventured far from home to participate: "For many generations, the only equivalent of its raw excitement—the opportunity to test oneself, to flee the ordinary—has been war. The Gold Rush may have been a celebration of base greed, but it was no war" (Cole 1988:41).

San Francisco was, according to Gunther Barth (1975), an "instant city" rapidly settled by diverse groups of people, some of whom brought with them patterns of urban life that they recreated. The vast wealth flowing from the Gold Rush, along with the "search for social cohesion and cultural identity, set the instant city apart from the score of other western towns developing rapidly during the second half of the nineteenth century as well as older cities that had grown quickly in earlier phases of American history" (Barth 1975:7).

The lure of the Gold Rush and San Francisco snared not just urban sophisticates in search of development opportunities in the gilded age, the poor and downtrodden from around the globe rushed in or slowly advanced toward their vision of a better future for themselves and their children.

Our slice of San Francisco, made possible by the replacement of the West Approach to the San Francisco Bay Bridge, includes neighborhoods settled by both types of players—the urban sophisticates in search of greater wealth and the immigrant poor in search of a better life. All of our neighborhoods are South of Market (Figure 3.1); all were essentially built by the middle 1860s; and all were completely destroyed in 1906. Each neighborhood had distinct characteristics: geographic, social, economic, architectural, and archaeological. This chapter explores those characteristics, after a discussion of the institutions that linked the neighborhoods for which we have archaeological data.

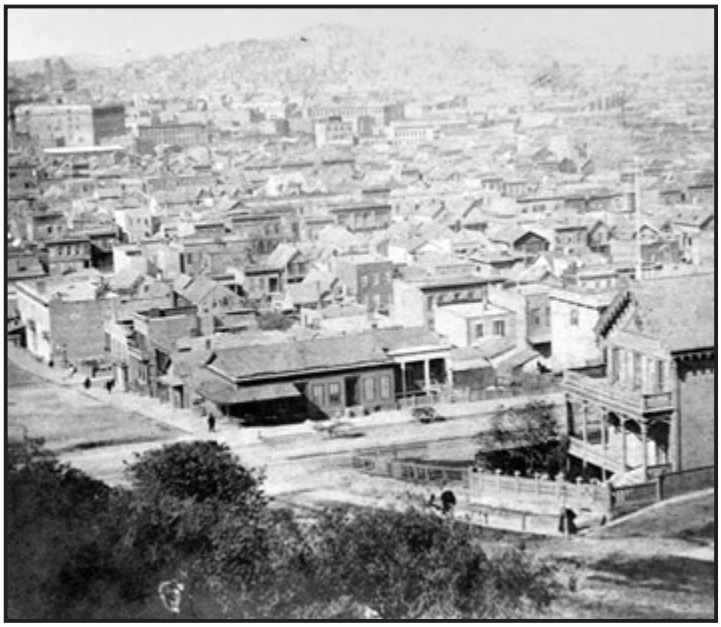


Figure 3.1. View from Second Street, Rincon Hill, 1866. (Photo courtesy of Prints & Photographs Division, Library of Congress, Lawrence and Houseworth Collection, LC-USZ62-27369.)

"ON THE OUTSIDE LOOKING IN": INSTITUTIONS AND COMMUNITY

Annita Waghorn

The South of Market was never a homogenous, cohesive neighborhood in the decades before its destruction in the 1906 fire. Although its overriding image was one of a poverty stricken immigrant slum, in fact the area was always characterized by extremes of wealth and social standing: it was home to the rich, the comfortably middle-class, and the inordinately poor. The institutions that made their home in the South of Market reflected this variability. Archaeologists investigated three of these institutions: St. Mary's Hospital, the California Collegiate Institute for Young Ladies, and the famous Silver Street Kindergarten. Groups and individuals from outside the South of Market community founded these institutions. In defining their mission, they brought their own expectations as to the character and needs of the local community.

Social and economic variability were two of the more piquant aspects of the South of Market neighborhoods from their beginning. All cities are distinguished by how their wealthier members separate themselves socially and often physically from their poorer compatriots. In the first years of the Gold Rush, settlement in San Francisco was limited by the peninsula's geography and the absence of efficient land transportation. People lived close to the city center at Yerba Buena Cove, and the attendant industries in which both rich and poor made their living. As a result, San Francisco of the 1850s and 1860s developed a type of vertical social stratigraphy, in which the well off situated their homes on nearby local prominences.

Rincon Hill, the closest highpoint overlooking the nascent Gold Rush settlement was the first of these elevated refuges of the well to do. From the 1850s, large, well-appointed houses were built on the slopes of the hill, providing not only a refreshing outlook over the bay, but also of the noxious industries of Tar Flat and the unruly settlement spreading south of Market Street. This little enclave, elegantly clinging to the slopes of Rincon Hill, persisted well into the 1890s although gradually losing social cache as innovations such as the railroad and the cable car made Nob Hill, Sutro Heights or far flung settlements on the Peninsula more attractive for the wealthy and socially connected.

Social disparity in the young San Francisco, and particularly in the South of Market neighborhoods, was not just expressed vertically, but also horizontally. In a pattern repeated on several of the blocks in the pre-1906 South of Market, the larger through streets such as Folsom, Harrison, Bryant or Third were often lined with the elaborate houses of the well-to-do, while smaller backstreets in the block's interior were the preserve of struggling, predominantly Irish immigrants. Thus, only a back fence might separate the wealthy and the working class. This pattern of social distance allied with physical intimacy between classes remained a feature of the South of Market until the earthquake and fire of 1906 destroyed the area.

Into this socially and economically complex community came three institutions. St. Mary's Hospital was constructed on the south side of Rincon Hill in 1861 by the Order of the Sisters of Mercy, an Irish order established in 1831 for the care of the sick. This new building replaced the Order's original hospital facility on Stockton Street. St. Mary's Hospital was the leading charitable institution in the South of Market until its destruction in the 1906 Fire. It was a vitally important community resource given the entrenched poverty in many of the South of Market neighborhoods. Although located within the wealthy Rincon Hill enclave, the Hospital was a

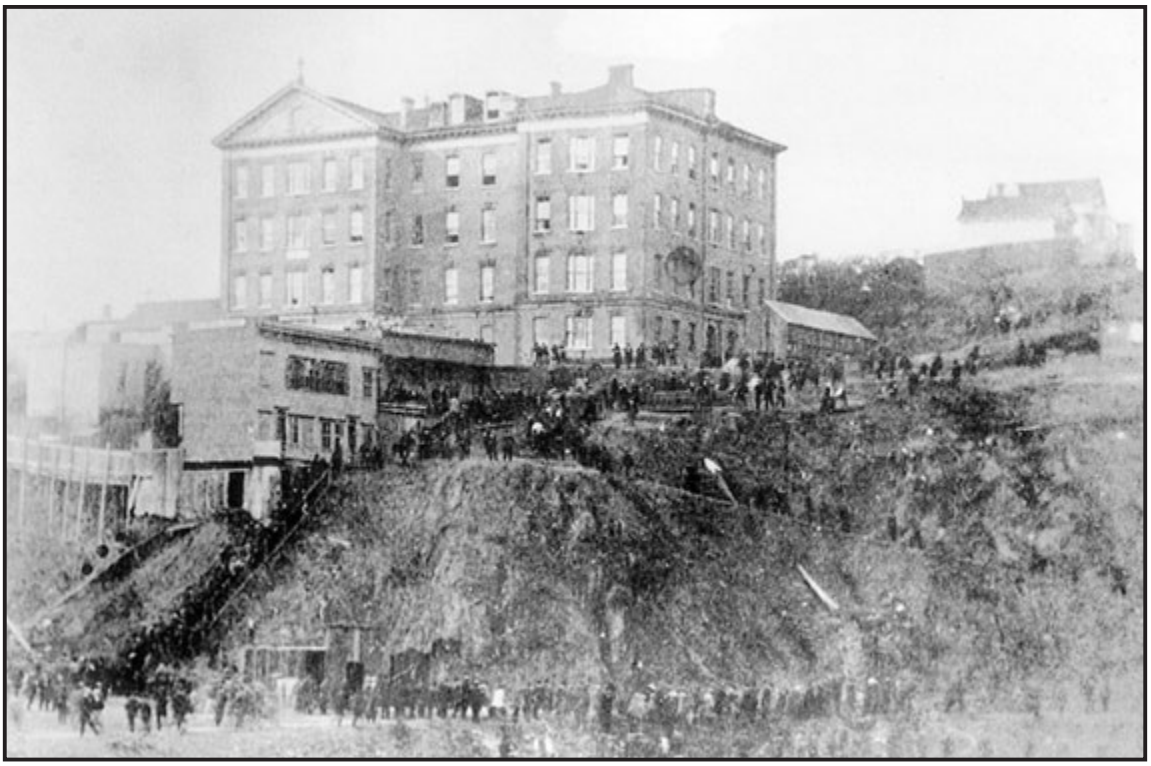


Figure 3.2. St. Mary's Hospital, 1867. In an 1861 letter back to Ireland, Sister Mary Baptist Russel of the Sisters of Mercy described the new building: "Everyone says the hospital is now perfect. There is every convenience that could be imagined: electric bells and lights, speaking tubes, a passenger elevator, chutes for soiled linen. . . . But the grandest part of all is the mansard story, in which the operating rooms are situated. There are two antiseptic rooms, the ceilings, walls and floors are tiled and, they are so constructed that the whole room can be hosed out, the water flowing off and down a marble gutter. The operating tables are heavy plate glass with nickel frames" (quoted in St. Mary's Medical Center 1997). (Photo courtesy of the California Historical Society, Luke Fay Collection. FN-01022)

charitable enterprise specifically designed to serve the nearby working-class communities of Tar Flat, Mission Bay, and South of Market. The Hospital, which opened with 27 patients, was divided by floors according to gender and ability to pay. Fees ranged from $10 a week for patients in open wards, to up to $20 a week for those in private rooms. Wealthy benefactors endowed beds for the care of the indigent sick (Olmsted and Olmsted 1993:185–188; Figure 3.2).

St. Mary's Hospital became the nexus of a group of Catholic social institutions that served the predominantly Irish immigrant community in the South of Market. The complex included the Aged and Infirm Women's Home, a much-needed refuge for widows and destitute older women from Tar Flat and other parts of San Francisco. Within two years of its opening in 1872, the *San Francisco Morning Call* noted that although it provided shelter for 125 women aged from 50 to 90 years old, it was still inadequate given the numbers in need (7 January 1874, cited in Olmsted and Olmsted 1993:186). Another building in the St. Mary's complex was the House of Mercy, constructed in 1873, which provided shelter for up to 24 unemployed younger women, with the goal of keeping them from falling into prostitution as means of support. The girls and women who found shelter there, some as young as 13, earned their keep sewing clothes (Olmsted and Olmsted 1993:186).

Aside from providing spiritual and practical assistance, the hospital complex was also something of a landmark for the surrounding community. The hospital building itself, rising starkly above the neighborhood, must have projected an appearance of earthly indestructibility.

Figure 3.3. Religious medallion of Jesus wearing a crown of thorns; enlarged to show detail (St. Mary's Hospital, Block 7).

The building did indeed survive the 1906 earthquake, although it and the surrounding complex were totally destroyed by the subsequent inferno. Patients escaped via steamer to Oakland. The site was never rebuilt as even before the Fire it had been planned to move the hospital to a new site near Golden Gate Park. Post-1906, the Depression-era homeless of Rincon Hill camped on the site. Archaeologists uncovered many of the retaining walls that permitted the hospital complex to be built on such a steeply sloping site, together with 1906 Fire-related debris. They also recovered artifacts, including typical hospital equipment such as heavy, institutional tablewares, enamelware basins, trays, bedpans, and urinals. Among the more tantalizing objects recovered was a small hand-painted porcelain medallion, depicting Jesus with a Crown of Thorns, perhaps a possession of one the sisters or their Catholic patients (Figure 3.3).

St. Mary's Hospital was one of the social and religious cornerstones of the pre-1906 South of Market community. It had particular resonance for the local Irish community, and its destruction may have hastened the departure of Irish-American families from the Tar Flat and Rincon Hill districts in the decade after the Fire. Although the Sisters' activities included providing educational opportunities for the city's prosperous Irish community in the form of Our Lady of Mercy's School established on Rincon Hill in 1871, the emphasis of their mission was in providing practical support that answered the needs of the local community's most vulnerable members.

Another educational option available to the city's well-to-do quartered in the South of Market area was the California Collegiate Institute for Young Ladies. This institution operated at 64 Silver Street from 1861 to 1869. Advertised in the City Directory in 1862 as an "admirably arranged and conducted female school," it provided the wealthy with an alternative to sending their daughters to the East Coast for schooling. A principal and four teachers taught music, dance, languages, gymnastics, and calisthenics to an average of 63 pupils, half boarded at the school. Most pupils were Californians but several came from the northern States of Mexico and British America. Archaeological deposits associated with the teachers and students revealed that the Collegiate Institute placed an emphasis on providing its pupils with sophisticated, elegant surroundings, in keeping with the Victorian belief that a beautiful environment could exert a morally uplifting effect on its inhabitants. The school's interior was decorated with porcelain vases and figures, and its dining table set with expensive painted and gilded porcelain tableware. Bottles of hair tonics, perfume, hair pins, and rubber and wooden hair combs, together with small personal items including a bone fan, earring and silk ribbons indicate an attention to grooming and sophistication of dress that might be expected from the staff and students of a young ladies college (Figure 3.4).

The decline in the social standing of the Rincon Hill neighborhood from the mid 1860s possibly reduced the student pool for the Collegiate Institute, and by ca. 1869 it had closed. The building itself remained a center for education in the neighborhood, being occupied initially by the Silver Street Primary School, and then by the Silver Street Kindergarten (Figure 3.5). This school, famous for being the first free charity kindergarten opened west of the Rockies, is perhaps today the best known South of Market institution. It opened amidst the working-class

Figure 3.4. Selected grooming items from Privy 7, Block 9; including hard rubber combs and hair pins, and bone toothbrushes.

Figure 3.5. Silver Street Kindergarten, ca. 1879. (Photo courtesy of the California Historical Society, FN-08725)

tenements of Silver Street in 1878 in the middle of a severe economic depression brought on in part by the arrival of the transcontinental railroad that, by giving San Francisco speedy and easy access to the East Coast goods and labor, eroded the economic power of the city's working class. Whereas at one time San Francisco tradesman and laborers commanded markedly higher wages than their East Coast counterparts, from the 1870s they saw precipitous income declines. These hard years grew into decades of grinding poverty. The South of Market neighborhoods, home to immigrants, tradesmen and laborers, particularly suffered. Church and benevolent societies were quick to respond, and by 1880 there were well over 1000 listings for such groups in Langley's *San Francisco City Directory*. These organizations tried to "care for their own" based on ethnic affiliation, trade brotherhood, social club, religious affiliation or fraternal order. Hospitals, orphanages, and destitute and unemployment shelters were initiated in attempts to alleviate the social despair. The Silver Street Kindergarten, together with the many San Francisco free kindergartens that its success inspired, were part of the middle-class philanthropic response to worsening poverty in San Francisco during the 1870s and 1880s.

Frederick Froebel developed the initial concept of a kindergarten in Germany in 1837. Froebel believed that young children had a divine inner spirit that should be nurtured. Structured play, which included practical tasks and activities, and games set to music, together with loving but firm encouragement, could lead children through progressively higher levels of physical, mental, and spiritual growth. Froebel's combination of the mystical and the practical proved highly appealing to middle-class philanthropists, suggesting as it did that a proper example of Christian morality, ethics and character (as provided by the kindergarten teacher) could help lift working-class children out of poverty (de Cos 2001:9). Sarah B. Cooper, an early Californian pioneer of the free kindergarten concept, called it "child-saving work" (Cooper 1884:18–28 cited in de Cos 2001:12). Early kindergartens in the U.S. were fee-paying ventures for the well off—the first California kindergarten was established in 1863 in San Francisco. The Silver Street Kindergarten, following the Froebel model, broke ground by providing free kindergarten education to the working poor. Its first superintendent and teacher was Kate Douglas (later Douglas-Wiggin), an educated, middle-class young woman from the East Coast. In 1880 she also established the California Kindergarten Training School within the Silver Street Kindergarten building, in order to provide trained teachers for the burgeoning West Coast kindergarten movement (de Cos 2001:15; Figure 3.6).

Figure 3.6. Portrait of a young Kate Douglas. This photograph with the caption "The author in her kindergartening days" appeared in Wiggin's autobiography *My Garden of Memory* (1923).

Wiggin was a gifted advocate for the Silver Street Kindergarten, adept at both promoting its goals, and obtaining practical help and donations from San Francisco's well-to-do. She wrote and

published widely about the kindergarten, and the transformative role that it could play in the lives of poverty-stricken children. In these writings, her descriptions of the South of Market—she called it "a slum of Tar Flat"—played to middle-class readers' expectations by emphasizing the area's destitution and moral depravity.

> The Shubeners, Levis, Ezekiels, and Appels were generally in tailoring or second-hand furniture and clothing, while the Raffertys, O'Flanagans, and Mcdougalls dispensed liquor. All the most desirable sites were occupied by saloons, for it was practically impossible to quench the thirst of the neighborhood.
>
> There were also in evidence barbers, joiners, plumbers, grocers, fruit-sellers, bakers, and vendors of small wares, and there was the largest and most splendidly recruited army of do-nothings that the sun ever shone upon.
>
> These forever-out-of-workers, leaning against every lamp-post, fence-picket, corner house, and barber-pole in the vicinity, were all male, but they were mostly mated to women fully worthy of them, their "wives" doing nothing with equal assiduity in the back streets, hard by. Stay—they did do one thing, they added copiously to the world's population [Wiggin 1923:109].

Wiggin's descriptions of the Silver Street neighborhood exhibit a marked disdain for the unemployed and those who she saw as succumbing to their poverty and distress. A more objective assessment based on census data from the 1870s and 1880s might suggest that the area was actually home to a good number of established tradesmen and small business owners. Unlike perhaps organizations with deeper community roots such as fraternal or ethnic associations, Wiggin possessed a tendency characteristic of many middle-class philanthropists of the period to see such problems as rooted in a person's individual morality, rather than their social and economic circumstances. Men were unemployed because of their bad morals rather than because of the local economy. Unemployment was blithely equated with drunkenness and moral laxity. Accordingly, it was thought, the unemployed and destitute deserved little in the way of sympathy or assistance. Hope could be held for their children, however, who through careful teaching and example might rise beyond their background to live lives of sobriety and rectitude.

Wiggin opened the Kindergarten in 1878 as its only teacher and accepted 40 children; although more than 100 would-be pupils were presented at the school's doors. "I had carefully selected children best calculated to show the amazed public the regenerating effects of the kindergarten method" (Wiggin 1923:116). The experiment was watched with keen interest: as a result of a series of enthusiastic articles describing the school in the *Saturday Evening Bulletin,* she had over 1000 visitors in the first year. Visitors came armed with ironclad preconceptions, and were often surprised to have them confounded. One of the School's Board of Supervisors noted on being presented with clean, well behaved children: "The subscribers will think the children come from Nob Hill… Are you *sure* you took the most needy in every way?" (Wiggin 1923:119). In an effort to publicize the school and attract well-heeled supporters, Wiggin wrote widely of the kindergarten's achievements: *The Story of Patsy*, her popular tale of a small Irish kindergartener (expanded and reprinted in 1889) played shamelessly to both the heartstrings and the prejudices of its middle-class audience (Figure 3.7).

Wiggin wrote of the Kindergarten that it "must have its roots deep in the neighborhood life" (1923:111). There are no known accounts, however, of how the neighborhood regarded Kate Douglas Wiggin or the Silver Street Kindergarten, whether it was seen as an outsider's interference

Figure 3.7. "Patsy and Miss Kate" from *The Story of Patsy.* Kate Douglas Wiggin in her writings portrayed the Silver Street Kindergarten's neighborhood in terms of popular, but derogatory stereotypes of the working class Irish.

or as a genuinely useful and hopeful service. It was from the first, readily patronized by the neighborhood, perhaps because it offered a safe and free place to leave young children who were often underfoot in the family home or business. The pupils' ages ranged from 3 to 6, and they spent three hours a day in school. In the afternoon, the kindergarten teacher visited the children's homes to talk with and morally encourage their mothers. Wiggin noted that most mothers delivered their children each morning; suggesting that most of the kindergartners came from a 2- to 3-block area. They arrived very dirty by Wiggin's standards, and their first task was to wash up in the backyard sinks. This yard also held sand tables in which the children could play and learn manipulative skills, as well as being the location of the school privy.

According to both Froeblian theory and the dominant Victorian ideology, the kindergarten facilities, by being clean, pleasant, and filled with objects of interest, could play an important didactic role by giving children aspirations beyond their home experience. An account of the first San Francisco kindergarten in 1863 in *The Californian*, described the children as being "gently led over the threshold of learning by the seductive charm of music, flowers, games, pictures, and curious objects" (Hunt 1957:152 cited in de Cos 2001:7). As a young volunteer booster for the Silver Street School exclaimed on its doorstep before its opening: "You'd ought to go upstairs and see the *inside* of it! There's a canary bird, there's fishes swimmin' in a glass bowl, there's plants bloomin' on the winder sills, there's a pianner, and more'n a million pictures! There's closets stuffed full o' things to play and work with…" (Wiggin 1923:114). For many young children of the neighborhood, such an environment must have been an entrancing novelty. Pets were an important part of the kindergarten life, teaching the children habits of nurturing and responsibility. Their accoutrements were part of the classroom: Wiggin wrote of the goldfish globes and brass birdcages that decorated her kindergarten's interior (1889:10). The presence of these educational pets was also indicated in the Silver Street Kindergarten's archaeological deposits, which included not only a porcelain fish-tank figurine, but also remains from a dog and an immature cat.

Although archaeological remains associated with the school included a wide range of household furnishings and objects, the largest number were related to the school's lessons, including 977 slate pencils for drawing and writing (Figure 3.8). A lined slate tablet was also recovered that had been scratched on one side with "DON (backwards N)/DON." Attesting to the importance of play in the school curriculum, archaeologists also uncovered an array of toys,

Figure 3.8. Selected artifacts associated with school activities, from the Silver Street Kindergarten (Privy 1, Block 9).

including marbles, tea set pieces, dolls, and an India-rubber baby rattle. The Kindergarten was also a training center and home for student teachers, and several hair combs (both plastic and hard rubber) were found as well as a bone fan and pocketknife that are likely to have been these women's possessions. While it is not known if pupils ate lunch at the school, the archaeological finds indicate that the resident teachers and student teachers ate well from a table set with both expensive porcelains as well as more utilitarian earthenware.

The success of the Silver Street Kindergarten became an inspiration to the free kindergarten movement in San Francisco. By 1888, 40 free kindergartens in San Francisco taught approximately 4500 children. Social leaders such as Mrs. Leland Stanford, Mrs. Phoebe Hearst, and Mrs. Miranda Lux financially supported many of these ventures (de Cos 2001:12). Increasingly, however, the kindergartens lost the earlier Froebelian goal of developing the inner potential of each child, instead seeing their role as socializing immigrant children, and through them their families, improving living conditions among the poor, and providing models of such virtues as temperance, frugality, order, and cleanliness (de Cos 2001:13).

St. Mary's Hospital, the California Collegiate Institute, and the Silver Street Kindergarten each answered different community needs and, in the case of St. Mary's Hospital and the Silver Street Kindergarten, had longstanding roles in the South of Market neighborhoods. Unfortunately, we lack an understanding of how these institutions were regarded by local residents. Although today, the Silver Street Kindergarten is the better known, it is likely that the St. Mary's Hospital complex actually played a more instrumental role in community life. It provided not only much needed support for people during illness and crisis, it did so in the context of Catholic religious faith and charity that may have been comforting to many of the South of Market's Irish and German Catholic residents.

DOGS

Elaine-Maryse Solari

Sixty-three percent of U.S. households contain a pet, according to the American Pet Products Manufacturing Association 2007-2008 national survey. It is estimated that Americans spent $40.8 billion on their pets in 2007, which is more than the gross domestic product of most nations. More households have dogs than any other pet: 44.8 million households will provide homes to 74.8 million dogs. Today, pets have become more "humanized" and are considered by many as family members. The demand for pet products has expanded into areas that were typically reserved for human consumption: Gourmet foods, designer clothing, and luxury services abound and medical care has become high-tech.

The roots of our current near obsession with pets can be found in the culture of earlier eras. Although royalty and the aristocracy, in various parts of the world, had kept pets for millennia, widespread pet ownership by the middle classes in Europe and America began in the late 18th and early 19th centuries (MacDonogh 1999:237–241; Ritvo 1988:20).

The Victorian ideology of domesticity played a central role in the evolving status of pets. Although some pets continued to be kept for practical purposes such as vermin control or the protection of private property, during the 19th century the American and European view of animals shifted from utilitarian to personal accoutrement (Russow 1989:32). The most popular pets in 19th-century America were dogs and cats, with dogs being viewed more favorably (Kellert 1989:21).

A young San Franciscan proudly poses with her pet pug in 1904. The breed had been wildly popular in the mid to late 19th century. The pug has changed significantly as a breed from that period. The breed standard for the modern pug specifies a shorter more compact build and a shorter muzzle.

Centuries of animal breeding had prepared pets for their new role in the family. Domestic animals, especially dogs, had been selectively bred to be neotized to look and act younger and to be viewed more readily as children (Lawrence 1989:62; Russow 1989:33). The pug, a prime example of this trend, with its flat face and large eyes, became a fashion craze in the 1870s. Not only was the live animal popular as a pet, its image was on a wide range of merchandise including Christmas cards, calendars, and ceramics. The majority of dogs would not have been purebreds by today's standards, but they would be recognizable types such as terriers, spaniels, hounds, and mastiffs. The characteristics of these types were due to their historic work such as assisting hunters, vermin control, or guard dogs. Written breed standards and register books for dogs were rare in the United States until the American Kennel Club (AKC) was founded in 1884 (Grier 2006:28). Although a purebred "dog fancy" seized the upwardly mobile in the 1870s, it was not until the 1940s that registered purebreds became truly popular in the United States. Even today, the majority of dogs in America are of mixed breed (Ritvo 1987:84–85; Serpell 1996:51, 125; Grier 2006: 12, 28).

This illustration represents the breeds of purebred dogs typically found in the 1890s. The conformation of these breeds has frequently become more extreme since then; e.g., their muzzles are either narrower or squashed, their eyes larger and more protruding, etc. depending on the dog fancier's preferences. House, Kennel and Field, chromolithograph, published by Currier & Ives, New York. (Image courtesy of Library of Congress, Division of Prints and Photographs, Cat# LC-DIG-pga-00789)

As valuable tools for child socialization, cats and dogs were sometimes perceived to have enjoyed the status of family members. According to Miller: "Of all the pets we gather about us, the dog usually comes the nearest to being absolutely one of the family" (1894:141–142). Families were encouraged to keep pets as a tool for training their children. Dogs "offer unequalled opportunity for lessons to our children in humanity, justice, and unselfishness" (Miller 1894:141). If children, especially young boys, were not raised to be kind, there would be troublesome consequences for families as well as society at large. During this period having pets became part of the ideal American childhood (Grier 1999:95–99, 2006:139–178).

In the second half of the 19th century, as pets became integrated into the home, pet keeping became fully commercialized. Ever mindful that even pet keeping should be done properly, instruction books such as Miller's "Our Home Pets: How to Keep them Well and Happy" were listed in *Harper's Weekly* (23 June 1894 595:4). Nationally marketed pet supplies, including food, cages, collars, and leashes, grooming supplies, and medicines were available in specialized stores and through catalogs. In 1886 one could order a seven-pound can of Dr. Wither's Challenge Dog Food via the mail for 50 cents, which would be almost $11 in 2006 dollars. Most owners, however, prepared the food themselves using table scraps or pet meat picked up at the butcher shop and cooked into stews with rice and potatoes (Grier 1993:114–115). Mainly due to flea problems, the family dog usually spent the majority of his time living outdoors in the 19th century. Dog houses—ranging from a barrel on its' side with a whole cut in one end to ornate structures—were a common feature of house yards (Grier 2006:62).

As dogs proliferated, populous areas had to develop strategies to deal with their increased numbers. Unlike today where veterinary services

Pets were considered important in the socialization of children and were utilized at the Silver Street Kindergarten. This illustration from Kate Douglas Wiggin's *The Story of Patsy* shows a dog picture on the wall of Wiggin's office at the kindergarten in San Francisco.

are readily available, Americans in the 19th century and the first part of the 20th century had to deal with animal fertility in a much more natural, albeit callous, way. It was not uncommon to drown or otherwise kill all but one of the offspring in a newborn litter. Also of concern, vaccines for distemper and rabies were not yet available. The general public feared rabies because it was transmittable to humans and always fatal. As a result, there were periodic campaigns in towns and cities to kill wandering dogs. In response to the problem of stray dogs roaming the streets, both San Francisco and Oakland passed strict ordinances in the 1860s regulating dogs.

The 1862 San Francisco ordinance prohibited dogs without a muzzle or leash on any street north of Ninth and east of Larkin. A pound keeper was authorized to round up the strays and execute them if they were not redeemed for $5, which would be more than $100 today. Thus, it is not totally unexpected that according to a newspaper account, of the 255 dogs impounded in the first month of implementation only 20 had been redeemed (Baker 2001:9).

In 1865 Oakland passed an ordinance requiring dog owners to pay a yearly license fee of $2.00 and to procure a collar and display the registered number on it. This ordinance apparently remained dormant until it was "resurrected" in 1872 and vigorously enforced. One newspaper account stated that, "Three days ago one could count from a dozen to 50 dogs within the space of a block or two anywhere on Broadway at almost any time of day. But since the commencement of the dog catchers' raid these animals have become wonderfully scarce and but few are allowed to roam at will" (*Oakland News* 12 July 1872 3:1). Like San Francisco, Oakland originally charged $5 to redeem an impounded dog, but this fee was reduced within a year to $3 (City of Oakland 1873, reprinted 1889).

In 1868 a group of humanitarians founded the San Francisco Society for the Prevention of Cruelty to Animals, the fourth in the nation and the first "West of the Rockies." Oakland established its SPCA six years later in 1874.

Stray dogs continued to be a problem in both San Francisco and Oakland. A survey of the San Francisco Pound keeper's report every five years from 1863 to 1895, shows that an average of 4,609 dogs were impounded each year. Of these dogs impounded on average 78 percent were killed. The dog carcasses were sold to the National Fertilizer Company (City of San Francisco 1863–1895). In 1888 Oakland constructed a new building with a unique apparatus constructed specifically for drowning dogs. The pound master was so diligent in drowning dogs that complaints were made about the number of drowned dogs washing up on the beach. In 1892 the Oakland Humane Society brought charges against him for cruelty, abuse, and corruption (*Oakland Examiner* 20 May 1892 5:1; 28 May 1892 7:3). In spite of the poundkeeper's efforts, Oakland had a large dog population. In 1896 the license collector estimated that there were about 1,100 dogs, but little more than half would be licensed because of economic hard times (*Oakland Enquirer* 20 July 1894 1:2).

As the treatment of pets during their lifetime has changed, so has the disposal of deceased pets by the families with which they lived. In the 1800s, some Americans began to give their beloved pets

careful burials including eulogies and graveside ceremonies. Although it was much more common to bury a pet in the backyard, some cities had pet cemeteries. San Francisco had a pet graveyard near the Park and Ocean Railroad roundhouse dating to the mid 1880s (*San Francisco Morning Call* 4 February 1894 11:7).

Many of the inhabitants in the project area undoubtedly had dogs; however, although dogs are found in family photographs and mentioned at times in diaries and letters (see Grier 2006), the historical record does not readily lend itself to identifying exactly who. Archaeology can show that dogs were present in three ways: 1) the presence of artifacts specifically associated with dogs; 2) the presence of dog burials or their skeletal remains in privies and wells; or 3) the presence of bones with gnaw marks made by dogs. Whether the dogs were pets or pests is another issue.

Dog-related Artifacts

Only one leather collar was identified in each of the San Francisco and Oakland collections: these were the only artifacts directly linked to dogs. No patent medicines, food containers, or at the products associated with dogs were identified. Unlike birds that have special food and water dishes, dogs likely ate out of ordinary bowls previously used by their owners.

These collars are the clearest indication that a dog was a family pet rather than a scavenger in the area. A fancy copper dog collar adorned with a Greek Key decorative pattern and having a dog license attached was located at 711 Sixth Street (Privy 1454) in West Oakland. The small collar along with the artifacts in the same deposit and historical records indicated that a little dog lived with a household of woman, some of them related by birth or marriage. The owner-occupant of the property Annie Fallon came from a relatively wealthy Irish family. Annie, who would have been in her mid-30s at the time, inherited the property on Sixth by 1884. She might not have inherited that much else of her mother's considerable estate ($32,000 in real estate and personal property in 1870) because she had at least four other siblings with whom to share (1870 Census

This photograph of the Kings-Steigelmaier family in the mid 1890s illustrates how many Americans considered dogs as family members (Cabinet card, E.E. Shaver, photographer, Chelsea Michigan). (Courtesy Linda M. Ziegenbein)

This collar indicates that Mary Peel, a widow, kept a small pet dog for company at 540 Folsom on Block 5 (Privy 516). Dog collars could be purchased through catalogs.

Murray Township, page 5). The artifact assemblage at 711 Sixth indicated that the household had limited resources: They set the table with unmatched dishes and ate low to moderate status cuts of meat. They spent their money on patent medicines and other items associated with sickness. Yet they spent money from their limited resources to provide a fancy collar for the little dog and licensed it at least once with the City of Oakland, which was not inexpensive. It is unknown when the little dog died or at what age. One of the three copper-alloy plates on the collar was dated 1881, however, the collar was founded in privy that had been filled around 1890. The little dog could have likely worn the collar through the 1880s. The household had its share of sadness during this period: Annie married and was widowed within a few years and two of the residents, both in their 20s, died of tuberculosis. Annie and her housemates likely spent much of their time nursing these women. One can imagine the little dog keeping the bedridden women company, and providing comfort as they suffered from this terrible disease.

The leather and copper-alloy collar found in the San Francisco collection was from Block 5, 540 Folsom Street (Privy 516). It was found in a deposit associated with Mary Peel, an English widow in her 50s or early 60s, from 1871–1879, the period between her husband's death to her own, when she apparently lived alone in the big house.

Dog Skeletons (or elements thereof)

Due to the parameters of the excavation, the archaeologists focused on privies and wells and did not actively search for dog burials. Hence it is unknown how many dogs were buried in the project area. One dog burial was located on Cypress Block 37 at 1726 William Street. The burial could not be associated with a particular family because it was not associated with either artifacts or stratigraphy that could tie it to a particular time period.

For purposes of this essay, a feature was considered to have a dog present if more than five dog bone elements were recovered in an archaeological feature. If an analytical unit had fewer than five dog bones, the bones were disregarded as background noise. Using this methodology the Cypress Project had five addresses with dogs, while the West Approach Project had only three addresses with dogs. Determining whether the dog disposed of in the trash was the household's pet or an unwanted pet was also a challenge. Newspaper accounts clearly state that both San Francisco and Oakland had a problem with stray dogs. Could a disgruntled neighbor, have killed the dog and tossed it down a well or privy? In 1862 when a dog licensing ordinance was first initiated in San Francisco, the city would pay a 50 cents reward for any dog taken to the pound by the public (Baker 2001:9). Presumably, this would affect how stray dogs were handled in that city at that time. Why not collect the fee rather throwing the stray in the trash?

The Dogs in Oakland

The five addresses that had bones indicating the presence of dogs all contained artifacts, such as toys and small shoes, indicating the presence of children. Three of the residences were occupied by renters. The data suggest that for some of the household the dogs might have been pests rather than family members or useful in socializing children, and disposed of accordingly. For example, the renters at 1827 William Street, on Block 20, included men, one woman, and children who according to the archaeological record appeared to eat relatively well, partially by supplementing their diet through fishing, hunting and collecting shellfish. Nearly 10 percent of the bones from their privy (Privy 6300) were burned or calcined—unusually high for collections from the project area—it is likely that the family burned their trash, possibly to control scavenging rats and dogs. The remains of a large puppy, three house mice, two rats, four cats, and kittens were found in the trash. This combined with evidence of rodent gnawing suggests a scavenger problem at the address rather than beloved pets (Praetzellis ed. 2001a:122).

One family stands out as to the potentially adversarial relationship between people and "pets." In 1880 the Abel French household lived at 669 Sixth Street, just down the street from the Annie Fallon household. Abel, a railroad conductor, and his wife lived with their five children ranging in age from three to eleven. The household ate formally on fashionable ceramics and drank expensive liquor in the appropriate glasses. This family should be the perfect setting for children and their pets as advocated by the literature of that time period. Yet their privy (Privy 954) contained the remains of 10 dogs, mainly puppies, as well as three cats. Not a pretty picture for the socialization of children. It appears that Mr. French was practical and unsentimental when dealing with unwanted animals. Numerous chicken medullary bones and a large quantity of other avian remains suggest that the French family kept laying hens and raised poultry in their backyard. Several chicken elements evidence healed fractures and other trauma indicating altercations between chickens and dogs or cats. The cats and dogs may have been killed to protect the family's poultry.

Other households might have had pets but they were faced with their uncontrollable fecundity. The data of 830 Linden Street on Block 6, suggest that a minimum of five people usually lived in the small residence (only 625 square feet). They may have raised piglets in the small backyard. Faunal remains in the privy (Privy 4281) indicate that two dogs, three cats, and indeterminate number of puppies or kittens, were thrown out with the trash (Praetzellis and Stewart 2001:357–362). Two other deposits one dating around 1880 and the other 1900 were made by families with children. Both had one dog thrown out in the trash. (Praetzellis, ed. 2001b: 203–210, 305–311).

Dogs in San Francisco

Like Oakland, all of the San Francisco features that had dog skeletal elements also had artifacts indicating the presence of children. These three properties were the Usher Family at 20 Perry Street (Well 17), boarders at 236 Fremont Street (Privy 1333), and the Kindergarten at 64 Silver Street (Privy 1).

John P. Usher, a sail maker and railroad worker from Maryland, lived at 20 Perry Street with his wife and three children, including two adult sons, from 1879 to 1881. James the eldest worked as a detective, while John F. was a bank porter. Daughter Mary, at age 12, was still in school. A sister-in-law, Mary Shore, and her adopted daughter, Ida Briggs, both of whom worked as dressmakers lived with the family. The artifact assemblage suggests that the family was involved in many activities including music, sewing, writing, and wood working and Mary had numerous toys. Their dog did not reach full maturity and was thrown out with the trash.

Knickknacks of children with animals, particularly dogs, were popular during the Victorian era. This figurine was discarded by a working-class family at 13 Baldwin (Privy 1305) on Block 4 in the late 1870s or early 1880s .

The house at 236 Fremont was unique in that it had a Chihuahua and its puppy as well as a guinea pig. This feature is discussed in detail elsewhere in the chapter (see sidebar "Chihuahua and Guinea Pig, Privy 1333 – 236 Fremont Street" in Chapter 7).

The kindergarten at 64 Silver, discussed in detail in this chapter, was established in 1878.

Evidence of Dog Gnawing byFeature*

Cypress (*n* = 48)					West Approach (*n* = 28)				
Block	**Feature No.**	**Total NISP**	**NISP**	**% of Total**	**Block**	**Feature No.**	**Total NISP**	**NISP**	**% of Total**
1	933	583	25	4.3	**5**	507	575	40	7.0
	947	470	19	4.0	**9**	1	272	14	5.1
	968	135	20	14.5		7	212	39	18.4
2	1461	80	5	6.3		18	110	5	4.5
21	7500	96	5	5.2	**10**	813	197	12	6.1
	7511	2,497	185	7.4					

*Note: Only those features with at least 4 percent or higher of all bones being gnawed by dogs is interpreted as significant indication of dogs and included here.

It taught children ages 3 to 6 from disadvantaged families in the neighborhood. Although pets appear to have been an important part of kindergarten life and were used to teach habits of responsibility and nurturing, the remains of a dog and an immature cat were found in the kindergarten trash. There is no way of knowing whether these animals were for the children, were pets of the teachers that lived on premise, or were strays that were found dead nearby. What is clear is that their disposal in the trash does not indicate the sentimentality or respect that was advocated in the literature.

Bones Gnawed by Dogs

The presence of bones gnawed by dogs, like the presence of their skeletal elements, shows that dogs were present in the project area. Similarly the data suggests that not all dogs were pets and some were likely scavenging pests.

Oakland

The Cypress faunal collection had a total of 48 analytical units containing bones with dog-gnaw marks. Again to weed out "background noise," the faunal analyst determined that only those units with at least 4 percent or higher of all bones being gnawed by dogs would be a significant indication of dogs (see table). This amounted to six features—about 12.5 percent of the features. Five features showed a moderate amount of dog gnawing and only one unit (with 14.5% of bones being gnawed by dogs) was considered a high amount. As shown by the examples below, the gnawing was likely to have been caused by scavenging pests rather than pets.

Terrance and Annie Brady lived at 812 Castro Street in West Oakland (Block 1) for several decades. He was an Irish plumber, she was from England and they had no children. The probate records and the archaeological deposit dating from 1889 to 1902 indicates that the family ate well, relied heavily on patent medicines, and cluttered their space with soft furnishings, knick-knacks and other dust collectors that would have dismayed social reformers of that time period. Did they share their premises with a family dog? That 14.5 percent of the faunal remains had gnaw marks could indicate that they did. However, the fact that another 10 percent of the faunal remains in the deposit had rodent gnaw marks indicate that their trash could have been subject to scavengers, both rodent and canine. Perhaps their trash disposal practice, like their interior design choices, was not up to the standards of the social reformers of the day.

The addresses with the second highest percentage of dog gnawed bones (7.4%) also had the greatest number (185) of bones gnawed by dogs. This address, 1774 Atlantic, was occupied by Southern Pacific Railroad workers and their families in the 1890s. The number of gnawed bones clearly indicates the presence of dog or dogs. Both the weathering of the bone and gnawing of rodents was a very small percentage (.2%) indicating that there probably was not a scavenging problem and that the gnawed bones in the trash were likely to have been gnawed by pets rather than scavengers.

San Francisco

The West Approach Project faunal collection had a total of 28 analytical units containing bones with dog-gnaw marks. Five of these units—nearly 18 percent—had a statistically significant amount of gnawing. The addresses with the highest

percentage of dog gnawed bones were 6.1, 7, and 18.4 percent (see table).

San Francisco like Oakland had a problem with scavenging dogs; perhaps the problem was even worse. The feature at 64 Silver Street (Privy 7) on Block 9 with 18.4 percent of the bones having dog-gnaw marks, was occupied in the 1860s by the California Collegiate Institute for Young Ladies. Over 90 percent of the faunal remains were weathered and about 55 percent had some form of gnawing. The high percentages of weathering and gnawing by both rodent and dog suggests that the bones may have been left exposed in the institute's backyard for some time or that the yard was seasonally saturated.

The next largest percentage of gnawed bones was 7 percent of the faunal collection from the privy deposit at 540 Folsom Street (Privy 507) dating from the early 1870s. What is interesting about this collection is that almost 12 percent of the faunal specimens were weathered and about 29 percent had some form of gnawing. This suggests that a fair number of the bones may have been left exposed for some time within the feature prior to burial. Also recovered were bones representing one juvenile cat, a Norway rat, and a black rat. During this period 540 Folsom was occupied by Jonathan Peel, Sr., and his family, one of the wealthier and higher status families in the project area. Peel, an English brewer, merchant, and real estate agent, was related to the famous Sir Robert Peel and in 1870 had $50,000 in assets, over $730,000 in 2006 money. The Peel family lived in an impressive home, surrounded by high status items, and ate and drank well. Yet they left trash in their backyard that evidently attracted scavenging dogs and other creatures.

Conclusion

The archaeology data from both Oakland and San Francisco show that dogs were numerous. However, many of the dogs were not the beloved family members advocated in the literature of the time. Many were likely to have been considered pests—they were dangerous to livestock or a nuisance that scavenged in the trash. Although it is not known how many dogs were buried in the backyard, the fact that some were disposed of in the privy is at odds with the expected treatment of a beloved family member. It presents an interesting conundrum: If a major purpose of pets was to socialize children, what does the treatment of their pets—or other dogs that could be someone else's pet—upon death tell us about the process of Victorian socialization?

LIFE ON THE EDGE OF RINCON HILL

Rincon Hill, with its view of the bay and easy access to downtown via the Omnibus, provided San Francisco's first exclusive address. Gold Rush entrepreneurs built their mansions here on lots larger than those on the flatlands below. Domestic architecture spanned the gamut of fashionable styles with elaborate entrances, high walls, and lush gardens. Cattle baron Henry Miller lived here (Figure 3.9), as did Indian Agent General John Wilson, and attorney Hall McAllister, whose statue stands at San Francisco City Hall.

Gold Rush storyteller Bret Harte lived on Rincon Hill with his sister's family on Block 6 in 1861 before the neighborhood was damaged by the Second-Street Cut. In 1864 he had moved to 40 Silver Street on Block 9 on the edge of Rincon Hill. This neighborhood also held the name of Happy Valley at this time and Harte seems to have been writing about this location in his "Neighbourhoods I Have Moved From" series in *The Californian*. He begins: "Soon after I moved into Happy Valley I was struck with the remarkable infelicity of its title. Generous as Californians are in the use of adjectives, this passed into the domain of irony" (Harte 1864b:493). He describes the house on the presumably fictitious Laura Matilda Street, as historical research found no such place, and the feeling that the neighborhood did not feel right with the world. Harte credited this to the "fact that the very foundations of our neighbourhood were artificial" and on "'made ground.'" Harte continues in his wordy, but in this case, informative way:

> We had not been long in our new home before we found an older tenant, not yet wholly divested of his rights, who sometimes showed himself in clammy perspiration on the basement walls, whose damp breath chilled our dining-room, and in the night struck a mortal chilliness through the house. There were no patent fastenings that could keep him out, or writ of unlawful retainer that could eject him. In the winter his presence was quite palpable; he sapped the roots of the trees, he gurgled under the kitchen floor, he wrought an unwholesome greenness on the side of the veranda. In summer he became invisible, but still exercised a familiar influence over the locality. He planted little stitches in the small of the back, sought old aches and weak joints, and sportively punched the tenants of the Swiss cottage under the ribs. He inveigled little children to play with him, but his plays generally ended in scarlet-fever, diphtheria, whooping-cough, and measles. He sometimes followed strong men about until they sickened suddenly and took to their beds. But he kept the green plants in good order, and was very found of verdure, bestowing it even upon lath and plaster and soulless stone. He was generally invisible, as I have said; but some time after I had moved, I saw him one morning from the hill stretching his grey wings over the valley, like some fabulous vampire, who had spent his repast. It was then that I recognized him as Malaria, and knew his abode to be the dread valley of the Miasma,—miscalled Happy Valley! [Harte 1864c:495–496].

The writer describes the sounds—"pleasant melody of boiler-making from the foundries"—and smells–"the gasworks in the vicinity sometimes lent a mild perfume to the breeze." The street quiet and a passerby or carriage would "run the gauntlet of batteries of blue and black eyes on either side of the way." There were sights: "From my bedroom window I could plainly distinguish the peculiar kind of victuals spread on my neighbour's dining-table; while on the other hand, he obtained an equally uninterrupted view of the mysteries of my toilet." But there were also rules. When a pretty girl's bedroom was "cynosure of neighboring eyes" in the form of opera glasses by an "ingenious youth," it was met with "such prompt and universal condemnation,

SAN FRANCISCO WEATHER ACCORDING TO BRET HARTE

Mary Praetzellis

"A fog bank enveloping the Golden Gate Bridge." (Photo courtesy of: NOAA's National Weather Service Collection wea00154)

As the daughter of a meteorologist who spent much of his career attempting to predict the weather in the San Francisco Bay Area before the advent of satellite imaging, I find the local weather a fascinating topic. It is so changeable, by the day, hour, even minute that one is always in suspense. But, of course, I am from a long-time California family and have lived here most of my life. I know what to expect—the unexpected. I thought the absence of rain provided the definition of summer; that June meant fog.

Bret Harte hailed from the East Coast; he never warmed to San Francisco; in fact, if we take him at his word he never knew warmth at all—"In winter fires are merely a luxury,--lightening the gloom of a cloudy, rainy day, or taking the office of candles in the brief twilight; in summer they are a necessity" (1866d). While Harte made his fortune writing about California, he did not take the role of booster, he clearly longed for Eastern weather, foods, and landscapes. And when he needed to fill a column and lacked inspiration, the weather provided a convenient topic.

Take the wind:

> A cloud of dust, opaque and impervious, files past my window. At the corner it precipitates three or four hats, a boy's cap, a tin sign, a chimney-pot, and other unconsidered trifles. The air is filled with driving sand, as palpable and stinging as the volley of arrows which the Lilliputians discharged at Gulliver. Pedestrians are scudding before the gale or facing it with that peculiar contraction of the eyebrow which becomes habitual to San Franciscans, and is certificate of their citizenship [Harte 1866c].

Or the cold:

> Ought I not to be thankful that I can sleep under blankets instead of being driven to the necessity of celestial contemplation from an open window, through the extreme heat of a summer's night? Should I not be satisfied that I can work the summer through without needing vacation, instead of idling away a month or two in dreaming by babbling brooks or under whispering trees? . . . Watermelons, and the fog enveloping you like a wet sheet. Watermelons on your table, and a fire in your dining-room. Nature revolts and the blood curdles at the thought [Harte 1866h].

Or the seasons:

> The California spring is, in fact, unlike any other season. It does not change into summer, neither is it perennial; its budding youth never develops into maturity and fruition, but is protracted throughout the year in a kind of withered, unprofitable virginity that gets to be very shrill and shrewish toward the close. When it ends finally, it does not fade away with the hectic flush and consumptive beauty of an Eastern autumn; it dies of atrophy with all the hippocratic signs of dissolution—cavernous, sunken, rigid, colorless and cold [Harte 1866a].

And even a backhanded compliment:

> We are enjoying our finest season—that tranquil interval between summer and winter, when the winds have ceased and the rains have not yet come. . . . Summer relents at the last moment, and as she departs, gives us one glimpse of her chary beauties. I am perhaps over particular in describing the charms of this rare season, for I have been accused of vilely slandering the "finest climate in the world." Let this honest tribute to our last two weeks of lovely weather stand recorded against that charge [Harte 1866k].

as an unmanly advantage, from the lips of married men and bachelors who didn't own opera-glasses, that it was never repeated" (Harte 1864c:495–496).

The West Approach Project did not affect accessible parcels in the most salubrious environs of Rincon Hill, so we could not excavate in these areas. We did, however, work on the edges of Rincon Hill, on Blocks 5 and 9, which while less elegant and exclusive, still housed a mix of predominately professional and skilled households. The 500 block of Folsom on Block 5 probably

Figure 3.9. Henry Miller's residence, built in 1877, at the corner of Essex and Harrison streets. (Photo courtesy of the California Historical Society, FN-23384)

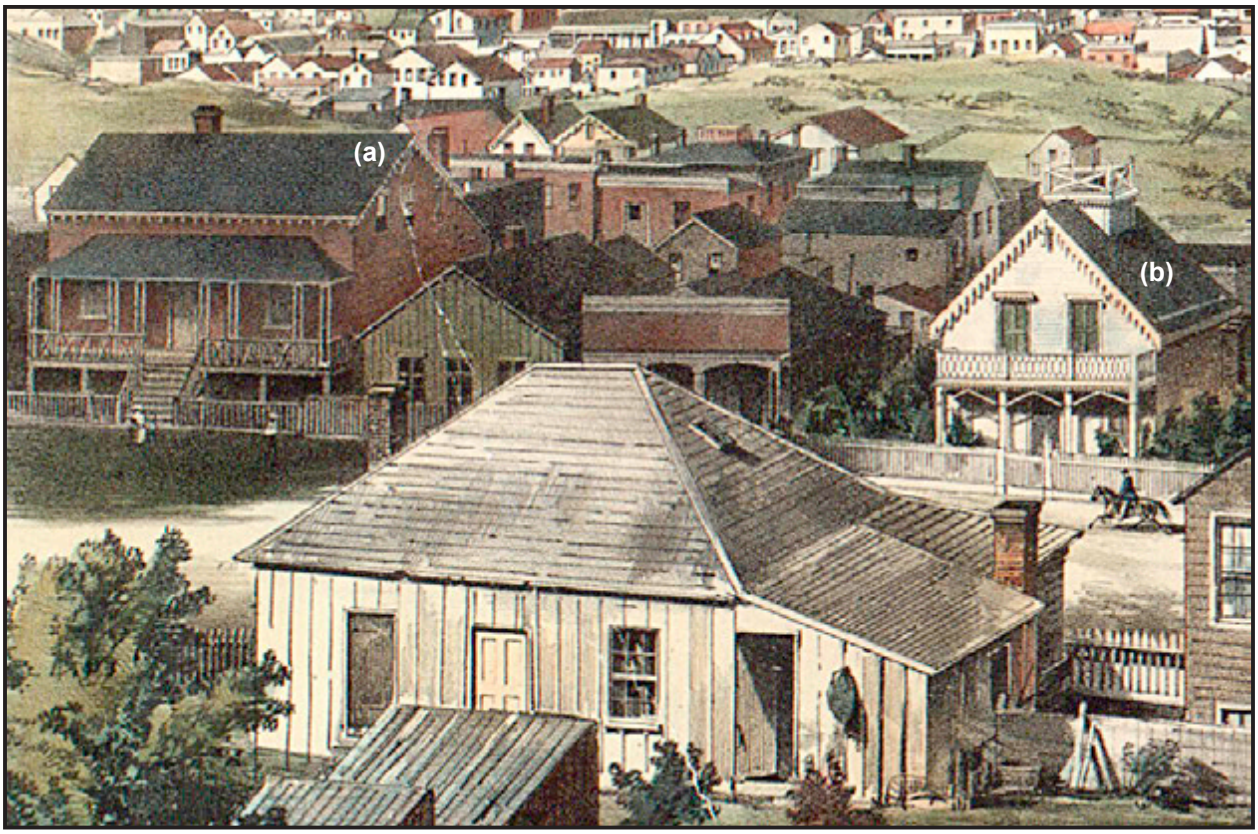


Figure 3.10. The duplex at 546–548 Folsom (a) and the ornate bargeboard residence at 540 (b); detail from the panoramic drawing made by Dr. F.N. Otis in 1855. (Illustration courtesy of the Bancroft Library, University of California, Berkeley:1963.002:0576--F)

contained the most fashionable addresses in the West Approach sample. The duplex at 546–548 Folsom (a) and the ornate bargeboard residence at 540 (b) on the panoramic drawing made by Dr. F.N. Otis in 1855 each provided rich archaeological collections (Figure 3.10). Smaller, more densely packed residences backed up on the buildings pictured here and faced Clementina Street, which was more of an alley.

Privy 505, associated with the 546 half of the duplex (a), is associated with the household of Henry Mayne a ship's carpenter from Louisiana and Thomas O'Connor a sawyer from Canada. The Maynes took in boarders, including another ship's carpenter, a bookkeeper, and a marble polisher. This household invested in fashionable tableware and moderately expensive meals, including a remarkable quantity and variety of game. Jonathan and Mary Peel lived at 540 Folsom (b). Jonathan worked as a merchant and owned the duplex at 546–548 and other local property as well. An early arrival to San Francisco, Jonathan lived the life of an English country gentleman—and this he may have been, as a relative of Sir Robert Peel, Queen Victoria's Prime Minister. The contents of Privy 507 are associated with the Peel family; the privy was probably backfilled shortly after Jonathan's death. The privy contained many items reflecting the family's comfortable circumstances and interest in Victorian pastimes and consumer goods. Privy 516 appears to have been deposited by the widowed Mary Peel. While not nearly as materially rich of an assemblage, this collection shows that Mrs. Peel continued to live the good life, just more simply. A small backyard cottage occupied by the Fegan brothers backed up on the Peels' property. Hailing from Ireland, both brothers worked as longshoreman; one was married with a wife and five children. Privy 515 is associated with their household. The artifact collection from this feature is sparse,

Figure 3.11. The rear of 14 Perry Street ca. 1879. The back of the house with upstairs back porch entrance can be seen on left; the side of the Silver Street Kindergarten is visible on the right.

but the faunal remains show a clear difference between the high cost of meals served on Folsom and the budget meals served on Clementina

There are no pictures of the fronts of the small single-family residences on Perry Street on Block 9, although the rear of 14 Perry can be seen behind the Silver Street Kindergarten (Figure 3.11). Archaeologists discovered three artifact-filled features related to families working in the maritime trades on Perry Street. Privy 2 associated with Frank Johnson, a seaman from California, dating to around 1880, was located at 14 Perry. This collection is remarkable for the quantity of porcelain and cut glass tableware indicating formal dining, for the quantity of grooming and health aids, and for the fancy and exotic items displayed in the house and on the dressing table. The occupants of this household chose expensive meat cuts and had an eye for fashionable details. Well 8—associated with Albert Rowe, a shipwright from New Jersey, and dating to around 1887—was located at 16 Perry. The material remains from their well indicate that the family ate well, but not expensively, dressed warmly but not fashionably, kept their best ceramics and glassware for entertaining with tea and alcohol, while serving meals on simple and somewhat dated plates. The children got new shoes when they needed them and the girls had the nicest dolls and toy tea set available. Privy 9 associated with John Usher, a sail maker from Maryland, dated to around 1880, contains a wealth of material representing many of the activities that took place within the small lot—housekeeping, dressmaking, carpentry, music, play, education, and perhaps the keeping of a horse and chickens. The residents of 20 Perry Street took pride in their appearances; they ate moderately well on simple white ceramics and imbibed various alcoholic drinks in fancy stemware and tumblers.

The Shaw brothers' household from Mississippi, including Ebenezer, an insurance agent, and unrelated boarders is associated with Privy 18, which dates to the early 1870s at 16 Perry. Privy 18 contained a phenomenal quantity and range of footwear: a minimum of 63 pairs with a lot of singles, of various sizes, styles, and construction techniques (see sidebar Chapter 9). Many of the footwear are well worn and appear earlier than those typically recovered in on the West Approach Project. Well 6, dating to the late 1890s, is associated with another large household with many wage earners—that of James Hannan, an Irish Catholic boilermaker, his children, and widowed property owner Theodate Dent and her two grown working children. The residents of the relatively large, simple dwelling at 12 Perry Street discarded an enormous quantity of artifacts representing a lifetime of activities. They ate expensive cuts of meat and shellfish on formal table settings that would have been fashionable in the 1860s. Someone collected buttons, shellfish, and other curios. Goldfish were proudly displayed in large matching fish globes (see sidebar). While rats were a problem in the yard, perfume, cologne, and Florida waters masked obnoxious odors. Some of the quirkiness of the collection may be related to son John Hannan's occupation as seller of toys, fancy goods, and Yankee notions.

LIVING ART: BIRDS AND FISH

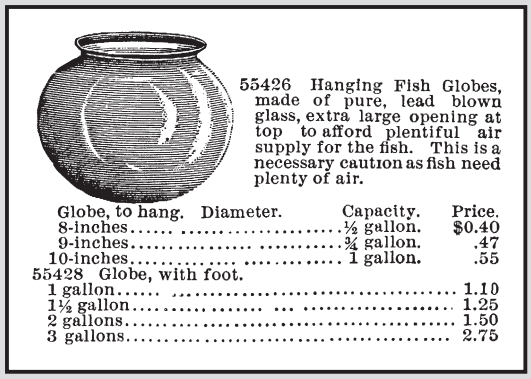
Elaine-Maryse Solari

Due to scientific and engineering advancements during the 18th and 19th centuries, European and American perceptions of nature changed dramatically. Humans were to dominate nature, rendering it less threatening and enabling it to be viewed with more affection and artistic appreciation (Ritvo 1988:21). Homemakers brought nature into the parlor: ferns overflowed oriental urns, stuffed wildlife posed under globes or in glass cases, and live birds and fish fluttered and swam in elaborate cages and bowls. Pet owners viewed birds and fish more as living art or pieces of natural history than as companions, like cats and dogs (Ritvo 1987:3; Kete 1994:76).

Goldfish and Aquariums

Goldfish appeared in the U.S. in the early 1800s, but were expensive until the 1880s. Many families kept only one—as a parlor ornament (Grier 2006:45–46). Around 1878 goldfish were imported directly from Japan allowing for different varieties than previously available. A leading expert on goldfish, Hugo Mulertt (1883:8) estimated that two million goldfish, with a wholesale value of $300,000, were sold annually in the U.S. in the early 1880s. Using these figures the wholesale value of each fish was 15 cents about $3.02 in 2006 money (The Inflation Calculator 2007). The retail price would be significantly more; hence, goldfish were more expensive than they are today. By 1909 a firm in San Francisco and one in Seattle regularly imported goldfish from Japan and China. The Japanese cultivated ten varieties. The Ryukin (also known as fringe tail) was the most extensively imported. A few of the Oranda variety had also been imported into the states. However, because of their delicate nature, many varieties could not survive the shipping and thus could not be imported (Smith 1909:93–94, 19).

If kept under ideal conditions goldfish can live over a decade; however, they were generally short-lived as pets because they were—and still are—cared for improperly. Goldfish "served the purpose of an animated ornament" (Mulertt 1883:5) and were commonly kept in glass globes in parlors and drawing rooms. Although it was known that this environment was not healthy for them, and the practice decried, it was popular practice because "they are seen to the greatest advantage in them" (*Godey's Lady's Book* 1855:50). The goldfish generally lived short lives because of the lack of oxygen and quickly polluted water. As *Godey's Lady's Book* advised in 1855: "Never give the fish any food; all they require, when in a globe, is plenty of fresh air and fresh water. They will derive sufficient nutriment from the animalculae contained in the water" (1855:50). This undoubtedly contributed to their short life span.



55426 Hanging Fish Globes, made of pure, lead blown glass, extra large opening at top to afford plentiful air supply for the fish. This is a necessary caution as fish need plenty of air.

Globe, to hang.	Diameter.	Capacity.	Price.
8-inches		½ gallon.	$0.40
9-inches		¾ gallon.	.47
10-inches		1 gallon.	.55

55428 Globe, with foot.

1 gallon	1.10
1½ gallon	1.25
2 gallons	1.50
3 gallons	2.75

Fish globe advertisement, Montgomery Ward, 1895. Although not conducive to the longevity of its inhabitants, fish globes were commonly sold to house goldfish. Montgomery Ward & Co. sold them in sizes ranging from 1/2 gallon to 3 gallons (Montgomery Ward 1895:545).

Beginning in the 1840s, some Victorians kept fish in aquariums. The concept behind them was different than the living art approach to parlor goldfish. Aquariums were intended to be balanced systems that could sustain themselves in a closed system indefinitely. Plants added to water in a container would give off enough oxygen to support animals and animal waste would provide nutrients for the plants. These miniature communities likely required frequent restocking of fish and other creatures because amateur aquarists frequently put both predators and their prey in the same container. In the early 20th century, warm-water tropical fish became available. This increased the popularity of aquariums. However, because these fish were both fragile and expensive, wealthy adult men remained the main enthusiasts until the 1920s (Grier 2006:52–54).

Only one household in the West Approach collection, located at 41 Perry, had glass fragments clearly identified as belonging to a fish globe. That household had two fish globes probably related

to the work of an occupant in a variety store. The Cypress collection from West Oakland did not have any glass fragments identified as a container specifically used for fish. Fish, however, could have been kept in any non-specific, unidentifiable bowl.

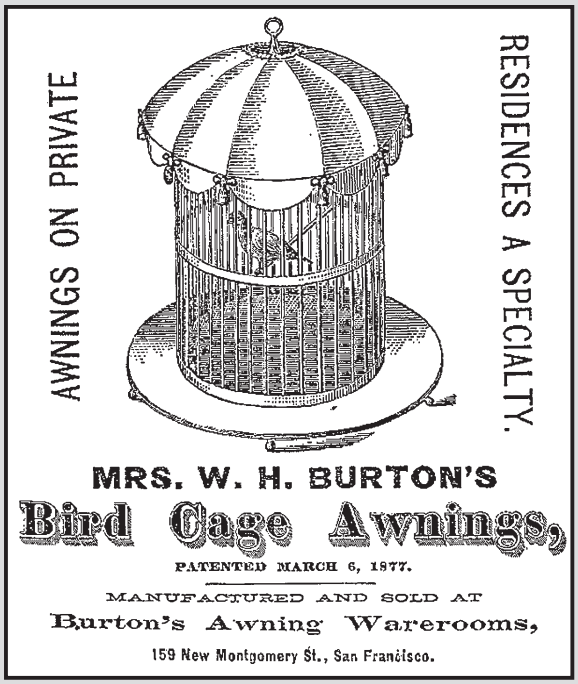
A fish tank figurine was found in a deposit from the Silver Street Kindergarten at 64 Silver Street. *The Story of Patsy*, by Kate Douglas Wiggin, provides details of the interior and activities of the Silver Street Kindergarten. Although the book mentions multiple fish globes, it does not specifically mention an aquarium. One little boy, Patsy, described the kindergarten as "most as good as Woodward's Gardens, – fishes – 'nd c'nary birds – 'nd flowers" and the fish apparently had enough room in a large container to swim vigorously (Wiggins 1889:21–22). Another account of the kindergarten mentions fishes swimming in a glass bowl, not an aquarium (Wiggin 1923:114).

Birds

European immigrants brought the practice of bird keeping with them when they came to North America in the 17th century. They captured and kept a wide range of American songbirds, but the most common seem to have been goldfinches, mockingbirds, and cardinals. A variety of imported birds could be purchased in the 19th century. The canary, which had been domesticated by at least the 17th century, was imported into the United States sometime before 1840. Described as the "universal parlor bird," canaries were the most popular caged bird through the 1930s (Grier 2006:48–49). Caged birds were more popular in the Victorian era than they are today. According to Katherine C. Grier, the author of *Pets in America: A History*:

> Pet-keeping households of the nineteenth and early twentieth centuries cared for an extraordinary number and variety of caged birds. In fact, birds may have been the most favored "indoor pets" with a popularity that crossed lines of class, ethnicity, and race [2006:46].

Birds were valued for both their beauty and their singing. Birdcages were frequently hung in parlors and sitting rooms near a window. They were also kept in bedrooms and sometimes in kitchens. Caged birds were at times also used to provide solace to those suffering from illness (Carlisle 1993:136, 141).



Bird awning advertisement. This birdcage awning manufactured in San Francisco was advertised in the Oakland City Directory for 1877–78 (B.C. Vandall 1877, advertisement section). Although pet products could be purchased locally, a wide variety of products were available through catalogs.

Birdseed could be purchased locally or through the mail, and a variety of books on birds provided recipes of the ideal food to feed various species. Hemp seed was commonly included in bird feed as it supposedly encouraged canaries and other songbirds to sing (Holden 1903:48; Maling 1862:37; Skinner 1825:120; Wood 1869:34–36). As the ownership of pets became more pervasive, the development of products for pets became more widespread in the 19th century. Birds were the first pets to have a full range of products and by the 1840s shopkeepers sold special foods, a variety of tonics, ointments, and insecticide powders, in addition to seeds. By the 1870s special equipment for birdcages, including gravel mats for cage bottoms, awnings to protect birds from direct sun, and bathing and feeding dishes were available (B.C. Vandall 1877; Grier 2006:232; *Oakland Enquirer* 16 November 1886 4:3).

The presence of pet birds in the excavated sites in West Oakland and San Francisco was

Bird founts and bathing dish (Privy 806, Block 10). These decorative Chinese porcelain bird feeders were recovered from San Francisco households. Colorless glass feeders were more commonly found in the West Oakland deposits.

based on distinctive accessories such as birdbaths and feeder/founts. Of the 101 deposits in Oakland that could be associated with individual households, 20 had artifacts indicating the presence of pet birds. A higher percentage of households kept pet birds in San Francisco: 10 out of 30 households had artifacts indicating their presence.

No evidence of bird keeping was found in the archaeological deposits from the Silver Street Kindergarten. Kate Douglas Wiggin, however, when writing about the kindergarten mentions birds and birdcages: "The dazzling California sunshine streamed in at the western windows, touched the gold-fish globes with rosy glory, glittered on the brass bird-cages" (1889:10); "you shall come right back with me now, – all the children have gone, – and you and I will be alone with the sunshine and the birds and the fishes" (1889:43). At least one canary lived at the kindergarten (Wiggin 1923:114).

Having birds and fish, as well as other pets, were important teaching tools in kindergartens based on the Froebel system, such as the Silver Street Kindergarten. As Emily Shirreff, the President of the Froebel Society wrote in *The Kindergarten at Home*:

> [T]he care of animals . . . bring the childish mind in nearer contact with outward nature; they call forth feeling, wonder, self-control, and self-sacrifice in their care and management, no less than intelligence and observation and for these reasons were held in high esteem by Froebel [1884:77].

Perhaps the Silver Street Kindergarten's emphasis on the importance of pet keeping made an impact on the surrounding area. Of the ten households that kept pets, six of them were on Block 10, just down the street.

Birdcages. These modern birdcages hang in the Imperial Tea Court in San Francisco. The porcelain bird founts in the cage housing the bird are quite similar to those recovered in the San Francisco excavations.

The Edge of Rincon Hill neighborhood also included features associated with neighborhood institutions, a store, and a 1930s residential complex. St. Mary's Hospital once stood on the northeastern third of Block 7 and is described at the beginning of this chapter. Further down Rincon Hill, Block 9 contained an additional two privies associated with neighborhood institutions. Privy 7 is associated with the California Collegiate Institute for Young Ladies, an upscale establishment that brought students from throughout the Pacific region in the flush 1860s. Reflecting the neighborhood's decline, a charitable institution, the Silver Street Kindergarten, operated at the same address from 1878. Privy 1 is associated with the kindergarten. Only one deposit associated with a commercial site was discovered during the West Approach Project: Prussian Henry Knoche's grocery store at 423 Third Street contained Cesspool 13 (see sidebar). Lastly, one feature, Well 17, dates to the abandonment of a residential building just prior to the construction of the West Approach in the 1935, and is associated with a mix of mainly unemployed, new immigrants. These households are decidedly more impoverished than their 19th-century predecessors. They stretched meals as soups and stews, mended shoes at home when they could, and resorted to a cobbler, rather than discard footwear with life left in them.

Figure 3.12. Undated portrait of Sir Robert Peel, 2nd Baronet (5 February 1788 – 2 July 1850). (Image from Wikimedia Commons; accessed June 2008)

Case Study: Peel Family

While the Peel family is not the average household from the Edge of Rincon Hill neighborhood, they are representative of the families who settled on Rincon Hill during the Gold Rush. Jonathan, his wife Mary, son Jonathan, Jr., and daughter Mary arrived in San Francisco with a servant on the *SS Pacific* in February 1852. Jonathan was a nephew of Sir Robert Peel, a Tory MP who served as the British Prime Minister from 1834–1835 and again from 1841–1846 (Figure 3.12). Previously serving as Home Secretary, Robert Peel created the London Metropolitan Police in 1829, Robert is also well know as an originator of gun control, income tax, child labor laws, and for the repeal of the Corn Laws, which forbade the import of cheap foreign grain.

Jonathan Peel and his family probably lived in the house at 540 Folsom shortly after their arrival in San Francisco. The house is depicted in an 1854 daguerreotype (Figure 3.13) and Jonathan is listed on the block in the 1856 city directory. The 1860 census shows him as a 45-year-old English brewer, living with his wife Mary. They owned $2000 in both real estate and personal property. A decade later the city directory lists Peel as a real-estate agent, although the census lists him as a retired merchant. During those 10 years, the Peel fortune had grown to $30,000 in real estate and $20,000 in personal property. His son was also a real-estate agent by this time with considerable property living nearby with his wife Margaret Jane, two sons (one also called Jonathan), and an Irish servant. Margaret Jane was the eldest daughter of Matthew Crooks, a prominent San Franciscan. Born in County Tyrone, Ireland, Crooks arrived in San Francisco in 1849 and made a fortune in real estate. The Chinese were among his business associates and he leased property to them, including several theaters and a joss house.

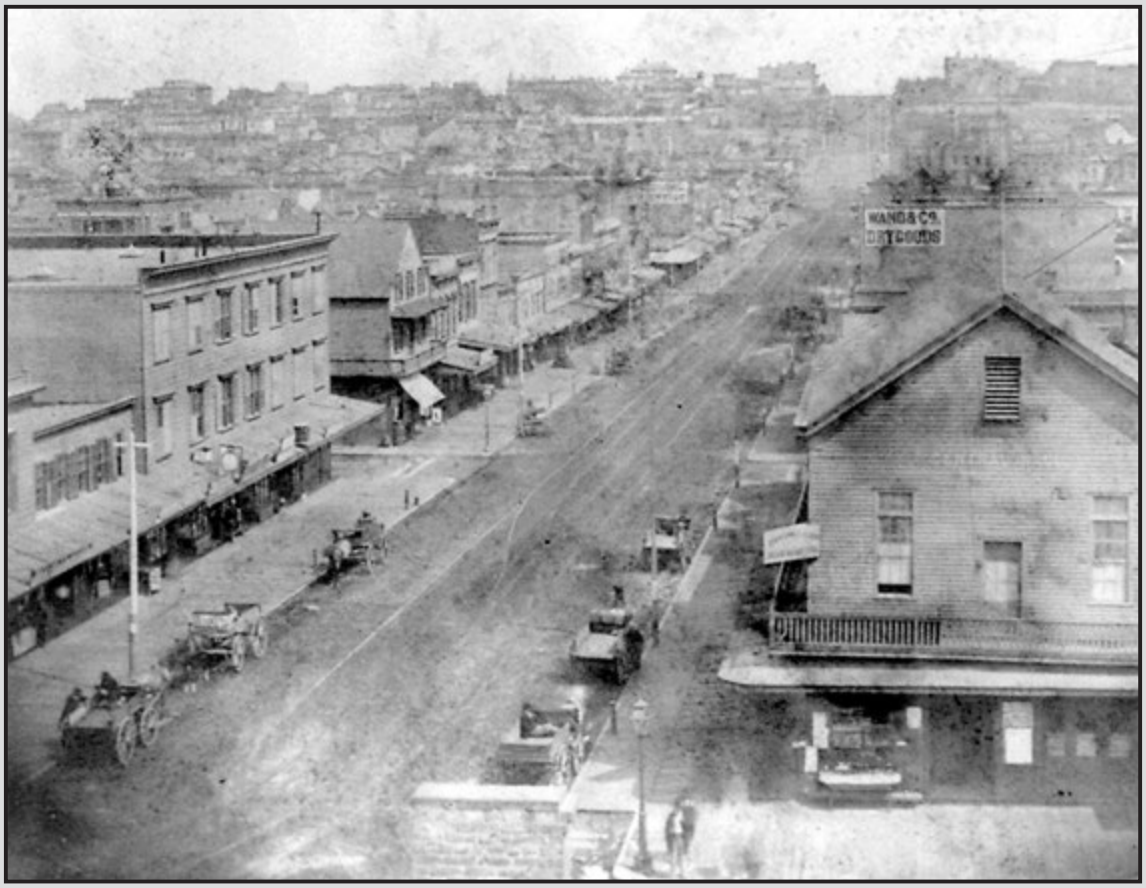
"CENTER OF THE NEIGHBORHOOD": COMMUNITY AND THE KNOCHE STORE

Annita Waghorn

Walking down Third Street, one summer morning in 1880, what might you have seen?

A roadway misted by fog and thick with wagons and carriages with their attendant horses, men, coats pulled tight around them, moving off to work, and women venturing out of their homes in the back alleys, to buy milk and food for the day's meals. The flow of people would have swept back and forth along the sidewalks, between workplace, home and errands. It would have swept people past a parade of stores and saloons that had positioned themselves on almost every street corner in the South of Market in order to catch the eye. Sometimes they were one and the same, selling both staples and liquor. More than just commercial establishments, such places were among the lynchpins of the South of Market neighborhoods, places where gossip, information or relaxation could be had as easily as flour, meat, or a beer.

If you had been walking down Third Street on that summer morning, you would have passed by a small combination store and saloon on the southeast corner of Third and Perry streets. The store was instantly recognizable as a commercial establishment; a two-story building sporting a first-story canopy that wrapped around two sides of the building, so that it appeared to address both the bustling Third Street thoroughfare and the quieter Perry Street. From 1871 through to 1885 this store was owned by Henry Knoche, who lived nearby at 118 Perry Street. Knoche was a middle-aged immigrant from the German state of Prussia, married to a fellow Prussian immigrant, the 23-year old Johanna Homeyer. He was a prosperous business man, and in partnership, also ran



"Second Street from Market, San Francisco." This 1866 image is adjacent to the project area; it gives a general impression of what a working-class neighborhood looked like. (Photo courtesy of Library of Congress, Prints & Photographs Division, LC-USZ62-27390)

another grocery/liquor store a few blocks away at 120 Second Street. This wasn't uncommon, as German immigrants in the South of Market often gravitated to businesses such as corner stores and saloons (Olmsted and Olmsted 1997:106). Knoche continued to operate the Third Street grocery until his wife's death in 1885, after which he sold up and moved to Oakland. His store was taken over by another German immigrant, and was run as a grocery store until 1906. Around 1880, Knoche had his premised connected to the main city sewer line. Previously, household wastes were directed into a dome-topped cesspool located under the store's back porch. When the dome was broken off in order to run the household line to the main sewer, the disused cesspool was filled with refuse from the store and resident clerk. Archaeologists excavated the cesspool. The artifacts found give us a sense of the role of this store, and ones like it, in the surrounding community.

For the working-class residents of the South of Market neighborhoods, there were limited options for obtaining food. Most families and residents only had recourse to their own feet when it came to lugging provisions home, and no refrigeration to keep perishables fresh. Food had to be bought often and, if possible, bought locally. The ubiquitous corner grocery and liquor store, along with peddlers pushing carts or leading a horse drawn wagon were the main sources from which to buy household goods and provisions. The South of Market and in particular the small back alleys such as Perry Street were the homes of the working-class poor. Perry Street was lined with small two-story working-class houses. Most of these households consisted of extended families with children. Many, although by no means all, were Irish immigrants with their breadwinners working in the small businesses, factories and the docks that were concentrated in the South of Market. Some worked only as day laborers or were unemployed (Olmsted and Olmsted 1993:209–210). It was an area of entrenched poverty and struggle. In such areas, the corner grocers would run a weekly tab for their regular families, with the tab being paid off on Friday nights after the arrival of the breadwinner's pay packet.

The Knoche Store would have been one of the mainstays for the families living on Perry Street, although similar stores were located at many of the intersections in the South of Market (Olmsted and Olmsted 1997:103). It is probable that the Knoche Store garnered most of the Perry Street business, in keeping with the strong sense of tribalism that characteristically pervaded each back street in the South of Market (Olmsted and Olmsted 1997:106).

In the Knoche Store, the Perry Street residents would have found a full complement of household staples and provisions. The store sold meat, perhaps conducting some butchering or boning out on site, since bones found in its cesspool represented over 500 pounds of meat. Cuts of beef, pork and mutton were available, although many were of moderate cost suitable for soups and stews. Fish was occasionally for sale, perhaps when a local fisherman sold his excess catch to the store. Perry Street residents may have relied on the Knoche Store for their meat for simple, day-to-day soups and stews, venturing further afield to a butcher shop only for special occasion steaks and roasts. The store sold a full complement of condiments as well including olive oil, peppersauce, pickles, spices, and Worcestershire sauce.

Aside from meat and fresh produce, Knoche stocked household goods. On the store's shelves you would have found glue, ink, and pencils; sewing aids, such as pins, thimbles, and buttons and beads of various types; ammunition and even some cheaper items of jewelry (see photo). Patent medicines and other grooming aids would have occupied a considerable amount of shelf space. Perfume, cologne, toothwash, toothbrushes, hair combs, hairpins, makeup, and hair

Items recovered from Cesspool 13. They may include inventory fom the Knoche store (for example the bullets or ink bottles), or perhaps the personal belongings of the store clerk, who resided there.

dressings were all available for sale. Medicinals covered the spectrum from female complaints, to infant teething, to pain and coughs: Ayer's Cherry Pectoral, Bristol's Sarsaparilla, Burnett's Cocoaine, Hemblod's Fluid Extract, Injection Brou, Koenigs Hamburger Tropfen, Moses' Pills; Mrs. Winslow's Soothing Syrup, Jamaica Ginger, and Spencer's Sapoine. Knoche stocked his store to provide for the household needs of local wives, mothers and daughters. It would have been convenient for Perry Street women to nip down to the corner for medicine for a sick child, a few buttons to repair a shirt, or some meat and bones to make the evening's soup; a familiar place, where a quick word could have been exchanged with the clerk, or a passing neighbor. Children hanging onto their mother's skirts, or coming in themselves with a penny for sweets, would have been a commonplace sight, as suggested by some lost marbles and a toy saucer, swept up by the clerk at the end of the day and disposed of in the disused cesspool.

The other role of the Knoche Store was as a local saloon for the neighborhood's men. The saloon may have been located in the store's back room, behind the grocery, or they may have shared a room, with the saloon section differentiated only by the presence of a rough bar and a few tables. Alcohol was served by the glass or the bottle; over 30 glasses were recovered from the store's cesspool, as well as 37 alcohol bottles, including beer/ale, whiskey, and wine/champagne. Other drinks may have been served from wooden kegs. Numerous smoking pipes were also found as well as a bone gaming peg. Perhaps for many of the neighborhood's men, a drink, a smoke and a game or two of cribbage at Knoche's Saloon was a favorite way of killing a few hours after the week's work was done (see photo).

At a time when the temperance movement in America was rapidly gaining strength, San Francisco was noted for its number of saloons, and its inhabitants' laissez-faire approach to alcohol consumption: in 1881 a local paper could write that: "The people of San Francisco, as a body, are not very straight-laced in matters of this sort . . . they are a pleasure-loving folk" (*San Francisco News Letter and California Advertiser* 12 November 1881). A drink could be had at any number of places, from traditional saloons, corner groceries and drug-store bars. The density of saloons and

Assorted drinking glasses from Cesspool 13, Henry Knoche Grocery.

grocery/saloons was especially pronounced in the South of Market neighborhoods, contributing to the reputation of the area as a ribald slum. William Chambliss, a naval officer who visited the South of Market in 1887, wrote that: "I shall never forget my first impressions of San Francisco. . . . The first thing I saw . . . were numbers of whiskey and beer saloons and chop houses. . . . They were low, filthy-looking places, with vulgar signs on their windows which read 'Steam Beer, five cents'. . . . The background for this scene was the south side of Rincon Hill" (Chambliss 1895).

Chambliss' disgust at the sight of working-class drinking was common enough in the 1880s in an America stirred to indignation by the temperance movement. Middle-class women, who linked the legal prohibition of alcohol with female suffrage, particularly championed the movement, which had been gaining ground since the 1820s. They and many others believed that drink caused social ills as diverse as poverty, political corruption, and domestic abuse (Rorabaugh 1987:41). Temperance beliefs made slow inroads into working-class households, however, for a number of reasons; drinking played a strong role in many immigrant cultures such as that of the Irish, it was an alternative to less than clean water supplies, a cheaper alternative to beverages such as tea, coffee and chocolate, and it remained a common belief that alcohol supplied extra energy needed by the working man (Kelly 2000:266). Given that many middle-class temperance advocates found the drinking habits of working-class men and immigrants so egregious, saloons in working-class neighborhoods became a favored target. Quite clearly, according to temperance advocates,

drink and the saloons kept working men down, kept their families in poverty, and prevented them from ascending into the middle class through hard work and thrift. Saloons took money and time from working men that should rightly be devoted to their families. They were also places where immigrant men could socialize with their compatriots, and as such, it was felt, encouraged immigrants to retain their language, their customs, and their religion rather than adopting the (Anglo-protestant) American ethics of industriousness, sobriety and rectitude (Kingsdale 1973:487). Middle-class commentators, in short, roundly demonized saloons. In doing so, they were unable to consider the more complex role actually played by saloons in working-class and immigrant neighborhoods.

Saloons played three important roles in the social network of 19th-century working-class neighborhoods: they were almost entirely male establishments; they acted as a neighborhood center for local men; and they were a conduit for the transmittal of working-class and immigrant cultures (Kingsdale 1973:472). As one commentator noted at the turn of the century: "The saloon is, in short, the clearing house for the common intelligence – the social and intellectual center of the neighborhood" (Melendy 1901:450). In the popular imagination, saloons were as intrinsically linked with masculine culture, as the home was with female morality and authority. Reflecting this, the female-centric temperance movement was "profoundly vested in domesticity and the contrast between public male drinking and private female abstinence" (Murdock 1998:54). Under this moral structure women were seen as the potential victims of alcohol both because of male drunken abuse and because their own natures were so vulnerable to degradation. Drinking by women in public, especially to excess, was viewed with a particular horror. Saloons were a public space, a male space, and women who frequented them must therefore, be prostitutes (Murdoch 1998:43–44). This is not to say that working-class women did not drink. Alcohol could be bought at saloons to be drunk at home, a fact recognized by beer companies who advertised the sterile healthy nature of beer as a good alternative to the diseased milk and unclean water often available in towns and cities (Murdock 1998:54). However, female drinking remained a private matter, largely hidden within the home.

Saloons, by excluding women, provided a powerful alternative to the Victorian mythology of the home, with women as its moral center (Kingsdale 1973:485). The saloons were a world that was self sufficiently male in character. They provided men with opportunities for relaxation, conversation, business discussions, or social networking among familiar faces and cultures, particularly since individual saloons often became closely associated with specific neighborhoods, trades, or ethnic groups. Although the temperance movement was ostensibly concerned that saloons were luring married men away from their families, the saloon clientele were more likely to be drawn more from the large single male population present in cities at the time. In 1890, 42 percent of the American male population over 15 was single (Kingsdale 1973:486). The preponderance of single men in cities was due in part to their overrepresentation within the first generation of many immigrant groups (Kingsdale 1973:489). Although many families lived in the South of Market, the area's industry drew a heavy concentration of single men, many of them immigrants. They lived in crowded boardinghouses or as lodgers, often separated from any family connections. Although for married men, the saloon might have provided a respite between the demands of work and the family, for single men living in crowded lodgings, the saloon may have been one of the few places available in which to spend free time. For many men, married or single, immigrant or native born, the saloon became a local club, or even a surrogate home (Kingsdale 1973:476).

Until the 1920s, saloons were for working-class men, many of whom might have worked 10 to 12 hours a day, six days a week, one of the only sources of recreation (Olmsted and Olmsted 1997:104). Parks were infrequent and distant, and money for omnibus or tramcar fares to other parts of the city might not be often available. Alternatives such as reading rooms, clubs, labor union recreation halls and such were not common in neighborhoods such as the South of Market, and often reflected more the concerns of the sponsoring middle-class philanthropist than their working-class patrons. Instead the saloons, by offering newspapers, cards, games, a place to sit down, and a bite to eat "tried to give the workingman exactly what he wanted" (Kingsdale 1973:478). Clubs, unions and political associations often tacitly supported the idea of the saloon as

the neighborhood center by hold their meetings in saloons, which would offer free space with the expectation that members would order drinks. Politicians also used the saloons as venues for campaigning.

Saloons also offered the workingman a variety of services. The saloon owner often cashed checks, lent money or acted as a message center for his regulars. Saloons were often the only option for public toilets for working-class men. And of course, many saloons also offered the infamous Free Lunch—a daily spread that might consist of cold meats, potato salad, boiled eggs, cheese and pickles, of which customers might partake for the price of a drink. San Francisco was famous for its Free Lunch Saloons, and they were common in the South of Market, catering to the workers in the neighborhood's many factories, works, wharfs and Butchertown. Many working men depended on the Free Lunches as "keeping me alive." By providing so many of the services of a neighborhood center to workers, the saloon offered a logical place in which to spend free time.

As Jack London, who frequented the saloons of the South of Market, noted: "The saloons are poor men's clubs. Saloons are congregating places. We engaged to meet one another in saloons. We celebrated our good fortune or wept our grief in saloons. We got acquainted in saloons" (1913a:78). By providing women with a convenient way of obtaining food and household provisions, and men with the opportunity for a drink, relaxation and the latest neighborhood news, the Knoche Store would have become a focal point for the Perry Street community. Up and down the South of Market, this same relationship would have been replicated between other grocery/saloons and nearby residents. In this way, such stores played an essential role not only in provisioning the neighborhood, but in knitting it together into a community.

Jonathan died in March 1871 at the age of 55. In 1876 Jonathan Peel, Jr., died at the age of 37. Mary Peel was last listed at 540 Folsom Street in the 1879 city directory, the year in which she died at age 63. In 1880 Jonathan Jr.'s widow, Margaret, lived with their three sons—Jonathan, Matthew, and Robert—and two female servants. Her father had also died in 1879, leaving an estate valued at more than a million dollars. In October 1881 she married Dr. Thomas Morffew, a dentist who lived at the Cosmopolitan Hotel. Her sons took his name as their middle name, creating some confusion in city directories. Jonathan Peel III followed in his stepfather's footsteps and became a dentist.

Figure 3.13. The residence at 540 Folsom Street (left); detail from a daguerreotype of the Tar Flat area ca. 1850–1855. (Courtesy of the Society of California Pioneers [C004290])

Privy 507 was wood-lined and located in a rear corner of the parcel at 540 Folsom Street. It had been truncated by later construction. The TPQ is 1871 based on a Lady Liberty half-dime minted that year. The deposition date is probably the early 1870s after Jonathon Peel, Sr.'s death in 1871 (Figure 3.14).

When Mr. and Mrs. Peel arrived with their two children in 1852, they apparently brought little tableware with them—hardly surprising considering transportation cost and the rigors of the voyage. Only two marked vessels have end manufacturing dates that precede the family's arrival, but as both of these were marked in America it's likely that they were purchased here: a fancy Parian pitcher from the Bennington Pottery in Vermont and a decorative plate made by Mason in Staffordshire and sold by a

Figure 3.14. Privy 507, Artifact Layout, Jonathan Peel Sr. Family. Jonathan and Mary Peel arrived from England in San Francisco with their two children in 1852. They bought property on Folsom Street and constructed a comfortable home for the family on a large lot and rentals for income nearby. They outfitted their new home with fashionable ceramic and glass tableware, and other decorative touches. Over the years, their income grew. By the 1870s, they ate very well, purchasing expensive meat cuts. Privy 507 was probably backfilled in the early 1870s. It contains many items reflecting the family's comfortable circumstances, including a number showing an interest in the Victorian pastime of collecting natural phenomena.

New York importer. The family purchased fashionable ceramics from among the best makers in England, Europe, and the United States. Expensive decorated porcelain sets predominated (Figure 3.15), accompanied by white improved earthenware vessels in popular transfer printed and molded patterns. The presence of dozens of serving vessels and numerous sizes of plates indicates that formal dining took place within the household. Three teapots of various fabrics and formalities—earthenware, porcelain, and pearlware—mirror the occasions upon which tea was served from familiar to formal. The pearlware teapot probably was an heirloom and may have been brought with the family from England.

The Peels also purchased sufficient glassware to entertain numerous guests with a variety of alcoholic beverages in suitable glasses—cordials, goblets, stemware, and tumblers. Jonathan had begun his career in San Francisco as a brewer, so it is not surprising that beer/ale bottles outnumbered wine/champagne bottles in this professional household. Schnapps and whiskey also appear to have been favorites. Tobacco use ranged from smoking and chewing tobacco to snuff.

The faunal collection indicates that the Peel family ate well and collected exotic birds. A total of 575 bones were identified from Privy 507. The total quantity of meat represented from both mammals and birds is a little over 586 pounds. Over half, 55 percent, of this total is represented by beef followed by mutton with about 28 percent and pork at almost 10 percent. The reflected

status of calculated meat weights from all major meat animals combined shows a preference for high economically classed cuts (over 49%) leaning slightly towards the moderate end of the scale (over 35%). Over 41 percent of the meat weight from beef is represented by cuts from the loin followed by the chuck at nearly 33 percent. A little over 53 percent of all the beef was in the form of steaks, followed by portions appropriate for soups and stews at about 13 percent, and roasts at about 4 percent.

Figure 3.15. Porcelain tableware from Privy 507.

Leg and shoulder dominate the identified retail cuts from mutton, together contributing over 67 percent, followed by a preference for rib and loin at about 28.5 percent combined. Cuts appropriate for soups and stews are well represented comprising nearly 25 percent of the identified chunks of mutton. A penchant for steaks is also well represented at nearly 24 percent followed by roasts at 7.7 percent of the identified chunks of meat. A single round bone lamb roast or 'leg of lamb' was identified. A little over 33 percent of the meat weight of pork is from ham; nearly 31 percent is from the loin followed by noteworthy contributions from the shoulder at about 18 percent. Well represented are steaks from the ham and loin at over 27 percent of the total identified chunks of pork; followed by cuts appropriate for soups and stews at almost 17 percent and roasts at 10.4 percent.

A wide variety of avian species were identified. The predominantly represented species is domestic chicken with an MNI of 10. Combined, the avian elements total about 6.8 percent of the combined meat weight. The MNI for chicken consists of 2 roosters, 6 hens and 2 juveniles, a range that suggests that these animals could have been kept on the premises. Identified elements from no less than 18 other avian species were recovered from this feature. Included are contributions from turkey, California quail, northern pintail, green-winged teal, bufflehead, rhinoceros auklet, band-tailed pigeon, domestic pigeon, Steller's jay, greater roadrunner, marbled godwit, western meadowlark, greater yellowlegs, Virginia rail, dowitcher, grouse, barn owl, and a lilac-crowned parrot.

Certainly many of these birds came into the household as elements of the menu and the presence of shorebirds (godwit, dowitcher, and yellowlegs) in San Francisco is hardly surprising. Other birds, however, show an interest on the part of a Peel family member in collecting and probably displaying natural phenomena within the home—a very Victorian element. Of the 6 barn owl (*Tyto alba*) specimens analyzed, 2 had knife scores in places indicating 19th-century taxidermist techniques. Barn owls have a unique mournful expression that may have endeared them to collectors (Figure 3.16). Both humeri of the rhinoceros auklet have knife cuts in identical locations indicating a more purposeful technique, in this case cutting the wings (see short essay in Chapter 7). This bird lives in the open ocean only coming to shore to breed, and it has a unique horn, hence the link to the rhinoceros. With its long tail and bill and sleek form, the roadrunner is also an attractive candidate for household display. It is not native to the San Francisco Bay

Figure 3.16. Barn owl (Tyto alba)

Area and would have required a trip to drier inland regions for capture. The presence of a truly exotic bird—the lilac-crowned parrot—is further evidence of collecting. This parrot is native to Mexico and only rarely observed nesting in the San Gabriel Mountains of southern California. This colorful bird has been part of the pet trade for thousands of years. The left canine tooth from an elephant seal (*Mirounga angustirostris*) is another exotic collectable item from this collection.

The presence of several game birds suggests recreational hunting, although these birds may have been available in local markets. A pistol and 3 lead-shot pellets were the only artifacts indicating hunting recovered from Privy 507. The lead-shot, which measured 1/16 inch and 1/8 inch, are consistent with pellets used in a shotgun shell.

In addition to the apparent display of stuffed birds, the Peels had at least three vases and four pots for flowers, a decorative fruit stand, and a Christmas tree in season, as indicated by glass beads. They lighted their home in a variety of ways, from candlesticks, to glass chimneys, to a whale-oil lamp with glass tinklers to diffuse the light in colorful patterns (Figure 3.17). The large quantity of pencils and inkwells, along with newspaper and printed material suggest that reading and writing occupied the family, while dozens of pins and needles, a thimble and darning egg show that some clothing was at least mended at home, if not actually constructed.

Grooming was also important with many hair combs, hairpins, toothpaste, toothbrush, toothbrush holder, soap dishes, perfumes, colognes, hair tonics, and other beauty products recovered from Privy 507. The presence of three nearly complete chamber pots and two lids in different patterns—sided, molded water lily, and blue printed Priory—indicates a housecleaning episode following the transition to plumbed toilet facilities. Further indications of grooming and health care were an adult human tooth with a small gold filling.

Figure 3.17. Lamp elements and candlestick from the Peel residence.

While the Peel children had left the house by 1860, the 17 toys including marbles, dolls, and toy tea set pieces probably remained in the house for their grandchildren, who lived a short distance away, to play with. Many

items can be associated with Mrs. Peel, including the hair combs, cosmetics, jewelry, three silk dresses in black, copper-toned madder, and mint green, corset hardware, fan, and decorative buttons.

The artifacts and faunal collection from Privy 507 evoke a couple who kept a well provisioned, fashionable, but eclectic household. They consumed alcohol, tea, and tobacco, pricy cuts of meats, and relatively expensive cosmetics in the search for a youthful appearance. Meals were formal and colorful, as was clothing. Perhaps in retirement, they appear to have kept poultry in their large yard, ventured forth to the seaside and interior to gather natural specimens in the form of rocks, coral, birds, and a sea elephant tooth. Stuffed roadrunners, a rhinoceros auklet, and barn owl probably graced Mr. Peel's private space. The Peels did well for themselves in San Francisco, making money in real estate; they seem to have enjoyed the fruits of their labor in the purchase of consumer goods and the practice of their hobbies. Their children and grandchildren inherited their property, remained in the area, and did well for themselves.

Rincon Hill Sample

The Edge of Rincon Hill sample is composed of nine archaeological features associated with residences that date before 1900. Table 3.1 shows the characteristics for these features. The average lot measured nearly 3000 square feet and the average dwelling just over 1500. Most of the residences had basements, which were not included in the square footage, but would have

Table 3.1. Edge of Rincon Hill Feature Characteristics

ARCHITECTURAL			
Lot Size	High – 5625 sq. ft.	Low – 1875 sq. ft.	Average – 2953 sq. ft.
House size	High – 1946 sq. ft.	Low – 600 sq. ft.	Average – 1565 sq. ft.
Basements	7 out of 9 features are from residences with basements[1]		
Multiple family parcels	Duplex (1); backyard cottage (1)		
Square footage per person	High – 1500 sq. ft.	Low – 75 sq. ft	Average – 424 sq. ft.
SOCIAL/ECONOMIC			
Nativity (Head of Household) [2]	Canadian (1); English (2); Irish (2); U.S. (6)		
Occupation (Head of Household)	Wealthy Professional (1); Professional (1); Skilled (5); Semi-skilled (2); Widow (2)		
Tenure	Owner (4); Tenants (3); Unknown (2)		
Religion	Catholic (1); Protestant (4)		
ARCHAEOLOGICAL			
Sample size	9		
Features	Privy (7); Well (2)		

[1] Basements not counted in square footage. [2] Some features associated with more than one household.

been eventually developed into living space as the neighborhood became less exclusive and more compact. The average square footage per person, based upon available information, was just over 400 square feet. Compared with over neighborhoods in this study, these were spacious accommodations.

Most of the heads of these households had been born in the United States (6), followed by England (2), and Ireland (2), with one Canadian (in dwellings with multiple families, each head is counted). Four households had connections with Protestant churches, while one was Catholic. The occupations of the heads of households tended toward skilled professionals with one Wealthy professional, one Professional, five Skilled, two Unskilled, and two Widows. Four families owned their homes; three rented; and the status of the other two could not be determined. In summary, these features are associated with individuals and families who came to San Francisco from the eastern and southern United States and from England and Ireland; they generally brought with them skills and resources that enabled a successful transition.

LIFE ON THE SHORE OF MISSION BAY

The Shore of Mission Bay neighborhood developed with small working-class houses and industrial complexes as the bay was filled in the 1860s. By the 1880s our blocks were densely packed with residences and work places. A mix of skilled and semi-skilled households settled on Perry and Silver streets with the most affluent arriving earlier and taking the higher, firm ground near Third Street. Unlike the houses on Blocks 5 and 9 on the Edge of Rincon Hill built in various sizes, shapes and setbacks, the houses on Block 10 are remarkable for their uniformity. Developers clearly built housing in blocks for quick sale; this is particularly true as one moves toward Fourth Street.

The Stephen Baker family resided at 108 Silver Street near Third. Baker worked his way up from policeman to police captain to the owner of a wharf. The family backfilled their well (which was probably constructed in the late 1850s) before they left San Francisco in the early 1870s. Well 853 is remarkable for the quantity and variety of the artifacts it contained, including printing plates and typeface from the middle 1860s.

Two doors down at 112 Silver, also on high ground, Well 866 had been backfilled in the middle 1880s by two families related by marriage and living in the three-story residence divided into two units. Patrick McDonald was an ironworker, his son James a salesman, and his daughter Annie a dressmaker. A second daughter, Susie, married John Tobin, a bookkeeper, and lived in the adjoining unit. This well was also artifact rich and reflected the combined earning capacity of the family's multiple wage earners. The Metcalf family lived next door at 114 Silver Street from 1864 to 1906. Alfred Metcalf was a successful sea captain and, although he may have spent long periods away from the family, he appears to have separated from his wife Catherine, perhaps as early as 1872. Privy 851, associated with the Metcalfs, contained a gold ring that may have been a wedding band, what appears to be mourning jewelry, and the remains of an infant.

Further down Silver Street at 120, a three-story residence once owned by a successful bookkeeper had been subdivided and housed several families. Privy 808 was backfilled in the early 1880s by the residents at that time. These included the families of Emil Schreiner, a barkeeper from Saxony; Christian Johnson, a saloonkeeper from Denmark; Peter Degnan, an Irish laborer; and Thomas McIntyre, an Irish ship's steward. The privy contained a wealth of material,

including faunal remains representing over 1,700 pounds of meat, much of it high priced. Near mid block on filled land at 142 Silver Street, the family of Joseph Sheridan an Irish teamster backfilled Privy 801 in the late 1880s. The Sheridans had nine children and also took in boarders. Not surprisingly, this feature contained a large number of toys and slate pencils.

Moving to Perry Street near Third, Irishman Michael Dolan owned a duplex at 109–111 Perry. Michael began as an expressman and worked his way up to a shipping clerk with a company doing business in China. In 1880 son James was a commercial agent and son John a law student and clerk. The Norwegian Michelson family rented the adjoining duplex. Jacob was a master mariner and his son William worked as a box maker. Between them the families had 12 children. They backfilled Privies 857/858 in about 1880. Along with the usual household artifacts, these privies contained a number of unique and eclectic pieces perhaps reflecting the wide-ranging commercial connections of the households' heads.

Two doors down in a relatively large three-story residence at 115 Perry Street lived the German Jewish Strauss and Ackerman families. Related by marriage, members of the household worked in the butcher and upholsterer trades, and were quite successful. Privy 849 was backfilled in the early 1870s. Although not as artifact rich as the other Block 10 features, it does provide a glimpse of the family, who appear not to have adhered to strict Jewish dietary traditions. Further down the street within 100 feet of the 1852 shoreline, German master mariner Ferdinand Gee owned a relatively spacious two-story residence from the middle 1860s at 123 Perry. The 1868 earthquake did considerable damage on properties built on fill and Gee's seems to have been one of these. Subsequently, the backyard was raised behind a retaining wall and then a privy (Privy 807) was excavated into these fill layers (see Meyer sidebar this chapter). The fill contained a large quantity of artifacts apparently discarded by the Gees after the quake. This is one of the largest and most varied collections from the block. Gee also owned the duplex next door at 125–127 Perry Street. The two-chambered privy behind this residence was backfilled in around 1880 by the families in residence: Scotsman Murdock McIver who worked as a stevedore and English Jewish commission merchant Abraham Martin who worked out of Alaska. Four of widowed McIver's eight children worked: the sons as a box maker and a polisher and the two daughters as dressmakers. Martin's elder son was also a commission merchant, the younger worked as a frame maker. This large and varied collection has a distinct feminine aspect, perhaps related to the two dressmakers and the several women and children in the combined households.

Three families shared the residence next door at 129 Perry in around 1880 when Privy 812 was backfilled. These included John Maloney, an Irish stock dealer; John Hill, a Canadian machinist; and Charles Towne, a railroad clerk. Hill and Towne had recently married sisters and the families would remain close for decades. This is another large collection with a high percentage of porcelain, patent medicine bottles, and feminine attributes; perhaps reflecting the newly weds. The Aaron family lived in a very similar house, which they owned, next door at 131 Perry Street. The members of this Russian Jewish family worked as a peddler (father), barber (son), and teaching assistant (daughter). Despite the father's death, the family did well, accumulating property and finding affluent marriage partners. Privy 814, backfilled before they moved in the middle 1870s, unfortunately contained too few bones for faunal analysis, but did demonstrate the family's early less affluent surroundings.

From the middle 1860s through the 1880s, the Irish Catholic Moynihan family owned and lived in a duplex at 133 Perry Street. Andrew Moynihan died by 1866 and his wife Mary took in laundry and renters to support her family. The duplex was always crowded generally

A LANDSCAPE CUT AND FILLED

Michael D. Meyer

Privy 507 (left) after excavation from beneath Brick Foundation 631; clearing around Privy 516 and Footing 689 (right) prior to excavation.

San Francisco is known for its natural beauty, yet it is a landscape that has been severely altered. Massive amounts of sand and soil were moved to make the terrain conform to the city grid imposed upon it. With the population boom of the Gold Rush, the city expanded westward by cutting and filling hills and valleys to normalize grades, and eastward into the bay first with wharves then followed by fill. Early Coast Survey maps show how, with each passing year, trails following the natural topography were replaced by the street grid, and early homes situated topographically were moved or removed to conform as well.

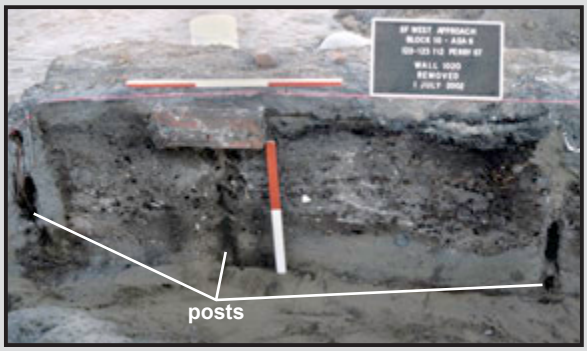
South of Market Street, Mission Bay was completely filled and Mission Creek extended in a channel to the San Francisco Bay. Yerba Buena Cove was filled past Rincon and Clark's points. In the 1850s Fremont Street, the eastern boundary of Block 4, was at the western edge of Yerba Buena Cove. Today it is five blocks west of the Embarcadero and bay. One of the most infamous acts of grading was the Second-Street Cut of the late 1860s. The cut through Rincon Hill benefited the railroad and commercial access to the southern waterfront. The cut sounded the death knell for the prestigious Rincon Hill neighborhood as some houses actually slid into the cut and were destroyed.

Archaeologists found evidence of filling episodes in several areas of the project. During excavation it became clear that Block 4 had been subjected to extensive filling with dune sand. The builders' trenches for some privies were at a 1:1 slope or shallower. The earliest features identified dated to the 1860s. It is likely that earlier deposits remain on the block buried deeper beneath the sand fill.

Further up Folsom Street on Block 5, the Peel family's lot contained two privies at different elevations. The earlier Privy 507 was filled in the early 1870s. It was capped by a mortared brick foundation (see photo), which was apparently a retaining wall for raising the backyard of the Peel home. Once the backyard was raised several feet, Privy 516 was constructed and used until the late 1870s, most likely after Mary Peel's death in 1879. It too was capped with a brick foundation. The later foundation was probably associated with surviving family members converting their former home to income property. A three-story Italianate townhouse was built in the original house's side-yard by the mid-1880s.

Privy 808 excavated with wood lining remaining on back and right sides; outline of Privy 817 at bottom of cut.

Substantial portions of Blocks 10 and 11 were filled marshlands. Midden from part of a prehistoric site along the former margins of Mission Bay was found on Block 10 (see sidebar Chapter 1). Nearby the remains of a wooden retaining wall were found between 120 Silver Street and 123 Perry Street. At 120 Silver Street, Privy 817 was abandoned and filled as part of filling the backyard. Privy 808 was built on top of Privy 817 once the yard had been raised (see photo). At 123 Perry Street, refuse was deposited as sheet refuse and within the wall chambers as part of lot filling (see photo).



Fill within a retaining wall cavity on Block 10. The boards have been removed exposing the posts and fill separating these Perry and Silver Street yards.

The earthquake and fire of 1906 burned South of Market in the project area to a blank slate. A massive amount of fill was deposited in the area. Mission Bay was filled until it could hold no more and the remaining debris from the city was sent on barges and dumped near Mile Rock (Bronson 2002:170). Old foundations and paving from both before the earthquake and before freeway viaduct construction were seen in the soil profiles of Block 10 (see photo), and on the Bayshore Project to the west.

In the 1930s Rincon Hill was cut for the west anchorage of the Bay Bridge. As the top of the hill was cut, the old foundations of St. Mary's Hospital were filled leaving only the old retaining wall along the street exposed.

Brick paving on fill at 142 Silver Street, Block 10. After 1906 about 6 feet of fill was required to raise the lot to street level.

housing over a dozen individuals and perhaps a business. Privy 813 behind the duplex was backfilled in the late 1870s. At this time, the following people lived there: Mary, who worked as a washwoman, her two sons who worked as cord makers; Margaret Boorem, whose husband had been a fire-engine driver, but may have died, Margaret sometimes is listed as a washwoman, her two sons also worked as cord makers; and a niece worked as a dressmaker's apprentice. The other half of the duplex housed the Collins family; John worked as a barber, his wife Mary took in washing, one son was a rope-maker's apprentice; the Collins' two school-aged children and an apparently unrelated seamstress also lived in the household. This feature was notable for the quantity of toys, the quality of the clothing, and the modest expenditure on meat as reflected in the faunal remains. Two doors down Irishman John Monahan owned a duplex at 137–139 Perry Street, where he lived through 1879. Privy 810 backfilled in the late 1870s is associated with the Monahan family. John owned a saloon and liquor business on Pine Street. Thomas Griffin a ship's fireman probably resided in the other half of the duplex. The collection from this privy is remarkable for the quality of the table and glassware and the proportion of high-priced meat, particularly mutton.

As marshlands through the 1850s, Block 11 was not developed until the middle 1860s and was never as densely packed as Block 10. Only two features were found on Block 11, Privy 1600/1601 located at 207–209 Perry Street. The duplex at this address originally backed up on the Kimball Carriage Works, one of the city's largest manufacturers at the time. The privy was backfilled around 1880, at which time the Irish Donnelly family headed by a blacksmith and the Scottish Beal family headed by a gold miner, sometimes hardware-store affiliate. The families had 12 children between them. Due to the saturated nature of the soils on Block 11, a stunning quantity of fabric, wood, and metal artifacts survived, probably reflecting the quantity of discards of this material on other blocks as well.

Case Study: Baker Family

Of the 14 feature complexes in the Mission Bay sample, half had employment connections to the maritime industry, in jobs ranging from steward to master mariner. The deposit associated with wharfinger Stephen Baker is taken as representative of this group. A wharfinger is an owner or keeper of a wharf, responsible for the delivery of goods, day-to-day activities, and dispute resolution. Baker appears to have kept the wharf as a representative of the Harbor Commission.

In January 1861 Stephen Baker connected his property at 108 Silver Street to the municipal water main. He may have been the original owner of the late-1850s house. Stephen and his wife, Louisa, were from New York, arriving in California by 1855 at the latest. Stephen worked as a policeman achieving the rank of captain by 1864. The first district station was located at First and Mission. In 1866 the city added a new station at Fourth and Harrison, not far from Baker's home. At this time each officer carried a "large revolver" and a large Bowie knife in a scabbard beneath their uniform (Tully 2009). By 1868 Baker had translated his policing skills to a new job overseeing the management of a city wharf.

The family lived in a modest two-story dwelling of just over 1,000 square feet. Stephen's real estate was valued at $2,000 in 1860 and his personal property at $200. Stephen and Louisa had a 5-year-old daughter and a 3-year-old son. A young mariner, also from New York, resided with the family. By the time of the 1870 census, the family's assets had increased to $4,000 in real estate and $3,000 in personal property. The family had a new addition since the previous

Figure 3.18. Excavation of Well 853 in progress (Block 10). The saturated fill was bagged to be wet screened at a later date.

census: William M., age 7. All three of the children attended school. The Bakers probably left San Francisco before 1872. By 1880 they were living in Cook County, Illinois. Stephen Baker worked as a telegraph operator. All three of the children still lived at home. The youngest child William also worked in the telegraph industry; while the elder son, George, worked as a clerk in the town hall.

Well 853 was located beneath what was probably an addition to the original dwelling and measured 3 feet 9 inches in diameter and just over 17 feet deep. Only the upper foot or so contained brick lining. This was the deepest well excavated in the West Approach Project area. A slide-rail shoring system, submersible pumps, and continual bailing were needed to enable excavation (Figure 3.18). The TPQ for the filling of Well 853 is around 1872 based on an Upham's Japanese Hair Stain bottle. Middle period marbles dating from around 1870 are the only other artifacts that have potential beginning dates in the 1870s. The vast majority of the artifacts have beginning dates in the mid to late 1850s. The ceramic mean date based on 58 marked pieces and datable patterns is 1860.8.

The well seems to have been backfilled rapidly in the late 1860s to early 1870s coinciding with the departure of the Stephen Baker family from 108 Silver Street. Numerous pockets of ash were noted throughout the fills suggesting regular stove cleanouts and giving support to the idea of that the deposit formed over an extended period. The Baker family's artifacts predate many of the other archaeological collections from the West Approach Project. If they were not the original owners of the house, it was at most only a few years old when the Bakers moved in. The well was abandoned and likely filled with daily refuse until finished with a massive cleanout of items considered not worth moving halfway across the country to Illinois (Figure 3.19).

Figure 3.19. Well 853, Artifact Layout, the Baker Family. In 1861 Stephen Baker connected his house to municipal water. He may have been the original owner of the late-1850s house. Stephen and his wife, Louisa, were from New York. They were in California by 1855 at the latest. Stephen worked as a policeman achieving the rank of captain before changing jobs to wharfinger. The archaeological deposit dates to the early 1870s when the well was filled prior to the Bakers moving near Chicago. The deposit contains numerous pieces of matched tableware and other items that demonstrate the Bakers' participation in consumer culture by displaying the trappings of financial success.

Figure 3.20. Assorted serving dishes and glassware from Well 853 (Block 10).

The family's tableware is composed of matching sets of dishes and glassware. The mean ceramic date is about the same date as the Bakers' arrival at this address. Most of the ceramics were just over a decade old when discarded. The matched sets reflect the Bakers' economic success. Although there were few expensive porcelain dishes (4%), the less expensive white improved earthenware pieces were apparently purchased new in matched sets. The Bakers also had a sufficient quantity of serving vessels for multi-course meals and the requisite variety of drinking vessels to match. The ceramic food preparation and consumption vessels are overwhelmingly of white improved earthenware (85%) with some opaque porcelain (7%) and only a few pieces of porcelain. Three-quarters of the ceramic vessels are decorated, most of which is molded. There are several patterns of molded matched sets: St. Louis Shape, Scalloped Decagon, Split Pod, Twelve Paneled Gothic, Girard Shape, Hanging Leaves, and ordinary paneled. The only vessels with other decorations are a Chinese porcelain blue painted bowl and 2 annular bowls with blue and brown bands. Like the ceramics, many glass pieces match; these include items of the pressed Ashburton pattern, paneled decoration, both cut and pressed in various sizes, a goblet is paneled and stained, and a tumbler is paneled and fluted. The other pressed glass goblet is decorated with Loop and Chain Band. The Bakers clearly had enough vessels of high quality and variability of form to fashionably entertain guests (Figure 3.20).

Their consumption of alcoholic beverages, as reflected in their artifacts, did not keep pace with their glassware, for only 8 wine or champagne bottles and 3 beer or ale bottles were recovered. Nine ball clay pipes and a spittoon indicate that tobacco was both smoked and chewed.

The amount of meat represented by the faunal bone is an impressive 2,572 pounds. This quantity suggests that the well was filled incrementally over many months with daily refuse. Almost 26 percent of the bone exhibits rodent gnawing. In addition, remains of at least 24 Norway rats were found along with those of a mouse and a skunk. One rat tibia had been punctured by a cat's tooth (see Stoyka sidebar).

Over half the meat consumed by the family was beef, with lesser amounts of mutton, pork, and bird; remains of a single rabbit were recovered. Overall, by weight the meat cuts were priced moderate to high. Beef was almost evenly divided between high, moderate, and low cost. Mutton was overwhelmingly high priced. Pork cuts were priced similar to beef. Identifiable beef and mutton cuts were primarily eaten as steaks with more soup bones than roasts. Pork has the fewest unidentifiable cuts and the most soup bones. Domestic poultry accounts for 100 pounds

CATS

Michael Stoyka

The relationship between humans and cats is well documented throughout history. The revered and notable stature of cats is probably best recognized in the art, history, and culture of ancient Egypt. The beginning date of this cooperative association is being pushed back earlier than most would expect through archaeological evidence. In 2004 a grave was uncovered in Cyprus that revealed the intimate pairing of a human and feline in a single internment that dates to 9,500 years before present (*National Geographic* 2004).

Domestic cats (*Felis catus*) are frequently represented at urban historic sites. The Cypress and West Approach projects are no exception. There are both similarities and areas of stark contrast in comparing the two data sets. The primary role for domestic cats in 19th-century cities can be summarized in a single statement: "Cats were crucial to urban rat control, especially around markets and stables" (Grier 2006:35). All of the blocks in the San Francisco project area were surrounded by numerous butcher shops and fish markets. The relationship between cats and rodent populations is unmistakable. For this reason, free roaming cats (tramps) were tolerated much more than ownerless dogs and were depicted as a service rather than a nuisance. Dogs were subjected to early efforts by animal control, were feared to carry diseases (especially rabies), and were known to bite or attack local people. Groups of feral dogs operated in cooperative packs, while cats were individual hunters. Cats were largely left alone possibly because "cats were not likely to attack people, and they usually conducted their lives at night, away from human eyes" (Grier 2006:215). In fact, many businesses and governmental offices kept cats and budgeted for their care to keep pests in check (Miller 1894:199–200). This was especially true for American port cities, such as San Francisco.

While cats were not persecuted like dogs, they occupied a "grey" area in relation to their association with humans. Dogs were and still are considered a companion, and have been honored by breed and as show animals for a long time. The first American dog shows took place in the early 1860s (Grier 2006:29). In contrast, the first formal National Cat Show did not take place until January 1878 in Boston (Grier 2006:38). Cats had an ambiguous role in American households and were seen as somehow less tame than dogs. Their roles were of aloof independent contractors and unrepentant predators.

At first glance there appears to be a gender bias towards cats. While many historic images depict men and boys with their dogs, cats were considered to be more appropriate companions for women, girls, and children, and as a result held a lower social status. In spite of this, many historical accounts describe the relationship between men and cats. Samuel Clemens (Mark Twain), for example, was a passionate lover of cats, and had photographs of his numerous pets published as "Mark Twain's Cats" in the *Pictorial Review*.

Archaeology in San Francisco and Oakland produced numerous features with cat remains. From the West Approach Project, 20 analytic units (47.6% of the total) provided cat bones representing 61 individuals. A breakdown of cats represented by age show that 67.2 percent were kittens (mostly neonate), 23 percent adult or fully mature cats, and 9.8 percent sub-adults (whose long bones were nearly full sized but with unfused epiphyses). In contrast, Oakland's Cypress Project recovered cat remains in a total of 31 analytic units (31.6% of the total) representing 65 individual cats. In Oakland most cat remains were from fully adult individuals (66.2%) as opposed to 33.8 percent kittens. The San Francisco-Oakland numbers reflect an inverse relationship. Much higher and denser populations of cats are counted for San Francisco, and the animals showing up in the archaeological record are far more likely to be kittens (see table).

The potential reasons behind the counts and age range of cats represented in the archaeological evidence are most likely related to population density in San Francisco and the resulting sanitation issues. With the population explosion of San Francisco during the Gold Rush and a parallel explosion of the rat population, came a greater need for feline pest control. Some of the features from the West Approach Project produced Norway rat remains in numbers that are quite alarming. For a burgeoning port city during this

Evidence of Cats by Project

	Features with cats	% of Total	Total MNI	% Adult Cats	% Sub-adult cats	% Kittens
Cypress	31	31.6	65	66.2		33.8
West Approach	20	47.6	61	23	9.8	67.2

time period, the proliferation of rats comes as no surprise. Six of the excavated features contained the remains of dozens of rats. One rat element in particular displays clear evidence of the hunter/prey relationship between cats and rats. Well 853 from Block 10 produced a rat tibia that displayed puncture damage consistent with cat dentition (see photo).

It seems very likely that the large number of kittens present is at least partially due to culling. Many of the adult cats may have met their fate in a similar manner. A small percentage of the neonate kittens can also be attributed to infant mortality. The female domestic cat can become fertile several times a year. The average litter for a cat is three to five kittens. With the number of feral cats, large numbers of kittens were being produced. It was common practice to dispose of unwanted litters of kittens by drowning them very shortly after birth. It should also be noted that none of the cat elements identified from West Approach Project bore any signs of trauma to the bones.

A rat tibia with puncture damage consistent with cat dentition, Well 853, Block 10.

There are also numerous historic accounts of the problems of feral felines. In May 1872, Alice Stone Blackwell, a cat lover who also cared for a small flock of fowl at her family's suburban house, found herself confronting her next-door neighbor to "tell him if he did not keep the cat shut up we should have to kill it" (Merrill 1990:71; Grier 2006:35). Many of the features examined had evidence that chickens were being raised at home. Is it possible some of the cats were chronic molesters of fowl and had to be disposed of?

In another account, a man had complained about the "yawling concerts" of his neighbor's cats around the house, and noted in passing in a list of chores that he had "killed a couple of useless cats" (Grier 2006:37). Some of the cats may have been lax in their obligation to be supreme mousers. Yet another source, with instruction for young naturalists, suggests that if birds, bird-nests, and eggs are to be collected, a trade-off of nurturing the local population of birds was also desirable. The book suggests feeding birds in winter and summer, supplying them with bird boxes and houses, and "waging a relentless war upon marauding cats" (Verrill 1913:61).

Another line of query concerns the transition of America's 19th-century cities to a consistent plan for issues of health and hygiene. New York, Boston, and Philadelphia enforced the destruction of hundreds of thousands of feral cats. Once sanitation issues were addressed in those cities, rat populations declined, and the services of cats as pest control no longer was highly valued. San Francisco began its efforts to modernize sanitation in 1875. The largest number of cat remains from the entire project was from Privies 1600 and 1601 on Block 11, and Privy 1303 from Block 4, each with 10 individual cats. Block 10 had Privy 808 where 8 cats were found. All of these features had Irish residents and the deposition dates of all three features were 1880 to 1882. The two features from the Cypress Project with similar characteristics are Privy 955 from Block 1 and Privy 6300 from Block 20, where 7 and 14 cats were included, respectively. These features also had deposition dates in the very early 1880s. Although the sample size is too small to come to a definitive conclusion, the data at least raise the question that a negative attitude towards cats was becoming more prevalent during this period.

of meat, consisting mostly of turkey with some chicken. The wild fowl accounts for an additional 41.5 pounds of meat and includes a variety of birds: Canada goose, greater white-fronted goose, American widgeon, northern pintail, surf scooter, and California quail.

Shellfish were also part of the diet: 328 shells were identified as food refuse. The most common are bent-nosed Macoma, native Pacific oyster, and Pacific littleneck clam. Well 853 also contained a large quantity of fish bone with moderate variety, including cod, Pacific mackerel, rockfish, silversides, jacksmelt, white seabass, Chinook salmon, starry flounder, lingcod, and California barracuda. These represent moderate to high-priced meals.

Only a few furnishings were recovered: a mirror, porcelain bud and spill vases, a possible opaque-white glass vase, and portions of a Jacob's ladder (see Gibson sidebar in Chapter 7). There are a remarkable 54 lamp chimneys, a lamp globe, and 2 tinklers. An unusual number of unique decorative items could not be categorized: balls, disks, tubes, and a globe or ball; a porcelain bird head; and a piece of soapstone.

The presence of Siegert's Bitters and Osgood's India Cholagogue bottles in the Bakers' refuse, leads to speculation that someone in the household may have suffered digestive trouble. Siegert's was advertised as a remedy for all digestive ailments, while Osgood's was for the cathartic elimination of bile. Also recovered was Hamlin's Wizard Oil used for both internal and external remedy on "all painful afflictions." It was made of 55 percent alcohol and 40 percent camphor oil. Just over one half of the perfume bottles are unmarked; of the marked specimens, however, Lubin (6) was preferred over Violet (1). The Florida Water may have served as either a perfume or mouthwash. The importance of hair care is indicated by bottles of Upham's Japanese Hair Stain, Lyon's Kathairon for the Hair, and an unmarked hair tonic, along with three combs, two hairpins, and a beaded silk hairnet. Toothbrushes are present in both adult and child sizes. Other grooming and health items include a syringe, three vials, a breast pump, a dresser box and two chamberpots.

An assortment of 21 garments was constructed mainly from wool, with a greater than normal amount of copper-toned madder—a distinctive dye used predominately from 1860 to 1880. In general the fabrics exhibit a much greater range than typically recovered from West Approach features. What might have been an entire ensemble for a woman or older girl was homemade in madder-brown wools. A fitted dress or basque has both hand-sewn buttonholes and machine-made elements. Another outergarment fashioned from a brown woven-ribbed weave also had at least one handsewn buttonhole on a lapel constructed without interfacing. The lack of interfacing created a floppy lapel that would have needed pressing to encourage suitable laying and would have easily pulled out of shape when under stress.

Other garments include a man's plaid work shirt, everyday trousers, and dress or other outergarments. A variety of decorative buttons are in a range of sizes that could have been used for children's and women's garments and men's vests.

Besides the many straight pins recovered and the garments described above, there is another indication of home sewing. A scrap from a discarded garment was used to practice making a buttonhole (see short essay Chapter 5). Making a buttonhole is one of the most difficult steps in constructing an outergarment; the results are unforgiving and highly visible. It is a common practice for those learning (or relearning) this skill to practice on a scrap of similar-weighted fabric. Louisa Baker had basic sewing skills and some common sense, though not enough to

Figure 3.21. Toys from Well 853 (Block 10).

make outergarments professionally. She made clothes for herself and perhaps her children, and it appears that she was passing down her knowledge to her daughter, Jeanie.

A corset fastener was also recovered in addition to 2 trouser buckles. Most of the 15 discarded shoes are indeterminate women's, girls' or children's with 1 definite adult's shoe, and 1 child's size 7-1/2. Two pieces of jewelry were discarded in the feature along with a possible fob chain, 3 pocket watches, 3 pocketknives, and an umbrella.

Three sets of toy dishes are in the collection. Two porcelain cups and a white improved earthenware plate are child's size, while the remaining porcelain teapot, three cups, and one white improved earthenware cup were more appropriate for serving dolls. There is a large china doll and three small Frozen Charlottes as well is an unusual number of marbles of porcelain, glass, agate and onyx. Most of the porcelain marbles are painted with lines or leaves, and some of the glass marbles have core swirls (Figure 3.21).

Shells representing 10 different species more appropriate for collecting than for food indicate someone's hobby; these include a Recluz's moon snail that is found from Santa Barbara to Baja California. Other collected items include a piece of petrified wood and a water-worn piece of Chinese ceramic. A Chinese Tong Bao may have also been collected as an item of interest or may have adorned a sewing basket along with some of the glass beads (see Figure 5.3). Numerous writing implements were discarded including a slate tablet, 35 slate pencils, 4 graphite pencils, and an inkbottle. Most unusual are 9 printing plates and 139 pieces of type. Several of the plates bore dates from the mid-1860s including the "Business Directory and Mercantile Guide 1864–1865." Another plate was from "The Sheep Breeders Guide" (see Gibson sidebar Chapter 7). The

hand tools recovered are an ash shovel, a chisel or a hammer, and a dagger, which could have been part of Stephen's police equipment.

The family's connection with the sea is reflected in their meals of fish, game birds, and shellfish, in their collectables, and what may have been clay gaming pieces with a three-masted sailing ship on one side and other nautical symbols on the other (see Stoyka sidebar, Chapter 10). We can only guess why the family decided to move to the middle of the country.

Mission Bay Sample

The Shore of Mission Bay sample is comprised of 21 archaeological features associated with residences and dating to before 1900. The West Approach Project discovered 14 of these features, 7 were discovered by the SF-80 Project (Praetzellis, ed., 2004). Table 3.2 provides the characteristics for these features. The average lot measured just over 2400 square feet and the average dwelling just over 2000. While the Rincon Hill sample had larger lots, the residences were smaller. Eight out of 21 Mission Bay residences, however, did not have basements, making them effectively smaller than the basemented residences on Rincon Hill. The Mission Bay residences also housed more individuals, based on available information, with an average per person square footage of only 251, compared to just over 400 square feet on Rincon Hill.

Table 3.2. Shore of Mission Bay Feature Characteristics

ARCHITECTURAL			
Lot Size	High – 8000 sq. ft.	Low – 1200 sq. ft.	Average – 2432 sq. ft
House size	High – 3546 sq. ft.	Low – 960 sq. ft.	Average – 2075 sq. ft.
Basements	8 out of 21 features are from residences with basements[1]		
Square footage per person	High – 752 sq. ft.	Low – 58 sq. ft.	Average – 251 sq. ft.
Multiple family parcels	4 duplex; 1 flat, 1 lodgings[2]		
SOCIAL/ECONOMIC			
Nativity (Head of Household) [3]	Canadian (1); Danish (1); English/Scots (3); German (6); Irish (16); Norwegian (1); Polish (1); U.S. (3)		
Occupation (Head of Household)	Wealthy Professional (1); Professional (11); Skilled (9); Semi-skilled (7); Unskilled (3); Widow (1)		
Tenure	Owner (9); Tenants (8); Unknown (4)		
Religion	Catholic (9); Jewish (3); Protestant (2)		
ARCHAEOLOGICAL			
Sample size	21		
Feature Type	Privy (19); Well (2)		

[1] Basements not counted in square footage. [2] Counted under social/economic factors as a household.

[3] Some features associated with more than one household.

The majority of heads of households had been born in Ireland (16), followed by Germany (6), and England/Scotland (3). Poland, Canada, Denmark, and Norway were each represented by a household. Only three heads of households had been born in the United States. These features clearly represent a more diverse group than those found on Rincon Hill. Nine families had Catholic backgrounds, three Jewish, and two Protestant. The occupations of the heads of households tended toward professional, with 11 Professional, 9 Skilled, 7 Semi-skilled, 3 Unskilled, 1 Wealthy professional, and 1 Widow. Nine families owned their homes; 8 rented, and the status of 4 households could not be determined. In summary, these features appear to be associated with families who emigrated from northern Europe, primarily Ireland; they either arrived with marketable skills or quickly acquired the means for gainful employment.

LIFE IN TAR FLAT

Originally on the shoreline of Yerba Buena Cove, Tar Flat was part of what was known as "Happy Valley" in early 1850s. The cove provided protected anchorage for vessels and rapidly filled with treasure seekers from around the world who camped on the sandy beaches. By the late 1850s, developers had flattened the sandhills and filled the bay. Block 4 developed into the site of heavy industry with large iron foundries, lead works, and the city's Gas Light Company operating beside smaller foundries and blacksmiths, with residences, hotels, and shops occupying Baldwin Court and portions of Folsom and Fremont streets. Coal tar from the city's gas works dumped directly into the bay and gave the district its new name. The Miner's Foundry overshadowed the small cottages on Baldwin Court that backed directly into its yard (Figure 3.22).

It is unlikely that Bret Harte ever lived in Tar Flat, but his description of a neighboring court in a nearby neighborhood might well apply here. The "gentility" of his neighborhood suffered from the "blight" of an unwholesome cul-de-sac, whose "primitive people living in a state of barbarous freedom" apparently spent the "greater portion of their lives on their own door steps." Most shockingly:

> Many of those details of the toilet which popular prejudice restricts to the dressing-room in other localities were here performed in the open court without fear and without reproach. Early in the week the court was hid in a choking, soapy mist, which arose from innumerable wash-tubs. This was followed in a day or two later by an extraordinary exhibition of wearing apparel of diverse colours, fluttering on lines like a display of bunting on shipboard, and whose flapping in the breeze was like irregular discharges of musketry. It was evident also that the court exercised a demoralizing influence over the whole neighbourhood {Harte 1864b:492].

Despite the pollution, noise, and the crowded conditions, many families remained in their tiny homes on tiny lots on Baldwin Court for decades. The family of Irish blacksmith William Thompson lived at 21 Baldwin Court for 30 years; their tiny home backed up on the coke oven of the Miner's Foundry. Their eldest son was blind, their daughter died of smallpox at age 14, and the other sons suffered long periods of unemployment. The family backfilled Privy 1303 in around 1880; it shows a preference for mutton and very modest expenditures on meat and household goods. Privy 1304 behind the small residence next door at 19 Baldwin Court was filled in much later in around 1895, probably when the residence was converted into storage for the Miner's Foundry, which had acquired the property. Foundry workers and their families

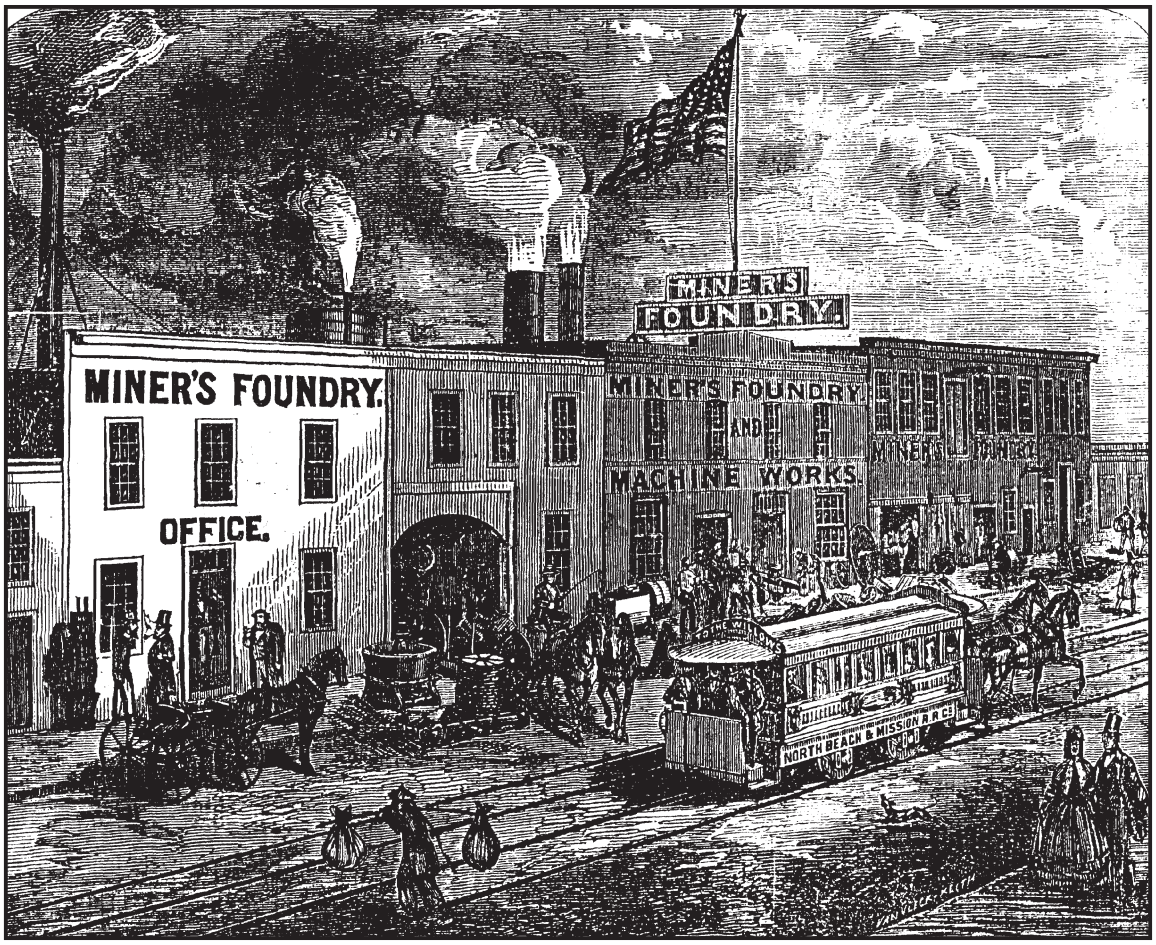


Figure 3.22. The Miner's Foundry on First Street, ca. 1865 by William Keith. (Illustration courtesy of the Bancroft Library, University of California, Berkeley: fF862.3 M324 v1:2)

had lived in the residence for decades and, while the residents who created the deposit cannot be determined, they were probably similar. Like their neighbors next door, the residents of this house made only modest purchases of meat and household goods; but they did show a marked preference for pork that was unique for the project.

The residents of the cottage at 13 Baldwin Court filled a line of three privies in their tiny backyard. The earliest, Privy 1307, is associated with the family of John Brown, an Irish laborer and sometimes stevedore, his wife, and seven children. Like their neighbors, the Browns ate very modestly, but they did have a large and varied table setting and many unique household items, perhaps related to their son's job in a junk store. Two families replaced the Browns: that of Martin Fuchs, a French carpenter in the iron trade, and of William Cadigan, an Irish laborer and sometime stevedore. Between the two families there were eight children still in school. A minimum of 12 people crowded into this 730-square-foot house on a 600-square-foot lot. They also ate modestly and the wives appear to have taken in washing. The household furnishings included some older, heirloom pieces. The third privy on the lot contained too few materials for study. The family of Patrick Murphy lived in their equally tiny cottage next door at 11 Baldwin Court for nearly 30 years. A Protestant from Belfast, Murphy worked as a laborer. The family had at least six children; at least one of their five girls worked as a dressmaker. The Murphy family filled their backyard privy (Privy 1318) around 1880. The family appears to have spent more on

meat and to have lived in better-appointed surroundings then their neighbors; they also may have raised poultry.

Patrick and Nancy McSheffrey lived at 9 Baldwin Court; Patrick worked as a laborer, sometimes as a longshoreman or weigher, and could neither read nor write. The family appears to have had no children living with them and took in boarders, one of whom was a teamster. They backfilled Privy 1310 in the middle 1870s; this privy contained over 30 alcoholic beverage bottles and 128 soda water bottles, most of which were whole and crammed into the small space. Irish immigrants George and Isabella Clark married in 1864 and shortly thereafter moved to a small cottage at 7 Baldwin Court. Adjoining privies (1311/1320) in their backyard appear to have been backfilled after the earthquake of October 1868 and before the Clarks moved around the corner to 242 Fremont Street. George had a long career in the iron industry as a boilermaker. In keeping with George's skilled occupation, the family ate better quality meats than most of their neighbors; the large collection of alcoholic beverage bottles (representing ca. 25% of the collection) may have been related to breakage in the quake.

As a main street, Folsom developed differently from Baldwin Court. Larger lots served more than one function often with two dwellings and a business operating on the ground-floor street frontage. Irish Catholic Robert Taylor owned a doublewide lot at 414–412 Folsom. Robert worked first as a packer for an importer of crockery and glassware and then as a porter for an importer of oils and lamps. As a property owner and collector of rents, he was relatively well off. The October 1868 earthquake appears to have destroyed much of the family's breakables. They backfilled their privy (1301) with a sizeable quantity of upscale ceramic, glassware, and lamps prior to moving to firmer ground in the Hayes Valley neighborhood.

Taylor's tenants, the Irish Catholic Thomas McEvoy family, next door at 414 Folsom also lost a sizable amount of personal property in the 1868 quake. Thomas engaged in various business ventures during his long tenure at this address, including selling fruit, furniture, groceries, liquors, and eventually running a boardinghouse. The family appears to have filled in their privy after the quake. At the time of the earthquake, Thomas was listed in the furniture business; but the 29 schnapps bottles in the privy indicate that he had another business operation on the site. The family of Wolf Samuel, a Jewish Polish tailor, lived in one of the two residences next door at 416 Folsom Street from 1880 until the area was destroyed by fire in the 1906 earthquake. The contents of Privy 1300 are associated with his family and probably with that of Leonard Smith, an engineer who lived in the back during the middle 1880s when the privy was filled. Privy 1300 was unusually deep and remarkable for the quantity and preservation of its artifacts, including fabric associated with Samuel's business.

Originally bay frontage, Fremont Street developed with a mix of small industries and residences, sometimes on the same lot. As on Baldwin Court, industry expanded onto former domestic lots. The small residence at 236 Fremont with a "storage" unit facing Baldwin Court stood next door to the Western Foundry, which took over the lot in the middle 1890s. The residence's privy (1333) was backfilled prior to the change in use. William Dougherty, an Irish longshoreman, may have been the last occupant of the residence. No specifics on his wife and possible children could be found. He did sell liquors from the property, and the privy contained a large quantity of table and glassware, as well as an unusual collection of faunal remains; William may have served meals along with his liquor. The remains of pets, a guinea pig and Chihuahua, were also unique to this feature (see Stoyka sidebar Chapter 7).

FAUNAL STUDIES: RATS AND PATHOLOGIES

Michael Stoyka

Rats

Gold Rush San Francisco was a boomtown made of wood, which seemed to be always on fire and overrun with rats (Derr 2004:143). Years later the great city on the bay's rat population brought about a serious health crisis. In 1900 (one year after an outbreak in Honolulu via southern China) the Plague invaded the docks and waterfront (Barde 2004). The source of this outbreak was the rats arriving in the thousands of ships that moved through the port.

Despite the unpleasant implications of rat infestation, some residents made the best of the situation. Some people derived entertainment and income from this malady: "residents paid top dollar for terriers or other proven rat killers, and the dogs regularly drew a crowd when loosed on their prey in city streets. They would also race the clock in barroom competitions designed to see how many rats they could kill in a set period of time" (Derr 2004:143–144). Rat catchers became a needed service for the population. Such individuals would go out every night on the outskirts of town and near the waterfront, trapping and hunting the numerous rodents. The rodents in many cases were later skinned, cured, and sold in bundles to a French company who manufactured them into kid gloves branded as "Alexandre's Best" for resale to America (San Francisco History 2006, citing *San Francisco Herald* 1857).

Archaeological evidence from the Cypress and West Approach projects provided information on what the average resident had to deal with from vermin through the MNI of rats and the rates of rodent gnawing on recovered bones. The deposition dates from the many features excavated in San Francisco and Oakland are bracketed by the historic accounts detailed above with most features falling between the 1860s and 1900. It is clear that residents from West Oakland and from San Francisco's Tar Flat neighborhoods had very different experiences in the rodent department.

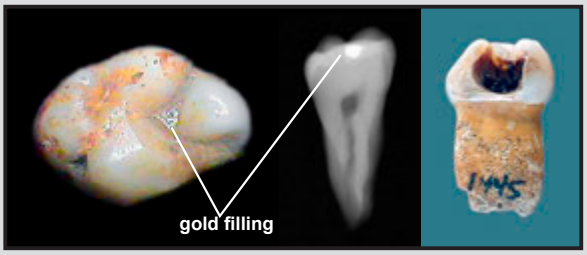
"Isaacsen's rat dogs in a cage." (Photo courtesy of Library of Congress, Prints & Photographs Division, LC-DIG-ggbain-00038; original shows 2 cages, each with 2 dogs)

Only three Cypress features had high numbers of rats, ranging from five to nine individuals per feature. Many of the West Oakland features had no rodent representation at all or are in the very low single digits. The same data from San Francisco towers over Oakland in regards to rodents. The features from Cypress with high counts are essentially equivalent to the "background noise" for West Approach. The range for the most rat-laden features from South of Market is from 8 to 24 individuals; 8 privies and wells had this kind of quantity.

The rates of rodent gnaw-marks correlate with the MNI's of the rats from each project area. Most of the Cypress features had percentages of gnawing that were in the single digits, while about one quarter of the features from San Francisco had gnawing rates of over 30 percent and 2 were as high as 46.5 percent (Block 9, Well

A Norway rat *(Rattus norvegicus).* (Photo courtesy of United States Forest Service)

6) and 66 percent (Block 9, Privy 8). It is apparent that the rodent infestation in San Francisco was at a much higher level than in Oakland. The conclusions are logical when San Francisco's isolated geography, population density, and nautical setting are taken into account. The San Francisco project area also had a high concentration of retail and wholesale butcher and fish shops, which would have attracted rodents. Every residence in the project area was within one or two blocks of several establishments of this type (San Francisco City Directories v.d.).



Human tooth with gold filing; visible as shiny spot on top of tooth and white spot in x-ray (Privy 507); and human tooth with large abscess (Privy 1300). (Note: not to scale)

Pathologies

The R*attus norvegicus* (Norway rat) bone specimens from San Francisco lead to another very interesting area of study. The faunal analyst described seven pathologies on rat elements. One of these elements bears a direct correlation to the animals responsible for keeping rat populations in check: A rat tibia with small puncture marks consistent with the canine teeth of a domestic cat. No healing took place at the site of the wound, which strongly suggests that this interaction resulted in the rat's demise (see Cats sidebar, this chapter). The other pathologies on rat elements are best characterized as bone growth or porosity deformities and abscesses. While most of these anomalies are due to reactive bone probably from disease and/or infection, a couple could also be the result of trauma. A particularly impressive pathology is a humerus, radius, and ulna that have completely fused from bone growth. The anterior of this elbow joint also has a significant abscess. It may be that this animal was lucky enough to escape the clutches of a cat only to live out the rest of its days with a crippled and deformed limb.

Rat humerus, radius and ulna that are fused (Privy 1, Block 9).

The remaining bone deformities fall into four categories: two human teeth, avian remains, fish bone, and food bones. The state of 19th-century dental hygiene is a subject unto itself. It is not uncommon to recover human teeth from historic features either as deciduous losses or extractions due to periodontal disease. A tooth from Privy 1300 on Block 4 has a deep cavity that was surely quite uncomfortable and probably led to its forcible removal. In contrast, a tooth from Privy 507 on Block 5 had a cavity that had been treated and filled with gold, but was ultimately extracted anyway.

Another category for skeletal anomalies is on avian remains. The specimens described represent both domesticated and wild fowl, and are almost entirely from the West Approach Project. Two bone growth pathologies on a humerus and a tarsometatarsus, an ulna with a healed fracture, and a humerus with a smooth perforation are on chicken bones. The pathologies could be related to survived attacks by the numerous feral dogs and cats that were roaming these neighborhoods. There is evidence that chickens were being raised for eggs and/or meat in quite a few households, so the chickens may have been rescued from the clutches of a violent death (possibly resulting in the bludgeoning of the culprit), and were than cared for so they could return to their egg-laying duties (Grier 2006:35; Praetzellis and Praetzellis, ed. 2004: 150–151).

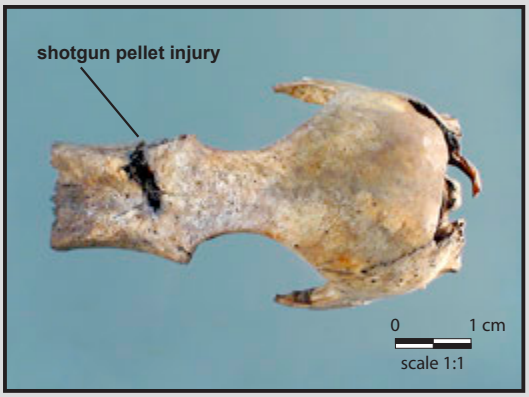
Chicken ulna with healed fracture; note area where bone has thickened (Well 853, Block 10).

Duck ulna with healed fracture. (Privy 1333, Block 4).

The California Academy of Sciences possesses avian specimens with healed fractures that occurred in the wild. Bird skeletons are very strong for their weight and function but can be damaged during flight, landing, or by predation. Susan Heckly from the Lindsay Wildlife Center in Walnut Creek states, "I'm sure that some wild animals can survive after serious injuries, especially with subsidy from humans. Many people have ended up with a wild 'pet' when the animal's been injured and then 'rescued'. Most serious injuries would cause such a handicap for the animal that it wouldn't survive for long without help" (pers. comm. 2007). Three elements from two different ducks found in Privy 1333 raise the possibility that someone at this address was caring for injured birds. A mated radius and ulna from a large duck species displayed healed fractures resulting in a significant misalignment of the healed bones and the sternum of a greater scaup has a deformity of its posterior keel.

A California quail tibiotarsus had a healed trauma resulting in the distal fusion of the fibula with that element (West Approach Block 10, Privy 808). This specimen could be another survived attack from a predator. Quail (a bird that spends most of its time on the ground) are particularly vulnerable to cats, rats, raccoons, and dogs. Quail can be found in limited numbers in Golden Gate Park and the Presidio today. The numbers of quail in San Francisco have dwindled in recent years. Whether one cause of this decline could be the feral cat population is a point of some contention.

Several duck elements revealed another type of trauma—evidence of shotgun pellet damage. Two large duck elements from West Approach Block 10, Privy 808 exhibited shot damage. A duck keel from West Approach Block 4, Privy 1316 showed evidence of a wound that has a small circular entry wound on one side and a bulging impact on the opposite side. This example is slightly different, because the trauma does not appear to have been fatal since the wound shows



Duck skull with shotgun pellet damage (Privy 3, SF-80 Bayshore)

signs of healing. Lastly, a duck skull from the SF-80 Bayshore Project, Privy 3 with shotgun pellet damage denotes its acquisition as a game animal. All of these features also contained artifacts related to firearms.

Two fish elements of the more than 43,000 such bones recovered bore unusual features. One rockfish vertebra found in Privy 857 on Block 10 has a large bone growth on its spine. There are numerous vectors for fish pathologies including injury, predation, disease, and parasites. Another interesting ceratohyal bone from a rockfish has tooth perforations that are consistent with the canine dentition of a domestic cat leading to the conclusion the cat made a snack of the scraps after human consumption.

Finally, there are eight examples of pathologies on mammalian food animals. These specimens are perhaps the most alarming considering the diseased elements represent meals. When broken down by meat type: two are from beef bones, two are from mutton bones, and four of the

Rockfish vertebra with bone growth, (Privy 857, Block 10).

Diseased pig femur eaten as a roast (Privy 851, Block 10).

examples are on pork elements. Most of the major meat animals' abnormalities are bone growth pathologies from disease and/or trauma, or abscesses and are located at or near an articulation. It appears that pigs have a slightly higher tendency for disease. An extremely pathological pig femur was recovered that bore consecutive knife scores or "carving marks" confirming that it was a ham and indeed a food item. The diseased element is fully involved in whatever condition or pathogen caused the abnormality resulting in significant bone growth, and with routes from the center of the bone for a flow of puss clearly visible. The irrefutable evidence for consumption makes this example particularly disturbing.

Sheep tibia with bullet hole; exit on right (Cypress).

A total of 31 pathologies and oddities have been observed and identified during this analysis. The number of pathologies on items that were obviously consumed tells us quite a bit about the state of the food animal population at the time and has possible implications regarding animal husbandry practices. One must also wonder whether there may have been one or more questionable butchers in some of these neighborhoods. In contrast, the Cypress Project in Oakland had nearly twice as many features and bones analyzed, but only produced two such anomalous elements. One sheep tibia has damage that could only have been caused by a firearm, and may have been used for target practice. The only other pathology from this project is a sheep rib with puncture damage of unknown origin.

Two doors down and two decades earlier, widow Amanda Scales operated a boardinghouse at the three-story residence at 240 Fremont. Amanda's husband had been a relatively well-off merchant, but her fortunes declined following his death. In 1870, her son worked in the customs house, while boarders included machinists, seamen, stevedores, clerks, and a tailor; Amanda had a housekeeper and was listed as blind on the census. Privy 1326, backfilled around the time Amanda moved from 240 Fremont, sat upon a unique granite base that may have been installed because the facility was excavated into sand. Residents of this boardinghouse ate their varied, but moderately priced meals in a fashionable setting. Two families lived in the simple house next door when Privy 1322 was backfilled in the late 1880s: that of Michael Hurley, an Irish laborer, and James Conniff, an Australian Catholic fireman; both men worked at least part time as lamplighters for the S.F. Gas & Light Company. The simple collection associated with these two young families has some evidence of hunting (an elk bone) and a large quantity of fish.

Case Study: Murphy family

The family of Patrick and Cecelia Murphy is a good representative of on the residents of Baldwin Court in the middle of the 19th century. The Irish Protestant family lived on a tiny lot in a small two-story cottage dwarfed by the Miner's Foundry behind them. Patrick worked as a laborer and his wife and daughters helped support the family in various ways, from backyard agriculture to sewing. The family owned their home at 11 Baldwin Court where they lived for over 30 years.

A native of Belfast, Patrick Murphy became a naturalized American citizen in Brooklyn, New York, in 1852. Patrick was born around 1825; his Irish wife, Cecelia, was born seven years later in County Down,

Northern Ireland. Their two oldest daughters, Mary and Rose, were both born in New York before 1859. By 1860 the family had arrived in San Francisco. In that year, Patrick worked as a laborer and the family lived around the corner at 312 Fremont. According to the census enumerator, Cecelia could neither read nor write, while 6-year-old Mary attended school. The Murphy family had moved to 11 Baldwin Court, when Patrick registered to vote in June 1866. In the early years, the Murphy family occasionally took in a boarder. According to the 1870 census, Patrick and Cecelia had three more children since the previous enumeration: Catherine, age 8; Maggie, age 6; and James age 3. Catherine attended school with her two older sisters. From 1875 to 1888, Patrick was listed as a laborer in the city directories except in 1887, when he called himself a stonemason. Patrick and Cecelia had another daughter, Lizzie, born about 1872. Mary no longer lived at home in 1880, but their other children still did. Twenty-one-year-old Rose worked as a dressmaker. The previous two years she had worked as a machine operator at E. Derrick & Company manufacturers of bags, tents, and awnings. Catherine, age 17, no longer went to school with her three younger siblings.

Patrick died at age 59 on 7 June 1888. The funeral was held at his home and he was buried at Mount Calvary Cemetery. James Patrick Murphy, his sole son, worked as a last maker (shoe forms) for Potter & Sexton in 1889. The family appears to have remained at 11 Baldwin until at least 1894. By 1896 James lived at 307 First Street. It is unknown whether his mother Cecelia was still living at 11 Baldwin when she died in 1897 at age 63. Either her late husband or her son had been a Mason and a Knight of Pythias, because her funeral was held at Pythian Castle under the auspices of Excelsior Lodge No. 12, K of P; Cecelia Murphy was buried at the Masonic Cemetery.

Privy 1318 was located in a rear corner of the backyard. The TPQ is 1877 based on a Pioneer Soda Works bottle and the ceramic mean date based on marked pieces or datable patterns is 1866.7 based on 24 items. The feature is believed to have been filled in around 1880, when the dwelling may have been hooked up to the sewer line. Privy 1318 is associated with the Murphy family who lived here from 1866 through at least 1894 (Figure 3.23).

The Murphy tableware is primarily made of white improved earthenware (60%), with lesser, yet similar, quantities each of opaque porcelain (14%), pearlware (12%), and porcelain (11%). In addition there are single vessels of Jackfield and earthenware. Most of the ceramic vessels are decorated (58%), with the white improved earthenware vessels being decorated by molding; named patterns include Scalloped Decagon, Potomac Shape, Sharon Arch, Fig, True Scallop, Forget-me-not, Triple Border, and Double Sydenham. Decoration on white improved earthenware other than molding includes: blue transfer print, hand painted, hand painted and cut sponge, and scalloped with hand painting. Opaque porcelain is decorated only with molding—Double Sydenham, Hanging Leaves, and Lily of the Valley. All the pearlware is decorated. Matched pieces include five blue shell-edge plates, gaudy plate and saucer, and two annular bowls in matching colors of yellow and blue (Figure 3.24); another annular bowl is blue and brown in similar pattern. A creamer is hand painted with sprigs. Most of the porcelain (70%) is undecorated; the three decorated items are a sided possible sugar, a lid, and a hand painted and gilt saucer. It appears that the collection represents portions of several matched sets of tableware in various designs and fabric types. The earthenware teapot has a variegated glaze and the lone piece of Jackfield is undecorated, however, its dark purplish color is in stark contrast to the collection's majority of white vessels. Although the ceramic mean date based on marked pieces or datable patterns coincides with the family's move to Baldwin Court, at least some of

Figure 3.23. Privy 1318, Artifact Layout, the Murphy Family. From 1867 to 1894 the Murphy family lived at 11 Baldwin Court. Patrick Murphy, an Irish laborer, owned the house and lived there with his wife, Cecelia. They had six children, several of whom lived at home at least until their late teens. The privy was abandoned and filled in the early 1880s on conversion to a plumbed toilet. The deposit contains a variety of items discarded during this transition, including tableware, toys, various containers, personal items, and an interesting collection of food bone.

the ceramic vessels may have been acquired second-hand; the pearlware was long out of date (Figure 3.25).

If the ceramic and glassware vessel types are combined, drinking vessels are in the majority (42%) with lesser amounts of tableware (35%), and serving vessels (20%). Glassware is overwhelmingly composed of drinking vessels (85%); the rest are serving vessels. Most of the glassware is decorated (83%). All but one of the 52 pieces of glassware is colorless; the exception is Vaseline glass cordial. The most common glass decoration is panels of varying height and number; this style is found on 2 cordials, 1 goblet, 2 stemware, 18 tumblers, and 1 stemware or tumbler. Other matched patterns on multiple vessels include: 2 etched grape and vine, 2 honeycomb, and 2 diamonds. The quantity of drinking glasses indicates that the Murphys had a sufficient supply and variety of glassware to entertain guests in a semi-formal manner. A total of 9 alcoholic beverage bottles was recovered: 5 ale or beer, 3 wine, and 1 indefinite. The only tobacco artifacts are 6 ball clay pipes.

Figure 3.24. Two annular bowls from Privy 1318 (Block 4); while not identical, they are very similar in color and design.

The Murphys served beef (49%) more often than mutton (22%), pork (15%), or fowl (14% by meat weight). The proportion of pork, however, is higher than in most deposits in this neighborhood. The beef eaten was typically of moderate price (55%) with slightly more high (25%) than low (20%). The cuts consumed were most often blade or sirloin steaks followed by stews or soups. Only two rump roasts are represented. Mutton cuts are more uniformly priced with high (37%) and moderate (33%) slightly favored over low (30%). Soups and stews were eaten more often than steaks. Mutton roasts were eaten more often than beef roasts, including the leg of mutton (see Stoyka sidebar in Chapter 4). Pork cuts are typically low priced (50%), and with more high value cuts (31%) than moderate (19%). The most common cuts are soup or stew bones from the head and jowl. The few pork steaks and roasts are in similar proportion to mutton. An unusual aspect of these major meat animals is the presence of a juvenile animal from each group. Cuts from juvenile cows, lambs, or piglets are rarely found, so the presence of all three is most unexpected.

Figure 3.25. Examples of Pearlware from Privy 1318 (Block 4).

The fowl remains are notable for the number of birds present. Domestic poultry (67%) are more common than game birds (33%) due to the presence of a turkey and 10 chickens. The game birds include mallard ducks (3), a northern pintail, a goose, a duck, and a duck or goose. The remains of 4 indeterminate juvenile birds were also found; these may have been chicks raised on site. A single cottontail rabbit is represented; it is not clear if this was a pet or a meal. A juvenile cat was recovered along with 4 juvenile mammals (not kittens) that were too young to identify. The presence of dog gnawing on a small number of bones may indicate the presence of puppies from a small breed of dog kept by the Murphys. The remains of 5 Norway rats were found in the fill.

The Murphys discarded a variety of decorative items including a clock, furniture parts, and four flowerpots. There is a pair of hand painted polychrome porcelain vases, a Parian figural vase of a hand holding flowers, and a porcelain spill vase with molded and applied flowers and berries highlighted with gilded accents (Figure 3.26). At least four mirrors and three photographs are in the collection. A porcelain picture hanger that may have held one of the mirrors suggests picture molding in at least one room of the house. Several types of lighting devices were discarded: two candlesticks, at least three oil lamps, and three whale oil lamps.

Figure 3.26. Furnishings from Privy 1318 (Block 4).

Grooming and Health items account for over 9 percent of the total items recovered, including a hairbrush, 8 combs and 2 toothbrushes. A perfume bottle and a paint pot for cosmetics were also discarded. There are numerous containers: a soap dish, a glass syringe and plunger, and a rubber pump with tube. Chamberpots were typically discarded when privies are filled for conversion to plumbed fixtures; there are four from this privy.

The remains from several wool and one silk garment were found along with a variety of buttons. These included an inexpensive, store-bought men's jacket with machine-made buttonholes and an old-fashioned woven woolen plaid shawl with fringe. By 1877 Rosie Murphy appears to have been operating a sewing machine at E. Derrick & Co, maker of awnings, tents, and bags. In 1880 she was listed as a dressmaker. The only evidence of her skills are the possible scrap from a remade outergarment and a bone crochet hook.

Four shoes were discarded—an adult size 6-1/2, boy's size 13 wide, child's size 9, and toddler's size 5. The boy's shoe shows wear and a cobbler's repair along the toe. The smaller children's footwear shows no signs of wear and were probably outgrown.

The Murphy children had apparently outgrown their toys as well. There are 9 porcelain dolls: 7 china head and 2 Frozen Charlottes. A hard rubber doll head is a less destructible version of a china doll. The 13 doll dishes are all of porcelain. The marbles are porcelain (14), glass (4), and clay (1). A harmonica and domino were also found.

Although Cecelia Murphy was listed as illiterate on the 1870 census, her children all attended school and could read and write. The remains of 2 slate tablets, 13 slate pencils, and 4 ink bottles were recovered.

By the time the Murphys filled their privy with domestic refuse in the 1880s; they had lived for more than ten years on the lot and would remain another decade thereafter. Some of their discarded tableware was already falling out of fashion when they moved to Baldwin Court in

the late 1860s. Much of what they discarded was clearly behind the times by the 1880s. Although they owned numerous vessels for serving coursed meals, the service did not match. More expensive porcelain was limited to a few pieces that may have been reserved for formal teas. The Murphys ate moderately priced cuts of meat with a higher proportion of pork and fowl than their neighbors. Despite the small size of the lot and yard, the family may have raised poultry for eggs or meat. Although the house was small, it was owned, not rented, and appears to have been well appointed with decorative items. The children had numerous toys and good grooming was important to the family.

Tar Flat Sample

The Tar Flat sample is comprised of 13 archaeological features associated with residences and dating to before 1900. Table 3.3 provides the characteristics for these features. The average lot and dwelling measured considerably smaller than both Rincon Hill and Mission Bay samples—at about 1250 square foot for the lot and 1180 for the residence. Additionally none of the dwellings had basements, making them effectively even more crowded. Each individual claimed only just over 200 square feet based on available information. Some lots housed multiple residences and businesses as well within the same cramped quarters.

As with Mission Bay, most heads of households had been born in Ireland (10), although Australia, France, and Poland were each represented. The heads of only two households

Table 3.3. Tar Flat Feature Characteristics

ARCHITECTURAL			
Lot Size	High – 2165 sq. ft.;	Low – 600 sq. ft.;	Average – 1241 sq. ft
House size	High – 3000 sq. ft.	Low – 600 sq. ft.	Average – 1184 sq. ft.
Basements	0 out of 13 features are from residences with basements		
Square footage per person	High – 500 sq. ft.	Low – 61 sq. ft.	Average – 203 sq. ft.
Multiple family parcels	3 with 2 residences (possible businesses as well); 1 lodgings[1]		
SOCIAL/ECONOMIC			
Nativity (Head of Household)[2]	Australian (1); Irish (10); French (1); Polish (1); U.S. (2); Unknown (1)		
Occupation (Head of Household)	Professional (1); Skilled (7); Semi-skilled (3); Unskilled (4); Unknown (1)		
Tenure	Owner (3); Tenants (9); Unknown (1)		
Religion	Catholic (4); Jewish (1); Protestant (2)		
ARCHAEOLOGICAL			
Sample Size	13		
Feature Type	Privy (13); Well (0)		

[1]Counted under social/economic factors as a household. [2]Some features associated with more than one household.

were born in the United States. The occupations of the heads of households were more mixed than the other neighborhoods with seven Skilled, three Semi-skilled, four Unskilled, and one Professional. They tended to change occupations more frequently and to suffer more periods of unemployment. Only three families owned their homes, nine rented, and the status of one family could not be determined. Four households had Catholic backgrounds, two Protestant, and one Jewish. In summary, these features appear to be associated with working-class Irish households with various ranges of training from skilled to unskilled.

STATISTICAL FINDINGS

Bruce Owen

In San Francisco as in many American cities, the average household's economic status declined as one moved from the hills to the flats, and with proximity to noxious industry and environmental pollution. In this study, Rincon Hill clearly was the best neighborhood in relation to views, quiet, and amenities; Tar Flat was the least desirable due to overcrowding, pollution, and noise. Neighborhood level statistics provide details on the significant archaeological correlates of these neighborhood differences. The three neighborhoods fell into a single, clear order of general socioeconomic status when ranked by every category of consumption except social drugs. Rincon Hill was the most prestigious or wealthy neighborhood, followed by Mission Bay, with Tar Flat at the bottom.

The methods used in these analyses are described in more detail in Chapter 11 and only briefly referenced here; the detailed statistical analyses by Bruce Owen are provided in full in Appendix F. Two statistical tests were used: The Wilcoxon rank-sum test, which assesses whether two distributions of values are significantly different (do households in neighborhood A tend to have a higher proportion of porcelain ceramics than households in neighborhood B?); and the Spearman rank correlation, which tests for an ordered relationship between values such as "pounds of beef" and a ranked series of categories, such as Unskilled, Semi-skilled, Skilled, Professional, and Wealthy professional occupational status groups.

The Wilcoxon tests showed that the neighborhoods vary consistently in both meat species and meat cut prices (Table 3.4). People's choices about the cost of meat cuts corresponded just as expected to the occupational status ranking of their neighborhood. While the species patterning did not reach the 10 percent confidence level, it was so consistent across all categories that it should be studied further. Rincon Hill households ate the most expensive cuts and more of the preferred species (i.e., beef over pork). Tar Flat households ate the cheapest cuts and more pork in relation to beef. Mission Bay was intermediate on both measures. Households in all neighborhoods bought similar proportions of low-priced cuts. Households in the lower-status neighborhoods economized by buying fewer expensive cuts and substituting more medium-priced ones, rather than by eating more cheap cuts. While households in Mission Bay tended to purchase an intermediate mix of cuts. The use of domestic poultry did not vary by neighborhood, although there was a slightly larger contribution of game to the Tar Flat diet, suggesting that game functioned as a lower-status necessity rather than a high-status luxury.

The Spearman rank correlations showed that high-priced cuts comprised a larger percentage of meat consumed in the Rincon Hill neighborhood and medium-priced cuts a higher percentage of meat consumed in Tar Flat, both at well under the 5 percent confidence level. Mission Bay

Table 3.4. San Francisco Neighborhood Statistically Significant Differences[1]

Neighborhoods[2]	Variable	Which has more?	Probability	Sig @ 5%	Sig @ 10%
RH vs. TF	High Meat Price	RH	0.0135	X	X
RH vs. TF/MB	High Meat Price	RH	0.0290	X	X
RH vs. TF/MB	Medium Meat Price	Not RH	0.0316	X	X
TF vs. RH/MB	High Meat Price	Not TF	0.0413	X	X
TF vs. RH	Medium Meat Price	TF	0.0027	X	X
TF vs. RH/MB	Medium Meat Price	TF	0.0191	X	X
TF vs. MB	Medium Meat Price	TF	0.0788		X
RH vs. MB	Earthen/car[3]	MB	0.0082	X	X
RH vs. MB	Earthen/cer	MB	0.0071	X	X
RH vs. TF	Earthen/cer	TF	0.0062	X	X
RH vs. TF	Earthen/sub	TF	0.0050	X	X
RH vs. MB/TF	Earthen/cer	MB/TF	0.0032	X	X
RH vs. MB/TF	Earthen/sub	MB/TF	0.0026	X	X
RH vs. TF	WIE/sub	TF	0.0825		X
RH vs. MB/TF	WIE/cer	MB/TF	0.0807		X
RH vs. TF	Ceram/sub	TF	0.0905		X
RH vs. MB/TF	Ceram/sub	MB/TF	0.0975		X
MB vs. TF	Wine/talc[4]	MB	0.0704		X
MB vs. TF	Tobacco/fpc	TF	0.0365	X	X
MB vs. RH	Tobacco/fpc	RH	0.0057	X	X
RH vs. MB/TF	Tobacco/fpc	RH	0.0379	X	X
MB vs. RH/TF	Tobacco/fpc	RH/TF	0.0034	X	X
TF vs. RH	Soda/sub	TF	0.0021	X	X
TF vs. MB	Soda/sub	TF	0.00365	X	X
TF vs. RH/MB	Soda/sub	TF	0.0052	X	X
RH vs. MB	Soda/sub	MB	0.0295	X	X
RH vs. MB/TF	Soda/sub	MB/TF	0.0048	X	X
TF vs. RH	Soda/fpc	TF	0.0029	X	X
TF vs. MB	Soda/fpc	TF	0.0176	X	X
TF vs. RH/MB	Soda/fpc	TF	0.0030	X	X
RH vs. MB/TF	Soda/fpc	MB/TF	0.0327	X	X
RH vs. TF	Gr-equip/fpc 5	RH	0.0162	X	X
RH vs. MB/TF	Gr-equip/fpc	RH	0.0304	X	X
TF vs. RH	Perfume/fpc	RH	0.0698		X
TF vs. MB	Perfume/fpc	MB	0.0316	X	X

Table 3.4. San Francisco Neighborhood Statistically Significant Differences

Neighborhoods	Variable	Which has more?	Probability	Sig @ 5%	Sig @ 10%
TF vs. RH/MB	Perfume/fpc	RH/MB	0.0196	X	X
TF vs. RH	Perfume/gr-cons	RH	0.0266	X	X
TF vs. MB	Perfume/gr-cons	MB	0.0199	X	X
TF vs. RH/MB	Perfume/gr-cons	RH/MB	0.0085	X	X
RH vs. TF	Patent/sub	TF	0.0824		X
RF vs. MB/TF	Patent/sub	MB/TF	0.0619		X
RF vs. TF	Patent/gr-cons	TF	0.0168	X	X
RH vs. MB/TF	Patent/gr-cons	MB/TF	0.0586		X
TF vs. RH/MB	Patent/gr-cons	TF	0.0425	X	X

[1] Wilcoxon Rank-Sum Test; see Appendix F.

[2] Neighborhoods: RH, Edge of Rincon Hill; MB, Shore of Mission Bay; TF, Tar Flat.

[3] Ceramic MNIs were run as a fraction of total ceramic MNI (cer), fraction of all significant items (sub), and MNI of serving items and ceramics overall.

[4] Social drugs were run as fraction of all significant items (sub), fraction of all food prep and consumption items (fpc), and mean of alcohol type over all alcohol items (alc).

[5] Gr-equip is grooming and health equipment (chamber pot, soap dish, hairpins, toothbrushes, etc.), Gr-cons is grooming and health consumables (product containers)

appears the most variable of the neighborhoods in terms of meat-price preferences (Table 3.5 and Figure 3.27).

The ceramic wares used in the three neighborhoods reflected the neighborhoods' socioeconomic ranking, but not strongly. Rincon Hill households averaged the highest proportions of porcelain and Overseas Chinese porcelain, and the lowest proportions of white improved earthenware, earthenware, and basic wares. Households in Tar Flat had the lowest average proportions of porcelain and Overseas Chinese porcelain, and the highest of earthenware. Mission Bay tended to fall in between, or close to Tar Flat, for all of these wares. Households in the lower-status neighborhoods averaged relatively more opaque porcelain and basic wares. Only some of these patterns are statistically significant (Table 3.4). Rincon Hill had fewer items of the cheaper earthenware fabric than Mission Bay and Tar Flat in six comparisons at the 1 percent level. White improved earthenware made up a larger proportion of the ceramic assemblage in Tar Flat, and in Tar Flat and Mission Bay in comparison with Rincon Hill. This strongly confirms the association of earthenware with lower economic status.

The Spearman rank correlations also showed a strong correlation between earthenware and neighborhood rank at better than 1 percent, with the lower-status neighborhoods having more earthenware both as a fraction of the ceramic assemblage and as a fraction of all significant discards (Table 3.5, Figure 3.28).

Wealthier neighborhoods discarded fewer ceramics relative to other refuse: Rincon Hill exhibited the lowest mean proportion of ceramics to other discards; assemblages from Mission Bay contained an intermediate mean proportion of ceramics as a fraction of all items, and Tar Flat contained the highest mean proportion of ceramics relative to other discards. This pattern

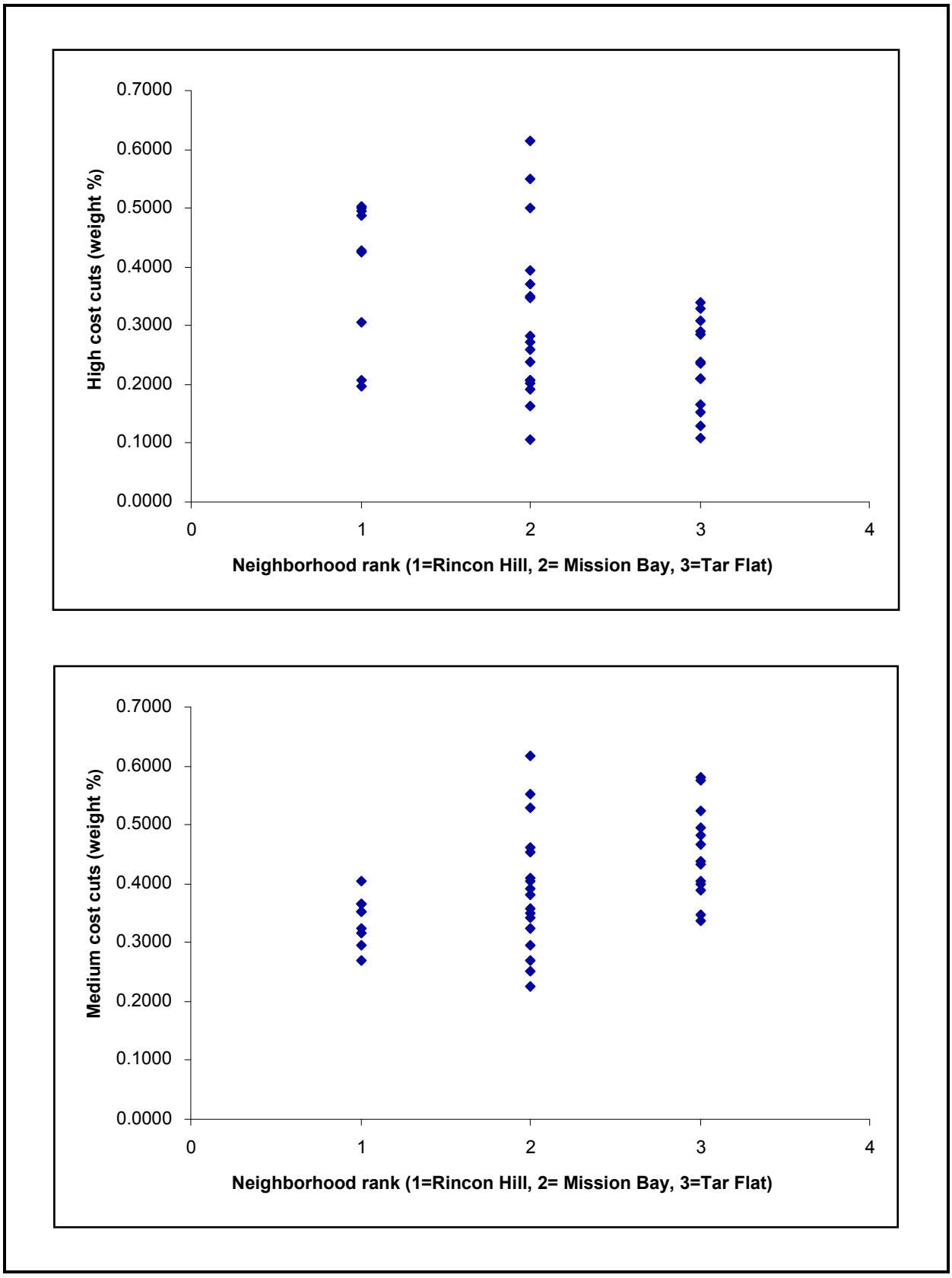


Figure 3.27. San Francisco neighborhood significant Spearman rank correlations related to meat price.

Table 3.5. San Francisco Neighborhood Statistically Significant Correlations [1]

Variable	Correlation coefficient	Probability	Sig @ 5%	Sig @ 10%
High Meat Price	-0.41	0.0093	X	X
Medium Meat Price	0.47	0.0025	X	X
Earthenware/all ceramics	.040	0.0081	X	X
Earthenware/MNI	0.40	0.0085	X	X
Soda water/MNI	0.53	0.0003	X	X
Soda water/Food prep, con	0.49	0.0008	X	X
Grooming-health equip/Food prep, con	-0.35	0.0215	X	X
Perfume-primping/Food prep, con	-0.32	0.0385	X	X
Perfume-primping/Groom-health cons	-0.40	0.0079	X	X
Patent medicine/MNI subset	0.27	0.0837		X
Patent medicine/Groom-health cons	0.38	0.0134	X	X

[1] Spearman Rank Correlations, see Appendix F.

suggests that wealthier households sold or donated a greater fraction of their unneeded ceramics than did poorer households.

While one might expect that households in more prosperous neighborhoods used more ceramic serving vessels, the proportion of ceramic serving vessels as a fraction of all food preparation/consumption items is virtually identical in all three neighborhoods. This is unexpected and suggests little difference in the ability to set a formal table in each of the different neighborhoods.

The social drugs category only patterned weakly by neighborhood and was much stronger by occupational rank. The summary tables of means suggests that the overall consumption of social drugs and of alcohol alone was highest in Tar Flat, less in Mission Bay, and least in Rincon Hill. None of these trends, however, proved to be significant in the Wilcoxon tests. Only one pairwise analysis proved significant: Mission Bay had more wine/champagne bottles relative to other alcohol items than did Tar Flat, presumably reflecting the number of professionals living in Mission Bay.

Tobacco use did pattern by neighborhood: Tobacco items were most common relative to food preparation/consumption items in Rincon Hill, intermediate in Tar Flat, and smallest relative to food preparation/consumption in Mission Bay (see also Chapter 6 on tobacco). The Spearman Rank tests found no correlations between social drugs and neighborhoods.

There were 9 Wilcoxon significance tests at the 5 percent confidence level related to soda water bottles. In all of them, Tar Flat residents discarded more soda water bottles than other neighborhoods, while people on Rincon Hill discarded the least. The Spearman analysis confirmed the strength and significance of this correlation generating the largest correlation coefficients of the study (Table 3.5, Figure 3.29). This dramatic neighborhood effect suggests a specific causal factor directly related to neighborhood, such as differences in the availability of piped water. The geographic and documentary data support this interpretation. Much of Tar Flat was on land reclaimed from the bay. None of the residences in our sample had wells; even if they

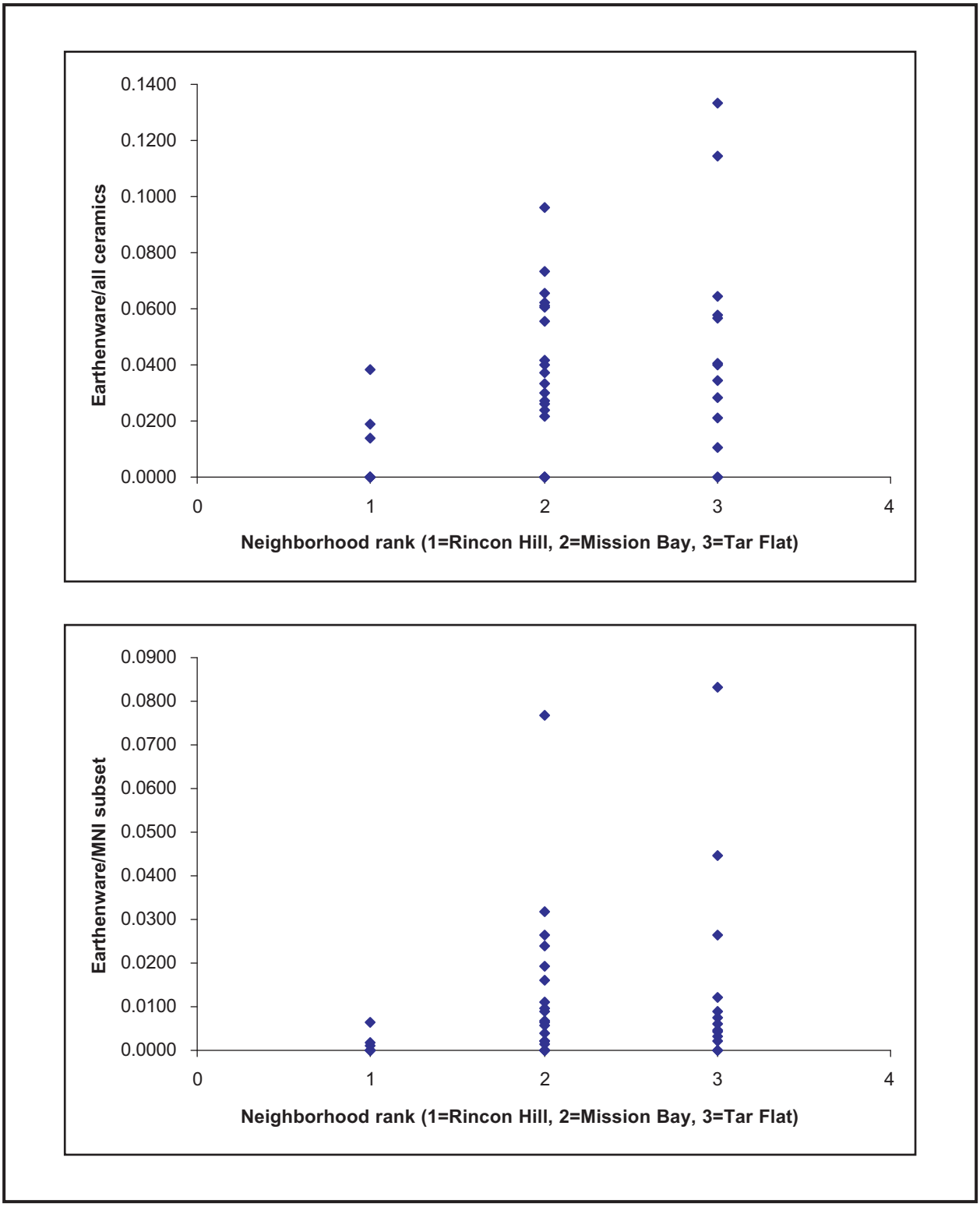


Figure 3.28. San Francisco neighborhood significant Spearman rank correlations related to ceramics.

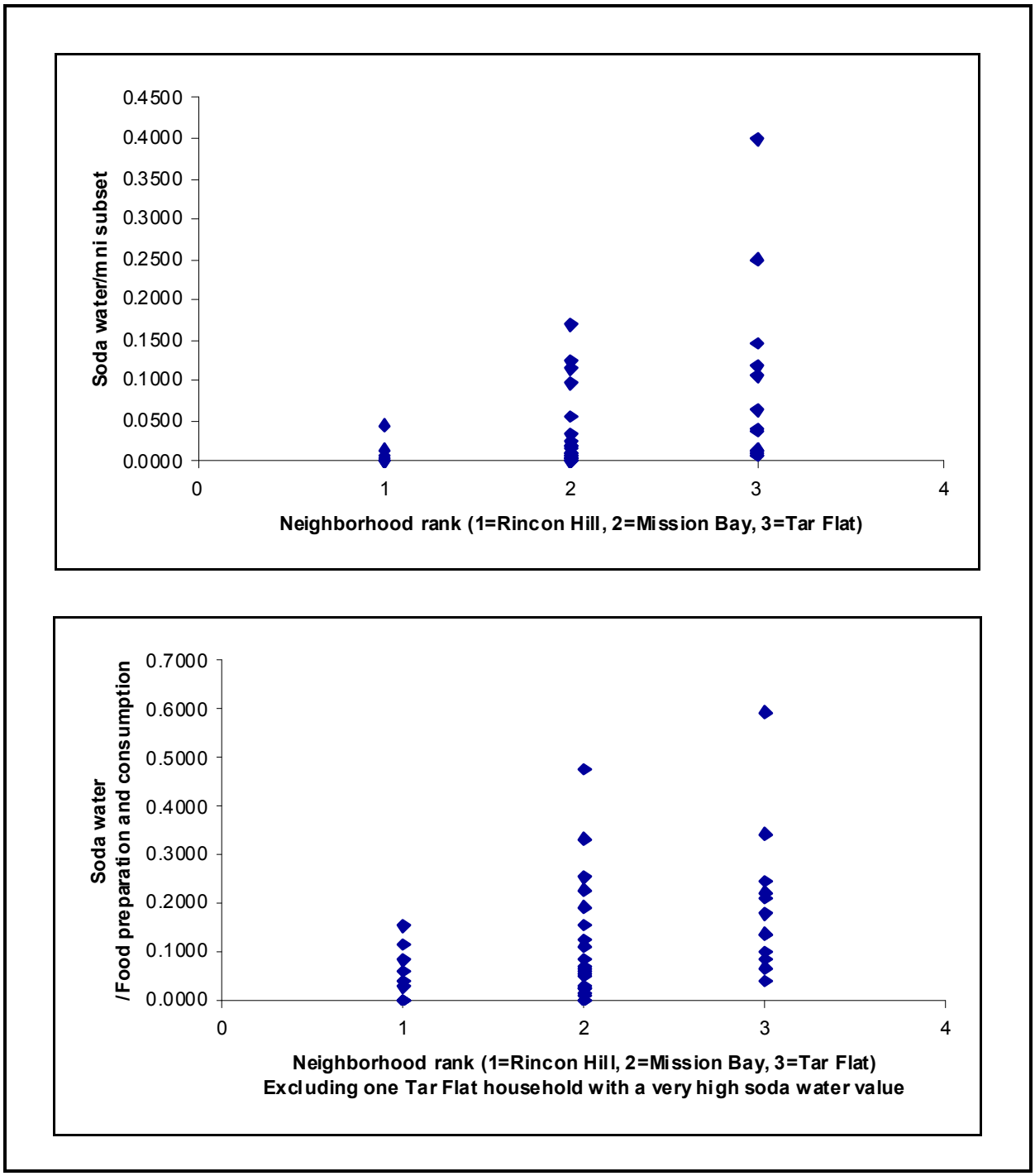


Figure 3.29. San Francisco neighborhood significant Spearman rank correlations related to soda water bottles.

had been dug, the water would have been brackish. It is unclear when city water reached this neighborhood. As late as 1870, operators of a water cart lived on Fremont Street in the project area. South of Market Boys remembered hauling water from the local cemetery:

> In the old days, before the Spring Valley Water Co. extended its pipe lines south of Market, the residents of the District depended upon the water cart for its household requirements. One of those institutions was owned by Joe Fairfield and his establishment consisted of a large barrel or pipe mounted on two wheels and drawn by a horse. The minimum amount Joe would sell was twenty gallons which was measured out in five gallon containers and then poured into the purchaser's barrel. Old Tom Tierney had three children and lived at 24 Folsom Avenue where he had a well which supplied his neighbors. In those days, mother bathed us on Saturday night in the family wash tub and when we got prosperous, a tin bath tub was purchased which was hung outside the kitchen door to the envy of neighbors. Well, it took a large amount of water to keep us youngsters clean which, I believe was responsible for Tom Tierney's well going dry. With this advent, Joe Fairfield got a new customer, but the twenty gallons he supplied were far from sufficient to bathe us all and leave a surplus for wash day Monday. We had a lot of fun, however, toting water from the cemetery at Seventh and Market down to the house and it was necessary to make several trips to fill the barrel [Roxburgh 1926:11].

There were significant differences in the importance of appearance and personal grooming between the neighborhoods, as shown in both the Wilcoxon tests and the Spearman correlations. The higher a neighborhood's socioeconomic rank, the more perfume and primping items its residents used, and the less patent medicine. The more affluent the neighborhood, the more grooming and health equipment its residents discarded. Households in higher-status neighborhoods may have required more grooming and health equipment in each bathroom; they may have had more bathrooms per inhabitant; or they may have replaced grooming and health equipment more frequently, perhaps tolerating less wear or damage than did lower-status households, or responding more quickly to changes in grooming and health fashions. Rincon Hill residents discarded more grooming and health equipment (items that are not product containers, e.g., chamber pots, hairpins, basins, etc.) than the other neighborhoods (Figure 3.30) and Tar Flat discarded fewer perfume/primping containers than the other neighborhoods (Figure 3.31).

Another general trend identified by both statistical analyses is the tendency of households in lower-status neighborhoods to discard more patent medicine bottles relative to all significant discards and to all of their grooming and health items. Rincon Hill residents discarded fewer patent medicine containers, relative to all significant discards and as a fraction of all grooming and health consumables; Tar Flat residents discarded more (Figure 3.32). The consumption of soda water and patent medicines in Tar Flat may be related to different health conditions prevalent in that area.

As indicated in Tables 3.4 and 3.5, there were numerous statistically significant differences in the material culture of these three neighborhoods. Some may have been expected based upon the occupational rankings of the households involved, such as the meat-price findings; others, like the lack of any significant correlations related to serving vessels or the higher end ceramic fabrics, are entirely unexpected. While people's choices about meat cuts, ceramic wares, and various grooming and health items reflected their neighborhood as strongly and clearly as their household occupation rank, and sometimes more so, their use of social drugs was much less related to their neighborhood, and more strongly tied to their occupation rank. This hints that

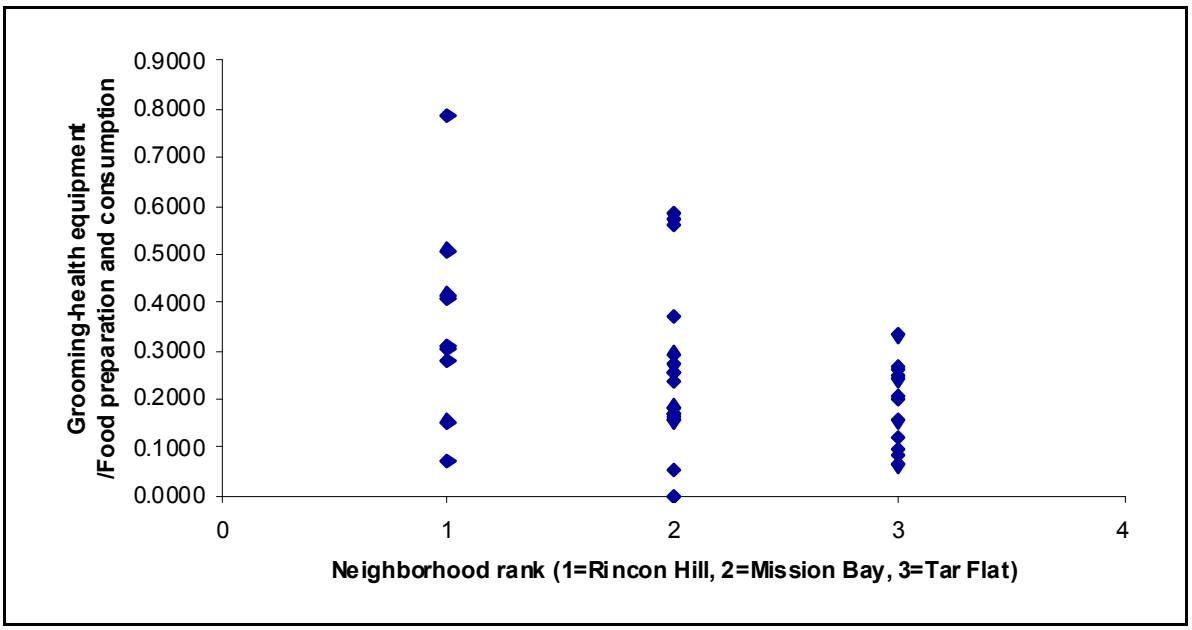


Figure 3.30. San Francisco neighborhood significant Spearman rank correlations related to grooming and health.

social drug use was more strongly influenced by individual household factors such as occupation rank, while meat consumption, ceramic purchases, and grooming and health purchases were relatively more influenced by the social environment of the neighborhood.

That ceramic assemblages might reflect neighborhood values is understandable, since ceramics would have been lasting and visible markers of social status. Grooming and health equipment, and perfume and primping items affected personal appearance, which people may have adjusted to fit neighborhood norms. Why meat consumption might respond more to the neighborhood context than did tobacco and alcohol consumption is harder to imagine. Perhaps a substantial fraction of the alcohol consumption was more private than were prepared meals, and thus less affected by neighborhood standards? At this point, we can only speculate on the reasons. Clearly the patterning of material culture is very complex. This topic is discussed further in Chapter 10, when three neighborhoods from West Oakland are added to the mix.

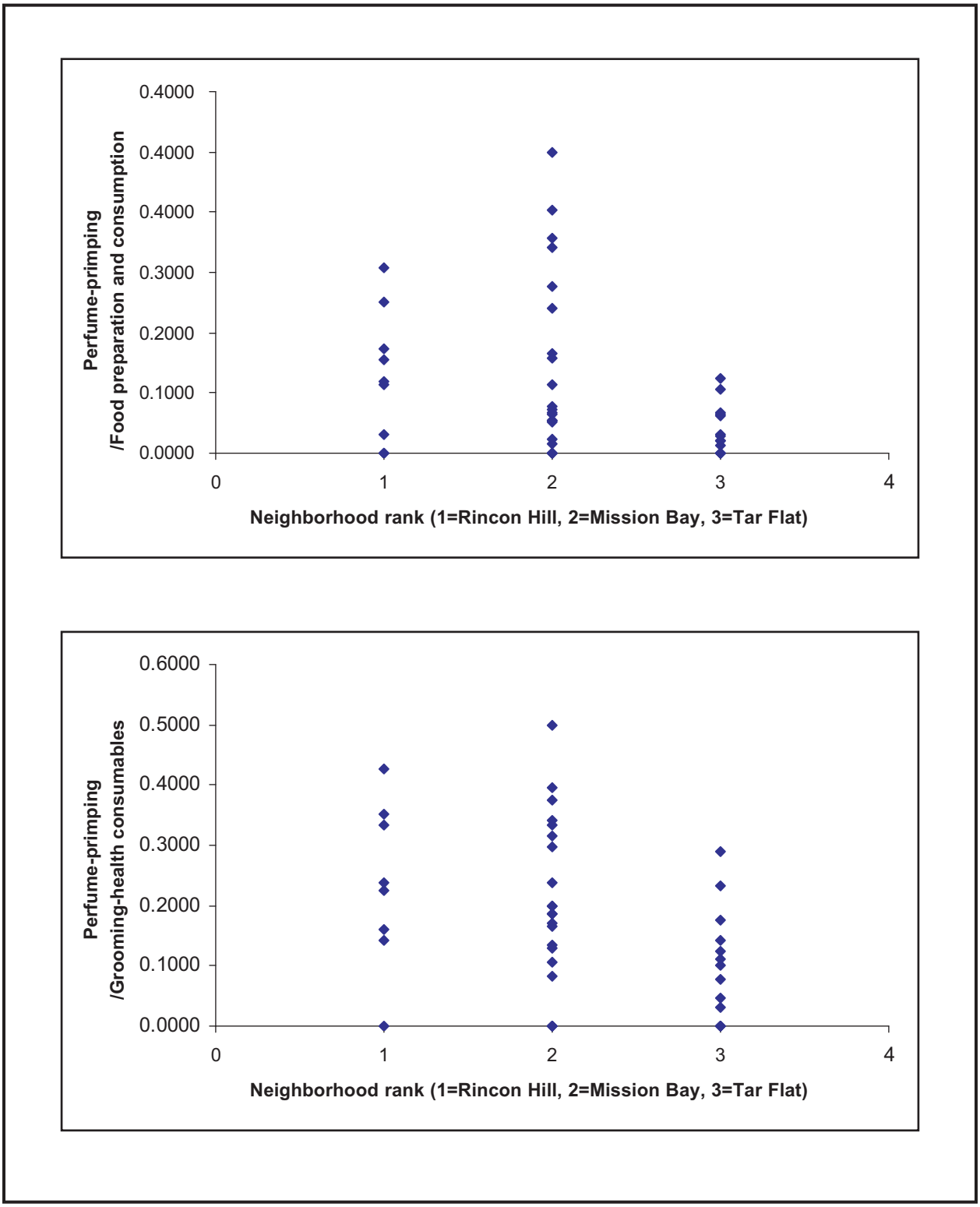


Figure 3.31. San Francisco neighborhood significant Spearman rank correlations related to perfume.

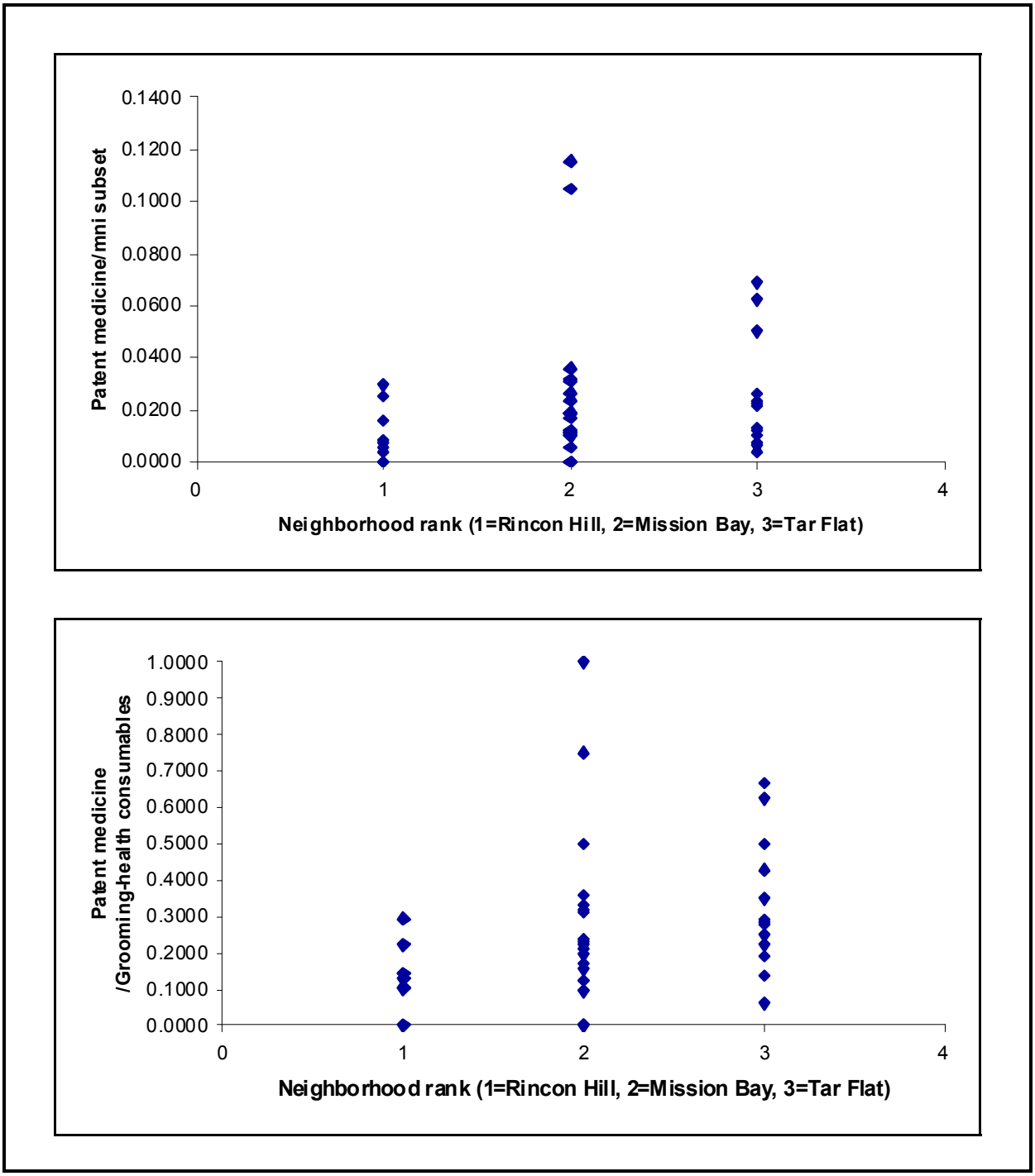


Figure 3.32. San Francisco neighborhood significant Spearman rank correlations related to patent medicines.

PART III: HOUSEHOLDS

Part III continues the discussion of project findings at the household scale in five chapters. What did individual households purchase, use, create, repair, and discard? The chapters range widely, covering immigrant women and their household possessions, needleworkers and sewing implements, tobacco, life at home, and ethnicity and socioeconomic status as reflected in Jewish and Irish households.

CHAPTER 4

TRACING IMMIGRANT WOMEN AND THEIR HOUSEHOLD POSSESSIONS IN 19TH-CENTURY SAN FRANCISCO

ANNE E. YENTSCH

This chapter considers the women who helped create the various artifact assemblages analyzed in more technical sections. We consider them by name, by size of family, by ethnicity, and by their cooking styles. Documents are not as forthcoming about some of the women, but those who slip beneath the written records can sometimes be glimpsed through the more visible women. In today's world, the most astonishing aspects are how young they were when they left their homelands or married. Yet each one, from the highly articulate and well-published Kate Douglas Wiggin (Privy 1) to the women who could not read or write, offers an entry point into married life in the 19th-century West.

Most of the women were foreign-born. Each inevitably began the process of assimilating to California society, and each did so individually, leaving traces in the archaeological record. It is impossible to know to what degree "ethnic particularism"— assimilating into a culture while still retaining one's ethnic identity—influenced their actions (Hyman 1995:11). But with knowledge of the places from which they came and consideration of the typical lifestyles that characterized each, we can read between the lines and see acculturation, the process of becoming an American woman, in operation. Some women acquired the basic markers of the larger society—dress, values, language, material objects—to greater degrees than others. In a manner akin to the assimilation of foreign tools (metal axes, fish hooks, iron kettles) among native societies, most women took to some categories of material goods, notably clothing, in rapid fashion. Values are difficult to determine from artifacts alone, but historians often use intermarriage as a measure of changing values. Within San Francisco's early Jewish population, even the marriage between a Bavarian Jew and a Jew from Poland initially implied intermarriage, let alone one between Jew and Gentile which prompted family separations. Two factors were critical among the Irish: marrying outside the Catholic faith and/or wedding someone of different ethnicity (e.g., German, French, Italian). Based on census records, these were rare occurrences within the neighborhoods studied, despite their cultural diversity (Burchell 1979:79).

For most, San Francisco was wholly *Other*, unlike any place they had ever lived. Its neighborhoods rang with cultural diversity. A pastiche of languages hummed in accompaniment. Men outnumbered women. All classes of people intermingled on the streets; children darted about. There were few elderly. The city itself was a "crossroads—of things past and present, cultural and social"—a place in which the existence of different symbolic expressions, world views, and modes of behavior was inescapable (Maffi 2000:270). It is useful to think of it as "made up of different contributions, ever contradictory, ever evolving, ever reinventing [contributions] which kept influencing what lay beyond the neighborhood borders" (Maffi 2000:271), and which shaped ideas and behavior inside household walls too.

Some idea of the cultural chaos—the way that day-to-day activities brought one into contact with different traditions—can be quickly brought out by comparing street culture with home life. Hannah Hart, a young Australian Jew, lived in a neighborhood jammed with small craftsmen (brewers, bootmakers, shoemakers, textile dyers, seamstresses) and tradesmen (chicken dealers, fruit dealers, grocers, hucksters, candy makers, toy store owners, saloon and restaurant keepers), who spoke German, French, Swiss, Italian, English, American English, Mexican Spanish and other Hispanic variants, or Chinese. She would soon be married and move to the study area where other languages resonated, styles of dress collided, and English was the lingua franca for all schoolchildren. Many Irish families lived south of Market; Gaelic was spoken in many homes and on streets or sidewalks, providing an undercurrent of sound that blended with the Yiddish spoken by many small shopkeepers.

The following pages provide a social context for Hannah and other women, mainly wives, associated with the assemblages. They are placed within their families, for all stayed home and kept house. Their daughters did not necessarily do so, but their immigrant mothers belonged to a traditional generation. This does not mean that married women did not work and work hard, but that their labor, often unpaid, took place within the hidden domain of the family. They were often isolated within their homes by the weight of a workload that was "mighty hard," while daughters attended school, sons roamed far, and husbands worked throughout the city (Mary Jane Megquier, a San Francisco 49er, quoted in Jolly [1998:3]). Both custom and conservative California equity laws bound women to their households (Sparks 2006:76–81; Yung 1995:25–26). They are shown here as wives, mothers, hostesses, housekeepers, gardeners, nurses, educators, students, and consummate shoppers.

Many had few relatives in the city, but sometimes, after disentangling kinship connections, what initially appears to be two families sharing a duplex becomes one large extended household (e.g., Sarah McDonald and Susan Tobin, Well 866). Composite households, containing unrelated bachelors, widows, even young couples with small children, also appear. Ironically, looking at women within their families brings them further into the public eye. One can imagine arguments and see marital discord and, perhaps, even the dissolution of marriage bonds (the Metcalf women, Well 851 or Hannah Martin, Privy 806). There are glimpses of women and their negotiations with the fashion world, trips to the butcher shops and flower markets, even to an internationally known children's kindergarten on Silver Street. We can also begin to discern socio-economic differences that cross-cut ethnic boundaries as seen in Table 4.1 where fragments of perfume bottles and jewelry lessen in Irish assemblages from working class neighborhoods.

This research originated with a desire to know more about their foodways. This chapter does give insight into cuisine, although not as much as one would wish. But, placing women first changes the focus of archaeological study and it does so in some intriguing ways. It opens a window onto birth, sickness, sexuality, death and remarriage, children's lives, and care of the aged. The impact of household size can be assessed, hints of household composition emerge (primarily masculine or primarily feminine) and stages in the life cycle of the family enter the field of play as mediating factors. The difference between deposits prompted by catastrophic events (the 1868 earthquake) and those precipitated by family events (pregnancy, weddings, other celebrations, family moves, deaths, and family breakups) can be read between the lines (Figure 4.1).

Since personal identity was tightly interwoven with ethnic identity in any immigrant community, Hannah's life and those of other women are presented in sections arranged by point

Table 4.1. Distribution of Perfume, Jewelry, and Fans among Assemblages

Ethnic Composition	Number of Assemblages	Perfume Vials		Jewelry		Fans
		n	%	*n*	%	*n*
American/English families	4	26	39%	7	23%	2
European families	4	18	27%	10	32%	2
Irish families outside Baldwin Court	6	15	23%	12	39%	2
Irish in or near Baldwin Court	10	7	11%	2	6%	2
Total	24	66	100%	31	100%	8

Non-Irish Assemblages include the following: American and/or English families: Baker, Shaw, Peel (2); European: Aaron, Ackerman/Strauss, Martin/McIver, and Metcalf.

Irish Assemblages include wealthier families: Gee, Monahan, Moynihan, Dolan/Michelson, Donnelly/Beal, and McDonald/Tobin; and those that live in or near the working class neighborhood of Baldwin Court: Fegan, Mayne/O'Connor, Thompson, Cadigan/Fuchs, Murphy, McSheffrey, Clark, Taylor, McEvoy, and Brown. Baldwin Court was part of the low lying land near the waterfront that constituted Block 4 whereas the other assemblages were associated with Irish families that lived on streets that were on the other side of Rincon Hill (primarily Blocks 10 and 11).

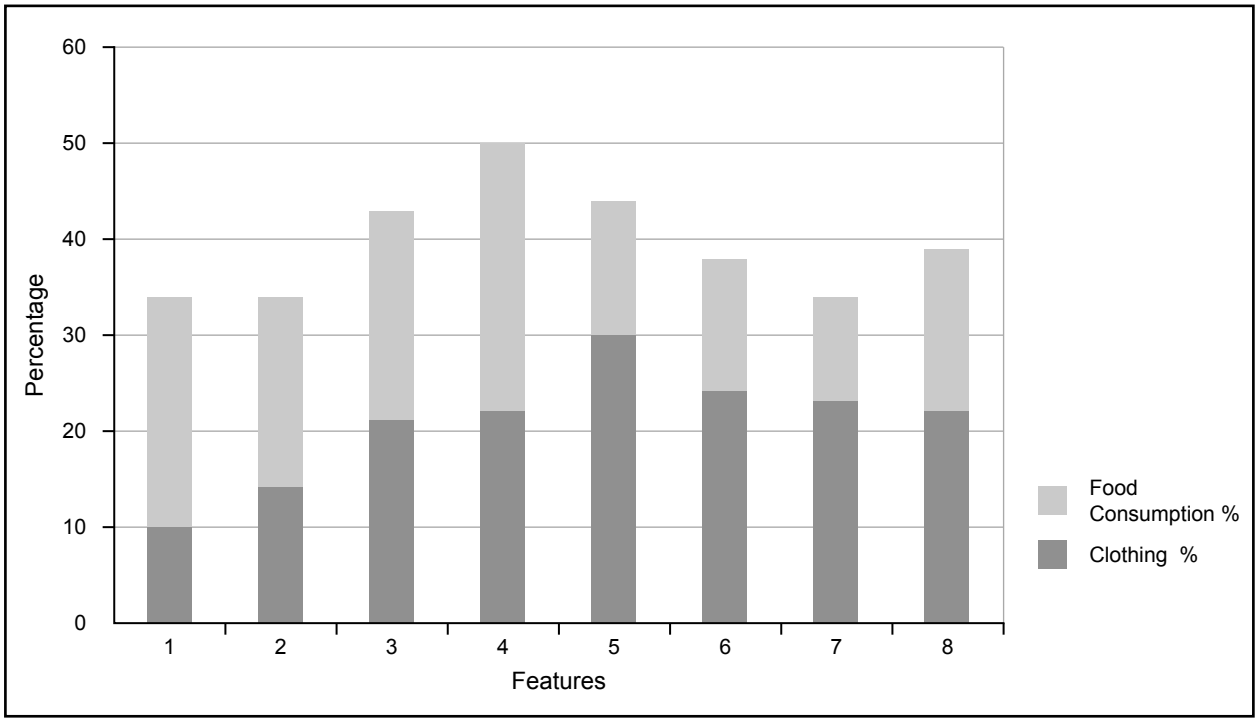


Figure 4.1. Percentage of clothing and food consumption artifacts for four 1868 features (post-earthquake, 1 to 4) and four 1880 features (5 to 8).

of origin. Because so many were of Irish descent, Ireland's women come first. There was a small but very active network of Jewish families in the city by 1849, so Lena Strauss, Hannah Aaron, and Hannah Martin follow. There were no assemblages from French or Italian households or from the African American, Mexican, Chilean, Argentinean, or Chinese families living in San Francisco, so these women are missing. But there were a few women, married to mariners, from Norway and Germany, whose lives provide additional insight (Aletta Michelson, Isabella Gee, Catherine Metcalf). In all cases, child-rearing and homemaking were essential parts of their stories, but there is also indication of the shift from woman as constantly laboring, unpaid helpmate, to women with more leisure, who reflected (or displayed) their husbands' roles and status in the city (Isabella Gee, Minna Duisenberg). There are a few widows who bridged the boundary between domestic work and wage labor, making enough to keep their families afloat and own their own homes (e.g., Mary Moynihan), but they did so within the confines of the family.

By 1880 only 30 Irish women in the city worked at low status factory jobs, only 10 held upper middle class jobs as clerks (Burchell 1979:55). More accessible options were jobs as domestic servants (i.e., day labor requiring minimal skills or literacy), milliners and seamstresses (i.e., craftswomen), nurses, or teachers—a position requiring specialized training and literacy. Women as wage workers are peripheral in this description of immigrant women's lives in San Francisco as seen through archaeology. Finally, as the second generation comes of age, there are clearer indications of women working in white collar positions (e.g., Ida Strauss, Amelia Aaron, Sarah and Margaret Taylor; see Jolly 1998; Sparks 2006).

POINT OF ORIGIN: IRELAND

Irish women were held to different standards than their men. According to San Francisco's *Catholic Guardian*, men were oaks; women were tendrils (Burchell 1979:77). Catholic values required them to be excellent and to be useful to others, but not to excel (Gregg 1856). Men, not women, were ordained by God to handle the great and weighty matters of life; women were their helpmeets—emotionally, intellectually, and spiritually different. Men saw them as mothers, tending the sick and nurturing children, as kin, and, in quite distinctly separated contexts, as sexual creatures. Men knew them to be tenacious, courageous and resourceful, but expected wives to work within the home after marriage (Diner 1983). Irish homes were "central to everything in life" (Dowling 1998:63). Women strove to see their families survive. Men took pride in saying "no wife of mine has ever had to work" (i.e., do wage labor once she married) and many men never thought of their wives as having worked (Smith 1982:447).

In 1850, when few Irish lived in San Francisco, women in Ireland went barefoot and dressed simply. They wore a shift, petticoat, and dress, used a cloak for warmth, covered their hair with a cap, and protected their gowns with long work aprons. Over the next few decades women more often wore a shawl, a red flannel skirt, and bodice. They obtained much of their clothing at second-hand fairs or street markets. According to Kate Wiggin's descriptions of rural Irish women in *Penelope's Irish Experiences* (1902), daily dress had changed little by the late 1890s (Figure 4.2). Gradually English styles became both more popular and more obtainable (Mageean 1997b:70–71). Little pieces of cloth that survived in a damp context, coupled with hundreds of different dress fasteners, bits of whalebone, and all the necessities to make a fancy dress or strap one's self in a corset, are found across the artifact assemblages. These indicate the fashionable changes Irish women made in their dress after acclimating to city life (Figure 4.3).

Figure 4.2. Nineteenth-century Irish women. (From the author's collection)

The contrast between Irish home styles and those that immigrants adopted, as they could afford them, was dramatic. George W. Russell—Irish writer, poet, and painter—pointed out how families in the home country were amazed by the transformation in the women who emigrated: "The girl . . . remembered without a hat, with bare feet, with short red petticoat is seen as a duchess in her American transformation." There she was in photographs, smiling beneath a glamorous hat in a dress of fine fabric (Figure 4.4). Her kinfolk marveled; her sisters "trembled with longing and delight" (Mageean 1997b:71–72). The married women for whom she worked grumbled to themselves when they saw her wearing a velvet cloak and a hat as elegant as any they owned (Elliott 1868). And when the dress was torn or the hat tatty, she tossed it in the privy fill (e.g., Meg Brown at Privy 1307), sold it to the ragman, or recycled it at a junk store (Wiggin 1923). Old clothes supplied the basis for made over clothing. Hence, small boys frequently collected cast-off clothing and sold it to shopkeepers, whose wives mended, patched, exchanged, and sold this apparel at neighborhood stores. According to a Swedish visitor, both fabric and eastern-made clothing was cheaper than food in the 1870s (Bjork 1950). Family histories, and the printed observations of Henry George, tell of Irish women possessed by a craze for fine shawls, fans, or

Figure 4.3. Buttons and fasteners, Privy 1301. The 145 buttons found in the Taylor family's privy represent a minimum of 37 garments; which included a woman's dress or outergarment constructed of dark-green teal wool twill and matching silk lining.

Figure 4.4. Irish girls frequently sent pictures home as well as money, tickets, clothes, and other presents. (From the author's collection)

parasols, no matter the state of the family finances (De Mille 1942a:440). Any woman who wanted to dress well had opportunities to do so, as is quite apparent among assemblages recovered from Block 10.

The history of the George family in Henry George's biography indicates that his Irish grandmother-in-law had a perpetual yen for decorative china or specific plant varieties, such as begonias, used as specimen pot plants (De Mille 1942a:440). Abigail Meagher Parrott wrote her sister that, "no day in the past year has found me without fresh flowers on my table" (Dowling 1998:321). Flowers grew readily in the California climate—roses, fuchsias, salvias, geraniums, verbenas, and gillyflowers, to name a few. Two-thirds of the vases and two-thirds of the common flowerpots in the artifact assemblages (those dating to or before 1880) came from Irish households (Table 4.2). Twenty-seven, or 87 percent, of the 31 figurines did as well—a contrast with the two unambiguously Jewish deposits, in which there were no figurines, one vase, and a single common-clay flower pot (Figure 4.5). However, note that Harriet

Table 4.2. Distribution of Vases and Flowerpots among Assemblages

Ethnic Composition	Number of Assemblages	Vases		Flower pots	
		n	%	*n*	%
American/English families	4	6	20%	15	25%
European families	4	3	10%	3	5%
Euro-American subtotal	8	9	30%	18	30%
Irish outside Baldwin Court	6	6	20%	29	45%
Irish in or near Baldwin Court	11	15	50%	18	28%
Irish subtotal	17	21	70%	47	70%
Total	25	30	100%	65	100%

See Table 1.3 for list of households by status and/or ethnic composition.

Levy's description of her mother's "splendid" parlor mantel specifies a series of figurines: two pairs of bisque shepherds and shepherdesses; one pair of gaily painted terra cotta gypsies (Levy 1996:102). Perhaps the glory of the parlor and the sanctity of behavior within it differed? Still, the broken flower vases, pots, and figurines reveal that Irish-American women kept decorative items in their homes. Their men gifted them with dishes and figurines knowing they were fond of these. In Ireland, homes were furnished spartanly, but most had a series of wall shelves where women displayed a few eye-catching pieces of pottery. It is not surprising, given the conservative nature of Irish and Scots folk culture that the use of decorative ceramics continued well into the 20th century (McNeill 1929). Folklorist Henry Glassie noticed their presence in the 1960s; his work is helpful in thinking about some of the sherds of painted earthenware in the West Approach collection.

Glassie, with his eye for color and pattern, saw "the softness of textiles, a busy glittery dance of little things, a rainbow of color and a happy cacophony of pattern" enlivening Irish homes (Glassie 1999:267; 2006:194–199). Women hid from sight their everyday dishes: ordinary plates, jugs, mugs, and cups for strong tea. Gaily decorated pieces of pottery—platters, plates, and decorative cups of different shapes—lined the shelves of dressers. Ask a woman who gave her these items and you could see her social network. Each one was a gift; each one was a friend that recorded something special, a chain of friendship, or a family member, and each one demonstrated the affection her family showed her. The plates both commemorated and displayed social relationship, and it is understandable that such ceramic pieces were "things to see, not things to use in eating" (Glassie 2006:194–199). They included transfer-printed, hand-painted, or machine-

Figure 4.5. Two porcelain figurines from Irish households (not to scale). The figure on the left may have belonged to Catherine Thompson (Privy 1303). The Parian porcelain figure on the right came from the household of widow Mary Moynihan.

decorated platters and plates, usually in blue and white, with birds, flowers, boats, castles, and mansions, and most had been produced one to two generations earlier. The brightly colored ceramics were a woman's way of molding space that gave her home its personality. Women took pleasure in the care of "the delph." Some saw their careful sudsing, washing, rinsing, and drying as an act of love. These prized possessions were fragile; they could break easily and often did when carelessness or hot temper entered a home. We may see them as mementos, but they lose personality in archaeological catalogs, where their role in food consumption is more apparent than pride of place in a home.

The group photographs of artifacts in each assemblage point to the presence of colorful wares, side by side, with the ubiquitous white earthenware, too plain for a gift. During the 1868 earthquake, Eliza McEvoy (Privy 1316) lost a blue and white soup plate with a large, central floral display and a smaller plate with hand-painted flowers, berries, and leaves. Susan Taylor (Privy 1301) lost a blue shell-edged plate, a blue transfer-printed cup, and four tiny transfer-printed mugs, too delicate for her children to use. Isabelle Clark (Privy 1311) lost a lovely flow-blue pitcher (Figure 4.6), a tureen lid unusually decorated with seashells, and different transfer-printed vessels in light blue, dark blue, and purple. Isabella Gee (Privy 807) lost a large water ewer decorated with hand-painted flowers over a rich transfer-print, a blue shell-edged platter, and a gilded one. While each of these vessels might have been used at the table on special occasions, their age and decorative motifs also suggest a role in display. And while carelessness destroyed many, if not most, vessels found in artifact deposits, all of these assemblages date to a time shortly after the 1868 earthquake. In these cases, it was nature—the ground shifting like bowl of jelly—that threw fragile objects off shelves or tables and rolled beds across rooms without distinction as to ware-type or daily care. It was a woman's pottery and glass that was destroyed rather than her clothing—and the artifact assemblages show this.

Figure 4.6. A flow-blue pitcher. This elegant pitcher was recovered from the privy of Irish boilermaker George Clark and his wife Isabella. (Privy 1311)

Another suggestion that women continued to display colorful, nostalgic ceramics can be seen in the continued presence of blue, shell-edged plates and platters well beyond their customary use date. Produced in large quantities with variegated rim decoration since ca. 1790, this ceramic type gradually fell out of fashion well before mid-century, yet it is present in many of the later (ca. 1880) artifact assemblages (e.g., Nancy McSheffrey's one blue, shell-edged plate [Privy 1310]; Cecelia Murphy's four [Privy 1318]). Mrs. Murphy also owned a platter or large plate with gaudy reddish pink flowers, green leaves, and blue berries dancing around its rim. While this pattern is seen elsewhere in these deposits, it is primarily associated with the homes of Irish women. The Dolan/Michelson assemblage (Privy 857/858) reflects the possessions of both Irish and Norwegian families, but here too one finds decorative earthenware, this time of French origin. There are three tiny cups in the McIver/Martin (Privy 806) assemblage that may have been kept in a display case; they would have had little impact on a shelf filled with larger, more ostentatious earthenware. The presence of colorful ceramics is barely visible in the deposits of two Jewish women, Mrs. Aaron (Privy 814) and Mrs. Strauss (Privy 849), and their forms, hollow-

ware serving pieces, are not as amenable to display as are plates and platters. The same can be said for the deposit associated with the families of Minnie Samuel and Catherine Smith (Privy 1300), neither of whom was Irish.

Does this mean that the Irish women of San Francisco and the women of northern Ireland or highland Scotland had the same fondness for gay pottery that they could display, admire, and fondle through washing, drying, and polishing? There is enough information in the archaeological data to be suggestive, but not definitive. Yet, consider the similar pottery recovered from Irish households in a New York tenement neighborhood (Yamin 2001:160–162). The New York assemblages show the same patterning: colorful, decorative wares in forms that are easy to display at sites associated with Irish families; and a lack thereof at the few sites associated with Jewish families. While Irish homes were furnished spartanly, both 19th century accounts and Claudia Kinmonths's (1993, 2006) analysis of paintings and furniture indicate most homes had either wall shelves or a dresser where women displayed a few eye-catching pieces of pottery, primarily blue and white. Contemporary ethnographic evidence is both tantalizing and substantive (Figure 4.7).

Figure 4.7. Photograph by Henry Glassie of a dresser in an Irish home that displays a ceramic collection. (Photo courtesy Henry Glassie)

One approach to understanding these Irish American women is to look at the life they left behind. Most lived in rural areas, in small homes whose turf fires centered their lives (Figure 4.8). Most could not read and write. They learned housekeeping through apprenticeship—from mother to daughter, from aunt to niece. They knew how to cook with an iron pot over a fire; few had ever used a stove or had access to running water or well-made lamps. They bought their tea and sugar by the ounce or half ounce (George 1883). They had never been inside a well-stocked grocery store selling coffee, currants, raisins, and exotic nuts, and could not afford these delicacies. One can only imagine what they felt strolling through open city markets filled with the scent of oriental spices—cloves, curry, cumin, ginger, coriander–where German bakers, Italian fishermen, Jewish grocers, Chinese vegetable peddlers, and Irish or German butchers hawked their wares.

In Ireland, women grew herbs and vegetables in kitchen gardens and had almost no money to spend at market. They did much hard, physical labor. Once, potatoes had been rare. Farmers,

Figure 4.8. Irish woman in typical garb sitting by peat fire. (From the author's collection)

hesitant about the vegetable's moral character and how to tame the uncontrollable passions that might rise up by eating it, planted very few (Chambers 1733, quoted by McNeill 1929). Potatoes, however, are exceedingly nutritious and gradually became a staple (Clarkson and Crawford 2001). By the early 19th century, most Irish ate a diet based simply on potatoes, dining by the fire's glow and holding a skeehogue (potato basket) on their knees (Evans 1942:73). They sat on stools and they sat on chairs, but a kitchen table—let alone one for dining—was rarely seen There were exceptions—church holidays, seasonal holidays, and family celebrations—when women scrimped, scavenged, and traded to pile mutton and ham on cabbage mounds, and each guest took their tiny share. Still, potatoes thrust out most other types of foods.

A brief overview of Irish eating patterns reveals that meat, offal, and milk products dominated in the early 1600s. The rich ate beef and mutton; the poor consumed smaller animals—rabbits and game birds—as well as pigs and offal. Prodigious quantities of milk and milk products were consumed—as broths, curds, butter, and cheese. Families grew cabbage and green kail [kale]. These were supplemented by leeks, onions, watercress, wild garlic, spinach, and goosefoot; by a limited number of fruits; and by herbs (Clarkson and Crawford 2001). Cooking had much in common with other Gaelic regions of England, namely Wales and Scotland. And, as Scotland did under English control, Ireland too retrograded in its cooking habits during the 18th and early 19th centuries when it was under the implacable hands of English landlords (Freeman 1997; McNeill 1929).

By circa 1750, foodstuffs became tradable. Wheat brought a high market price and thus was not used in home consumption, although beer and oatmeal in many different guises were. Pork and bacon became valuable exports. Butter and eggs could be sold at market. The sale of foodstuffs could help pay the rent. Nature's larder was opened when necessary. Women gathered nettles and found seaweed (laver or sloke or dulse) along the coast, bringo roots in the sand, cockles on exposed tidal flats. But these opportunities were restricted to coastal locations.

By 1800 Irish eating habits belonged to one of two patterns. The first resembled patterns seen in England. Prosperous families ate meat (beef, mutton, pork, poultry, rabbits, game birds, and offal); grain-based foods; dairy products; small amounts of fish, oysters, and other shellfish; and fruits and vegetables. They purchased wine and liquor as well as groceries. Those less prosperous—three-quarters of the population—ate milk products or potatoes "washed down with buttermilk or whiskey" (Clarkson and Crawford 2001:75), and had little variety in their choice of other food. Some foodstuffs were seasonally available, particularly oatmeal and herring. Others, especially meat, became peripheral—reserved for feasts and festivals. Butter, bread, fish, eggs, and bacon became treats. This was what most Irish immigrants had experienced in their daily diet and it did not produce a wealth of traditional dishes.

O'Grada (1994a) urges readers to be suspicious of recipes that claim to be traditional: champ, boxty, colcannon, potatoes and bacon, and Irish stew. These, he wrote, are primarily late-19th-century dishes created by wives of prosperous farmers. Hasia Diner believes that the Irish "failed to develop a national cuisine" (2001:85). She notes a lackadaisical attitude towards cooking, a lack

of skill, and a consequent disconnect between cooking and a woman's identity, her sense of self worth. Consequently there was an absence of food lore, few memories of what the Irish diet had been (Diner 2001:98). She does admit the existence of a rich set of food traditions prior to widespread potato cultivation (Diner 2001:103).

Diner (2001:114) equates the lack of food descriptions in narrative accounts, what she calls "the sounds of silence" with Irish American foods and believes that food had no role in holding together Irish American communities. Irish women supposedly learned to cook through working as servants in the kitchens of well-to-do American families and were not taught at home. Yes, they patronized any number of Irish butchers and food markets, but these, apparently, sold no distinctively Irish foods (Diner 2001:128). Part of her evidence is the absence of food memories in literary works by Irish Americans (Diner 2001:150–151). Yet there is some evidence of Irish feasts in California and one wonders if there would be more if someone dug deeper. The Murphys in Los Altos Hills, for example, were well known for their immense celebrations, cooking sheep, pigs, steer and bulls' heads for more than 5,000 guests (Taaffe 1998). When Henry George brought the mayor home for a wee bit to eat late at night, his Irish wife, Annie, served an Irish stew (De Mille 1943a:240). Two other San Franciscans—Eleanor Downey Martin (born in County Roscommon) and her sister, Annie Downey Donahue—were famous for hosting splendid dinners and other forms of entertainment (Dowling 1998:57–67). The wide range of vessel forms, their quality and quantity in the archaeological data suggest that Isabella Gee (born in Northern Ireland) was an excellent hostess who served a wide range of guests at her table (Figure 4.9).

Figure 4.9. The Gee family's tableware and serving vessels (Privy 807). The variety displayed indicates the Gees used formal table settings.

There is a variety of evidence in the artifact assemblages—from those at the yards on Baldwin Court to those recovered from Perry Street—that some dietary practices remained identical to those of the home country. Take teapots, tea cups, and mugs for tea. The Irish love for strong tea, thickly dredged with sugar, was such that some saw it as almost a national obsession and damned its consumption (Clarkson and Crawford 2001:103–104, 235). It was as indispensable and as necessary to Irish women in San Francisco as it was in Ireland or Great Britain. They too

Figure 4.10. Assorted teapots. Five teapots were identified from Well 866. Of the four earthenware teapots, one or two are of the popular Rebekah at the Well motif, while the fifth is of hand-painted Japanese porcelain.

set the pot on the stove where it stayed for hours until finally, the liquid used to make another poured out hot but clear. One privy produced nine teapots; others held four or five; Isabella Gee had at least three. When one remembers that the materials in these assemblages were deposited over a month or so, a contrast to the slow accumulation of sheet refuse, the quantity of tea consumed seems prodigious. Judging from the assemblages, most families owned more than one pot and went through a succession in a lifetime (Figure 4.10). Basically, these were common functional pots made of pearlware, black-glazed or Rockingham-type earthenware, and molded white ironstone—a good indication that women used them to brew tea to drink (i.e., not tea used for social display).

There are also other artifacts associated with food preparation, including healthy quantities of faunal remains. There are a modest number of vessels used to prepare food, and numerous artifacts associated with food consumption. Both the faunal remains, overwhelmingly of beef or mutton with lesser quantities of pork, and the long life spans—well beyond the average—of these Irish Americans testify to a healthy diet and families that were well fed. They do not, however, speak of a uniform diet. There are individual variations. One family eats a lot of pork, another serves a suckling pig, a third eats barely any pork at all. Beef and mutton vie for first place in some families, and it is clear that in the choice of a roast, people's preferences vary. Some women cook better cuts of meat than others, and some concentrate on soups and stews (Table 4.3). There is certainly enough mutton to infer that varied forms of Irish stew appeared at the dinner table. Cuts of beef used for stew, or "slink" in Scotland and Ireland, are well represented. There is documentation of the importance of family Sunday dinners, where roasts might have

Table 4.3. Irish Assemblages and Types of Meat (by percent of weight)

Assemblage	Beef	Mutton	Pork	Fowl	Rabbit
Gee	62	24	4	9	0.3
Dolan/Michelson	46	27	21	6	0.2
Donnelly/Beal	74	11	7	8	0.9
Moynihan	52	26	11	11	0
Monahan	32	44	21	3	0.8
McDonald/Tobin	49	37	9	4	0.5
Sheridan	48	44	5	3	0.8
Johnson	52	30	8	8	1.1
Dent/Hannan	48	32	9	10	0.8
Average for Blocks 9–10	*52*	*30*	*11*	*7*	*0.6*
Fegan	23	39	27	12	0
Thompson	24	56	13	7	0.4
McEvoy	50	20	7	17	6.1
Cadigan/Fuchs	52	22	20	6	0.7
Murphy	49	22	15	14	0.5
O'Connor	67	29	12	3	0.3
Brown	40	34	23	2	0.6
McSheffry	46	16	37	1	0
Taylor	45	26	23	7	0.2
Clark	75	12	3	10	0
Noonan	46	18	16	20	0
Anne Mills	54	20	20	5	0
Dougherty	54	28	13	4	0.4
Hurley/Cunliffe	67	12	14	6	0.8
Anthony Dean	58	2	14	10	0
Average for Blocks 4–6	*50*	*23*	*17*	*8*	*0.6*

been served. There is also information on what poorer families ate when funds were low: milk, bread, potatoes, cornmeal, and the cheapest fish of all (De Mille 1942b:99).

THE LADIES OF BALDWIN COURT

Women living on Baldwin Court in the Tar Flat neighborhood had a much harder life than those on Perry Street, as did their men. This industrial area was dominated by metal foundries that were deeply affected by the 1870s depression and times were hard; little money was to be had (Figure 4.11). Men in working-class neighborhoods "[worked] ten hours a day in order that [they] might sleep eight and have two to three hours for themselves when [they] were tired out and all their faculties exhausted" (George 1868). Working-class men, especially laborers, were often seen running for Mission Street streetcars. And given that the city averages 2 to 3 months of rain a year, often blown in on afternoon winds, these men returned home in the rain and the fog with one single thought in their minds: a whiskey or beer at a neighborhood pub to ease the cold and boost the spirit before going home. An 1869 *Catholic Guardian* reported that working men needed an income of approximately $15 to $20 a month to cover rent ($5.00), transportation ($3.00), daily beer or whiskey ($3.00), and pub entertainment ($4.00) (Burchell 1979:69). This, of course, includes no support for a wife or children and little cash for family meals. According to Henry George, it "was not a reasonable life." They struggled; their wives and children struggled. Their artifacts—working boots or shoes, wool clothing ("the universal afternoon wear"), tobacco pipes, and liquor bottles—testify to this. Overall their sons had fewer marbles to play with although the sizes of several caches testify that they played for keeps (Figure 4.12).

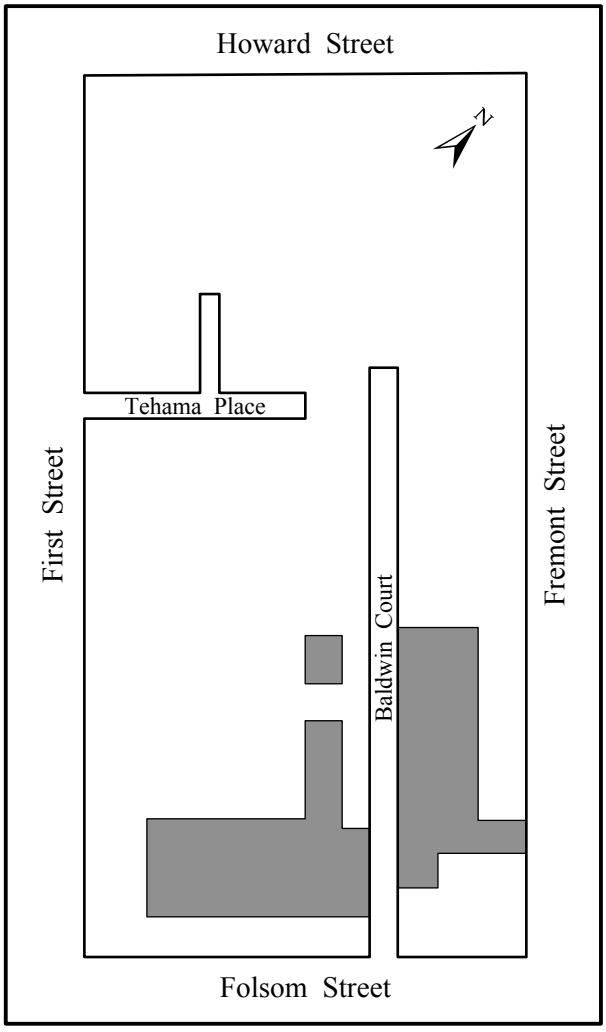


Figure 4.11. Block 4 schematic showing extent of archaeological investigation (grey boxes).

Only two assemblages yielded the more expensive dolls; most were quite ordinary. The little girls of Baldwin Court had fewer dolls than the Irish girls on Perry and Silver streets (an average of 3.5 per family vs. 8 for the latter) and markedly fewer tiny tea sets (3.5 vs. 18). The averages shown in Table 4.4 fall well below the 11 dolls recovered from the wealthy Duisenbergs' privy fill on adjacent Block 3. A well-made, quality European doll could cost above $10.00, which was more than a month's rent in San Francisco's poorer neighborhoods. What stands out here is the larger amount of toys among upwardly mobile Irish families

Table 4.4. Distribution of Dolls and Tiny Tea Wares among Assemblages

Ethnic Composition	Dolls			Miniature Tea Wares		
	n	Avg.	%	*n*	Avg.	%
American/English families (4)	14	3.5	12%	37	9	18%
European families (4)	13	3.25	12%	28	7	13%
Irish outside Baldwin Court (6)	50	8.3	45%	109	18	52%
Irish in or near Baldwin Court (10)	35	3.5	31%	35	4	17%
Total	112		100%	209		100%

See Table 4.1 for listing of families.

when compared to those in poorer neighborhoods and those of European immigrants.

Figure 4.12. Marble collection. Sixteen of these seventeen marbles from Privy 1306 were found grouped together, perhaps in a small bag.

Today, a $10.00 doll seems modestly priced, but to put it in perspective, consider Annie George's (Mrs. Henry George) heartfelt wish when her husband brought in just a few dollars a day, she had to manage on almost nothing, and help pay the rent by sewing for her landlady. The family took a pragmatic approach: they left a more expensive flat ($18/month) to live at 9 Perry Street, renting for $9.00 a month. Annie's wish was simple: "that her husband would manage regularly to make twenty dollars a week!" (De Mille 1942b: 100). It is no wonder that wives made do with a single bottle of perfume if they had any, and some did not. There were fewer decorative figurines than among the better off Irish homes. While almost every assemblage across the West Approach area contained a vase for flowers, the number recovered from Baldwin Court was extraordinarily high (50% of the total). However, the number of ordinary pots used to grow pot herbs, flowers, or specimen plants was lower (Table 4.2).

Yard space was minimal and approximated the size of a small deck on one of today's condominiums (ca. 15 feet wide by 10 feet deep, if not less). Front yards were miniscule if one can count a 3-foot setback as a yard. The small homes—none any wider than 15 feet and few much deeper than 20 to 25—were filled to the brim with children and extraneous men (lodgers). Boys probably played kick the can and shot craps on the street, gathering into small gangs that protected their turf (Baldwin Court) against encroachment. Girls watched from door stoops while caring for their siblings. Several families had no indoor plumbing, and bought water from the early-morning delivery trucks. Think of it as an area with an active street culture and one where boys occasionally slipped off to the docks to skinny dip as their counterparts did in New York.

The rate of illiteracy on Baldwin Court was high. When women cannot read or write, it is impossible for them to use a cookbook. They cook as they were taught by other women in the family or by neighbors (Wood 2004); the litany of complaints about Irish domestics is one indication that Irish cuisine differed from middle- and upper-class American modes of cooking. These complaints are recorded in letters, novels, and cartoons; the view that Irish women couldn't cook was almost ubiquitous within middle-class and the upper social ranks of American society (Hardy 1992). However, Senator Joseph McKenna observed that President McKinley visited Mark Hanna's Washington home each Sunday for breakfast, drawn by the politics discussed and Hanna's cook, Maggie Maloney's "mouthwatering hash" (*San Francisco Monitor*, "Maggie Maloney's Hash," December 10, 1921). The story of Maggie Maloney's Sunday corned beef hash is a counterpoint to the stereotypic view (Dowling 1998:79). Assimilation brought with it other alterations to traditional Irish fare. Through their daughters, women had access to a wide range of recipes from those in newspapers to those in books. Of course, whether mothers were receptive to the new ideas about food their daughters brought home from school is something else entirely. It is more likely that the women exchanged recipes with their Jewish and other European neighbors, as this is a practice well documented elsewhere (e.g., Diner 2001:119; Ferris 2005; Wood 2004). One need only see the recipes for Irish stew included in Jewish cookbooks of the early 20th century to acknowledge its presence.

Figure 4.13. A young girl attending the Silver Street kindergarten as illustrated in the work of Kate Wiggin.

The Irish mothers in this study group urged their daughters to go to school, and most dressed them very carefully. Kate Wiggin describes them as nifty little girls in starched white aprons (Wiggin 1889:19; see Figure 4.13). Each would have had many responsibilities at home, helping her mother by peeling potatoes, watching younger children, washing dishes, ironing, and doing other housekeeping chores. Some left school to work in local factories, but not at as great a rate as their brothers. In part, local prohibitions against female workers in factories benefited the daughters whether or not families knew so at the time (Locke 1990; Yung 1995). Few, if any, second-generation daughters connected to these archaeological features are listed in later censuses as domestic servants; most became dressmakers, milliners, copyists, teachers, nurses, and factory workers as did their sisters across the city (Sparks 2006:64–65). The rate of literacy among school-aged or older, second-generation residents was high.

Gradually assimilating Irish immigrant communities near Chicago, as described by Deirdre Mageean, had much in common with Baldwin Court. Simple cottage-style homes were reminiscent of rural Ireland; they were heated with wood or coal. Families depended on salt pork, beef, cabbage, bread, and potatoes. They planted kitchen gardens. Neighborhood saloons, where people drank in the back of the building, offered groceries in front. Dances celebrated some life events; well-attended wakes in the deceased's home marked others (Mageean 1997a). Consumption of sugar, beer, and whiskey would have ebbed and flowed with wage fluctuations. No one living on Baldwin Court was rich or even well-to-do, but Irish women beat their poverty with humor, with stories, with fiddle and dance, and emphatically, with hard work and faith. What Kate Wiggin wrote of their children could be said of the mothers as well: "Some were lovely and some were interestingly ugly; some were like lilies growing out of the mud" (1923:126).

IRISH WOMEN FROM BLOCKS 10 AND 11

Mary Jane Dolan

If one thinks of a lily as upwardly socially mobile, hardworking, and strong at its core, then Mary Jane Dolan who lived on Perry Street comes to mind (Privy 857/858). She exemplifies in many ways, the lives of other Irish American women. Mary Jane Dolan married Michael, at 16. He was only 17 or 18 and had more dreams than marketable skills. It is noteworthy that both Mary and Michael were literate. Michael was canny about business and finance. He started as a cart-man, hooking his short, stocky workhorse or horses to a delivery wagon, picking up packages and passengers at the docks or shops, and delivering them in the city. Michael's days were long; a 12-hour workday was the norm. Then, he had to care for the horse (s). Sometimes Mary Jane felt as if she never saw him from dawn to dusk. But, he was a good provider, who had squirreled away $550 in personal wealth by 1860 ($86,460 in modern currency[1]), money later used to buy the home on Perry Street.

The Dolans were married in California or arrived soon thereafter. Their oldest son, James, was a native-born Californian (born in 1855). Mary Jane watched the city grow, knew its openness, its vices, it sounds, its muddy streets. They first lived downtown in the heart of the city. Michael was listed in the 1861 City Directory residing north of Market Street at 11 Leidesdorff, close to his wagon stand near the New World Market building. Here, Mary Jane gave birth to Jennie and John. Many Irish in this area lived in single-room dwellings or above a shop (Kinnaird 1966[1]:445). Leidesdorff Street lay only a block behind Montgomery Street, with its shops, houses of prostitution, and bars. Despite the convenience for Michael, the family could not stay. Mary Jane and Michael made two moves before purchasing the newly built, two-story duplex on Perry Street. The children liked it because it had a backyard. Mary Jane also liked it because it was away from the overcrowded streets of the center city. Michael liked it because he could rent out the second flat to cover the mortgage.

In 1870, four years after moving into the duplex, Michael's real estate was valued at $10,000 ($1,107,000.00) and his personal wealth at $1,000 ($110,700.00). This equals $11,000 or eight times the 1870 national average for foreign born citizens ages 30–39 which was only $1,267 (Soltow 1975: Table 3.4). Michael's home was worth ten times the national average of $911 (Soltow 1975: Table 3.3), but only five times more than most Californians if one limits the comparison to real estate holdings for adult men in the Northwest which averaged $1,948 (Soltow 1975: Table 3.5). The modest number of toys among the Dolan artifacts is perhaps a combined result

1. The conversion from 19th-century dollars to modern equivalencies comes from measuringworth.com. This Web site offers five ways to compute the relative value of the dollar. The one used here is **The Unskilled Wage Rate,** which "is a good way to determine the relative cost of something in terms of the amount of work it would take to produce, or the relative time it would take to earn its cost." It is difficult to measure worth. The consumer price index is not used here because the cultural value, the availability, accessibility, popularity, and consumer consumption needs for many items is vastly different now than it was in late 19th-century San Francisco as were expectations of what it was reasonable to purchase. We can't assume that prices changed the same percentage as the average price change over time. The same can be said of the GDP index. Expectations and needs also changed between the different ethnic groups represented in this sample. It is this writer's impression that although the unskilled wage rate does produce valuations that seem high, use of the consumer price index would not provide comparable valuations. The unskilled wage rate also permits comparisons across the data base while lessening disparities (among the sites and between past and present) due to cultural factors. (Samuel H. Williamson, "Five Ways to Compute the Relative Value of a U.S. Dollar Amount, 1790–2006," MeasuringWorth.Com, 2007.)

of parsimony and an emphasis on education. Since most of Mary Jane's married life was spent either pregnant or nursing a baby, the family continued to grow. Thomas arrived shortly after the move; Elizabeth came in 1867. The next year Mary Jane gave birth to little Michael, who lived just eight months. Kitty was born in 1871 and Robert in 73. Two years later Mary lost another son. Adelaide, arriving in 1877, was the last baby; Mary Jane was 49, entering menopause, and surely glad to leave childbearing behind, but her 'mitherin' of children would last well into her sixties.

By this point, her two oldest sons had married and started their own families. John had gone through high school and St. Mary's College, graduating at 19. Three years later, still single, he was admitted to law practice by the Supreme Court. James, the eldest son, died in 1886; Michael died in 1887; and John had already run for public office when he died in 1888. James had lived to see his son grow into a feisty toddler; John's son was born posthumously. Mary Jane may have been delighted to be a grandmother with wee grandsons, but she also mourned her husband and sons. On nearby Silver Street, Kate Wiggin, well aware of the high mortality rates among the Irish community, wrote: "these poor mothers! They bite back the cry of their pain, and fight death with love so long as they have a shred of strength" (1889:15).

Many Irish American women do not appear with greater clarity when one digs deeper into the historical records. One reason for this is the large concentration of Irish in the city and the use of similar naming patterns: Mary Murphy, Susan Taylor, Catherine O'Connor, Mary Sheridan. There are simply too many Murphys, Taylors, Fegans, Clarks, and O'Connors to sort them all out. Another reason they were hard to track is that their lives revolved around their parish church, and Catholic parish records are not readily available. Some aspects of Mrs. Dolan's life were clearer because the activities of her husband and children were newsworthy; they entered the political sphere, worked actively in the church, gained positions of influence and the roles these demanded on St. Patrick's Day. One can read about them in the *Alta California*. Not regularly, but often enough to pick up different aspects of their lives.

The Widow Mary Moynihan

Other Irish American women stand out in small, individual ways. As social historians recognized, most Irish American women outlived their spouses (Diner 1983). Mary Jane Dolan and Catherine Fegan were widows for more than 10 years; Maggie Donnelly for more than 20. Tom Boreem died, leaving Mary Moynihan's sister, Maggie Boreem, with two young sons (Privy 813). Mary's husband, Andrew Moynihan, also died young; Mary was a widow for almost 40 years. She took in her widowed sister, her Boreem nephews, and another niece. The two women brought up their young sons alone, taking in boarders and doing laundry.

In the beginning, before Andrew died, the two-story duplex, with basement, had ample space for a young couple with two small children. It boasted a long, narrow veranda on the street side and a slightly wider front yard then other working-class homes. One flat was approximately the same size as other houses in the neighborhood, but its one-story rear extension effectively made it the equivalent of two Baldwin Court homes. It also contained a store, however, which cut back the availability of domestic space. The second flat was almost identical to the first but its rear addition was only 5 feet in depth. However, when you divide this fairly spacious area—slightly larger than that normally used by two single working-class families—into one occupied by four, the overcrowding increases the intensity of social interaction tenfold. Take into consideration Mary's home-based laundry and you can see that she made almost every spare bit of the property an income-producing resource. Once the young boys reached their teens, they joined the work force, as cord workers, and Mary's niece apprenticed to a dressmaker. In addition, Maggie went

Figure 4.14. Illustration of New York housewives washing clothes in much the same fashion as the McEvoy women would have done (from Helen Campbell's *Darkness and Daylight,* 1896).

to work as a housekeeper where, according to Harriet Levy (1996), women worked a 13-hour day. Thus, every member of the family was also an income-producing unit—it was how they got by.

Mary and her oldest boy outlived her sister, her nephews, her younger son, and possibly her niece. When John Moynihan married Elizabeth Lynn, Mary made her welcome. When Mary died at 63, she even left her home to Elizabeth, perhaps because she was literate while John was not. Nor was he a successful businessman, but he had learned from his mother about caring for others. During his marriage, at one time or another and often simultaneously, John had four generations of his wife's family living with him. This was the way the young took care of older generations.

The McEvoy Women

Sometimes wives died before their husbands. Eliza McEvoy died at 50; her husband lived another 13 years (Privy 1316). Their home had no boarders when the family was young, but as the years went by, the McEvoys packed them in, 12 to 17 male lodgers at a time. Their home eventually became a hotel for working men. Running it was a demanding job. In a letter dated 30 June 1850, Mary Jane Megquier complained about running a large San Francisco boarding house: "I am obliged to trot all day and if I had not the constitution of six horses, I should have been dead long ago" (Kaufman, ed. 1994). After Eliza died, the responsibility for feeding these firemen, seamen, and laborers fell on daughters Anne and Mary. The work involved makes one shudder (see Psota's sidebar; Figure 4.14). All washing was done by hand; ironing was cumbersome. Oil lamps left a smoky residue, while pollution from the factories filtered in and settled down in ever-accumulating dust. Large breakfasts and dinners needed preparation; marketing required

KEEPING UP APPEARANCES

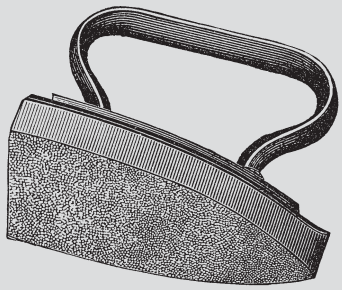
Sunshine Psota

Each generation of Americans has had its own idea of what is acceptable to wear. During the mid- to late-1800s, Americans and Europeans "loved to keep up appearances, but they could not tolerate waste" (Walkley and Foster 1978:11). Victorian mores favored those who were clean and disdained those who were not. But the requisite level of cleanliness varied. The advent of mass production of undergarments in the 1870s brought about a practice of changing these garments weekly, coinciding with the new practice of weekly washing (Doyle 1999:39). Since clothing purchases consumed a significant portion of a household's budget—even with the alternative choices of second-hand clothing and hand-me-downs—clothing maintenance was a constant part of a family's housework. Items related to cleaning clothes therefore constitute a small, but regular presence in most Bay Area archaeological features.

Clothes seen by the public were worn over layers of undergarments, so the body never directly touched and dirtied most elements of clothing. The exceptions, such as collars and cuffs, often detached for easier cleaning and replacement. This practice limited soiling from the inside, but not from the noxious air and dirty streets outside, or the smoke and fumes from coal-burning stoves and heaters in the home. Keeping an eye on the condition of clothes was a daily task for most of the women of West Approach households. Clothes were inspected before being hung on pegs, laid on shelves or in drawers, or hung over one of the various innovative clothes hangers of the day (Deen 2004; Des Plaines 2005). Outergarments, dresses, and trousers were daily checked for mud, dirt, and other spots. Wool and silks could be brushed clean, especially at the hemline, which was most subject to soiling. Rain also took its toll on these clothes: woolen clothes lost their shape and sagged when wet, and silk became spotted from each rain drop.

Cotton shirts and undergarments required washing to maintain their white color and freshness. If clothes were not sent out to a washerwoman, then the process of washing at home

was time-consuming and laborious. Most women considered this one of the worst household tasks and so it was done as infrequently as possible (Tarrant 1986:45–46). Cotton clothes would be boiled, bleached, and starched in the kitchen. Dressed in old clothes and an apron, women would start by boiling large amounts of water. While water was heating, a bar of soap was cut up, creating soap flecks that would dissolve in the tub of boiling water; others might choose to purchase laundry soap powder (Doyle 1999:39–40; Draznin 2001:53). Next the clothes were soaked, sometimes overnight, and then scrubbed before boiling. Washboards, like the possible one from Privy 808 at 120 Silver, were used to scrub dirty clothes. The last tub of rinse water might contain bleach, vinegar, or—as eight households at West Approach used—bluing balls to ensure whiteness. Once washed and rinsed, everything was



wrung clean, either by hand or through a wring device. These clothes were boiled, bleached, and scrubbed to oblivion.

More fragile garments, like cotton dresses, were washed separately and with more care. These clothes might have been hung outside on a clothesline using some of the 42 wooden clothespins recovered from six West Approach features; more often, they were hung inside over a dry rack. The indoor method was a common practice during the rainy winter months, but it was also used to prevent the dirty city air from soiling the clean clothes. Once clean and dry, then the task of ironing this mountain of clothes began. Two West Approach features contained an iron, while a third contained four. All but one, are sadirons, with "sad" referring to the solid portion of the iron that flattened the clothes from its weight, along with the heat. These four irons attest to the countless hours spent lifting and pressing the hot heavy implements to create a polished, smooth appearance for the 1870s William and Catherine Cadigan and Martin and Mary Fuchs families.

Spots were cleaned as soon as they were noticed. Each household likely had its own arsenal of proven cleaners, but here are some of the common ones (Doyle 1999:12; Walkley and Foster 1978:32–38). Rubbing a cut raw potato on black clothes would remove dirt, whereas stale bread was used for surface grease spots. Gin and other cheap alcohol, such as vodka, were used as cleaning fluid for fats and oils, and acid-based stains, like body oils and perspiration. Diluted liquid ammonia was used in the same way. Turpentine cleaned velvet. None of the more dangerous solutions, including Oil of Vitriol (mainly sulfuric acid) or Spirits of Salt (hydrochloric acid) for rust spots and for early dry cleaning, were found in the West Approach features.

If these efforts were not successful, alternatives were considered. Dresses could be paired with strategically placed jewelry, accessories, or trim. Clothes could be dyed a darker color to make the spot less noticeable. The other main reason for dying clothes was as an inexpensive alternative to buying mourning clothes. One dye bottle from the Boston company of Howe and Stevens was recovered from Well 6, the mid-1880s Dent or Hannan household at 12 Perry Street.

While shoes and boots could be polished and brushed to keep up their looks, footwear and stockings were far less important to maintain than gloves or other more visible accessories. Only 1 bottle of shoe polish—a Miller, Frank and Son item thrown into Privy 1600 at 207–209 Perry Street during the 1880s—was recovered on this project, in contrast to the 22 bottles recovered from 13 features for the Cypress Project in West Oakland. Hollow, white glass darning eggs for mending socks and stockings were common; a total of six were identified for the West Approach project, while many more were found across the bay on the Cypress Project.

These interminable chores were all part of the behind-the-scenes effort to keep up a presentable facade. Home laundry was time-consuming, exhausting, and necessary for most West Approach women to maintain their own appearance and that of their family.

careful planning. Meals had to be filling. The lodgers, all had hefty appetites, grubby clothes to wash and torn ones to mend, socks with holes to darn, and beds with grimy sheets to change. Their meals left stacks of dirty dishes plus pots and pans to scrub. Two years later, Anne ran off and married a young Italian boy; Mary died single two years later. The McEvoy women were not long-lived, yet there is nothing in the food remains, or in the food-consumption vessels from 1868 that suggests a less nutritious life style from their neighbors, although their eating patterns were slightly different: more rabbit, more chicken, and more wildfowl. The Irish families, as a whole, did not eat as high on the hog as other families did—that is, if butchers' complaints were based on reality and it was truly hard to "find customers for the coarser cuts of meat" (Brooks 1868:466). But then, neither did the Jewish families in this sample.

POINT OF ORIGIN: EUROPE'S JEWISH COMMUNITIES

Ashkenazim Immigrants (Hannah Aaron and Lena Strauss)

There were five Jewish families living in four households in the study group; four were Ashkenazim, while the Martins (originally Martinez) were Sephardic Jews. We can picture what they might have looked like from an 1896 description in "The American Jewess in San Francisco" provided by Rebecca Gradwohl, "always well dressed, sometimes a little dashing in her apparel; with dusky flashing eyes, brilliant cheeks, and a figure that moves along with the swinging motion that indicates perfect health" (Gradwohl 1896:10). Inexplicably, these families were more visible in the documents than the Irish families. Three stood out: the Strauss, Aaron, and Martin families. There are distinct differences between the assemblages of the two Ashkenazi women when compared to the McIver/Martin deposit. Lena Strauss and Hannah Aaron were 20 to 30 years older than Hannah Martin. They were of a different generation and had grown up a world apart. Age/generational differences, point of origin, and the distinctive character of Sephardic foodways are tentative explanations for the contrast in the assemblages. Another difference is the degree of anti-Semitic persecution each encountered in their homelands.

In Charlene Aker's introduction to the 1996 edition of Harriet Levy's reminiscences, she notes the difference between German Jew and Polish Jew: "Highly assimilated German Jews considered themselves intellectually and culturally superior to Polish Jews who clung to the traditional Jewish culture of Eastern Europe" (Levy 1996:ix). A rigid social stratification characterized these two factions of the Jewish community, although occasionally a Polish Jewish girl was fortunate enough to marry a man from the German sector. This was more frequent within the Gold Rush camps and boomtowns, when men outnumbered women to a great degree, than it became later in the century. There were further distinctions as Harriet Levy noted; ashmen and butchers held a lower rank within the order of "Baiern" or Bavarian Jews and within the Polish communities as well based solely on their occupation (1996:151). The Jewish homes and life that Levy describes were rooted in communities north of Market Street whereas Lena Strauss and Hannah Aaron lived far south of this dividing line. Among the former enclave, "variation was perversity" and everyone strove to behave appropriately in Levy's "starched society" (1996:vii). Whether this characterized the street where the Aarons and Strausses lived almost side by side isn't known. But, one would be willing to bet families in both neighborhoods took advantage of their bay windows to watch everything that took place on their street. They offered unbroken communication and allowed all members of a family to gather gossip and report news within the home (Levy 1996:1–4).

Lena Strauss (Privy 849) came from Germany, Hannah Aaron (Privy 814) from Poznan. One lived at 131 Perry; the other at 115 Perry. The Widow Moynihan lived near door to Hannah Aaron; the Irish Dolans were next door to Lena Strauss and her Ackerman nieces and nephews. The block was ethnically diverse. Perry Street was packed with tiny two-story houses, usually duplexes, four- to five-foot deep front yards, and small back yards, which families soon filled with one and two story additions that either enlarged their living space or provided rental income—more often the later based on census records. A separate building directly behind the Aaron residence was reached through a side alley running beside the house; its occupants at the time the Aarons lived on the lot are unknown. Lena Strauss's home was approximately the same size as Hannah's, but two families resided within it. As on the Aaron property, a separate structure occupied a goodly share of the back lot along with a corner privy. The Strauss family moved to Larkin Street in a neighborhood close to Harriet Levy's home at 920 O'Farrell—an area described by Benjamin Levy as possessing prestige and a comfortable closeness to the commercial activity on Van Ness, a neighborhood where friends and acquaintances in the Jewish community also lived (Levy 1996:1). Hannah Aaron went to live with her daughter and prosperous son-in-law, Wolf Levy, in Yolo County.

In their assemblages, toys were few; the debitage from sewing was sparse; the china was well made, yet plain, simple, and sparsely present. Their artifacts indicate they wore perfume and used cold cream to soften their skin. There were few articles of clothing represented, but remnants of silk dresses were found. Mary Wills wrote that everyone in San Francisco dressed gaily (1889:103); there was no reason for these two women not to wear fine garments at appropriate times and every reason to do so; clothing was a coded, visual message telegraphing that they too were part of the city's culture and busy assimilating into American society (Heinze 1990:90). This is not to say they did not also behave in old-fashioned ways, especially in the kitchen. The two deposits differ primarily in the artifacts associated with liquor, but not overwhelmingly so. Traditionally, Jewish families spent less money on drink or in saloons (Heinze 1990).

There is every indication of frugality. Frugality, of course, was a tenet of the early Jewish experience in America, spartan living a virtue. First-generation families had less money to spare and were also less receptive to culture change, especially inside the home (Hyman 1995). Their material life "was nearly medieval" (Heinze 1990:33), which translates to minimal household goods, bare essentials, making do. The next generation and those who immigrated later (e.g., Wolf Samuel, Hannah Martin, the Belasco children) were more amenable to change: "I have shifted my mode of living more in fifty years than my ancestors did in a thousand" wrote Louis Borgenicht (quoted in Heinze 1990:33.). From their assemblages, there is little indication that either the Strauss or the Aaron families responded to California's abundance by substantially acquiring household goods. Perhaps if one could see inside their homes, there would be more indication of material possessions. French visitor Daniel Levy, in 1858, described Jewish life in San Francisco as charming, serene, composed of "young and happy households living in affluence." He stressed that their homes "contained all the conditions necessary for comfort and even luxury" (Kahn 2002:411; Rosenbaum 2000: 40–41). The question is whether he spoke for a few or had made careful observation of many.

With the Aaron family, there is every indication that the second generation succeeded greatly and multiplied. A San Francisco writer, Emma Wolff drew on local knowledge to describe the city's typical Jewish mother, who "sank her life interest in family. . . . Her resources were her daughters. Her dominant ambition was to husband her resources" (1896:279). She did so through arranging successful marriages, a venture wherein Hannah Aaron excelled. None of

THE FINISHING TOUCHES: CRAFTING THE HOME WITH NEEDLEWORK, CROCHET, AND BRAIDED RUGS

Sunshine Psota

A knitted doll's cap, front and back views; pictured at approximately half-scale (Privy 9, Block 9).

The Marsh sisters in Louisa May Alcott's 1868 novel *Little Women* turned to embroidery as a welcome diversion from the constant chores involving sewing and knitting. At that time, the trend in such needlework was based on the German artistic expression, now called Biedermeier, which presented romanticized images of middle-class life (Vincent 1988). Coupled with the Victorian focus on families, idyllic images of families engaged in various tasks were printed onto paper or canvases for women to create needlework; the results were functional items such as bookmarks, pincushions, suspenders, and slippers, as well as decorative hangings for the walls of their homes. Small pieces were frequently given as tokens of affection to special friends and family members. A type of canvas work is called Berlin wool work, with different colors of fine wool stitched using the same basic stitch; the result was the production of very durable pieces of embroidery that could be used as furniture covers, cushions, and bags. This widespread style stands in contrast to the earlier focus on silk embroidery, whose high cost had limited it to only the wealthy.

In the late 1860s, the next wool-needlework trend was even more popular, sweeping into American homes in the form of written mottoes, sometimes coupled with cross-stitched quaint houses or stylized flowers. Among the first of these phrases was "Home Sweet Home." These simply stitched mottoes were hung above a door or on the walls of less formal rooms. This creative outlet reinforced important moral and social values, while mottoes were easier to execute than Berlin wool work. For the first time, American companies produced the printed backings, significantly dropping the initial cost. Some were available in stores for only a penny, or they were packaged as incentives to subscribe to particular magazines. These remained extremely popular through the 1870s, when the mottoes were moved into workrooms and kitchens. The trend's popularity and resulting demise is summed up in the 1884 decorating manual, *How to Make Home Happy: A Housekeeper's Handbook*: "If mottos are used on dining room walls, which is by no means to be advised, do seek one different from 'Eat, Drink, and Be Merry,' and other conventional platitudes which are so common in the cheap boarding-houses" (cited by Vincent 1988:81). By the mid-1870s, decorative needlework, once the domain of the affluent, was now practiced by middle-class women and even some working-class women, who had more time to spend with this leisure activity since they no longer needed to hand sew everything for the family.

The craft-oriented needlework in the West Approach collection came primarily from Well 6. A chain stitch of fine-quality brown wool was likely part of a piece of needlework. Another piece of similar quality wool yarn of a different color may have been paired with it. The needlework could have been used on clothing or for decorating some household item. Mary Hannan is the most likely creator. This feature also contained a ball of yarn. Fragments of uncrimped, good-quality wool yarn were retrieved from the Donnelly and

Beal families's privy, as well as from the Silver Street Kindergarten's privy.

A more basic household article is hinted at in Well 866, associated with either Miss Annie McDonald (a dressmaker) or Susie Tobin. The creation is a long, carefully rolled, wool-twill strip. The 2-3/8-in.-wide roll was likely shaped in preparation for braiding a rug or for use in making a standing wool rug, constructed of dozens of these tight rolls, stitched together with a linen cord (Gray 2006). Such utilitarian rugs reflected the thriftiness of the craftswoman, and celebrated her efforts to make her home comfortable. The concept of woolen rag rugs was brought from Europe to North America, where the rugs achieved a life of their own. At first limited to New England, handmade wool rugs only became popular in the West after the railroad spanned the continent, allowing cheaper access to wool from New England mills (Gray 2006). They provided an economical alternative to expensive store-bought wool rugs. Unlike the latter, braided rugs were extremely thick, and durable, as well as practical—when they became worn they could be flipped and the other side used. Early-20th-century directions recommended three or four shades of one color and perhaps a black, which could be gleaned from salvageable pieces of old clothing (Woman's Home Companion 1907). The wool roll from Well 866 is either the leftover wool not needed after the completion of a rug, the beginning of a new roll, or both.

The only hand-knitted artifact from the project is a well-preserved knitted doll's cap from Privy 9, associated with the Usher family (see photo) The off-white silk yarn was likely white originally. Continuously knitted using four small needles, the one-piece cap was fashioned using a basic garter stitch. The simple cap has a small, center-back seam, which appears pieced with a crochet hook. The cap measures the same in height and width, 2-3/4 inches. No knitting implements were identified in any of the West Approach features, but across the bay in West Oakland, several features contained knitting needles. Several bone crochet hooks were found on San Francisco's Block 9 (see Chapter 5, this report).

them, however, were from the Baiern who, according to Harriet Levy's mother, never "marries a Pole unless he is *krumm* or *lahm* or *strum* [crooked or lamb or dumb]" (Levy 1996:152–153). Still, Hannah had more than a dozen grandchildren at her death, all of them living in prosperous upwardly mobile homes within the Russian/Polish Jewish community. Since mothers acquired prestige with each advantageous betrothal, Hannah had done well.

Lena Strauss, however, continued to live with her single sons, single daughters, and their single cousins. Among the full set of cousins (11 individuals), only 1 daughter and 3 sons were wed. For whatever reason, marriage in this family was not something its women chose. In this they went against the norm despite an urgent demand among the predominantly male members of the Jewish community for Jewish wives. The women in the Ackerman/Strauss household who remained single did so out of choice, which was unusual—both that they were permitted to do so and wished to do so. Articles in the *American Jewess*, however, indicate that other women held similar positions: "[I] would be quite content to go husbandless if only Public and Maternal Opinion had not set up a contrary decree," Emma Wolff wrote in *"One-eye, Two-eye, Three-eye."* "It matters not how you marry, but marry. . . . oh, for that glorious independence day when spinsterhood will be honored . . . meanwhile there is the placard, 'Not wanted,' which Public Opinion stamps upon the front of every woman who had not achieved matrimony" (Wolff 1896:281).

Lena Strauss

Lena Strauss left Bavaria as a teenager, leaving behind a Yiddish culture in which social and economic conditions were rapidly deteriorating. Perhaps she was already married to Bernard Strauss. Perhaps not. State law mandated a listing of all Jewish households in every Bavarian community. One had to be on the list (the *Matrikel*) to set up a household, yet could only be placed on the list if another household was taken off (through death or outward migration). Jewish newspapers noted that marriage was virtually impossible (Diner 1995:15–16, Diner and Benderly 2002:73); one option was to emigrate as a newlywed couple or as a prospective bride for a Jewish man living in America.

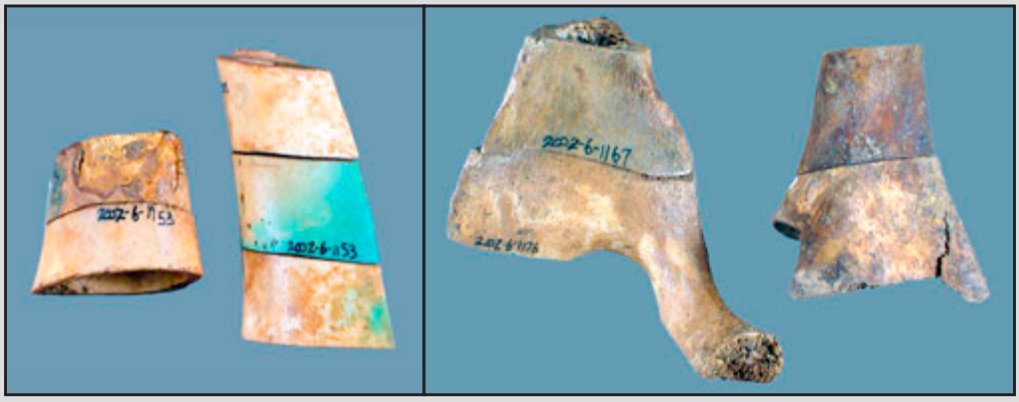
The family settled in a Gold Rush town in the Sierra Nevada by 1854. How did they get to this remote spot? Eastern European merchants, tradesmen, and peddlers arrived in California by 1849 backed by funds from home and access to overseas supplies. Accustomed to trade, procurement, and distribution at small scales and large, they had the skills to set up supply networks in outlying regions (Kahn 2003:29). Bernard, arriving in 1850, was among them, one of various Strauss men who were working in and around the gold-mining towns, and in market-supply nodes of Sacramento or San Francisco. In 1860 Bernard sold goods and food in Angels Camp, a boom town jammed with miners working surface gold. There Lena gave birth to Ida. Arthur was born two years later. On one side their neighbor was a young English blacksmith, on the other an Italian merchant, Joseph Perano, with his 14-year-old wife. The Peranos had kin folk living nearby. While the Italian families lived in better dwellings, valued at 7 to 20 times that of the Strausses' home, Bernard had more money ($4,000 in personal estate, or $674,680.00 in today's currency). The value of the Strauss home was not based on old age, for a catastrophic fire swept the town in 1855, burning almost all buildings. Imagine it as insubstantial and temporary.

Lena undoubtedly helped her husband in his store. The cash on hand testifies that he was doing well. Still, the family had to travel 20 miles to attend a synagogue only open during High Holy Days (Kaufman 2003:41). Crowded with people of different nationalities, with men of good repute and bad, a few women of none, Angels Camp was a colorful place to live, but not a peaceful one. Life was hard on women. In "Brown of Calaveras," Bret Harte put words in the mouth of one character that might have entered Bernard's mind: "sell out all you've got, take your wife with you, and quit the country. It ain't no place for you, nor her. Tell her she must go; make her go, if she won't" (Harte 1885:n.p.).

Family life in Angels Camp could not have been more unlike Lena's childhood home. The ideology of family solidarity was pervasive in central Europe, where Jewish people, despite living in different countries, shared cultural traditions, expectations, options, and values. According to Kaplan, husbands sought self-denial and thrift from wives. Long-term savings—for a daughter's dowry, a son's education—were expected and maintained. Major holidays meant family reunions and traditional meals. Entertainment took place within the family or on family outings among family members. Ties within families were intimate, and this domestic closeness was seen as a reward in itself (Kaplan 1991:76–86). Life in a mining camp allowed little time for family virtues; children saw rough, raw living among all social classes. The number of Jewish residents was minimal. Exposure to *goyim* (non-Jews) and their differing cultural beliefs was constant. The cultural pluralism, in fact, may have made it overwhelming for some. As mines played out, the Strausses had fewer customers and, like many, they resettled in the city with its synagogues and larger Jewish population.

BUTCHER CUT REFITS

Michael Stoyka



Mutton chops or steaks (Privy 851, Block 10). On the left are consecutive steak cuts representing mutton "arm chops." On the right are examples of consecutive steak cuts representing mutton "rump" and "sirloin" chops.

The analysis of dietary remains from the West Approach Project produced dozens of examples of butcher cut refits. The refits fall into three distinct categories. The first, and most common, are consecutive steak cuts from a single element (i.e., humerus, femur, sacrum, or scapula) or articulating elements (i.e., pelvic acetabulum and proximal femur). When reassembled, the steaks (usually of very similar thickness) have corresponding and matching butcher cut marks (usually handsaw marks) that allow reconstruction of that portion of the element. Some of the refits that fall into this category comprise as many as three or four consecutive steaks.

The second most common type of butcher cut refit is in the form of roasts. By their nature, roasts usually are a larger cut of meat and can involve several consecutive articulating elements. The most frequent example of this cut is a reconstructed leg of mutton (femur and tibia, sometimes including part of the innominate and patella), a ham (innominate, femur, tibia, and fibula), or a loin roast of several lumbar vertebrae that articulate. In most cases, these bones exhibit numerous parallel knife scores, confirming the style of preparation and serving.

The final type of reconstructed meat cut is the soup bone, of which there are two varieties. One type can be identified when conjoining and articulating elements are reassembled to form a complete joint. A common example of this type is the distal humerus, the proximal radius and ulna, or consecutive cervical vertebrae. Another form of soup bone refit occurs when an element or group of elements appropriate for a soup or stew has been split, shattered, or disarticulated. Some recurrent examples of these soup bones would be an astragalus, calcaneus, and centrale; a shattered or split tibia, sometimes with articulating split distal femur; a distal humerus; or pig skulls. The tool of choice for this type of meat reduction is most frequently the ax/cleaver.

Leg of mutton (Privy 1318, Block 4). This is an example of a leg of mutton roast that has been re-articulated. The long bones exhibit roast "carving marks" and knife scores.

Seven features from the project have identified butcher cut refits (see table). Four features from Block 10 and three from Block 4 fall into this category. Three of the features (801, 1304, and 1305) have minimal numbers of refits. The other four features have quantities that are quite significant (from 16 to 31 each), and when compared to the paucity

Beef soup bones. On the left is a beef radius representing fore shank soup bones (Privy 1333, Block 4). On The right is a reconstructed beef ankle or hind foot soup bone (Privy 1326, Block 4). Note the reduction with axe cuts.

of this evidence for the dozens of other collections studied, the emphasis appears to be more than just a coincidence. These come from only two of the six blocks studied.

Evidence of this phenomenon may speak to several different topics. One of these is the method of disposal and/or deposition. Another topic questions whether the presence of these refits is an artifact of consumerism, home-butchering, or the methods of a particular butcher or butcher shop. Lastly, does the presence or quantity of refits appear to have any correlation to the feature's overall character in terms of meat cost?

To address the first topic, the faunal material has to be seen as just another artifact category in the catalog. When the other artifact types, such as bottles and tableware, are observed as whole or large fragments that represent a relatively low minimum number of items (MNI), one can envision a pattern of gradual breakage and disposal over a relatively long period. In contrast, the presence of these refits—along with a large number of bones from individual birds, fish, and pets—suggests fast, all-encompassing disposal and fill events with relatively little post-depositional disturbance.

The second question is perhaps the most difficult one, but there are a few likely scenarios that can be considered. It is certainly possible that the individual purchasing the meat may have had particular requests. The consumer could order a larger piece of meat to be reduced for steaks of a specific quality or thickness, or have a chunk of meat split up for the soup/stew that was going to be prepared.

There could also be a matter of convenience involving butcher-shop density. The consumer may have timed his or her visit to the meat market first thing in the morning, when the steaks or soup bones were being produced by the butcher and were still relatively intact. It is interesting to

Features with Cut Refits by Type

Block	Feature	Address	Association	TPQ	NISP*				Market Price
					Soup bone	Steak	Roast	All	
10	801/802	142 Silver	Irish	late 1880s	3	4		7	Moderate
10	810	137–39 Perry	Irish	late 1870s	3	4	9	16	High
10	851	114 Silver	German	late 1870s	5	20	6	31	High
10	853	108 Silver	American	1872	3	2	19	24	High to moderate
4	1304	19 Baldwin	Unknown	1895	2	3	1	6	Moderate
4	1305	13 Baldwin	French/Irish	1880	3			3	Moderate
4	1326	240 Freemont	American	1870's	12	8		20	Moderate to low
				Total	31	41	35	107	

*NISP = number of identified specimens

note that, when the locations of retail butchers listed in the 1879 San Francisco City Directory were mapped, Blocks 4 and 10 each had a large number of butcher shops within a one-block area.

The topic of home-butchering is not easily addressed. Only the Privy 1305 collection had a number of indicators that suggest residents at this address might have been purchasing larger cuts of meat at a lower cost, then reducing the meat themselves. Among this evidence is the presence of a number of elements from the forequarter of a veal cow. Also contributing to the argument are a reconstructed pig skull, with axe to break marks, an amateurishly reduced beef thoracic vertebra, and other less than consistent butcher marks.

Finally, do these data have any impact on the percentage of meat weight by market price? While the current sample size of butcher cut refits is fairly small, some trends are evident that may start the dialogue on this topic until other data sets become available. For example, Privy 1326 had the highest proportion of soup bone refits to steak cuts that contributed to a character of moderate to low cost. In addition three of the four large samples (Privies 810 and 851 and Well 853) ranked at the high end of the spectrum for quality and cost of meat consumed. The residents associated with these features may have had the financial means, and a demanding concern for quality, to make these kinds of choices. Also, the counts of roasts (especially as hams and leg of mutton, both of which are expensive cuts of meat) and steaks have an obvious impact on cost analysis.

Tens of thousands of bones were examined from dozens of features in order to arrive at the examples detailed here. It is quite arduous to identify and record cut refit examples during analysis. It takes a patient, detail-oriented eye, as well as a very methodical processing of the faunal material. Like elements and conjoining elements must be processed and observed at the same time so that mates and mends can be noted. Matching butcher marks must also be confirmed, and if elements are found to articulate, the articular surfaces have to fit and match exactly. In turn, firm historic-association data are key. The interpretation of these results and the conclusions based on the evidence are not definitive, but the discussion and examples are certainly relevant and interesting.

In San Francisco by 1870, the family's wealth had decreased considerably; they lived at 115 Perry Street in a duplex shared with the six Ackerman orphans and Henry Strauss—a retired butcher like Bernard—plus David Ackerman, also a butcher. Almost none of the Strauss men recorded on the 1860 census, including three other butchers, could be found on later California censuses. If they were relatives, they had come and gone. Yet the presence of collateral relatives among both the Ackermans and Strausses indicates that the two families immigrated in a chain-linked fashion similar to other European Jews, both supporting and drawing on a tight-knit set of kin. Lena enjoyed the company of her nieces and nephews, who mixed easily with her own children. It was sometimes confusing to have her son Arthur and her nephew, Arthur/Adolph, both born in 1859, her Ida (1857) and her niece, Ada (1855), living under one roof. The two Edwards, at least, were seven years apart. In Ashkenazi tradition, both she and her brother Joseph had named their offspring for friends or relatives who had passed away, not anticipating that their two families eventually would form one very crowded household.

The bitter words of another immigrant (not Jewish) shed some light on why the Strausses left Germany: "It was my desire to bring my children . . . to a place where they could find work and bread, as long as they would work hard and be frugal," wrote Michael Friedrich Radke, "where each of them could prepare for a happy and calm future" (1848:n.p.). Increasing harassment of Jews throughout Germany shed doubt on the future; whole communities from Bavaria, Bernard's home principality, migrated to America (Toll 1978:9). Radke used a graphic metaphor to spell out how the lower ranks were treated: "In Germany the poor man compared to the rich man is like a despised creature, or like a scarcely noticed creeping worm, who must slither and creep along

in the dust in order not to be stepped on to death" (1848:n.p.). The Aarons experienced this and more in their home near Poznan.

The Aarons, Strausses, and Ackermans could not return to their homeland; few of their fellow exiles carried with them fond memories of a mother country. Heinze (1990:106) writes that many Jewish women felt great nostalgia for the countryside and rural homes of their youth, hanging paintings of rustic farms in their homes as reminders. They also shared memories of similar ways of preparing food (e.g., De Silva 1996) and of rare foods. But, neither had ever seen grapes, cherries, pears, or strawberries in December markets, or the "reckless wealth of melons, grapes, oranges, and undried figs" offered in California's fruit stalls (Brooks 1868:468; Elliott 1868:564). Their cooking was defined by Ashkenazi traditions, by the stipulations of Kashrut, by the cycle of Jewish holidays, and individual family celebrations (i.e., circumcision, *bar mitzvah*, burial, and weddings). Its origins lay in the cold European environment, one that created a "world of chicken fat, onion and garlic, cabbage, carrots, potatoes, freshwater fish, especially carp, and salt herring" (Roden 1996:16). The names of their foods are familiar ones: lox, bagels, latkes, kugel, matzo balls, goulash, gefilte fish, noodle soup, golden yotch (or chicken soup), and cheesecake. Most leave no trace in the ground.

Lamb or mutton was not forbidden, but it was expensive and hard to find in eastern Europe and hence unimportant in Ashkenazi cuisine. The *Heimsche Kitchen Cookbook* (2002), compiled by the Ladies Auxiliary of Nitra, and *A Taste of the Past* (Koerner 2004), as well as *The Book of Jewish Food* (Roden 1996:41–210) have no recipes for lamb or mutton. Thus it is unsurprising to see that sheep meat comprises such a modest percentage of the faunal remains from the Strauss/Ackerman assemblage (Table 4.5). Mutton was, however, so commonly served in 19th-century California that it must have been both cheap and readily available. David Phillips wrote in an 1876 letter, "Mutton in California is of universal use. It is either roast mutton, broiled mutton, fried mutton, boiled mutton, mutton stew or stewed mutton" (1877:Letter XII). No frugal housewife could avoid its use.

Faunal experts tell us that the family did not eat roasts, which is puzzling; but they did eat more of the better meat cuts than of the middling or lesser, more steaks than stews. With the butchers in the family and reputations on the line, Lena Strauss could be sure of getting the best pickled tongue, the tenderest steaks, the best prime rib, and the most flavorful beef remnants for her beef stew and vegetable soup. According to Jewish cooks, she might have roasted breast of beef, brisket, deckle, rolled breast, top of rib, minute roast, French roast, chuck roast, end steak, or rolled roast. Some of these cuts might have been unfamiliar to Christian butchers, but Lena wouldn't have patronized them. If she needed a bit of pork, her husband or sons would buy it.

Jewish farmers maintained some of the large farms in outlying areas. The poultry they sent to market was "fine in quality and nicely prepared" (Wills 1889:102). One can be sure Lena bought the best of these. She would pick out a hen, a turkey, or duck and have it butchered by a ritual slaughterer (a *shochet*), who said a brief blessing as he quickly cut its throat. The bird would be hung so its blood could drain, and thoroughly koshered by additional steps. One of her girls would pluck it, clean it thoroughly, salt it to drain out the blood, and soak it. The next step was washing off the salt and a thorough rinsing, three rinses at least, ending with a final wash after which the meat was left to drain (Koerner 2004:57–58). At that point it was ready to roast or to use for soup. For soup, Lena tossed it into a pot, covered it with water, added its feet to intensify the flavor, and simmered it slowly while removing the foam. After an hour, a carrot, some celery and onion would be thrown in along with salt and pepper. Some cooks added a leek or turnip,

Table 4.5. Meat Represented in the McIver/Martin and Strauss/Ackerman Faunal Assemblages (by percent of weight)

Assemblage	Beef	Mutton	Pork	Fowl	Rabbit
McIver/Martin	61	20	13	5	0.6
Strauss/Ackerman	65	18	5	11	2.0
Average	63	19	9	8	1.6

and others parsley. Eastern Europeans favored garlic. After several hours of slow cooking, the soup was ready to be cooled and the fat drawn off (Kann 1993:49). Without air conditioning, with open windows and an ocean breeze, the aroma of simmering chicken soup would disperse among nearby buildings. Every neighbor knew what the Strauss family was eating that day unless it was rainy and cold.

There are pig bones in the faunal assemblage as well, although it is difficult to know how the meat was cooked. Pork was a forbidden meat, yet a tiny portion in a variety of cuts (including pig's feet) is present. The percentage of pork among the Jewish assemblages is significantly small (about 5 to 13%), but it is there nonetheless (Table 4.5). It should be noted that Rabbi Julius Eckman wrote to the *Daily Herald* in 1854, publicly berating a Jewish butcher for eating non-kosher meat—presumably pork, for living in a non-kosher boardinghouse, and for working on the Sabbath (Rosenbaum 2000:21).

Other faunal deposits, from Arkansas (Stewart-Abernathy 1986; Stewart-Abernathy and Ruff 1989) and New York's tenement district (Yamin 2001:165) further testify to pork's consumption by Jews. Roden (1996) acknowledges it was occasionally eaten, while Koerner confirms this in a description of his uncles, who bought sausages from a Christian butcher, and stored them in an outbuilding their mother would not enter (Koerner 2004:60, 76).

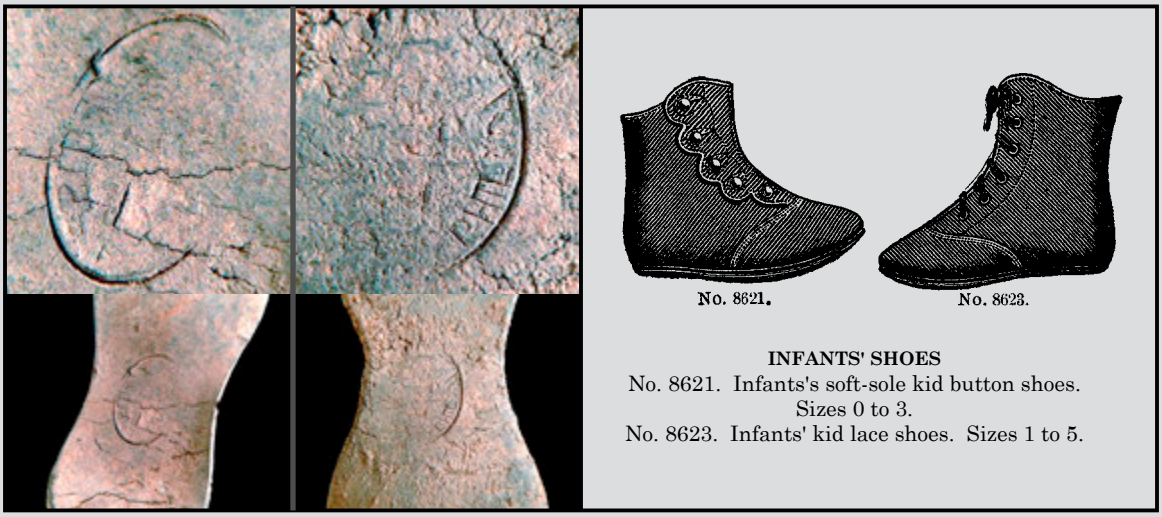
Hannah Aaron

This Jewish woman grew up either in a rural household or an urban ghetto; a matchmaker or her father arranged her marriage. Hannah and Isaac immigrated the same year as Lena's husband, Bernard—it is not clear whether from Russian-controlled areas of Poland or from Prussian controlled Poznan. According to the U.S. Census, Hannah's parents never taught her to read and write. She would have grown up speaking Yiddish in a closed community fenced in by tradition. Presumably, Hannah's mother kept a kosher kitchen. This meant that she kept meat and dairy separate, never cooked them simultaneously on the stove, used two sets of dishes for each, and carefully cleaned the kitchen counter so that no contamination could occur (Koerner 2004:76). She cooked the best meal of the week for Friday night, when the family began the Sabbath. Other weekly meals were simpler.

Across Poland, women's lives were circumscribed by their family networks and the larger community; they were dependent not pro-active, although some Jewish women became skilled bookkeepers and shop assistants. By and large, their work fell within a labor category that was unrecognized (shop work) and, in some cases, paid but hidden (washing, sewing, or catering done within the home; Kaplan 1991). They were enculturated to value thrift and industriousness, to be good mothers. Many families lived in wattle-and-daub homes with earthen floors. Kitchen stoves and chimneys did not appear until the second half of the 19th century. Women were adept

THE SAN FRANCISCO/PHILADELPHIA CONNECTION IDENTIFIED ON TINY SHOES

Sunshine Psota



Seiberlich marker's mark on baby's booties with examples of the basic styles of infant shoes.

In the 1880s household of Albert and Katie Rowe, shoes were rarely thrown out, especially if they belonged to either of the couple's two daughters or son, or to Albert's sister and her daughter (U.S. Census 1880). This all changed after Katie died and the house was given a thorough cleaning some time before Albert married his second wife in 1888. Among the items thrown into Well 8 at 16 (37) Perry were various sizes of infants' and children's footwear. Twelve are "booties," or shoes from infants and toddlers. Among the older children's and boys' footwear are wooden-pegged shoes and a pull-on boot. This boot style was popular for a long time, but the type of machine construction is typical of that used from the 1850s to 1870s. All but one are cracked and worn. One of these worn soles bears a stamped portion of a maker's mark. It probably was a circle or an oval, with the only two legible letters and a symbol, "S&D," stamped into the arch; this company could not be further identified.

The bulk of the youngster's footwear consists of turned soles from shoes, or what we now call "booties." Here, "turned footwear" refers to a technique in which uppers and lowers are machine-sewn together inside-out, then reversed, or turned back, so that the sewing is protected inside. This technique is most often used on infant shoes or indoor shoes and slippers. Manufactured for economy and comfort, and not durability, none of the turned footwear retained any signs of wear. These tiny shoes were probably not worn very long before the child outgrew them. What remains are portions of similarly stamped maker's marks on three different pairs ranging in size from an Infant's 1 to a Toddler's 2-1/2. Most of the mark can be discerned: "A. Seiber . . ." above a line, with "PHILADA" underneath.

The shoe was likely manufactured by Anthony Seiberlich, who was born in Baden (now southwestern Germany). While not listed in the 1840 U.S. Census, the next (U.S. Census 1850: Philadelphia District, page 64) places him and his family in Pennsylvania by 1842, when his eldest son was born. The bootmaker and his wife had five children, while five young women ages 14 to 22 listed with the family may have been their domestic help, lodgers, or, more likely, employees who lived with the family while hand-sewing footwear in their shop. In 1860 the successful 42-year-old had $10,000 in real estate and $30,000 in personal worth. His French-born wife, Victoria, was two years younger (U.S. Census 1860: Philadelphia, Ward 2, page 150). They had nine children spaced two years apart, beginning with the eldest: Anthony, age 20, who worked as a clerk; John, who also worked as a clerk; followed by Frank, Augustus, Anna, Thomas, Edward, Benedict, and Powell.

By 1870 the 28-year-old Francis Seiberlich (aka Frank) lived in San Francisco with his Pennsylvania-born wife, Mary, and their 1-year-old daughter, Mary, who had been born in California (U.S. Census 1870: San Francisco, Ward 8, page 203). Like his father, Francis was successful, working as a wholesale boot and shoemaker with $7,000 in real estate and an additional $30,000 in personal assets. In either 1870 or 1871, a son was born in California. The Seiberlichs' stay in California was short, possibly only a year or two according to the birthplaces of their younger children (U.S. Census 1880: Philadelphia, ED 58, page 6). The family returned to Pennsylvania by 1875, where three more of their children were born. Five years later, Francis Seiberlich was still manufacturing shoes, probably in the company his father built. The census also documented that he had rheumatism.

By 1890 in Philadelphia, the shoe firm of Louis H. Seiberlich & Frederick Arnold operated at 20 S 4th Street, and Francis X. and Thomas W. sold shoes under the company name of F.X. & T.W. Seiberlich at 413 Dillwyn (James Gopsill's Sons 1890). While Francis X. was living in Philadelphia, Thomas W. lived and worked in San Francisco; in San Francisco, however, the company's name was A. Seiberlich's Sons, probably building on their father's reputation (San Francisco City Directory 1889–1891). Their relation Benedict J. also worked in the San Francisco area as their traveling salesman. The family tradition continued with two other Seiberlichs, Louis and Joseph F., making shoes in San Francisco at this time, each for a different company, while the two lived at the same address. The Philadelphia–San Francisco connection lasted several decades and is reflected in the tiny, saved infant shoes in the Rowe family collection.

at hearth and fireside cooking. Material possessions were few; prized plates were displayed on cupboard shelves; cooking utensils were earthenware vessels or iron pots (Knothe 1997).

Life was especially difficult in Poland's Jewish communities under Russian control. Czar Nicholas I, who ruled during Hannah's childhood, sought the annihilation of Jewish citizens and encouraged anti-Semitism. His tactics—designed to coerce assimilation, to kill or displace the population—were harsh. Families were forced out of towns and villages, except in agricultural areas of southern Russia or the pale of settlement (Russian Poland), and persecuted wherever they lived. Jewish boys (by 12, but sometimes at age 8 or 9) were conscripted into the Russian military and made to serve 25 years (Sachar 1965:309–315). Elite families were able to purchase dispensations for their sons.

By the mid-1840s, a ban on men's traditional hair styles and clothing was in place. Assimilation was emphasized in new schools that Jewish families were forced to support. Shortly afterward, Jews learned they were to be classed as either *useful* (merchants, craftsmen, and agriculturalists) or *not useful* (small tradesmen, hucksters, and poorer families). This order was to become law in 1851 (Eisenbach 1991; Sinkoff 2004). Given both systematic persecution and political tension, Hannah's early years of married life had to have been filled with concern for the future. Hannah gave birth to Joseph (1846) and then to Pauline (1849). The Aarons left before the 1851 order (above) began. Certainly worries over increasing ethnic tension, economic discrimination, their son's future, and falling under the 'not useful' category would have been among their motives. If, however, they lived near Poznan then radical restructuring or revolt might have been the impetus to move. It is hard to tell since the family reported both Russia and Posnan as their origin on different documents.

The situation in Prussian areas was different, but there were still good reasons to leave, especially for those who rose up against the Hohenzollern king in 1848. While some Jews sided with the Polish elite and others helped organize and fought with the Germans, it mattered little in the end. There was dissension in the Jewish communities, particularly among the intelligentsia,

and 1848 saw the start of sustained outward migration. This coincides with the Aarons' departure. A number of these men and women gathered eventually in San Francisco, where they formed an exile community that included Rabbi Elkan Cohn, whom Rosenbaum (2000:44) believes fought in the rebellion.

When Isaac and Hannah left, they were among a small number of emigrants (approximately 6,000 Polish Jews between 1830 and 1875) consisting primarily of intellectuals and political exiles, although the volume of Polish and Russian emigration grew rapidly thereafter (Zubrzycki 1979:61–62). Why ever and however they went, the passage was long and they took it knowing they could not return. Isaac and Hannah arrived in New York with an infant and a young boy who needed Hebrew schooling. Sarah was born in 1853, followed in another three years by Amelia. The Aarons now had one son and three daughters. Marx once wrote that Polish Jews "multiply like lice," (quoted in Kaplan 1991: 44), but the family size and spacing between births suggest that Hannah used some form of birth control. Unlike the Roman Catholic Church, the Jewish faith did not prohibit family planning (Kaplan 1991:43–45).

Isaac struggled to make money and earned less than he wished. Further, living conditions in New York were deplorable. Somehow the Aarons financed the move to California, and once in San Francisco, Isaac peddled cigars. Peddling was a classic Jewish occupation in eastern Europe, one many immigrants took up in New York. A generation later, peddling for Hannah's sons-in-law, was a first step towards prosperity, a path that included clerking, peddling from wagons across rural California, purchasing small stores, networking between city and country. But they began at an early age utilizing family networks and a broader, supportive ethnic community. Isaac and Hannah were among the very first wave of eastern European migrants when they arrived in California, and without a strong support network. Hannah came from a region where a number of wives were active participants in their husband's commerce; it is likely she took up a similar role in San Francisco.

In Hannah's mind, education was important; all her children attended school well into their teens despite the early death of their father. The youngest daughter, Amelia, worked at the Eighth Street Grammar School before she married Alexander Rummelsberg, a merchant from Poznan. Three of Hannah's children and possibly a fourth married Polish Jews—a hint that the family's social networks were enmeshed in the exile community. Hannah's sons-in-law became highly successful merchants in the rich farming counties of Yolo and Colusa.

This family was exceedingly frugal, but they were not poor. In 1860 Isaac had $350 in personal property ($55,020). In 1870, 1 to 2 years after his death, Hannah owned their home on Perry Street appraised at $6,000 for taxes ($943,200.00) and had $1,000 in personal property ($157,200). Son Joseph had an additional $1,500 ($235,800), despite being only 23. Often an investment in real estate makes a family wealthy on paper, yet without much cash on hand for day-to-day living. This was not so with this family whose total wealth was almost three times the average for men in the Northwest (Soltow 1979: Table 3.5). However, this affluence is not reflected in their artifact assemblage. It does tell us, however, how they accumulated it, namely by being parsimonious. The family was thrifty in their purchases. But, consider Hannah's background. Think of her growing up without a kitchen stove living in very modest housing. Think of her mother as a woman who used every bit of food that came into the house, using meat for seasoning more than bulk, and conserving wherever she could. Thrift was Hannah's childhood legacy. The only frivolous artifacts in the assemblage from her home consisted of pieces of a child's ABC dish, a porcelain vase, a marble, a doll, and three pieces of a miniature tea set.

There is nothing known about the meats eaten in the Aaron household because too few bones were recovered to justify analysis. The presence of a lovely Staffordshire bowl, however, indicates that ceremony did attend certain meals. In fact, their religious beliefs dictated it. Heinze wrote that the acquisition of luxuries, particularly for dining, "sanctified oneself and one's household" (1990:83). Jewish families in New York annually redecorated their small apartments at Passover, tossing everything they didn't want out into the street. This was not as wasteful as it sounds, because others selected from the discards to get things they wanted or needed. The Aaron and Strauss/Ackerman assemblages contain no hints of this practice. Their assemblages also stand as counterpoints to a biased view held by many Americans that Jews "flaunted their riches" (Diner 1995:191).

While there are few signs of luxury among the Aaron and Strauss/Ackerman artifacts, the situation changes when we consider young Hannah Martin and her stepdaughter, Esther.

San Francisco's Sephardim

The Sephardic community in San Francisco included a few families from Mexico and a larger number from London's Anglo-Jewish neighborhoods near Whitechapel. When Spain exiled its Sephardim, many became successful merchants based in Amsterdam, who extended their reach into London once British Laws allowed Jews to enter the country. The London Anglo-Jewish community became another bridgehead in the Jewish Diaspora. They remained a small, distinct ethnic enclave until a number of Ashkenazim, drawn by the business opportunities funneled through London, sent relatives to Britain in the early 1800s. While brilliant financiers created one bridge between the Anglo-Jews and their English counterparts and physicians built another, a more unlikely bridge was forged by boxers, some of them legendary, some famous, some apparently infamous. Among all these were the Belascos, the Harts, and the Martins (i.e., Mendes/Mendoza).

Hannah Hart Martin

Hannah's life can be teased out from a variety of documents, including census records for different families, newspapers, and a biography of a famous relative (Privy 806). Her parents, approximately the same age as her husband, Abraham Martin, belonged to an Anglo-Jewish community in London. The Harts joined Australia's Gold Rush and grew, as five more children—including four girls—were born. Australia treated its Jewish citizens well; there was remarkably little discrimination. It is unclear why the family left. But, after 12 years they decided, whether from loneliness or economic necessity, to move to San Francisco. Other Australian-based, Anglo-Jews from London left too (e.g., the Solomon family). The flow of all migrants always moves in response to push and pull factors. For the Martins and Solomons, the pull may have been a small London-born enclave of San Francisco Sephardim. By 1870 the family rented a house next door to Chinese laundry workers in an area north of Market, a few doors down from a Mexican bootmaker. They lived in a neighborhood packed with small craftsmen and tradesmen of remarkable cultural diversity. Hannah experienced none of the persecution that Lena Strauss or Hannah Aaron endured in childhood. Unlike them, she grew up in a more cosmopolitan world and had, even if only at a distance, a much broader knowledge of cultural variation than they possessed at her age.

Abraham Martin, born ca. 1831, came to California with his wife, Fanny, and opened a grocer's shop. She was 16 and he was 21 when they left London. If he used the route in 1852 that

his twin sister, Reina (Martin) Belasco, took in 1853, then they sailed to Central America, crossed the isthmus, and sailed north (Winter 1918:2). Fanny and Reina had sons within a year of each other. Abe and Fanny's first son, David, was born at home in 1854. Abraham's sister, Reina, had five more babies (two sets of twins) before 1859, when Fanny had little Hannah who died in infancy or early childhood. There were no more recorded births during the next five years as there were none between David and Hannah, although this does not rule out miscarriages or stillborn infants. Esther (1864) and Isaac (1865) entered the Martin family in quick succession. Tragically, both were deaf. Subsequent infant deaths become a litany: Charles (Isaac's twin?), d. 1865; Honora, d. 1866; Mary L. and Rosie, d. 1868. Fanny died too after birthing the twins, while David, then age 14, ran off to Alaska before, during, or just after Hanukah (December 1868). It is hard to imagine the grief Abraham and David felt, or to understand the bewilderment and sorrow of the two deaf youngsters who no longer had a mother or an older brother nearby.

Abraham, Esther, and Isaac do not appear in any census documents for 1870 seen to date. Clearly, this widower needed a woman in his home. Single women remained a minor segment of the city's population; eager young bachelors were everywhere and young women, or their matchmaking parents, could be choosy. There was a reluctance to intermarry. Whether Abraham went home to London to find a wife or looked elsewhere is not known, although collateral records indicate many immigrants did seek wives from Old World towns and villages. Abraham and his children reappear in texts three years later, when he married 16-year-old Hannah. It had to have been an arranged marriage for Abraham was 40, 24 years older than Hannah. He came from the same London neighborhood as her parents and was also their age. Arranged marriages were still common in the Jewish community.

Hannah tried to follow Jewish tradition and make home a retreat from the workaday world. She prepared for the Sabbath carefully. She welcomed her sister-in-law and brother-in-law, Reina and Abraham Belasco. Reina was a bright, imaginative, yet gentle woman, with shining brown eyes and a love for poetry; she doted on her son David and his passion for the theatre, a passion the whole family gradually adopted (Winter 1918:468). Her genial husband was "a modest, loveable person . . . a pleasant companion and a clever entertainer" (Winter 1918:3). Their children were handsome and talented, but, like Hannah's stepson, many of Reina's children were as old or older than the new bride. Her stepdaughter, Esther, drew comfort from them. As a young second wife, Hannah could not have had the same status within this close-knit, cosmopolitan family as Abraham's first wife.

Heinze (1990:135–136) told how Jewish women gave their parlors an "air of social self-respect" through the careful display of small figurines and vases. These items conveyed their participation in a Victorian aesthetic and bespoke respectability. We find similar items among Hannah's artifact assemblage: porcelain figures, porcelain vases, and a few of ordinary glass. San Francisco florists sold gorgeous flowers (Dowling 1998; Kaufman 1994: 162), so the vases may have been used both as containers and for display. Hannah also set as graceful a table as she was able (Heinze 1990:68–75). She had porcelain plates for marzipan deserts, almond cakes, sugar cookies, almond-honey pastries; porcelain cups for tea and porcelain demitasse cups for rich, thick coffee; and a glass compote for fruit poached in sugar syrup. There were serving platters aplenty and other serving dishes in a variety of styles and materials. Some of her lamps were plain, but more special ones had little glass tinklers.

Like Lena Strauss and Hannah Aaron, Hannah Martin would have served traditional foods on holidays or religious occasions (Figure 4.15). Like them, she also used meat for seasoning,

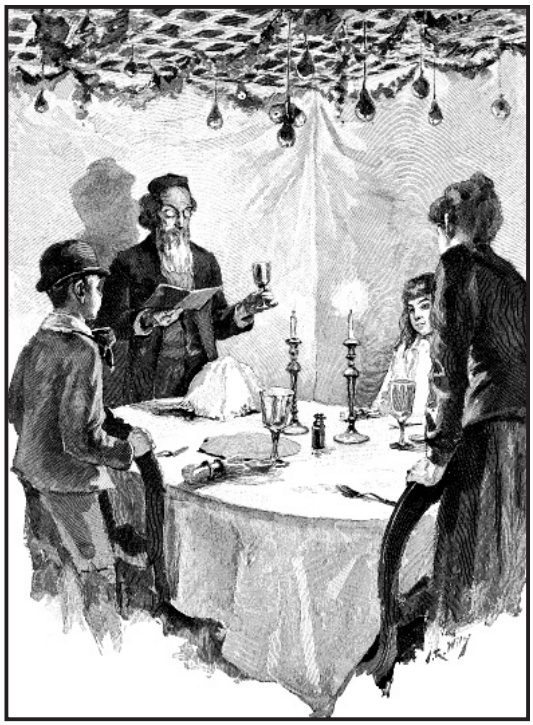


Figure 4.15. Welcoming the onset of the Sabbath during the festival of *Sukkot* (Wheatley 1892:332).

or in small savory Sephardic pies. Unlike them, she would have selected her spices, pickles, fruits, and vegetables from the wider, hotter array used in Sephardic homes. She was familiar with tropical fruits, thought nothing of finding strawberries or raspberries in December, and saw the availability of mushrooms as expectable. Oriental spices and curries were as common in Australian markets as Asian faces; thus Hannah may have had some knowledge of these exotic cuisines. Hannah also cooked with aromatic herbs, and prepared zucchini, peppers, tomatoes, and artichokes. Her deserts were flavored with grated orange zest, chocolate, and vanilla. Lamb, like saltwater fish, was a traditional food, cooked with a variety of fruits or nuts, sometimes stuffed with rice or mixed with eggplant. Most of the lamb her family ate was from high-priced cuts, in contrast to the less expensive beef pieces she chose. Her cooking drew from a different cuisine than that of eastern European women. Ashkenazi and Sephardic cooking styles never fused, although the Ashkenazim did 'borrow' recipes for sweet deserts, and fish fried in batter (Roden 1996:17). But the fact that the bones from Hannah's kitchen were mixed with those from a Scots-Irish family makes it difficult to know precisely what she did.

It is impossible to identify which artifacts came from Hannah's household and which from the McIvers, but the two families did not have the same socioeconomic status. The McIver home was filled with small motherless children, who constantly outgrew their shoes (over two dozen were recovered). Miss Mary, the eldest daughter, had charge of their care. She had to balance a weekly budget and make ends meet while her father, a skilled rigger, drew a good salary, but not a stupendous one. One can only hope that he appreciated all his daughter did and expressed it both verbally and tangibly.

The little figurines in the assemblage would have been an appropriate way to do so, whereas the 14 perfume bottles (Figure 4.16) speak of a different type of intimacy as does a luxurious silk-and-glass-beaded hairnet. We can more reasonably assume they were Hannah's. Taken together with the remnants of a parasol, a fan, various fake gemstones, ornamental pins, and silk garments, the array suggests an indulgent lover, a man who wanted to please his wife or perhaps one who couldn't. A female syringe speaks to both sexuality and birth control. Hairpins, hairbrushes, combs, and porcelain jars for cosmetics indicate someone paid attention to their appearance, whereas medical syringes, two dozen medicinal bottles, painkillers, and a urinal indicate a focus on health. The picture is fragmentary but also suggestive of a May–December union

Were there times when Hannah Hart Martin wished Abraham's first wife was still alive? Did she sometimes wish she hadn't married so young? In many California families, girls of 16 were exploring the outer world through their jobs. But, not Hannah. In some ways her life had been better during childhood; in fact, from a 21st-century perspective, she was not much more than a child herself when she married. The next 10 years were filled with sorrow and death.

Figure 4.16. Perfume bottles; ten from Lubin, and the rest from Pinaud, Bazin, and one unindentified manufacturer (Privy 806).

Her first daughter (b. 1872) died young, her twin daughters (b. 1872), her first son (b. 1875) died young, and her third son (b. 1883) died too. Her father passed on in 1877 at age 45. Then David, a single man of 26, came back and went into business with his father. There was trouble in the home, although its source isn't known. Angry words were said. Abraham moved down the street to 152 Perry, and was out of town (in Alaska?) when the 1880 census was taken. He died in 1882, aged 51 years and 7 months.

Hannah spent half of her young married life pregnant, and became a widow at 28. Her mother, brothers, and sisters lived a block away (236 Perry Street), close enough to provide company and comfort. As reminders of her marriage Hannah had her daughter, Bella, and her two stepchildren. By 1900 Hannah's mother was gone, her siblings married; she lived with Bella and her husband, Max Fleischman (Flushman), and their two daughters. Hannah and Bella were not listed on the 1920 census, and Bella's husband had remarried.

Esther Martin

Both Hannah Aaron and Hannah Martin spent their married lives living in nuclear households (husband, wife, and children), whereas many Jewish immigrants in New York lived in households comprised of aunts, uncles, and cousins in addition to the nuclear family—small homes literally filled to the brim with family. Rooms did double duty (Heinze 1990:135). Esther Martin's home life changed when her father died. She moved from a small household run by her stepmother to the Belasco domain—with its diachronic extension (the generations) and synchronic additions (siblings, spouses, in-laws, and oriental servants); its involvement with the theater (primarily the Alcazar), its actors and actresses, its focus on night life and the stage. Rooms here may have done double duty, too, as the Belasco sons cycled in and out, going on the road with various stage groups.

Esther's Aunt Reina was Abraham's twin, a charitable soul known in the city's poor neighborhoods as the "Good Angel" (Winter 1918:469). She mothered a large and unusually eclectic family. They changed names; they anglicized names. It is sometimes difficult to be sure who was who. David occasionally went under the stage name of William Kingsley. Abraham (Jr.) appears most often as Walter, occasionally as Abraham W. His father, "Humphrey," is listed as Abraham in city directories, censuses, probate records, and this essay.

According to family sources, Reina died in 1899 at 69; she wasn't listed on the 1900 census. But all the other indications of a close-knit family, one which sheltered its own were there. Abraham Belasco was providing a home for 17 people: for his bachelor son and namesake, an actor; for son Edward, single and in merchandising; for son Frederick, a theatrical agent, and his actress wife, Julia; for son Henry, the Alcazar's ticket collector, his Irish wife, and their two boys; for his daughters, Hannah and Sarah, their Jewish husbands (both in merchandising), and their children; for a niece (Esther); and for a 12-year-old Chinese servant and a German maid. His other married sons and daughters also lived in the city. The family divided their life between the theatre, mingling with the many actors and actresses who appeared on the San Francisco stage, and the world of small-scale merchandising.

Esther's life in the Belasco home must have been very different from her early childhood and from the years she lived with her step-mother. Esther continued to live with the Belascos up to and after 1910. An aging Abraham turned control of the household over to Edward. This didn't break apart the family's closeness, however, since many of Edward's siblings either lived in the same building or next door. The household added new members, including another cousin and Frederick's 60-year-old mother-in-law. Sarah and her son continued to share a home with her father. Two Japanese servants, one a cook, waited on this complex family. But, some had moved out. Henry and his family lived next door to his brother, Solomon, and down the street from another brother, Isaac. Walter, the actor, lived with his wife and small son in their own home. Julia, the actress, and Sarah's husband, Maurice, were gone.

As the older generation died, the younger continued to set up their homes. Esther, age 57, outlived her parents, her brothers, her half sister, stepmother, aunt and uncle, and moved to a boardinghouse. Her cousin David was famous, a well-known playwright, innovative stage manager, and Broadway producer. The other Belascos carried on. Any archaeologist would be eager to analyze the archaeological record produced by this household, to examine and compare its artifacts with those of the Martins.

It also would be gratifying to link the small porcelain tea set or one of the half-dozen china dolls in the McIver/Martin assemblage to Esther (Figure 4.17), to think of her playing in the sun and smelling fragrant flowers on the wind. Artifacts don't come with name plates and it is impossible to glean any concrete details of her life from the small things left behind. One can, however, make the logical assumption that the bottles of expensive Parisian perfume, identical to those found at the Strauss/Ackerman home, belonged to her stepmother. It simply seems likely that the large McIver family also would have indulged in children's toys, in children's clothes, in better food for their family with their spare funds.

Figure 4.17. Toys from Privy 806; associated with the Martin and McIver families who both resided in the duplex at 125–127 Perry Street. Widower Murdock McIver had eight children (ages 7 to 24); and Abraham Martin lived with wife Hannah and their four children (ages 4 to 16).

A Woman with a Scots Heritage

Mary McIver

Sara McIver never actually lived in the duplex with Hannah Martin, but her influence could be seen in the way her eldest daughter, Mary, ran the household. Sara had spent her entire married life either pregnant, nursing young babies, or changing diapers for her 12 infants. Complications from a late pregnancy probably ended her life. Her husband grieved for her and placed much of the burden for childcare on Mary's shoulders. Murdock did, however, move the family to a better neighborhood, renting a duplex shared with the Martin family. The large number of dolls, marbles, and a dozen children's shoes in their assemblage suggest he both indulged his family and kept them well clothed. "Miss Mary," a title the census taker gave his daughter, and her sister may have made good use of a nearby rummage store, of its second-hand dresses, trousers, hats, and its marvelous scraps of cloth in their sewing (see Psota in Chapter 5).

Kate Wiggin, well known in this neighborhood, wrote of its children, boys particularly, who came to school in ingenious creations, blending ragged trousers and velvet blouses (Wiggin 1923; Figure 4.18). Reading this, one wonders how Mary's brothers dressed. Kate visited the homes of her pupils, entered backyards littered with bottles and cans, and walked past fences where children hid behind and swung from each picket. She knew of families with an abundance, if not an excess, of tiny family members; of children who were angelic in the morning only to change tune late, observing that sometimes "the divil is busy wid them the whole of the day" (Smith 1925:210). She would have sympathized with Mary, knowing full well the toil, the patience, the ups and downs of raising your brothers and sisters. Yet, it was a daughter's duty to do so when no one else could. Michael Friedrich Radke spells this out: "Then I had to work for myself, my

Table 4.6. Type of Meat and Price Range for the McIver/Martin Assemblage

Price	Beef Cuts			Lamb Cuts			Pork Cuts		
	High	*Mod.*	*Low*	*High*	*Mod.*	*Low*	*High*	*Mod.*	*Low*
	14%	48%	38%	48%	35%	17%	13%	40%	47%

Beef formed 61%, Lamb 20%, Pork 13%, Bird 5% and Rabbit 1% of the faunal remains.

mother, and 4 brothers and sisters . . . to take care of their livelihood because I was the oldest . . . and had to take care of them. I [did] what is a child's duty towards his elders and brothers and sisters" (1848: n.p.). Mary's duty was even larger, four brothers and four sisters to feed morning and night. She had peace to bestow and lunch pails to fill for her father and the younger ones in school.

Murdock McIver had more children and less money in 1860 than Abraham Martin. By 1870 McIver lived in the 2nd Ward in an enclave of families whose men worked the docks, as longshoremen, riggers, and stevedores. Murdock McIver relished his ancestry and was a "celebrated Scotchman of his day"; he participated in all the different Scottish societies and was a famous Quoits player, competing at various gatherings (Roxburgh 1927a:14). Murdock rose from dockworker to rigger, a skilled job with the strength of a union behind him. But he had all those little children to feed, while meat was expensive. As his income rose and his children began to contribute their earnings to the household, Mary had more to spend on beef or mutton (see Table 4.6). Corned mutton, mutton pies, and lamb's blood pudding were the traditional ways that Scotsmen ate lamb. The first was difficult to make; the last grew less appetizing to many immigrant families as the 19th century progressed. The most likely way the McIvers ate mutton was in savory pies or as ground meat. For this reason, it seems best to allocate the expensive cuts from the McIver/Martin site to the Martin family. On the other hand, given the Martins' religious background and Abraham's involvement with the Sheth Israel Congregation, it might be safest to allocate the larger than usual amount of pork among the McIvers and assert that both families ate beef in all its different forms.

Figure 4.18. Teacher from the Silver Street Kindergarten and her students as shown in Wiggin's *The Story of Patsy.*

MARINER'S WIVES

As one considers the archaeological record of the more cosmopolitan residents of the project area, sea captains and the larger merchants (e.g., Duisenberg) come to the fore. Both material possessions and visibility in the archaeological record increase. The three mariners—Gee, Metcalf, and Michelson—and their wives close out this section. Captain Gee may have traveled far and wide. Captain Metcalf ranged closer to home, sailing between San Francisco and small port towns to the south. Captain Michelson went further away, normally sailing north along the Oregon or Washington coast.

Point of Origin: Norway

Aletta Michelson

Mariners along the West Coast exemplified the cultural diversity seen in San Francisco. According to Bjork (2001), Scandinavians handled almost the entire coastal trade. Norwegian sailors were especially prevalent in the Pacific's "Scandinavian Navy" (Benson 1974:fn 18), but only a few (6%) commanded vessels. Many ship-owners or captains were men of considerable means. Jacob Michelson owned his own coastal schooner, which enabled the family's fortunes to grow modestly.

Aletta Michelson was a youthful bride, 16 or 17, when she sailed from Norway in 1858 with Jacob, her new husband, his brother Michael, Michael's daughter Selina/Selma (age 9, b. 1852 CA), Michael's new wife Jensina, and their daughter Aquata (Augustina, b. 1857 Norway). Aletta and Jensina would be two of the very few Norwegian wives who accompanied their husbands to California (Benson 1974). In fact, San Francisco was so overwhelmingly male that Aletta's husband and her brother–in-law, who arrived in California in 1848, had returned to the old country to find wives. Michael's young daughter, from a previous marriage, accompanied them.

In 1860 there were few Norwegians in San Francisco—only five Norwegian families, and no Scandinavian community per se (Bjork 1950). Thus the city did not have the same social lure for the two couples as it did for the Jewish Martins and Irish Mahoneys. The families turned their backs on San Francisco; Michael purchased a duplex in Oakland (worth $4,000.00) to share with his brother. Here Aletta had Addie and William, 18 months apart. Jacob hired an Irish maid to help out; he could afford to, given the personal property he reported on the 1860 census ($2,000.00). The families anglicized their surname from Mikleson/Myklesen to Michelsen/Michaelson over the next decade and moved across the bay.

Aletta and Jacob lived on Clary [Clara] Street, within walking distance of the docks, yet outside the rougher streets. Their next home at 442 Third Street kept them within walking distance of Michael's and Jensina's home. Jacob's older brother was temporarily driving a laundry cart, but by 1870 Michael was a steamboat captain once again living in Oakland. By 1880, he and his wife had retired to a farm on the Russian River, where he could enjoy steelhead and salmon fishing and perhaps turn a hand to making wine. Jacob, in contrast, never fully retired from the sea.

In 1880 there were still fewer than 500 Norwegian families living in California, a striking contrast to the Irish (over 80,000 including second and third generations) in San Francisco alone. The Jewish families in San Francisco numbered 1,000 in 1857–58; their numbers grew to

Figure 4.19. Tableware from the Dolan and Michelson families (Privies 857 & 858). Despite being associated with two families, the variety of styles represented here, suggest that both the Dolans and the Michelsons ate off a hodgepodge of dishware.

between 20,000 and 30,000 in the late 1860s (Levy 1996). The Scandinavian population stayed small (Benson 1974; Rosenbaum 2000: 40). Norwegians saw no reason to have overlarge families. Demographic analysis reveals families averaged just under three children (Benson 1974), a sharp contrast to the Irish families in the study area. Small families necessitate some form of family planning. Here is what Aletta did. She had two children close together, waited four years until their dependency lessened, had two more in quick succession, and waited another four years before giving birth to her last child in 1870. Aletta had advice if not actual help from her lodgers: an East Coast midwife, a Norwegian dressmaker, a widowed Prussian nurse and her son. One spoke Aletta's native language, the other two were health-care givers—one with skill in caring for pregnant women.

The 1870s were tough times for all city residents, but especially for those, like Jacob, involved in shipping. Few Scandinavian families could afford to rent a house during this depression (Bjork 1950). The Michelsons went against this tide. Of all the people uncovered by this archaeological study, they moved most frequently, without ever leaving Perry Street. If one takes into account that something always breaks whenever one moves, it is no wonder the family ate from a piecemeal set of dishes united primarily by their simple lines and white color (Figure 4.19). At the start of the 1870s, the Michelsons lived up Perry Street from the Dolans, the Strausses, and the Ackermans. Six years later, they resided at 110 Perry across the street from the Dolans. In 1880 the family moved into the Dolan duplex, leaving it after three years to move to 167 Perry. By 1900 the Michelsons owned the duplex at 141 Perry, renting one-half to an Irish widow, her sister, and two bachelor brothers (36 and 32). Aletta was the same age as the Widow Flanagan; her two sons (40 and 30), still living at home, were close in age to the Flanagan men. Do their compatible ages suggest social camaraderie? George was unmarried, while William was a widower who had moved back home with his boys, Henry and Edward. Jacob, at 71, still owned a schooner.

Jacob died between 1900 and 1910; George married and moved away. Edward continued to live with his grandmother and uncle. All had moved from Perry St. Aletta's married daughters had children of their own. Jacob and Aletta, Michael and Jensina outlived their peers by close to 30 years.

Ancillary information suggests some parameters of Norwegian American life. Aletta was literate and might have drawn upon Hannah Winsnes' (1845) popular Norwegian housekeeping manual for guidance. What is surprising in this text (and is NOT found in American cookbooks) is the emphasis on home butchery and a wife's participation in the process. There is evidence of home butchery in the Dolan/Michelson assemblage, including a suckling pig, an animal Norwegians traditionally served for Christmas. There are also game birds in the deposit, another winter delicacy in Norwegian homes. There were also almost a dozen pipes and some were in very good condition, unlike the stumpy remnants found in many assemblages (Figure 4.20). Normally, this would indicate men's leisure activities—women were more apt to smoke little cigars—but pipe smoking was not gendered behavior among Norwegians. Traditionally, older women smoked pipes while younger girls eagerly offered to light them for their moms, sneaking whiffs as they did (Grindal 1990). Neither home butchery nor pipe-smoking women were typical in American communities.

Figure 4.20. Selected ball-clay pipes from Privy 857 and Privy 858, Dolan and Michelson families.

The seasonal cycle of American housekeeping dictates major cleaning in fall and spring. The Norwegian custom was to clean a house from top to bottom the Sunday before Christmas, which Aletta may have done. It was traditional to decorate a home for a wedding, for the bride to wear a tinkling silver crown, for friends and families to feast and toast the bride with strong drink. Both Aletta's daughters were married while the family lived at 111 Perry Street. Mrs. Winsnes' manual gave instructions for serving different beverages at festive events, including a punch made with red wine, orange juice, orange peel, and water. Its ingredients were readily available.

Beverage glasses of various types in a variety of forms were well represented in the Dolan/Michelson assemblage, bringing to mind a variety of beverages including the punch. The Reverend Christian Hvistendahl, who served as pastor of a Lutheran mission in the 1870s, discovered that California Scandinavians were fond of their liquor. To his dismay, men both cursed and drank, some immoderately so during Scandinavian Society meetings (Bjork 1950). Men brewed wine or beer at home, and liked their schnapps which they called aquavit but made with wormwood—the basis of absinthe—a common plant in eastern Norway. Schnapps, too, could have brought back memories of home, male kin, and male friends. Archaeologists noted its rarity elsewhere and its presence at the Dolan/Michelson site.

Hvistendahl grouched that many Scandinavians didn't feel the need to attend church as other groups did. He attributed this to a dispersed settlement pattern and lack of neighborhood

churches. He also observed other Sabbath distractions: tramcars to the breweries, the parks, and other pleasure spots. Some were particularly suited to men: baseball clubs, cricket clubs, and rifle clubs (Elliott 1868:563). Hvistendahl notes that when Sunday dawned bright and clear, warm with the scent of roses, no one wanted to be inside (Bjork 1950). As a minister, this was discouraging, but to a family like the Michelsons it meant a day at the beach collecting shells or an opportunity to visit Michael and Jensina in Oakland. Irwin noted San Franciscans were extraordinarily fond of expeditions into the country, and spent as much time out of doors as they could (Irwin 1906). When Michael retired, visits to his farm also gave Jacob and Aletta an opportunity to bring back fresh produce and meat, perhaps bringing meat back, in fact, as large cuts that were then reduced in size.

If expanding the historical record to include further information on Norwegian Americans shed a little more light on the Dolan/Michelson assemblage, the next example both opens wide the barn door yet keeps the artifacts inside, for despite the context enabled by documentary research, the Metcalf assemblage is almost as enigmatic and puzzling as it was initially. The three women the assemblage represents were much like other women in San Francisco: they enjoyed fancy clothes and loved their jewelry (Elliott 1868:566). Yet, look past the clothing and the assemblage speaks most cogently of domestic relationships during a tumultuous time, and suggests several motivating events that might have led women to "clean house," tossing out both clothes and jewelry. Still, the how and the why of doing so remain elusive.

Catherine and Henrietta Metcalf

Alfred Metcalf (Privy 851) was a mariner, born in Ohio of Connecticut parents, who did not find the Midwest to his liking. He left the farm, his 81-year-old grandmother, his parents, six brothers and four sisters and went to sea. Catherine/Katharina, a German immigrant, met her husband in New York, their home when first married. Both were in their early twenties. Daughter Katie was born in 1856 and Hattie (Henrietta) in 1859.

Alfred was a bright, capable, educated man who soon learned his way about a ship. Between 1860 and 1864, he brought his family west, presumably sailing from New York to Panama, then overland, and finally, by steamer, up the coast to San Francisco. For Katie, age 7, it may have been one great adventure. By 1864 her father was mate on the steamer *Salinas,* in charge of loading coal, ship's gear, and cargo. Three years later, he was its captain. Metcalf was responsible both for passenger safety and conduct of the crew. The route he followed was a familiar one, heading south and offloading supplies at places such as Santa Cruz, Pigeon Point, Moss Landing, and Monterey. The journey was not without danger; Metcalf lost a mate overboard in December of 1874. The body eventually washed ashore.

Metcalf made good money; his family could afford nice things, although there is no evidence of conspicuous consumption in the artifacts. The 1870 population census shows that his real estate was worth $10,000 and there was $6,000 in personal property (equivalent to $11,070,400.00 and $664,230.00 respectively). Yet, Metcalf always took in several boarders: a male boarder: a German carver who could speak his wife's language; a mechanic from New England; an Irish boilermaker; an American carpenter; and, ca. 1880, an Irish mariner—John Swanton—working for the same steamship line as Captain Metcalf. The difference was that John captained the bay ferries, which meant he slept at home every night. Alfred did not and, for whatever reason, Catherine's marriage was rapidly disintegrating. Alfred moved into a sailor's boardinghouse to

live with other sea captains and their crews. It was just around the corner; Catherine couldn't escape seeing him from time to time.

Catherine's oldest daughter, Katie, copied documents for a business firm. However, Henrietta (Lottie/Hattie) stayed home, which put this "young and pretty" (as she was later described in a newspaper clipping) girl in closer proximity to John than her mother might have wished. John had emigrated from Ireland in 1847 as a small boy accompanied by three sisters, from whom he learned much about girls. Hattie (18 to 19) and John (28) began a liaison that ended in a stormy marriage. She had three children by Swanton. John spirited his oldest son, John Henry (born July 1881), away, taking him to Napa and leaving little John with his Irish grandmother and aunts. This insured the boy would be brought up Catholic, and possibly, in a more stable home since Hattie, despite her youth, appears to have been already married and divorced before she began her relationship with John. But John couldn't stay away. Soon, Hattie was pregnant a second time. The couple's arguments—which could have been over anything, from the strength of tea, fish on Fridays, cursing, drinking, infidelity, abuse, or religious beliefs—drew them apart. This time she gave birth to a daughter named Edith (1883–1884). The couple fought over Edith (even as Hattie became pregnant for a third and last time)! Finally, in late December 1884, John ran off with Edith in his arms, dashing into Alice Banahan's home. It wasn't far; according to census records the Banahan's lived next door to Capt. Jacob Michelson, just four doors down the street.

Hattie chasing after him, pounded on the door; Alice opened it, saw Hattie and slammed it shut. Edith, seeing her mother, began to cry. John picked her up and hurried out the back door to a nearby hack. Furious, Hattie knocked again, begging Alice to let her in, and accidentally breaking a window. Alice had Hattie charged with malicious mischief. A very pregnant Hattie tearfully explained to the court in January what happened; the Judge quickly dismissed the case. Son Herbert Stuart, born two months later, was raised by his mom.

Herbert told the story again and again; a tale passed down to subsequent generations and reported on the internet (www.ginnisw.com; look under other Swanton family trees for John Swanton of San Francisco) with other genealogical information on Swantons. John, together with his cousins and probably his older brother, was raised by his grandmother and three widowed aunts as one large family. John, with his elder brother and cousins, worked in Napa and then returned to San Francisco where he registered for the draft. His father continued to live with the sisters, ran a steamboat until he retired, and never remarried. Harriet got a divorce, one not recognized by the Catholic Church, remarried and moved back to the house on Silver Street where it all began.[2]

Did any of these actions leave a trace in the archaeological record? One might think not, however, archaeologists (with little knowledge of the tangle outlined above) found the reasons for tossing out some items enigmatic (specifically a gold ring, a Virgin Mary pendant, two signet rings; Figure 4.21). Others—little dolls and miniature tea sets, perfume bottles, and hair care items—were fully explainable and similar to artifacts found across a range of sites. The reasons for the breakup of the mother's and daughter's marriages remain, however, in the realm of the imagination.

What we do know is that Capt. Swanton placed his son, and probably his small daughter, with his closest kin. The aunts raised their brother's children. Diner (1983) notes a special

2. This information is drawn from Family traditions <http://www.ginnisw.com/SWANTON%20FAMILY%20TREES/Swanton%20Trees%20John%20Swanton%20San%20Francisco.htm> (accessed 2 September 2007).

closeness between Irish brothers and sisters; the Swanton siblings and their living arrangements are an example. They each left San Francisco to live in Napa Valley where the eldest sister owned a home. In later life, John stopped working the river and became a stonemason, carefully and patiently building walls and fences that became part of Napa's wineries.

John and Hattie's two sons grew up separately and registered for the draft in World War I as did the third Swanton boy, Benjamin Elias. The two brothers were medium height, medium build, one with gray eyes and the other with blue. Both had light brown hair, unlike the third, who was dark-haired and dark-eyed. It is likely that John knew Ben through the aunts and that Ben grew up in the same house; it is unlikely that John and Herbert ever met or the Swanton Family History would have had a different ending to this episode.

Figure 4.21. Three puzzling discards. This signet ring (top), pendant (left), and possible wedding band (right) were recovered from Privy 851 at the Metcalf residence.

It was not necessarily the mix of Irish and German that caused the Metcalf women's domestic lives to sour, although culturally based ideas of appropriate gender behavior might have been one factor. Violence also occurred in the neighborhood, as one boy informed his teacher, Miss Kate Wiggin: "My father he got fightin mad when he was drunk and pitched me down two flights of [stairs]" (Wiggin 1889:15). Arguments over religious upbringing also made their way into court, as Jacob Michelson discovered when he tried to "adopt" a German orphan and Catholic nuns demanded her return for religious reasons—assuming she would get better care in a Catholic orphans' home.

There were ethnic divisions in the city. Italians patronized their special restaurants; Germans went to ones where "Germanesque" food was prepared (Irwin 1906). Churches too were split down both denominational and ethnic lines, as were men's societies and women's charitable organizations. Henry George (1880) saw "a greater mobility of society than in older communities," and believed it might "give rise to certain excitability and fickleness." But, the hints of this trend in the archaeological record are as elusive in San Francisco as they were in Oakland (Praetzellis and Praetzellis eds., 2004). For example, take the home of Isabella Gee, a German sea captain's Irish wife.

Isabella Gee

Although married to a German sea captain, Isabella was Irish, a mother at 20, and living in San Francisco at 123 Perry Street (Privy 807). Her older husband, a northwest coastal trader, was often away. It was worrisome at times. She knew, from what Ferdinand said; that the waters he sailed, from Humboldt Bay to Alaska, were both beautiful and sometimes deadly. Her husband split the proceeds of his voyages, using some to support the family, some to build his schooners, investing on the side in the Alaska Packer's Association (whose members opened the trade in canned oysters, canned salmon, and other ocean produce). Converting the value of his estate as shown on probate records to an amount comparable to today's wages (over $3 million), indicates he was very successful. The family's lifestyle, while not ostentatious, reflects this.

Yet, Isabella knew the meaning of hard work (she had no live-in servant) and how to stand on her own. When her husband was at sea, she made decisions daily that other women expected their men to make. She managed the home and was a productive partner in their marriage. One of her rewards was a beautiful, flowered basin and pitcher (Figure 4.22); others included gilded cups and platters, and a ruby red-stained, etched grape-and-leaf-patterned decanter set. And, all the accoutrements to set a proper dining table (Figure 4.9).

Figure 4.22. Ewer from the Gee household. Decorated with both transfer printing and hand painting, this ewer was both functional and highly decorative (Privy 807 complex).

Whenever Captain Gee was home, the family feasted, drank various liquors, and ate well. They may have entertained. In the Block Technical Report, archaeologists note that, "Every cooking and serving need seems to have been met, and tableware was sufficient to serve a family two to three times their size." There were more than 20 glasses, mainly tumblers, 2 decanters, 2 dozen ale bottles, half a dozen wine and champagne bottles. There were as many cups as glasses, plus 3 teapots. Isabelle had relish dishes, berry dishes, 2 celeries, 4 or more platters, 5 oval serving dishes, other plates ranging from 7 inch to 10-1/2 inch, a dozen soup plates, totaling more than a gross of different dining-related chinaware.

The faunal assemblage indicates the Gee family frequently ate rump roasts, leg of mutton, ham, and roast pork, as well as more poultry and wild fowl than most of their neighbors (Table 4.7). There were almost a dozen chickens, half a dozen turkeys, and more than 2-1/2 dozen wildfowl, as well as two rabbits. Sometimes these meats were roasted, sometimes, they were boiled. Isabella's dozen flower pots may have held the sweet herbs that flavored them or her houseplants. Her bean pot would be familiar to anyone who grew up before electrical slow cookers. Such pots were an essential part of American cookware; one was found in Amanda Scales' assemblage (Privy 1326). These pots are virtually indestructible, yet almost identical ones were recovered from two other Irish-American features (e.g., associated with the Noonans and an unidentified family, Privy 20). Isabella's baking dish would have been as useful for making savory pies as it would for fruit pies, cobblers, or custards (Figure 4.23). Her kitchen was well-stocked. She made use of condiments; she offered varied meals. One longs to know what cookbooks Isabella owned and which she liked best.

Table 4.7. Type of Meat and Price Range for the Gee Faunal Sub-assemblage

Price	Beef Cuts			Lamb Cuts			Pork Cuts		
	High	*Mod.*	*Low*	*High*	*Mod.*	*Low*	*High*	*Mod.*	*Low*
	35%	37%	29%	45%	39%	16%	31%	52%	17%

Beef formed 62%, Lamb 24%, Pork 5%, Bird 9% and Rabbit >1% of the sub-assemblage.

Eating well helped insure that her children got adequate nutrition. This was one way to keep them healthy; another was to keep the house clean. Isabella must have been a good housekeeper for she nursed her oldest boy through typhoid fever yet no one else caught the disease. All her children grew to adulthood; her husband lived well into his seventies.

Isabella remained in her spacious two story home, raising her small family until her death in 1882. By today's standards, she was too young; by those of turn of the century San Francisco, she was approaching the average age (48) at death for women.[3] Her family lamented her passing: "Oh mother, dear mother, a down in the grave." They were alone; they wept, saying "sorrow is our guest." Her oldest boy was almost 20, her second son was 17, already a mariner, and her youngest, Anne, was 13.

Anne was too young to assume oversight of the household. Soon, the family split up. Captain Gee bunked at the Master Mariner's Benevolent Association when he was in port; Ferdinand, Jr., had a room. George stayed with his sister Anne in the family home. He married by age 30 and had a son, named for his father, born one year and died the next. Anne may have lived with him or with other relatives until she wed John Rodgers, a shipping clerk, in 1890.

Figure 4.23. Red earthenware crock with lid (beanpot) and yelloware baking dish (Privy 807).

Isabella knew her family would mourn her death, and she may have hoped that her husband would take a second wife, a kind woman to care for Anne. He did remarry, and they were living in Oakland when he died in 1905, leaving an estate worth somewhere between $50,000 and $100,000. It included a building in San Francisco at the corner of Ellis and Van Ness, stock, and numerous schooners. Oddly, the fate of some of these ships (*Emma D., Emma Utter,* and *Elvinia*) can be traced more easily than Isabella's sons, who seem to have disappeared. Anne, however, continued to live in Oakland with her family. She inherited,

3. http://victorian.squarespace.com/vital-statistics/

with her German stepmother, Captain Gee's considerable estate. As it was settled, the estate was worth $38,000.00, or in 2005 currency, $3,804,840.00. The family built this wealth through prudent shopping and diversified investments.

CONCLUSION: FINDING WOMEN IN THE ARTIFACTS

In this essay, readers can see women who lie about their age (e.g., Lena Strauss), women of all shapes and sizes (as demonstrated by their clothing and their shoes): single women, just-married brides, childless women, women with many children, women whose infants died, handicapped women, widows, old and young, and girls who became "little mothers," caring for their brothers and sisters when death took their mother. Their lives were far from identical, but they all lived in a region that provided virtually everything a cook needed, and abundantly so. The bay was a gigantic fishing pond, mined by Chinese and Italian fishermen, where even East Coast oysters grew; fruit farms came up to the edge of town, and the surrounding hinterland produced in an abundance fine meats—especially beef and wild game—all cereals and all vegetables.

As historians note (Campbell 2002; Kaufman 2003), Irish and Jewish immigrants had a much better life in San Francisco than in eastern cities. Henry George wrote of this as the potent charm of California: the sophistication, tolerance, and openness that came from living in a culturally diversified environment where habit and tradition eroded. The result was a belief in the future, self-reliance, and an abundance of hope that gave women the opportunity to express themselves in individual ways to a greater degree than one saw in the tradition-bound communities they left behind. Some of this new freedom was expressed in the world of visible objects that marked status (jewelry and fans plus pet birds), ethnic identity (vases, flower pots, teapots, and figurines), femininity and sexuality (perfume bottles, cosmetic containers), and personal identity (a multitude of sewing paraphernalia and wearing apparel). Some can still be seen in the archaeological record.

This was brought to the fore by combining the archaeological data with a series of data sets based on the family and, specifically, women's roles within it. Anthropologists speak of universal life events—birth, puberty, marriage, death—that surround an individual's life and often dissect lives through the analysis of demographic data. These are biological events that take on cultural forms. Both the family and the household are amenable to similar dissection; however, among archaeologists it is generally the site itself, an ethnic group, or a site's male occupant who holds center stage. Laurie Wilkie broke through this paradigm to consider how the internal dynamics of the family might affect a child's behavior towards her toys (Wilkie 2000). In a sense this is the path this essay has followed. Women are considered within the context of their families and known family events. The initial objective was not to look at women as private individuals visible only within the domestic sphere. However, time and the availability of sources made it easier to associate women with household assemblages than to take a deeper look at the San Francisco women whose lives were rooted in more public domains (Kate Wiggin at the Silver Street Kindergarten; St. Mary's Hospital and the Sisters of Mercy; teachers and students at the California Collegiate Institute for Young Ladies) and who might also be visible within the institutional assemblages. Ethnographic analogy provided by parallel documentary sources (i.e., Irish women's history, women's lives in America's ethnic neighborhoods, the contours of Jewish women's lives abroad and in the United States) also had a central role. Its use can easily be read between the lines.

In this analysis women are central, men peripheral, which turns topsy-turvy the usual form of archaeological reports. The focus is intensely local, inching down to the level of street blocks and individual homes, so one must ask if this information can be useful in a broader framework. The data come from privies or deep deposits, not from sheet refuse (such as the cans and bottles that littered some yards, according to Wiggin [1889]) nor from streets filled with piles of garbage and trash (another sight that she also observed [Smith 1925; Wiggin 1894]). Thus association is both tight and reliable. In some cases it is the absence of expected household goods that is remarkable. Primarily, it is the small things that are the most telling—the children's toys, perfume bottles, a baby bottle, women's syringes, corset stays, scraps of silk, hairnets, hairpins, and combs and brushes. They help us delineate women's lives within their homes, making them refreshingly visible and hard to resist. And what we see is that none of them were alike; that through their individual activities and personal choices, they created lives that were wholly their own.

CHAPTER 5

NEEDLEWORKERS AND SEWING IMPLEMENTS

Sunshine Psota and Mary C. Beaudry

INTRODUCTION

This chapter consists of two back-to-back, complimentary essays. In the first, Sunshine Psota explores the historical context for needleworkers in the mid to late 19th century and situates the specific West Approach needleworkers within that context. Mary Beaudry identifies and describes specialty sewing implements, some of which have not been identified in archaeological contexts heretofore.

NEEDLEWORKERS OF THE WEST APPROACH PROJECT

Sunshine Psota

The Female Economy

The common perception that late-19th-century women's work was temporary while men's work was permanent ignores the more important complex relationship of the value of women's economic contributions to their family and the turbulent economy of the times (Turbin 1987). Many working-class men were not employed full time, and those who were could not always support a family on their wages alone. Women's work in the home, in contrast, was always full time, although unpaid; if women worked outside, the stereotypical view held that they did so at the beginning and near the end of their adult life: there was the young single woman, who worked a few years before marriage, and the widow who worked to provide her own support. Population census takers did not record the other work women performed throughout their lives, upon which their families often relied. In fact, many women regularly augmented their family's income by working outside, sometimes enjoying long-lived careers. San Francisco women worked in a diversity of jobs. Apart from boardinghouse managers, washerwomen, needleworkers, and other domestic-related endeavors, employment opportunities included door-to-door sales; various positions at photography shops (Palmquist 1989; Shaping San Francisco 2004); a range of doctoring (Luchetti 1998); artistic ventures (Anderson 1989); divining (Myers 1999:121); entertaining; and prostitution. A small sample of documented working women, mainly those in the needle trades and those running boardinghouses, is represented in the West Approach neighborhoods. From archaeological deposits associated with the households of the needleworkers, an exceptional collection of sewing-related artifacts has been amassed.

In 1880 there were 285,401 Euroamerican women across the United States who worked as dressmakers, seamstresses, and milliners; men and minority women were missing from this count, as were untold married women who operated beyond the realm of the census takers (Gamber

1997:Table A-1). Tripled from the previous decade, this figure includes not only some of the women who worked from their homes, but also outsourcers, clerks in stores, and those with their own shops. Often city directories listed needleworkers—tailors, tailoresses, dressmakers, fitters, seamstresses, dressmakers' apprentices, and milliners—yet many more of these workingwomen existed than were listed in city directories or censuses (Gamber 1997; Nicklass 2005). Further details can be ascertained when place of employment and a person's family and living situation are taken into account. Compared to their male counterparts—the tailors, women dressmakers and seamstresses often appeared in the historical or primary record for a shorter time, and were often described as unmarried or widows. Once married or remarried, their contribution to the family's economy was often veiled behind the census taker's phrase "at home." Yet needlework offered flexible options to women, from intermittent work to a life-long profession, whether they were married or not. Gamber (1997) asserted that the "female economy" was a complex, frequently ephemeral, intimate interaction between predominately female customers, retailers, employees, and producers, sandwiched between the male wholesalers and creditor economy, and the customers' husbands, who controlled the payment for garments they may not have liked or thought too expensive.

The types of needleworkers represented in the West Approach Project run the gamut of the profession: tailors and tailoresses, dressmakers, seamstresses, and even a lone sewing-machine operator. Tailors created trousers and men's outergarments, such as overcoats and jackets. Tailoresses' work was limited to women's coats and jackets, or men's outergarments (Penny 1863:355–356); this was considered the most skilled occupation for women needleworkers, comparable to male tailors in skill level and occasionally compensated at almost the same rate. Dressmakers who owned their own shops and created and constructed dresses for the city's elites were also well paid for their highly developed skills. Aside from dress shops along fashionable commercial travel ways, other exclusive dressmakers operated out of tiny rooms rented in large commercial buildings in the downtown district (Gamber 1997:31, 100). Other skilled and well-paid positions with good social standing were fitters and cutters, who worked in a dressmaker's shop and created the patterns for a custom garment, fitting it to each customer. Independent dressmakers either "went out by the day" to a customer's home or worked out of their homes. Working at home was often reserved for an adequate or intermittent dressmaker, who likely balanced many household chores along with her paid obligations.

The least honored were seamstresses, whose work consisted of sewing simple garments (such as skirts, shirts, neckties, nightclothes, and undergarments), as well as accessories, or sewing trim to decorate garments and then charging by the yard. As independent small operations, needleworkers often worked throughout the day and into the night to complete a job on time. Because of their expertise in creating custom patterns and correctly fitting garments to their clients, tailoresses, dressmakers, and fitters were paid typically two to three times more for their efforts than were seamstresses. A discussion of the varied skill levels of the West Approach Project needleworkers and how these were identified in the collections is given below.

THE IMPACT OF THE SEWING MACHINE ON AMERICAN HOUSEHOLDS AND SOCIETY

Sunshine Psota

"Seamstress," ca. 1853; daguerreotype of an unidentified woman with an early sewing machine. (Image courtesy of Library of Congress, Prints and Photographs Division, DAG No. 1204 [Digital ID: cph 3c06400])

There is one thing more powerful than all the armies in the world and that is an idea whose time has come, to paraphrase Victor Hugo. Such was the case with the invention of the sewing machine.

While Elias Howe Jr. is credited with patenting the invention on 10 September 1846, many other inventors in several different countries either contributed to or created similar machines. And while Howe was unsuccessful in marketing his machine, mainly because it sewed so poorly, other inventors met with success. Isaac Merritt Singer, for example, targeted the household market and, with a better design, produced a machine that actually did what it claimed to do. To protect his patent, Howe brought about a series of lawsuits against Singer and others; in 1856, after his case won in court, Howe became part of the Sewing Machine Combination, with partners Isaac Singer (inventor of the foot-operated treadle, tension device, and heart-shaped cam for the needle bar), Nathaniel Wheeler (the rotary hook), and Allen B. Wilson (the four-motion feeder). Since all of these men played pivotal roles in the development of the sewing machine, they pooled their patents and for a short time had a monopoly on the market. While the patents still held, prospective manufacturers had to obtain a license to make sewing machines, paying $15 to this partnership for each machine produced, with the fee divided among the patent holders. Howe's take was more than $2,000,000 (Lewton 1930:578). When the patents expired in 1877, so did the relatively short-lived, but lucrative, combination.

Of the more than 200 sewing-machine companies in operation in the United States in the early years, Singer was the most successful. The Singer sewing machine offered a few desirable features

not available from the others. The needle sewed in an up-and-down motion, instead of sideways, and a tension knob maintained adjustable control over the threads. Perhaps most important, the machine was powered by a foot treadle instead of a hand crank, leaving both hands free to manipulate the cloth. To target the homemaker, whose main focus was to produce most if not all of her family's clothing needs, Singer advertised his machines as so simple that even a child could run them (Breneman 2001). He promoted the machines as timesavers, allowing women more time for the many tasks involved in caring for their families. The machines were displayed in sumptuously decorated showrooms, where attractive young women would demonstrate how the machines worked. Beyond the stores, Singer and then his salesmen traveled across the United States, showing off their machines and teaching their prospective customers how to use them. As an added incentive, a woman could take a machine home overnight, which probably sealed the deal on many occasions. The company offered part exchange and after-sale service, which allowed them to control the secondhand market for their product. These were new concepts in selling, created or at least promoted by Singer and his staff.

Sewing machines were expensive, priced equivalent to buying an inexpensive automobile today. To reach a larger audience, an innovative purchasing plan was developed to allow more people to afford this luxury-priced item; called the hire-purchase plan, the strategy is known today as installment buying. The machines could be taken home for an initial small deposit, with monthly payments made until paid in full. This allowed many women to pay for their purchase from the money they earned using it.

The sewing machine was one of the most significant American inventions of the 19th century. In addition to benefiting the family seamstress, it revolutionized the fledgling ready-to-wear clothing industry. Sewing garments by machine shortened the construction time by at least half and reduced the cost of production by 50 to 80 percent (Cooper 1976:58–59). This meant a factory sewing-machine operator was paid more than a hand-sewer; the company made more garments and more money, and each garment could be sold for less. These features, in turn, inspired people to own more clothes, which meant they were warmer, cleaner, and more comfortable (Robert S. Taylor, 10 April 1891, as cited by Lewton 1930:583).

Along the way, a few glitches had to be worked out, requiring more innovations. Machine sewing used two to five times more thread than did hand stitching, depending upon the type of stitch (either chain or interlocking). Improvements to thread construction were needed to produce a more durable product for commercial machines. The solution was a process advertised as "Six-Cord," in which three strands of two-ply silk or cotton thread were plied together. Other improvements, attachments, and adjunct machines were designed for different aspects of the ready-to-wear industry. By the late 1860s, a buttonhole sewing machine was on hand at most factories. In 1873 Helen Augusta Blanchard patented the first zig-zag-stitch machine, which bound the edges of a seam by stitching, yielding a sturdier garment (Bellis 2006). The industry built around the sewing machine continued to grow, both here and abroad. By 1890 Singer claimed 80 percent of the world market (Singer 2006). This had been a pivotal decade for marketing the machines in San Francisco as well: in 1879, city directories listed 25 sewing-machine stores or agents, but by 1889, there were 128 entries.

When the sewing machine was adapted to shoe and boot construction, it inspired changes to that industry on a scale similar to the clothing industry's revolution. Machine-sewn shoes lasted eight times as long as hand-stitched ones (Cooper 1976:60). In a very short time, all of the upper pieces of commercial footwear were machine sewn. Aside from clothing and footwear, the manufacture of many other products benefited from the use of sewing machines, including awnings, tents, sails, books, flags and banners, purses, trunks, saddles and harnesses, mattresses, umbrellas, belting and hosing, upholstery, and even hot-air balloons. An example from the West Approach Project area is 18-year-old Rosy Murphy from Tar Flat, who worked as a sewing-machine operator for an awning and bag-making factory in 1877, possibly earning more than her laborer father. Between 1860 and 1900, the United States exported approximately $90,000,000 worth of sewing machines, a significant contribution to the American economy (Cooper 1976:64).

While no sewing-machine parts were identified from the archaeological remains at West

Three brands of sewing-machine oil used by West Bay Approach residents (Well 866, Cat. Nos. 1255-97 and 1270-50; Privy 810, Cat. No. 966-70).

Approach, three bottles that once contained sewing-machine oil were discovered in two features. The rectangular bottles had four recessed panels with embossing. A bottle with the Bailey & Eaton brand from Privy 810 was most likely associated with the John Monahan family. From another feature, two bottles of sewing-machine oil were recovered. One of the bottles contained sperm oil, with no manufacturer specified; it was most likely associated with dressmaker Miss Annie Tobin. From an upper, later level, a Singer brand bottle was unearthed. Other indicators of the presence of sewing machines, such as sewing-machine needles and sharply bent pins, were not found in any of the West Approach assemblages. In contrast, deposits associated with households across the bay in Oakland, examined during the Cypress Project, yielded one sewing-machine part, while seven features yielded one or more sewing-machine-oil bottles.

Constructing Our Needleworkers

Compilations from several decades of 19th-century San Francisco city directories detail the variety and number of clothing-related occupations in the city, along with the social titles used by the listed needleworkers (Tables 5.1 and 5.2). Similar to other urban areas, most of the women were single, yet the next most numerous were those women listed as Mrs., presumably either married or widowed. A small but constant presence among the dressmakers was the group of highly skilled French dressmakers, or those who adopted a French persona by using the title "Madame" (n = 12 in 1861) or the lone "Mademoiselle." A few men played a part in the San Francisco fashion industry; in fact four of the nine needleworkers on Table 5.3 are males. From these directories and U.S. census records, several needleworkers were identified living within the West Approach study area during the latter half of the 19th century. Two tailors lived in Tar Flat on Block 4, while a sewing-machine operator turned dressmaker also lived in that neighborhood. Further south, at the base of Rincon Hill on Block 9, a mother–daughter dressmaking team operated out of their home. On Block 10, one block to the west, a dressmaker and a coat maker had their own shop, two sisters worked as seamstresses, and another young woman worked as a dressmaker's apprentice. Four of these households left behind not only sewing implements and fasteners, but also the fabric on which they likely toiled.

For 26 years (1880–1906), the Wolf Samuel family rented at 416 Folsom. During that time, Wolf worked as a tailor out of his shop fronting Folsom (Table 5.3). A Jewish immigrant from eastern Europe, he was 31 years of age when he first appeared in the city directories in 1880. Wolf continued to be listed at this address until the 1906 earthquake, which forced his family to move. He married Minnie in 1881 and together they had nine children, several of whom did not survive childhood. Also living at this address between 1879 and 1883 was a tailor named Moses Hyman, who was likely Minnie's father or another older relative. After the Samuel family moved to 624 Locust Avenue, Wolf opened a tailor shop outside his home. When Minnie died in 1915, Wolf moved in with his daughter's family, the household of Simon and Tillie Shapiro. Wolf continued

Table 5.1. Needleworkers and Related Occupations Listed in San Francisco City Directories

	1861	1869	1879	1889
Cloakmakers	6	9	18	11
Dressmaker	82	212	248	577
Embroiderers	11	17	19	10
Milliners	44	66	87	105
Tailors*	148	231	381	1,266
Total	291	535	753	1,969

*Tailors and drapers were grouped together for 1861

Table 5.2. Social Titles and Gender of Dressmakers in San Francisco City Directories

Year	Total	Miss		Mrs.		Widow		Madame		Mademoiselle		Women without Title		Unknown Gender		Men	
		Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
1861	82	26	31.7	42	51.2	0	0.0	1	1.2	0	0.0	2	2.4	9	11.0	2	2.4
1869	212	48	22.6	110	51.9	12	5.7	12	5.7	1	0.5	15	7.1	9	4.2	5	2.4
1879	248	47	19.0	152	61.3	0	0.0	14	5.6	0	0.0	26	10.5	6	2.4	5	2.0
1889	577	234	40.6	137	23.7	4	0.7	4	0.7	0	0.0	45	7.8	45	7.8	19*	3.3
Total	1,119	355	31.7	441	39.4	16	1.4	31	2.8	1	0.1	88	7.9	69	6.2	31	2.8

* 16 are listed as ladies' tailors

Table 5.3. Needleworkers at West Bay Approach Addresses

Name	Occupation	Age	No. of Years Operated	Ethnicity	Parents' Occupation/ Ethnicity	Social Status	Block/Address	Associated Feature
Wolf Samuel	Tailor (shop in home); tailor merchant (ca. 1920–)	31–77	46 (1880–1926)	Jewish from Poland/ Russia	Unknown	Married	4/416 Folsom	Privy 1300
Moses Hyman (Hyman Moses)	Tailor	69–73	4 (1879–1883)	Jewish from Poland/ Russia	Unknown	Widowed	4/416 Folsom	Privy 1300
Jacob Samuel	Tailor; cloak maker (1901–1902)	21–23	2 (1900–1902)	U.S. born	Tailor – S/Jewish from Poland/Russia	Unmarried	4/416 Folsom	None
Bessie Samuel	Seamstress in cloak house	24	1 (1910)	U.S. born	Tailor – S/Jewish from Poland/Russia	Unmarried	Off-site at 624 Locust (once 4/416 Folsom)	None
Matthew Delano	Tailor	35	1 (1880)	Scotland	Unknown	Married	4/240 Fremont	None
Rosy Murphy	Sewing-machine operator (1877); dressmaker out of home (1880)	18–21	3 (1877–1880)	U.S. born	Laborer – Ireland	Unmarried	4/11 Baldwin	Privy 1318
Mary Shore & Ida Briggs Shore	Dressmakers; out of home	36, 19–20	1 (1878); 1 (1880–1881)	U.S. born	Unknown	Married*/ Unmarried	9/20 (35) Perry	Privy 9
Annie McDonald	Dressmaker; shop 141 Fourth/121 Post	29–43	11 (1890–1904)	U.S. born	Salesman – P/ Irish	Unmarried	10/112 Silver	Well 866
Celia M. Hayes	Coat maker; shop 533 California	Unknown	1 (1890)	Unknown	Unknown	Unmarried	10/112 ½ Silver	None
Mary & Carrie McIver	Seamstresses; out of home	21, 17	1 (1881)	U.S. born	Stevedore – SS/ Scottish	Unmarried	10/125 Perry	Privy 806

*Mary Shore's martial status was not listed on the 1880 census, but by 1900 she had been married 30 years. Note: P = Professional; S = Skilled; SS = Semi-skilled.

to work until just before his death in 1926, making him the longest-working needleworker in this San Francisco cohort.

The one-story residence at 416 Folsom was probably divided in half, with each side containing a small shop, and with working or living quarters in the rear. The half portion of the building would have been more affordable to rent and the busy Folsom Street would have insured good foot traffic. (Wolf was never recorded as unemployed on census records, suggesting a successful operation.) A large privy in back of the main house yielded many artifacts associated with his business and family, as well as items discarded by the Leonard Smith family. A modest sample of sewing implements was recovered, including brass and steel straight pins, while the remains of 33 fabric scraps and 2 new scraps are more telling of his profession.[1] Most of the wool scraps are small pieces with remnants of their previous construction. The variety of light- to heavyweight wools retain narrow, machine-sewn seams, 1/8 to 3/8 in. wide, diagnostic of men's tailored clothing (trousers, jackets, coats, and vests). A few hand-sewn details, such as buttonholes, are likely from trousers. Other machine-sewn details include a bound buttonhole and a narrow band of fabric trimmed from around a collar and lapel, all parts of outergarments. Also typical of men's outerwear are the cloth-covered buttons, representing 29 percent of the button collection; another piece of wool is likely an extra circle blank, cut for that purpose but never used. Most of the wool is typical of the four main colors worn by men in the late 19th century: black, dark blue, brown, and olive (Walkley and Foster 1978:127). Eighteen different textured woven fabrics are likely the remains of pairs of natty trousers, which were popular in the 1870s and 1880s (Peacock 1996:65–106; Severa 1995:314, 388).

Long after Privy 1300 was filled in and forgotten, Wolf Samuel was still making a living as a tailor. By this time, too, the tailoring craft had been disseminated from father to children. His eldest son, Jacob, started working at 18 in 1897 as a porter salesman for Greenberg and Greenberg, a fancy goods importer, and then two years later for the silk importers R. Isaacs and Brother. By 1900 he was a tailor, at times focusing on cloaks. Jacob drifted away from the needlework profession, becoming a packer and, by 1910, a salesman in a shoe store. By that time, the Samuels' 24-year-old daughter, Bessie, worked as a seamstress in a cloak house. In a few short years, she married, presumably leaving outside work.

Around the corner at a boardinghouse operated by Amanda Scales at 240 Fremont, Matthew Delano and his family lived for a less than a year while he worked from home as a tailor. Not listed in any of the San Francisco directories, his mention is limited to the 1870 census, which placed him living with his wife and child in this boardinghouse along with five other people. His tenure was approximately four years before the filling of Privy 1326 at this address. Cultural materials in the privy include two-dozen straight pins, an adult's thimble, and buttons from 48 garments, almost all plain. It is doubtful that Delano would have found any room to practice his trade in this cramped boardinghouse; the pins and non-tailor's thimble attest to someone doing hand sewing, but probably not the activities of a tailor. More likely, they represent general household activities from one or more of the people living in the boardinghouse over time.

1. All counts reflect minimum number of items (MNI), not individual buttons or pieces of fabric. "New scrap" refers to leftover scraps from constructing new clothes, whereas "scrap" alone refers to sewn or distinctive fragments from refashioned garments. Decorative buttons comprise a variety of materials but are fancifully decorated, such as porcelaneous buttons with a piecrust design or glass buttons with molded designs. Plain black glass and other similar buttons are not counted as decorative, because this category is independent of price and merely reflects a level of embellishment.

At 11 Baldwin Court, the alley of small workers' houses off Folsom, New York-born Rosy Murphy lived with her Irish-born parents, Patrick and Cecelia. In 1877 the 18-year-old Rosy worked as a sewing-machine operator at an awning and bag-making factory. Three years later, the young woman was described as a dressmaker on census records. After this entry she disappears from the historical record, leaving behind perhaps a few indications of her occupation among her family's discards in Privy 1318.

A total of 29 garments are represented in the collection from this feature, based on the minimum number of buttons, but only 7 percent of the sample consists of better clothing, as indicated by decorative buttons. Of the 8 different fabrics recovered, 2 (25%) are inexpensive, including the remains of a man's store-bought jacket or coat with machine-made buttonholes that probably belonged to Rosy's laborer father, and portions of a woven-plaid wool shawl that still contained some fringe. The shawl was a practical garment that would not have been a fashionable item worn on the streets of San Francisco; it may instead have been a relic from the family's native Ireland, worn inside the home to keep warm. Another piece of fabric is a possible scrap from an everyday, remade dress or outergarment. This is the lone indication that someone in this household had sewing skills beyond those of the average working-class woman of the day. The only possible sewing-related implement is a turned bone handle fragment that probably was fitted with a crochet hook or similar implement. There is nothing that can help detail Rosy's transition from a sewing-machine operator to her more lofty position as a dressmaker, nor do any items allude to the type of work she produced. All this suggests that Rosy Murphy worked outside the home, most likely at her clients' houses.

At the base of Rincon Hill in Block 9, several blocks southwest of Wolf Samuel's shop and home, was a home dressmaking business contemporaneous with Wolf's earliest San Francisco efforts. Mrs. Ida Shore began listing herself as a dressmaker in the San Francisco city directory in 1878 at 2511 Post, with no residence listed. The following year she had moved to 20 (35) Perry and provided no occupation in the directory. For two years, between 1879 and 1881, Mary Shore and her adopted daughter, Ida Briggs, lived with Mary's brother-in-law's family, John and Mary Usher. (John was a sailmaker and his wife kept house, while their two older sons worked and a younger daughter attended school.) About the time that Mary and Ida moved to Perry Street, a transition took place: Ida was first listed as a dressmaker; later she gave her name as Ida B. Shore, and Mary was no longer listed with an occupation. The two-story 20 × 42 ft. house with a 10 × 25 ft. outbuilding would have had ample room for the Usher and Shore family, with likely a room devoted exclusively to the sewing business. Both John and his eldest son were unemployed for four months in 1880; the economic viability of the family would have been enhanced during the leaner months by the Shores' contribution to the household.

Besides her handiwork, we know very little about Mary E. Shore. Neither she nor her adopted daughter can be located on the 1870 census. The 1880 census did not list Mary Shore's marital status and simply described her as a 38-year-old Ohioan who stayed "at home." The 19-year-old Ida Briggs was also born in Ohio from parents born in the same state. According to the 1900 census, Mary had been married to Thomas Shore in 1870, although neither can be located for that year's census. He was a year younger than his wife and had emigrated from England in 1863. By 1880 Mary and Thomas may have been separated.

This was another family where sewing had shaped the family's economic history. The skilled hands of a sailmaker were less sought after as more and more ships transitioned from sail power to steam in the 1880s; ironically, this change occurred shortly before the transition from hand-

Figure 5.1. Thread spools recovered from Privy 9.

sewn to machine-sewn women's garments. By 1880 at the age of 56, John Usher had reinvented himself as a driver and hostler for the Pacific Transfer Company, working for the same firm his son had. The dressmaking endeavor that operated out of his home was likely a family effort. First the daughter assisted her mother, gaining valuable experience, which she shortly put to use while her mother assisted with hand-sewing at home. Many other people in the Usher family may have helped sew from time to time: John Usher was unemployed for several months and his wife, Mary L., was "at home." The artifacts left behind and thrown into Privy 9 document the greatest sewing activity for the West Approach Project, represented by sewing implements, buttons, and fabric remains (Figures 5.1 and 5.2).

Sewing implements from Privy 9 include 176 straight pins, 2 tracing wheels, 4 needles, and 28 wooden spools that once held thread (see Beaudry, this chapter). A plethora of buttons representing at least 96 garments, plus 70 button blanks and fillers, also attest to on-site dressmaking activities. Of the 96 minimum number of garments represented by buttons, 24 percent are fancy and typical of women's better clothes. But the gem of this collection is the assemblage of clothing remains, representing at least 46 garments, with 7 new scraps and 45 other scraps, as well as 52 different kinds of ribbon. Many of the fabric pieces are colorful silks, a fabric that typically does not preserve as well as wool. All but three seams were hand-stitched (see "Stitches in Time" for specific details). The bulk of their business appeared to be in refashioning older clothes, by taking in the girth of a skirt or altering a neck or the shape of a sleeve. Most middle-class and working-class women had one silk dress in their wardrobe for best occasions. More often than not, these fell out of fashion long before they were worn out. Even slightly worn silk clothes were remade, with the expensive fabric reversed, rather than purchasing new silk (Tarrant 1986). The average silk garment in the late 1870s cost two to five times as much as a wool one (Severa 1995:295).

When clothing historians describe the refashioning of clothing to update style and fit (Paoletti 1980; Severa 1995), they write of better-quality silk dresses, so some evidence of refashioning silk garments was expected in the West Approach collection; the larger sample of refashioned everyday wool clothing, however, was a revelation. As women's fashions in the 1870s and 1880s changed, clothing could easily be readapted—voluminous skirts became more fitted, requiring several fewer yards to construct a dress. All the fabric needed to make a new dress was in the skirt if the bodice did not allow for refitting. This sample from Privy 9 details some of the efforts undertaken by San Francisco women to stay as fashionable as possible, even in the depressed

economic times of the late 1870s. Refashioning a dress would be more affordable, and kept Mary and Ida Shore in demand.

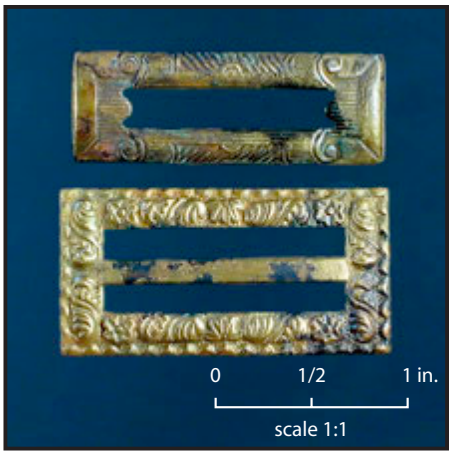


Figure 5.2. Two stylish women's belt buckles recovered from Privy 9.

What happened to these women after the John Usher family moved in 1881 is uncertain. Mary next appears on the 1900 census with her husband, Thomas, living in San Francisco; no profession was provided for Thomas. The couple owned their house free of mortgage. After Thomas died sometime between 1900 and 1910, Mary moved in with her widowed daughter, now known as Ida B. Carr, and Ida's youngest son; her two other children had grown up and were living elsewhere. The 1910 census lists 11 other families and 2 boarders living at this crowded 18th Street boardinghouse. The women—now 68 and 49 years of age—have "none" listed as their profession, while Ida's son, 13-year-old Stanley, worked as a street newsboy.

Further uphill a block from the Usher/Shore household lived another West Approach dressmaker on Block 10. In 1890 the 29-year-old Miss Annie McDonald lived at her parent's large three-story home at 112 Silver with her brother, while operating a dressmaker's shop at 141 Fourth (Table 5.3). The family moved to Silver in 1886 and had lived there for six years when Annie's mother died. Both siblings continued to live with their father to 1900 and continued with their professions. While living at Silver Street, Annie relocated her business to 121 Post, where she worked between 1892 and 1894. By 1900 she was still dressmaking and lived at another address with her family. Ten years later none of the family could be found. For a short time while the McDonalds lived in the front at Silver Street, a coat maker, Miss Celia M. Haynes, lived behind in a back building. Most of Celia's time was likely spent working at her shop at 533 California, a large building where 23 other businesses operated, including 6 tailors (City Directory 1890).

A feature associated with the McDonald family, Well 866, probably predates Annie's operating her own shop. Instead, the sewing-related artifacts likely reflect early years of her career (between ca. 1886 and 1890), as she was building her clientele by going to customers' homes to work, thereby getting enough experience to support her own shop. A few items recovered are compatible with her profession: some heavyweight, charcoal-gray wool that appears to be scraps; a spool of thread; two thimbles; and a bottle of sewing-machine oil. The latter stands as a testimonial to her family's investment in her skills and anticipation of long-term employment, along with her father's success as a salesman. Twenty-six percent of the fasteners thrown into the well were fancy, many probably adorning Annie's clothes, along with salvaged fasteners from her clients' old garments.

Around the corner at 125 Perry Street, the 1881 city directory listed the widowed Murdock McIver family. His two daughters—Mary, 23, and Carrie, 18—are listed as seamstresses; a profession not recorded a year earlier by the census enumerator. If either of the sisters worked out of the home, they probably adjusted their work schedule to help care for their three younger siblings and their older brother. In 1880 Murdock was listed as a Scottish rigger and stevedore who had been unemployed for three months that year. His eldest, John, worked as a polisher, but was unemployed for six months, and another son, Louis, made boxes. In 1882 the family moved

a few houses away on Perry. Both sisters are listed in the city directory for only one year. In 1889 Carrie died at the age of 25.

In 1887 the house at 125 Perry was a two-story duplex with a basement; the McIver residence likely consisted of two stories, 12-1/2 × 33 ft. long with a two-story 9 × 15 ft. rear addition and no outbuildings. This suggests there would have been enough room for the two women to work at home or to bring work home at night. With both Murdock and his eldest son being unemployed that year (for three months and six months, respectively), at times the bulk of the family's income must have rested on Carrie and Mary's modest seamstress operations and their 16-year-old brother's earnings as a boxmaker. Their 20-year-old sister, Marion, who may have cared for the three school-aged siblings, may have also helped sew during busy times.

The archaeological remains associated with the McIver household and their neighbors, the Martins, were recovered from Privy 806. These included pieces of a tailored outergarment that retained a combination machine-sewn and hand-sewn edge, the latter stitched with the precision of an accomplished sewer; such detailed work is not typically associated with seamstresses. Although 19th-century domestic features typically contain the remains of heavy outergarments, this privy contained many lightweight garments and buttons from at least 50 different garments, with 42 percent of the garments fastened by decorative buttons. Another unusual find was the fine-quality unspun wool that was probably used for padding to fill out an angular women's silhouette, a common shaping technique in the 1870s (Holford 1972:n.p.). Also found were four straight pins and a wooden spool that once held thread. The paucity of these implements understates the value and contribution of needlework to this household.

Others Who Valued Sewing

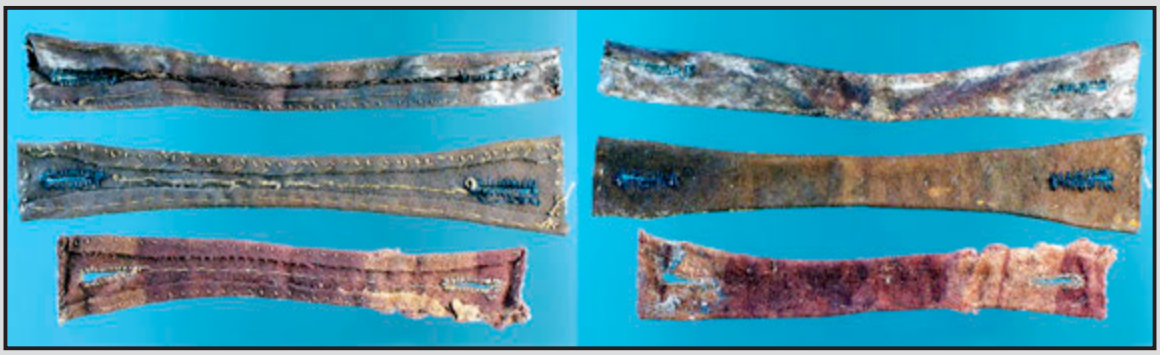
Eight other West Approach Project households left material remains that suggest the presence of sewers, either for themselves, their family, or clients, or a household ready to hire a dressmaker. In the early 1870s, items discarded by John and Mary Peel included 62 straight pins (dwarfed only by the Usher/Shore assemblage) and a thimble, along with the remains of 48 garments mainly represented by buttons. No scraps or evidence of hand or machine stitching was recovered. These items date to a time when the Peels entertained and attended social functions; another nearby feature, with very few sewing-related items, was created years later when Mary was a widow. To present a suitable façade, Mary may have sewed some of her own clothes or hired a dressmaker to construct fashionable clothes when she was younger, but may have found this practice unsuitable or unnecessary after her husband's death.

At another household, materials discarded in a privy around 1868 were associated with the family of master mariner Ferdinand Gee and his wife, Isabella. Artifacts included many straight pins, a few hand-sewing items, and an impressive number of garments with decorated buttons (37%). Of the eight different fabric fragments, two retained the remains of sewing: one was sewn by hand, the other both hand and machine sewn. This suggests that Isabella sewed for herself and her three young children.

Four families—those of Emile and Mary Schreiner, Christian and Annie Johnson, Peter and Catherine Degnan, and Thomas and Mary McIntyre—were associated with Privy 808; two families lived in the front house and two in the back. Artifacts left behind include the scraps from a newly cut garment, numerous straight pins, and a few other sewing items. This is certainly not a robust sample, but sufficient to suggest that at least one of the women was a home sewer.

STITCHES IN TIME

Sunshine Psota



Three handsewn basque belts, front and back views (shown at approximately 45 percent of their true size)

Urban archaeologists do not often find an artifact that reveals one small, single event in a person's life. Yet the fragile remains of wool and silk garments recovered from West Approach features offer such details. Among the 443 garments represented in the collection, a modest sample (n = 67, 15%) retains hand-sewn construction details, and a few can be attributed to a particular maker.

Usually the most intact clothing is some type of outergarment, perhaps a man's overcoat or the newly introduced shorter sack coat, or a woman's basque, cape, or coat. More often than not, after the 1880s, seams were sewn by machine. But occasionally there are the remains of hand-sewn work, some of these paired with machine-sewn stitching of vertical straight seams. The time of deposition of most of these features, the 1870s and 1880s, marks a brief transition for women's clothing from all hand sewn to all machine made, following a trend previously established by the men's garment industry a decade or so before (Greene 2002:13). The following account celebrates some of the unique hand stitches that highlight simple moments of the past.

Between 1879 and 1881, Ida Shore and her daughter Mary lived with Mrs. Shore's brother-in-law's family, the Ushers at 20 (35) Perry Street, leaving behind a testament to their prolific sewing abilities. Three hand-sewn wool belts, each from a different well-fitted basque (a woman's fitted jacket or bodice that flared to some point over the hips) illustrate the consistent sewing techniques and the forethought of this sewing team. Fashioned from one small piece of wool cloth, the narrow rectangular-shaped belts flare slightly at both ends. The edges of the wool fabric were simply folded over and hand sewn, halfway between the raw and the folded edges, with a basic running stitch that was virtually invisible from the front. Then to keep its shape longer, a simple line of basting stitches from the end of one buttonhole to the beginning of the other was added—a structural detail noticeable in some places on the front. Hand-sewn buttonhole stitching encircles the buttonholes placed at the two ends of each belt. The buttonholes on the two darker ones, once dark brown or drab, were sewn with black-silk thread for one, and with a tan (at present) to medium-brown silk thread for the other. The remaining belt is of medium-brown wool dyed from copper-toned madder that appears to have been a woven plaid, which was sewn completely with a single color of silk thread. As two small steps in the whole process of constructing a basque, these expediently executed details demonstrate the consistency and precision needed to construct these everyday, highly fitted garments. With careful planning and reliable workmanship, each of these handcrafted belts look almost exactly alike.

One of these belts pairs with the accompanying remains of a woman's basque. The dark-brown wool seams were nicely hand stitched with black-silk thread. Sometime during its life the garment was cut or torn, which appears as an intentional destruction. But rather than throwing it away, either Mary or Ida Shore patched the wool basque with two kinds of expensive fabric. These were likely leftover scraps. It seems odd that the patches are from a mixed match of black

fabric: one is wool, while the other is silk. Both are expensive fabrics, woven in intricate patterns that differ from each other and from the basque. While the reasons for these actions are not clear, the level of effort undertaken to repair and maintain the shape of the garment is impressive. Patient hands mended the basque back together, restoring its structure but fully repairing its appearance. This was obviously someone's special garment that warranted unusual efforts at recovery.

The person who constructed the next garment from this address is unknown. What remains is a discarded scrap of aqua, white, and tan plaid silk, with fine hand stitching that created a fancy dress. The hem was expertly hand sewn with white silk thread using small, fine stitches. To enhance this expensive garment, a machine-made silk lace was selected to trim the edge of the skirt at the hemline. In contrast to these better materials and fine workmanship is the thicker brown thread used to attach the lace to the skirt at the hem, leaving large noticeable stitching on its backside. This last act was not completed by the same dressmaker that constructed the rest of the garment; it was likely done by someone who was paid by the yard. While the Shore ladies refashioned this garment into something more contemporary, they certainly would have noticed the poor finish to an otherwise exquisite dress.

When constructing clothing, most pieces can be taken apart and redone if the first attempt is not successful. But occasionally this was not the case. Sewing a buttonhole and creating the lay of a lapel are the two most common exceptions. These devilish, highly visible details can add or decidedly detract from a garment. Those who sew often pause before such steps, for if they are not successful, they will need to begin the garment anew. Louisa Baker, the presumed sewer at 108 Silver, did pause long enough to make a sensible choice. She chose to practice first on an old wool garment, probably of similar weight to the one under construction. That garment was a woman's or older child's outergarment with seams varying from 3/16 to 5/8 in. in width; wool twill tape had been used to strengthen the seams and maintain the shape. But after it was no longer useful as an article of clothing, she picked up the garment and used a small corner to practice sewing a buttonhole before she started on her main objective.

Another wool piece from this address was part of a fitted dress with both machine-sewn and hand-sewn stitching. Again the sewer employed wool twill tape to strengthen the seams, in this case for the inset piece that contoured down the side of a body under the arm. While the vertical, longer seams were machine sewn and ranged in width from 5/8 to 3/4 in., the horizontal seams are hand sewn with the same black silk thread. The practice piece, the variation in seam width, and aspects of the homemade dress suggest a sewer who followed her good common sense and had perfected her basic sewing skills to clothe her family. Perhaps she even offered her basic abilities periodically as a seamstress.

At 7 Baldwin Court in the Tar Flat neighborhood, fragments of brown wool, part of a woman's basque, were found, presumably that of Isabella Clark. Sporting 3/16 to 1/4 in. wide machine-sewn seams, the everyday garment includes the front and backing around a center-front seam. The front was folded over and handsewn to the slightly smaller back piece with nice even, small stitching; this preventing any of the stitches from being visible from the front. Three 7/8-in. buttonholes were hand sewn; through wear they are torn a little, perhaps from too tight a fit. The narrowness of the seams could indicate that the garment had been let out. The combination of hand-sewn and machine-sewn elements was well executed by a talented home sewer.

Three houses away at the Brown residence, the family's privy yielded the remains of a woman's outergarment. Cut from distinctive brown wool, the fabric consists of staggered woven rectangles, similar to a brick wall in design. The handsewn collar was stitched with black silk thread using a whipping stitch. The same thread also finished the buttonholes. This nicely made garment has 1/4-in. seams. Of the many garments from this feature, this one stands out as one of only two hand-sewn garments. As the best example of

someone's labors, the outergarment may have been fashioned by the female head of the household, Margaret Brown, before she had access to a sewing machine, or by a dressmaker.

Two other garments with preserved hand-sewn stitching came from the Fuchs or Cadigan family, who lived at this same Baldwin Court address several years later. A fragment from a plain brown wool dress, from the waist area, contained both portions of the skirt and the fitted bodice. The top of the full skirt was folded over and two rows of basting 3/8 in. apart were stitched through both layers to gather the material. This would have added extra thickness at the waist and so the dress was not likely for Sunday best, but the sturdy construction did allow the skirt to hold its shape over a longer time.

The other garment is some sort of wool outergarment that was not a basque. Constructed from basic brown wool twill, the machine-sewn seams vary from 3/8 to 5/8 in. wide. The front opening was closed with at least thee buttonholes that are rectangular in shape and 3/4 in. wide. A matching, smaller, cloth-covered button is still attached to the cuff. The hand-sewn hem remains intact, as is one or two back pleats. A white-wool braid, knotted at one end, was sewn to the inside back of the neck to allow the garment to easily hang over a hook. Both garments retain the skillful touches of a talented sewer, likely the hands of Catherine Cadigan or Mary Fuchs.

Remains from a few other features suggest that at least one woman in each household created the family clothes or supplemented the family income with her skills. The modest garment sample at 14 (39) Perry speaks of a competent sewer, possibly a dressmaker, who created some everyday wool and expensive silk clothes. These efforts may have been an important contribution to the family by Mary Johnson. A few blocks away at the Dolan or Michelson home at 109–111 Perry Street, archaeologists recovered material from two new everyday garments, four or five remade garments, and numerous sewing pins. These items may represent the efforts of Jane Dolan and her two daughters, Jennie and Lizzie, or the work of Aletta Michelson to cloth her ever-growing family; or perhaps one of these women engaged in small-scale work as a seamstress or dressmaker. At 120 Silver Street in Privy 808, there are no garments with stitches, but there is possible evidence of home stitching: scraps of black silk cut for a new garment document the presence of someone capable or bold enough to sew with silk. This daring person would have been from the Schreina, Johnson, Degnan, or McIntyre families.

These simple little stitches, often reflecting humble tasks, are some of the grandest remains from the 1,421 sewing-related items of clothing represented by fabric and buttons from the West Approach Project. Now little fragments of wool and silk, they are the products of many hours of labor and years of experience.

The Theodate Dent family and the James and Mary Hannan family at 12 (41) Perry are associated with Well 6, a feature that contained a decent sample of straight pins and sewing artifacts, along with five scraps, including one from a new garment. There are 70 garments represented by buttons; 20 (26%) of these had fancy buttons. This wide variety of artifacts, coupled with the quantity of scraps from remade garments, strongly suggests that a professional dressmaker was operating out of the home.

Numerous straight pins, two new scraps, and five scraps from remade garments are associated with the early-1880s Michael and Jane Dolan or Jacob and Aletta Michelson households. Thirty-one percent of their buttoned garments had fancy fasteners. Though sewing-related artifacts are somewhat limited in their range, those that survive suggest that Jane or Aletta may have been a dressmaker working out of her home.

Privy 810, associated with the household of saloonkeeper John Monahan and his wife, Delia, was one of two features to contain a sewing-machine-oil bottle, yet no sewing-related items. This piece of furniture may have stood as a symbol of a successful household and may have been used by a hired dressmaker when custom-made garments were needed (see sidebar on sewing machines). All of the buttons found in this privy were plain utilitarian varieties.

Figure 5.3. Tongbao and Chinese sewing basket. A tongbao is part of the tassel decorating this basket; one possible explanation for the presence of the Chinese coins found in West Approach collections.

From Block 11, refuse discarded by the families of George and Maggie Donnelly or William and Esther Beal contained almost a dozen spools of thread, several sizes of straight pins, and two thimbles, along with a wool scrap; decorative buttons accounted for 30 percent of the 117 items in the sample. A Chinese coin in the collection, wen or tongbao, might have been an ornament atop a Chinese sewing basket. Maggie and Esther may have sewn for their many children or for themselves, or they may have worked as seamstresses or dressmakers.

In addition to the Donnelly or Beal feature, other West Approach Project features yielded a tongbao. These included the households of Steven and Louisa Baker at 108 Silver; Pat and Nancy McSheffrey at 9 Baldwin Court; and Charles and Julia Towne, John and Francis Hill, or John and Rosanna Maloney at 129 Perry. As exotic objects of curiosity, some of these may have been tied to Chinese sewing baskets (see Figure 5.3), and therefore may pinpoint other home sewers or professionals in the South of Market neighborhood.

Four Views of a Dress

As that thin layer between the public and the private, clothes offer a buffer from the outside world while signaling personal preferences and style, popular trends, economic conditions, and social aspirations. Yet clothing is also the product that reflects the livelihoods of the needleworkers who created them. The discussion below characterizes these different views of a garment: the perspectives of the wearer, the dressmaker, the clothing historian, and the archaeologist.

The Wearer

The purchaser's perspective is best expressed by Harriet Lane Levy (1947:131–135) in her autobiographical book about growing up in a relatively cloistered, Jewish family in 1880s San Francisco. When her mother, Henriette Levy, received a bill for $58.20 for the design and creation of her last dress by the elite dressmaker Miss Denny, she announced to her family and friends that Harriet's sister Addie's new street suit would be constructed by a dressmaker who came to their house. Henriette choose Miss Lauber, recommended as "stylish and swift," who could create a finished garment between 8:00 a.m. and sunset. Most dressmakers who came to a house would take two days for this accomplishment and charged $3.00 a day, but for her speed Miss Lauber charged four. She arrived at the Levy house promptly at eight dressed in a long black coat and carrying a black satchel in one hand and a fashion book in the other. She was escorted to the backroom where Henrietta and the family's sewing machine awaited her. On the bed lay yards

of plum-colored broadcloth and gray silk lining, whale bone, binding, and a box of assorted pins waiting for the dressmaker. After feeling the fabric and meeting the dress's prospective wearer, Miss Lauber quickly took out her fashion book and the process of choosing a style began. With so many to choose from, the family asked if aspects of three could be combined into one. The dressmaker complied by cutting the basque lining to the desired shape, incorporating elements of the three patterns. Next she pinned it onto Addie. With her own shears, Miss Lauber trimmed the pieces for a better fit. Then, she machine-sewed the lining, and another fitting confirmed a good fit and excellent workmanship. Then the whalebones were added to the lining. Once the inside was completed, the outer fabric was cut and sewn. All the while, the Levy women watched this professional work, entertained by Miss Lauber's speed and skill. At this point, Addie went out to buy silver buttons and silk trim. When she returned, lunch was served in a party-like atmosphere with plenty of food, including two servings of coffee and dessert heaped on Miss Lauber. "The conversation was lively and tactfully restricted to the subject of clothes and present fashions" (Levy 1996:133).

In the afternoon, work continued with the skirt cut and sewn, all seams to both garments faced and bound, and sleeves, collar, and cuffs added to the basque along with the newly purchased trim. Sixteen buttonholes were also completed. When lemonade was brought to her at three, the dressmaker drank while working, barely breaking her stride. By four, the collar that had looked so chic in the fashion book was less attractive on Addie's thin neck and the right sleeve did not hang right. What should have been the final fitting, instead also exposed the waist pulling to one side. Using a needle, the embarrassed Miss Lauber pulled out the machine stitching and went back to work. At six, she was offered dinner with the family, but declined in order to finish her work. By eight, the creation was done, and the dressmaker was ready for payment. Henrietta paid the bill and included a tip. Then Addie put the street suit back on and the women examined it closely. The sleeve now hung well and "it was not unbecoming," but "still it did not look like a 'Denny' dress."

The reader is left to presume that neither dressmaker was employed again. (Neither Miss Lauber or Miss Denny are listed in the 1880 U.S. population census or the 1879 or 1889 city directories. Levy described Miss Denny as the dressmaker of the Jewish elites of San Francisco.)

As a newcomer to 1860s San Francisco, the well-traveled, avant-garde writer Ada Clare offered a cosmopolitan commentary on San Francisco styles. Since she was new to the city, Ada was unable to interpret many of the signals conveyed by the local women through their fashion. She wrote, "It is hard to tell what are the exact fashions here. Dresses are worn of every kind of stuff . . . and made in every conceivable way" (Clare 1992:310). In the major fashion centers of New York and Paris where she had been living, a new fashion trend would sweep through the crowds and in a week all would be wearing it. In contrast, she was impressed that San Francisco women were free to establish and to interpret their own fashions. Ada continued:

> All of [the] fashions have either lived their season, or are living them, in the great cities of the world. But here they are all worn simultaneously and with perfect originality. Everyone tries her own taste, and sails under her own independent colors [Clare 1992:310].

In addition to style and fashion, for working-class women there was the question of affordability. California's Bureau of Labor Statistics for 1887 describes how many young working-class women seeking employment outside the home found it impossible to afford new clothes. Instead they depended on hand-me-downs from family members and friends, and presumably

second-hand stores. These garments likely needed to be altered to fit and finessed to appear less dated. A presentable image was important to these young women finding employment, especially for highly visible positions such as shop clerks.

The Dressmaker

Dressmakers would see a different side of the garment and have a different experience of the dressmaker–client relationship. An 1896 article entitled "Suggestions for Dressmakers" has been attributed to the dressmaker Catherine Broughton, who described some of the attributes need to be a modiste. According to Broughton, a dressmaker

> . . . is supposed to have a brain large enough to remember all of the foibles and fads of all her customers, and a heart sensitive and loving enough to bathe each one in sympathy for all the troubles and trials to the unbosoming of which the fitting of a dress somehow leads [Gamber 1997:102].

Another honest, anonymous article in *Ladies' Home Journal* (1908:8, 38) provided more details from the needleworker's perspective. That particular dressmaker began her career by going "out by the day" to sew in homes. As neither a servant nor a guest, many were unsure how to treat her. As with the Levy girls and Miss Lauber in San Francisco incident, often conversations would focus on the weather or other distant subjects. Yet the dressmaker found it ironic:

> Here I was in the homes of people, concerned with the making of their clothes—one of the most intimate relations a person can have with another, for clothes express mind and spirit as well as body. And yet I was denied community of interest with them, although I served them. They never realized that in their demeanor toward me they expressed themselves and affected their clothes and my work for them [Anonymous 1908:8].

Some customers were exceptions. Only for these kind, repeat customers did that dressmaker take pieces home and sew at night without charging. For most, conversation was kept to a minimum with a sense of urgency that comes with paying someone by the hour. Yet when work was simply work, the extra touches needed to make a dress special often did not have the chance to bloom.

In contrast to "working out" in the customers' homes, when this dressmaker started her own shop she found the same customers approached their relationship with her quite differently. Some would come and spend all morning trying to decide on a design. Others wasted her time by taking in all she had to offer; then with her chic designs, off they went to another (presumably less expensive) dressmaker for the construction. Poor choices made by a customer were another dilemma. Does one tell the customer what would be more becoming or in better taste? Or does one give them what they want? (For example, while Miss Lauber thought the color of the fabric would be flattering on Addie, she never commented on what the overall effect would be when incorporating parts of three designs into a basque; she simply stated that she could accomplish it.) Other customers used the intimacy of multiple fittings as a chance to unburden all of their most personal problems. Topics that centered on husbands' deficiencies would have been embarrassing and inappropriate for the often-unmarried modistes. Other problems erupted when customers wanted something for a specific occasion but gave little time for the dressmaker and their employees to construct such a creation; the dressmaker was left with the choice of losing a lucrative commission or working long hours into the night for several days.

This anonymous dressmaker did not enjoy working with customers who presumed that a new style of dress would make them much younger or slimmer. Yet to her the most unpleasant type were young women who thought only of fashion and themselves. The easiest-to-please customers were those who wanted elaborately decorated dresses, as decorations would cover over any defects that manifested during construction. Her favorite customer had good taste and knew what she wanted: something simple that showed off the style and fit of the garment's design and construction. This was a chance to show off her skills and truly create a spectacular garment. Those who fully appreciated her skills inspired this dressmaker and made her more than 30 years of clothing construction worth all the effort.

Only years of experience helped with the task of collecting payment. The bane of unpaid bills was most pronounced in shops, where bills would be sent out after the customer received the garment. For some, money given by husbands for such services was frequently used for other household expenses. This dressmaker's creative approach was to consistently send the bill to the husband, or father, if present. She found this direct, non-negotiable policy most effective for prompt bill payment. Even with her tough policy, this modiste always had plenty of work. Her success can be measured in another way: she started with a staff of "two girls," and in 1908, after more than 30 years, her staff had blossomed to 52. While this long-term tenure and large enterprise was much greater than any experienced by our San Francisco needleworkers, they would have likely have suffered from similar problems.

Other needleworkers chose the sewing profession for its respectability and its flexible work schedule. Seamstresses often abandoned sewing work for better-paying jobs in order to save enough money to buy new ready-to-wear clothes. Then, once properly attired, these women would quit those jobs, with their greater restrictions, and go back to the needle (California Bureau of Labor Statistics 1887).

The Historian

Historians have conducted demographic studies of tailors, dressmakers, and seamstresses using city directories and other primary sources to paint broad pictures of these professions, primarily focusing on urban areas (e.g., Scranton 1994; Trautman 1979). Innovative research by Wendy Gamber (1997) has transformed these demographic studies into more personal portraits by combining descriptions in R.G. Dunn's mercantile agency's ledger entries for milliners and dressmakers. These entries could contain character references, family information, personal descriptions, notes on quality of work, and assessment of their credit risks. Gamber and other social historians have used these ledgers to focus on urban areas solely in the eastern United States: Albany for Lewis (2005); primarily Boston for Gamber (1997); and cities in North Carolina for Nicklass (2005). Gamber researched skilled, independent Boston women, mainly modistes, of predominantly working-class origin from 1860 to 1930. She found that dressmakers and milliners were among the highest paid professions for a woman during this period and one with considerable status within the community.

The typical Boston dressmaker was white, native-born, and unmarried or widowed; half of them lived beyond the structure of a nuclear family (Gamber 1997). Many of the women were second-generation Americans of Irish descent, but a consistent small group was of French heritage. On average, these women stayed in business for six years, with experience—and therefore age—an asset for a modiste, but not for a seamstress. In Albany, New York, Lewis's (2005) investigation of needleworkers between 1840 and 1885 found that home-based businesses were most common. She identified the typical 1880 dressmaker as white, widowed, foreign-born, and in her 40s. This

BEADS

Erica S. Gibson

More than 2,000 beads were recovered from 37 features from the West Approach Project; see Appendix E for descriptions, provenience, and selected photographs by bead analysts Karlis Karklins and Lester Ross. The majority were drawn beads, formed by pulling out a small amount of hot glass into a long slender tube and chopping it into desired lengths. The small circular beads made in this way were typically called 'seed beads.' Black seed beads were very popular during the latter half of the 19th century for use on ladies garments and accessories; when mounted on wire, they were formed to make brooches, decorative buckles for hats, and other decorative items. Colored examples were favored for Berlin work, a type of embroidery popular in the 19th century, and for creating beaded bags, lamp-globe veils, and watchbands, among other items. Ladies embroidered card cases, pincushions, and other accessories that were often donated to charity bazaars. When mounted on wire, they could be formed to create baskets, flowers, and other knick-knacks. Hexagonal, tubular beads—typically called "bugles"—were produced in Bohemia during the second half of the 19th century and the early part of the 20th. These thin-walled beads came in short, medium, and long sizes and had numerous decorative uses, many similar to the seed beads. Thicker ones were popular for tablemats, longer beads were frequently used for lamp fringe, while thinner varieties were employed in bell pulls, hanging baskets, decorative pillow tassels, and similar items.

Wound beads were formed by winding threads of hot glass around a wire that was then removed, leaving a slender hole. They were frequently used in necklaces and rosaries, which were strung on copper-alloy wire. Prosser-molded beads were manufactured using a method patented by Richard Prosser in 1840, where a powdered mixture of sand, feldspar, and calcium fluoride was pressed into a mold and then fired in an oven. The Prosser-molded beads recovered from the West Approach project were also of forms typically used for necklaces and rosaries. Mold-pressed beads were formed by placing heated glass in a two-piece mold. The majority of the recovered mold-pressed beads were black; they were customarily used for necklaces or bracelets, though some of the faceted barrel beads may have been used as lamp fringe.

Blown beads were manufactured by blowing a bubble in a small gather of heated glass. As a result they were hollow and light and were often used for necklaces, earrings, hair accessories, and garments. Some were colored inside to give the appearance of pearls; others were silvered or otherwise colored and used in Christmas garlands.

Jonathan and Mary Peel and their children resided on Block 5 from shortly after their arrival to San Francisco in 1852 until Mary's death in 1879; Privy 507, abandoned in the early 1870s, is associated with the family's residence at 540 Folsom Street. The Peels kept a fashionable if eclectic household, decorating their home with vases, flowerpots, an ornamental fruit stand, and stuffed birds. This feature accounts for 35 percent (n = 718) of all beads recovered from the West Approach Project. The vast majority of these are drawn beads, primarily black, although

Drawn tubular hexagonal beads. Archaeologists recovered these short, thick multi-colored beads from the Taylor family deposit (Privy 1301) on Block 4. While these beads were too large to have been used in traditional embroidery, they might have been used for tablemats or lamp fringe. Several of these beads contain remnants of ferrous wire and were probably used to create three-dimensional items like baskets and flowers.

Beads by Feature

Block	Feature	Association	Date (ca.)	Drawn	Wound	Mold-pressed	Prosser molded	Blown	Wood	Amber	Bone	TOTAL*
4	Privy 1300	Samuel and Smith families	1885	82	2	8	0	1	0	0	0	93
4	Privy 1301	Taylor family	1870	72	6	1	0	0	0	0	0	79
4	Privy 1304		1895	2	0	0	0	0	0	0	0	2
4	Privy 1305	Fuchs and Cadigan families	1880	3	1	0	0	0	0	0	0	4
4	Privy 1307	Brown family	1870	20	2	0	1	0	0	0	0	23
4	Privy 1310	McSheffrey household	1870	1	0	0	0	0	0	0	0	1
4	Privy 1316	McEvoy family	1870	0	19	0	0	0	0	0	0	19
4	Privy 1318	Murphy family	1880	7	0	0	3	0	0	1	0	11
4	Privy 1322	Hurley and Conniff families	1890	4	1	0	0	0	0	0	0	5
4	Privy 1326	Amanda Scales and boarders	1875	11	0	0	0	0	0	0	0	11
4	Privy 1333	Dougherty family	1890	14	8	1	0	0	0	0	0	23
5	Privy 505	Mayne household, O'Connor family	1880	4	0	0	0	0	0	0	0	4
5	Privy 507	Peel family	1870	698	14	4	0	1	0	0	1	718
5	Privy 516	Mary Peel	1880	39	0	0	0	0	0	0	0	39
7		St. Mary's Hospital	1906	1	4	2	7	0	0	0	0	14
9	Privy 1	Silver Street Kindergarten	1885	3	6	2	0	0	0	0	0	11
9	Privy 2	Johnson family	1870	0	1	1	0	1	0	0	0	3
9	Well 6	Dent/Hannan households	1895	12	42	1	2	0	4	1	0	63
9	Privy 7	California Collegiate Institute for Young Ladies	1870	16	6	0	1	2	0	0	0	25
9	Well 8	Rowe household	1885	13	1	0	0	0	0	0	0	15
9	Privy 9	Usher household	1880	11	7	2	7	0	0	0	0	27
9	Cesspool 13	Henry Knoche Grocery Store	1885	37	13	5	0	2	0	0	0	57
9	Privy 17	Depression-era flats	1935	0	0	0	1	0	0	0	0	1
10	Privy 801	Sheridan family	1885	0	2	3	1	0	0	0	0	6
10	Privy 806	McIver and Martin families	1880	151	127	15	2	2	0	0	0	297
10	Privy 807	Gee family	1869	69	3	5	15	2	0	0	0	94
10	Privy 808	Schreiner, Johnson, Degnan, and McIntrye families	1880	45	11	2	2	4	0	0	0	64
10	Privy 810	Monahan family and tenants	1880	0	1	0	0	0	0	0	0	1
10	Privy 812	Towne/Hill household	1880	29	19	4	2	2	0	0	0	56
10	Privy 813	Moynihan household	1880	9	2	0	0	0	0	0	0	11
10	Privy 814	Aaron family	1875	0	2	0	0	0	0	0	0	2
10	Privy 849	Strauss/Ackerman household	1870	0	1	0	0	0	0	0	0	1
10	Privy 851	Metcalf family	1880	0	1	0	0	0	0	0	0	1
10	Well 853	Baker family	1870	8	9	1	0	0	0	0	1	19
10	Privy 857+	Dolan and Michelson families	1880	91	29	17	7	0	0	0	0	145
10	Well 866	McDonald and Tobin families	1885	14	1	11	1	1	0	0	0	28
11	Privy 1600+	Donnelly and Beal families	1880	37	29	6	1	0	0	0	0	73
TOTAL				1,503	370	91	53	18	4	2	2	2,046

*Totals include one bead each carnelian, clay, and shell from Well 8, Privy 857+, and Well 6 respectively

Wound beads. Though wound beads were often used in necklaces, these large navy beads (ranging from 1/2″ to 1″ in length) would have been far too heavy to have been worn. The various shaped beads were probably from a beaded curtain that would have served as a room divider or door partition in the McIver/Martin households on Block 10 (Privy 806).

nearly 100 are colored. This wealthy family could easily have afforded lavish beading for women's garments and accessories. The colored beads may have been used for additional accoutrements, home decoration, or philanthropic enterprises. Several wound beads, again mostly black, were recovered as well. One, a square-faceted bead strung on ferrous wire, may have been from a necklace. A translucent, rose-wine-colored, blown-glass bead was probably from a Christmas garland. Interestingly, although the Peels were a Protestant family, they appear to have had at least two rosaries: one made of bone beads, the other of light-gray, wound-glass beads on copper-alloy wire.

In 1880 the widower Murdock McIver, a Scottish rigger and stevedore, lived at 125 Perry Street on Block 10 with his children: two boys and five girls, two of whom worked out of the house as seamstresses. During the same period, Abraham Martin, a Jewish merchant, and his wife lived with their children—two boys and two girls—at 127 Perry Street. Privy 806, associated with the McIver and Martin families, contained almost 300 beads, the second largest quantity from the West Approach Project. Of the 151 drawn beads, almost 100 were colored. Some of these are appropriate for lamp fringe, while the rest were probably used for other decorative purposes. The seamstresses might have been adorning beaded bags and the like to accessorize ladies' attire. More than 80 percent of the 127 wound beads were large, ovoid and round beads in shades of navy blue that may have been used for a beaded curtain. A wound black bead on copper-alloy wire was most likely from a rosary.

The fragment of an opaque-black, mold-pressed portrait bead, and several spacer beads, were recovered from Privy 812, Block 10. The cameo-like oval bead is 1 inch in width and greater than 1 inch in height and, along with the plainer rectangular spacer beads, has two parallel perforations from one side to the other. The portrait bead fragment depicts the torso and chin of a woman draped in a toga-like garment and was probably a part of a necklace or bracelet. Also on Block 10, a series of graduated, translucent white, globular beads with a yellow-metal cap were recovered from Privy 857/858. This necklace might have adorned any of the women from the Dolan

or Michelson families who resided there in 1880. A mother-of-pearl rectangular pendant was also recovered from this feature. A wound, opaque, robin's-egg-blue glass bead was probably part of a rosary. The single clay bead remains a mystery.

The three stone beads recovered were all necklace components: two amber beads from Privy 1318 (Block 4) and Well 6 (Block 9), and a carnelian bead from Block 4, Privy 1333. The four wooden beads, also from Well 6, were most likely part of a child's toy or an abacus. This deposit, filled around 1895, was associated with the households of James Hannan and Theodate Dent. The combined presence of several Chinese dishes—a medium bowl, a tiny cup, and a lid—and a variety of toys in Well 6 does not resolve the question of the use of wooden beads.

The thousands of beads recovered from the West Approach Project represent an impressive variety of bead types and varieties, many of which have been previously unrecorded. Their tightly dated late-19th-century deposits and associations help to fill in a void in bead studies, which have typically concentrated on earlier sites. Exceptions include the I-880 Cypress Freeway Replacement Project in Oakland, California and the Metropolitan Water District in Los Angeles. Beads recovered from these two projects are comparable both in type and date with the West Approach assemblage, with a few notable exceptions. Three large, barrel-shaped, translucent-white beads—called "crackled whites"—were recovered from Pit 3382 (Cypress). While smaller ones have sometimes been found in North America, these large ones are typically found in eastern and southern Africa. Another unusual bead, an opaque red on transparent-green seed bead from Privy 156 (Cypress) was a trade bead that went out of general circulation in 1840, much earlier than the deposit. The bead may have come from an item embroidered by Native Americans for the tourist trade (Karklins 1998).

dressmaker was the head of her own household and, along with her family, took in at least one boarder, thus operating two small business ventures at once. Lewis also found that countless dressmakers remained single longer than other women, while they worked many years at this skilled trade. Often family members were employed to help when needed. Nicklass's (2005) insights into North Carolina's working women were divided into two time periods: antebellum and postbellum. The average antebellum business woman operated for 9.6 years, while in the turbulent and unstable economy of postbellum society, women averaged 3.6 years, with 81 percent in business for two years or less (Nicklass 2005:161, 163). In Colorado, Trautman (1979) found that more than half of the dressmakers and seamstresses worked in Denver, which also had the highest percentage of those from foreign or mixed parentage. In contrast, tailors were about half native and half foreign-born. In 1880 most Denver dressmakers worked out of their home, with eight working for department stores, and four of the five seamstresses also worked for a department store.

The biggest determent to a successful enterprise was unpaid customer bills. When clothing and money were exchanged at the same time, payment was more often assured, but at dress shops such as Miss Denny's and the anonymous dressmaker's, bills were sent out after the garments were received. When customers did not pay in a timely manner, collection became a delicate matter, because word-of-mouth referrals and the customer's apparel were a walking advertisement of the dressmaker's abilities. The busiest times were from March to June and September to December, as demands for new or remodeled fashions were cyclical. At these points, many delinquent bills could devastate a business.

Social historians have also focused on technological trends. In 1860 no Boston dressmaking shop owned a sewing machine, but 10 years later 95 percent of those in the business used them for at least a portion of their sewing tasks (Gamber 1997:137). The introduction of the sewing machine (see sidebar) and availability of an array of drafting pattern systems made it possible

for less-talented dressmakers and even seamstresses to produce more presentable garments with greater ease. In contrast, a proficient dressmaker would have draped and pinned the fabric to a client, developing the fit and style as she worked. As many American women embraced factory-made garments, those who could afford to sought out a more customized wardrobe, especially for garments for special occasions. Selecting the fabric from a dry goods store, purchasing trim from a fancy goods store, and selecting a dressmaker and a suitable style engaged the consumer in the selection and creation of a garment to a degree that purchasing ready-made clothes could not provide.

In contrast to a strictly woman's perspective, Scranton's (1994) work on needleworkers in Philadelphia focused on the transitional period of 1890 to 1930, when small cottage industries dominated the men's tailoring trades after the initial surge in factory output. Eastern European Jews dominated the tailoring industry, although those with Irish surnames were frequently detected throughout the clothing factories. In 1890 there were about as many men's custom clothing firms as there were women's dressmakers, but they employed twice as many workers and garnered three times the income (Scranton 1994:247). By a few years later, more woman-owned and -operated shops had closed—a product of the depression of the early 1890s and the increased reliance on ready-to-wear merchandise.

Others historians of needleworkers have focused on individuals and their clothes. Miller (2003) profiled African American dressmakers from the South and the central to northern Midwest by combining their life stories with discussions of their creations. She found that this profession often provided the income necessary for women to pursue other dreams. Most famous in the late 1800s was Elizabeth Keckley, who used her skills as a talented dressmaker (along with her business sense) to buy herself out of slavery; while operating her own dressmaking establishment, she became the personal dressmaker for Mary Todd Lincoln during her tenure as First Lady. Yet even with all this skill, recognition, and success, she died in a poorhouse (Miller 2003:5–13).

Art historians at the Cincinnati Museum focused on selected dressmakers associated with the spectacular gowns and outfits in their collection (Amneus et al. 2003). Their history is linked with the growth of Cincinnati and with similar themes discussed above by other historians. Further afield, but also relevant to this research was Severa's (1995) perspective of presenting the changing fashions of American clothing from 1840 to 1890s. Her descriptions of clothing shown in old photographs of predominately working- and middle-class people from the northern Midwest, combined with advice offered by dressmakers and local farm journals, provides commentary on how everyday people lived and dressed. Severa's well-trained eye spotted several remade dresses and confirmation of the increase in ready-to-wear garments in the photographs.

The Archaeologist

Archaeologists combine written records with those patterns of artifacts recovered from discrete features to create a more focused portrait of a household or business. This research compares public trends with household preferences and idiosyncrasies. The West Approach needleworkers provide an impressive sample with which to explore those employed in the needle trades in 19th-century San Francisco. The remarkable preservation of fabric encountered in privies and wells for this project is unprecedented. The remains of at least 139 garments were recovered from the four features associated with Wolf Samuel's tailoring operations, dressmakers Mary and Ida Briggs Shore, dressmaker Annie McDonald, and seamstresses Mary and Carrie McIver. Buttons accounted for an additional 167 garments. Additionally 11 new scraps left over

from garments made by these needleworkers and 80 remade garments contribute to a remarkable sample of 397 garments associated with these needleworkers' operations. Comparing the fabrics, scraps from new and remodeled garments, and various sewing implements with the remains from the rest of the archaeological assemblage associated with these needleworkers could provide a greater understanding of the business, the household, and these people's economic contribution to their family.

There are only four professional needleworker households with sewing-related assemblages in the West Approach sample; this minimizes the possibility of such a broad comparison. Four other such households have been archaeologically studied in the region—one from another area of San Francisco and others from Oakland and Sacramento, but data are not always comparable. While a preliminary analysis suggests that adjusted minimum numbers of items from West Approach features are more than two times as high as all but one of the features from other projects; the exception is the robust assemblage associated with tailoress/seamstress Hannah Driscoll Schram from the Central Freeway Project in San Francisco, but differences in the data collection and data presentation (St. Clair and Dobkin 2006:Tables 5I, 5J, and 13) do not allow comparisons. Dressmaker Virginia Cook's assemblage from Sacramento (Praetzellis and Praetzellis 1992) dates to 1908, considerably more recent than the other collections, which range from 1868 to the mid-1880s.

Assessment of scraps and quality of fabrics, coupled with a look at the decorative button sample, allows for an enhanced interpretation of the variety of dressmaker, seamstress, or tailor clientele and the services provided. Tools of the trade—such as straight pins, thimbles, and so on—ranged from a high of 1-1/2 percent to much less than 1 percent of the total MNI, except for Mary and Ida Shore's collection, whose huge assortment of straight pins and other items tops out at almost 28 percent. Yet even the average counts and percentages represent a quantity not often recovered from other households.

As the only tailor in our sample, Wolf Samuel's Tar Flat business would have consisted of altering and reshaping men's clothes, along with providing new everyday clothes for his working-class customers. The low proportion of decorative buttons (13%) is consistent with working- and middle-class men's attire. The few fancy buttons represented can be attributed to the women that lived in the home, with possibly a few for men's dressier vests. Wolf's tailoring shop provided for his family, but did not yield sufficient income to purchase a home or move out of Tar Flat until the earthquake and fire forced the move. The Samuel family's inexpensive fabric occurred in similar quantities as that of the McIvers, but the sisters' much lower proportion of expensive fabrics suggests that the tailor had a more diverse clientele and a better income.

The unusual preservation of more silk than wool documents the Shores' endeavors to create and redo a variety of wool and silk garments, indicating a diverse group of customers from the working and middle class. Refitting and shaping a garment can be problematic, as newer fashion shapes did not always hang well or accommodate the current shape of the wearer (Severa 1995), especially when using the challenging fabric of silk. The Shore women were quite prolific in sewing silk and seem to have had a prosperous enterprise; if their customers paid on time, their financial rewards should have been satisfying. Their economic contribution to their brother-in-law's household likely sustained the family when its head and youngest son were out of work, and during the period that John Usher sought to reinvent himself.

In contrast, Annie McDonald's sewing-related assemblage yielded one of only two sewing-machine-oil bottles, along with a thimble and a wooden spool that once held thread. The

combination of machine-sewn and hand-sewn artifacts is consistent with the changing technology available to professional sewers during the mid- to late 1880s and suggests that this talented dressmaker worked regularly and charged enough for her skills to a buy a sewing machine on time. These artifacts are associated with Annie McDonald's early years prior to opening her own shop, to a time when she likely went to work at her clients' homes; the remains reflect her trying out new styles and sewing techniques when sewing her own clothes at home. Most of her sewing-related implements were likely moved when she opened her shop. The percentage of decorative buttons in her collection is consistent with that of the Shores, who cut all kinds of buttons from garments before disposing of them. Unlike the Shores with their fine silks and wool, all of the fabric remains recovered from Annie McDonald's assemblage were of everyday quality.

The sister seamstresses Mary and Carrie McIver had the lowest percentage of clothing represented and, enigmatically, the greatest percentage of both inexpensive fabric and decorative buttons. Many options were available for young women starting off in the seamstress trade. The large quantity of clothing and sewing-related artifacts suggests that at least one of the sisters did her work at home. The high ratio of buttons to minimum number of garments would be consistent with clothing being thrown out by a family, or with the common practice of dismantling clients' old garments, then using the pieces to make the client an individualized clothes pattern. If the latter was the case, then buttons would have been cut off the garment and either tossed out or thrown into a button box; sets were often strung on a length of thread to keep them together for future use. Mary's and Carrie's seamstress skills would have garnered the lowest pay of our group, and their business would have been more prone to seasonal variability and meager returns. But even this low income would have been some help to their family's domestic operations.

The ample evidence for clothing construction detailed in the fabric left behind in West Approach features overshadows the samples from other northern California needleworkers from this time period. Archaeologists must often rely on buttons, a few straight pins, or a single needle or thimble, allowing few insights into the types of work these women undertook. The white-chalk pencil left by Hannah Driscoll Schram was likely used for pattern alteration and fitting, which suggests that as she altered premade patterns in her home business, she continued to use the skills she had learned while working in a shop as a tailoress. There are no fabric remains, however, to fill out this picture. Her occupational change from tailoress to seamstress in the city directory may signal the point when Hannah started working on her own.

Archaeologists concluded that because the Driscolls lived beyond their means, their daughter had to work as a seamstress (St. Clair 2006:70). While this is a common conception about the value of needlework, it is contrary to the investment that the family made as their daughter apprenticed to a dressmaker. Such ventures were typically unpaid or minimally paid labor, while some apprentices paid to gain the experience. Frequently, apprentices were used to run errands and do basic sewing without learning the skilled techniques of fitting (Gamber 1997:70, 131, 149). More likely, Hannah Driscoll's apprenticeship was seen as a long-term investment toward future economic return. As a seamstress, her wages would have been low and constituted only a small contribution to the family's income as she gained more experience.

Further afield, archaeological investigations with discrete features associated with needleworkers have been limited, with features only documenting the business life of needleworkers. In Virginia City, Nevada, dozens of straight pins and beads found by archaeologists, are probably associated with a dressmaker, Mrs. Margaret A. Andrews. She operated a small dressmaking shop at 18 North G Street for less than 18 months until her death

at the age of 35 in 1873 (Schablitsky 2002:219–222). She and her husband lived several blocks away from the shop, and few artifacts were recovered that could elaborate on her customers and creations.

In New York City, archaeologists investigated the working-class residents of the Five Points Neighborhood. Among those studied were the many tailors, clothiers, and secondhand-store operators on that block between 1870 and 1900 (Yamin, ed. 2000). The associated features contained many scraps of cloth, some of which were quite shoddy, along with military buttons. One feature was interpreted as the remains of a business that converted soldiers' uniforms into civilian wear. Another feature, designated H, appeared to be remains from Polish-born Mendel Myer's 1850s to 1860s clothing operation. Recovered sewing-related artifacts consist of 226 packages of straight pins, 1,000 single pins, 50 thimbles, 222 hook-and-eyes, along with 200 new scraps, small rolls of twill tape, fragments of seam binding, and numerous basic men's buttons. This suggests that Myer's operation was either run on an industrial level (Yamin, ed. 2000:129–132), or that he was a merchant tailor, who sold sewing supplies as an adjunct to his tailoring operations.

A variety of professional sewing work is exemplified in the present collections. The Shores and Annie McDonald appear to have reaped the most from their needle skills. The most unusual archaeological finds, thanks to the impressive fabric preservation, were the array of men's and women's garments that were refashioned and altered for continued use. Each custom-made garment has its own story to tell, whatever perspective is taken: whether you created the garment, cut or sewed it, wore it, breathed new life into it, admired it in a photograph, displayed it in a museum, or rediscovered it within a sealed archaeological feature.

Touch the fabric one more time. Feel the silk or wool between your fingers and those unwavering silk stitches to begin to understand the complex relations that created it.

SEWING IMPLEMENTS FROM THE SOUTH OF MARKET NEIGHBORHOOD

Mary C. Beaudry

Excavations of household deposits in the South of Market neighborhood recovered vast quantities of domestic refuse, as well as artifacts that seem to indicate in-home production of various sorts, including participation by men and women in the needle trades (see Psota, this chapter). The items that I examined had been cataloged as either sewing-related or unidentified, and almost all items that I recognized as sewing tools or accessories are typical implements used by the home sewer for everyday domestic purposes; only a few are of the sort one would expect at commercial premises or at homes where professional needleworkers plied their trade. Only one pair of scissors was recovered, and it was not among the materials presented to me for study. A close examination of scissors, if more had been available, would have been a useful way to learn more about the nature of sewing work at these sites (cf. Beaudry 2006:115–136). I did not study glass bottles that once held sewing-machine oil, either, but several examples were found, and these are unmistakable evidence for use of sewing machines versus hand sewing.

The range of items that were examined included common straight pins and safety pins; thimbles; a wide array of turned and carved bone implements (handles, spools or reels, possible needlecases) and fragments of implements that were parts of sewing sets; wooden thread spools; glass darning eggs; bone handles that likely came from awls or stilettos; and a few miscellaneous items (Table 5.4). Many of the unidentified objects I inspected are not, in my opinion, sewing tools; safety pins are not discussed further, because I consider them not sewing tools but clothing fasteners. Those materials I recognized as sewing related are discussed below by block and by feature in an attempt to place items found within the same deposits into a contextual framework. Throughout the discussion, I have drawn upon information compiled in my book, *Findings* (Beaudry 2006), and have not cited sources for my identifications. Following the descriptions of individual assemblages are some general remarks about the sewing tools from all of the features in the South of Market neighborhood.

Block 4 – Folsom, Baldwin, and Fremont Streets

412 Folsom Street: Privy 1301

Finds in the privy at 412 Folsom Street were associated with the Irish Catholic Taylor family. They were deposited after the 1868 earthquake (in other words, they represent cleanup after the quake, which seems to have precipitated the Taylors' move away from this address). Robert Taylor was a porter for an import firm.

Unmistakable evidence of home sewing and clothing repair presented itself here in the form of an opaque white glass darning egg, several straight pins, and a thimble. The straight pins are all of copper alloy; one is a lillikin (a small pin of fine wire gauge), one a large white (>2 in. long), and three are middling or short whites (all-purpose ordinary pins about 2 in. long) but of fine, as opposed to common, wire gauge. Only the large pin would have served for pinning heavy fabric. The copper-alloy thimble is deep-drawn with regular knurling and a motto band lacking a motto; the rim portion is missing. There is quite a bit of wear on the crown of this fairly ordinary, adult-sized thimble.

Table 5.4. Artifacts Associated with Sewing

Block	Feature	Association	Date (ca.)	Sewing-related Artifacts
4	Privy 1301	Taylor Family	1868	Darning egg, 5 straight pins, thimble
	Privy 1300	*Samuel Family/Smith Family*	1885	4 straight pins, stiletto or awl
	Privy 1310	McSheffrey Family	1875	14 straight pins, spool holder
	Privy 1318	Murphy Family	1880	Crochet hook
	Privy 1305	Fuchs Family/Cadigan Family	1880	1 straight pin, button blank
	Privy 1303	Thompson Family	1880	Reel or spool holder
	Privy 1307	Brown Family	1870	Child's thimble
	Privy 1326	Amanda Scales and boarders	1870	24 straight pins, thimble, spool holder, awl or stiletto
	Privy 1322	Hurley Family/Conniff Family	1885	2 straight pins
	Privy 1333	Dougherty Family	1890	1 straight pin, knitting needle guard, child's thimble
5	Privy 507	Peel Family	1870	7 straight pins
	Privy 515	Fegan Brothers Household	1880	1 straight pin
9	Cesspool 13	Henry Knoche Grocery Store	1885	5 straight pins, tailor's thimble, thimble, awl or stiletto, crochet hook
	Privy 7	California Collegiate Institute for Young Ladies	1870	4 crochet hooks
	Privy 1	Silver Street Kindergarten	1885	Crochet hook, spool holder, straight pin
	Well 6	Hannan Family/Dent Family	1895	13 straight pins, darning egg, 3 spool holders, thread spool, thimble, child's thimble, sewing box
	Privy 2	Johnson Household	1885	3 straight pins, spool holder, sewing clamp, crochet hook
	Privy 9	*Usher Household*	1880	175 straight pins, 4 needles, 28 thread spools, 2 pattern tracing wheels, thimble case, card or type-weaving disk, spool holder, awl or stiletto, bone thimble
10	Well 853	Baker Family	1870	6 straight pins, crochet hook
	Well 866	*McDonald Family/Tobin Family*	1885	2 sewing machine oil bottles, thread spool, 2 thimbles, spool holder
	Privy 851	Metcalf Household	1878	Thimble

Table 5.4. Artifacts Associated with Sewing *(continued)*

Block	Feature	Association	Date (ca.)	Sewing-related Artifacts
10	Privy 808	Schreiner, Johnson, Degnan, and McIntyre families	1882	40 straight pins, thimble, spool
	Privy 801	Sheridan Family	1888	Child's thimble
	Privy 857/858	Dolan Family/Michelson Family	1880	20 straight pins, toy thimble, spool rod, crochet hook
	Privy 807	Gee Family	1868	34 straight pins, darning egg, thimble, needlecase
	Privy 806	*McIver Family/Martin Family*	1880	4 straight pins, spool, awl or stiletto, thread spool
	Privy 812	Towne Family/Hill Family/Malony Family	1880	Thread reel, needlecase
	Privy 810	John Monahan Family/ Thomas Griffin Family	1880	Sewing machine oil bottle
11	Privy 1600/1601	Donnelly Family/Beal Family	1880	19 straight pins, 2 thimbles, 11 thread spools, darning egg, tatting shuttle

Italics indicate households with a known needleworker

416 Folsom Street: Privy 1300

For 26 years this address was rented by a tailor, Wolf Samuel, a Polish Jewish émigré who lived there with his family in a portion of the house shared with the Smith family, whose household head, Leonard, was an engineer from Pennsylvania. Wolf Samuel ran a tailor shop out of the premises. It is therefore no surprise that several scraps of textiles were recovered from the privy, filled in the mid-1880s, although there were only a few artifacts related to sewing. After their move, Samuel trained his son Jacob in his trade, and later his daughter Bessie became a seamstress.

Fragments of three copper-alloy straight pins were found, two of them middlings or short whites and one a lillikin. A single iron straight pin was found; it is of the middling variety, which is a bit unusual because iron pins are not common finds (they rust, making them undesirable for everyday sewing); they tend to be larger than the one recovered and of fairly heavy wire gauge.

Of the three turned bone objects found in the privy, only one (1444-99) appeared to be related to sewing. It is a turned bone tubular handle, with tooled decoration on the finial end, and is very possibly, a handle for a stiletto or awl.

9 Baldwin Street: Privy 1310

Here the contents of the privy filled ca. 1875 are linked to the Irish McSheffrey family, whose head of household was a laborer. From the privy fill came 14 copper-alloy straight pins, a mix of lillikins and middlings, or short whites. A single bone object is a tapered, turned tube with exterior screw threading at its surviving end. It resembles other finds from elsewhere in the neighborhood that have been identified as connector rods or shafts from reels or spool holders;

such rods would have had disks that screwed onto each end, the removable ends facilitating the placement of a spool of thread onto the rod where it could spin readily as the thread was pulled.

11 Baldwin Street: Privy 1318

Privy 1318, associated with the Irish Protestant Patrick Murphy family (Murphy was a laborer), was filled ca. 1880. Murphy's 20-year-old daughter, Rosy, was a sewing-machine operator turned dressmaker by the 1880 census. The feature produced a single sewing item, a turned bone handle fragment; the exterior has ribbing and a narrow end with internal threading. It appears to be the handle for a fitted crochet hook or similar implement (e.g., a tambour hook).

13 Baldwin Street: Privy 1305

The French Protestant Fuchs family lived at this address, sharing the premises with the Irish Catholic Cadigan family. Mr. Fuchs was a carpenter, Mr. Cadigan a stevedore. Privy 1305 was filled ca. 1880 and produced a single iron straight pin of middling size (1 in. long) and a flat bone disk with center hole—a button blank that would have been covered with fabric when used on clothing.

13 Baldwin Street: Privy 1307

Privy 1307 is associated with the occupation of this address by the family of John Brown, an Irish laborer. From this privy came a very corroded and fragmentary copper-alloy thimble; it is very small and is likely to have been a child's thimble.

21 Baldwin Street: Privy 1303

The privy here was filled in around 1880; its contents have been associated with the household of Irishman William Thompson, who was a blacksmith. The only sewing-related item here is a cylindrical, turned bone tube that appears to be part of a fancy reel or spool holder; it is threaded at one end, where it screws into a flat disk that has four attachment holes drilled into it (Figure 5.4). This sort of reel holder would have been one element of a turned and carved bone sewing set.

Figure 5.4. Bone reel or spool holder (Privy 1303).

240 Fremont Street: Privy 1326

Amanda Scales, boardinghouse keeper, lived at this address with her tenants. A privy filled in the early 1870s produced evidence of Mrs. Scales's (or her boarders') sewing activities. Among these finds were 24 common pins, a thimble, and several bone objects that may have been parts of sewing implements.

The straight pins are all of copper alloy and are of varying lengths and overall sizes, in other words, an assortment of lillikins, middlings, and long whites, or large pins. The thimble is a deep-drawn, copper-alloy thimble of adult size; it has a folded rim with gadrooning and a motto band; it is too corroded to determine whether a motto is present.

Among the bone items is a disk (1573-176), flat on one side and convex on the other, with a small threaded hole in the center of the flat side. Although it might be a decorative boss for a needlework box, it is more likely one end for a spool or reel, as it closely resembles other spool ends found in the neighborhood. Another bone disk (1573-161) is perfectly plain and flat; it is not a button but might have been a button blank, or, alternatively, a game piece such as a tiddlywink.

A third disk (1573-174) may be another spool end or part of a piece of costume jewelry. A rather crudely made, worked, bone handle (1561-106) has a rectangular cross section with chamfered edges; it holds the remains of a ferrous shaft, indicating it was the handle for a whittle-tang tool, such as a knife or an awl or stiletto; it is highly polished from use and appears to have been intended for heavy use. The final bone item (1573-206) is another turned and carved bone handle, relatively small, with a J-shape. It resembles several other "J-shaped" bone handles found throughout the collection that probably are not parts of sewing tools but might be handles for button or glove hooks or for pipe scrapers or some other, as yet unidentified, tool. (See sidebar J or L-shaped Handles/Tools.)

242 Fremont Street: Privy 1322

At the time Privy 1322 was filled in the late 1880s, this address was occupied by the households of Michael Hurley, an Irish laborer, and James Conniff, an Australian Catholic fireman. Two straight pins were recovered from the privy fill; they are either copper-alloy middlings, or short whites, of relatively fine wire gauge.

236 Fremont Street: Privy 1333

Privy 1333, filled in the early 1890s, is associated with the Irish William Dougherty family; William was a longshoreman.

Items of bone found in the privy included a very fine-pointed, turned bone object that may have been a stiletto, or possibly part of a personal hygiene kit. A second object is a small, tubular bone object with holes opposite one another at the open end of the tube; the intact hole shows wear. This is almost certainly a knitting-needle guard.

One copper-alloy straight pin was found, a middling of fine wire gauge, as was a thimble. The thimble is deep-drawn, of copper-alloy, and has a rolled rim and band with no motto. It is tall and narrow but small, a child's or pinky thimble.

Block 5 – Folsom and Clementina Streets

540 Folsom Street: Privy 507

Privy 507, filled ca. 1880, is associated with the English Protestant family of merchant Jonathan Peel. Here the only sewing-related items were seven copper-alloy straight pins in assorted sizes.

49 Clementina Street: Privy 515

The privy at this address is associated with a pair of Irish longshoremen, the Fegan brothers. It yielded one copper-alloy straight pin and a J-shaped bone or ivory handle of unidentified function.

J OR L-SHAPED HANDLES/TOOLS

Mary C. Beaudry

A J-shaped handle with flat "foot" at one end, Privy 1326

Several examples of small J-shaped handles were found in deposits throughout the South of Market neighborhood. One found in Privy 1326 (Block 4) is a relatively small, turned and carved bone handle. It has interior threading at one end of the shaft, which is incised with diagonal lines and hatching within ringed bands, and the terminus is a flat "foot" shape. This object is nearly identical to Item 1007-255 found in Privy 812 (Block 10). Item 1007-255 has balusters and cordons as well as diamond-shaped cross-hatching at its screw-thread end; the other end is carved into a stylized, flat "foot" with carved lines and is highly polished from wear. A single turned and carved J-shaped handle, made of especially dense bone or perhaps of ivory, was also found in Privy 515 (Block 5). The long portion ends in a foot shape; the interior threading at the end of the short portion would have held the working end of the tool (a possible scraper, awl or stiletto, or perhaps a button hook). The flat foot shape on these three J-shaped handles tends to support their use as pipe tools, with tamper (foot) at one end and scraper at the other.

Well 6 (Block 9) also produced a long, slender, J-shaped object of turned and carved bone; one end is hollow with internal threading, the other is carved into the shape of what appears to be a duck's head.

A L- or J-shaped bone object was found in Privy 1333 (Block 4). It has exterior threading on the short end, while the long portion is a hollow long leg. This item is worn, although some hatching can be seen; it has a hole cut on a slant near the polished/worn end. It is possible that the holes were for a ribbon or lacing, or chain, from which the implement might have been suspended.

Privy 808 (Block 10) yielded a small L-shaped turned bone handle with internal threading at one end and its terminus carved into a probable dog's head (1026-245). This might have served as the handle for some sort of masculine implement, such as a pipe scraper.

The purpose of these "J" or "L" shaped bone tools remains unclear but the number of examples found in the collection, suggest that they were handles for some small tool that was in common use. Until intact parallel examples can be found, it is impossible to identify the purpose of these little handles with certainty.

Block 9 – Third, Silver, and Perry Streets

423 Third Street: Cistern 13

The cistern behind the Henry Knoche Grocery Store was filled in the mid-1880s. It produced several bone objects, including a possible tailor's thimble, a metal thimble, and five straight pins.

Item 297-250 is a hollow, turned bone handle, polished from use; it is most likely the handle of an awl or a stiletto. Item 302-33 is a narrow, tapered shaft missing its tip at the narrow end; it appears to be a small-gauge crochet hook, from which the hook has broken off; it also appears to have been reused in some manner. An item initially cataloged as a possible tailor's thimble (301-164) resembles a bone ferrule more than a thimble, being too small in diameter to accommodate any but the smallest of fingers; it does not widen at the base like most thimbles, and shows no sign of use as a thimble.

The copper-alloy specimen (297-233) is a badly corroded, large adult thimble, deep-drawn with rolled rim; it has ferrous corrosion, which suggests it had a steel core. This was a sturdy thimble for heavy use.

64 Silver Street: Privy 1 and Privy 7

This address was the home of the California Collegiate Institute for Young Ladies, associated with Privy 7, filled ca. 1870, and later the location of the Silver Street Kindergarten, linked to Privy 1, filled in the mid-1880s.

From Privy 1 came an intact, turned bone crochet hook (179-26), 4-1/2 in. long. It is slender with a tiny hook, hence it was used with very fine yarn or thread for making doilies, baby clothes, and the like. Its terminus—the end opposite the hook—is carved into a pyramidal shape; it is highly polished from use. It very closely resembles Item 302-33, found in Cistern 13 at 423 Third Street.

Another bone item found in Privy 1 is a turned bone cylinder (171-119) that tapers at each end; it is possibly the connector rod for a spool, but it is fragmentary and lacking any diagnostic elements. A threaded peg or rod of turned bone that fits into a disk with internal threading (two items that fit together: 180-22) is part of a spool or reel holder. Also found was a single copper-alloy straight pin, a tiny lillikin.

Privy 7 contained four bone crochet-hook fragments from two fine-gauge crochet hooks and two small wooden thread spools.

12 (41) Perry Street: Well 6

This well is associated with the families of James Hannan and Theodate Dent and was backfilled in the middle 1890s. James worked as a boilermaker; his son, John, worked as a clerk at the California Notions and Toy Company. Theodate was a widow with two grown children.

This feature contained a number of sewing tools and accessories, including an opaque white glass darning egg; three bone disks (201-77, 292-130, and 293-185—the latter two are identical and probably from the same object, but missing their connector rod) from spool or reel holders; a large wooden thread spool; 13 assorted copper-alloy straight pins (lillikins and short whites); a small, flat piece of bone in the shape of an oval (probably an inset or appliqué for a sewing box or other small box); and two thimbles.

Both thimbles are of copper alloy, deep-drawn, but one (293-182) has a steel core and a plain rim; it is 18th-century in form but manufactured using 19th-century techniques. It is of base metal but would have been quite elegant in its day, and it seems likely it was made in Europe, possibly France, not in England or America. The second thimble (206-116) is fragmentary and very small; it is a child's or pinky thimble.

14 (39) Perry Street: Privy 2

This privy is associated with the household of a California seaman named Johnson; it was filled in the mid-1880s. It contained three copper-alloy straight pins, all of them large (long whites); a turned bone disk with one convex side incised with a circular decoration and a flat side with a threaded center hole, seemingly part of a spool holder; a turned bone peg, with one rounded end with a horizontal slit (a possible tuning or tightening peg or a thumbscrew for a carved bone sewing clamp); and a tapered, turned bone rod that may have been a pen holder or possibly the shaft of a crochet hook.

16 (37) Perry Street: Privy 18 and Well 8

Privy 18 was filled ca. 1873; its contents are associated with the household of Mississippi insurance agent Ebenezer Shaw. No sewing implements were identified. (A single bone item—a narrow, tapering tube with a rounded knob at one end—appears to be the tip for a parasol rib for a small and delicate parasol.)

Well 8 is associated with the household of the Rowe family from New Jersey; its household head was a shipwright, and the well was filled ca. 1887. From this well came a large, deep-drawn, copper-alloy thimble with a rolled rim gadrooned with diamond shapes; it had a plain band with no motto. Also found was a single wooden thread spool of relatively large (1-1/4-in. tall) size.

20 (35) Perry Street: Privy 9

At this address, Privy 9, filled ca. 1881, was associated with the John Usher household; Usher was a sailmaker from Maryland. John's sister-in-law and her daughter, Mary Shore and Ida Briggs Shore, lived with the family and worked as dressmakers. Indeed, more evidence for a wide range of sewing activities came from this address than any other in the neighborhood. Psota (this chapter) discusses the abundance of clothing fasteners and garment fragments that indicate that the Shores probably devoted most of their efforts to altering and remaking clothing.

In the Usher deposit, four needles were found; these were very fine or medium-to-fine sewing needles, not of steel but copper-alloy. They were likely intended for everyday home sewing (certainly not for work with canvas). A very large number of copper-alloy straight pins (n = 175) and one steel straight pin came from this deposit; they are highly assorted in size, though all but the longest are very fine wire gauge. This ample evidence of sewing, indeed, of dressmaking, is reinforced by the presence in the assemblage of 28 wooden thread spools in a variety of sizes.

The remains of two pattern-tracing wheels (208-416 and 209-281) were found; both are cast copper-alloy handles terminating in forked ends, into which the wheels would have been riveted. One is round, the other square in cross section; the former is small and delicate, the latter, large and sturdy. Both are missing their wheels.

Also found was a carved-and-pierced bone thread barrel or thimble case (209-229; Figure 5.5); part of a sewing set; and a pierced, small rectangle of bone that may have functioned in card- or tape-weaving in some way. Another bone sewing implement is a carved thimble (270-

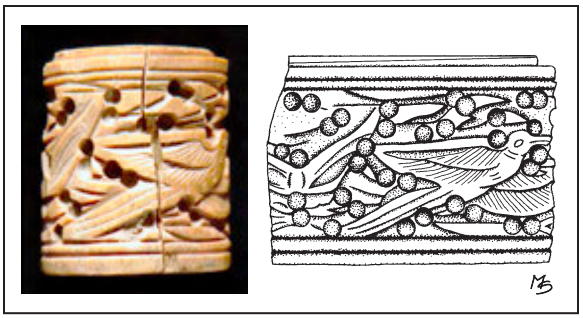


Figure 5.5. Bone thread barrel or thimble case. This item is ornately carved with birds and leaves, and has a recessed rim for a lid (Privy 9; approximate scale 1:1; illustration by M. Stoyka).

Figure 5.6. Bone thimble and vegetable ivory (or bone) handle (Privy 9; approximate scale 1:1).

32), with regular knurling on its crown and body; it has a plain band around its base and cordoning around the rim and was intended for adult use (Figure 5.6). Bone thimbles are rare finds at historical sites; this example would have been more expensive than ordinary copper-alloy thimbles. Another object (208-331) may be of bone, though it could be of vegetable ivory; it is a turned tapering rod that may be a lace bobbin but more likely is a handle for an awl or stiletto (Figure 5.6).

The assemblage of sewing items left by Mary and Ida Briggs Shore in the Usher deposit is a rich one, made up for the most part of very practical objects suitable for dressmaking/clothing alteration well beyond what would have been called for in home sewing. There are also a few objects, like the bone thimble and reel holder, that show special attention by an individual in selection of sewing accessories that were attractive as well as practical.

Block 10 – Silver and Perry Streets

108 Silver Street: Well 853

This well, filled ca. 1872, has been associated with the Stephen Norris Baker family, whose head of household had moved to San Francisco from New York and was a policeman and wharfinger. The well fill contained seven intriguing bone objects and six common straight pins. All of the straight pins were of copper alloy, with one example each from assorted sizes: short white, fine-gauge short white, fine-gauge middling, regular-gauge middling, long white, and lillikin. Most of these could have been used for sewing purposes.

The bone items are a bit more problematic because most are fragmentary and hence difficult to identify. One slender, turned bone rod (1258-93) has an acorn terminus; the point is missing but it closely resembles bone crochet hooks found elsewhere in the South of Market neighborhood. The portion recovered is about 3-1/4 in. long and has a diameter of 3/16 in.; if this was a crochet hook, its hook would have been of a very small size, for fine work with fine thread or yarn, for making baby clothes, hairnets, doilies, and similar delicate items. Two items (1258-92, cap, and 1257-144, tube) seem to be part of a very small pin case or other container. The small cap screws onto the hollow tube; the cap has a threaded interior at one end, the tube a threaded exterior. The maximum length of these two items when screwed together is less than 3/4 in., shorter even than most pins, so it is not clear that this tube and cap had anything to do with sewing. Two bone items I examined (1257-141 and 1258-111)—a flat disk with beveled edge, and a thin, rectangular plate—seem to have once served as decorative appliqués, the flat plate possibly having been a bit of bone veneer. Another bone item that I did not see (1263-46) is described as a hollow can or short tube with a round ball finial, with small holes on either side of the open end. Such an

item could very well have been a knitting-needle guard, though the description readily fits tips for parasol ribs. The final bone item from this deposit is a narrow spoon or scoop (1257-129), possibly a marrow or salt spoon or even a caviar spoon; the bowl is marked with letters that are only partly legible (ADA…S), probably Adams. It is not likely to have been employed as a sewing tool of any sort.

112 Silver Street: Well 866

At the time that the well at 112 Silver Street was filled, ca. 1884, the home was occupied by the McDonald family from New York and the Tobin family from Ireland. The McDonald household included Miss Annie McDonald, who was a dressmaker who worked outside of the home in dressmakers' shops, eventually running her own shop (see Psota, this chapter). The deposit nevertheless contained abundant evidence of in-home sewing, including two sewing-machine-oil bottles, each embossed with the name of a different supplier (Singer and Sprem, respectively), a small wooden thread spool, and two thimbles.

Both thimbles are of copper alloy and manufactured using the deep-drawn technique, and both are adult size. One has a folded rim (1268-138), the other a rolled rim (1270-101), and both have bands with no motto. The former example is sturdier than ordinary copper-alloy thimbles because it has a steel core, indicating it was for heavy use; it is very worn, especially on the sides (this results when the sewer needs to push large needles through heavy fabric, the sides of the thimble providing more leverage for this purpose than its crown). Psota (this chapter) notes that some heavyweight wool fabric was also found in this feature. The heavily worn thimble indicates that Miss McDonald engaged in considerable handwork despite owning a sewing machine.

Other items from the well that might be sewing related include a 1-in.-long tube of white improved earthenware 1268-127), which may have once been part of a multi-element sewing stand or spool holder, and a small rectangular bit of bone that looks like one end of a thin, polished box of some sort; the latter may well have been a gaming piece.

114 Silver Street: Privy 851

At this address, a privy filled in the late 1870s is associated with the Metcalf family, headed by a German sea captain. The privy contents included a single copper-alloy thimble (1154-72), deep-drawn with rolled rim and a band lacking a motto; it is an adult-sized thimble. The only other possible sewing item from this feature is a bone disk (1166-32), about 1-3/8 in. in diameter, with a flat front and slightly convex back that is scored with concentric rings; the disk has threaded sides, indicating that it could have been a lid that screwed into something. It would be very difficult, however, to screw this into anything because there is nothing providing leverage for this action. The piece is highly worn on one side and hence is possibly a well-used gaming piece.

120 Silver Street: Privy 808

Privy 808 was filled around 1882; the house at 120 Silver Street was occupied at this time by a number of families from different parts of Europe. The Schreiners were from Saxony, and the head of household was a barkeeper; the Johnsons and McIntyres were from Ireland, heads of households were a laborer and a steward, respectively; the Degnan family was from Denmark, and its head of household was a saloonkeeper.

From this deposit came seven intriguing carved bone objects, 40 common straight pins, and a thimble. The adult-sized thimble (1026-356) is made of copper alloy, deep-drawn, with a

plain rim; it has a band with no motto. Of the 38 copper-alloy straight pins, 37 are of normal or middling size and one is a tiny lillikin only 1/2 in. long and of very fine-gauge wire. There are two iron wire straight pins, both of the sort known as "long whites"—these are longer than the copper-alloy pins and meant for heavier tasks than ordinary sewing.

The bone objects include a solid carved bone handle terminus from a glove or button hook, or, less likely, the end of a lace bobbin; a turned bone spindle with cordoning and a tapered point is too fragmentary to identify with certainty; two slender turned bone "rods," one with rouletting, that might be parts of handles of delicate sewing implements; a very small, pear-shared turned bone tubular hollow peg that is more likely to be a decorative finial or a tip for the rib of a small parasol than part of a sewing tool; and a pair of matching bone disks with domed fronts and flat backs with recessed circles around a center hole, each with ferrous corrosion in the hole (1026-249). The bone disks may well be the ends of a small spool; the corrosion suggests a missing connector rod of iron. The majority of 19th-century bone spools have turned bone connector rods with threads at either end that the spool ends screw onto, iron being likely to rust and spoil the thread. This intriguing collection of turned bone objects is too fragmentary to permit much interpretation, but such items are for the most part feminine in character and represent if not sewing then attention to clothing and dressing oneself.

142 Silver Street: Privy 801, Pit 802

Privy 801 and Pit 802, in the lot behind the house at 142 Silver Street, were both filled in the late 1880s, when the Joseph Sheridan family lived here. Sheridan was an Irish Catholic teamster. The only sewing item found here was a small, deep-drawn copper-alloy thimble with rolled rim. This is a child's thimble; it has a plain band lacking a motto. Such thimbles were mass-produced and inexpensive; one of this size would have been used by a youngster learning to sew.

109–111 Perry Street: Privies 857 and 858

Here Michael and Jane Dolan, Irish Catholics, shared a house with the Michelson family (Jacob and Aletta) from Norway. The privies were filled around 1880.

From the privies came seven bone items, some of which appear to be parts of sewing tools, a thimble, and 20 common copper-alloy straight pins (these were not available for me to measure). The thimble is a deep-drawn, copper-alloy, miniature thimble (only 1/2-in. tall) with a rolled rim and band without motto. Such a small thimble was either a toy, for doll play, or would have been used by a child learning to sew using thimbles on both index finger and pinky. It is seems unlikely that such a thimble figured in any way in productive sewing, though it would have served didactic purposes.

The bone items include a thin rectangular plate (1213-17) that may have served as a decorative appliqué for a sewing box or other item; a turned bone rod (1213-16) with threading at one end that is very likely to have been a connector rod for a spool that would have been part of a carved bone sewing set; and a 3-1/2 in. long bone tube (1211-15), carved in a vaguely South Pacific style, very worn along the center of the shaft that may have served as a handle for a fitted crochet or tambour hook. The presence of these items along with numerous fancy clothing fasteners and seven scraps of textile prompt Psota to infer that either Jane Dolan or Aletta Michelson was a dressmaker working out of her home. It is difficult to support this conclusion upon examination of the limited assemblage of sewing tools and accessories.

115 Perry Street: Privy 849

This Perry Street address was home to the Strauss and Ackerman households, who were German Jewish émigrés; the heads of households were, respectively, a butcher and an upholsterer. The privy was filled in the early 1870s. The only sewing tool that came from this feature is a tapered, turned bone handle carved with deep vertical ridges, about 2 in. long (1155-83); it has a ferrous core. This was probably a whittle-tang handle for an awl or a short stiletto. While it could very well have been a handle for a small glove or buttonhook, it is the right size for an awl. Awls and stilettos were very common elements of sewing kits and would have been necessary implements for upholsterers, who dealt with exceedingly heavyweight fabrics.

123 Perry Street: Privy 807

At 123 Perry, Ferdinand Gee, a Prussian Catholic master mariner, lived with his family. Someone in this household, perhaps Ferdinand's wife Isabella, did a great deal of home sewing, as indicated by the presence in the privy, filled ca. 1868, of an opaque white glass darning egg, a bone needlecase, 34 common straight pins, and a thimble (see Psota, this chapter, for discussion of the buttons and textiles from this feature).

Of interest is that the majority of the straight pins (n = 31), all of which are of copper alloy, are very small, either lillikins or short middlings; only two are short whites or middlings and one a long white. Hence the pins were mainly for delicate work.

The thimble (995-133) is of very good quality; it is a deep-drawn, copper-alloy thimble that appears to have a steel core and perhaps even some silver content (it has more than one type of corrosion product and is heavier than ordinary thimbles); it has a plain rolled rim and elaborate knurling, consisting of square indentations on the crown with a rosette pattern in the center, round indentations on the sides, and a wide band with delicately etched squares, some etched with tiny vertical lines (Figure 5.7). There is a square cartouche on the band, the usual place for a monogram or a size mark, but in this instance the cartouche is blank. It has traces of gilding and is of small to medium size. A thimble such as this cost considerably more than the ordinary thimbles that constitute the vast majority recovered elsewhere in the neighborhood.

Figure 5.7. Copper-alloy thimble (Privy 807; approximate scale 1:1).

Isabella Gee, presumably the owner of the fancy thimble, also possessed a nicely turned and carved bone needlecase. A portion of the body of the case was found; it consists of a tube with decorative carving at one end and interior threading into which a closure would have fit.

125–127 Perry Street: Privy 806

This address was home to the Scottish Murdock McIver family; Murdock McIver was a stevedore. Abraham Martin, an English Jewish merchant, also lived here with his family. Privy 806 was filled ca. 1880. Carrie and Mary McIver were seamstresses, and their activities seem to be reflected by fragments of over 50 lightweight garments of the sort seamstresses would typically work on (Psota, this chapter). There are only a few sewing implements from this deposit: portions of a spool from a carved bone sewing set; a bone handle with a whittle-tang that may have been an awl or stiletto (or table cutlery); a cylindrical bone handle that might be for a sewing tool or for a parasol; four straight pins (middlings and long whites), and a single wooden thread spool.

The spool fragment consists of two parts, a disk and a rod; both are threaded, and the rod portion or post screws into a hole in the back of the bone disk (1011-480). There are decorative holes drilled into the convex (outer) side of the disk. This seems to be a fragmentary element of just one piece of a hand-carved and pierced bone sewing set (I discuss these further in my concluding section). Such sets were popular in Victorian times for home sewing; they were ornate and decorative and not suited to the long, hard use expected of a seamstress's tools. But owning one would have been a clear sign that a woman took pride in her sewing.

129 Perry Street: Privy 812

The privy at 129 Perry was filled in around 1880; at this address lived the families of Charles Towne, a railroad clerk from Massachusetts, and John Hill, a Canadian machinist, as well as the family of John Maloney, who was a stock dealer from Ireland. From the privy came seven bone items, a hard rubber handle, and a wooden handle.

Figure 5.8. Bone thread reel or spindle (Privy 812; approximate scale 1:1).

Among the bone objects were a disk (1007-259) and a tubular rod (1007-262; Figure 5.8) that might be elements of a spindle or thread reel, though if this is so they were not from the same reel. The bone rod is cylindrical and elaborately turned with many ribs and cordons, with screw threading at one end; the other end is tapered and shows much wear. Another bone tube (1007-271), 2-1/2 in. in length, was identified by the cataloger as a possible stamp; it has a tapering baluster shape (from 1/2 to 1/4 in. in diameter) with a center knop, and a square top with floral cutouts on its surface and cutouts on each of its four sides (a diamond shape, a heart, an eye, and a fourth indistinct image). The business end is tapered and worn and may possibly have been tenoned into another object. Of interest on this unidentified implement is a tiny etching, in stick-figure style, of a running deer with large antlers; this carving does not seem to have been done when the object was manufactured but at a later date (Figure 5.9). This bone implement is probably not a sewing tool but it is intriguing nonetheless.

A turned bone handle (1007-255) has a turned baluster shape, embellished with twisting diagonal incisions in the convex center area; it has ferrous corrosion at one end, suggesting that it is a ferrule of some type or a handle for a whittle-tang implement; the end lacking iron staining has interior screw threads, indicating that something was fastened into it. It seems likely it is a handle from something like a large button hook (e.g., a boot-button hook) that would have had a long, hooked iron rod at the business end and a screwed-in decorative finial or a hook for hanging the tool up at the other end. It is possible, though not likely, that this was a handle into which a very large crochet hook might have been screwed, but it would be exceedingly awkward to use for crocheting.

The wooden handle (1007-263) is nearly 4 in. long and has a hollow copper-alloy lining; it is carved at one end and has a cordon at the other. This, too, is more likely to have been the handle for a buttonhook or other implement not related to sewing. The hard black rubber object (1007-155) lacks both ends, as only the shaft is present; it is long (about 3 in.) and slender and tapering. Since it lacks its working end, it is impossible to identify what sort of handle this was.

Other bone items are more readily identifiable as sewing accessories. Item 1007-240 is a very fragmented turned and carved bone needlecase, carved on one side with a female figure and on the other side with a spread-eagled figure with its arms and legs wrapped around the cap. A

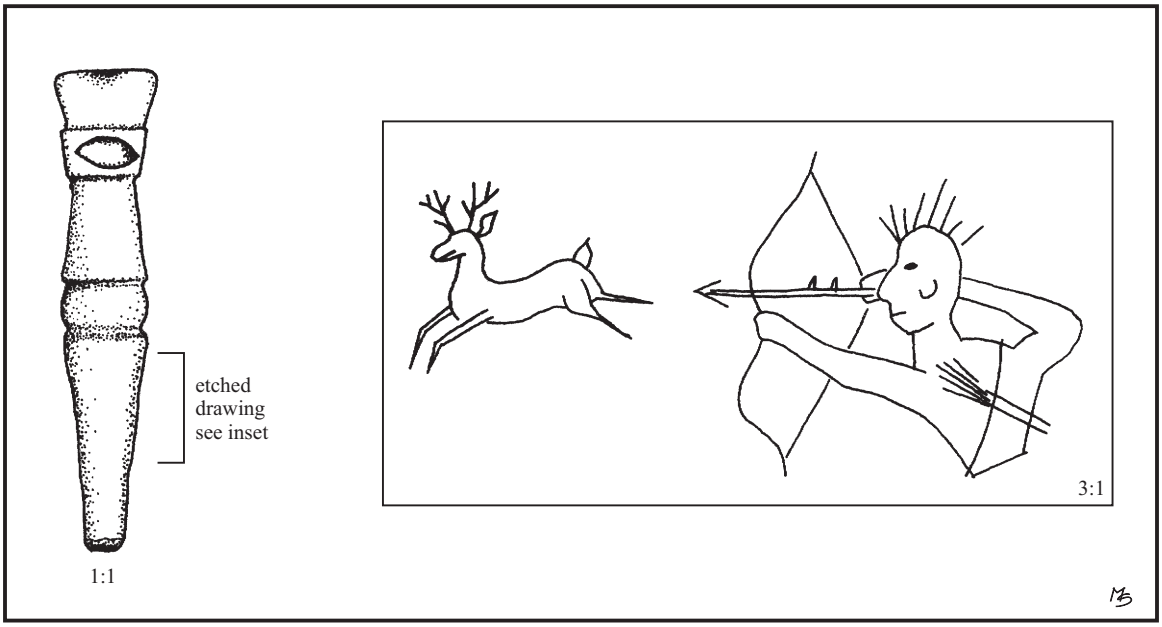


Figure 5.9. Unidentified bone object with etched drawing of a hunting scene. Object is shown at 1 to 1 scale, while the drawing is enlarged to 3 to 1 (Privy 812; illustration by M. Stoyka).

small turned bone tube (1007-258) in the shape of a bowling pin is difficult to identify; it seems possible that it was part of a small needlecase, because is too small to have served as a handle.

133 Perry Street: Privy 813

A single bone handle was found in the privy at 133 Perry Street—the home of Mary Moynihan and her family. Mary was a washerwoman and an Irish Catholic; the privy was filled in the late 1870s.

The turned bone handle (987-17) is long and slender; one end is tapered, the other recessed to receive a collar or ferrule. It has a ferrous core, indicating that it could have been a handle for a whittle-tang implement, such as an awl or a stiletto, although the long, tapering shape more closely resembles a pen holder, into which an iron nib would be fitted, or a the handle for an artist's small paintbrush.

137–139 Perry Street: Privy 810

No sewing tools were found in Privy 810, filled in the late 1870s, but a single sewing-machine-oil bottle provides evidence that someone in either the John Monahan or Thomas Griffin household owned a sewing machine. No textiles or buttons were found here.

Block 11 – Perry Street

207–209 Perry Street: Privies 1600 and 1601

Two privies at this address—Privies 1600 and 1601—have been associated with the Donnelly and Beal families, the former household headed by an Irish blacksmith, the latter by a Scottish gold miner. Both privies were filled in the 1880s.

Sewing items from Privy 1600 included 17 common straight pins, 2 thimbles, 11 wooden thread spools, and 1 wooden and 3 hollow bone tubes. The tubes may have been handle elements for sewing tools but could well have been for any number of other purposes—mouthpieces for musical instruments, dollhouse furniture, and so on. One flat, decorative bit of bone or horn that I examined appeared to be a bit of inlay, possibly for a sewing box; there were also four safety pins. All of the copper-alloy straight pins (n = 13) were of fine-wire gauge and of middling length; seven of these had a dark coating similar to that applied to pins used in mourning; the iron straight pins (n = 4) were all large pins of the sort known as corkins, or blanket pins.

The two thimbles are both of copper alloy, deep-drawn, and with rolled rims. One specimen (1654-246) is very large (0.8 in. high with a basal diameter of 0.7 in.); this is a heavy-duty thimble for use by a man or woman who needed to stitch canvas or other dense fabric. The other thimble (1655-254) is or normal adult size (about 0.6 in.); it is gilded and exceedingly worn on the crown, indicating that it was extensively used.

This indication of heavy use comes as no surprise when one notes the 11 wooden thread spools from this deposit; this represents purchase of mercerized or pre-waxed thread already handily stored on commercially produced spools. This represents a fair amount of thread (for example, a contemporary spool 1-3/4 in. tall and 1-1/2 in. maximum diameter can hold about 275 yards of thread), and some of the spools were large enough to hold heavy-duty thread of the sort one would need for heavy textiles requiring the use of the large, sturdy thimble described above. One spool, the large thimble, and some of the straight pins appear burned, as were many of the other artifacts from this deposit.

Privy 1601 produced evidence of clothing maintenance in the form of a white glass darning egg, of sewing in the presence of two common straight pins (of iron wire, middling size), and of fancy work represented by a tatting shuttle (Figure 5.10). The white glass egg would have been used for darning socks, evidence of household thrift and of a skill most women and girls were expected to possess well into the 20th century. The darners were relatively inexpensive items. The tatting shuttle is likewise not a fancy item; it is made of hard rubber instead of bone or another material used in more expensive shuttles. It represents not clothing maintenance but production of a looped,

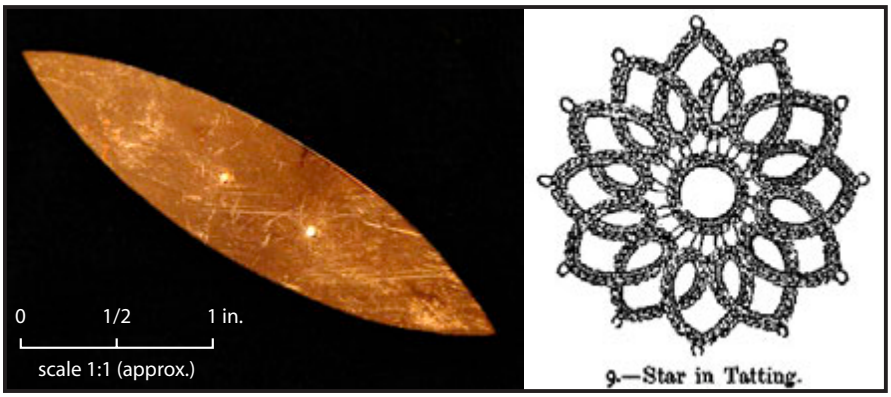


Figure 5.10. Tatting shuttle (Privy 1601) and tatting example from *Beeton's Book of Needlework* by Mrs. Isabella Mary Beeton, 1870.

lace-like items such as hair nets, relatively delicate bags or purses, trim for women's clothing, doilies, antimacassars, or many other sorts of items popular in Victorian times.

Discussion

Several general observations can be made about the overall assemblage of sewing-related items from features excavated in the South of Market neighborhood. First, in all but a couple of cases, there is less evidence for sewing activities than one might expect, given the ubiquity of home sewing until well into the 20th century. But deposits from a few households indicate that some families specialized in alterations and remaking clothing for others, so it is possible that busy working people turned to others for clothing maintenance more often than expected. More telling in this regard than the sewing implements themselves are the textiles and clothing fasteners found in most deposits (Psota, this chapter).

The majority of the sewing items are fairly ordinary and inexpensive: pins; thimbles; handles for stilettos or awls; wooden thread spools; bone crochet hooks; and glass darning eggs. These were all mass-produced items readily available for purchase, probably right in the neighborhood. A single tatting shuttle represents the participation of at least one female in the popular home art of tatting—there was a huge craze for this in Victorian times. While most tatting shuttles were made of bone, ivory, or other more valuable materials, the Perry Street shuttle is made of inexpensive, hard, black rubber, though it may have given the appearance of being made of jet or gutta percha, both more expensive materials. There are several bone objects that might have served as knitting-needle guards, but, surprisingly, no knitting needles or other knitting accessories were found at any of the properties; knitting would likely have been done almost universally within and outside the home.

Other items, while far from luxurious, represent a bit greater financial outlay. While none of the thimbles found were made of precious metal, such as silver, and none were silver-plated, there were several thimbles with steel cores, one with traces of gold gilding, and a single bone thimble from the Usher household. There were also many carved-and-pierced elements of bone sewing sets.

Hand-carved and pierced bone sewing sets were very popular in Victorian times and presumably were imported in large numbers from sources in Asia and the Pacific (Rogers 1983:127–129); it is far from surprising that such items should be fairly common on sites in San Francisco (and, based on personal observation to date, less so on sites in the eastern U.S.). A set usually consisted of a clamp or vise that could be fastened to a table or other surface with a screw-threaded finial screw, a cotton or thread barrel, a needlecase, a thimble holder, and spools. The various elements of these sets (lids, thumb screw, spool rods and ends, needlecase and cap) were threaded to effect closure or, in the case of the clamp, a tight grip. What the archaeologist most commonly sees are disparate bits of such sets (lids, spool ends, thumb screws, etc.) that have become separated from whatever they originally threaded into and hence are relatively difficult to identify. There are several examples of reel or spool holders in the collection, a possible thimble case or cotton barrel, and a couple of needlecases. One suspects that in San Francisco, people could purchase items of this sort from nearby shopkeepers, though they were also available by mail order and at large import houses that carried a wide array of objects from "the Orient" (see Hosley 1990). Such items represented a bit of extra outlay for attractive sewing accessories, but

they were nevertheless relatively reasonable in price: they are not high-end, fancy, or expensive items.

At least two categories of objects call for further, in-depth research. The number of wooden thread spools present in deposits throughout the neighborhood is sufficient to suggest that a study of these items as a class of object might reveal more about them, in terms of what sorts of threads would have come on spools of various sizes. Such a study would complement the detailed analysis of textiles and garment fragments from the features. Although only one pair of scissors is present in the current collection, other collections might benefit from a study of scissors found in association with sewing implements, textiles, and clothing fasteners, enriching our understanding of the sorts of sewing (tailoring, dressmaking, alterations, and everyday clothing maintenance) that took place within the home or in home-based shops.

In sum, sewing tools and accessories from the South of Market neighborhood are what one would expect to find in a working-class neighborhood. For the most part, the implements would have been relatively inexpensive and intended for practical use in activities such as darning and clothing repair. There is also a fair amount of evidence, bolstered by finds of textiles and clothing fasteners, for in-home sewing as a household income strategy—sometimes in a formal, "professional," manner; at other times informally. Finds of sturdy awl handles and large adult thimbles draw our attention to men's participation in sewing activities, and the presence of several small, child's thimbles reminds us that the skills of sewing were imparted to girls, and often to boys, at a very young age, and that youngsters may have contributed in some ways to such household operations as clothing maintenance.

CHAPTER 6

TOBACCO

Michael D. Meyer

This chapter begins with some background information about the origin and use of tobacco. Next, the archaeological remains of tobacco use represented in the West Approach, SF-80 Bayshore, and Cypress (Oakland) archaeological projects are described and compared.

HISTORY

When Argonauts rushed to California's Pacific shore in 1849, they were following a pattern that had begun centuries before on the Atlantic seaboard. Early 17th-century settlers in Jamestown, Virginia, aspired to find gold as the Spanish had done from Mexico to South America a century before. Instead of gold, the Jamestown Colony's wealth came in the form of tobacco (Figure 6.1). In particular, the immediate popularity of tobacco smoking in England created fortunes that spread from Virginia throughout the British Empire.

Figure 6.1. The tobacco plant is native to the Americas. It was first cultivated in the Andes around 5000 to 3000 B.C. The two most commonly cultivated species are *Nicotiana rustica* and *Nicotiana tabacum*. *Nicotiana bigelovii* is native to California. (*The Teachers' and Pupils' Cyclopedia,* Holst 1909)

Smoke has been a universal cultural icon since early humans mastered fire. Most cultures across the globe have some form of smoking for ritual or pleasure as part of their heritage, though the substance smoked has varied. Tobacco was unusual in its rapid dispersal across the globe. The plant was native to the Americas and primarily cultivated in two forms, *Nicotiana tabacum*, found from South to Central America and the Caribbean, and *Nicotiana rustica*, from northern Mexico to southern Canada in the east. Several other species were found throughout the West, including *Nicotiana bigelovii* (Driver1970:105–108). Cultivation of the plant began ca. 5000 to 3000 B.C. (Gately 2001:3). At the time of European contact, tobacco was used by locals in a variety of manners—chewed, imbibed as a tea, inhaled

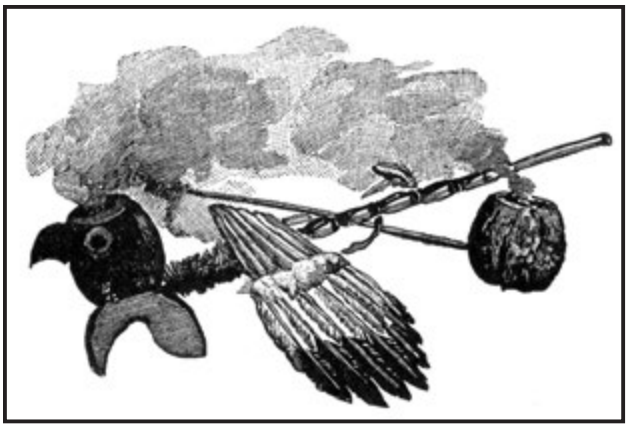


Figure 6.2. Native American tobacco pipes from Florida with detachable stems. This is the style of pipe first encountered by English explorers to North America. (*A History of Florida,* Brevard 1904)

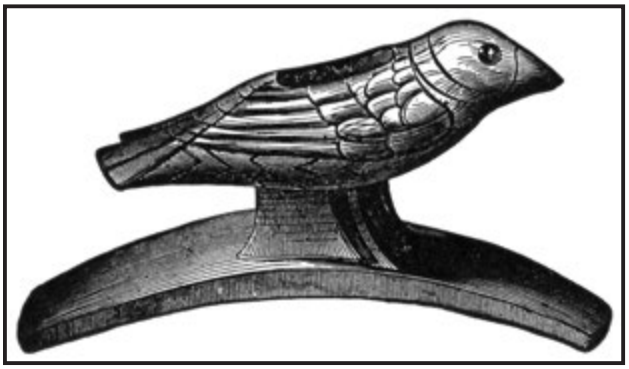


Figure 6.3. Bird-effigy pipe from the Tremper Mound in Ohio (Hopewell culture ca. 200 B.C. to A.D. 500). This design of platform pipe may have had its origins as the spur of a flat atlatl, or dart-throwing stick. (*A History of the United States for Schools,* Gordy 1898)

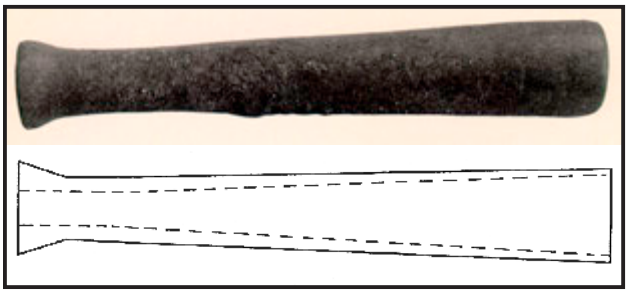


Figure 6.4. A long (19 cm) steatite pipe from the Emeryville shellmound (ca. 800 B.C. to contact). Pipes in prehistoric California were typically cylindrical. (*The Emeryville Shellmound Final Report,* Schenk 1926)

as snuff, injected as an enema, eaten as jelly, and smoked.

The first Europeans to report smoking tobacco were members of Columbus's crew while on the island of Cuba in 1492 (Gately 2001:23; Goodman 1993:37). The mode of smoking tobacco in that region was typically as a rolled leaf cigar, and it was this method that was introduced to Spain by returning seafarers. Tobacco was brought to England during the mid-16th century, apparently by a Captain Hawkins after his second voyage in 1565. Within a decade both species of tobacco were being grown in England (Walker 1977:30–31). Hawkins had traveled to Florida, where the inhabitants smoked using a pipe with a clay bowl and a cane stem. This was the method introduced to England. Pipes were also commonly used by the inhabitants in England's "New World" of Virginia and the rest of North America. Pipes were made in a variety of materials and forms, including effigies. In California, the pipes most commonly found in prehistoric archaeological context are of steatite in tubular form (Figures 6.2 to 6.4).

While the tobacco plant thrived in hot and humid environments, it could be grown in all but the coldest climes. It also proved to be a successful cash crop for small farmers as well as large plantation owners. Unlike other New World plants such as potatoes and tomatoes, tobacco became a global phenomenon. The initial dispersal was by global superpowers Spain and Portugal. By the mid-16th century, tobacco entered higher society at the Portuguese court. By 1570 there was small-scale cultivation in Spain, Belgium, Italy, Switzerland, and rising global superpower England (Goodman 1993:37). The Spanish, via the Manila galleon trade, brought tobacco to the Philippines from Mexico in about 1575. From there it reached China by about 1600 through Chinese traders. Within a few decades the plant had spread to Indochina, Mongolia, Siberia, Taiwan, Tibet, and Turkestan. The Portuguese spread tobacco from Macao: to India by about 1595, Java and Persia by about 1600, and Japan by about 1605. By about

1610 the plant was spread from Japan to Korea and from India to Ceylon. The British appear to have introduced tobacco to the Ottoman Empire about 1600 and perhaps into northern Africa as well. Tobacco was likely introduced into various parts of Africa by traders from several other countries, including Arab nations, France, and Portugal. By 1675 tobacco was cultivated around the world (Goodman 1993:51–52), yet as with any crop, certain environs will produce a yield superior in taste.

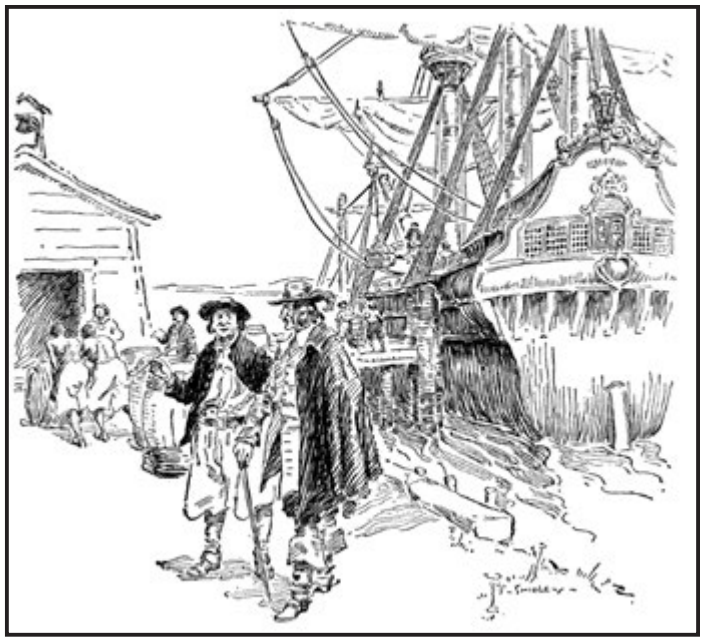


Figure 6.5. Hogsheads of tobacco being loaded onto a ship in Colonial Virginia. Tobacco was packed in large barrels, or hogsheads, for the journey across the Atlantic. (*American Leaders and Heroes,* Gordy 1905)

The popularity of tobacco smoking in England created an opportunity in the New World. Jamestown's financial success began with the importation of *Nicotiana tabacum* seeds from Trinidad by John Rolfe. His first crop reached England in July of 1613. Rolfe may be better known for marrying Pocahontas, but he also may be credited as the founder of the North American tobacco economy. By combining cultivation techniques from the local tribes and published curing techniques from the Spanish, he was able to achieve economic success for the colony. Some of Rolfe's success may be attributed to a Spanish ban on tobacco production in the settlements of Venezuela between 1606 and 1616. The Spanish king ceased production for a decade in his colony in response to illicit trade that failed to fill the royal coffers. Rolfe is also credited as creating the concept of brands by calling the Virginia tobacco Orinoco, furthering its distinction from the darker leaves produced by the Spanish and Portuguese. Rolfe sent 170 lbs. of tobacco in 1614, increasing to 1,250 lbs. in 1616. English colonial imports of tobacco went from 23 hundred lbs. in 1615–1616 to nearly 23 million lbs. by 1697–1698 (Goodman 1993:135; Walker 1977:33; Figure 6.5).

Since tobacco is a labor-intensive crop, the success at Jamestown led to the first importation of African slaves to North America. Slavery ultimately led to the Civil War, and the Civil War in turn ensured that the transcontinental railroad would be built on a northern route to keep the West Coast and its mineral wealth allied with the Union. The transcontinental railroad, completed in 1869, provided more reliable transportation of goods nationally. In 1880 the tobacco industry's shift in both marketing strategy (from local to national advertising campaigns) and production methods (from hand rolled to automated cigarette manufacturing) created consumption patterns that persisted through the following century. Although tobacco was one of the first products of mass consumption, it was one of the last to be mass-produced. To this day, the manufacture of certain kinds of tobacco products, such as fine cigars, still requires a significant amount of manual labor.

Smoked, Snuffed, or Chewed

Since tobacco's initial exportation from the Americas, its use as a medicinal herb likely helped its popularity, but the smoking of tobacco was condemned by many as immoral. By the mid-19th century, scientific studies were finding direct links between smoking and disease, but arguments against the practice at that time were primarily based on morality. Medical arguments tended to focus on specific types of tobacco use, rather than tobacco in general. In contrast, advertisers championed the medical benefits of tobacco well into the 20th century. Several characteristics of tobacco use, in particular smoking, worked against the reformers: ingesting tobacco was pleasurable, physiologically addictive, and indulged in by all levels of society.

Although smoking had initially created the tobacco boom in Europe, snuff was most popular during the 18th century. In Britain at the beginning of the 19th century, snuff commanded over half the tobacco market, but by the end of the century, snuff had been reduced to 1 percent of the British market. During the Victorian era, pipe smoking made a resurgence: about 60 percent of British consumption was via pipe tobacco by mid-century. In contrast, 19th-century Swedes preferred snuff. In particular they preferred wet snuff that was taken orally rather than dry snuff, taken nasally. Americans also preferred to use snuff orally. This method may have been especially appealing to the working class, since it was cheaper by volume than smoking (Rogozinski 1990:41). For women, a pinch of granulated snuff, taken orally, must have seemed more ladylike than a chaw of leaf or a plug. During the mid-19th century, Americans preferred chewing tobacco, often sold as "plugs," or sweetened condensed blocks. During a visit to the United States in 1842, British writer Charles Dickens was repulsed by Americans' penchant for chewing tobacco. The ubiquitous practice literally reached to the floor of the Senate and House of Representatives:

> Both Houses are handsomely carpeted; but the state to which these carpets are reduced by the universal disregard of the spittoon with which every honourable member is accommodated, and the extraordinary improvements on the pattern which are squirted and dabbled upon it in every direction, do not admit of being described. I will merely observe, that I strongly recommend all strangers not to look at the floor; and if they happen to drop anything, though it be their purse, not to pick it up with an ungloved hand on any account [Dickens 1874:141].

The declining popularity of dry snuff during the 19th century may have been due to its perception as being elitist, foppish, and effeminate (Heimann 1960:118). Cigarette detractors made similar claims during the mid-19th century. The cigarette had origins in the Americas but had been of only minor importance commercially. In the 17th century the Spanish began using paper wrapping, rather than organic wraps such as cornhusk or reed. Commercial manufacture of cigarettes seems to have been started by the French about 1830**.** In 1843 cigarettes became part of the French government's tobacco monopoly (Wagner 1971:33). By 1845 the first year of French production, they sold 6 million cigarettes (Gately 2001:181). French consumers preferred the lighter American leaf to their own, while in Germany, American leaf was mixed with that from Turkey and the Balkans (Goodman 1993:98). Cigarettes were hand-rolled until 1880, when the first automated cigarette machines were produced. Cigarettes had two major advantages over other types of tobacco. They were inexpensive, and they were the most effective way of delivering nicotine into the blood stream because, unlike cigars or pipes, the lighter cigarette smoke could be drawn into the lungs. Cigarette packs also provided an excellent vehicle for advertising, as small cards were used as stiffeners for the soft packs (Figure 6.6).

The popularity of cigarettes in the United States took a circuitous route. Compared to the cigar they were seen as a "beggar's smoke" in the Spanish colonies of the 18th century. Beginning in the 19th century and with the use of higher quality paper, the cigarette's popularity spread across southern Europe into Russia. During the Crimean War, from 1854 to 1856, British soldiers observed their Russian counterparts smoking cigarettes. Soon after the war a veteran opened the first British cigarette factory. Americans and particularly New Yorkers returning from travels across the Atlantic brought back cigarettes and began the fad at home. After the Civil War, cigarette manufacturing began in New York; then spread to Richmond, Virginia, and beyond (Wagner 1971:32–35). The smoke of beggars had returned to America as a status symbol.

Figure 6.6. The American cigarette card from Allen & Ginter's *World's Smokers* series. One of a set of 50. One card was packed in each box of 10 cigarettes. The card was used as advertising, created brand loyalty, and stiffened the pack. (From the author's collection)

Prior to mechanization, cigarettes were hand-rolled. As with cigars, much of this work was done by women. The most famous cigar factory worker in western culture must be Carmen, the title character of George Bizet's 1875 opera. The story is based on an 1845 French novella. To the French, both the setting—the actual cigar factory in Seville, Spain—and the fictional gypsy Carmen would have been seen as "Other." Due to the sweltering heat in summer, many of the hundreds of women in the factory worked only partially dressed when rolling cigars. Armed guards were required to limit access by men to the factory. The character Carmen combined overt sexuality and the sensuality of smoking. Ironically, the women at the factory smoked *papelotes*, which the French would popularize and rename *cigarette* (Gately 2001:178–179; Figure 6.7).

In the United States, the cigarette was initially deemed too effeminate for a man to smoke. It was scorned in Gold Rush California due to its Spanish and Mexican association. Decades later, in 1884, an editorial in the *New York Times* foretold of America's ruin due to the cigarette, the same way that Spain had fallen into decadence. From the moralists' perspective, women who smoked were like Carmen, loose and sinful. From a woman's perspective, cigarette smoking could be seen as a symbol of independence. The cigarette changed American smoking habits. Late-19th-century advertisements, such as tobacco cards, were almost exclusively directed at men. Pictures of actresses and other scantily clad women in costume reinforced the lascivious aspects of smoking.

Figure 6.7. Carmen cigarette tin from Sweden. Carmen, the title character of George Bizet's 1875 opera, personified the allure of smoking. (From the author's collection)

The women's market was quite small, although some attempts were made to expand it. On 7 September 1878, *Harper's Weekly* carried the following advertisement:

> YOUR MONOGRAM
>
> On receipt of $5.00 we will forward to any address, free of charge, 500 DELICIOUS CIGARETTES, beautifully decorated with monogram or name, manufactured from *Vanity Fair* tobacco. Also small size, with or without mouthpiece, expressly for ladies. Please be careful in giving order and shipping directions. Address WM. S. KIMBALL & CO., Rochester, N.Y. Peerless Tobacco Works.

In 1886 the Duke Company introduced the Cameo brand in New York, intended for the women's market. A Duke salesman, Edward Teatherston Small, used various ploys to expand the market. In Atlanta he replaced the traditional advertising image of an Indian with that of French actress Madam Rhea, holding a box of Duke cigarettes. In St. Louis he gained free publicity by hiring a woman as his sales representative to gain the attention of both wholesale and retail consumers (Wagner 1971:36).

Regional and ethnic differences in tobacco consumption are quite relevant to California. Changes in the West were rapid, as Native Americans had limited contact with Europeans until establishment of Spanish missions—beginning in San Diego in 1769, through San Francisco in 1776, and Sonoma in 1823. This was soon followed by secularization and Mexican rule, before the American conquest in 1846 and the onslaught of the Gold Rush in 1849. The circumstances of mixing so many cultures, including a large number of Chinese, and the city's remoteness from much of the rest of the country, created a characterization of San Francisco as "Other."

While women's smoking may have been considered unseemly in other parts of the country, it may not have carried the same stigma in the West. The cigarette may have been more welcomed in a place with both a Spanish heritage and a large population of European immigrants. This "otherness" may be seen in the context of A. Coolot's 1891 advertisement for the Young Ladies Standard Cigar Factory founded in 1856. The advertisement not only identifies that the cigars are made by young ladies, but includes both Cameo and Vanity Fair cigarettes, brands targeting women (Figure 6.8).

In San Francisco during the 1870s and 1880s, the cigar factories employed a mix of white men and women, along with Chinese men who were union-organized in the Hong Tuck Tong, with 2,000 members (Meriwether1888:778–779). The phrase "Young Ladies" in Coolot's advertisement may have been intended to imply "not Chinese." In 1890 white women nationally comprised 27.8 percent of the cigar industry labor force, in California only 6.7 percent and in San Francisco, a nearly identical 6.8 percent. In contrast, Chinese men comprised 72.5 percent for the industry labor force for California and 82.3 percent for San Francisco in the same year (Brown and Philips 1986:61–74). The national Chinese Exclusion Act was signed into law in 1882 and renewed as the Geary Act in 1892. The Young Ladies advertisement was likely meant to play upon anti-Chinese sentiment. In 1882 the Rinaldo Brothers of San Jose were more direct by announcing they would only employ "first class white labor" (Yu 1991:25).

From the 1860s to 1890s, when most of the archaeological deposits from the West Approach, Bayshore, and Cypress projects were created, chewing was the most popular form of tobacco consumption in the United States. This shift may have been the result of industrialization and workplace restrictions. While the act of smoking, especially pipes, requires the use of hands, chewing does not once the bite or pinch is in the mouth. At certain workplaces, such

as a foundry, spitting on the dirt floor might not have been noticeable among the other wastes. Spitting on a dock or in a railroad yard would likely also have been inconspicuous. The same may not have been said for those in many retail or clerical positions (with the aforementioned exception of politicians). Although chewing was preferred on a national average, it appears that even those who chewed at work may have also enjoyed a pipe at home. An important fact regarding usage is that both men and women enjoyed tobacco. While archaeological deposits can provide insights regarding a household's tobacco consumption, there are limitations to the inferences possible due to the ways in which tobacco was sold and consumed, and to its residual material culture. The pipes recovered archaeologically may have also been used for smoking substances other than tobacco, or used for other purposes, such as blowing bubbles by children.

A. COOLOT

CIGAR HOUSE

Sacramento, Cala.

Our goods are guaranteed as represented, and we will not allow our customers to keep any of them that are not satisfactory to their trade.

YOUNG LADIES' CIGARS

Inches		Price per Box
4¼	ON THE WING	$1 10
4½	OUR PRIDE	60
4⅛	MY LOVE	65
3⅜	LITTLE DUTCH CHEROOTS	3 00
4⅛	CORITA	85
4⅛	GOOD TASTE	75
4⅜	ROSA	85
4⅜	PANSY BLOSSOM	1 00
4¾	EL PRECIO	1 00
4⅜	LOLA MONTEZ	1 00
3¾	PAIR OF QUEENS (Havana filled)	1 25
3½	PURITY (Havana filled)	$1 25
4½	RICHELIEU (Havana filled)	1 25
4⅛	SMILES (Havana filled)	1 25
4⅛	OUR BEAUTY	1 25
4⅛	LA MEDALLA	1 25
4⅛	PUNCH	1 25
4¾	OUR LADY	1 25
4⅜	MASHER	1 25
4½	GRANT'S FAVORITE	1 50
4⅜	LITTLE JOKER (slim) PANETELAS	1 50
4½	CARLOTTA	1 50
4⅜	SWEET LIPS (1st quality Havana seed, long filler)	$1 50
4⅜	PERFECTOS (1st quality Havana seed, long filler)	1 50
4⅜	SPANISH (1st quality Havana seed, long filler	1 50
4⅜	AHEAD OF ALL (1st quality Havana seed, long filler)	1 75
4½	WORLD'S FAIR	2 00
4⅜	BRIGHT EYES (1st quality Havana seed, long filler)	3 25

You will save from 25 to 50 Per Cent. from Prices you pay to DRUMMERS for Cigars

Figure 6.8. Tobacco advertisement for A. Coolot of Sacramento from *Weinstock & Lubin's 1891 Spring & Summer Catalog*. Coolot sold cigars made by the Young Ladies' Factory, along with a wide variety of other imported and domestic tobacco products.

Residue analysis was not conducted on pipes from any of the three archaeological projects. The process of burning tends to destroy active ingredients within the substance being burned (Hairfield and Hairfield 2002). While the use of a gas chromograph mass spectrometer can be used to identify residues within pipes, it does not account for elements of what Cessford (2001) refers to as the "tobacco consumption package." The consumption package represents a person's total tobacco consumption in any form, much of which might not be found archaeologically, including how often a pipe was smoked. For example, in preparation for his 1895 tour, inveterate smoker and former San Francisco resident Samuel Clemens, or Mark Twain, took 3,000 manilla cheroots (similar to modern cigars) and 4 lbs. of smoking tobacco for his pipe (Emerson 1997: 506–507).

A look at the volume of tobacco manufacture or sales for the United States and several European countries (Table 6.1) indicates a range of product preferences by country; it also shows that Clemens's prodigious use may not have been unusual for the times. While smoking tobacco—either cut for pipes or as cigars—was favored in most countries, the U.S. population clearly preferred chewing. Since most Swedish snuff was consumed orally, the combined categories of chewing tobacco and snuff exceeded even that of the United States.

The 1879 city business directory for San Francisco has several tobacco headings: Tobacco Retail (directed to Cigars Retail); Tobacco Wholesale (45); Cigarettes - Manufacturers (9); Cigars – Importers & Jobbers (43); Cigars – Manufacturers (105); Cigar Molds (1); Cigars Retail (277); Pipes – Smoking (9); Meerschaum Pipe Manufacturers (2); and Smoker's Articles – Wholesale (6). It is interesting to note that despite a national preference for chewing tobacco, retail tobacco listings are biased toward cigars (Figure 6.9).

Figure 6.9. Advertisement for Gannon's Cigar Store, with two locations on Market Street in 1879. (*San Francisco Directory,* Langley 1879)

Table 6.2 shows the changes in U.S. tobacco manufacturing through time. The table under-represents chewing tobacco prior to 1940, as scrap tobacco was listed as cut rather than chewing up through 1930. Cut tobacco is traditionally used for smoking, either in a pipe or rolled within a leaf or wrapper. Since cut tobacco tends to dry out and lose its flavor more rapidly, it is not typically chewed. The mechanization of cigarette production in the 1880s doubled output between 1880 and 1890. The next large shifts in America's infatuation with the cigarette occurred after World Wars I and II. During both wars allied forces received tobacco rations, with U.S. troops receiving a more generous ration than most, primarily as cigarettes (Gately 2001:234–235, 256–257).

Table 6.1. Tobacco Product Preferences by Country, circa 1880 (in percent)

	Type	Lbs. per Capita	Chewing	Snuff	Cut	Cigars	Cigarettes
United States	Manufacture	3.87	55	2	18	24	1
Hapsburg Empire	Manufacture	3.15	3	7	69	18	1
France	Sales	2.11	3	18	66	10	2
Germany	Manufacture	3.60	1	8	63	27	–
Hungary	Manufacture	–	–	1	88	11	–
Italy	Sales	1.32	–	21	40	39	–
Sweden	Manufacture	2.65	18	62	10	10	–

Data from Rogozinski 1990

Table 6.2. Tobacco Products Manufactured in the U.S. – 1880 to 1950 (in percent)

Year	Plug	Snuff	Cut	Cigars	Cigarettes
1880	55	2	18	24	1
1890	52	3	21	23	2
1900	44	3	24	27	2
1910	33	5	35	24	3
1920	22	5	33	24	16
1925	18	5	34	18	25
1930	13	5	31	15	36
1940	12	4	24	12	49
1950	7	3	9	9	72

Data from Rogozinski 1990

WHAT REMAINS TO BE FOUND IN THE GROUND

A Social Drug and Its Paraphernalia

An important aspect of both the ritual and social use of tobacco has been the broad range of accoutrements associated with it. As stated by David Wright, curator of the Museum of Tobacco History and Art:

> Throughout history, wherever tobacco has been popular, the utensils and accessories created for its consumption have been the expression of both the region and the time period, coincident with how tobacco was used and in whatever popular form it assumed: in a pipe, as plug or snuff or as a cigar, a cigarillo or a cigarette [1996:vi].

While Victorian reformers may have seen tobacco as immoral and unhygienic, the habits associated with smoking made a clear statement of one's social status. The wealthiest of society could afford to dedicate entire rooms to smoking—a place where men could remove themselves after dinner to avoid smoking in front of women. To spare clothing and hair from the reek of smoke, a man of means could don a smoking jacket and hat. For the middle class, the pipe provided the means of identifying one's place in society. Unlike the smoking jacket or hat that would be difficult to identify in the archaeological record, pipes, or at least certain types of pipes, are often found. Many of the artifacts associated with tobacco consumption are ephemeral and have essentially vanished in a puff of smoke. Typically the entire tobacco leaf is consumed through inhalation or ingestion to the extent that the residual ash, chewed leaf, or crushed butt is unlikely to survive in the archaeological record. Further, the use of the leaf alone usually precludes discovery of seeds that are so commonly found in food residue.

Preservation

The ephemeral nature of tobacco severely limits drawing conclusions about its use from the archaeological record. As an organic substance with scant residual remains after consumption, tobacco studies are dependent upon the preservation of accessories and packaging that in many cases were also quite transitory. With the exception of moist snuff, most tobacco products were dry and could be packaged in cloth, paper, wood, or fiber containers that tend to disintegrate in the ground. Snuff was the one product typically sold in bottles, although in bulk it was sold in less stable bladders. The mass production and use of tin tobacco containers did not begin until after 1900, when they were produced in a vast array of shapes and sizes. These are, with few exceptions, difficult to identify without their paper or tin-lithographed labels. In contrast, the other common social drug, alcohol, was typically packaged for home use in bottles, a relatively high percentage of which are identifiable by shape. Most of the tobacco packaging recovered from the West Approach, Bayshore, and Cypress projects was found in anaerobic environments such as saturated wells. These items include tobacco boxes, foil box-liners, and a cloth sack. Two plugs of tobacco were recovered from privy vaults lying below the water table in San Francisco.

The most common type of tobacco artifact recovered from late-19th-century historic sites in California is the ball-clay smoking pipe. This type of pipe has been found in various forms on historic-period sites in North America dating from the early 17th to the 20th century. Other items recovered from late-19th and early-20th century sites in California include pipes of other materials; mouthpieces of glass, hard rubber, or celluloid—either for pipes or as cigar or cigarette

holders; spittoons; the occasional wooden cigar box or its foil liner; tin cans; tin tags from plug tobacco; ashtrays; snuff bottles; pipe tampers; cigar cutters; and match safes or vestas.

Cities by the Bay

The various types of tobacco artifacts recovered from the two San Francisco archaeological projects and the Cypress Project in West Oakland are listed in Table 6.3 and summarized by block in Table 6.4. The analytical units with tobacco artifacts are as follows: the West Approach Project has 42; Bayshore has 7, and Cypress has 86. Based on adjusted minimum number of items (MNIs), the proportion of tobacco artifacts for most analytical units ranges from <1 to 7 percent. There are three exceptions, ranging from 10 to 12 percent that are from units in Oakland with relatively small total MNIs, of 52 or less. By city, San Francisco (3.2%) has only a slightly higher average of tobacco artifacts than Oakland (2.8%). This difference is in part due to larger adjusted MNIs in San Francisco (354) than Oakland (160). A deposit with a greater MNI is more likely to represent filling over a longer duration, or a cleanout event.

Within the San Francisco deposits there are differential patterns divided geographically: by the 1880s Block 4 was part of San Francisco's industrial core. Block 5 had been densely populated in the 1850s, but by the 1880s was a transitional area below Rincon Hill, another area that was losing its cachet as a premiere neighborhood. Across Second Street, on the lower slopes of Rincon Hill fronting Mission Bay, was Block 9. By the 1880s the population had transitioned from middle class to working class, while the latter extended to filled marshlands including Blocks 10 and 11 and the Bayshore blocks beyond. By the late 1880s, Bayshore Blocks 3, 4, and 6 were a contrasting mix of open spaces, dense residential, industrial, and a few estates surviving from an earlier day. Block 3 alone was a mix of the four property types. Features from West Approach Blocks 4 and 5, facing San Francisco Bay, averaged 4.4 percent tobacco artifacts, higher than the city average of 3.2 percent. Features from the combined city blocks from Mission Bay to Mission Creek that included West Approach Blocks (9, 10, and 11) and Bayshore Blocks (3, 4, and 6) averaged only 2.6 percent, below both the city average of 3.2 percent and for Oakland at 2.8 percent. Some of the difference is likely due to earlier deposition dates for features from Blocks 4 and 5 reflecting a higher standard of living for the associated residents.

Artifacts and Association

The three deposits with the greatest diversity of tobacco artifacts (5 or more types), as shown in Table 6.3, are those with large numbers of artifacts and good preservation resulting from saturated soils and anaerobic environments. The deposits are compared in Table 6.5.

The Dent and Hannan families filled Well 6 in 1896. The city directory for that year listed two women and seven men in residence, with employment ranging from boilermakers to clerks. The Hannans and Dents were long-term residents. The tobacco collection (Figure 6.10) includes ball-clay pipes (11); other pipes (2); a pipe tamper/reamer; porcelain spittoons (2); earthenware spittoons (2); cigar-box liners (2); and snuff bottles (6).

The Donnelly and Beal families filled the pair of privies, 1600 and 1601, behind their duplex around 1880. Donnelly was an Irish blacksmith, Beal a Scottish gold miner. The tobacco collection (Figure 6.11) includes an amber pipe mouthpiece; ball-clay pipes (24); an earthenware pipe bowl; a pipe mouthpiece; plugs of tobacco (2); and a cigar box.

continues on page 248

Table 6.3. Tobacco Items from West Approach, Bayshore, and Cypress Projects

Project	Block	Feature	Meer-schaum	Wood Pipe	Ball Clay	Clay Bowl	Pipe Other	Sack	Tin	Spittoon Porcelain	Spittoon Other	Plug	Snuff	Cigar Box	Other	Tobacco MNI	Total MNI*	Percent Tobacco
West Approach	4	1300	1		28						1					30	768	4
		1301			18	1				3	3					25	505	5
		1303			7					1						8	113	7
		1304			5		1									6	126	5
		1305			5											5	180	3
		1307			8								1			9	316	3
		1310			5						1					6	252	2
		1311, 1320			4											4	179	2
		1316			4								1			5	212	2
		1318			6											6	394	2
		1322			4					1			1			6	131	5
		1325			4					1						5	79	6
		1326			20	1							1		1	23	493	5
		1333	1		20	2	1				1		3			28	549	5
	5	505			20								1			21	321	7
		507			8	1				1			1			11	476	2
		515			4	1										5	48	10
		516			2	1										3	76	4
	9	1			4	1	1									6	1,197	1
		2			6											6	174	3
		6			11		2			2	2		6	2	1	26	652	4
		7			2											2	232	1
		8			6											6	277	2
		9			10	1									1	12	828	1
		13	2		16	1					1					20	408	5
		17			2		1		11		1					15	278	5
		18			2											2	164	1

Table 6.3. Tobacco Items from West Approach, Bayshore, and Cypress Projects *(continued)*

Project	Block	Feature	Meer-schaum	Wood Pipe	Ball Clay	Clay Bowl	Pipe Other	Sack	Tin	Spittoon Porcelain	Spittoon Other	Plug	Snuff	Cigar Box	Other	Tobacco MNI	Total MNI*	Percent Tobacco
West Approach *(continued)*	10	801			5											5	248	2
		806			16		1				1				1	19	695	3
		807			5					1						6	489	1
		808			7					1	1					9	534	2
		810			1					1			2			4	168	2
		812			4		1									5	317	2
		813			2											2	158	1
		814			2											2	104	2
		819			2						1					3	91	3
		849			1											1	124	1
		851			6								2			8	272	3
		853			9						1					10	639	2
		857, 858			11								2			13	428	3
		866	2		13					1						16	434	4
	11	1600, 1601			24	1	1					2		1		29	1,044	3
Bayshore	3	3	3		18	1				1						23	600	4
	4	1			3											3	60	5
		30			3											3	240	1
		38			10											10	294	3
		39			4											4	84	5
		41			5					1						6	779	1
	6	20			1						1					2	130	2
Cypress	1	900			3											3	517	1
		933, 1112			1	1										2	271	1
		947			1											1	104	1
		953			7	2										9	493	2
		954			4											4	237	2
		955			10	1										11	163	7
		968			4		1									5	206	2
		985								1						1	94	1

Table 6.3. Tobacco Items from West Approach, Bayshore, and Cypress Projects *(continued)*

Project	Block	Feature	Meer-schaum	Wood Pipe	Ball Clay	Clay Bowl	Pipe Other	Sack	Tin	Spittoon Porcelain	Spittoon Other	Plug	Snuff	Cigar Box	Other	Tobacco MNI	Total MNI*	Percent Tobacco
Cypress	1	993			1											1	66	2
(continued)	2	1300			5											5	52	10
		1301			1											1	91	1
		1309			1											1	18	6
		1311, 1320			4											4	17	2
		1317			1											1	87	1
		1321A			1											1	9	11
		1321B									2					2	79	3
		1330			2											2	44	5
		1354			1											1	77	1
		1358, 1372			12											12	340	4
		1368			1						1					2	43	5
		1376			4											4	156	3
		1387			6											6	102	6
		1404, -52, -61			1											1	34	3
		1409			3											3	213	1
		1420			1											1	43	2
		1431			2						1					3	72	4
		1454			1											1	115	<1
	3	1700c			5					1						6	412	1
		1703-1706			4											4	214	2
		1747			1											1	117	1
		1753			1											1	100	1
		1785			1											1	32	3
	4	3137			1											1	52	2
		3139			1											1	188	1
		3178			1						1					2	109	2
		3185			2								2			4	173	2
		3300, 3301			3										1	4	235	2

Table 6.3. Tobacco Items from West Approach, Bayshore, and Cypress Projects *(continued)*

Project	Block	Feature	Meer-schaum	Wood Pipe	Ball Clay	Clay Bowl	Pipe Other	Sack	Tin	Spittoon Porcelain	Spittoon Other	Plug	Snuff	Cigar Box	Other	Tobacco MNI	Total MNI*	Percent Tobacco
Cypress *(continued)*	4	3346			2											2	175	1
		3382			1											1	146	1
	5	3800					1									1	28	4
		3802			2					2			3			7	209	3
		3830			2						1					3	88	3
	6	4220			1											1	22	5
		4234		1	9											10	221	5
		4239			3											3	121	2
		4243			1											1	52	2
		4245			2											2	97	2
		4281			3					2						5	119	4
	20	6239			6								3			9	200	5
		6260			1											1	116	1
		6270			2											2	161	1
		6282			2											2	78	3
		6292			3											3	91	3
		6300			1											1	141	<1
		6325			4											4	480	1
	21	7175		1	3						1	1				6	395	2
		7500					1				1			1		3	325	1
		7511			4					2						6	234	3
	22	5200			2											2	44	5
		5237					1									1	437	<1
		5293			1											1	21	5
	24	559, 579			6											6	377	2
	27	2784, 2877A			2											2	128	2
		2784, 2877B			1											1	19	5
		2784, 2877C			3											3	63	5
		2786/2874			5											5	114	4

Table 6.3. Tobacco Items from West Approach, Bayshore, and Cypress Projects *(continued)*

Project	Block	Feature	Meer-schaum	Wood Pipe	Ball Clay	Clay Bowl	Pipe Other	Sack	Tin	Spittoon Porcelain	Spittoon Other	Plug	Snuff	Cigar Box	Other	Tobacco MNI	Total MNI*	Percent Tobacco
Cypress *(continued)*	27	2809, 2812			5											5	43	12
		2822			7											7	316	2
		2855			2					1						3	100	3
		2870/2800			3											3	315	1
	28	2007			3											3	341	1
		2404			2											2	70	3
	29	4600		2	22		2	2			1		8	21		58	812	7
		4648			2	1										3	110	3
		4714			6								1			7	239	3
		4724, 5112			1											1	103	1
		4731, 5167, 5169			5	1										6	358	2
		5162			3						1					4	65	6
	31	2504								1						1	204	<1
		2524			1						1					2	77	3
	37	100			1											1	99	1
		101			2											2	125	2
		141			1											1	52	2
		156	1		1											2	235	1

*Adjusted MNI *equals:* Activities *plus* Domestic *plus* (Personal *minus* Clothing)

Table 6.4. Average Percentage of Tobacco Artifacts by Project Block

Project	Block	No. of Analytical Units	Mean MNI of Tobacco	Mean % of Tobacco
West Approach	4	14	11.9	4.0
	5	4	10.0	5.8
	9	9	6.3	2.6
	10	14	7.4	2.2
	11	1	29	3.0
Bayshore	3	1	23	6.0
	4	5	5.2	3.0
	6	1	2.0	2.0
Cypress	1	9	4.1	2.1
	2	18	2.8	3.8
	3	5	2.6	1.6
	4	7	2.1	1.6
	5	3	3.3	3.3
	6	6	3.7	3.7
	20	7	3.1	2.1
	21	3	5.0	2.0
	22	3	1.3	3.3
	24	1	6.0	2.0
	27	7	4.1	4.9
	28	2	2.5	2.0
	29	6	13.2	3.5
	31	2	1.5	1.5
	37	1	1.0	1.0

The Railroad Hotel was located at Oakland Point and catered to skilled laborers. When Well 4600 was completely filled in 1892, the hotel was owned and managed by Olaf Anderson, a Norwegian, and his Swedish wife, Johanna. Hotel residents were primarily male and included both European immigrants and native-born Americans. The well was 6 ft. in diameter and the water table covered over half the 11-ft. depth, providing excellent preservation of organic remains. The tobacco collection (Figure 6.12) includes briar pipes (2); ball-clay pipes (22); pipe mouthpieces (2); cloth tobacco sacks (2); an earthenware spittoon; snuff bottles (8); and cigar boxes (21). A tobacco leaf, probably from a cigar, was also recovered from Well 4600. Hemp seed (*Cannabis sativa*) was found in Well 4600 and two other wells in Oakland. These were probably not associated with smoking, but instead used as birdseed (Hirn 1999:61). Without the wooden cigar box and cloth sacks, tobacco artifacts would be a more typical 4.5 percent.

Clearly, differential preservation impacts the types of tobacco-related artifacts available for comparison. Demography is also important, in that the Railroad Hotel was primarily occupied by single workingmen with few women. Other differences are behavioral. In his study of tobacco artifacts from the Boott Mills in Lowell, Massachusetts, Lauren J. Cook found the clay pipe a

Figure 6.10. Tobacco artifacts from Well 6. The Dent and Hannan families' well was over 20 ft. deep near the base of Rincon Hill. Tobacco artifacts include foil cigar-box liners and a bone pipe-tamping tool in the shape of a duck's head (left in front of snuff bottle).

Figure 6.11. Tobacco artifacts from the Donnelly and Beal families; included is an actual plug of tobacco. Their privies were in saturated sand used to fill Mission Bay (Privies 1600, 1601).

Table 6.5. Bay Area Features with Greatest Tobacco Artifact Diversity

Project	Block	Feature	Association	MNI*	Tobacco MNI	% Tobacco	No. of Artifact Types
West Approach	9	Well 6	Residence	652	26	4.0	7
West Approach	11	Privies 1600, 1601	Residential Duplex	1,044	29	2.8	5
Cypress	29	Well 4600	Hotel	812	58	7.1	7

*Adjusted MNI *equals:* Activities *plus* Domestic *plus* (Personal *minus* Clothing)

symbol of working-class culture. Some of the pipes recovered had stems intentionally shortened prior to smoking, identifying the smoker as a member of the working-class. Tobacco artifacts recovered from the Boott Mills include 488 ball-clay pipes; 2 terra-cotta pipe bowls; a terra-cotta mouthpiece; 2 plastic pipe stems; a bone pipe stem; a redware cuspidor; and a tobacconist's pocket advertising calendar from the mid-1890s (Cook 1989:226–228).

Pipes

Pipes are the most-represented type of tobacco artifacts. Ball-clay pipes were the least expensive, relatively fragile (and, hence, in need of regular replacing), and thus most commonly found. The other style of clay pipe most often found is the bowl with attached stem, which would have had a separate stem of wood, cane, or other simple material. Wood-burl and meerschaum pipes also had removable stems or mouthpieces of various materials, including amber, hard rubber, bone, and ivory. These were typically formed with bites to aid clenching between the teeth and were often attached with metal ferrules.

Figure 6.12. A large quantity and variety of tobacco artifacts (including several cigar boxes) were discarded and preserved in Oakland's Railroad Hotel well (Well 4600).

Table 6.6. Price Range for Pipes and Bowls (Weinstock, Lubin & Co. 1891)

	Small	Medium	Large	Fancy Carved	Imitation
Meerschaum					
Pipe, amber mouthpiece					
Straight Stem	$3.50	$4.25	$5.00	$6.50	$0.75
Curved Stem	$4.25	$5.00	$6.00	$7.50	
Pipe bowl					
Egg, Hamburg, or Hungarian shape	$2.50	$3.50	$5.00		
Inferior quality or flaw	$0.95		$1.15		
Briar					
Curved Stem, Amber mouthpiece					
French, cased*	$0.75	$1.00	$1.25		
Wooden Briar	$0.10	$0.15	$0.20	$0.45	

* Categories for French Briar are listed as "Fine, Finer, Finest," rather than by size.

The durable burl pipe is much more likely to survive in the ground than the lighter woods or the wood used for cigar boxes. The possibility of replacing the mouthpiece also reduces the necessity of discarding the pipe itself. Both French briar and meerschaum pipes not only had separate mouthpieces, but also were sold in protective cases.

Table 6.6 indicates the price range for pipes advertised by Weinstock, Lubin & Co. of Sacramento in 1891, self-described as "the largest retail establishment on the coast." Clay tobacco pipes that sold for a penny or two each in 1883 (Walker 1883:39, cited in Cook 1989:218) were not even listed.

Meerschaum pipes. Meerschaum, or sepiolite, is a white, claylike mineral used for making pipe bowls. The word is German for seafoam, reflecting the light color and buoyancy of the mineral. It is an excellent medium for carving and produces a cool smoke. Meerschaum is typically either white or light gray, turning a brown hue when smoked. The pipes are often made with amber mouthpieces. The pipes are light yet durable, although carving is susceptible to damage if dropped. All of the meerschaum pipes recovered from the three projects are of simple shapes, and none are highly carved. These pipes were and are still typically sold in custom cases. The first carving of a pipe from meerschaum is attributed to a Hungarian cobbler in 1723, although there is little factual support for this (Walker 1977:53). By 1745 the first manufacturing center for the pipes was established in Ruhla, Saxony. By 1851 it was considered one of Germany's most productive articles of trade (Rappaport 1996:36).

Fragments from a total of 10 meerschaum pipes were found in the three archaeological projects (see Figure 6.13). With the exception of three pipes from two features, all of the meerschaum pipes are associated with families from German states, Prussia, and Poland.

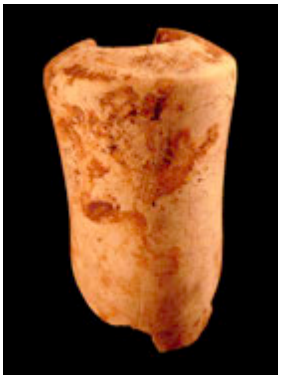


Figure 6.13. Meerschaum pipe from the McDonald and Tobin households (Privy 866). James P. McDonald, from New York, was a salesman at the Davis Bros. Golden Rule Bazaar, which carried a variety of "fancy goods." Meerschaum pipes of even simple designs were far more expensive than the common ball-clay pipes.

Three pipes were found in Bayshore's Privy 3, associated with Charles A.C. Duisenberg's family. Duisenberg was a 49er, a German

Consul, commission merchant, and one of the wealthiest individuals represented in the three projects. The West Approach Project produced six meerschaum pipes. A pair was recovered from Cesspool 13 associated with Henry Knoche, a Prussian grocer, and one from Privy 1300, associated with the Samuel and Smith families. Wolf Samuel was a Jewish tailor from Poland. A tobacco store had previously been on the property. The remaining three pipes were found in features associated with residents of Irish descent. Privy 1333 is associated with William Dougherty, a longshoreman. Dougherty appears to have supplemented his income by running a saloon from a back building on the property. The pipe may have come from one of his patrons. Two pipes were found in Privy 866 associated with the McDonald and Tobin families. John Tobin was a bookkeeper for merchant tailors. Patrick McDonald was an ironworker; his son James was a salesman for Davis Brothers. The Davis Brothers were importers and jobbers who owned the Golden Rule Bazaar; they sold toys, fancy goods, and Yankee notions. The fancy goods probably included meerschaum pipes. A single meerschaum was recovered in Oakland from Privy 156, associated with the Long family. William Long was a butcher from Germany.

Figure 6.14. Figural refined stoneware pipe with brown slip and glass eyes; it has a metal liner and cover. It was discarded by Amanda Scales's family or one of her tenants in the late 1860s (Privy 1326).

Figural Clay Pipe Bowls. Two figural, socket-stem pipes recovered from the West Approach Project are of special note. The first from Privy 1326 is made of stoneware with a dark brown slip. It is molded in the figure of a man's head. He wears a turban, has a thick mustache, and glass eyes. There are copper-alloy fittings at the rim and socket (Figure 6.14). The deposit, dated ca. 1874, is associated with Amanda Scales and her tenants.

The other figural clay pipe is of a style made of porcelain from Privy 1301, filled ca. 1868. The figure is a polychrome painted man's head. The man has dark brown hair, brown full beard, and wears a gold crown. The stem is yellow and green. The appearance is similar to Staffordshire figures typically produced of earthenware in the 18th and 19th centuries (Figure 6.15). The pipe is associated with Robert Taylor and his family.

Figure 6.15. Figural porcelain pipe from the Taylors' privy (Privy 1301); it may represent a god or king.

These two pipes were probably priced comparably to wooden pipes. The pipe with glass eyes and copper-alloy mounts may have even been in the lower price range of meerschaum pipes. The overglaze paint decoration on the porcelain pipe would have required little skill and may have been done by child labor, yet was still of higher quality than any of the ball-clay pipes.

Two other socket-stem figural pipes were also recovered. Socket-stem pipes were the most common type of clay pipe manufactured in the United States from the 1840s to the early 1900s (Bradley 2000:118). This style of pipe was often produced with simple molded designs. The body is typically either earthenware or stoneware. These pipes are found with a variety of glazes or unglazed. One of the figural pipes appears to depict a foot kicking the bowl (Figure 6.16). It was found in Cesspool 13 associated with Henry Knoche's grocery on Third Street. The other is part of a head found in Privy 507, associated with the Peel family in the early 1870s; this one may have been from a presidential campaign. Similar pipes were made with the presidents' name on the stem. Known examples include Millard Fillmore, Franklin Pierce, and Zachary Taylor (Figure 6.17).

Figure 6.16. This socket-stem pipe appears to represent a foot kicking a pipe bowl (Cesspool 13).

Wood Pipes. No wood pipes were recovered from San Francisco. Three deposits in Oakland did have wood pipes. Two were associated with railroad workers, the third with unknown tenants. It is possible that some of the mouthpieces of various materials had been attached to wood pipes; however, there is no way to confirm this. American pipes of softer woods than French briar are less likely to have survived. Likewise, the iconic corncob pipe has little chance of survival. Referred to as "barnyard briars," corncob pipes were exhibited at the Brussels Exposition of 1887 by the Missouri Meerschaum Company (Ehwa 1974:59–61; Figure 6.18).

Figure 6.17. The center pipe may have been from a presidential campaign. The others are typical of American-made pipes during the latter half of the 19th century (Privies 1600/01, 507, 515).

Ball-Clay Pipes. Ball-clay pipes are the most common tobacco artifacts from the three

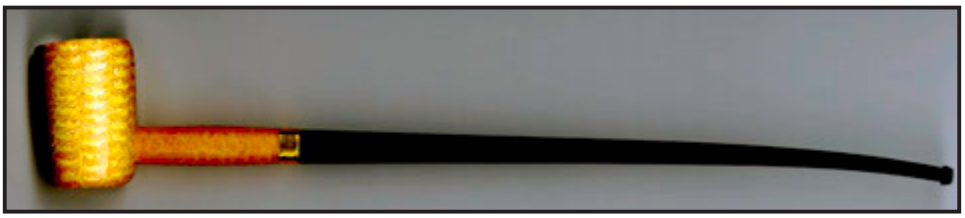


Figure 6.18. A Missouri Meerschaum corncob pipe. The hard-rubber stem and brass ferrule would be most likely to survive archaeologically. (From the author's collection)

Table 6.7. Frequency of Ball-clay Pipe Makers by Bay Area Project

Country	Maker	City	Quantity by Project		
			West Approach	*Bayshore*	*Cypress*
England	Neogene	England	1		
France	Peter Dorni	St. Omer	2		
	Dumeril	St. Omer	1		1
	L. Foilet	St. Omer	1		1
	Gambier	Paris	5	1	1
	M.E. Gisclon	Paris	1		
Ireland	O'Brien	Dublin	1		
Netherlands	J & G Prince	Gouda	1	1	
	A. Sparnaay	Gouda	1		
Scotland	Christie	Glasgow	2	1	6
	T. Davidson & Co.	Glasgow	16		8
	Duncan McDougall & Co.	Glasgow	62	2	83
	William Murray & Co.	Glasgow	8		
	Thomas White & Co.	Edinburgh	10	6	8
	William White	Glasgow	66	8	27
Other	Acme	?	1		
	Noel A Lyon	France?	2	1	

projects. All of the San Francisco deposits with tobacco artifacts yielded ball-clay pipes, while only three Oakland deposits did not contain ball-clay pipes. The tobacco artifacts from two of those deposits without ball-clay pipes consist of only single spittoons; the other assemblage has a spittoon, wood pipe, and cigar box. Only two of the Oakland deposits have 10 or more ball-clay pipes: the Railroad Hotel ($n = 22$), and a rented house with several tenants ($n = 12$). In contrast, 14 of the San Francisco deposits have at least 10 ball-clay pipes.

Table 6.7 shows 17 manufacturers of marked pipes from San Francisco and Oakland. The San Francisco collection represents more than twice the pipe manufacturers found in Oakland.

Many of the pipes were decorated in molded patterns. Foliate designs were most common (Figure 6.19). Three pipes from Privy 1326, associated with Amanda Scales and her tenants, also have stars and "T D" molded with leaves. Numerous pipes from both San Francisco and Oakland are marked "T D." The latter were sold at a lower wholesale price than other ball-clay pipes. Clay pipes in general were referred to as TDs (Cook 1989:219; Figure 6.20).

In reminiscences of the South of Market neighborhood, George W. Paterson recalled the shop of

> C.P. Heininger, then located at 535 Market Street. Here was the headquarters for the celebrated clay pipes known as "T.D.s" that were always on demand by the various fraternal bodies whenever it was proposed to stage a "Smoker" [1927:14].

Figure 6.19. Molded acanthus leaves and other floral patterns were the most common type of ball-clay pipe design recovered in San Francisco (Privy 505, top left and lower right; Privy 1600/1601, top right; and Privy 808, lower left).

Several types of pipe decoration targeted specific markets (Figures 6.21 and 6.22). Home Rule was a major political issue for Ireland and Scotland in the latter half of the 19th century. Three pipe bowls were found with this decoration on the West Approach Project; one also had a shamrock. Two of the pipes were associated with Irish residents, the third in association with a tobacco store. A pipe decorated with shamrock, harp, and "Erin Go Bragh" is associated with an Irish blacksmith. Two pipe bowls molded with a cannon and "GARIBALDI PIPE" may have been a tribute to the Garibaldi Guard, the New York 39th infantry of the Civil War. One was associated with Isaac Aaron, a Jewish peddler from Poland, the other associated with William Dougherty, who had the saloon in his backyard; this deposit also had one of the "Home Rule" pipes.

Figure 6.20. Ball-clay pipes were referred to as "TDs"; a large number were produced with these initials either impressed or embossed on the bowl (Privy 505).

Figure 6.21. Pipes embossed "Home Rule." These pipes expressed sentiments popular with many Irish and Scots desiring autonomy from Great Britain for their homelands (Privies 1300 and 1305).

One pipe from the Bayshore Project associated with Thomas O'Neill, an Irish glasscutter, had a broken stem and tooth marks indicating that it had been used as a short pipe (Figure 6.23). At the Boott Mills in Lowell, Massachusetts, archaeologist Lauren Cook attributed the intentional shortening of clay pipes prior to smoking as cultural statement of working-class identity. While Cook's argument is compelling for his study, the evidence of one short pipe of three from a single deposit may

Figure 6.22. "Garibaldi Pipe;" it may have been in reference to the Garibaldi Guard of New York's 39th Infantry (Privy 814).

Figure 6.23. One of the O'Neills' pipes had been shortened and smoked, as seen by the bite ring. This pipe would have provided a much hotter smoke than its full-length counterpart (SF-80 Bayshore Privy 1).

not have a direct correlation. Due to the very personal nature of tobacco use, Mr. O'Neill may have at times simply preferred the hotter smoke of a short-stemmed pipe. As a homeowner and business proprietor, Mr. O'Neill was above the economic status of the Boott Mills boardinghouse residents, though he may have developed his affinity for the short pipe as an apprentice or wage laborer while learning his trade. The two TD pipes are shown here (Figure 6.23; the other pipe is fragmentary with a decorated bowl.

Snuff

Snuff bottles were found in 26 percent of the West Approach analytical units, only 6 percent of the Cypress, and none of the Bayshore. The spatial division in San Francisco is quite obvious, with snuff bottles in 39 percent of the analytical units on Blocks 4 and 5, yet only 17 percent of the units on Blocks 9 to 11. San Francisco deposits with multiple bottles were found on Blocks 4, 9, and 10. Three bottles found in Privy 1333 are associated with William Dougherty and his backyard saloon. One of the snuff bottles was embossed *J.M. Venable & Company of Petersburg, Virginia* (Figure 6.24). The Dent and Hannan families' Well 6 on Block 9 contained 6 bottles of snuff, while three units on Block 10 each contained a pair of bottles. Privy 810 was filled by the Monahan and Griffin families in the 1870s. John Monahan was an Irish saloonkeeper, and Thomas Griffin an Irish ship's fireman. One ball-clay pipe and a porcelain spittoon were also found in the privy. Privy 851 was filled by the Metcalf family in the late 1870s. Metcalf was a German sea captain. Eight ball-clay pipes were found along with the snuff bottle. Privies 857 and 858 were filled by the Dolan and Michelson families in 1880. Michael Dolan was an Irish shipping clerk, Jacob Michelson a master mariner from Norway. The privies also yielded 11 ball-clay pipes.

Figure 6.24. Embossed snuff bottle from J.M. Venable & Company of Petersburg, Virginia (Privy 1333). This was the only snuff bottle with an embossed label in the West Approach collections, and the only style of snuff bottle identified. Larger quantities were also sold in brown mason jars and stoneware jars with a distinctive shape.

Figure 6.25. Selected spittons from West Approach collections. Porcelain spittoons would have required constant cleaning to remain presentable, unlike their earthenware counterparts' variegated glaze, which resembled tobacco spit (Well 6, a, c, d, and f; Privy 808, b; Privy 801, e; and Privy 1301, g).

Three deposits in Oakland had multiple snuff bottles. Privy 3802 was filled by the McDonald family in the early 1880s. William McDonald was a bridge builder from Scotland. A pair of ball-clay pipes and a pair of porcelain spittoons was also found in the privy. Privy 6239 was filled by the Hansen and Hayles families in the early 1880s. Henry Hansen was a German fisherman, Henry Hayles an English railroad worker. Six ball-clay pipes were also found with the snuff bottles. Well 4600 at Oakland's Railroad Hotel had 8 bottles—the most of any feature. Due to the Swedish preference for snuff at that time (see Table 6.1), the large number of snuff bottles may in part be due to the heritage of Mrs. Anderson and catering to preferred tobacco choice of Swedish clientele.

Spittoons

Spittoons were ubiquitous during the 19th century, when tobacco was predominately chewed. They are equivalent to ashtrays during the 20th century, when tobacco was predominately smoked as cigarettes. Spittoons or cuspidors came in a variety of sizes and styles (Figure 6.25). The most common type—in fact, the only type found on the three projects—are the larger-sized ceramic spittoons that sat on the floor. Spittoons were made from a variety of materials, including ceramic, metal, and glass. A person of fashion might also have had a personal spittoon of smaller size, called a spitting pot or spitting mug; these required less skill and force to propel the mix of tobacco and saliva to its intended target. Most of the spittoons found are either porcelain or variegated earthenware. The spittoons found are typically about 10 in. in diameter and 4 in. high, with a top that funnels down to an opening and side holes so that the contents may be drained. Porcelain spittoons are often molded around the poring opening, while variegated spittoons are more often molded on the body or top.

The large number of spittoons recovered speaks to how common they were in 19th-century households. Unlike tobacco packaging or even ball-clay pipes with a relatively short lifespan, the spittoon was also a furnishing with an intended longer span of use. While it may be reasonable to assume that ceramic spittoons were imperiled due to their position on the floor and their

Table 6.8. Comparable Prices of Spittoons and Other Ceramic Vessels 1894 to 1895

	Earthenware	WIE*	Porcelain
Spitoon (each)	$.20–.30	$1.00	$.70–1.15
Chamber Pot w/Lid (each)		$.76	
9 in. Plates (dozen)		$1.12	
Sugar Bowl (each)		$.23	

* White Improved Earthenware listed in the catalog as "Vitrious (*sic*) Hotel China" (*Montgomery Ward & Co.'s Catalogue No. 56).*

potential to be dropped while being emptied or cleaned, the quantity found suggests that they were not worthy of packing for a move. Table 6.8 shows comparable prices for spittoons and vitreous hotel china from the 1890s.

Spittoons or plug tobacco were found in 45 percent of San Francisco deposits and only 20 percent of Oakland deposits. As previously mentioned, this disparity may be due to the relative proportion of mean adjusted artifact MNIs for San Francisco being more than twice that of Oakland. The total number of spittoons from San Francisco is equally divided between porcelain and other ceramic types.

Multiple spittoons were found in three West Approach features. Privy 1301 filled by the Robert Taylor family after the 1868 earthquake contained 6 spittoons: 3 of porcelain, and 3 of variegated earthenware. This feature also contained the ceramic figural pipe bowl (see Figure 6.15) and 18 ball-clay pipes. Privy 808 was filled in 1882 with contributions from several households. The residents were mostly adults, including a barkeeper from Saxony, an Irish laborer, an Irish steward, and a Danish saloonkeeper. The privy contained one porcelain and one variegated earthenware spittoon. Well 6 was filled by the Dent and Hannan families in about 1896. They discarded two porcelain and two variegated earthenware spittoons, as well as pipes, snuff bottles, and cigar boxes.

Of the three deposits, only the Taylors' was associated with a single family. The presence of three porcelain and three variegated spittoons may represent differential placement in public and private spaces, the way porcelain tableware might be reserved for guests. Aesthetically, the porcelain would look nicer in a room when clean; however, once used the brown spatter would be most conspicuous on the white vessel until cleaned and returned to a pristine white. Conversely, brown variegated glaze is well suited for disguising brown rivulets and spatter of tobacco juice, requiring less frequent cleaning. As stated in an advertisement for variegated or 'Rockingham' spittoons:

> These are a strong, durable article, of good size, at a very reasonable price, and as they are of a bright Brown color, they do not show the contents like the white ones [Barber 1909:194].

Tins

The presence of tobacco tins in only one deposit is due more to age of the deposit than factors of preservation. When Well 17 was filled in the 1930s, tobacco tins were in their heyday. Improvements to both can production and decoration during the last quarter of the 19th century had increased their popularity. Tindeco, the Tin Decorating Company of Baltimore, was founded in 1900. A year later 60 firms united to form the American Can Company. "By the 1920's Tindeco was said to be the largest tin lithography plant in the world" (Swedberg and Swedberg 1985:11,

82). The tins found in Well 17 were all pocket tins identified by their distinctive shape. They were all fragmentary and none retained any labeling. The well also contained ball-clay pipes, a spittoon, and an amber mouthpiece for either a pipe or cigarette holder.

INTERPRETATION

Ethnicity

Two groups of tobacco artifacts were found to correlate with ethnic heritage: meerschaum pipes and ball-clay pipes with Irish symbols or slogans. With the exception of one pipe associated with Mr. Dougherty and his backyard saloon, and two pipes from the McDonald and Tobin families, the remaining seven meerschaum pipes are associated with four families from German states, Prussia, and Poland. The occupation status for all of the heads of those households was either skilled or professional.

Out of a total 135 deposits from the San Francisco and Oakland projects, only 15 (11%) were associated with households of immigrants from Germany, Prussia, and Poland. Of those 15, there were 4 (27%) with meerschaum pipes.

Ball-clay pipes with Irish symbols and slogans were found in four deposits associated with Irish immigrants, including William Dougherty and his backyard saloon. Another was in association with a tobacco store. Out of the total 135 deposits, there are 41 (30%) associated with Irish immigrants. Pipes with Irish decoration were found in only 10 percent of the Irish immigrant deposits, although ball-clay pipes were found in almost every deposit from the three projects.

Economic Status

Based on the relative value of tobacco items recovered, there are two deposits associated with single families that appear to have spent more on tobacco accessories than their neighbors. Bayshore's Privy 3, associated with the Duisenberg family, contained 3 meerschaum pipes, 1 porcelain spittoon, 1 redware spittoon, and 18 ball-clay pipes (Figure 6.26). West Approach's Privy 1301, associated with the Taylor family, contained the Staffordshire porcelain pipe, 3 porcelain spittoons, 3 earthenware spittoons, and 18 ball-clay pipes.

Both families moved to better neighborhoods after filling their privies with refuse. The Duisenbergs, who were one of the wealthier families from the three projects, left in 1895 after the death of the head of household, Charles—a 49er, commission merchant, and diplomat. His family could afford to move to an upscale neighborhood and outfit their new home with new furniture. The Taylors moved after the major earthquake of 1868. Robert Taylor owned his home, yet his profession as a porter—for a crockery and glassware store and later for a

Figure 6.26. Meerschaum and ball-clay pipes from the Duisenberg family (SF-80 Bayshore Privy 3). Charles Duisenberg was a 49er, a commission merchant, and a diplomat. Despite his considerable wealth, the privy was not abandoned until his death in the 1890s.

lighting company—is considered a semi-skilled position, since he was not the proprietor. Still, he owned real property that may have produced rental income, and he was able to move to a more desirable neighborhood. When the Taylors moved to their new house, the transcontinental railroad was nearing completion and it would be some years before a labor surplus would depress wages locally. In the early 1870s prior to the economic downturn, the figural pipe of a man in turban was also discarded on Block 4.

It is unclear whether Robert Taylor's jobs placed him in wealthy customers' homes or simply working in stores surrounded by ceramics, glassware, and lamps had given him an appreciation of and desire to own finer things; or whether his personal interest in fine things had drawn him to these stores. Taylor's employers may have sold him goods at a discount, allowing him to afford higher-status goods. The dishware and lamps discarded by the Taylor family were nicer than those of their contemporary neighbors and much nicer than those of later block residents. Despite the apparent economic disparity between the Duisenberg and Taylor families, both of their artifact collections reflect upscale tastes, including their tobacco accessories. The collections also reflect negative changes to the local economy through time. One wonders what the Duisenbergs would have discarded if they had filled the privy in 1869 instead of 1895.

Only one ball-clay pipe was identified as having been intentionally shortened. The short pipe from Mr. O'Neill's Bayshore project privy would have been familiar to the laborers in the boardinghouses of Boott Mills in Massachusetts. Mr. O'Neill would have been considered out of place for using a pipe beneath his station.

Gender

There are both limited historical documentation and artifacts from the three collections to effectively address late-19th-century gender issues through tobacco use. During the 19th century, tobacco consumption was considered primarily a man's activity by the middle class. The acceptance of women using tobacco took a shift mid-century. Prior to 1850 tobacco was more accepted and among those who smoked openly were the wives of Presidents Andrew Jackson and Zachary Taylor. As noted by Robert Heimann, "as the nineteenth century passed the halfway point, city manners and the romantic notion of womankind as fragile flowers came in, and women's pipes went out" (1960:90). The transition was not immediate. In the United States during the 1850s, the "'West" was Ohio and Michigan, with California the "Far West." While wealthy women in New York City were experimenting with cigarettes to emulate their European counterparts, much of the nation was too rustic to emulate polite society.

Isabella Lucy Bird described her travels of 1854 in *The Englishwoman in America.* Her journey took her through New York to Michigan. In Chicago she was forced to stay in a second-rate hotel that advertised "every comfort and advantage." In the "ladies parlour" she found "a large, meanly-furnished apartment, garnished with six spittoons, which, however, to my disgust, did not prevent the floor from receiving a large quantity of tobacco-juice." While crossing Lake Erie on the richly furnished steamboat *Mayflower*, she found "porcelain spittoons in considerable numbers garnished the floor, and their office was by no means a sinecure one, even in the saloon exclusively devoted to ladies" (Bird 1856:147–148, 170).

By the 1870s railroad travel was an indicator of shifting values. There were different types of cars for passenger travel, depending on social status and gender. For women of appropriate means and race there was the ladies car (Heimann 1960 102–103; McCall 1999). Tobacco was

forbidden in the ladies car and men were only allowed in the ladies cars as escorts. Women who wished to smoke were required to remove themselves to the smoking car.

In San Francisco Robert Woodward created Woodward's Gardens, one of the city's premiere attractions from the 1860s to the early 1890s. Woodward made his Gold Rush fortune as a hotelier. He opened the What Cheer House in 1852. It was renowned for being clean, inexpensive, and not serving alcohol. His planned estate near Mission Dolores was converted to a pleasure garden with a variety of exhibits, including fine art, taxidermy, saltwater aquarium, live animals, and rides. Like his hotel, Woodward's Gardens was family oriented. To encourage female attendance on weekdays, he dedicated special ladies cars on his street railway, which ran from downtown along Mission Street to the Gardens at Fourteenth Street.

> Mr. R. B. Woodward is deserving of great praise for his enterprise in giving us a novelty in the form of a new car. . . . The Kimball Manufacturing Company has just finished for him the first "Street Palace" ever built here. This car is elegant in design, luxuriously fitted up with velvet carpet, and sofas extending the length of the car, upholstered in embroidered tapestry costing sixteen dollars per yard. The fresco painting work was done by a San Francisco artist, at a cost of two hundred dollars. The object of the car is to supply a want long felt by the ladies, desiring to visit Woodward Gardens at hours when gentlemen are engaged and cannot accompany them. It being strictly a ladies car, no gentlemen will be admitted unless with ladies. There will be no disgusting pipe or cigar smoking on the platform, nor the usual standing crowds to be squeezed, but every passenger will be seated. The fare will be ten cents, and it is worth the extra five cents to enjoy so much luxury [quoted in Kahn 1940:19].

Women smoking struck at the core of Victorian values. As stated by David McCall, these values included "religiosity, idealization of women (particularly mothers), orderliness, personal morality, respect for standards, (and) repression of sensuality (not merely sexually, but in the connotation of all senses)" (1999:8). In particular, it was the public use of tobacco that was considered taboo by reformers. Ironically, it would be the association with the Carmen archetype as rebellious and sensual that would render smoking, and especially cigarettes, a symbol against Victorian values, and hence more desirable to some women.

In San Francisco with a large immigrant population and a large number of families with insufficient funds to maintain an ideal Victorian lifestyle, women's tobacco use may not have been scandalous. Historian Mark Swiencicki (1998:780) estimates that only 5 percent of U.S. women consumed tobacco in 1890. He derived this figure to account for "closet" female smoking. This figure seems rather low and appears to disregard other types of tobacco use. By 1890 over a quarter of the cigar rollers in the United States were women. It seems likely many of these women also used tobacco. The same may be true of the cigarette girls who hand rolled cigarettes prior to mechanization. Although machines were displacing the cigarette girls by 1890, many displaced workers would have likely kept the habit, at least in private. Many women in rural tobacco-growing regions must have also partaken in their local crop in at least one of its many forms. As Robert Heimann states:

> Every farmhouse had its tobacco patch, big or small according to the size of the family – all of whom chewed or smoked. For this reason statistics on tobacco consumption before 1870, sparse as they are, do not describe the actual extent of chewing and smoking by Americans but only indicate the very slow growth of manufacturing [1960:89].

Women living in cosmopolitan urban areas at the forefront of fashion, like San Francisco, were also more likely to have used tobacco.

With few exceptions, the deposits analyzed are domestic, so that home use is being measured. The problem lies with our inability to associate the various implements of use by gender and the poor representation of various elements of the tobacco consumption package. While DNA testing on ball-clay tobacco pipes has proven successful elsewhere in determining the user's gender (Dixon 2006), it still cannot address overall tobacco use.

While most of the deposits are associated with households made up of male and female residents, there are two exceptions that are more intriguing. Tobacco pipes were found in the Silver Street Kindergarten privy (Privy 1) from West Approach. Although the kindergarten's founder Kate Wiggin (1923) refers to the local residents' intemperance, she does not address the use of tobacco in her descriptions of the neighborhood. The pipes may have also been used for the kindergarteners to blow bubbles or left by a male caretaker living on site.

Even more pipes were found in the privy of the kindergarten's predecessor: the California Collegiate Institute for Young Ladies. Unlike the kindergarten situation, it is more likely that the young ladies used these pipes. As educated women in the West, it appears that at least some of them preferred to reject rather than adhere to Victorian values.

CONCLUSION

Due to the personal nature and ubiquitous use of tobacco in San Francisco during the latter half of the 19th century, there are, with the exceptions above, few indicators of group identity or other patterns found in the archaeological remains of tobacco use. Tobacco artifacts were found in the households of every ethnic and economic group regardless of date. Tobacco pipes were even found in the privies of the Silver Street Kindergarten and the California Collegiate Institute for Young Ladies.

The presence of multiple spittoons of different material or quality may indicate a dichotomy in the use of space within a household. Multiple spittoons may also indicate the number of rooms where chewing (and spitting) was allowed. Due to the poor preservation of tobacco itself, these artifacts provide a very biased set of data to work with. Only the most durable tobacco items such as spittoons and pipes survive, while whole classes of tobacco such as cigars and cigarettes rarely leave a trace.

By modern standards the amount of tobacco consumed in the 19th century would seem excessive. While at least one contemporary writer found the presence of pipe and cigar smoke in public places in San Francisco to be disgusting, historic accounts of tobacco use in the city are limited. Tobacco may have been so ubiquitous that it was barely noteworthy. At the time the smoke from so many pipes would have been less conspicuous than at present. Tobacco smoke would have blended with the smoke of coal and wood fires at home, work, or from the large industrial smokestacks at so many locations South of Market. The speckles of spit not contained by the spittoon may at best have appeared as knotty grain on the wood floor, while patterned carpets of the appropriate color would disguise errant droplets. Outdoors the brown gobs would have been just one of numerous substances on the (at best) cobblestone paving that was besmirched with waste—either created by humans or by dray animals pulling carts, carriages, wagons, and railcars through the city streets.