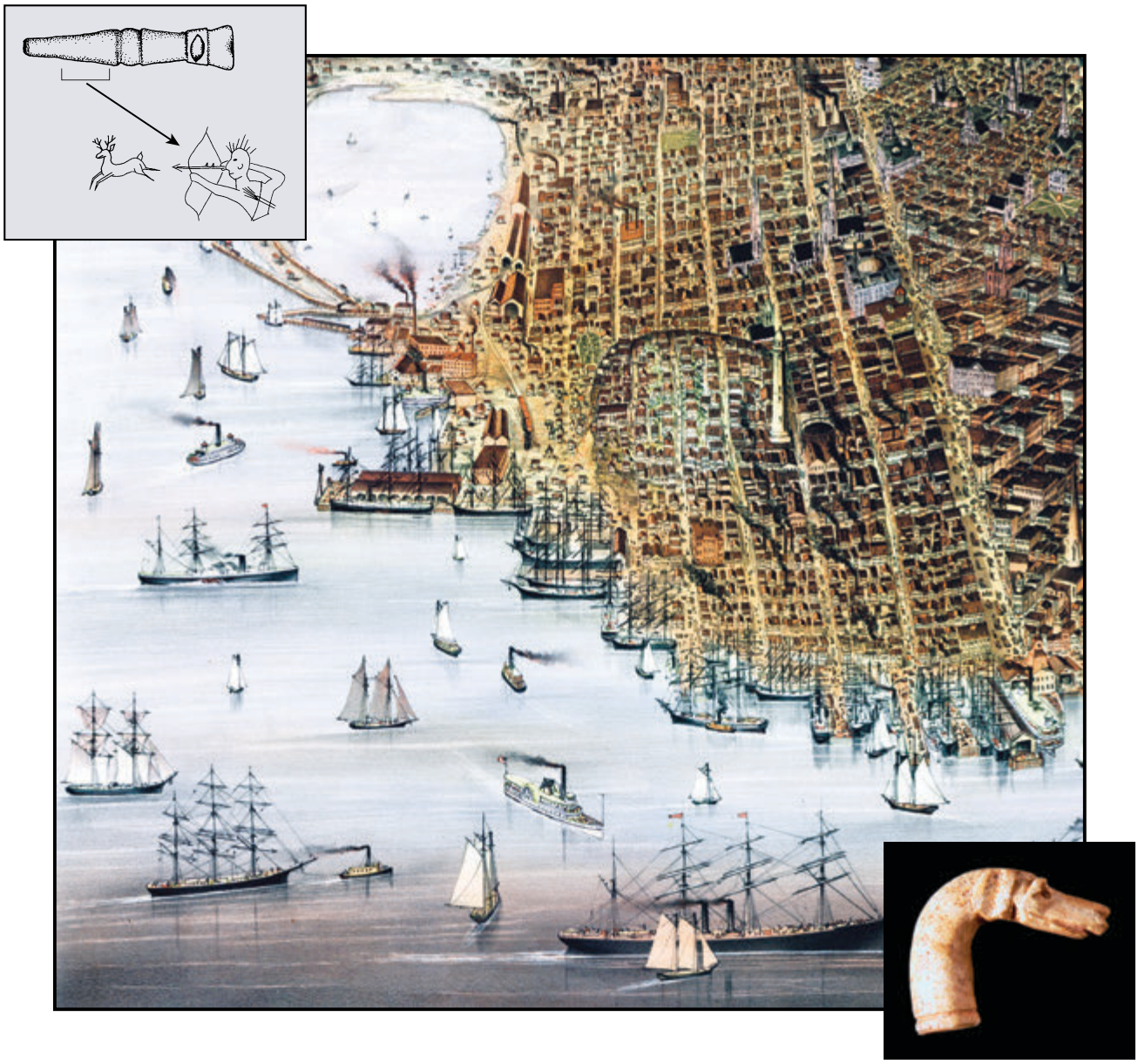
SOUTH OF MARKET:
HISTORICAL ARCHAEOLOGY OF 3 SAN FRANCISCO NEIGHBORHOODS

The San Francisco-Oakland Bay Bridge West Approach Project

VOLUME II



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 II

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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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LIFE AT HOME

Erica S. Gibson

With abundant seafood and wild life available, it was often possible for 19th-century residents of Tar Flat, Rincon Hill, and Mission Bay to supplement their diet with locally caught fowl, game, fish, and shellfish. Fruits, berries, and other vegetables were canned at home for use later in the year. Some residents raised poultry and other livestock in their small backyards; others used their yards as workshops or commercial stores, including small saloons. Those handy with a needle mended garments or picked them apart to refashion them into more trendy styles or smaller sizes for children. For many residents, thriftiness was a way of life.

ANGLING IN THE BAY AND DIGGING IN THE SAND

South of Market residents consumed a wide variety of fish, much of which could have been as easily caught in the bay and surrounding waters as purchased at market or from the local fisherman/peddler (Table 7.1). In the 1840s William Davis commented on San Francisco Bay fishing: "My success as an angler was beyond expectation and a surprise to me. In less than no time I had a pailful *(sic)* of several varieties of fish, which made the sport quite exhilarating" (Davis 1967:57). Many fish species found a home in the bay and its environs: still are present Pacific tomcod, jacksmelt, topsmelt, starry flounder, surfperches, Pacific herring, white croaker, and Pacific staghorn sculpin, to name a but few (The Bay Institute Ecological Scorecard 2003). The most common fishes archaeologically were members of the silverside family (smelts) and rockfish, recovered from almost every West Approach feature that had fish remains. Recreational bay fishing continued throughout the next century. In 1927 James Roxburgh reminisced in the *South of Market Journal*, "I tried to locate Long Bridge, the Cattle Wharf, with the old steamer *Chrysopolis* lying alongside and where we used to fish for pogies [perch]" (1927c:11).

The San Francisco Bay area was home to a thriving commercial fishing industry. By 1850 the first commercial fishery was established by Italian immigrants seining for salmon, herring, mackerel, anchovy, smelt, and "whitebait" (Skinner, ed. 1962). From shore to shore and up the inland waterways, both commercial and recreational fishing was abundant. While fish remains from throughout the West Approach Project attest to the availability of both fresh and preserved fish, only a single fishing-related artifact—a fishhook from Privy 1300—was recovered. The presence of baitfish in several features suggests that at least some local fish were procured by the residents themselves and not purchased.

Ferdinand Gee, a master mariner, lived with his wife, Isabella, and his young son in the Mission Bay neighborhood from about 1867 to 1883. In 1867 he was captain of the schooner *Eleanor Delia*, and later he captained the schooner *Elvina*. With his easy access to the bay and the Pacific Ocean, it is not surprising that he and his family consumed a lot of fish. The privy (807), associated with the Gee family, filled shortly after the 1868 earthquake, contained the greatest variety and largest quantity of fish remains, more than 22,000 specimens. Commercially available

Table 7.1. Recreational/Noncommercial Fish Remains by Feature

Block	Feature	Association	Date (ca.)	Description
4	Privy 1300	Samuel and Smith families	1885	Silverside, rockfish
4	Privy 1301	Taylor family	1870	Silverside, topsmelt, minnows,* surfperch, rockfish
4	Privy 1303	Thompson family	1880	Silverside, northern anchovy*
4	Privy 1305	Fuchs and Cadigan families	1880	Pacific herring, rockfish
4	Privy 1307	Brown family	1870	Pacific herring, minnows,* surfperch, rockfish
4	Privy 1310	McSheffrey family	1875	Silverside
4	Privy 1311+	Clark family	1870	Silverside, Pacific herring, minnows,* rockfish
4	Privy 1316	McEvoy family	1870	Silverside, rockfish
4	Privy 1322	Hurley and Conniff families	1890	Silverside, Pacific herring
4	Privy 1326	Amanda Scales and boarders	1875	Silverside, rockfish
4	Privy 1333	William Dougherty	1890	Silverside, minnows,* surfperch, starry flounder, rockfish
5	Privy 505	Mayne household, O'Connor family	1880	Silverside, common carp, surfperch, rockfish
5	Privy 507	Peel family	1870	Silverside, Pacific herring, surf smelt, Pacific tomcod
5	Privy 515	Fegan family	1880	Rockfish
5	Privy 516	Mary Peel	1880	Rockfish
9	Privy 2	Johnson household	1880	Rockfish
9	Well 6	Dent and Hannan families	1895	Rockfish
9	Privy 9	Usher household	1880	Silverside, rockfish
10	Privy 807	Gee family	1869	Silverside, Pacific herring, surfperch, anchovy,* greenling, Pacific tomcod, starry flounder, pile perch, rockfish
10	Privy 808	Schreiner, Johnson, Degnan, and McIntrye families	1880	Silverside, jacksmelt, minnows,* surfperch, rockfish
10	Privy 810	Monahan family and tenants	1880	Surfperch, rockfish
10	Privy 851	Metcalf household	1880	Rockfish
10	Well 853	Baker family	1870	Silverside, jacksmelt, starry flounder, rockfish
10	Privy 857+	Dolan and Michelson families	1880	Silverside, jacksmelt, Pacific herring, surfperch, starry flounder, rockfish
10	Well 866	McDonald and Tobin families	1885	Rockfish
11	Privy 1600+	Donnelly and Beal families	1880	Silverside, Pacific herring, common carp, surfperch, rockfish

*Suitable as baitfish

fish in the assemblage included Atlantic cod, trout, flatfishes, and salmon. Sacramento perch was available from the lower Sacramento Valley; the cod and mackerel could have been caught in the bay or salted and imported from the East Coast; Pacific herring was available both fresh and preserved. Smelts, surfperch, greenling, Pacific tomcod, starry flounder, pile perch, and rockfish could have been caught in the bay or purchased locally. The anchovy were probably used as baitfish (Schulz 1999; Schulz and Stoyka 2007).

Second only to the Gee family in terms of sheer variety of fish represented was the Dougherty residence in Tar Flat (Privy1333). William Dougherty, an Irish longshoreman, resided at 236 Fremont Street between 1890 and 1892, while several other longshoremen—Peter Hanson, John Lennox, and Joseph Hawkins—shared the residence intermittently during that period. While many of the species were most likely purchased (e.g., flatfishes, trout and salmon, and white sturgeon), the presence of local surfperch, starry flounder, smelts, and rockfish, along with the minnows commonly used as baitfish, suggests fishing by individuals of the household.

In 1868 Robert Taylor lived with his family in the Tar Flat neighborhood (Privy 1301). Employed as a porter for Hayward and Coleman, importers of oils and lamps, he was fairly well off financially. Regardless, household meals were typically of low- to moderate-priced cuts of meat served as soups and stews. Fish remains included the herrings and sardines, Pacific mackerel, trout/salmon, flatfish, and the ever-present cod. Minnows were found along with local fishes—silverside, topsmelt, surfperch, and rockfish—suggesting some recreational fishing by the Taylors.

Near former Mission Bay, Michael Dolan, an Irish shipping clerk, lived with his wife and eight children at 109 Perry Street from 1864 until 1889. In the duplex next door resided Jacob Michelson, a Norwegian sea captain, his wife, and their four children. Deposited around 1880, the privy fills associated with this duplex (857/858) reveal a taste for fish. Available from the bay, the Chinook salmon was an extremely important market fish in 19th-century San Francisco. White sturgeon, native to the bay, were typically purchased rather than caught recreationally. Similarly, rainbow and steelhead trout would have been most likely bought at market, though they were found in local inland waterways. Additional local fish included smelts, rockfish, starry flounder, suckers, and surfperch (Schulz 1999; Schulz and Stoyka 2007).

Shellfish was widely available in the San Francisco Bay. The local native people were prodigious collectors, while more recent immigrants to the Bay Area collected, ate, and otherwise exploited shellfish. Oyster shells were so numerous that a local company used them in manufacturing cement (NOAA Fisheries Southwest Region 2005). Native species included the Pacific oyster, bent-nose clam, and California mussel, while the common littleneck clam frequently came from Tomales Bay, about 40 miles to the northwest. Intruders to the area included the common bay mussel, which hitched a ride aboard European sailing ships, and the soft-shell clam, which was accidentally introduced into the environs when the Eastern oyster was imported in 1870 (Skinner, ed. 1962:95,97,106).

Among the South of Market residents, the bent-nose clam was a favorite, followed by the Eastern oyster, the Pacific littleneck clam (Figure 7.1), the bay mussel, and the Pacific oyster (Table 7.2). Abalone varieties were an infrequent purchase and, as such, were probably more expensive. Three households had a clear preference for shellfish, accounting for more than 60 percent of the total food shellfish refuse from the project. One of the earliest residents, Stephen Baker, a police captain/wharfinger, lived along the shore of Mission Bay at 108 Silver Street (Well 853) with his family between 1861 and 1872. The remains of 244 bent-nose clams, many probably

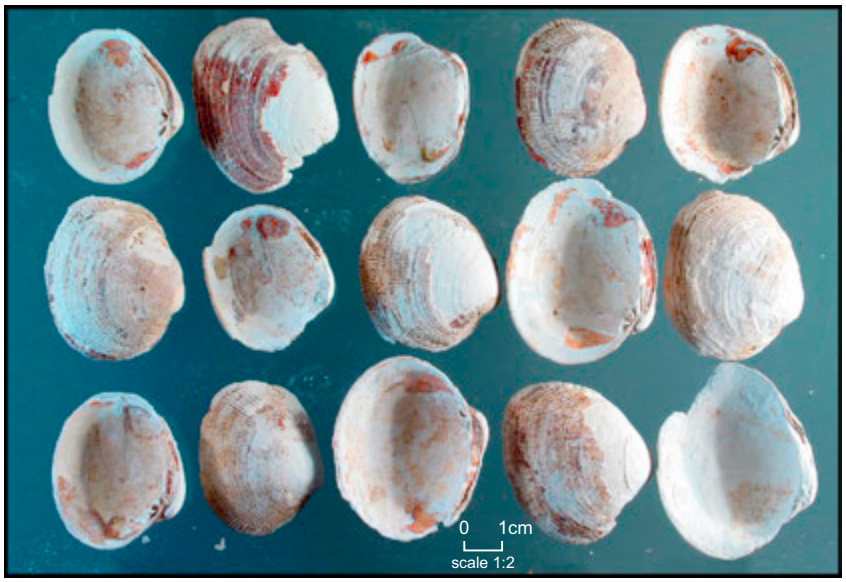


Figure 7.1. Pacific Littleneck Clam. The Peel family, who lived on Rincon Hill at 540 Folsom Street in 1870, preferred this clam above Pacific oyster and Eastern oyster.

dug by Chinese shrimp fisherman in the south bay (Skinner, ed. 1962:106), demonstrate a clear household favorite and were probably purchased at market, as were the 41 Pacific oysters. The remaining 36 Pacific littleneck clams, 2 California mussels, 2 bay mussels, and 2 Eastern oysters may have been scavenged from the nearby mudflat or bought along with the other shellfish.

Along the edge of Rincon Hill (Privy 9), John Usher, a sailmaker, lived with his extended family in 1880. The family consumed a rather large quantity of bay mussels (103), a shellfish popular in Europe but less so here. Other species most likely quarried by the residents themselves include at least 80 bent-nose clams and 4 Pacific littleneck clams. Just down the street and a decade-and-a-half later, James Hannan, an Irish boilermaker, and Theodate Dent, a widow, lived with at least seven additional family members in 1895 (Well 6). Remains of 250 Eastern oysters and only 1 Pacific oyster suggest that the latter was rapidly disappearing from the bay. The oysters—along with 19 bent-nose clams, 10 cockles, 5 Pacific littleneck clams, 3 California mussels, and 2 West Coast bittersweet—suggest both market purchases and local digging for shellfish. Clam-digging would have been lively activity for families, with the added benefit of a group shellfish feed later.

Table 7.2. Food Refuse Shellfish Remains

Block	Feature	Association	Date (ca.)	Total MNI	Common Name
4	Privy 1300	Samuel and Smith families	1885	26	Eastern oyster (21), Pacific oyster (4), Soft-shelled clam (1)
4	Privy 1301	Taylor family	1870	25	California mussel (5), Eastern oyster (2), Pacific oyster (13), Nuttall's cockle (3), Pacific littleneck clam (2)
4	Privy 1303	Thompson family	1880	4	Pacific oyster (1), Pacific littleneck clam (3)
4	Privy 1307	Brown family	1870	7	California mussel (4), Pacific oyster (3)
4	Privy 1311+	Clark family	1870	7	Pacific oyster (1), Pacific littleneck clam (6)
4	Privy 1322	Hurley and Conniff families	1890	25	Bent-nosed clam (12), Pacific oyster (4), Pacific littleneck clam (9)
4	Privy 1326	Amanda Scales and boarders	1875	16	Bent-nosed clam (8), Clam (1), Giant rock scallop (1), Mussel (1), Pacific oyster (3), Pacific littleneck clam (2)
4	Privy 1333	William Dougherty	1890	20	Bent-nosed clam (5), Black abalone (1), California mussel (1), Giant Pacific cockle (1), Pacific oyster (5), Pacific gaper (1), Pacific littleneck clam (3), Pinto abalone (1), Red abalone (2)
5	Privy 505	Mayne household, O'Connor family	1880	38	Bay mussel (1), Bent-nosed clam (1), California mussel (2), Eastern oyster (21), Pacific oyster (1), Pacific littleneck clam (12)
5	Privy 507	Peel family	1870	36	Eastern oyster (1), Pacific oyster (1), Pacific littleneck clam (34)
5	Privy 516	Mary Peel	1880	3	Bent-nosed clam (1), Nuttall's cockle (2)
9	Privy 2	Johnson household	1880	79	Bent-nosed clam (1), California mussel (2), Eastern oyster (1), Pacific oyster (1), Nuttall's cockle (69), Pacific littleneck clam (5)
9	Well 6	Dent and Hannan families	1895	297	Bent-nosed clam (19), California mussel (3), Eastern oyster (250), Pacific oyster (8), Nuttall's cockle (10), Pacific littleneck clam (5), West Coast bittersweet (2)
9	Well 8	Rowe family	1885	9	Eastern oyster (6), Pacific oyster (3)
9	Privy 9	Usher household	1880	195	Bay mussel (103), Bent-nosed clam (80), Pacific oyster (8), Pacific littleneck clam (4)
10	Privy 801	Sheridan family	1885	1	Eastern oyster (1)
10	Privy 807	Gee family	1869	13	Bay mussel (1), Eastern oyster (7), Pacific oyster (3), Pacific littleneck clam (2)
10	Privy 808	Schreiner, Johnson, Degnan, and McIntyre families	1880	13	California mussel (2), Eastern oyster (1), Giant Pacific oyster (1), Pacific oyster (9)

Table 7.2. Food Refuse Shellfish Remains *(continued)*

Block	Feature	Association	Date (ca.)	Total MNI	Common Name
10	Privy 810	Monahan family and tenants	1880	2	Pacific oyster (1), Nuttall's cockle (1)
10	Privy 812	Maloney family; Towne and Hill household	1880	4	Bent-nosed clam (2), Pacific oyster (1), Nuttall's cockle (1)
10	Privy 814	Aaron family	1875	5	Eastern oyster (4), Pacific littleneck clam (1)
10	Privy 849	Strauss household	1870	5	Bent-nosed clam (1), Eastern oyster (4)
10	Privy 851	Metcalf household	1880	18	Eastern oyster (1), Pacific oyster (1), Nuttall's cockle (1), Pacific littleneck clam (15)
10	Well 853	Baker family	1870	327	Bay mussel (2), Bent-nosed clam (244), California mussel (2), Eastern oyster (2), Pacific oyster (41), Pacific littleneck clam (36)
10	Privy 857+	Dolan and Michelson families	1880	16	Bay mussel (3), Nuttall's cockle (10), Pacific littleneck clam (2), Red abalone (1)
10	Well 866	McDonald and Tobin families	1885	4	Black abalone (1), Eastern oyster (1), Pacific oyster (1)
11	Privy 1600+	Donnelly and Beal families	1880	46	Bay mussel (7), Bent-nosed clam (4), Black abalone (1), Eastern oyster (6), Pacific oyster (1), Pacific littleneck clam (7), Soft-shelled clam (20)

CHIHUAHUA AND GUINEA PIG, PRIVY 1333 – 236 FREMONT STREET

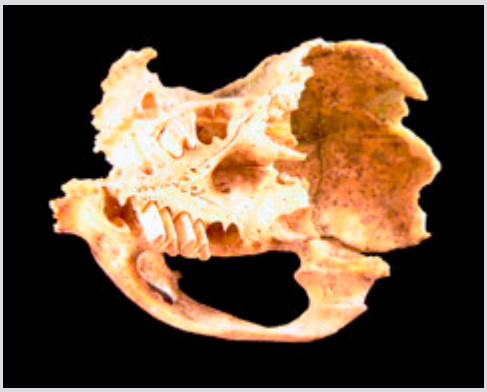
Michael Stoyka

Domestic dog remains show up on a regular basis in 19th-century urban privies in the Bay Area cities of San Francisco and Oakland, although not nearly as frequently as cats.[1] During the analysis of the faunal material from Privy 1333, it became apparent that there was a domestic dog with very distinctive features. An indeterminate rodent skull with distinctive characteristics that did not match any of the usual suspects added to the mystery. These specimens were later identified as a Chihuahua with a neonate puppy, and a Guinea pig.

How does an analyst deal with unexpected identifications such as these? Luckily these animals possessed such distinctive, specific, and unmistakable features that their identifications were not difficult. Some other rodent bones and the skeletons from domestic dogs in Bay Area archaeological collections have defied species and breed-specific identification (although efforts to identify the problematic specimens have not been abandoned). Even the best-stocked faunal comparative collections and museums would not have the necessary exotic rodent or breed-specific canine specimens to help identify the archaeological finds.

An important lead for the rodent came from the skeletal collection of the Department of Ornithology and Mammology at the California Academy of Sciences in San Francisco. The maxillary dentition alignment was unlike any of the rodents from California or North America examined there. But the Academy's large collection of exotic species from Galapagos and South America provided the answer. Instead of two parallel sets of teeth, the specimen had a V-shaped alignment that nearly converged at the anterior. The V-shaped dentition is an attribute of South American rodents belonging to the genus *Cavia*.

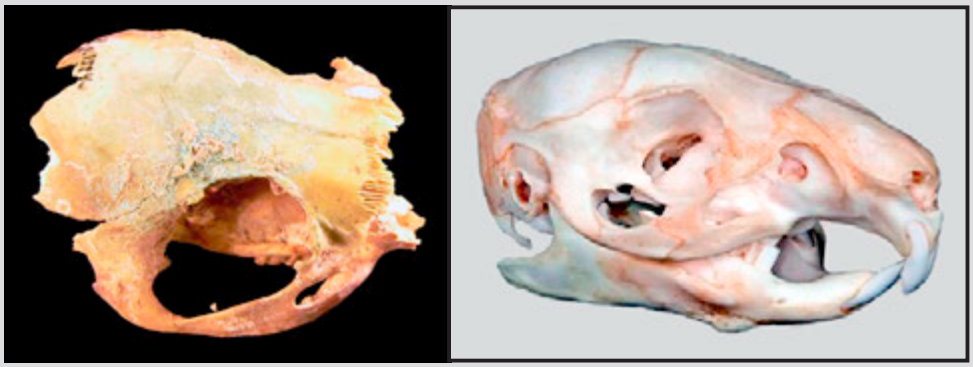
1. Six dogs were identified from 5 analytic units on the West Approach Project, while 24 dogs from 13 analytic units were identified on the Cypress Freeway Project. By comparison, the remains of 61 cats were recovered from West Approach and 65 cats were collected from Cypress. The Norway rat (*Rattus norvegicus*), Black rat (*Rattus rattus*), and European house mouse (*Mus musculus*) are also frequent contributors to species lists.



Guinea pig maxillary dentition, Privy 1333

The collections examined led to the conclusion that a South American rodent, probably a Guinea pig, was present in the collection from Privy 1333. The other animal was definitely a domestic dog of some type, but which one? The Internet became a valuable tool in this quest. There are several Web sites featuring illustrations of skulls in various views, occasionally with scales (see selected list, below). The fact that both animals had largely intact skulls was a benefit, since post-cranial examples are far harder to come by. The comparison of the digital images to the specimens made identification absolute.

Guinea pigs have a long domestic history. The Incas first began to domesticate Guinea pigs as both ritual entities and as a source of food from around 500 B.C. In Peru, Guinea pigs have a hallowed place in native folklore. Legend holds that Guinea pigs are mystical beings that can heal the sick and assist the dying in the journey from the world of the living to the great beyond. Little is known about how Guinea pigs were first introduced to Europe and North America as domestic pets, but they most likely came during the 16th century. It is said that Queen Elizabeth I of England had a Guinea pig of which she was much enamored, which contributed greatly to the animal's popularity in Europe (Comfy Cavies 2006). In America by mid-century, Guinea pigs, white mice, and fish (usually housed in small globes) had become known as children's pets. These animals were easy to care for and relatively hardy (Grier 2006:24, 39).



Guinea pig cranium, Privy 1333 (left) and guinea pig skull from osteological specimen catalog (right skull photo courtesy of www.skullsunlimited.com)

The Guinea pig specimen identified in the feature was an older individual, based on the fusion of the skull sutures. An indeterminate rodent femur and sacrum, which exhibit porosity and bone-growth pathologies, may also belong to this animal; post-cranial elements were not available for comparison. Guinea pigs have a life expectancy of 4 to 7 years; hence, young children could enjoy their pet's company through much of their childhood. It is likely that these animals were available in San Francisco at an early date, considering the penchant for the maritime industry to bring exotic objects and animals from around the world, and the fact many of the ships that harbored in San Francisco included South America in their voyages.

The Chihuahua is also a breed with Latin American origins, although there is a certain mystery and controversy concerning its roots. The Techichi, companion of the ancient Toltecs, is believed to be the progenitor of the Chihuahua. No records on the Techichi are available prior to the 9th century, but it is probable its ancestors were present prior to the Mayans. Dogs similar to the Chihuahua are found in materials from the pyramids of Cholula in central Mexico, predating 1530, and in the ruins of Chichen Itza on the Yucatan Peninsula. It is theorized that the Chinese crested, brought from Asia to Alaska across the Bering Strait, was responsible for the reduction in the breed's size. The animal's immigration to Europe may be the result of the travels of Christopher Columbus. A letter written by Columbus to the King of Spain makes reference to the tiny dog. The Chihuahua is an older breed by American Kennel Club standards, first registered in 1904 (American Kennel Club 2006).

The neonate dog raises some interesting points for the analyst. The skeletal elements from this animal were too juvenile to make a specific determination. When compared to the mature animal's bones, the morphology of those elements was found to be virtually identical. Through additional research and a side-by-side comparison of the juvenile and mature elements, it appears highly likely that this dog and her pup died during or some time shortly after whelping. The numerous problems and complications associated with breeding Chihuahuas are widely known to breeders. Owners are frequently warned to make sure that the stud is smaller than the bitch in an effort to ensure a smaller-sized puppy and thus an easier passage during birth. Other potential and common complications include too many puppies, retained puppies, one oversized puppy, puppy septicemia, eclampsia, absorption of the litter, and fading puppy syndrome (a condition of unknown cause where strong, healthy puppies stop thriving, fail to gain weight, weaken and die between 1 and 3 weeks old).

The remains of two kittens, a baby chicken and several rabbits were also recovered from the feature. The presence of these animals in addition to the Guinea pig, the Chihuahua, and the newborn puppy further suggests that the residents were involved in raising animals. The individual associated with this feature is William M. Dougherty, a longshoreman from Ireland. In city directories and voter registration records from the period, he is listed as residing at the same address with two men from Nova Scotia, a longshoreman and an engineer. In 1892 Dougherty is listed as selling liquors from the address, perhaps in a small saloon off his residence. Unfortunately there is

Chihuahua skull from Privy 1333 (left), and chihuahua skull from an osteological specimen catalog (right skull photo courtesy of www.skullsunlimited.com)

only sporadic mention of William and his situation. A large quantity and variety of child-related artifacts were recovered from the feature. Some of the child-related artifacts include 3 pairs of shoes sized appropriately for a child, 21 marbles (clay, glass, and stone), 8 porcelain dolls, a ferrous toy gun, and numerous items from tea sets. A family's involvement in raising animals may have been quite different from that of a group of single male tenants. It was common to expose children during this time period to animals to help socialize them and instill responsibility.

Some selected Web sites for use in identifying skulls of domestic pets:
http://www.boneroom.com/casts/bclonedog.html;
http://www.Guineapigsclub.com/gp_site/ill.asp;
http://www.skullsite.co.uk/Dog/dog.htm;
http://www.skullsunlimited.com/canidae.htm;
http://www.skullsunlimited.com/Guinea-pig-skull.html;
http://www.takingthelead.co.uk/3/Anatomy/dog_skulls.htm.

HUNTING FOR GAME, BIG AND SMALL

For millennia, the Bay Area has been a haven for game and wild fowl. An early visitor commented that ducks were "plentiful and fat and of so many varieties: mallard, canvasback, wigeon, and teal" (Davis 1967:56). Geese, quail, deer, elk, and rabbit were abundant, and all contributed to the diet of local residents.

Figure 7.2. A pepperbox gun from the West Approach Project (Privy 9). It was probably brought to California by John Usher when he moved here from Maryland. The Robbins and Lawrence Co. of Windsor, Vermont, manufactured the gun in the early 1850s. Though this gun was designed for personal defense, some of the ammunition in the West Approach collections indicate the presence of other firearms suitable for hunting.

Many features from the West Bay Approach project contained ammunition and/or firearms (Table 7.3). While the pistols (Figure 7.2) were most likely used for protection rather than hunting, several features had ammunition appropriate for fowl and game. BB shot would have been suitable for geese (4 and 5 shot for turkey, 9 shot for quail, and number 3 buckshot for ducks), while larger bullets might have been used for rabbits and deer. For the enterprising hunter, the nearby marshes would have been a fertile hunting ground.

Members of the Dougherty household enjoyed wild fowl almost as much as they did their fish. Bones from greater white-fronted goose, mallard duck, northern pintail, American wigeon, greater scaup, green-winged teal, and unidentified goose and duck, representing 31 pounds of meat, were recovered from Privy 1333 (Table 7.4). Faunal remains representing an additional 10 pounds of blacktail jackrabbit and cottontail rabbit were also recovered. While none of the faunal elements showed evidence of hunting, the presence of shot and shell casings in the feature suggest that the residents may have been exploiting the local terrain, though they would have had to travel a fair distance to get to suitable hunting grounds. Two large hunting knives were excavated from features on Block 4 (Privy 1300) and Block 10 (Privy 806). Privy 806 contained the remains of only a single blacktail jackrabbit, but Privy 1300 had more than 19 pounds of game meat and 32 pounds of wild fowl. Wolf Samuel, a Jewish tailor, and Leonard Smith, an engineer, lived at 416 Folsom Street (1300) with their families in 1885. In addition to a Bowie knife, the residents threw out more than 20 shell casings and a single fishhook.

Even clearer evidence of hunting was found in Privy 1316 in the Tar Flat neighborhood. Thomas McEvoy lived there with his family in 1870, when the privy was filled. Though no hunting paraphernalia was recovered from this feature, it contained at least one blacktail jackrabbit with an impact fracture and an American wigeon that had signs of a healed pellet shot. Whether shot by Thomas or bought directly from a hunter, it is clear that hunted, in addition to farm-raised, animals contributed to the McEvoys' diet. At the other end of the spectrum was George Donnelly, an Irish blacksmith, who lived at 207 Perry Street with his wife and seven children in 1880. In the duplex next door, at 209 Perry Street, lived William Beal, a gold miner, his wife, and their five children. While very little game or fowl is represented in their combined privy (1600, 1601), it appears that the inhabitants may have enjoyed hunting based on the wide range of shot and shell casings recovered.

Table 7.3. Shooting, Hunting, and Fishing Artifacts

Block	Feature	Association	Date (ca.)	MNI	Description
4	Privy 1300	Samuel and Smith families	1885	22	.22 shell casing (14), .32 shell casing (4), .38 shell casing (1), shell casing (3)
				1	Fish hook
				1	Bowie knife
4	Privy 1301	Taylor family	1870	1	.44 slug
4	Privy 1318	Murphy family	1880	2	.22 shell casing (1), shell casing (1)
4	Privy 1333	William Dougherty	1890	5	#1 buckshot (1), .22 shell casing (3), .51 shell casing (1)
				1	Revolver
5	Privy 507	Peel family	1870	5	#9 shot (1), .44 slug (1), 5/4 shot (3)
				1	Pistol
9	Privy 2	Johnson household	1880	1	.40 shell casing
9	Well 6	Dent and Hannan families	1895	1	.22 shell casing
				1	Gunflint
9	Well 8	Rowe family	1885	2	.44 shell casing (1), .56 slug (1)
9	Privy 9	Usher household	1880	5	.44 slug (1), 5/4 shot (1), BB shot (2), shell casing (1)
				1	Pepperbox gun
10	Privy 806	McIver and Martin families	1880	21	.22 shell casing (16), 5/4 shot (1), shell casing (1), shotgun shell (3)
				1	Target bottle
				1	Knife
10	Privy 807	Gee family	1869	1	.32 shell casing (1), shell casing (1)
10	Privy 808	Schreiner, Johnson, Degnan, and McIntyre families	1880	1	.22 shell casing
10	Privy 849	Strauss household	1870	1	.32 shell casing
10	Well 853	Baker family	1870	3	Shell casing
10	Privy 857+	Dolan and Michelson families	1880	3	.38 shell casing
10	Well 866	McDonald and Tobin families	1885	3	.32 shell casing (1), .38 shell casing (2)
11	Privy 1600+	Donnelly and Beal families	1880	9	#3 buckshot (1), BB shot (1), 5/4 shot (3), .22 shell casing (1), .38 shell casing (1), .44 slug (1), shell casing (1)

Table 7.4. Game Meat

Block	Feature	Association	Date (ca.)	MNI	Meat Wt.	Description
4	Privy 1300	Samuel and Smith families	1885	7	19.0 lbs.	Blacktail jackrabbit, Cottontail rabbit
				12	32.0 lbs.	Greater white-fronted goose, Mallard duck, Green-winged teal, California quail, goose, duck
4	Privy 1301	Taylor family	1870	1	2.0 lbs.	Cottontail rabbit
				6	13.0 lbs.	Canada goose, Mallard duck, American wigeon, scoter, duck
4	Privy 1303	Thompson family	1880	1	2.0 lbs.	Cottontail rabbit
				4	8.5 lbs.	Goose, duck
4	Privy 1305	Fuchs and Cadigan families	1880	1	2.0 lbs.	Cottontail rabbit
				1	0.5 lbs.	California quail
4	Privy 1307	Brown family	1870	1	3.0 lbs.	Blacktail jackrabbit
				4	4.5 lbs.	Duck
				1	NA	Turtle
4	Privy 1310	McSheffrey household	1870	1	0.5 lbs.	California quail
4	Privy 1311+	Clark family	1870	2	5.5 lbs	Large duck/small goose, duck
4	Privy 1316	McEvoy family	1870	3	9.0 lbs.	Blacktail jackrabbit
				2	6.5 lbs.	American wigeon, goose
4	Privy 1318	Murphy family	1880	1	2.0 lbs.	Cottontail rabbit
				7	17.0 lbs.	Mallard duck, Northern pintail, goose, large duck/small goose, duck
4	Privy 1322	Hurley and Conniff families	1890	1	NA	Elk (possible)
				1	3.0 lbs.	Blacktail jackrabbit
				3	4.5 lbs.	Mallard duck, duck
4	Privy 1326	Amanda Scales and boarders	1875	5	11.0 lbs.	Blacktail jackrabbit, Cottontail rabbit
				14	19.5 lbs.	American wigeon, duck, Green-winged teal, California quail, goose
4	Privy 1333	William Dougherty	1890	4	10.0 lbs.	Blacktail jackrabbit, Cottontail rabbit
				15	31.0 lbs.	Greater white-fronted goose, Mallard duck, Northern pintail, American wigeon, Greater scaup, Green-winged teal, goose, duck

Table 7.4. Game Meat *(continued)*

Block	Feature	Association	Date (ca.)	MNI	Meat Wt.	Description
5	Privy 505	Mayne household, O'Connor family	1880	2	NA	Horse, Blacktail deer
				3	8.0 lbs.	Blacktail jackrabbit, Cottontail rabbit
				14	31.5 lbs.	Canada goose, Emperor goose, Greater white-fronted goose, Northern pintail, American wigeon, Mallard duck, California quail
5	Privy 507	Peel family	1870	1	2.0 lbs.	Cottontail rabbit
				8	8.5 lbs.	Northern pintail, Green-winged teal, Bufflehead, California quail, Mountain quail
5	Privy 515	Fegan family	1880	1	2.0 lbs.	Rabbit
				1	5.0 lbs.	Goose
9	Privy 2	Johnson household	1880	1	3.0 lbs.	Blacktail jackrabbit
9	Well 6	Dent and Hannan families	1895	3	7.0 lbs.	Blacktail jackrabbit, Cottontail rabbit
				9	18.0 lbs.	Canada goose, Northern pintail, Mallard duck, American wigeon, Northern shoveler, Green-winged teal, Black scoter, Surf scoter
9	Well 8	Rowe family	1885	2	4.0 lbs.	Cottontail rabbit
9	Privy 9	Usher household	1880	1	2.0 lbs.	Cottontail rabbit
				15	41.0 lbs.	Greater white-fronted goose, Canada goose, Snow goose, Northern pintail, Green-winged teal, Canvasback, White-winged scoter, goose, duck
10	Privy 801	Sheridan family	1885	3	8.0 lbs.	Blacktail jackrabbit, Cottontail rabbit
				3	8.0 lbs.	Mallard duck, goose, duck
10	Privy 806	McIver and Martin families	1880	1	3.0 lbs.	Blacktail jackrabbit
10	Privy 807	Gee family	1869	2	6.0 lbs.	Blacktail jackrabbit
				27	86.5 lbs.	Canada goose, Mallard duck, California quail, goose, duck
10	Privy 808	Schreiner, Johnson, Degnan, and McIntrye families	1880	16	48.0 lbs.	Blacktail jackrabbit
				24	28.5 lbs.	Canada goose, Mallard duck, American wigeon, Green-winged teal, California quail

Table 7.4. Game Meat *(continued)*

Block	Feature	Association	Date (ca.)	MNI	Meat Wt.	Description
10	Privy 810	Monahan family and tenants	1880	5	10.0 lbs.	Cottontail rabbit
				4	11.0 lbs.	Domestic goose, Northern pintail, American wigeon, duck
				1	NA	Turtle
10	Privy 814	Aaron family	1875	1	3.0 lbs.	Blacktail jackrabbit
				2	3.5 lbs.	Duck
10	Privy 851	Metcalf household	1880	2	3.0 lbs.	Duck
10	Well 853	Baker family	1870	1	2.0 lbs.	Cottontail rabbit
				27	41.5 lbs	Canada goose, Greater white-fronted goose, American wigeon, Northern pintail, Mallard duck, Surf scoter, California quail
10	Privy 857+	Dolan and Michelson families	1880	1	2.0 lbs.	Cottontail rabbit
				8	16.5 lbs.	Canada goose, Greater white-fronted goose, Mallard duck, American wigeon, California quail
10	Well 866	McDonald and Tobin families	1885	1	3.0 lbs.	Blacktail jackrabbit
				3	9.5 lbs.	Brants goose, American wigeon, goose
11	1600+	Donnelly and Beal families	1880	1	2.0 lbs.	Rabbit
				1	1.0 lb.	Duck

RABBITS

Michael Stoyka

Rabbit remains are common in collections from both the Cypress Freeway Replacement Project and San Francisco West Approach. The introduction date for domestic rabbits into this country is unclear, but "English Rabbits" were kept as pets from the beginning of the 18th century (Grier 2006). By the mid-19th-century chickens, pigeons, and rabbits were being included in the standard list of "pet stock"; they were being bred for looks and were sometimes shown competitively by both adults and children. An 1874 catalog from a pet store in Philadelphia lists seven different breeds of rabbits for sale, including Lop Eared, Himalayan, Angora, Silver Grey, Belgian hare, and the Common English.

The presence of rabbits among the remains at archaeological sites is not always the result of their charms as pets. Rabbits are a common and favored food animal by some ethnic groups and were readily available in meat markets. In San Francisco, hares were selling for as little as 20 to 25 cents in November 1885 and September to October of 1886, then rising to as much as 75 cents to $1.00 each in February of 1886. Rabbits were sold by the pair in a price range that fluctuated far less—between 25 and 50 cents.

Local native rabbits, like the Black-tailed jackrabbit (*Lepus californicus*), the Desert cottontail (*Sylvilagus auduboni*) or Brush rabbit (*Sylvilagus bachmani*), could also be obtained by hunting. The number of rabbits fluctuates due to environmental factors, disease, and predators. The population of wild rabbits does not appear to have suffered from 19th-century exploitation. An account from 1896 puts the rabbit population into perspective as the agricultural boom in California was developing. In this article the rabbit is described as an "agricultural menace locally"; efforts to eliminate them recounted, "from 10–20,000 hares were killed in a single day during a rabbit drive in the San Joaquin Valley" (Orr 1940:34; Palmer 1896).

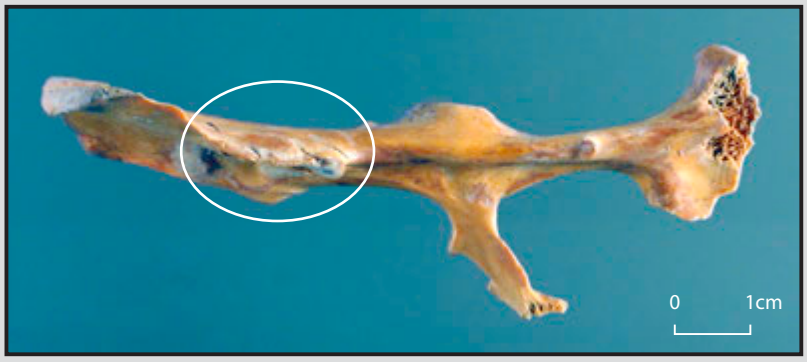
Many of the breeds eaten in the Bay Area were domestic varieties, raised in Sonoma, Marin, Napa, Alameda, and San Mateo counties (*San Francisco Morning Call* 9 April 1876:8). By the 1890s, raising rabbits for pet stock, food, or fur, was being promoted as a good income producer (Grier 2006:212). An 1876 *San Francisco Morning Call* article "What We Live On" contends that, although many rabbits were readily available and abundant in markets, "the poor rarely bought them"; instead "they chiefly go to French and German restaurants, and to well-to-do private families" (*SF Morning Call* 9 April 1876:8). A menu from the Palace Bakery and Restaurant in San Francisco lists "Stewed hare *a l'Anglaise*" for 10 cents, under their listing for Entrees (California Bureau of Labor Statistics 1885–86).

Other sources paint a more favorable view of rabbit as popular food in 19th-century America. Most contemporary cookbooks of any repute or popularity had at least one recipe for rabbit or hare and usually had several options for the game meat. In the 1868 *Handbook of Practical Cookery, for Ladies and Professional Cooks,* by Pierre Blot (a celebrity chef in New York City), recipes for *Hare in Civet*, *roasted*, and *baked,* are included. Instructions are also given in the selection of a fresh hare in the market, along with a very interesting piece of general information. Chef Blot states,

> No hares have yet been found in the United States, except for California. The reported hare of the Western prairies is, as far as known, a species of rabbit. That found in the Eastern markets comes from Canada and Europe. The Canadian hare is very inferior in quality [1868:280].

It seems that as well as being abundant the Black-tailed jackrabbit was held in fairly high regard by the culinary establishment.

The archaeological faunal materials do not suggest that only well-to-do families and restaurants served rabbit with any frequency in the United States. The data show that families of a wide range of cultures, ethnicities, and economic classes representing a cross section of the community were eating rabbit meat. The sample includes people of 11 nationalities from West Approach and 7 from Cypress. The presence of rabbits was not restricted to any economic class, ethnicity, or immigration or residential status. Thirty-two



Lepus innominate (hare hipbone), Well 6. Note knife marks on left.

percent (31 features) of collections from Oakland and 71 percent (30 features) from San Francisco contain rabbit bone.

Religion does not appear to have played a role in the consumption of rabbit either. One feature from the Cypress Project and three from the West Approach Project had Jewish associations. There were rabbit remains found in every analytic unit with a Jewish association except for Privy 1409 from the Cypress Block 2 (Praetzellis, ed. 2001). Three of the four features had pork, and two of four had shellfish. Rabbit, pork, and shellfish are excluded by Jewish dietary laws.

Features with Known Associations Containing Rabbit Remains (by Occupation)

	Cypress	%	West Approach	%
P+	1 of 1	100.0	2 of 2	100.0
P	4 of 4	100.0	10 of 11	90.9
S	10 of 10	100.0	10 of 15	66.7
SS	3 of 3	100.0	10 of 10	100.0
U	2 of 2	100.0	6 of 7	85.7
W	1 of 1	100.0	1 of 3	33.3

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

Features with Known Associations Containing Rabbit Remains (by Nativity)

	Cypress	%	West Approach	%
A	7 of 8	87.5	7 of 7	100.0
AA	4 of 4	100.0	–	–
I	8 of 8	100.0	20 of 24	83.3

A = American, AA = African American, I = Immigrant.

The listed resident of the property at 416 Folsom Street where Privy 1300 was located was Wolf Samuel, who lived there with his wife Minnie and their children. Mr. Samuel, a tailor, was a Jew from Poland. The significant presence of pork and rabbits, and the likelihood of hunting due to a wealth of artifacts related to that activity from this feature, would suggest that they were not eating in a manner consistent with a traditional Jewish household. Interestingly enough, a similar case emerged from the Cypress Freeway Project where at 712 Fifth Street, Samuel Jacobs, a Jewish fruit peddler resided. The presence of shellfish and pork in the faunal collection indicates that he too was ignoring religious strictures.

Another interesting point of similarity in the two cities' collections lies in the rate of butcher marks. San Francisco rabbit bones bear some evidence of butchering (knife scores, impact fractures, and cut to breaks) 27 percent of the time, while the same factor occurs in 36 percent of the bones from West Oakland. These numbers suggest a similarity and consistency in preparation and consumption styles.

Four families resided in two households at 120 Silver Street near former Mission Bay in 1880. The Schreiners, Johnsons, Degnans, and McIntyres all contributed to the refuse accumulated in Privy 808. The families ate an eclectic and expensive assortment of meat and fish, some purchased and some acquired by hand. At least 16 blacktail jackrabbits (18 pounds) are represented in the faunal remains. Two mallard duck elements show evidence of shotgun-pellet damage, while the remaining fowl—Canada goose, American wigeon, green-winged teal, and California quail—do not. Ten robins and a single coronet fish, found only in South and Central American and the Asian Pacific, round out the collection. Only a single .22 shell casing was recovered, yet it is obvious that some of the food set on the table was hunted locally.

In 1880 Henry Mayne, a ship's carpenter, his wife, and four lodgers lived in a duplex at 546 Folsom Street (Privy 505) with Thomas O'Connor, a Canadian sawyer, and his wife. Like others living south of Market Street, the residents here consumed rabbits, ducks, wigeon, quail, and geese. However, this was the only household to contain elements of black-tailed deer or clearly butchered horse. Three separate goose varieties are noted as well: Canada goose, Emperor goose, and greater white-fronted goose. None show evidence of pellet damage and no hunting-related artifacts were found in the feature, suggesting that most, if not all, was purchased at market.

Rabbit, duck, and goose were part of the diet of many South of Market residents. All of these, as well as other wild game, would have been available at the local market or straight from the hunter himself. Undoubtedly, some residents contributed their own bounty to the table.

BACKYARD BARNYARDS

Not all meat was procured at market or caught in the wild; some was raised and butchered at home. Fruits and vegetables were grown in the backyard or in flowerpots on the steps, while berries would have been collected from bushes growing in alleys and along fences.

Commercial chicken and turkey production in California did not get underway until the 1880s; until then, domestic poultry was in short supply and consequently more costly. It was not until shortly after the turn of the century that domestic poultry and wild game birds were economically competitive. With the decline in wild fowl populations in the 20th century, the tables were turned and game birds became increasingly expensive (Simons 1980).

Several South of Market families appear to have raised chickens on their small plots of land (Table 7.5). In addition to meat, chickens provided eggs and, upon death, feathers for pillows and other items requiring padding. Setting up and maintaining chicken coops could be as simple or elaborate as desired, though cleanliness was critical as chicks are susceptible to disease and parasites. Poultry feeders and waterers could be purchased ready-made or fabricated with materials available to any household.

More so than other neighborhoods, many residential deposits from Tar Flat—especially Baldwin Court—included the remains of juvenile and baby chickens, suggesting home poultry production. Around 1870 the Clark and McShaffrey families were neighbors, living at 7 and 9 Baldwin Court (1310, 1311+), respectively. Sharing a lot line, the families may well have conversed about the care and feeding of their chicks. A little further down the street, the Murphy and Thompson families, at 11 and 21 Baldwin Court (1318, 1303), were raising chickens by 1880;

Table 7.5. Raising Chickens and Home Butchering

Block	Feature	Association	Date (ca.)	Raising Chickens	Home Butchering	% Low-cost meat
4	Privy 1303	Thompson family	1880	X		33.6
4	Privy 1305	Fuchs and Cadigan families	1880		X	34.5
4	Privy 1310	McSheffrey household	1875	X		29.5
4	Privy 1311+	Clark family	1870	X		32.3
4	Privy 1318	Murphy family	1880	X		27.5
4	Privy 1333	William Dougherty	1890	X		35.2
9	Privy 9	Usher household	1880	X		25.8
10	Privy 808	Schreiner, Johnson, Degnan, and McIntyre families	1880	X		22.9
10	Privy 857+	Dolan and Michelson families	1880	X		31.4

while as late as 1890, the Dougherty family, who lived around the corner at 236 Fremont Street, were also rearing chicks (1333).

Home butchering may have also been a cost-saving measure. By purchasing a side or quarter of beef to be brought home and cut up, butcher costs would be eliminated. One West Approach feature, Privy 1305, contained faunal remains indicative of home butchering (Table 7.5). Residing at 13 Baldwin Court in 1880 were Martin Fuchs, a German carpenter, his wife, and their three children, along with William Cadigan, an Irish laborer, his wife, and their five children. The families ate inexpensive to moderate-priced cuts of meat, with many stews and soups. The remains of a forequarter of a veal cow show evidence of home butchering. Lending further support to home butchering by this household are an amateurishly reduced beef thoracic vertebra and a nearly complete left half of a pig skull and right mandible that reconstruct at butcher marks made primarily with axe/cleaver.

Figure 7.3. Stoneware crock and lids, recovered from Well 6. The lid at bottom was manufactured by the Pacific Pottery Company, later N. Clark & Company, of Sacramento sometime between 1857 and 1888 (Praetzellis et al. 1983:62–65).

A single feature, Privy 505 on Block 5, contained faunal remains that may be indicative of an inexperienced butcher or a butcher in training. The butchering pattern was predominantly the standard Euroamerican model: halves (or the butcher-reduced quarters) of a carcass cut down to steaks, roasts, and soup bones wherever appropriate. While at least 19 elements had amateurish, sloppy or excessive butchering, the lack of butcher-cut refits of the faunal elements indicates butchering off-site.

All but a few features show evidence of food preservation: seeds, canning jars, crocks (Figure 7.3) and lids, jelly jars, and other food-storage containers (Table 7.6). The seasonal preservation of food allowed for year-round enjoyment of various fruits and vegetables whose availability as fresh food was often very brief. Typically done on a small household scale,

Table 7.6. Floral Remains and Food-storage Containers

Block	Feature	Association	Date (ca.)	Floral Remains	Canning Jar	Crock/ Lid	Jelly Jar	Bottle/ Jug
4	Privy 1300	Samuel and Smith families	1885	Apricot/peach, cherry, coconut, grape, melon/squash	1	6		
4	Privy 1301	Taylor family	1870		1	5		2
4	Privy 1303	Thompson family	1880	Peach			2	
4	Privy 1305	Fuchs and Cadigan families	1880	Peach	1	2		1
4	Privy 1307	Brown family	1870	Peach		2		
4	Privy 1311+	Clark family	1870	Peach				
4	Privy 1316	McEvoy family	1870	Grape, peach				
4	Privy 1318	Murphy family	1880	Peach	2	2	1	
4	Privy 1326	Amanda Scales and boarders	1875			3	1	
4	Privy 1333	William Dougherty	1890		2	3		
5	Privy 505	Mayne household, O'Connor family	1880	Coffee	1			
5	Privy 507	Peel family	1870	Apricot/peach, berry, grape, melon/squash, peach			1	
5	Privy 515	Fegan family	1880		1			
5	Privy 516	Mary Peel	1880		1		2	
9	Privy 2	Johnson household	1880	Apricot/plum, berry, cherry, coconut, grape, peach		1	1	
9	Well 6	Dent and Hannan families	1895	Apricot/peach, cherry, coffee, grape, melon/squash, peach, peanut, walnut		7		
9	Well 8	Rowe family	1885	Apricot/plum, coconut, peach, pumpkin		5		
9	Privy 9	Usher household	1880	Almond, apricot/peach, berry, Brazil nut, cherry, coconut, coffee, grape, hazelnut, melon/squash, peach, peanut, pepper, walnut		5		
10	Privy 801	Sheridan family	1885	Berry, coffee, grape, peach	2	1	1	
10	Privy 806	McIver and Martin families	1880	Apricot/peach, cherry, coffee, grape, peach	3	4	2	
10	Privy 807	Gee family	1869	Apricot/peach, peach		4		

Table 7.6. Floral Remains and Food-storage Containers *(continued)*

Block	Feature	Association	Date (ca.)	Floral Remains	Canning Jar	Crock/ Lid	Jelly Jar	Bottle/ Jug
10	Privy 808	Schreiner, Johnson, Degnan, McIntyre families	1880	Apricot/peach, berry, chestnut, grape, pumpkin	3	1		
10	Privy 810	Monahan family and tenants	1880			3		1
10	Privy 812	Maloney family; Hill and Towne household	1880	Apricot/peach, peach, peanut	1	2	1	
10	Privy 813	Moynihan family and tenants	1880	Peach		1		
10	Privy 814	Aaron family	1875	Berry, cherry, peach				
10	Privy 849	Strauss household	1870	Grape, peach				
10	Privy 851	Metcalf household	1880	Peach	1	2		
10	Well 853	Baker family	1870	Peach, pumpkin			2	
10	Privy 857+	Dolan and Michelson families	1880	Berry, grape, peach		1		
10	Well 866	McDonald and Tobin families	1880	Cherry	1	4	1	
11	Privy 1600+	Donnelly and Beal families	1880	Almond, apricot/peach, Brazil nut, cherry, coconut, grape, hazelnut, melon/squash, peach, peanut, walnut	1	4	1	

homemakers could put-up an abundance of jellies, jams, pickles, vegetables, and the like in a relatively short period of time. Usually stored in dark, cool spaces or in a pantry, canned goods would be edible months and sometimes years later. Not only was canning an economic choice, it was also a personal preference enjoyed by wealthy and poor alike.

Much of the produce represented in the West Approach floral remains—such as apricots, peaches, cherries, and berries—would have been available from both the market and backyard. Likewise pumpkins, squash, and melons could have been as easily grown, space allowing, as bought.

The McIver and Martin families (Privy 806) had more food-storage-related items than other West Approach families—3 canning jars, 4 crocks/lids, and 2 jelly jars (Figure 7.4). Along with an assortment of apricot, peach, cherry, and grape seeds, these attest to home food preservation. The Taylor family in the Tar Flat neighborhood (Privy 1301) also had an assortment of food-storage items. Floral remains show that Wolf Samuel, Leonard Smith, and their families enjoyed apricots and peaches, cherries, grapes, melons, squash, and even coconuts. While only a single canning jar was recovered from their deposit (Privy 1300), at least 6 crocks—a vessel type often used for pickling—were found. It is likely that some of the squash were pickled and stored.

Figure 7.4. Food storage items from Privy 806. Included are 3 aqua-glass canning jars and a large (2-gallon) stoneware crock, about 11 inches in diameter and 7-1/2 inches tall.

WORKING AND RELAXING AT HOME

Many South of Market residents either worked at home or brought work home with them. Several needleworkers (see Psota, Chapter 5) lived in the project area: Wolf Samuel, a tailor in the Tar Flat neighborhood; Mary Shore and Ida Briggs Shore, dressmakers near Rincon Hill; and Mary and Carrie McIver, seamstresses in the Mission Bay neighborhood. All of these individuals worked out of their home, while still others were employed in local clothing shops.

Tools recovered from deposits suggest other residents may have worked out of the house as well (Table 7.7). George Donnelly, an Irish blacksmith, lived in the duplex at 207 Perry Street with his wife and family in 1880. Next door at 209 Perry Street resided William Beal, a gold miner, and his family. At least 14 tools were recovered from the deposit associated with the two families (Privy 1600+). A wrought-iron swage—a tool used in shaping metalwork—and part of another wrought-iron tool would have been tools of the trade for Mr. Donnelly. Additional tools included various handles, rulers, a triangular file, and a hatchet, all of which may have been used by either the blacksmith or the miner.

Members of the Usher household on Block 9 appear to have engaged in some sort of woodworking endeavor. John Usher, a sailmaker from Maryland, was unemployed for several months in 1880, around the time the collection was deposited. That same year the city directory listed him as a conductor on a nearby railroad. Among the artifacts recovered from Privy 9 were a common jack plane, a folding ruler, a wood chisel, a tack hammer, a screwdriver, several wooden handles, and a large quantity of wood shavings. It appears that John was a jack-of-all-trades and supplemented the family's income by using his woodworking skills.

At least one South of Market resident, William Dougherty, operated a saloon out of the back of his residence. William was an Irish longshoreman who lived at 236 Fremont Street (Privy 1333) in Tar Flat between 1890 and 1892. Several additional tenants, also longshoremen, briefly resided at this address in the early 1890s. By 1892 the city directory listed Dougherty as "liquors, 236 Fremont," with no residential listing, though it is likely he remained living at this address. Artifacts recovered from the deposit include relatively equal amounts of ale/beer, wine/champagne, and other alcoholic-beverage containers, more than three dozen stemware/tumbler glasses, and a variety of snuff bottles, smoking pipes, and spittoons, all of which would have been used in a saloon. The faunal remains, primarily moderate- to low-priced soup and stew cuts, represented more than 2,500 pounds of meat, a significant quantity for just a few men. William may have been serving simple meals along with liquor as a way to further augment his income.

In addition to home businesses, of course, these tools may also reflect home-maintenance activities or remodeling efforts. The unconventional materials used in the construction of stone-lined Privy 1326 (see sidebar), for example, suggest that the owner himself undertook the design and construction of this feature—perhaps the efforts of an amateur rather than commercial work. Work around the home, while an undesirable chore for many, would have been an entertaining hobby for some, and any number of the tools listed in Table 7.7 could have resulted from this pastime.

Between their more mundane activities residents of the South of Market found time to play games, collect novelties, engage in crafts, and otherwise relax in late-19th-century San Francisco. Many families decorated their homes with items collected from outings near and far (Table 7.8).

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Table 7.7. Tools

Block	Feature	Association	Date (ca.)	MNI	Description
4	Privy 1300	Samuel and Smith families	1885	10	Auger/drill bit, axe, file/rasp (3), hose, saw blade, scissors, triangular file, whetstone
4	Privy 1301	Taylor family	1870	1	Hose
4	Privy 1304	Unidentified	1895	6	Folding ruler, file/rasp (2), hose, wrench
4	Privy 1305	Fuchs and Cadigan families	1880	3	Folding ruler, hatchet, whetstone
4	Privy 1307	Brown family	1870	1	Wood chisel
4	Privy 1316	McEvoy family	1870	2	Spade, triangular file
4	Privy 1318	Murphy family	1880	3	Auger?, possible auger handle, hose
4	Privy 1326	Amanda Scales and boarders	1875	1	Hatchet
4	Privy 1333	William Dougherty	1890	3	Axe, folding ruler, hatchet
5	Privy 505	Mayne household, O'Connor family	1880	2	Folding ruler, handle
5	Privy 515	Fegan family	1880	1	Whetstone
5	Privy 516	Mary Peel	1880	1	Folding ruler
9	Well 6	Dent and Hannan families	1895	7	Ash shovel, folding ruler, hose (2), riveting hammer, square shovel, wrench/vise clamp
9	Well 8	Rowe family	1885	2	Hose, needle-nose pliers
9	Privy 9	Usher household	1880	8	Folding ruler, common jack plane, tool handle, hose, flathead screwdriver, sieve, tack hammer, wood chisel
10	Privy 806	McIver and Martin families	1880	2	Folding ruler, chisel/plane blade
10	Privy 807	Gee family	1869	3	Hose
10	Privy 808	Schreiner, Johnson, Degnan, and McIntyre families	1880	4	Axe, folding ruler, hose, triangular file
10	Privy 812	Maloney family; Hill and Towne household	1880	4	Handle, hatchet, mallet, sprinkler
10	Privy 851	Metcalf household	1880	3	Pipe wrench, triangular file, wrench
10	Well 853	Baker family	1870	3	Ash shovel, chisel/file, hammer
10	Privy 857+	Dolan and Michelson families	1880	3	Folding ruler, hose, ice pick handle?
10	Well 866	McDonald and Tobin families	1885	7	Hose, pry bar, triangular file (5)
11	Privy 1600+	Donnelly and Beal families	1880	14	Box chisel/nail puller?, brace handle, brush, folding ruler (2), handle (3), hatchet, hose, ruler, saw, swage, triangular file

A STONE-LINED PRIVY

Michael D. Meyer

Throughout California, privies, outhouses, and cesspits from the mid- to late 19th century are typically constructed with wood linings. Using this material for lining—even the use of privies themselves—made financial sense. For the homeowner, a privy was a minimal investment for a necessary facility. Wood was plentiful, relatively light and easy to haul, and both the vault and the privy itself required little skill to construct. For municipalities, sewer systems were an expensive investment. While city water systems were a primary need, the construction of sanitary sewers often lagged decades behind. In some cases, building municipal water supplies may have even delayed sewer construction, since privies were more likely to contaminate an adjacent well than piped water (Frost 1991:149–150). In Sacramento, there was a transition to brick-lined septic tanks prior to the connection to city sewer. In places such as New York's Five Points, privies were constructed from a variety of materials, including stone, brick, and wood (Yamin 2000).

In San Francisco a single privy vault has been found with a stone base: Privy 1326 located behind 240 Fremont Street in the Tar Flat neighborhood. The granite base consisted of a floor and a short, mortared "wall" of several thin slabs and more substantial pieces from 6 × 8 inches up to 10 × 14 inches. The granite base rose 18 inches above the floor of the 3-foot-square chamber. A wood lining sat atop the stone and was over 3 feet deep. Most of the granite was placed on edge. About 10 percent of the stone was dressed—a piece of dressed stone refit with another from an upper fill layer outside the privy. While granite does not occur naturally near Block 4, in 1861 Charles B. Grant's granite yard was around the corner at 411 Folsom. He lived on the same block as his business, at 324 Fremont. The irregular pieces and the broken pieces of dressed stone were probably scraps from Grant's yard.

The purpose of the stone lining was likely to prevent over-digging by the night-soil man, who emptied the privy chamber when necessary. The privy's location may have warranted extra effort to ensure its longevity: the convenience of its proximity to the house or the limited space in the yard for a replacement privy may have influenced the method of construction. The additional expense to upgrade the privy is consistent with the house construction. Like the privy, the house itself was unique for Block 4. It was a story taller than any other residence on the block. It also sat back further from the street and had a bay window.

The original owner likely speculated that the nicer homes of Rincon Hill would extend downslope across Folsom Street. Instead, industry crept up the hill and the house at 240 Fremont became an anomaly. It was first surrounded in the rear by the diminutive worker's cottages on Baldwin Court, and later removed to make way for an expanding foundry.

The granite base of Privy 1326, shown here with the upper wood lining of the vault removed, was unique. The stone base would have prevented over-digging by the night-soil man when he mucked out once or twice a year.

Table 7.8. Collectibles and Decorative Furnishings by Feature

Block	Feature	Association	Date (ca.)	Category	MNI	Description
4	Privy 1300	Samuel and Smith families	1885	Collecting	8	Coral (4), Native American bowl, quartz crystal, shell (2; 2 species)
				Furnishings	6	Figurine (3), mirror (3)
4	Privy 1301	Taylor family	1870	Collecting	9	Coral (5), shell (4; 4 species)
				Furnishings	7	Beaded lampshade, figurine, mirror (2), pressed-glass shoe, vase/spill vase (2)
4	Privy 1303	Thompson family	1880	Collecting	3	Figurine, mirror, vase/spill vase
4	Privy 1304	Unidentified	1895	Collecting	1	Shell
				Furnishings	1	Vase/spill vase
4	Privy 1305	Fuchs and Cadigan families	1880	Furnishings	3	Figurine, mirror
4	Privy 1307	Brown family	1870	Collecting	1	Shell
				Furnishings	11	Figurine (4), hollow (2), mirror (3), vase/spill vase (2)
4	Privy 1310	McSheffrey household	1875	Furnishings	2	Mirror, vase/spill vase
4	Privy 1311+	Clark family	1870	Furnishings	3	Mirror, photograph/picture, vase/spill vase
4	Privy 1316	McEvoy family	1870	Collecting	1	Volcanic tuff
				Furnishings	3	Mirror (2), vase/spill vase
4	Privy 1318	Murphy family	1880	Furnishings	11	Mirror (4), photograph/picture (3), vase/spill vase (4)
4	Privy 1322	Hurley and Conniff families	1890	Collecting	1	Copper-alloy lump
4	Privy 1326	Amanda Scales and boarders	1875	Collecting	4	Coral, shell (3; 2 species)
				Furnishings	5	Figurine/vase, mirror (2), vase/spill vase (2)
4	Privy 1333	William Dougherty	1890	Collecting		Shell (8; 6 species)
				Furnishings	9	Figurine (2), photograph/picture, hollow (2), mirror (3), vase/spill vase
5	Privy 505	Mayne household, O'Connor family	1880	Collecting	3	Coral, shell (2; 2 species)
				Furnishings	3	Mirror

Table 7.8. Collectibles and Decorative Furnishings by Feature *(continued)*

Block	Feature	Association	Date (ca.)	Category	MNI	Description
5	Privy 507	Peel family	1870	Collecting	4	Coral, quartz crystal, shell (2; 2 species)
				Furnishings	8	Flower/fruit Stand, hyacinth vase (2), ceramic box lid, mirror (3), vase/spill vase
5	Privy 515	Fegan family	1880	Furnishings	1	Photograph/picture
5	Privy 516	Mary Peel	1880	Collecting	1	Shell
				Furnishings	2	Mirror, vase/spill vase
9	Privy 2	Johnson household	1880	Collecting	11	Coral (5), garnet crystal, shell (5; 3 species)
				Furnishings	6	Figurine (3), mirror, vase/spill vase (2)
9	Well 6	Dent and Hannan families	1895	Collecting	47	Coral (15), quartz crystal, obsidian biface, shell (28; 15 species), soapstone, tubular-shaped crystal
				Furnishings	7	Figurine, figurine/vase, novelty dish, mirror (2), photograph/picture (2)
9	Well 8	Rowe family	1885	Collecting	2	Coral, shell
				Furnishings	4	Bud vase, figurine, mirror (2)
9	Privy 9	Usher household	1880	Collecting	39	Coral (2), shell (37; 15 species)
				Furnishings	2	Figurine
10	Privy 801+	Sheridan family	1880	Collecting	13	Shell (2; 2 species)
				Furnishings	1	Figurine, mirror (2), vase/spill vase (3)
10	Privy 806	McIver and Martin families	1880	Collecting	1	Dover flint
				Furnishings	14	Figurine (3), figurine/vase, Jacob's ladder, beaded lampshade, ceramic box lid, mirror (2), photograph/picture, vase/spill vase (4)
10	Privy 807	Gee family	1869	Collecting	8	Coral (3), shell (5; 3 species)
				Furnishings	7	Dish, figurine, mirror (2), novelty dish, photograph/picture, plaque
10	Privy 808	Schreiner, Johnson, Degnan, McIntyre families	1880	Collecting	8	Coral, shell (7; 5 species)
				Furnishings	19	Figurine, beaded lampshade, mirror, photograph/picture (4), vase/spill vase (12)
10	Privy 810	Monahan family and tenants	1880	Furnishings	5	Figurine, mirror, photograph/picture, vase/spill vase (2)

Table 7.8. Collectibles and Decorative Furnishings by Feature *(continued)*

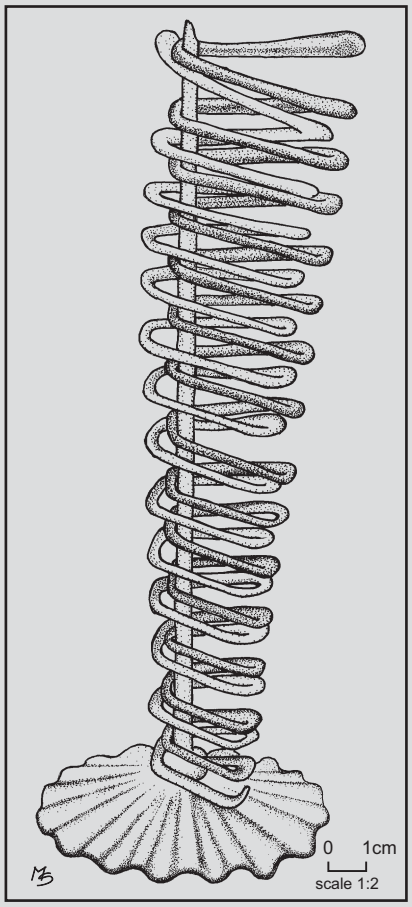
Block	Feature	Association	Date (ca.)	Category	MNI	Description
10	Privy 812	Maloney family; Hill and Towne household	1880	Collecting	1	Obsidian flake
				Furnishings	5	Figurine (2), beaded lampshade, mirror (2)
10	Privy 813	Moynihan family and tenants	1880	Furnishings	5	Figurine (2), mirror, photograph/picture (2)
10	Privy 814	Aaron family	1875	Furnishings	1	Vase/spill vase
10	Privy 849	Strauss household	1870	Collecting	3	Shell (3; 2 species)
				Furnishings	3	Jacob's ladder, mirror, vase/spill vase
10	Privy 851	Metcalf household	1870	Collecting	3	Coral
				Furnishings	4	Figurine (3), figurine/vase
10	Well 853	Baker family	1872	Collecting	24	Petrified wood, shell (22; 10 species), water-worn ceramic
				Furnishings	6	Bud vase, Jacob's ladder, mirror, vase/spill vase (3)
10	Privy 857+	Dolan and Michelson families	1880	Collecting	29	Coral, shell (28; 10 species)
				Furnishings	6	Display knife, figurine, Jacob's ladder, beaded lampshade, mirror, vase/spill vase
10	Well 866	McDonald and Tobin families	1884	Collecting	4	Quartz crystal, shell (3; 2 species)
				Furnishings	8	Figurine (3), pressed-glass hat, mirror (2), vase/spill vase (2)
11	Privy 1600+	Donnelly and Beal families	1880	Collecting	20	Coral, shell (19; 7 species)
				Furnishings	13	Pressed-glass basket, figurine (2), figurine/vase, hollow, Jacob’s ladder, mirror (2), photograph/picture (3), vase/spill vase (2)

JACOB'S LADDER

Erica S. Gibson

Glass whimsies, novelties, end-of-day items, or friggers (as they were called in Great Britain) were glass oddities made by individual glassmakers during their spare time or at the end of the day. As a demonstration of a glassmaker's skill, these handmade items were typically meant to be given to family and friends, though they could be sold as well. Limited by only the glassmaker's imagination and expertise, whimsies took almost any shape possible; blown hats and shoes, swans, pigs, sailing ships, Jacob's ladders, canes, chains, pens, rolling pins, bells, and stocking darners, to name but a few.

While some of these handmade items required a fair degree of skill (e.g., sailing ships and chains), the delicate and fragile spirals of the Jacob's ladder (see illustration) were deceptively easy to make. The glassmaker would pull a thread of molten glass and spirally wrap it around a glassmaker's tool, the pincers. Once the glass cooled, the pincer prongs were opened and the ladder was released (Hajdamach 1991). When placed on its pedestal, shaped like a wine glass stem and foot, the ladder could be pressed down slightly and then released so that it would spring up and down—the thinner the coils, the longer the ladder would bounce.



During the second half of the 19th century, the larger glass factories began to realize the commercial potential of these whimsical items and began making novelties and tourist souvenirs to be displayed at exhibition and to be sold. These objects included covered glass dishes in various shapes, pressed-glass hats (see photo inset) and shoes, novelty glass containers for candy, and pressed-glass vases and toothpick holders in the shapes of baskets, umbrellas, houses, cannons, and animals.

In the early days of San Francisco, when there were no local glassworks, bottles were a scarce and costly commodity. Typically, bottles were brought in from the East Coast around the notorious Strait of Magellan at the southern end of South America. It was not unusual to lose as much as half a shipment to breakage (Hinson 1995). Seeing a need, in the late 1850s Francis Cutting and his partner set up one of the first glassworks, Baker and Cutting. This endeavor was short-lived, however, and San Francisco continued without a true glasshouse until 1863, when the Pacific Coast Glass Works began production.

In 1865 Carlton Newman of Pittsburgh, Pennsylvania, and Patrick Brannan, a glass blower from Pacific Glass Works, founded the San Francisco Flint Glass Works. The single-furnace factory was located on Townsend Street between Third and Fourth streets. Destroyed by fire in 1868, the plant was rebuilt as the San Francisco Glass Works adjacent to the old factory on Fourth Street between Townsend and King streets. This newer plant began production in 1870 after a two-year hiatus. In 1876 San Francisco Glass Works purchased Pacific Glass Works and consolidated into a single company. By 1883 the new, larger company—in desperate need of additional space—had purchased land at Seventh and Townsend streets and built a new factory (McGuire 1983). Both of these plants were located

This decorative blue pressed-glass hat was recovered from the McDonald and Tobin family's deposit (Well 866). This ornamental novelty item may have been used as a toothpick or match holder or simply placed in a window to catch the sun.

a short walk from West Approach Project Blocks 10 and 11, just two blocks north.

At least five different Jacob's ladders and one pressed-glass hat were recovered from West Approach features, one from Block 11 and the remainder from Block 10. Deposited between 1872 and 1884, the features are associated with a diverse group of residents, none of whom worked at the glassworks: a Scottish stevedore, an English merchant, a wharfinger, an Irish shipping clerk, a Norwegian sea captain, a German butcher, an Irish blacksmith, a Scottish gold miner, and an Irish laborer. The whimsical novelties would have been a decorative addition to any parlor and were probably received as gifts or purchased from neighbors who worked in the factories.

The collection requiring the greatest investment of time and money is no doubt that of amateur taxidermist Jonathon Peel (Privy 507), who lived at the edge of Rincon Hill (see Stoyka, this chapter). By far the most frequently collected item, however, was shell followed closely by coral. John Usher and his family on Block 9 (Privy 9) kept an eclectic assortment of shell, with exotics including Black-lipped pearl oyster, Burnt dove, Coquina, Little Arabian cowry, Money cowry, Spiny cup-and-saucer slipper, and Spiny slipper. These shellfish were not locally available and had ranges that included the Indo-Pacific, New York to Florida, northern Mexico, southern California to Chile, and western Central Mexico. John worked as a sailmaker and probably spent much time at sea. Other households had equally impressive quantities of shell, but no other household had this variety of non-native shellfish. Crystals of various types were recovered from several deposits. Whether garnet, quartz, or simply oddly shaped, they would have added a touch of sparkle to interior decor. Like people today, 19th-century residents liked to pick up and keep Native American artifacts and other rarities. A single obsidian biface fragment along with two crystals and a piece of soapstone were recovered from the Dent and Hannan household on Block 9 (Well 6) and a Native American earthenware bowl, possibly a tourist item from the Southwest, was found in Privy 1300, associated with the Samuel and Smith families. Other unusual items included volcanic tuff from Privy 1316, associated with the McEvoy family, and petrified wood from Well 853, associated with the Baker family.

In addition to collectable items, every West Approach residence had some sort of decorative household furnishing, even if only a mirror. Photographs and hanging pictures were also popular. Decorative spill vases would have been used to hold long matches or paper rolled to form the long slender rolls, called spills, used to light lamps. Other vases, including bud vases and hyacinth vases, would have brought a bit of floral color and possibly aroma into the house. Figurines of porcelain and other fabric, and pressed glass pieces formed in the shape of shoes, hats, and the like, would have been placed on shelves for display. Beaded lampshades, blown-glass novelties like Jacob's ladders (see sidebar), and various kinds of bric-a-brac (Figure 7.5) would have helped to achieve the desired look of decorative abundance that characterized 19th-century parlors.

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TAXIDERMY – BLOCK 5, PRIVY 507

Michael Stoyka

Taxidermy dates at least as far back as dynastic Egypt. Animal skins have been treated and preserved by different cultures for a multitude of reasons, from creating hunting trophies to preserving animals or humans for the afterlife. West African gorilla skins were brought back to Carthage as early as 5 B.C., and fantastic stuffed-animal "scenes" were being produced in Europe through the 17th and 18th centuries. It was not until the 19th century that the practice of taxidermy reached the level of an art, both in terms of refinement of technique and in its recognition as a worthy pursuit by both the scientific community and the general public. This time period constitutes the birth of the "modern" era of stuffing animals.

> In nothing has the growing taste for natural history so much manifested itself, as in the prevalent fashion of placing glass cases of beautiful birds and splendid insects on the mantelpiece or the side table. The attention of the most indolent is attracted, the curiosity of the inquisitive awakened [Allen 1994].

Victorian sensibilities and aesthetic took the preparation and display of preserved animals to a new level. There was a new interest in the study and taming of the natural world. The collecting of shells, fossils, minerals, and taxidermy specimens became a culturally approved form of recreation (Logan 2001:144). Numerous publications were produced on the execution of these activities in both the United States and Britain, and on the methods of displaying and organizing the bounty that resulted. Examples are Daniel Beard's (1882) *The American Boy's Handy Book: Turn of the Century Classic of Crafts and Activities;* Montagu Browne's (1884) *Practical Taxidermy;* and A. Hyatt Verrill's (1913) *Harper's Book for Young Naturalists.* While these pursuits involved the study of natural history and the exercise of a rational (masculine) skill (Grier 1997:99), they were also being touted as hobbies for young ladies that carried a high level of cultural prestige (Logan 2001:147). The average set of tools and equipment to indulge in this activity would cost about $5.00 and were available at dealers and purveyors of taxidermy supplies (Verrill 1913:32); taxidermists Ferdinand Gruber at 626 California and E.F. Lorquin at 522 Pine were listed in the 1869 San Francisco city directory.

There were many ways to acquire animal mounts without actually having to do the task oneself. Many larger pet stores in major American cities performed taxidermy by request (as a memoriam for pets) or stuffed and sold birds that had died in the store (Grier 2006:242). Instructions were given on the acquisition of carcasses.

> Many of your bird specimens will no doubt be obtained from hunters and friends who shoot them while hunting, while many birds of prey may be secured from farmers, who, as a rule, kill every hawk or owl they see within gunshot, and are very willing to turn them over to boys who want them [Verrill 1913:52].

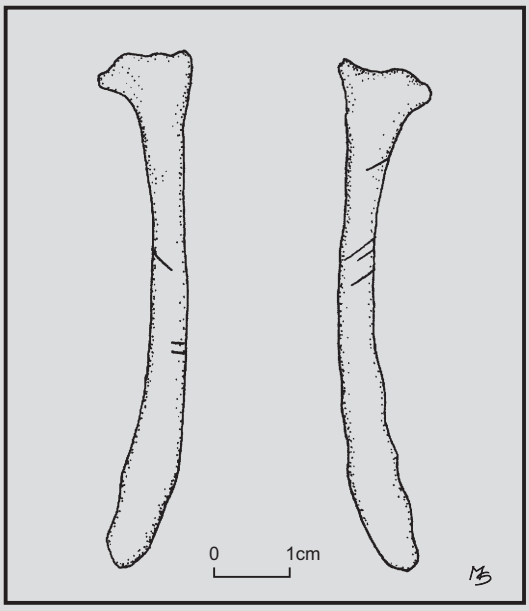
An individual who wanted to dispatch the animal himself, baited traps with a dead bird or mouse to catch owls and hawks, while blue jays, blackbirds, and doves were caught in box traps (Verrill 1913:53).

Privy 507, located at 540 Folsom Street at the edge of Rincon Hill, provided surprising faunal evidence of taxidermy. The myriad datable items from this feature place the TPQ in the early to mid-1870s and associate the property with Jonathon Peel, Sr., who owned three San Francisco lots, including this one where he and his wife resided from 1856 to their deaths in 1871 and 1878, respectively. The 1860 population census lists Peel as a 45-year-old brewer living with his wife. At that time their net worth was listed at about $2,000 in real estate and personal property. A decade later the census listed Peel as a real-estate agent and retired merchant with a net worth of $30,000 in real estate, and $20,000 in personal property (U.S. Census 1860, 1870), showing he had done quite well for himself. Mr. Peel had a prominent uncle in England: Sir Robert Peel was British Prime Minister from 1834 to 1835, and 1841 to 1846 (Sherman 1898). By all accounts, Mr. Peel had the opportunity to become familiar with the height of Victorian material culture and décor on both sides of the Atlantic.

One of the striking aspects of this collection is its diverse avifauna, one of the most diverse avian lists of all the features analyzed from Oakland and San Francisco. Many non-traditional birds were consumed as food items in California's 19th century, and many popular cookbooks from the period have recipes for the preparation of songbirds. Including domestics, 35 individual birds from 23 species are represented (see table). Combined, the avian elements identified account for 47.6 percent of the total NISP. Additionally, 11 more general bird categories were used for some specimens; these groupings include indeterminate elements likely from already identified species, as well as elements that defied specific identification and may represent additional unusual species.

The presence of an extensive number of game birds may indicate hunting for sport or for holiday meals, though some of these animals would have been easily available in local markets. None of the avian elements studied bore any marks that could have been created by firearms. A pistol and 5 lead-shot pellets are the only artifacts of this nature recovered from this feature. The lead-shot have measurements of 1/16 inch and 1/8 inch, consistent with use in a shotgun shell.

With the birds removed that are more likely candidates as food items—such as chickens, turkeys, ducks, quail, and doves/pigeons—there remains a list of 20 very diverse birds.



A mated pair of scapulae from a Rhinoceros auklet *(Cerorhinca monocerata)* with cut marks from a knife.

A contemporary photo of a pet Lilac-crowned parrot. The remains of one found in Privy 507, bore evidence of preparation for taxidermy. The bird may have been a deceased pet, or could have been prepared for display after its demise at a pet store. (Image – Wikipedia 2007)

Butchering evidence consistent with technical steps in taxidermy helped identify the reason for these birds' presence. Elements from Barn owl, European starling, Western meadowlark, Long-billed dowitcher, Greater roadrunner, Common snipe, Rhinoceros auklet, warbler, and the Lilac-crowned parrot all have butchered marks. Additionally, the butchered elements from several birds that could not be readily identified after exhaustive attempts at the California Academy of Sciences Ornithology Department suggest the presence of more exotic species.

The Lilac-crowned parrot is a rare occurrence. The presence of a cut to break on the coracoid of the parrot suggests that the animal was not simply a pet. This bird is a native to Mexico and is only rarely observed nesting in the San Gabriel Mountains of southern California, according to contemporary ornithological sources. Store-bought parrots from this period were expensive (Grier 2006:50). An author on a book about pets noted that, "from the number of these birds that find their way into the hands of a taxidermist, we may be sure that a good percent of them do not live the allotted years of Parrot-life" (Earl 1894:101). All the other birds can be found seasonally or year round in the San Francisco Bay

Privy 507 – BIRDS REPRESENTED IN FAUNAL REMAINS
540 Folsom Street (West Approach Block 5)
Jonathan Peel Sr. Family

Common Name	Scientific Name	NISP	MNI*	MW (lbs.)	Evidence of Taxidermy	Possible Taxidermy
BIRDS						
Domestic Poultry						
chicken	*Gallus gallus*	77	7	14		
turkey	*Meleagris gallopavo*	3	1	15		
chicken-like (prob. baby chickens)	Galliformes	6	4			
Game Birds						
Northern pintail	*Anas acuta*	5	2	4		
Green-winged teal	*Anas crecca*	3	2	2		
Bufflehead	*Bucephala albeola*	2	1	1		
California quail	*Callipepla californicus*	5	1	0.5		
Mountain quail	*Oreortyx pictus*	15	2	1		X
Rock dove (Domestic pigeon)	*Columba livea*	6	2			X
Band-tailed pigeon	*Columba fasciata*	7	2			X
Incidental Birds						
Rhinoceros auklet	*Cerorhinca monocerata*	9	1		X	
Stellers' jay	*Cyanocitta stelleri*	5	3			
Greater roadrunner	*Geococcyx californianus*	28	4		X	
Marbled godwit	*Limosa fedoa*	2	1			
European starling	*Sturnus vulgaris*	13	2		X	
Western meadowlark	*Sturnella neglecta*	15	2		X	
Northern mockingbird	*Mimus polyglottos*	5	1			
Common snipe	*Gallinago gallinago*	31	3		X	
Greater yellowlegs	*Tringa melanoleuca*	1	1			
Virginia rail	*Rallus limicola*	3	1			
Barn owl	*Tyto alba*	8	1		X	
Long-billed dowitcher	*Limnodromus scolopaceus*	10	2		X	
Dowitcher	*Limnodromus* (*griseus or scolopaceus*)	3	1			
Exotic Birds						
Lilac-Crowned parrot	*Amazona finschi*	4	1		X	
Indeterminate Birds						
large duck	*Anas* sp.	1				
small duck	*Anas* sp.	3				
grouse	Phasianidae	3	1			
pigeons and doves	Columbidae	2			X	
magpie	*Pica* sp.	23	2			
warbler	*Dendroica* sp.	14	3		X	
size of California towhee	Passeriformes	8	1		X	
size of Common yellowthroat	Passeriformes	4	1		X	
size of starling	Passeriformes	1			X	
indeterminate bird	Aves	111			X	
TOTAL BIRDS		436	56	37.5		

*Categories without MNI's are elements that are likely already counted in other more specific ID's.

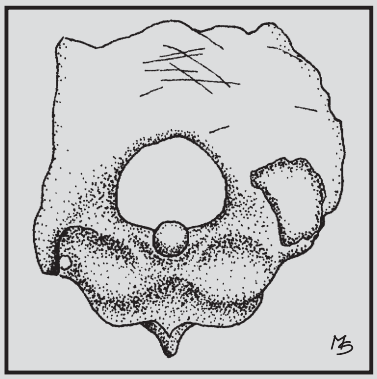
These humerae are broken in a way that is common to specimen preparation for taxidermy. Clockwise from top left: Barn owl *(Tyto alba)*, Western meadowlark *(Stenella neglecta)*, Greater roadrunner *(Geococcyx californianus)*, and Common snipe *(Gallinago gallinago)*. [not to scale]

Area. The mountain quail can be found in the coastal range north of the Bay Area, as well as in the mountains of Santa Cruz. The roadrunners, though infrequent today, were abundant in the East Bay hills and the North Bay.

The butchering evidence is quite compelling. A total of 80 cuts were observed on the above-mentioned species that include knife scores, cuts, cut-to-breaks, and impact fractures. The most common of these cuts are those that effect the dividing of the humerus. Eighty-one percent of all the cuts identified on these animals were in this location. A description of one of the early-stage steps in preparing a specimen states, "hold the left-hand wing with the left hand, and with the fingers of the right hand break or disjoint the bone of the wing as close to the body as possible, *i.e.*, across the 'humerus'" (Browne 1884:94). The same text also says, "Large birds may have their wings broken at the humerae by striking them with a stick or hammer" (Browne 1884:94), resulting in an impact fracture.

The impact fracture of a tibiotarsus from a Long-billed dowitcher has technical support as well. This element is frequently cut or broken to allow for the skinning of the legs. Instructions can be found for "pushing the skin of the leg up so you can cut the bone with scissors" (Browne 1884:105), and "(in practice, it will be found that retaining the full length of this bone—the tibia—is not desirable for subsequent operations; it may therefore be advantageously shortened by one-half)" (Browne 1884:100–101).

The butcher marks on the occipital portion of a barn owl's skull are also indicative of taxidermy. During the skinning process, it is necessary to make cuts in and around the skull to successfully claim that portion of the carcass for later mounting. In fact only a small portion of the skull is ultimately retained for the final specimen, and a successful mount can be accomplished without these elements altogether (Browne 1884:112). Butchering marks on a skull could reflect an attempt to remove the brain from the animal. Instructions are given to "sever the skull from the neck at the occipital to expose the brain for removal without cutting too much off at the base of the cranium, the shape of which is wanted for subsequent operations" (Browne 1884:97).



This barn owl *(Tyto alba)* skull exhibits cut marks on its occipital portion that are consistent with preparation for taxidermy (scale 1:1)

Another interesting comment on the procedure relates to birds such as ducks, woodpeckers, and raptors that have heads so large that the skull cannot be turned through the neck.

> In such cases skin to the base of the skull. Cut off the neck, and turn skin back into place. Make an incision through the skin along the back of neck from base of skull for an inch or two down the neck, and turn the skull through this opening [Verrill 1913:46].

Additionally, one indeterminate distal humerus with an impact fracture has a perforation through which a piece of corroded metal wire protrudes. The use of wire is a common convention in positioning the bird for perching or the desired attitude of the wings. Stated quite simply, "In setting up a bird we require the use of wires" (Browne 1884:106). A breakdown of the appropriate gauge of wire for various species follows: 26–28 for hummingbirds, 24 for small warblers finches and canaries, 21 for small birds including the hawfinch, 19 for thrushes and starlings, 19 for landrails and pigeons, 13 for parrots and owls, and finally 12 will do for larger hawks (Browne 1884:106). The technical procedure for wiring a bird is well documented in taxidermy manuals. In most cases, where the wings are being held in place, a wire is inserted down the length of the broken humerus.

Some examples of an additional category of artifacts found in Privy 507 may have a connection with preparing and mounting birds. Dozens of straight pins were found from several fill contexts

This humerus from an undetermined bird displays a wire protruding from its distal end. Wire was frequently used in taxidermy to form and hold the wings' position for display.

within the privy. Pins and needles are nearly always associated with the activity of sewing, but are also tools in taxidermy preparation. The pins can be used to hold a skin down or away from the site of active cutting while de-fleshing the subject. Straight pins were also used to hold key elements of the bird—such as the head, tail, and wings—in place to secure the ultimate position of the animal (Verrill 1913:43, Figures 25–29).

This Elephant seal *(Mirounga angustirostris)* canine tooth probably represents a collected item or "pocket piece."

Additional "Victorian naturalist" items from Privy 507 include a single left canine tooth from an Elephant seal (*Mirounga angustirostris)*. The Elephant seal canine is unusual and appears to be a collected item, or "souvenir." The surface of the tooth exhibits some wear and polish, as if it might have been handled frequently—perhaps kept in a pocket. A quartz crystal, non-native seashells, coral, and other collected or decorative items contributed to the ambiance of the interior of this residence.

Playing the harmonica was a pleasant pastime for several families. Harmonica slats were recovered from the Donnelly household (Privy 1600+), the McIver household (Privy 806), the Dent/Hannan household (Well 6), and the Murphy family (Privy 1318). In addition to the harmonica, the Samuel and Smith families (Privy 1300) also enjoyed playing the piano, as evidenced by the recovered piano-wire tightener and piano hammer. Near Rincon Hill, the Usher household (Privy 9) enjoyed the most varied musical entertainment. The recovery of mouthpieces for either a flute or piccolo and a small horn instrument (perhaps trumpet or trombone) and a probable guitar peg suggest that the family may have made music together.

Figure 7.5. This delicate, carved-cork basket was recovered from the Usher household on Block 9. Small enough to have been used in a doll house, this basket may well have decorated a small nook on a shelf.

REUSE, REPAIR, OR DISCARD?

Not all artifacts were simply discarded; some were reused, others were repaired, and still more traded or bartered away. Clothing provides the most ready examples of reuse and repair. Occasionally garments were carefully taken apart and refashioned into more up-to-date styles, or they were sized down for smaller individuals (see Psota, Chapter 5), while scraps of fabric have been used for bundle ties, doll clothes, or dishrags. Often garments and footwear were repaired for continued use.

Other than clothing, only one artifact—a chamberpot—from the project area demonstrated clear evidence of repair. The Donnelly and Beal families lived on Block 11 in 1880. Between the two families there were 12 children ranging in age from 1 to 12. With so many children, it is not surprising that they endeavored to mend a hole in the base of a small chamber pot with a hard white substance (Figure 7.6). The otherwise intact vessel was discarded with other items when the families moved away around 1880.

Figure 7.6. The only example of a repaired ceramic item from the West Approach Project, this children's chamber pot was recovered from the Donnelly and Beal privy deposit (Privy 1600+) on Block 11.

Clear evidence of reuse is often difficult to detect. For example, a red earthenware bean pot, filled with a black tar-like substance, was recovered from Privy 807. At some point during the Gee family's tenure at 123 Perry Street, remodeling or some sort of construction was taking place on the lot. The lidded pot may have been used to hold adhesive materials during this phase and later tossed out.

PRINTER'S TYPE – A NARRATIVE

Erica S. Gibson

Typeface plate for a book cover (Well 853) with a close-up of the of the finished product, the *San Francisco Business Directory and Mercantile Guide 1864–65*

Stephen Baker[1] had had a good day. His new job as a police captain took him to City Hall every day now—no longer did he have to walk a beat. At lunchtime he had gone out and spent some time perusing the book and print shops along Sansome Street in the commercial area of town. There were a number of such establishments and he had quite an enjoyable stroll.

Just last week he had met a couple of his neighbors, both printers. Alexander Crabb lived just down the street at 122 Silver and Bill Taylor on Perry Street, the block behind.[2] Stephen had been fascinated to learn how the printing plates were made. Apparently the process was based on the use of a Galvanic or voltaic cell. The idea seemed simple enough; placing two different metals in an acidic solution created an electric current, where one metal became the anode (positive charge) and the other metal the cathode (negative charge). When current was supplied to the cell, the cathode became the part to be plated and the anode supplied the plating metal.

The actual procedure was far more cumbersome. A wax mold was made of the composed type and the mold was covered with a thin metallic coating, often black lead or graphite. The mold was placed in a tank along with a metal plate and filled with an acidic solution of copper sulphate and sulphuric acid. Once current was applied, a hard metal shell formed over the mold. To make the printing plate, the shell was cooled; the wax mold discarded, and melted lead poured into the metal shell. The plate was then attached to wood for printing (Green 2006).

Alexander and Bill had been working on single-run production items, most notably the *San Francisco Business Directory and Mercantile Guide for 1864–1865*, published by B.F. Stilwell & Co. (see photo inset) Rather than melt down the old plate, they had kept several, along with miscellaneous pieces of individual type and punctuation.[3] Stephen was not sure what they planned to do with them but thought they would be fun for the kids—Jennie, George, and William—to play with, or maybe they could be melted down for another use. He might even persuade his wife, Louisa, that they could be shined up and put on display in the parlor. The men were happy to share.

This evening on his way home, Stephen had run into Alexander and Bill and they gave him a nice assortment. Among the stash were advertising plates for the Pacific Hardware Agency, at the corner of Sansome and Pine streets, and for B.P. Moore & Company at the same intersection.

1. Information on Stephen Baker and his family comes from U.S. Census (1860, 1870, 1880), Tap Record (1861), City Directories (1861–63, 1864–67, 1869, 1871); Voter Register (1866, 1867). This information is presented on the Documentary Research Table in the Block Technical Report (BTR) for Block 10.

2. Residence and profession information on Alexander Crabb and William Taylor comes from the Voter Register (1867).

3. Printer's type plates were recovered from Well 853. They are pictured and described under that feature in the Block 10 Block Technical Report.

Cover and sample page from the *San Francisco Business Directory and Mercantile Guide 1864–65*

Coincidentally, not more than a month earlier, Louisa had been to Moore's store looking for some new furniture for the house. At least one of the other plates was for a new map of Sonora, Chihuahua, Sinalo[a]–Durango, and Lower California published by A. Gensoul. He had heard of Adrien's work but never met the man; maybe he'd have to take a look at this new map. Stephen continued on his way home, humming away as he thought of how tickled Louisa and the kids would be with his finds.

Chinese brown-glazed stoneware vessels, typically used to package and ship Chinese foods and liquors, were not likely purchased for their contents by non-Chinese. In households lacking Chinese servants, the presence of these containers most likely represent reuse. Barrel jars—typically used to hold sheet sugar, rice, or whole soybeans—were recovered from West Approach features associated with the Taylor family (Privy 1301), the Metcalf family (Privy 851), and the Donnelly and Beal families (Privy 1600+). These large jars would have been suitable for storage of a multitude of items for these Euroamerican households. Smaller Chinese brown-glazed stoneware vessels and lids, most used for foodstuff storage, were recovered from across the project area and could have been reused in similar ways (Table 7.9). Like the possible southwestern pottery mentioned above, these unique items would have added an exotic touch to room decor.

Scrap materials might have been sold to the local junk dealer or store. As late as 1927, James Roxburgh recalled "the youngsters of that time, who used to gather scrap iron, bottles, rags, and old bones to sell, so they could go to Morosco's [theater] on Sunday" (1927b:15). Likewise, households often purchased goods for their homes from these same junk dealers. John and Margaret Brown and 7 of their 10 children lived at 13 Baldwin Court during the 1860s and early 1870s. Their eldest son, James, worked at a junk store and undoubtedly brought items from there for use at home.

Like the San Franciscans of today, 19th-century South of Market residents were a resourceful lot. Whether they caught their dinner, raised their chickens, grew their vegetables, canned their fruit, mended their clothes, or otherwise furnished and decorated their homes, they had a hand in adapting their surroundings to improve their lot.

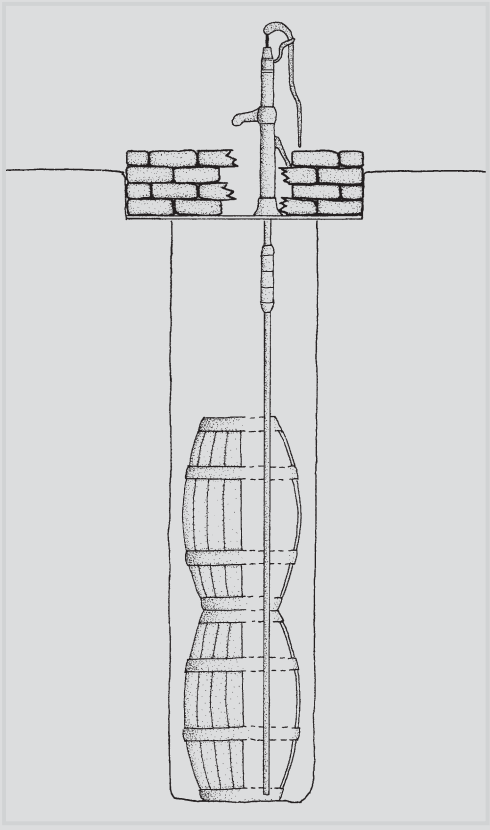
Table 7.9. Chinese Brown-glazed Stoneware

Block	Feature	Association	Date (ca.)	Barrel Jar	Hollow	Jar	Large Storage Vessel	Lid	Small Storage Vessel Lid	Wide Mouth Jar	Wide Mouth/ Spouted Jar
4	Privy 1300	Samuel and Smith families	1885		2						
4	Privy 1301	Taylor family	1870	1							
4	Privy 1333	William Dougherty	1890								1
5	Privy 505	Mayne household, O'Connor family	1880				1				
9	Well 6	Dent and Hannan families	1895					1			
9	Privy 9	Usher household	1880					1	1		
10	Privy 806	McIver and Martin families	1880					1			
10	Privy 808	Schreiner, Johnson, Degnan, and McIntyre families	1880							1	
10	Privy 810	Monahan family and tenants	1880								1
10	Privy 851	Metcalf household	1880	1							
10	Well 853	Baker family	1870				1				
10	Privy 857+	Dolan and Michelson families	1880			1					
10	Well 866	McDonald and Tobin families	1885		1			2			
11	Privy 1600+	Donnelly and Beal families	1880	1	1						

WELL MECHANISMS

Michael D. Meyer

Two wells encountered during the West Approach Project contained remnants of their water-retrieval mechanisms. Well 6 on Block 9, constructed around the early 1860s, had a 1-inch-diameter pipe standing vertically from the bottom of the well. Water was drawn from the well using a pump, probably operated by hand, as the available space would not have allowed a windmill. Well 6 was also interesting for its construction. It was wood-lined. While there were no lining remnants in the upper portions of the feature, the bottom was lined with two stacked wooden barrels (see illustration), whose wooden hoops were held in place with cut nails. The barrels were each just over 3 feet in diameter and about 4 feet tall. Numerous bricks found in the upper fills may have come from the headwall to prevent people, pests, and detritus from falling into the water supply.



A schematic diagram of the Well 6 pump mechanism based on the archaeological evidence. The well was actually over 20 feet deep with two stacked barrels lining the bottom, and a lead pipe to draw water. (illustration by M. Stoyka)

Well 866 on Block 10, was built around the late 1850s. It contained a post, pulley, and chain, such as are used for drawing water by hand (see photo). These pieces are part of a chain-pump that drew water up within a 2-inch-diameter pipe. The disk-chain, or button-chain, consists of a chain with a metal flange and leather gasket at 15-inch intervals. Presumably a crank mechanism was used to pull the continuous loop of chain through the pipe, where the gaskets prevented water from dropping back into the bottom of the well. A spout or drain at the top of the pipe would have directed water into a catch basin or vessel at the surface as the chain continued its loop to draw more water.

The pipe found in Well 6, presumably attached to a hand pump, is interesting for having been found in a hand-dug well, since the pipe would have fit in a bored well of significantly smaller diameter. The pipe and pump may have been a later conversion from a hand-drawn bucket and pulley system. Both the pump and the chain system in Well 866 were commercially produced equipment for the age-old task of hauling water. As the city matured and municipal infrastructure—such as water systems—was expanded, there was a decreasing need for household wells. In the 1861 city directory, there were two listings for well diggers. In 1869 there were none.

This post, pulley, and chain were discarded into Well 866 when it was abandoned (Block 10).

CHAPTER 8

ETHNICITY AND SOCIOECONOMIC STATUS

ADRIAN PRAETZELLIS

DISENTANGLING THE INFLUENCES?

San Francisco's South of Market district was a stew of nationalities, rich and poor and those in between. Our archaeological collections were used and discarded by people from Canada, England, Scotland, France, Ireland, Norway, Germany, Poland, and Australia, as well as native-born Americans from the northeast to the Deep South. The wealthy Peel family's home on Folsom Street was not far from low-rent Baldwin Court where the Murphys made their home behind the iron foundries.

How were these peoples' lives affected by their social position, their wealth, and their ethnicity? Was a family's social class or their ethnic background the more important factor in their material wellbeing? To what degree did people retain traditional mores and how did families integrate them with the era's popular culture? One goal of this chapter is to see if we can disentangle the influences of ethnicity from those of socioeconomic status; to make independent assessments of the relative power of these forces in peoples' lives and in creating neighborhoods and cities. It is only possible to make this attempt through statistical analyses conducted by Bruce Owen, whose work constitutes Appendix F. This chapter incorporates some of Owen's conclusions and statistically derived confidence levels (where 5% is the highest level of confidence), although he may not agree with some of what I suggest are implications of these data.

WHAT ARE ETHNICITY AND SOCIOECONOMIC STATUS?

Part of the archaeologist's job is to describe and explain peoples' behavior in the past: why they did what they did. This task is made more interesting—and complicated—by the heterogeneity of past societies. Ethnicity and social status are two categories that social scientists use to tackle the problem of how to divide people up in order to study them. Sometimes people divide themselves up into these categories by their actions, such as choosing to live in ethnically uniform neighborhoods. Sometimes social scientists place them into constructed categories when, for example, they decide that a family is 'lower-middle class.' Either way, our goal is arrive at useful distinctions that reflect peoples' lived experience as well as the larger patterns that we call culture and society.

Ethnicity

One's ethnicity is not a fixed characteristic. Rather it is a dynamic combination of place of nativity, religion, cultural mores, sometimes phenotype (one's outward appearance), and a host of other attitudes and behaviors, each of which may assume more or less significance in a given social situation. Since all the subjects of our study are dead, there's no asking them to self-identify their ethnicity. Instead we must rely on what others said of them. Each decade enumerators for

the U.S. population census asked people their place of birth and recorded their 'race,' providing a wealth of data if we are prepared to accept these and other facts as proxies for ethnicity.

Socioeconomic Status

Karl Marx assigned individuals to social classes by their ownership and control over the means of production. This approach was useful for his purpose of encouraging revolutionary change. Our goal, being more analytical than radical, requires a different concept: socioeconomic status. A group of people with similar income, educational level, and occupation (and occupational prestige) are said to have a similar socioeconomic status ('status'). As these individuals tend to associate and identify with each other, we might say that people experience their class through their status. Like ethnicity, status is a dynamic process that may change over one's life course. Its robustness and usefulness to social scientists is largely a function of this complexity. And as in their studies of ethnicity, historical archaeologists assign the people whom we study to various status categories through proxies derived from official records. Here we use occupation and relative wealth as proxies for status.

ETHNICITY: THE IRISH AND THE JEWS

Irish and Jews

This section continues the Irish/Jewish comparison begun in Anne Yentsch's essay "Tracing Immigrant Women" in Chapter 4. Of our 43 archaeological collections, 18 are from Irish and 4 from Jewish households. On their faces, the two groups are not strictly parallel: 'Irish' is a nationality whereas nativity is irrelevant to one's status as a Jew. The categories are linked by the concept of ethnicity, that is, a sense of shared group identity. Of course, these categories are broadly drawn and undoubtedly mask many subtle intergroup distinctions. The Jews in our sample, for example, would have identified as either Ashkenazim (Eastern European) or Sephardim (Mediterranean) depending on the regional origin of their ancestors; Sephardim like the Martins may have looked down on the Polish Aarons.

Although Irish immigrants' first identification was also to region within the mother country, like Jews they were seen as members of a monolithic group by outsiders. Jews and Irish were both looked down upon by many white native born Americans. Brett Harte pointed out a subtle emic distinction "'Twixt Ebrew and Jew" in an 1877 poem. The former, he asserts in "That Ebrew Jew," are businessmen who are socially acknowledged by gentiles out of self-interest. The latter group, being poor, is always despised—including being denied accommodation at the Grand Union Hotel that Harte satirizes for the policy:

> *Never a Jew*
> *Who's not an Ebrew*
> *Shall take up his lodgings*
> *Here at the Grand U.*
>
> Bret Harte, 1877
> [cited in Michael 2005:111].

While the practice of "No Irish Need Apply" has been found to be more apocryphal than demonstrable (Jensen 2002), anti-Irish sentiment was high among certain groups especially in the northeast after the influx of immigrants following *An Gorta Mór* (the Irish Potato Famine) of the 1840s (see Figure 8.1). Irishmen were sometimes called *beystsimer* ('egg-men') in Yiddish

EDUCATION: A NARRATIVE

Erica S. Gibson

Mary Shore's earthenware plaque

Mary Shore put down the small earthenware plaque she used for quick calculations when she didn't have any paper handy. She rubbed her tired eyes.

It had been a long day for her and for her adopted daughter, Ida. They had spent the better portion of the past week ripping out seams and fashioning new garments for some of the Silver Street neighborhood's more affluent residents in preparation for the upcoming dance. Her back was sore from bending over the worktable and her fingers were stiff from sewing the small neat stitches that she was known for. Sitting up and stretching, she leaned over and picked up the McGuffey Reader her 12-year old niece was reading in school and perused its contents. The second reading selection caught her eye. She turned to the page and read.

The gay belles of fashion may boast of excelling
In waltz or cotillion, at whist or quadrille;
And seek admiration by vauntingly telling
Of drawing, and painting, and musical skill:
But give me the fair one, in country or city,
Whose home and its duties are dear to her heart,
Who cheerfully warbles some rustical ditty,
While plying the needle with exquisite art;
The bright little needle, the swift-flying needle,
The needle directed by beauty and art.

If Love have a potent, a magical token,
A talisman, ever resistless and true,
A charm that is never evaded or broken,
A witchery certain the heart to subdue,
'Tis this; and his armory never has furnished
So keen and unerring, or polished a dart;
Let beauty direct it, so polished and burnished,
And oh! It is certain of touching the heart;
The bright little needle, the swift-flying needle,
The needle directed by beauty and art.

Be wise, then, ye maidens, nor seek admiration,
By dressing for conquest, and flirting with all;
You never, whate'er be your fortune or station,
Appear half so lovely at rout or at ball,
As gaily convened at the work-covered table,
Each cheerfully active, playing her part,
Beguiling the task with a song or a fable,
And plying the needle with exquisite art:
The bright little needle, the swift-flying needle,
The needle directed by beauty and art.

Samuel Woodworth, "The Needle"
(in McGuffey 1879:67)

Well, if that wasn't apropos!

Mary Shore had moved in with her sister and brother-in-law a few years ago. Her sister, Mary L., had three children: two sons in their mid to late twenties and a daughter. The girl child had been something of a surprise, born more than a decade after the boys. When Mary moved in, she had of course brought Ida, and since then they had helped with the family's expenses by working out of the house as dressmakers.

It made Mary smile to think of what her niece (the third Mary in the house) was learning at the grammar school around the corner. In addition to the four R's—reading, writing, arithmetic, and recitation—she was being taught the values of hard work, thrift, and piety and, unlike the earlier versions of McGuffey's readers (the ones that she herself had used some 25 years ago), the new editions were less critical of other peoples and

their religions. And to Mary's mind this Christian tolerance was a good thing.

While her nephews worked, her young niece attended the Rincon Grammar School just down the street. At one time it had been co-educational but was now an all girl school with more than five hundred students (Feroben 2001). The Principal was Miss E.A. Cleveland. She was from New England, had been principal since 1875, and was active in teachers' meetings and conventions (Anonymous 1892). Many thought that Miss Cleveland was a perfect fit for the school, just the right mixture of sternness and fun.

Mary put the book back on the table and picked up a broken fragment of a slate writing tablet. This must have come from one of the younger girls at the grammar school, one practicing their letters perhaps. She could just make out the cursive name of Don (or might it be Donna?) in one corner above a series of initials scratched into the slate, one on top of the other. Below was a drawing of a house and on the back were what looked like railroad tracks. The child probably had been bored in class and whiled away their time with random doodles. Mary was proud of her niece, a good student who loved her studies and planned to move on to the intermediate school next year.

Mary Shore's slate tablet

With a sigh, Mary returned the tablet to the table, stretched her arms and returned to her work. With perseverance, she would finish this last dress tonight.

because the 'Ir…'-sounds rather like *ayer*, the Yiddish for egg; the pun also contains a sexual double entendre. Irish and Jews both experienced worldwide diaspora. Although 'old country' memories may have been mixed, as Yentsch has noted, immigrant families retained or discarded cultural patterns in a complex dance to retain a sense of stability while taking advantage of the opportunities offered by this unique time and place.

The Irish

Any study of the Irish in San Francisco must begin with Burchell's (1980) work that deals with the period 1848 to 1880. By 1880, he reports, one in three San Franciscans was first- or second-generation Irish (Burchell 1980:3–4). Working from archival data, Burchell comes to some important conclusions about this group's experience of life in the city that we can examine and test using archaeological data. These suppositions concern, among other things, the issues of living standards and cultural change. We examine these issues by comparing the group of collections associated with Irish and Irish-American households with that of other groups and with the population at large.

Cultural Change

"The San Francisco environment," states Burchell, "permitted the Irish family to flourish… Only a minority on either side felt the dangers to accommodation and demanded the extreme of culture purity;" as a result, Irish assimilation was "a generation ahead" of the rest of the United States (1980: 183–184). Contemporary historian John Francis Maguire wrote that "There is not a State in the Union in which the Irish have taken deeper and stronger root, or thriven

more successfully, than California" (1868:262). At the same time, one in six San Francisco Irish was a member of one or other Irish social organization (see short essay, this chapter).

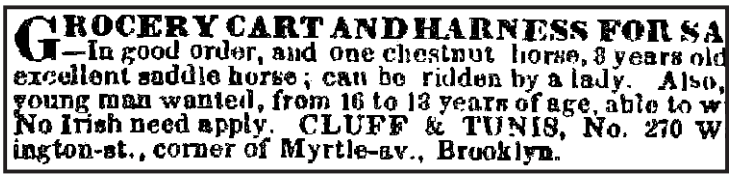

GROCERY CART AND HARNESS FOR SA
—In good order, and one chestnut horse, 8 years old
excellent saddle horse; can be ridden by a lady. Also,
young man wanted, from 16 to 18 years of age, able to w
No Irish need apply. CLUFF & TUNIS, No. 270 W
ington-st., corner of Myrtle-av., Brooklyn.

Figure 8.1. "No Irish Need Apply." Although anti-Irish sentiment was strong in the northeastern states, this clipping from the *New York Times* from 18 July 1855 is the only documented example of an advertisement that uses the phrase. It has been suggested that in San Francisco discrimination was not so pronounced, leading to faster cultural assimilation.

Archaeologist Stephen Brighton has written extensively about the Irish experience in America and the use of material symbols to convey Irish ethnicity (Brighton 2004). Working on data from the northeast and relating to the second half of the 19th century, Brighton postulates a relationship between certain artifact types and the "Irish experience of alienation" (Brighton 2008). Like Burchell, Brighton's interest is in how Irish immigrants and their children gradually both sought and achieved acceptance into predominantly Anglo-Saxon Protestant society. However, while Burchell examined outcomes through historical data, Brighton the archaeologist works out how the processes operated at the household level by looking at individual families' purchasing patterns.

Did Irish households eat different types of meat than other households?

Yes. Irish households tended to consume more pork, and correspondingly less beef, than other national groups. Statistical analysis confirmed this pattern at the lower 10 percent confidence level. There was no evidence for the commonly asserted Irish preference for mutton; Irish households fell in the mid-range for this type of meat. Irish households clearly consumed the most low-priced meat of all the national groups; 35 percent of their meat cuts were low cost versus 30 percent for native-born, white Americans (5% confidence).

Did Irish households use any distinctive types of artifacts?

Yes. Irish households' ceramic inventory contained proportionally far more earthenwares in comparison to the mean of all other national groups (5% confidence). Irish families' food preparation and serving ceramics consists of a mean 3.6 percent earthenware items; the next highest group were German households with 2.5 percent. The pattern also holds when one calculates the contribution of earthenware to all items in the collections: 1.3 percent for Irish households compared with 0.6 percent for German families, the next highest group. Although earthenwares were the least expensive ceramic type and Irish tended to be the least well-off, this pattern does not appear to be a function of economics as no simple, linear relationship could be discerned between all households' occupational rank and their use of earthenware; that is, earthenware is not a predictor of occupational rank while it does correlate with Irish ethnicity.

How did Irish households' use of alcohol compare with other national groups?

Several indices show that Irish households' refuse contained more alcohol containers in comparison to other nationalities. After the numbers were standardized, over 20 percent of all items in Irish households were found to be alcohol containers; the next highest group was native-born, white Americans who scored 9.9 percent. Irish households also contained the greatest percentage of hard liquor containers measured as a percentage of all items in the households' collections: 1.4 percent compared with 0.9 percent for English-Scots, the next highest group. Similarly, when one looks at the proportion of alcohol containers in Irish collections in relation to all items that relate to food preparation and consumption we find that 79.3 percent of the latter

CONTRASTING TYPICAL DINING EXPERIENCES: A NARRATIVE

Michael Stoyka

Pig's Head

> Soak in water and clean it well; take all the bones and flesh out; then cut the flesh and about one pound of salt pork in strips, which you put inside of the head, well mixed with salt, pepper, half a dozen middling-sized onions chopped, two teaspoonfuls of chopped parsley, half a saltspoonful of allspice, two bay-leaves, two sprigs of thyme, a little sage, and the juice of half a lemon; lay it in a crockery vessel for from four to six days. Envelop the head in a towel, place it in a kettle with eight small onions, two carrots cut in pieces, salt, pepper, four springs of parsley, four of thyme, four bay-leaves, two cloves, and a pint of white wine; cover with water, set on the fire, and simmer from six to eight hours; take from the fire and drain, take the towel off and drain again till dry and cold. Serve it with sprigs of green parsley around [Blot 1868:233–234].

Privy 1307 – 13 Baldwin Court

Early evening was fast approaching in San Francisco. Margaret Brown had been hard at work in the kitchen making sure dinner was ready for John and the children when he got home from work. John was a laborer on various jobs in the city. The pay wasn't great but through hard work and saving, where they were able, their real estate and personal property now amounted to a respectable sum.

While Margaret was busy in the kitchen, five of her children played with the dolls and marbles that always seemed to be scattered about the house. Her 16-year-old daughter, Margaret, and 14-year-old son, James, would soon be back from their jobs at the junk store. And everyone would have quite an appetite. The kids of course were always hungry and John burned so many calories on his job. It was a good thing that her oldest three were already out of the house and on their own. Feeding the household on a laborer's pay was already difficult enough.

It was important to Margaret to make sure her husband was comfortable and nourished when he got home. She pictured him sitting down in his work clothes, pipe in-hand, trying to forget the day he had just finished. The bottles of beer she had chilled in the ice box would surely help him with that. The work John had been doing for quite a few years now had taken their toll on his body. On many a night some liniment was required on his sore muscles and just a drop or two of painkiller to ease his aches and pains.

The stew was almost ready. Not only was this an economical way to keep the family fed but it was reminiscent of the Browns' homeland in Ireland, though here meat appeared more regularly. On special occasions Margaret was able to get a nice duck or a rabbit to roast. Sometimes they were able to splurge on some beef shoulder steaks. But more often than not a soup or stew was the most practical way of feeding everyone. Margaret had tried to keep some variety in stew meat, as long as the price was right. She had already made numerous pots of food with beef brisket, or mutton fore or hind shank and neck bones could be quite flavorful. Lately she had been making good use of pig head or jowl in her meals. Some people didn't really care for swine but she found she was able to make a perfectly tasty dinner out of the meat, and it was cheap enough.

It was done and everyone was home and settled, and finally time to eat. Many of the English china plates and soup bowls the Browns owned were 10 or 15 years old by now and well out of style. The tureen that held the night's stew was probably also too old fashioned to use for company but, as Margaret reminded herself, it was the nourishing food within that counted. After they'd eaten everything but the bones, the children helped clean up, while she and John took time to catch up over a glass of schnapps in the paneled cordial glasses she had bought at the junk store. The stylish glassware and the meaty stew made her feel quite luxurious!

Steaks

> The best piece of beef for a steak is the tenderloin.
>
> A steak should never be less than three-quarters of an inch in thickness.
>
> It should always be broiled; it is inferior in taste and flavor when cooked in a pan (*sauté*), or other utensil . . . .
>
> *To make tender.*—When cut, trimmed, salted, and peppered, put them in a bowl, and sprinkle some sweet-oil or melted butter over them; turn them over in the bowl every two or three hours for from six to twelve hours.
>
> *To cut and prepare.*—Cut the meat in round or oval slices, as even as possible, of any size, about one inch in thickness, and trim of the fibres and thin skin that may be around. Do not cut off the fat, but flatten a little each slice with a chopper.
>
> *To broil.*—When the steaks are cut and prepared as directed, they are slightly greased on both sides with lard or butter (if they have not been in a bowl with oil or butter before cooking them), placed on a warmed gridiron, set before or on a sharp fire, turned over once or twice, and taken off when rather underdone. Salt and pepper them, dish, spread a *maître d'hôtel* over them, and serve very warm [Blot 1868:171–172].

Privy 851 – 114 Silver Street

The *Salinas* was in port. So Catherine Metcalf's husband, Captain Alfred Metcalf, would be home soon and looking forward to one of her home-cooked meals. Alfred had been captain of the *Salinas* for almost 10 years now, having worked his way up from ship's mate. His salary and some sound property investments had placed the couple in a comfortable financial situation. Alfred was a successful man in a position of some importance, and expected a dining experience suited to his standing. Catherine would have to find out just how long he would be home this time to make sure the larder was well stocked.

Although the household's finances were stable, it was helpful to have a couple of boarders in the house. Their contribution certainly benefited the family and it was nice to have some people in the house while Alfred was at sea. Mr. Shaw (a mechanic) and Mr. McLaughlin (a boilermaker) had steady work and could afford the rent. Things had also gotten easier now that her daughters, Katy and Hattie, had become teenagers. With luck, the girls would soon find husbands.

Catherine knew what meals made her husband happy. Chicken, turkey and the occasional duck sometimes graced their dining room table, but only when Alfred was in the mood for something different or for a special occasion. Even so, his liking for fowl was pretty far down the list. And there was also the matter of her favorite butcher shop only a few blocks away. Catherine had been considering switching to a different butcher since she purchased a ham of questionable quality there (see Faunal Studies: Rats and Pathologies in Chapter 3). Roasts of mutton loin or rump, and a pork rump roast or ham were in the rotation for meals, but brought far less pleasure to Alfred than his favorite.

Captain Metcalf's preferred meal could be summed up in one word: steak! But not just any steak would do. The captain was particularly fond of any cut of beef from the loin, a sirloin or porterhouse, and cut to a nice thickness. The butcher was often agreeable enough to have a larger piece of meat reduced to steaks that would meet Catherine's specifications. Sometimes this was already taken care of if she got to the butcher early enough in the day.

Tonight the steaks came out particularly well, and were stacked on one of Catherine's oval platters. The pattern of her English china was decidedly out of date—it was 10 or 20 years old—but she could still set a perfectly presentable table for her family and boarders. Alfred was fond of Worcestershire sauce on his steak, so she had made sure the bottle was within easy reach of his seat at the head of the table. Her husband also enjoyed wine with his meal, and there was locally bottled mineral water for everyone else to drink. Following his usual routine after coming home from a voyage, after dinner Alfred sat in his parlor with a full stomach, pipe in hand, snuff within reach, and a tumbler of whiskey as a nightcap.

Figure 8.2. Soda water bottles from the McSheffrey family. Baldwin Court was a densely occupied backstreet behind the iron foundries and paint factory. This collection of soda water bottles was from the household refuse of Patrick and Nancy McSheffrey who lived at 9 Baldwin Court from the 1860s through the 1890s. (Privy 1310)

are alcohol containers compared with 44.9 percent for the next highest group, native-born, white Americans; statistical analysis confirms this pattern at the lower 10 percent confidence level.

What other bottled beverages did the Irish drink?

Soda water—and in a big way. Bruce Owen analyzed soda water bottles were classed under 'miscellaneous' items in his statistical studies. Two measures that compare the occurrence of various miscellaneous items between households of five different nativities both indicate heavy Irish use of soda water (see Figure 8.2). When calculated as a percentage of all items, 7.3 percent of Irish collections found to consist of soda water bottles; this contrasts with 3.4 percent among English-Scots households. An even more striking pattern emerges when soda water bottles are calculated as a percentage of all food preparation and consumption items: 41.9 percent of the latter consist of these bottles, in comparison with 12.5 percent among English-Scots, the next highest group. This pattern is confirmed with a high 5 percent probability although, once again, other analyses also link the consumption of soda water with the lower occupational group in which the Irish are disproportionally represented.

To what degree did Irish households self-medicate?

Many of the collections contain patent medicine bottles and other druggist items. However, the quantitative data indicate that these goods were not purchased in higher quantities by Irish households than others. Although collections from households of lower occupational rank tend to have more patent medicine containers and apothecary items (and most of these were Irish), no measures indicate that this pattern was particular to the Irish.

What evidence is there of beautification of the self or of the home?

Not much. Measuring self beautification by the presence of items in the perfume-primping category, Irish households score low—they discarded few of these items compared with their neighbors of other nationalities. This pattern is evident at the high 5 percent confidence level whether we standardize the figures in relation to food preparation/consumption items or in

relation to all artifacts in the grooming/health category. Similarly, Irish collections are the least likely to contain the kind of curios (such as coral, decorative shells, mineral samples, etc.) with which many Victorians decorated their parlors, a finding also supported at the high 5 percent confidence level.

What is the relationship between Irish ethnicity and household purchasing patterns?

Quantitative analysis shows some correlations between Irish national origin and consumption patterns in some areas. However, the influence of relative wealth cannot be disentangled from cultural preferences as the sample households disproportionally represented lower status occupations. Did people forego making certain purchases because they couldn't afford them (although they desired them) or because they simply didn't want them? Our quantitative studies have been of limited help in teasing out unequivocally ethnic behaviors which, if they are in evidence at all, are likely to be expressed through symbolically significant objects. As the latter may consist of unusual objects, they cannot be identified through quantitative analysis whose purpose is to identify patterns in mass data. These results show the importance of obtaining more samples that reflect a wider economic range of Irish households.

Do these patterns tend to support Burchell's assimilation model or Brighton's observations about the maintenance of ethnically Irish ways of life?

The results are mixed in an interesting way. We can neither say that Irish ethnicity sank without a trace in the Far West nor that it was vigorously maintained in all areas of life.

Irish households' tended to eschew conventional symbols of status in the areas of decoration and foodways. The data indicate that in contrast to the norms of the era, Irish homes were marked by a certain austerity with regard to both personal adornment and household decoration. While other groups purchased quantities of perfumes and parlor ornamentation, Irish households tended not to spend their money in this conspicuous way. A similar pattern is evident in Irish households' meat consumption. Their reliance on cheaper and non-beef meat cuts would seem to be a 'common sense' conclusion as most Irish households in this sample were in the lower occupational rank. However, it is interesting to note that among households of similar rank (but of more ethnic diversity) in West Oakland more expensive cuts of beef were actually better represented in collections from lower occupational ranks.

If (as we have suggested elsewhere) poorer households purchased beef as much for its symbolic value as for its taste and nutrition, then the Irish sample may have made a conscious choice not to use this idiom to express their values or enhance their social status. The cultural tendency among Irish-Americans to eschew the sin of pride by limiting personal ambition—and by extension, display—has been noted by Jensen (2002:417). The lack of conspicuous consumer goods associated with higher status on the part of San Francisco's Irish is consistent with the most cultural conservative values espoused by the Roman Catholic religious ideology. This deemphasized appearance over behavior, was wary of social pretentions as lacking humility, and tended to egalitarianism, awarding higher status to characteristics such as having a relative in priesthood, or being a member of certain religious, charitable, or political groups.

In his studies of Irish immigrants, Brighton (2004, 2008) suggests that the level of self-medication is a rough index to the group's acceptance by or alienation from mainstream America. Where physicians are unwilling to treat Irish patients, the use of patent/traditional medicines is high, declining as the group becomes more accepted. If we accept Brighton's approach, Burchell's assertion that the group's newly found freedom in the San Francisco caused them to rapidly

CHRISTIANITY AT HOME

Erica S. Gibson

The Victorian ideals of independence, industry, frugality, and hard work reflected the rapid changes of society during the mid to late 19th century. As the century progressed, more and more men worked outside the home in industrial and commercial jobs that often required additional job specialization. While men traveled further and further for employment, women were increasingly responsible for the everyday workings of the home. The outside world, or the men's world, was seen as rough, full of temptation and evil. Women, who were envisioned as symbols of purity, goodness and domesticity, were increasingly confined to the domestic sphere, and were expected to provide a safe haven for their husbands and a shelter from outside evils for their children. As this "Cult of Domesticity" took hold, women became responsible for not only raising the children but also setting a good moral example for them (McDannell 1986).

During the first half of the 19th century, men had typically led family worship with morning and evening devotions. As they began working further from home, men had less time for these daily rituals. It was at about this same time that women began to take a more active role in their children's religious education. This trend was true across Christian denominations (Stevenson 1991). Protestants were taught that women were "especially pious because of their tender hearts" and that, coupled with "their innate ability to communicate with children," made women more successful teachers (Stevenson 1991:9). The status of women was boosted even higher among Roman Catholics when, in 1854, Pope Pius IX announced the Doctrine of Immaculate Conception.

The religious artifacts recovered during the West Approach project, span the late 1860s through the 1890s. All were from analytical units with Irish associations, most probably Roman Catholic. Unlike other ethnic groups, the Irish tended to immigrate as families rather than individuals (Burchell 1980:49). This strong sense of identity was maintained by the tradition of marrying within the Irish community, a practice encouraged by the church (Burchell 1980:85). Unlike some other ethnic groups, most Irish immigrants could read and write English (McDannell 1986:12) and many were employed in skilled professions. Even those who worked as laborers found employment as the city of San Francisco rapidly expanded in the 1860s and 1870s.

Religion in the homes of the West Approach residents was exemplified in figurines, motto mugs, medals, rosaries, and crosses. At least two motto mugs attest to the religious education of children. One of them (see photo inset) bears letters from a scripture alphabet and their associated axioms:

K is for KORAH;
God's wrath he defied.
And lo? To devour him
the pit opened wide.
L is for LYDIA:
God opened her hear[t];
What He had bestowed,
['tw]as her joy to impart.

This type of motto mug taught children the alphabet and scripture at the same time. The second mug shows a child kneeling in prayer above the name Samuel. It is probably based on an event in the book of Samuel in the Hebrew Bible, in which the child Samuel is called by God. Children everyday would have used both of these mugs, furthering their religious training.

A single Roman Catholic religious medal, The Miraculous Medal, was found in the same feature as the Samuel motto mug. This feature, deposited in the late 1860's was associated with an Irish porter, his wife, and their four children, all of whom attended Sacred Heart Church. The

Miraculous Medal, also known as The Medal of the Immaculate Conception, was manifested to Sister (Saint) Catherine Laboure in the chapel of the Motherhouse of Daughters of Charity in Paris in 1830. The following words accompanied the vision: "O Mary, conceived without sin, pray for us who have recourse to thee, and for those who do not have recourse to thee, especially the enemies of the Church and those recommended to thee. Amen." This devotional medal was very popular in the 19th century and continues in use today.

A bisque porcelain figurine of a praying angel (see photo inset) is part of an 1890s collection associated with an Irish longshoreman and his family. This small figure would have graced the family parlor, perhaps serving as an open reminder of a lost loved one. For daily devotions, a family member would have used the mother-of-pearl rosary, found in the same archaeological feature. A less expensive bone bead rosary was part of an 1880s collection associated with an Irish blacksmith and his family.

It is not surprising that few religious trappings were recovered from the West Approach project; these items would have not been casually discarded. The artifacts were, without exception, broken in one way or another and may have been surreptitiously discarded. The more impersonal items—the motto mugs and perhaps the figurine—are examples of the numerous, inexpensive, mass-produced religious objects available to the Victorian consumer. The presence of items for both display and personal use (such as rosaries and medals) demonstrate the continued importance of religion and religious teachings in the lives of these Irish San Franciscans.

assimilate is supported. Why these Irish families were so attracted to bottled soda water is unclear, although it may have been for reasons of health. Well water—the principal source for most poor families in the South of Market—was frequently contaminated and likely unpalatable. When local industries could not pipe their liquid wastes out to the bay as was the practice of the local gas works (Shumate 1988:21–23), some tainted the groundwater by letting liquid wastes percolate into the ground. Installing privies immediately adjacent to one's well was a common practice that surely made the water less appetizing. Meredith Linn (2008) suggests another reason: how objects look, smell, taste, feel, and sound may be important factors in the decision to buy a product. It may be that the very blue-green color of the soda water bottles—a color representing health and wholesomeness in traditional Irish culture—encouraged residents to take the concoction as a tonic for its supposed health benefits.

Brighton (pers. comm. 2007) also notes that embossed ball clay smoking pipes frequently occur at Irish-associated sites, particularly Five Points, New York City (6–10) and Patterson, New Jersey (8). These artifacts may bear any of several patriotic motifs connected with the Irish independence movement championed by British Prime Minister Ernest Gladstone from the late 1860s onward. The present collection has five Irish patriotic pipes, all of which are associated with Irish or Irish-American families, or other households with Irish residents (see Figure 6.21). The

pipes' motifs include the words 'O'BRIEN/MAVOST/DUBLIN' (1), 'HOME RULE' with shamrock (3), and ERIN GO BRAGH' with shamrock and harp (1). An additional pipe, found in association with an Irish household that also had a 'HOME RULE' pipe, bears the name 'GARIBALDI.' This suggests that the Dougherty family supported this Italian patriot whose popularity among Irish Catholics was mixed.

In summary, it may be that Irish consumer patterns were influenced by elements of traditional, religio-ideological culture (and possibly folk beliefs) that were at odds with the conspicuous, status-driven values of much of San Francisco society. Consequently, Irish collections may be somewhat plainer in comparison with others, avoiding the appearance of the kind of display that might have been considered frivolous or even irreligious.

The Jews

There are four Jewish families in the study group; three Ashkenazi and one (the Martins) Sephardi. The analysis compared Jews with members of other religious groups, a sample universe of 24 collections, but not with other categories such as occupational rank. Because there were so few collections, there are correspondingly fewer quantitative results than the well-represented Irish. As Bruce Owen has noted, of households with known religions Protestants tended to occupy higher status positions, Jews slightly lower, followed by Catholics. Many of those who fill the "unknown" category left the least documentary evidence as they were most mobile and had fewest items of taxable value (see Table 8.1). (Some categories of artifacts aren't represented in all the collections.)

Table 8.1. Distribution of Samples by Religion and Occupational Rank

	Protestant	Catholic	Jewish	Unknown
Wealthy professional	2	-	-	-
Professional	1	2	-	5
Skilled	1	3	3	7
Semi-skilled	1	5	1	3
Unskilled	1	3	-	2
Widow	1	-	-	1
Total	7	13	4	18

Were the Jewish families' purchasing patterns significantly different from other religious/ethnic groups?

While Catholic families seem to have preferred beer or ale, Jewish families purchased the most wine or champagne of any of the religious groups in spite of the fact that these products were among the most expensive (see Figure 8.3). This pattern contrasts somewhat with expectations based on occupational rank, which indicate that wine and champagne was favored more by professional households. Four measures—variously at both 5 and 10 percent confidence levels—indicate that the Jewish households purchased more grooming-health and perfume-primping items than others in the sample. Importantly, this pattern does not correspond to expectations

Figure 8.3. The Samuel family alcohol bottles and pipes. The family of Polish-Jewish tailor Wolf Samuel lived at 416 Folsom Street. They deposited this collection of artifacts—among other objects—in the early 1880s, providing evidence of their preference for wine over beer. (Privy 1300)

based on the samples' occupational ranking that would have placed Jewish households in the unremarkable middle.

What evidence is there of cultural change or conservatism? Overall, did Jews conform to traditional foodways?

The presence of a great deal of refuse from *treyfe* (ritually unsuitable) species of meat and other foods (e.g., oyster) in the three Jewish families' collections that contained food bone is clear evidence that none conformed to the rules of *kashrus*. Although in comparison to their neighbors Jews ate slightly less pork, they did not do so at a statically significant level. The presence of any quantity of *treyfe* meat is, however, culturally significant. That Jews tended to eat meat cuts in the middle cost range in comparison with others (confirmed at the 10% confidence level) is consistent with their overall economic position between the higher ranking Protestants and the Catholics who dominated the unskilled occupations.

Are the differences between these collections simply a matter of economics?

The nature of our sample may mask the cultural distinctiveness of certain national or ethnic groups. Because Irish Catholic households tend to cluster in the lower occupational ranks, Jews in the middle, and Protestants in the middle and upper ranks, there is a natural tendency to account for all characteristics that fit this general ordering by reference to the families' economic condition. Although relative wealth doubtless played in important role in decision making, there is enough variation from a purely wealth-based model to indicate that other factors were at work.

THE FENIAN BROTHERHOOD AND SAN FRANCISCO'S IRISH

Annita Waghorn and Elaine-Maryse Solari

There is not a State in the Union
in which the Irish have taken deeper and stronger root,
or thriven more successfully, than California.

John Francis Maguire (1868:262)

By 1880 over one-third of San Francisco's population could be said to be part of the Irish community, with 30,000 first generation and more than 43,000 belonging to the second generation (Burchell 1980:3–4). The life of an Irish family in the South of Market might revolve around the workplace, the church, and membership in various political and benevolent associations. These institutions defined Irish immigrant life and provided a practical means of expressing a continuing Irish identity.

Associations were a common thread knitting together community life in many ethnic groups at this time. The Irish in San Francisco were enthusiastic founders and members of associations, and the numbers of these groups increased rapidly between 1852 and 1860. Their causes included charity, self improvement, immigrant assistance, temperance, sports, and education, as well as patriotic and political movements. Associations were a way of promoting Irish community and individual advancement in a period of extreme social upheaval and, for the average Irish immigrant, few established avenues for social and financial improvement. The appeal of associations to the Irish immigrants may also be related to their history of repression: British rulers of Ireland had long denied Irish Catholics the right of assembly. The associations favored by Irish immigrants were often economic, fraternal, religious or political in nature. They laid the basis for the Irish ascendency in San Francisco politics by providing ready avenues for mobilizing supporters and financial donations. They also encouraged a strong ethnic Irish identity that continued for generations.

Irish immigrants to America retained an intense concern for the political future of their homeland, at that time still under British rule. This concern, fueled by a perceived English indifference during the Famine years, encouraged the development of Irish-American nationalistic associations. These groups actively supported Ireland's freedom, sending a river of money flowing across the Atlantic to underwrite the Republican cause. Donations from the large Irish populations in San Francisco, New York, and Boston fed Ireland's growing Republican movement in the 1850s and 1860s, at a time when the Irish population itself was struggling to recover from the devastation of the Famine years. The fervor of pro-Irish Republican feeling among America's immigrant Irish communities was such that in 1885 London's *The Times* newspaper could state that "The Irish Question is mainly an Irish-American question" (Brown 1956:327).

It was largely American immigrants who injected the strong note of Anglophobia that came to be characteristic of Irish Republicanism. To the Irish immigrants struggling to make their way in the U.S., nationalism was a means of unifying diverse Irish groups across the country and identifying themselves with the noble causes of political freedom and political representation that resonated so strongly in American civic discourse (Brown 1956). As a result, the American Irish promoted an image of their home country that "contrasted the land of the free with an island groaning, as they saw it, under English tyranny" (Murphy1980:111).

One of the primary avenues for American influence on Irish nationalism during the 1860s was Fenianism, which included the belief that force was the means by which Irish freedom from British rule could be achieved (Murphy 1980:111). The Fenian Brotherhood was one of the most widespread and powerful expressions of Fenian thought. The organization was founded simultaneously in both Dublin and New York in 1858 by leaders of the failed 1848 Irish Rebellion (Ó Broin 1980:118). The Fenian organization tapped into the deep well of bitterness amongst Irish immigrants regarding the perceived British inaction during the Famine crisis, and the sense that British rule in Ireland would only ever be relinquished through violence. Although the movement advocated and helped fund numerous violent insurgent acts in Ireland itself, it also directly led to the founding

The bark *Catalpa*. The escape of Fenian prisoners from British hands on the New Bedford whaling bark *Catalpa* was a cause célèbre among Irish patriots—and a matter of great embarrassment to the government in London. (Illustration courtesy of Prints & Photographs Division, Library of Congress. Reproduction Number: LC-USZ62-12755)

of several political movements including the Irish Land League that successfully agitated against the British for land reform.

The *Catalpa* escape, one of the most famous incidents associated with the Fenian movement, was enormously influential in galvanizing the Irish expatriate population in America. Irish nationalists in the U.S. funded the clandestine rescue in 1876 of six Fenians imprisoned by the British in Fremantle Prison, Western Australia. The men were spirited away amidst a dramatic sea chase on a whaling bark, the *Catalpa*, originally from New Bedford. News of the rescue sparked celebrations in Irish communities across the U.S. and widespread fundraising followed to help the escaped prisoners in their new lives. Although the popular image of the Fenians was one of "roughs" or "rowdies" in fact, contemporary observers of the Fenian movement in America confirmed that the organization drew support from across the social spectrum including "the very cream of the Irish population" (Maguire 1868:592).

Several families within our San Francisco project area were associated with Fenian causes. John D. Tobin, the New York-born bookkeeper who lived at 112 Silver Street, was second generation Irish, born of a native Irish father. In 1876 he served on the General Committee (to Aid Escaped Fenians), helping to raise money to provide for the escapees of the *Catalpa* rescue.

Michael Dolan, an Irish native, and a shipping clerk, lived with his Irish wife at 109 Perry Street from 1864 to 1888. He was an active member of the Fenian Brotherhood, from the 1860s arranging local picnic excursions for members and families, and sponsoring testimonials for political activists. Typical of many Irish immigrants, he also participated in other less overtly political Irish associations including the St. Joseph's Benevolent Society and the Ancient Order of the Hibernians. The Dolan children were also politically involved: three of Michael's sons contributed to the Davitt Testimonial Fund in 1881, organized to aid Michael Davitt the noted Irish land reform activist and founder of the Irish Land League. The Dolan sons also performed recitations at meetings of the local branch of the Irish Land League. However, they seem to have been less active than their father in nationalistic associations. This possibly reflected a common circumstance in immigrant groups, whereby the first generation retained a strong interest in political issues of the homeland, while their children tended to derive their identity from the immediate immigrant community.

SOCIOECONOMIC STATUS

It seems intuitively reasonable that there is a fairly uniform relationship between the ability to purchase expensive and non-essential items and the actual practice of doing so. All else being equal, where things that are 'good to think' are available and affordable, consumers will, presumably, try to obtain them. In their interpretation of archaeological remains, archaeologists have historically assumed (and reasonably so) that the possession of valued material culture is an indicator of wealth while its absence suggests the reverse. The control that we have over the data being examined here gives us the opportunity to examine this assumption in some depth. We can investigate the degree to which their relative social status (measured through its proxy of occupational rank) was a factor in consumers' decisions as well as indentifying instances that do not fit to expected pattern.

Did households of higher occupational ranks consume more expensive items and more non-essentials than lower ones?

In general, the answer is yes. The data from several categories of artifacts—including meat cuts, ceramics, personal items, and alcohol—support this pattern. However, variations in the pattern show that consumption was not a direct and uniform function of wealth.

Figure 8.4. The Sutter Street Synagogue. This 1866 building was home to Congregation Emanu-El. The building is an interesting marriage of church-like architecture and subtle Jewish symbols. The *Magan Dovid* (Star of David) is displayed significantly above the line of sight, while the twin domes evoke the crowns *(keterim)* used to decorate the *etz chaim,* the wooden handles of the Torah scroll. (Photo courtesy of the California History Room,California State Library, Sacramento, California)

Meat cut data show that a household's occupational ranking was a generally good predictor of the quality of meat it consumed. If one compares the collection from the professional group with that of skilled, semi-skilled, and all others (both respectively and collectively) the former has the most high cost cuts and the fewest low cost ones at 5 and 10 percent confidence levels, respectively. The converse is also true: semi-skilled and skilled households consumed relatively more of the cheaper cuts, also at the 5 and 10 percent confidence levels.

Similarly, the use of porcelain is higher among wealthy professionals than the other groups at the 10 percent confidence level. The pattern is borne out by calculating the mean MNI of porcelain items (that tend to be costly) as a percentage of the collection: wealthy professionals weigh in with a hefty 36 percent versus the unskilled group with only 13.5 percent. The same measurement shows that the difference was made up by various less expensive earthenwares types, which appear in higher proportions in lower ranked households as a group.

While the quantity of durable items in the health category—such as wash basins—was similar between occupational groups, there was substantial variation in the quantities of perfume/primping items and medication containers. Households of the professional rank disposed of far more of the former, particularly when the perfume/

GAMES

Erica S. Gibson

Once the game is over, the king and the pawn go back in the same box.

-Italian Proverb

The late 19th century easily may have been the Golden Age of parlor games.

At a time when Victorian values espoused respectability, duty, hard work and thriftiness, a need for relaxation in the safety of the home, away from the evils of the outside world, was tantamount. Parlor games, the variety limited by only imagination, were an easy way to relax and enjoy oneself. Small social groups and families would have mingled together and played party games such as Blind Man's Bluff, Charades, Musical Chairs, or various guessing games like Twenty Questions and Who am I? Other games might have included card games such as Snap, Fish, and Old Maid or pencil and paper games like Hangman, Tic-Tac-Toe, or The Maze. Unfortunately, most of these types of games leave little if any archaeological evidence. Board games such as dominoes, chess, and checkers with their various individual pieces are much more likely to be found in archaeological deposits; almost two-dozen game pieces, not including marbles, were recovered from the West Approach Project.

Among South of Market residents, dominoes and chess were the most popular followed by cribbage, checkers, tiddlywinks, and games with dice. Block and draw domino games were typically played by two to four players and could accommodate a variety of skill levels, while children could have played other domino games, like concentration. One favorite pastime of dominos was simply arranging them on end in lines and pushing them over so that they toppled each other down. Cribbage, played by two to six players, is essentially a card counting game and would have been a good game for teaching math. Tiddlywinks, played by two or four players in two pairs, was very popular in the late 19th century.

Chess is a very old game with its origins in what was once Persia. Played by two players, this strategic game could have whiled away hours of an evening. Early European chess sets ranged from the very elaborate or very minimal. The wealthy could afford intricately decorated pieces that were so highly ornamented they were often top-heavy and unstable on the board. The rest of the population often played with undecorated

Game Pieces from West Bay Approach

Block	Feature	Association	Date (ca.)	MNI	Artifact Description
4	Privy 1301	Taylor family	1870	2	glass game piece, hard-rubber poker check/card counter
4	Privy 1318	Murphy family	1880	1	ivory domino
4	Privy 1326	Scales and boarders	1875	2	ivory die
5	Privy 516	Mary Peel	1880	4	bone checker piece, ivory domino (3)
9	Privy 2	Johnson family	1880	2	bone chess piece base, bone cribbage peg
9	Privy 9	Usher household	1880	3	bone chess piece (bishop), bone cribbage peg, wood game piece
9	Well 6	Dent/Hannan household	1895	2	bone chess piece base, bone chess piece (knight)
10	Privy 807	Gee family	1869	2	ivory domino
10	Privy 808	Schreiner, Johnson, Degnan, and McIntyre families	1880	2	bone die, bone tiddlywinks
10	Privy 813	Moynihan household	1880	1	ivory domino
10	Privy 851	Metcalf family	1880	1	bone game piece
10	Privy 857+	Dolan and Michelson families	1880	1	ivory domino

This bone chess piece, a mitred bishop, was recovered from the Usher household deposit on Block 9. The extended family lived at 35 Perry Street between 1879 and 1881.

Missing its base, this knight was recovered from the Dent/Hannan household on Block 9. John Hannon worked as a clerk for the California Notion and Toy Company and this delicate piece may have been part of a pre-1890 Staunton set that he brought home when the newer addition came in.

wooden sets in which pieces were differentiated by height. It was not until 1849 that the more familiar set was designed. In 1847, John Jaques and Nathaniel Cook designed and manufactured a new chess set, which combined the height differential of the common set with the piece individuality of the more expensive set (see photo inset). The resulting pieces were easily recognizable and well balanced, affording play that was both pleasing to the eye and practical. Howard Staunton, a renowned chess player at the time, endorsed the new set, which was promptly called the Staunton set (see photo inset). In 1890, the Staunton design was altered to make it more squat and robust. Current chess sets are based on this design with slight variations.

Parlor games were a relaxing end to a long day for South of Market residents. Regardless of wealth, status, religion, or ethnicity families and households sought out a variety of at home entertainments with which to unwind.

primping items are viewed as a fraction of all significant items; these materials are associated with professional households at the 10 percent confidence level by two measurements when this group is compared with unskilled and all other groups. Professional households also had significantly more collectable items (i.e., exotic objects, such as coral, used for display) than the other groups at the 10 percent confidence level. This pattern holds where collectables are measured as a fraction of all significant items: collectable items are 6.2 percent of professional households' artifacts but only 0.2 percent of unskilled collections.

Are there any material indicators of higher or lower occupational status?

Yes. Certain types and quantities of artifacts tend to be associated either positively or negatively to groups on the higher or lower ends of the status scale.

There is a surprisingly strong connection between lower household rank and more frequent use of bottled soda water; three measurements indicate a 10 percent confidence level. While the relationship is not uniform across the groups, the trend is evident where soda water bottles are measured in relation to mean MNIs within the grooming and health category: soda bottles are 8.9 percent of the category among unskilled households decreasing to 0.3 percent in wealthy professional households. This pattern also holds in relation to neighborhood, which tend to reflect relative wealth, and nativity—Irish families constituted most of the lower ranked group. One measurement of use of perfume/primping items correlates negatively with unskilled workers at the 5 percent confidence level when compared with professional households: the former group used significantly less of these commodities than professionals, though the small sample size leaves doubt as to whether this pattern has wider applicability.

Collections from a group consisting of semi-skilled and skilled households also contained relatively more patent medicines and druggist items than the higher ranked households at the higher 5 percent confidence level. This pattern does not, however, hold for the unskilled households who, as a group, had fewest of these items as a fraction of all significant items in the collections.

Professional households consumed more beef and less pork than households in the unskilled group at the 10 and 5 percent confidence levels, respectively. In fact the avoidance of pork by the professional group reached the 5 percent confidence level in two measures.

Figure 8.5. A Chinese porcelain bowl cover (Privy 1326). Made in southern China, this item is painted over glaze in enamels; the red manufacturer's mark is a highly stylized version of a Chinese reign mark. There is some irony in the fact that Chinese porcelain was valued for display in the parlors of the same group whose racist attitudes demonized Chinese immigrants.

The quantity of alcohol bottles discarded clearly varied by occupational rank. In general, lower ranked households discarded more alcohol containers and the higher ranks discarded fewer. This is particularly noticeable when the mean alcohol bottle MNIs are divided by all food preparation/consumption artifacts: wealthy professional and professional households have 31.1 and 34.9 percent, respectively, versus 69.1, 73.8 and 66.9 percent for the skilled, semi-skilled, and unskilled groups. The types of alcohol containers discarded also show that the higher occupationally ranked households preferred wine or champagne while those at the lower end (the semi-skilled and unskilled) discarded proportionally more beer and ale containers. The patterns can be seen clearly where the mean MNIs of each type of alcohol container are calculated as a percentage of all social drug items and compared across the occupational groups.

What does this say about the "emulation" model in which taste filters down?

The unskilled household group also had the fewest collectable (exotic display) items, while professional households had the most. The wealthy professional households, however, had the fewest collectables items of all—a counter intuitive result for which we cannot account. The fashion of the day valued Chinese porcelain as a sophisticated addition to the parlors of the aspiring and upper middle class (see Figure 8.5). These ceramics and other exotic wares were found in higher proportions in the group of higher status households by several measures at 5 and 10 percent confidence levels. However, other measures show that the unskilled group had more of this category than semi-skilled and skilled households at the 5 and 10 percent confidence levels. This indicates that there is not a uniform relationship between the possession of this type of material and occupational status; other factors are at work here. Lower ranked households may have obtain this material secondhand through one of many South of Market used-goods (aka 'junk') stores that operated vigorously, although with increasing social stigma, throughout

the 19th century. Statistical data show that the highest ranked households' collections contained a lower proportion of ceramics than the other groups. It may be that these households sold still-desirable ceramics to local junk dealers.

Archaeologists and other material cultural specialists have recognized for years that continual innovations in the presentation and use of artifacts constantly renew the meanings of objects (e.g., Douglas and Isherwood 1979, Shackel 1993). The item that today indicates worldliness, tomorrow announces that one is on the second level of cultural knowledge. Replacing last year's (or last decade's) decorative ceramics was an easy way for the wealthy to show their sophistication. By the time these materials appeared in the parlor of the unskilled their meaning had been entirely transformed.

What was the relationship between consumer decisions and status?

In a word: complex. We have not been altogether successful in our attempt to disentangle the influences of ethnicity and status in San Francisco due to the composition of our sample. We have shown that differences between social status groups (or at least occupational ranks) are visible in the archaeological record by general patterns as well as specific indictors, and that the expression of status can be seen in differences in the proportional possession of classes of objects vis-à-vis other groups. However, there was no entirely uniform relationship between the means to obtain expensive goods and the possession of them.

It is in this variability that archaeology can contribute to understanding life on the small scale by comparing individual households to the populations of which they are a part.

PART IV: CITIES

Part IV shifts scale again, providing three chapters that look at larger differences at the city level as seen through material culture recovered from archaeological contexts in San Francisco and Oakland. It explores the lives of 19th-century maritime workers in San Francisco and compares them with railroad workers in Oakland. Using literary views and sophisticated statistical analyses, the differences between San Francisco and Oakland are explored, framing the importance of place. The concluding chapter provides a retrospective on ASC's earthquake related studies of Oakland and San Francisco. It introduces the Material Status Index using 98 comparable collections from the two cities, gives historical context provided by 19th-century economist Henry George, and provides suggestions for future research and a global archaeology that can be truly quantitative and comparative.

Top photo: Detail from “Oakland, Cal. from Courthouse, April 1st 1908.” Bottom photo: Detail from “Panorama of San Francisco,” ca. 1904. (Courtesy of the Library of Congress Prints and Photographs Division, Washington, D.C.)

CHAPTER 9

MARITIME WORKERS

MARK WALKER

For the Cypress Freeway Replacement Project, the author analyzed deposits from railroad-worker households in West Oakland (Walker 2004). Instead of focusing in on a monolithic "working class," that project looked at divisions within the late-19th-century working class along the lines of craft unionism and nationality. This research reflected late-19th-century tensions between craft and industrial unionism among workers and the related struggles between immigrant and native-born workers. The approach used for the Cypress railroad workers was dependent on the specific historical conditions of those workers. The notion of "skill," for example, was specifically tied to the idea of craft unionism and a monopoly of labor rather than a more generic and historical idea of work complexity or technical expertise. The highly structured labor process of the railroad industry, the deep divisions among the workers in that industry, and the fact that many of the workers lived in single-family households, made the Cypress households an ideal archaeological dataset.

This chapter applies a similar approach to workers in the maritime industries, specifically sailors and waterfront workers (Figure 9.1). Like railroad workers, sailors worked in highly structured environments, but the material conditions of the maritime industry were very different from those of the railroad, and the lives of workers in each of these sectors were structured by distinct sets of work relations. The nature of work in each of the industries results in differing material remains and even differing degrees of archaeological visibility.

It is traditional to start an article on a particular social group with a discussion of the popular misconceptions and stereotypes about that social group. Then one addresses the reality. With a chapter on sailors the temptation to do so is irresistible. Fortunately the stereotypes about seafaring men are so ingrained in our consciousness that little discussion is required. The image of the Jack Tar has been a central part of naval genre fiction up to the present in authors such as C.S. Forrester, Patrick O'Brian, or Dewey Lambdin, and countless others. The movie industry has also participated wholeheartedly. The sailor in these sea stories is a yeoman, loyal, simple, even somewhat childlike. He may be subject to vicious discipline, but this is necessary for survival in the harsh and unforgiving world at sea. He may have started as the dregs of terrestrial society but is soon molded into a stout tar through the unforgiving routine of life at sea and the imposition of harsh, but necessary, naval discipline.

Figure 9.1. Sailors playing chess in the Sailors' Union of the Pacific hall, ca. 1911. (Photo from Mathews 1911)

While everybody likes sailors when they are at sea, not everyone

Figure 9.2. A 1906 panorama of San Francisco's waterfront; the nexus of maritime and terrestrial transportation systems (after the fire). (Photo courtesy of Prints & Photographs Division, Library of Congress, LC-DIG-ppmsca-07823)

likes them when they are on land. Away from the iron discipline of shipboard life, they revert to their terrestrial nature or worse, since they are making up for months of spartan life at sea through drinking and indiscriminate sexual behavior. Even today the word "sailor" slips easily off the tongue after "drunken" or a screeched "'ullo." In countless movies and novels, the waterfront district—the nexus between maritime and terrestrial commerce—where sailors spend their time ashore was the archetypal shady part of town.

San Francisco and Oakland are ports, the nexus where seaborne and land-based transportation systems meet, and goods and people pass from one system to the other. The transition between sea and land requires an infrastructure for docking, loading and unloading, and the physical movement of freight from one system to the next (Figure 9.2). The development of a class of workers oriented to shipping and dock work and of waterfront districts, with everything that implies, has profoundly influenced the character, history, and popular image of port cities. This chapter focuses on the people who worked on the docks and ships—the longshoremen, stevedores, sailors, captains, and shipowners.

MARITIME SAN FRANCISCO

The broad characteristics of the Pacific Coast maritime industry should be outlined before moving on to the nature of work within that industry. In the 19th century, San Francisco was the largest port on the Pacific Coast of the Americas, by virtue of a first-class harbor and its location at the Golden Gate, which was the only access to the Central Valley from the ocean.

The major first non-native maritime trade along the Pacific Coast was one in which sea-otter furs were harvested along the Northwest Coast and sold in China. Russians began the trade after Vitus Bering's Great Northern Expedition of 1733–1743 opened the Pacific Coast of America to Russian commercial interests. Russians had exclusive control of the trade until the 1780s with the publication of the results of Captain Cook's expedition. British and American ships soon appeared, and Americans from the East Coast, especially Boston, rapidly came to dominate the trade, to the extent that, as one author put it, "the economic foundation of an American Pacific Empire was unobtrusively laid from Vancouver Island on the north to Lower California on the south" (Mears 1935:107). It also established a circular trade in which San Francisco eventually became a key entrepôt. Ships would leave East Coast ports, sail around Cape Horn, beat up to the California coast, off-load manufactured goods for raw materials, then sail on to China—exchanging bulky raw materials for luxury goods—and finally return past Cape Horn and back to the home port. With some variation this loop remained the basic pattern of international trade for San Francisco during the sail era.

With the precipitous decline in the sea-otter population, as well as Chinese prices, the sea-otter trade lost its prominence in the first decade of the 19th century. The hide-and-tallow trade with the Mexicans and Spanish subsequently played a significant role in developing maritime trade along this coast in the 1830s. It was this trade along the California coast that Richard Henry Dana made famous in *Two Years before the Mast* (Dana 1911). This book was also the first major expose of conditions for crew on U.S. sailing vessels. The hide-and-tallow trade also participated in the East Coast and China trade. In this case, luxury goods from China were traded for hides and tallow, which were then transported back to the East Coast. Often the hides would make a return trip from the East Coast as leather goods, such as shoes (Delgado 1996:5). The growth of the Pacific whaling industry in the early 19th century was another important factor in establishing a U.S. maritime economy on the West Coast (Delgado 1996:6–8).

With the Gold Rush, San Francisco developed into a major port. The transport of passengers and manufactured goods to the goldfields sparked the brief but spectacular American clipper trade. Due to the price differences between the East and West coasts, ships built for speed rather than cargo capacity could turn spectacular profits (Rydell 1949). The clippers, which had their heyday in the 1850s, discharged their cargos in San Francisco, and then sailed onto China, loaded tea, and then returned to New York. Although expensive and specialized, a clipper often paid for itself on the first voyage. The slower British ships committed to the California goldfield trade could not hope to compete, and were often sold in San Francisco to be converted to floating storehouses (Delgado 1996:45–46). Factors such as this and the frequent abandonment of ships due to their crews lighting out for the goldfields also led to San Francisco's important position in the archaeology of mid-19th-century shipping, as abandoned ships were incorporated into the city's fill.

After the Gold Rush, San Francisco's importance as an international port continued to grow, with agricultural produce, lumber, and other raw materials flowing out and manufactured

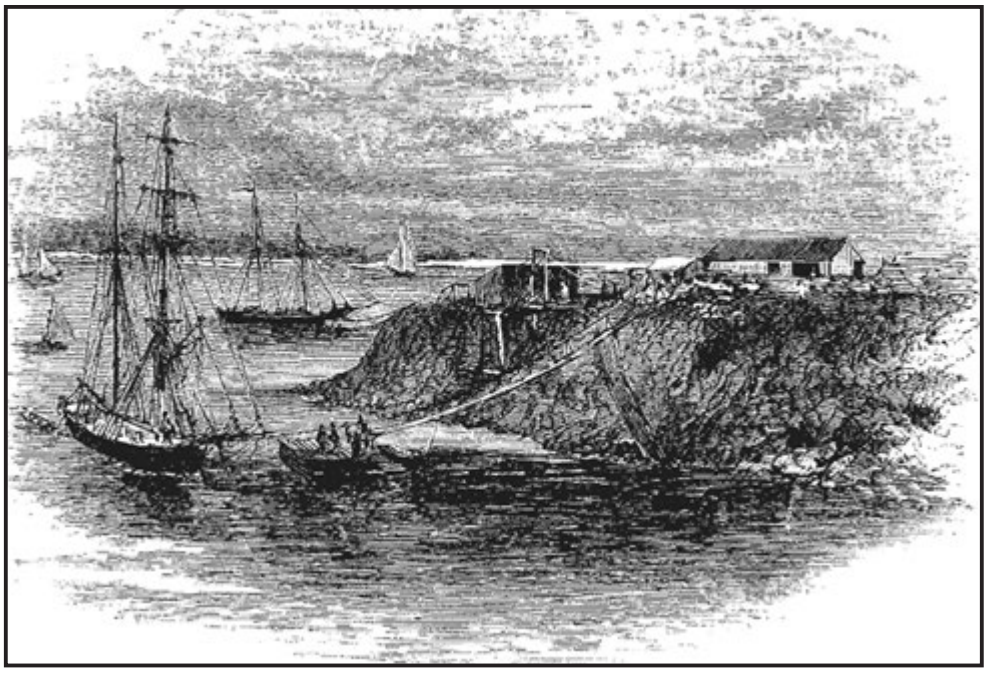


Figure 9.3. A schooner loading lumber in a Mendocino coast "doghole," ca. 1875. (Illustration from Nordhoff 1875)

and luxury goods flowing in. The completion of the transcontinental railroad in 1866, with its terminus across the Bay at Oakland, strengthened San Francisco's primacy even further.

While international trade, as well as the drama of the clipper trade, dominates the written history of San Francisco, the more mundane trade up and down the coast, from San Diego to Alaska, was equally important. This trade—using well over 100 small schooners—provided employment for the majority of West Coast seamen, and was primarily in the hands of northern European immigrants (Schwartz 1986:6). In 1917, of the 6,669 deck sailors on the West Coast, 3,100 were Scandinavian, while only 529 were born in the United States (Nelson 1988:42). The transport of lumber, particularly redwood, was a significant part of San Francisco's maritime economy and constituted the bulk of the coast trade (Mears 1935). Until the construction of small rail networks was possible, the primary means of transporting lumber from the forests of the Sonoma, Mendocino, and Humboldt county coasts was through the small schooners that docked at the small natural harbors, or "dogholes," along this coast (Jackson 1969; see Figure 9.3).

Loading and stowing lumber under these conditions was dangerous and required a skilled crew. The crews on the coastwise trade on the schooners out of San Francisco were by most accounts better off than those on the large oceangoing ships in the foreign trade. Living conditions on the vessel might be somewhat harsher, with much more cramped living conditions and a ship that continually rolled, but the voyages were shorter—a matter of weeks instead of months or years. The pay was higher, since the work of loading lumber in small choppy coves was skilled and demanding, and the coastwise trade did not have access to the labor pools that the foreign-trade vessels did (Schwartz 1986:6). Due to the short voyages, coast sailors were often free of the need to sign articles and were thus able to quit at any time. Another key difference between the coast and deepwater sailors was that the coast sailors acted as longshoremen of sorts, loading their own vessels. The seamen on these small schooners, with their skill and ethnic homogeneity, were the backbone of unionism on the West Coast (Nelson 1988:43; Schwartz 1986:6; Taylor 1971:9).

MARITIME WORKERS

Archaeological Research on Maritime Workers

An accurate understanding of sailors as a class is not easy. Some of the reasons are ideational. The historical literature is often romantic and celebratory, with analysis focused on the technology of sailing. One maritime historian observed that "Nostalgia, romanticism, and an antiquarian interest in ships have been the stays that supported the field for most of the present century" (Vickers 1993:419). Other difficulties are practical. The study of much of the 19th-century working class confronts the problem of widespread transience and mobility, making the lives of workers very difficult to trace in both the documentary and archaeological records. With sailors, who are by definition transient and mobile, this problem is even more extreme. The lives of sailors straddle both land and sea and disciplinary boundaries. With some exceptions—such as Eric Sager (1996), who studied Canadian maritime workers as members of land-based communities—when maritime historians have studied sailors, they have concentrated on sailors at sea. The sailors' waterfront life and the overall trajectory of their lives remains a void (Figure 9.4). Until both the sea and land contexts are integrated, key questions about sailors as a class must remain difficult to address (Vickers 1993:243).

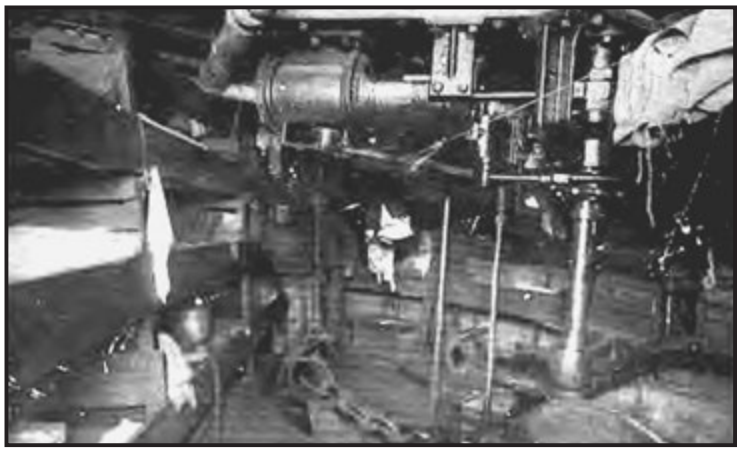


Figure 9.4. Crew's quarters in the forecastle of a coastwise steamer. Maritime workers at sea leave little in the way of material traces. (Photo from Mathews 1911)

Nautical archaeology also confronts practical problems. There is a tendency to focus on technology and cargoes. While this may be attributable to a theoretical focus, this focus may in fact be unavoidable. The dramatic site-formation processes that characterize most shipwreck sites leave little that can be specifically associated with a ship's crew. When such associations are made (e.g., Ward and Baram 2006), they are often tentative and limited to certain kinds of artifacts. In some rare cases, such as the *Mary Rose*, the sailors' remains themselves are available for study.

Usually when maritime workers themselves are studied archaeologically, it is however through terrestrial archaeology. Specific classes of mariner, such as whalers, leave prominent archaeological remains (Lawrence 2006). In other cases, the camps of shipwreck survivors have been investigated (Gibbs 2003; Nash 2004). When they are between voyages, sailors are generally not an archaeologically distinctive population. Like most transient workers, they lived in temporary and group housing, where the archaeological associations are often tenuous. It should be borne in mind that any archaeological investigation of sailors will only catch them at a specific point in their work and life cycle.

Some of the historical and archaeological research questions that the study of maritime workers needs to address have been summarized by maritime historian Daniel Vickers, in his article, "Beyond Jack Tar" (Vickers 1993), and by nautical archaeologist Joe Flatman, in his article,

"Cultural Biographies, Cognitive Landscapes and Dirty Old Bits of Boat: 'Theory' In Maritime Archaeology" (Flatman 2003). A central theme in both articles is the proletarianization of the maritime workforce. To phrase the question in dichotomous terms: were maritime workers skilled craftsmen in relatively egalitarian preindustrial workplaces? (Flatman 2003:148–149), or were they a proletariat in floating industrial workplaces? (Rediker 1988; Vickers 1993)? Obviously, these are extremes and most researchers would agree that the answer is complex and dependent on specific historical conditions. But most would also consider seamen as part of the continuum of working-class life and history, in one historian's words, as "working men who got wet" (Sager 1996:3).

Without understanding the trajectories of sailors' lives, we cannot understand the consciousness that informed their actions. Vickers (1993:422) argues that, for most sailors, seafaring was simply one stage in a life that was otherwise oriented towards land. Young men would go to sea and then at a certain age return to life on land. He notes that every age distribution in the literature on the sailing era that he was aware of indicates that 75 to 90 percent of common seamen were under the age of 30.

Sailors in the Law

The popular image of sailors is not a recent product, but was in fact enshrined in maritime tradition and law from the at least the Middle Ages, continuing on into the 20th century. In 1897 the U.S. Supreme Court stated that, "Seamen are treated by Congress as well as by the Parliament of Great Britain as deficient in that full and intelligent responsibility for their acts which is accredited to ordinary adults" (Nelson 1988:12). The importance of seafaring labor in national commercial and military power, the rootlessness and isolation of this workforce, and the brutal discipline of sailing vessels gave sailors a unique legal status compared to other workers. This status was defined in a series of mediaeval statutes starting with the Laws of Oleron, attributed to Eleanor of Aquitaine (referred to as the "Duchess of Guienne" in the Laws) ca. 1160. Based on earlier Mediterranean laws, the Laws of Oleron led to a series of other laws, such as the Laws of Wisby, the Laws of the Hanse Towns, and the French Code (Norris 1954), all of which regulated maritime commerce and carefully defined the nature of seamen and their lives, including shipboard discipline. These were, for the period, enlightened laws. Shipboard discipline was feudal and autocratic, but so was everything else in Europe in the 12th century. These laws also laid out what was probably the first workman's compensation plan, stating that a seaman rendered sick or injured while in service, without misconduct on his part, should receive medical and nursing care at the ship's expense, and with no loss of his wages (Norris 1954:483).

These laws were refined through time, but the basic tenor remained the same. Seamen were entitled to certain health benefits, but remained subject to feudal work conditions. Until 1915, sailors, along with Native Americans, had the dubious distinction of being considered wards of the state, the admiralty courts in the case of sailors (Nelson 1988; Norris 1954). There were some benefits; in addition to health care, employment contracts ("ship's articles") were minutely regulated and standardized. But sailors were also subject to conditions and discipline that were unthinkable, or at least extraordinary, even in the worst company towns, logging camps, or sweat shops (Nelson 1988:12). Although flogging was specifically outlawed in 1850, other forms of corporal punishment were not.

Until 1898, with the passage of the White Act, beating, wounding, imprisoning seamen, or withholding their food, were punishable only if they were "without justifiable course" (Taylor 1971:17). Brutality against unrated seamen by ship's officers and mates ("buckoism") was a central cause in the organization of sailors. In 1898 the International Sailors' Union published a pamphlet, "The Red Record," that documented atrocities on U.S. ships over the previous seven years, including the deaths of 14 seamen as a result of shipboard discipline (Nelson 1988:13). It enumerated 64 cases of violence, 40 of which were reported in San Francisco. Only three convictions for brutality against officers were obtained.

In addition to legalized corporal punishment, three legal constraints weighed heavily upon seamen:

- imprisonment for desertion,
- allotment of wages to creditors, and
- attachment of clothing by creditors.

Imprisonment for desertion was one of the legal constraints upon sailors that had no parallel in other industries. When a worker in other industries left his job, it was called quitting. At most there may have been civil penalties for violating a contract. When a sailor left his job it was called desertion, and the sailors doing so in the 1880s would be subject to criminal penalties, namely three months in prison. This only applied if the sailor had signed articles. Signing articles was mandatory on foreign voyages and theoretically optional on the coastwise trade. In reality most ships masters refused to hire anyone who would not sign articles, coastwise trade or not (Forsyth 1910:101–102). These laws enabled an underground economy that consisted of the trafficking of seamen by maritime labor contractors—crimps and ships masters.

The Maritime Labor Market: "Crimping"

A key factor to understanding lives of sailors is the labor market—those institutions that "mediate, affect, or determine the purchase and sale of labor power" (Rediker 1988). The functioning of the maritime labor market is, as with many sectors of temporary labor, rather opaque and little understood. Temporary labor contracting often takes place in the economic shadows and the transactions are minimally documented, if at all. The importance of the maritime labor market in 19th-century San Francisco is indicated in the fact that it has acquired a near-mythic status. "Shanghaiing," "the Barbary Coast," and a multitude of colorfully named and shady saloon keepers (Pickelhaupt 1996) are elements of San Francisco's shady labor-market past.

Probably the most important institution in San Francisco's labor market were the "crimps," who were generally boardinghouse owners and saloonkeepers who operated as employment agents (Figure 9.5). The crimping system was essentially labor-contracting, with the role of the crimps paralleling that of Italian *padrones* (Peck 2000), Mexican and Greek *patrones* (Papanikolas 1982), the Chinese Six Companies, or the Japanese *keiyaku-nin* (Street 2004). The crimps acted as middlemen between the captains and masters, and the labor pool of seamen. The captain placed an order for sailors with a land-based "shipping master," who would then make the rounds of crimps, who would fill the order. Each step along the way was fueled by kickbacks and fees that ultimately were deducted from the sailor's wages. The crimps, often with the collusion of the

Figure 9.5. "The Bells of Shandon" a San Francisco "crimp house." (Photo from Mathews 1911)

ships' masters, claimed large advances of the sailor's salary in payment for debts incurred while the sailor was in the crimp's care.

While in theory crimping, as with any other employment agency or contacting system, seems like an efficient way of consolidating and distributing information, it easily became exploitative, especially given the unusual legal status of sailors. The allotment laws became the linchpin of the crimping system, in which seamen essentially entered into debt peonage to crimps. At its most exploitative, the crimps encouraged or coerced seamen to run up debts at their establishments, the boardinghouse or saloon. Often "runners" for the crimp would go out to the ships to take sailors to their employers' establishments, with the charges starting with the boat trip to shore (Crowley 1967; Goldberg 1958). Sometimes sailors were actually induced to desert, often with captain's collusion, since the sailors would forfeit the pay they had accumulated to date. This would also put them more firmly under the control of the crimp, since they would now be (a) short of money and (b) criminals. The charges for boarding, food, and drink continued until the sailor was in debt and had to ship out under the crimp's conditions, a situation which could come to pass in the day or two. The sailor had very little choice especially as, if he was in debt to the crimp, the crimp could actually, under the allotment laws, take his clothes, thus rendering him a virtual prisoner. The sailor would then be placed in a ship of the crimp's choosing and owe the crimp a sizable advance on his future wages (Goldberg 1958:16). One observer noted that the crimps "would determine the length of [the sailor's] spell ashore, fix the rate of wages, and generally relieve him of all worldly cares." He continued, "such a thing as 'living private' was out of the question. The seamen were herded under the eyes of the boarding master as completely as so many cattle in a corral" (quoted in Goldberg 1958:16). In times of labor shortage, captains would pay the crimps "blood money" for the sailor. During times of labor surplus the crimp would pay the captain (Goldberg 1958:14). The real profit for the crimp lay in the advances on wages.

Crimping may also have had a personal and ethnic component. Many crimps were former seamen, and their boardinghouses and saloons would have been familiar to seamen—"steeped in the familiar ambience of ethnic and seafaring subcultures." There was also a tendency for seamen to cluster in boardinghouses on the basis of nationality (Goldberg 1958:16). This pattern also mirrors that of other ethnic labor contractors.

While the crimping system may have served some positive function in seamen's lives and may not have been as consistently and brutally exploitative as it has been portrayed, it served, more than anything else, as a spur for sailors to organize into unions. Early efforts to organize on the part of the sailors sought little more than the establishment of a hiring hall in order to circumvent the crimps and shipowners.

ORGANIZATION OF LABOR IN THE MARITIME TRADES

Maritime Hierarchies

While the severity of maritime hierarchies has become legendary, maritime labor in the 19th and early 20th century lacked the clear-cut hierarchy of railroad labor, and might best be described as hierarchies within hierarchies. The hierarchy on a ship had four basic rungs (Nelson 1988:31):

1. Masters and mates
2. Deck sailors
3. Engine-room hands
4. Stewards

Within each rung there were minute gradations of rank and pay. For example, the deck department was divided into bosuns, bosun's mates, able-bodied seamen, and ordinary seamen. As steam came to dominate over sail, the engineer room and deck departments increasingly vied for position. The stewards were always at the bottom, generally despised by the other hands for the food the shipowners provided.

These formal rank distinctions often mirrored ethnic and national divisions. For example, the deck hands on the coast trade schooners, a relatively privileged and skilled group, tended to be Scandinavians. On any ship the position of cooks and stewards could be of any nationality. The employment of Filipinos and Chinese began in the stewards' department, although later they were hired in increasing numbers in unenlisted ratings (Figure 9.6). As with many capitalist enterprises from the late 19th century onwards, shipowners sought to drive down wages, living conditions, and break efforts towards organizing by flooding the merchant marine with Filipino and Chinese workers, as well as transient workers, college boys on a lark, and the down-and-out and desperate (Nelson 1988:19). Organizing efforts on the part of seamen were thus bound up with nativist sentiments (Nelson 1988:48).

Figure 9.6. Chinese sailors on a Pacific Mail Company steamer. Chinese workers, including sailors, were targets of nativist organizing. (Photo from Mathews 1911)

The rigid divisions within a single ship were nested within larger divisions between types of ships, their operations, and the relations within which those operations occurred, for example, small independent operations or larger corporate enterprises. The captains themselves existed within elaborate hierarchies dependent on the types of ships and the types of operations in which they were engaged. The captain of a tug or bay ferry would be paid more and have a higher status than the captain of a "doghole schooner," since his ship was worth more. Captains of ships in international service had higher status still. As noted, the distinctions between ships and

operations also meant differences in living conditions for crew on those ships: life on an overseas ship was very different from life on a "doghole schooner."

The coast-trade sailors were less vulnerable than the deepwater sailors for several reasons. Their ethnic and cultural homogeneity served as a ready basis for solidarity. Many also shared traditions of labor organization rooted in European movements. They possessed a monopoly of skill—they could not be easily replaced in the event of labor disputes (Schwartz 1986). These sailors formed the backbone of what came to be the Seaman's Union of the Pacific (SUP), led by the legendary Anders Furuseth. By the turn of the century, this union had made San Francisco the center of the most highly organized maritime workforce in the United States (Forsyth 1910).

Organizing Maritime Workers

The Gold Rush was a brief golden age for California sailors. In order to compete with the lure of the goldfields, captains found themselves agreeing to pay common sailors $200 to $300 per month just so they could get their ships out to sea again (Figure 9.7). By 1850, however, wages had dropped to $25 per month as the easy placer workings played out. The labor market and seamen's wages fluctuated during the 1850s, as new goldfields opened and others failed. It was during this period that crimping and shanghaiing became embedded as a means of obtaining crews (Forsyth 1910:97).

The first recorded effort at organizing seamen on the West Coast came in 1866, with the brief existence of The Seamen's Friendly Union and Protection Society. In 1878 the Seamen's Protective Union was formed. It sought to establish a minimum rate of $30 month and was heavily involved with anti-Chinese agitation. After a brief florescence, it expired within a few months. In 1880 The Seaman's Protective Association was organized under Frank Roney, a prominent figure in San Francisco's labor movement. The rank and file were steamship sailors and firemen, but few of the leadership were actually sailors. This organization lasted until the end of 1882 (Forsyth 1910:19–98).

By 1885 common seamen's wages were about $25 per month on the coast and $20 per month for deepwater sailors. Declining wages and a depressed economy sparked the formation of the Coast Seamen's Union (CSU) in an exuberant meeting on the Folsom Street Wharf on 6 March 1885, in the midst of a strike by seamen for higher wages. By 23 March the organization was said to have had 1,000 members (Forsyth 1910:98). The strike eventually resulted in a number of shipowners agreeing to a $30 wage.

While groups of seamen, such as firemen and engineers, had managed permanent organizations prior to 1885, the CSU was significant as the first permanent organization of sailors as a whole—an industrial rather than craft-based union. The success of this union also sparked the first industry-wide organization of shipowners: the Shipowners' Association of the Pacific Coast in 1886. In an effort to break the CSU, the Shipowners' Association announced that it would only hire seaman through an association shipping office and would require workers to keep "grade books" listing their qualifications and employment history. Acquiring such a grade book from the shipping office entailed surrendering one's union card. The grade book also provided a way for shipowners and captains to identify and monitor potential troublemakers. The CSU struck unsuccessfully against the grade-book system in 1886, and it remained in operation (Nelson 1988:41; Schwartz 1986:15).

Figure 9.7. Yerba Buena Cove, South of Market, Winter 1851. This daguerreotype was taken from Nob Hill, and looks across Yerba Buena Cove toward Rincon Point. The cluster of abandoned ships in this part of the harbor represents only a few of the estimated 776 ships that lost their crews to the lure of the gold mines. (Daguerreotype courtesy George Eastman House, International Museum of Photography and Film: 1979:3101:0005)

In 1887, Anders Furuseth, a Norwegian sailor who had come to California in 1880, became secretary of the CSU (Figure 9.8). He remained secretary for two years, and, even in the aftermath of the 1886 strike, succeeded in expanding and consolidating the position of the CSU. He started publication of the *Coast Seamen's Journal* and obtained an investigation of waterfront conditions by the California Bureau of Labor. After another period at sea, Furuseth became secretary again in 1891, and presided over maritime organized labor until his death in 1938.

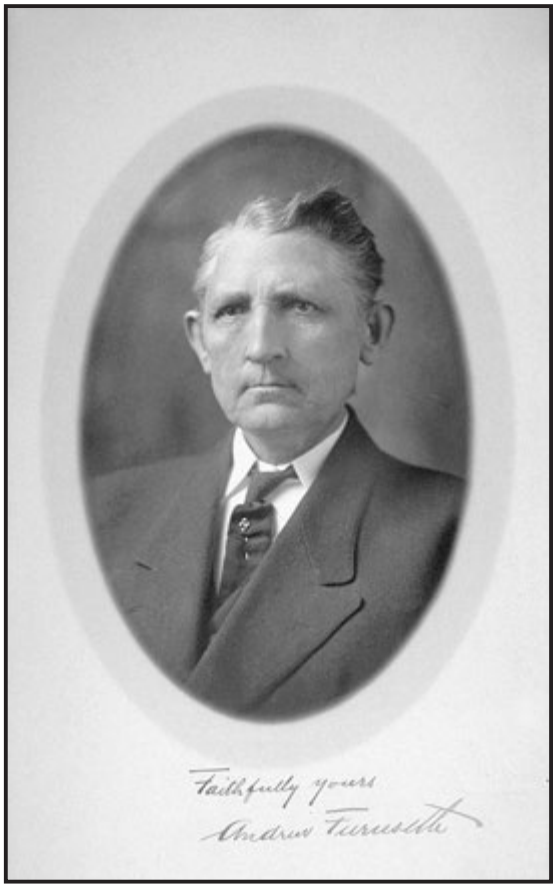


Figure 9.8. "Faithfully yours, Andrew Furuseth." (Photo courtesy of the Bancroft Library, University of California, Berkeley: Furuseth, Andrew--POR.

In 1891 Furuseth managed to merge the CSU with the growing Steamship Sailors' Union, ending jurisdictional battles between the two unions, and allowing sailors to work on both types of both sailing and steam vessels. This merger created the Sailors Union of the Pacific (SUP), which remains active to this day (Nelson 1988; Schwartz 1986). In 1893 the shipowners association made another effort to break the union, enlisting crimps and boardinghouse managers to provide sailors to work at less than union wage. This "Battle of 1893" was not a strike as such but centered on efforts by shipowners to obtain nonunion crews and efforts by the SUP to prevent nonunion sailors from hiring on. The SUP tactics included paying for the room

and board of nonunion sailors, thus removing them from the crimps; patrolling the waterfront; moving in on deepwater hiring, which had hitherto been left to the crimps; and using "dummy" sailors to quit nonunion vessels right before sailing. In the end the SUP was nearly bankrupt, and after the loss of public support due to an unsolved bombing at a crimp's boardinghouse, resolved to lower its wage scale and close its hiring hall.

In conjunction with direct action, the SUP also focused on legislative reform. In 1895 the San Francisco congressman James Maguire, with lobbying by Furuseth, succeeded in passing the Maguire Act, which prohibited imprisonment for desertion in the coastwise trade, prohibited allotment, and exempted seamen's clothing from attachment. Some loopholes in the Maguire Act were closed with the White Act of 1898, but deepwater sailors were still subject to imprisonment for desertion. After a long legislative ordeal, the Seamen's Act of 1915 was signed into law by President Wilson after being shepherded through by Senator Robert La Follette and Furuseth. The Act abolished imprisonment for desertion, established minimum standards for crew qualifications, eliminated legal corporal punishment and "buckoism," and established basic shipboard living conditions (Nelson 1988; Norris 1954; Schwartz 1986). This series of acts effectively broke the power of the crimps.

Maritime workers confronted many of the same issues in organizing that other workers did—an unfriendly legal system, associations of employers, and internal struggles and factionalism. As with the railroad workers in Oakland, a central issue that divided workers was that of craft vs. industrial unionism (or syndicalism), a division that was bound up with contemporary nativist ideologies. Furuseth was a devout craft unionist, absolutely committed to the idea of sailors as an exclusive skilled profession: "It is skill that puts the mechanic nearest the gods" (in Nelson 1988:46). Furuseth was also a nativist. He argued that the 1915 Act was essential for the "white man to maintain himself on the seas" in the light of increasing employment of Filipino and Chinese seamen (Nelson 1988:48).

Furuseth's craft unionism, as well as his white supremacist beliefs, ensured that as long as he dominated the sailor's union, maritime labor would remain divided—skilled from unskilled and whites from nonwhites. The SUP expended considerable energy in ensuring that it would remain separate from the longshoremen and in jurisdictional waterfront battles over who got to load and unload the ships, and at what point the cargo passed from the sailors' to the longshoremen's jurisdiction.

The exclusivity of the SUP under Furuseth was something that many members fought. Not necessarily the racial ideologies, but certainly the craft exclusivity. Although sailors were, and are represented as a breed apart, there were sympathies and connections between them and other professions. For example, close connections developed between maritime and logging industry workers. The conditions in the industries were similar, with transient workers living and working in isolated conditions under nearly feudal conditions. Loggers were one of the mainstays of the Industrial Workers of the World's (IWW) organizing in California in the early 20th century, and a number of these organizers played important roles in the radical maritime unions of the 1930s (Nelson 1988:63–64).

The longshoremen stood opposite the sailors. They literally muscled the international flow of commodities across the gap between sea-borne and land-based transportation networks. The work, especially before the widespread adoption of containerized shipping after World War II, was skilled and physically demanding. A work culture rooted in cooperative labor and physicality, their ties to the local community, and their positioning at the vulnerable chokepoints

Figure 9.9. The lumber trade in San Francisco: the Mendocino Lumber Yard, Pier No. 11. (Photo courtesy of Library of Congress, Prints & Photographs Division, Lawrence and Houseworth Collection, LC-USZ62-26886)

of global commerce made longshoremen a force to be reckoned with when they were organized. Probably the most famous West Coast strike is the San Francisco Waterfront Strike of 1934.

The connections between sailors and longshoremen extended beyond their proximity on the waterfront. They were often the same people. Commercial seafaring, if one was an unrated hand, was a young man's profession, and becoming a longshoreman after quitting the sea was something of a natural progression. One steamship company executive remembered San Francisco longshoremen as being mostly steamship sailors who, "when they married . . . wanted to come ashore. So they came ashore and became longshoremen" (Nelson 1988:2). Many loggers also worked as longshoremen when they tired of the transience of the lumber industry. Loading cargo, especially lumber, was one of the few jobs outside the timber industry where their logging skills were useful (Figure 9.9).

Longshoremen's pay tended to be higher than that of other laborers, but longshoremen's labor was "casual." They were hired for specific tasks—the loading or unloading of a ship, and their job was over when that task was complete. They were hired at "shape-ups," where a foreman would pick who was going to work that day, much in the manner day labor is hired today. The shape-ups and the casual nature of dock work were central issues that drove longshoreman organizing efforts (MacElwee and Taylor 1921; Selvin 1996).

THE WORKINGMEN'S PARTY OF CALIFORNIA AND SOUTH OF MARKET

Mark Walker

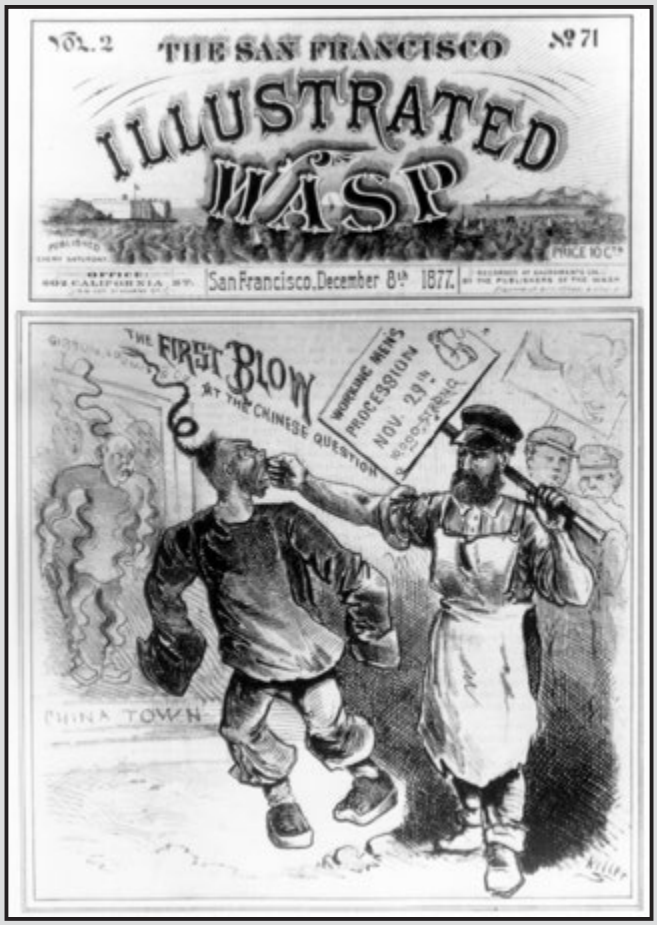
The Workingmen's Party of California (WPC) lasted probably four years. It appeared in the aftermath of anti-Chinese riots in July 1877; managed to get a state constitutional convention in 1878, which it numerically dominated; elected a mayor and suite of candidates to San Francisco office in 1879; and had ceased to exist as a political force by 1881. Riven by factional disputes, dominated by demagogues, and politically inexperienced, the WPC achieved little of immediate consequence in those four years; although in the longer term it had considerable impact. Working-class political action became a force to be considered in politicians' calculations, and restraints, albeit modest ones were placed on corporations. But the achievement for which the WPC has become infamous was placing the Chinese "problem" on the national agenda. The extent to which the WPC was able to muster a powerful political constituency with its rabid anti-Chinese attacks did not pass unnoticed, and in 1882 the federal government passed the Chinese Exclusion Act.

The WPC was a state-wide movement, but it was founded in San Francisco, and its political base was solidly in the South of Market neighborhood. In 1880 South of Market comprised approximately 3 percent of San Francisco's area, but contained 25 percent of its population (Shumsky 1991:108–109), and this was not the rich 25 percent. South of Market was a landscape of transience—boardinghouses, hotels, lodging houses, and restaurants. In the depressed conditions of the 1870s and 1880s, work was generally hard to come by and what there was, was temporary, but the cost of living was high. The squalor of South of Market was a glaring contrast to the opulence of the few wealthy families of Nob Hill. The contrast in living standards, the depressed economy, along with the not unjustified feeling that the Nob Hill families such as the Crockers and Stanfords were monopolists, made for an explosive social situation. The feeling that workers were competing with cheap Chinese labor imported by the monopolists added fuel. Foreign in appearance and manners and socially marginal, the Chinese made an ideal focus for mob violence. Using the Chinese as a lightning rod for the South of Market crowd's frustration, demagogues such as Denis Kearney transformed the WPC into a reformist party that backed up its platform with the threat of mob violence.

We know plenty about the leadership of the WPC, men such as Denis Kearney and Frank Roney, but who comprised the rank and file of the WPC was a mystery in 1878 and it is a mystery now, although cliometric studies (Shumsky 1991) have shed some light on this topic. Frank Roney stated that the WPC was composed of small property owners, while San Francisco newspapers argued that they were idle riff raff and hoodlums (Shumsky 1991:22). Alexander Saxton (1971:125) saw the WPC as a straightforward labor organization. Neil Shumsky analyzed voting registers, city directories, and census record to compile a rough picture of WPC voters. His analysis showed that the typical Workingman was young and a recent immigrant. Support of the WPC was strong among nearly all European immigrants, but was strongest among the Irish (Shumsky 1991:27–31). Denis Kearney and Frank Roney were both Irish-born. Support for the WPC was weak among native-born Americans. The association of the Irish on the West Coast with anti-Chinese feeling was so strong that some commentators saw anti-Chinese agitation as a product of Catholicism (Allerfeldt 2003:59). The Irish and the Chinese, both propertyless recent immigrants, were in competition for the same jobs. The Irish WPC supporters found advantage in this competition in being white.

Shumsky noted a recurring theme in the study of 19th-century laborers: their transience and reliance on rented, group housing makes them extremely difficult to trace. In essence he found that people who could be traced in the historical record were more likely to vote against the WPC. "In other words, party support came from men so anonymous that their lives could not be traced over a three-year period through basic records" (Shumsky 1991:30–31).

The reasons for the rapid rise and fall of the WPC have also been a subject of historical interest. There was no single reason. Internal factionalism was certainly an issue. Denis Kearney bred divisiveness. The WPC split between Roney and Kearney factions before the 1878 constitutional convention and it split again when Kearney



"The First Blow at the Chinese Question," (*The Wasp*, 8 December 1877). (Courtesy of the California History Room, California State Library, Sacramento, California)

affiliated with the Democrats and Greenbackers (Kauer 1944:289). Another factor is that the WPC was unable to exploit its electoral successes. The general consensus is that its delegates and office-holders were usually hopelessly outmaneuvered by more experienced politicians—in building coalitions and in manipulating parliamentary procedure and committee systems. Official repression and lack of legitimacy were also important. There was always the suspicion that the WPC had grown out of the 1877 race riot and that the same men were involved in each. This connection, coupled with Kearney's violent and indiscriminate rhetoric, meant continual police surveillance of WPC operations and reluctance on the part of machine politicians to associate with the WPC.

All of these factors were important, but there may have been a more fundamental reason. Shumsky argued that the WPC was a transitional form in working-class political activism, one that lay between the "crowd" of pre-industrial and early industrial Europe (Thompson 1971; Rudé 2005) and an organized electoral political party. Other writers have noted that the WPC laid the organizational groundwork for electorally oriented unions (Kauer 1944), but the transitory nature of the WPC may have been caused by the fact that it was essentially a crowd-based party. Its elected candidates had to combine, on the one hand, electoral and representative politics with its deal-cutting and compromises, while on the other they had to maintain their crowd-based constituency with blood-curdling speeches and the implied promise of riot. The rhetoric and massive assemblies of the WPC made San Francisco authorities nervous, even though the most disorderly person at these assemblies was usually the speaker. Crowds are transitory and when the crowd wandered off, the WPC disappeared.

THE ARCHAEOLOGY OF MARITIME WORKERS

The West Approach documentary research identified 13 archaeological features representing households with someone involved in the maritime industries (Table 9.1). The shipboard workers consisted of three captains, one steamship fireman, one ship's carpenter and caulker, one seaman, and one steward. The dock workers consisted of a wharfinger (a wharf manager), and four longshoremen. Lastly, there was a shipbuilder who owned ships involved in the coast trade.

For purposes of analysis, the maritime workers have been divided into three main occupational groups and one unique category. The shipboard workers are divided into *Masters* and *Seamen*, reflecting the major hierarchical division of shipboard life. The shipbuilder, as a shipowner and Master, is included in the former group. Four of the five dockworker contexts were associated with dockyard workers classed as *Longshoremen*, while the *Wharfinger* household is a unique case. The archaeological contexts and the households with which they are most likely associated are listed in Table 9.1. This table lists each eligible feature associated with at least one person engaged in a maritime occupation, the nationality of that person, and the approximate date of the refuse deposit in the feature. The Associated Households column notes whether the artifact deposit is associated with a single household or with multiple households, such as at a boardinghouse or apartment building.

A second table (Table 9.2) summarizes the information on associated households by the maritime trades identified for this West Approach group. Most workers in the 19th century are difficult to identify, both in the historical and archaeological records, as they were very mobile, and generally lived in group housing such as boardinghouses or as lodgers. Only under rare circumstances are their archaeological deposits individually identifiable. As the historical discussion above indicates, this problem is exacerbated with sailors. Table 9.2 shows that the working-class members of the maritime sector—the shiphands and longshoremen—are far less likely to be associated with single-household deposits. Of the nine ship hands and longshoremen, only one, the Fegan brothers, were confidently associated with an archaeological feature, yet they also lived on a multiple household lot.

Masters and Shipowners

All members of the Masters class were involved in the coast trade. They were not deepwater sailors, but worked on or owned vessels engaged in short voyages up and down the West Coast, probably hauling lumber in the case of the schooners and carrying passengers, mail and freight in the case of the steamers.

The Gee Household

Probably the wealthiest household in the maritime sample, and one of the wealthiest in the West Approach Project sample, is that of Ferdinand Gee. The Gee family resided on Block 10 at 123 Perry Street from about 1867 to 1883. The 1870 and 1880 censuses record Ferdinand as a master mariner, from Prussia. His wife, Isabella, is also listed as being from Prussia, although her 1882 obituary recorded her as being from County Tyrone, Ireland. Both Ferdinand and Isabella were listed as being illiterate, which is most likely incorrect. They had three children. In 1872 he was captain of the newly built schooner *Elvinia* (or *Elvina* or *Alvena*), a 148-ton, two-masted schooner built on Humboldt Bay. She was still afloat in 1900 (Magellan 2007). The *Elvinia* was almost certainly involved in the coast lumber trade (Figure 9.10). An "F. Gee, owner schooner

Table 9.1. Maritime Workers from the West Approach Project

Job Class	Maritime Association	Block	Address	Feature	Nationality	Date of Deposit	Associated Households	Number of Individuals in House (U.S. Census)	Notes on Association
Master	Alfred Metcalf, captain, and family	10	114 Silver	Privy 851	U.S.	1880	Single	5	
Master	Ferdinand Gee, captain, and family	10	123 Perry	Privy 807	Prussian	1869	Single	7	
Master	Jacob Michelson, master mariner, and family	10	109–111 Perry	Privy 857	Norwegian	1880	Multiple	16 (6 in Michelson family; 10 in Dolan family	Duplex with two families
Master	Albert Rowe, shipwright/ship-owner, and family	9	16 [37] Perry	Well 8	U.S.	1887	Single	7	
Seaman	Henry Mayne, ship's carpenter, and family	5	546–548 Folsom	Privy 505	U.S.	1880	Multiple	11: Mayne family 2, and 4 lodgers; O' Connor family 5	Duplex with two families. Lodgers
Seaman	Frank Johnson, seaman, and family; Henry Meyers, upholster, and family	9	14 [39] Perry	Privy 2	U.S.	1880s	Multiple	Johnson family 2; Meyers family 6	Shared duplex
Seaman	Thomas Griffin, ship's fireman	10	137-1/2 Perry	Privy 810	Irish	Late 1870s	Multiple	2	Tenant of John Monahan
Seaman	Thomas McIntyre, Ship's steward, and family	10	120 Silver	Privy 808	German	1882	Multiple	McIntyre Family:3 Schreiner Family:3 Johnson Family:2 Degnan Family:2 Howland Family:2	Duplexes
Longshoreman	William Cadigan, stevedore, and family	4	13 Baldwin Court	Privy 1305	Irish	1880	Multiple	Cadigan family 7 Fuchs family 5	Duplex

Table 9.1. Maritime Workers from the West Approach Project *(continued)*

Job Class	Maritime Association	Block	Address	Feature	Nationality	Date of Deposit	Associated Households	Number of Individuals in House (U.S. Census)	Notes on Association
Longshoreman	William Dougherty, longshoreman, and family	4	236 Fremont	Privy 1333	Irish	1890	Multiple	2	Also residence of Joseph Hawkins, engineer.
Longshoreman	Fegan brothers, Irish longshoremen	5	49 Clementina	Privy 515	Irish	1880	Single	2	
Longshoreman	Murdock McIver, stevedore, and family	10	125–127 Perry	Privy 806	Scottish	1880	Multiple	McIver family 9; Martin family 6	Duplex
Wharfinger	Stephen Baker, wharfinger, and family	10	108 Silver	Well 853	U.S.	1870s	Single	5	

Table 9.2. Assemblage Association by Maritime Job Class

Occupation	Single Association	Multiple Association
Masters		
Captain	2	1
Shipowner	1	-
Seamen		
Ship's Carpenter	-	1
Fireman	-	1
Seaman	-	1
Steward	-	1
Dockyard Workers		
Longshoreman	1	3
Wharfinger	1	-

Alvena" is one of the signers on a petition to the U.S. Senate for a Harbor of Refuge at Cape Gregory in Oregon (Office of the Board of Engineers Pacific Coast 1880:74). In addition, the master of the schooner *Annie Gee* is also a signer. As Annie Gee was the name of Ferdinand's youngest daughter, Ferdinand was likely owner of this ship as well. After Isabella's death, Ferdinand remarried. He died in or before 1905, the year his will was filed. He had done quite well for himself, leaving an estate of around $100,600, along with real estate in San Francisco, and considerable stock in the Alaska Packers' Association and in numerous schooners (*Oakland Tribune* 1905:5).

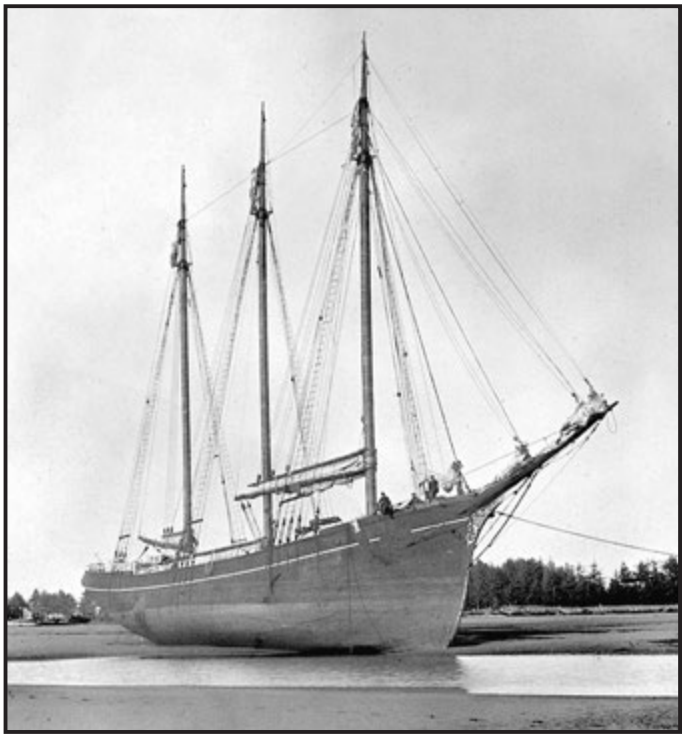


Figure 9.10. A lumber schooner, the *C.A. Thayer* stranded at Gray's Harbor, Washington, in 1903. It was built in 1895 at the Bendixsen shipyard, which also built the *Elvenia*. The *Thayer* was restored in 2007 and is currently at the San Francisco Maritime National Historical Park. (Photo courtesy San Francisco Maritime NHP, No. E3.8497n)

The Michelson Household

Jacob Michelson (aka Michaelson) and his family shared a duplex on Perry Street (109-111) in Block 10 with the Dolan family. Michael Dolan was also marginally involved in the maritime trades as a shipping clerk. The Michelson family lived here from at least 1880 to 1886. The 1880 Census lists Jacob as a 51-year-old Norwegian sea captain. His wife, Aletta, was also Norwegian. They had four children. The 1879 City Directory listed Jacob as captain of the schooner *Fannie*. Although no information was found on the *Fannie*, the vessel type indicates that it was most probably involved in the coast trade.

The Metcalf Household

The third captain in the sample is Alfred Metcalf. Alfred was born in the U.S. and his wife Catherine was Prussian. They had two daughters. The Metcalf family occupied 114 Silver Street on Block 10 from 1864 to 1896, when Alfred's widow, Catherine, died. In 1864 Alfred was mate on the steamer *Silenas* (probably *Salinas*), and in 1867, captain of the *Salinas*. The *Salinas* had been built in 1861 in San Francisco and was a small ship of about 147 tons. She remained in service until about 1890 (Magellan 2007; Wright 1911:122). At the time that Alfred was mate and then captain, the *Salinas* was owned by Goodall and Nelson, which was initially a tug-and-supply company on the San Francisco Bay but gradually expanded into the coastal trade after acquiring the service from the Pacific Mail Company in 1871 (Wright 1911:121). At some point after 1867, Alfred became a tug captain. He is listed in the 1880 petition to the U.S. Senate as master of the tug *Favorite* (Office of the Board of Engineers Pacific Coast 1880:72) and in the 1881 City Directory as captain of the tug *R. Holyoke*.

The Rowe Household

The final person in the Masters sample was not a captain but a shipbuilder and a probable owner of ships involved in the coast trade. Albert Rowe lived with his family at 16 [37] Perry Street on Block 9 from about 1873 to 1888. The 1880 Census indicates that he and his wife, Katie, were originally from New Jersey and had three children. Albert's divorced sister and his niece also lived with them. In the city directories from 1873 to 1879, Rowe is listed as part of Wilcutt & Rowe, shipwrights and caulkers. In the same 1880 petition for the Cape Gregory harbor of refuge that Ferdinand Gee was listed on, he lists himself as an "owner of vessels" (Office of the Board of Engineers Pacific Coast 1880:73) In the 1900 Census he was a "capitalist" and had remarried 12 years earlier. Two of Albert and Katie's sons became physicians.

The Seamen

The second category consists of the seamen—the workers who went to sea. All the archaeological contexts linked with this occupation had mixed associations, since most sailors lived in temporary or shared lodgings.

The Johnson Household

The first household is that of Frank Johnson, who lived with his family at 14 Perry Street on Block 9. They were there in 1880, sharing the building with an upholsterer and his family. The only historical record we have is the 1880 Census listing for Frank Johnson, a 32-year-old seaman from California, and his wife, Mary, 22 years old and from Ireland.

The Griffin Household

The second household is that of Thomas Griffin from Ireland, who resided at 137-1/2 Perry Street on Block 10 from ca. 1873 to 1877. He shared the house with John Monahan, an Irish saloonkeeper, and his family. Griffin appears in the 1876 City Directory as a fireman on the *Oakland*, which was the Oakland ferry, and in the 1877 directory as a fireman on the *S.S. Ajax*. In 1879 and 1880, he was a fireman on the Pacific Mail steamer, *S.S. Colima*.

A glimpse of life at sea can be gained by reviewing the voyages of the *Colima* and *Ajax*. The *S.S. Colima* was newly built in 1874, and was a deepwater ship. In 1874 she sailed from New York to San Francisco, and had to stop at Rio de Janeiro for repairs (*New York Times [NYT]* 1873:1). In

Figure 9.11. Honolulu steamer *Ajax* unloading at Greenwich St. wharf, San Francisco, 1866. (Photo courtesy of Library of Congress, Prints & Photographs Division, Lawrence and Houseworth Collection, LC-USZ62-13117)

1874 she sailed to Yokohama in a record-breaking 17 days 12 hours (*NYT* 1874:5). In the 1880s and 1890s, she operated between Panama and San Francisco. In May 1895 she capsized in a gale off the Mexican coast with the loss of over 160 lives, possibly because she was overloaded with lumber on the upper decks (*NYT* 1895:1; *Los Angeles Times [LAT]* 1895:3). The *S.S. Ajax* was another steamship that shifted from deep water to coastal routes later in life. In 1866 the *S.S. Ajax*, made the first steamship run to Hawaii (Figure 9.11), with Mark Twain as a passenger (Twain 1975:3). In the 1870s there was an *Ajax* that operated between San Francisco and Portland, Oregon (Alverson 1913:81; Joyce 1883:203). Assuming these refer to the same ship, it is likely that the aging steamer had been placed on coastal routes in the 1870s. There was probably a second (or third) *Ajax*, owned by the Oregon Coal and Navigation Company, which wrecked off the Mendocino coast in November 1890 (Kelley House Archive 2007). Or, given the date, it may have been the same ship on the last voyage of a long career.

The Mayne Household

The third household was that of Henry Mayne, a ship's carpenter from Louisiana. He lived at 546 Folsom on Block 5 with his English wife, Maria, from ca. 1873 to 1883; they had four lodgers. In 1873 Henry was a carpenter for the Pacific Mail Steamship Co (PMSS Co.), which owned the ill-fated *Colima*. In 1875 and 1876 he was carpenter on the Oregon Steamship Co. steamer *Ajax*. If this is the same *Ajax* as above, then Mayne and Thomas Griffin may well have

worked together. Henry Mayne died in Honolulu in 1883, while serving as carpenter aboard the *D.C. Murray*.

The McIntyre Household

The final seaman household resided at 120 Silver Street on Block 10. This is a complex association, as this address was divided into "Dwelling House A" and "Dwelling House B." In 1880 two families lived in Dwelling House A and three in B. These five households included German-born Emil Schreiner and his wife and daughter in Dwelling House A. They resided here from about 1879 to 1885. At the time of the 1880 Census, Emil was a bartender who had been unemployed for 9 months. In 1881 and 1882 he is listed in the city directories as a steward, although no ship is given. Then in 1883, he is listed as a bartender. He may have taken the position as a steward for want of other work.

Another steward also lived at this address, but at Dwelling House B. Thomas McIntyre, his wife, Mary, both from Ireland, and their two children lived here from ca. 1879 to 1882. At the time of the 1880 Census, Mary was the head of household, presumably because Thomas was at sea. Thomas was listed as a steward for the PMSS Co., on the *S.S. Ancon* in 1881, then on the *S.S. Idaho* the next year. During the 1870s and 1880s, the *Ancon* and *Idaho* appear to have been coast steamers (Figure 9.12), operating mainly between San Francisco and Alaska (*Morning Oregonian* 1884:4). The *Ancon* had been built in 1865 for use on the PMSS Co. run to Panama. In 1870 she was refitted as a coast steamer, and finally struck a rock in Neah Bay, Washington, 28 August 1889 (*LAT* 1889:5). Although the ship was destroyed, no lives were lost. A newspaper report noted, "She has long been regarded as more of less unsafe, and her owners the Pacific Steamship Company, have been very careful of her of late. The fact that no lives were lost causes many to regard her destruction as something of a blessing" (*NYT* 1889:3). The *Idaho* had been in operation since 1867 and was initially placed on the San Francisco/Hawaii route. In 1870 she became a coast steamer. These vessels ran passengers and freight from San Francisco north. There are several photos of cruise groups on the *Ancon*. More than likely, tending to passengers such as these was a significant part of McIntyre's duties.

Figure 9.12. *S.S. Ancon*, Safety Cove, Alaska. (Photo courtesy of Bancroft Library, University of California, Berkeley: 1960.010 ser. 2:0490--NEG)

Dockworkers: The Longshoremen and the Wharfinger

The sample contained four addresses that had features associated with households that contained longshoremen, and one with managerial worker—a wharfinger.

The Cadigan Household

On Block 4, 13 Baldwin was a duplex, the residence of the Cadigan and Fuchs families. William Cadigan (or Karrigan) was an Irish longshoreman and laborer. He was married and had two children in 1870, and five in 1880. His wife, Mary, was also Irish. Martin Fuchs was a carpenter and flaskmaker. The Cadigan family lived at this address from ca. 1875 to 1889, when William died. In the 1870 Census he was listed as a laborer. In the 1873 City Directory he was a stevedore with Whitney & Freese. In 1874 he was listed as a laborer, in 1875 a stevedore with George Whitney, in 1876 a laborer with Stryker & Kiernan, in 1878 a lumberman with A.C. Freese, the next year a stevedore with A.C. Freese, and in 1880 a laborer.

Although Cadigan held a variety of jobs, reflecting the casual nature of employment for dock workers, the fact that he often listed himself as working for specific companies and was often working with some variation of Whitney & Freese suggests he may have had relatively stable employment compared to most longshoremen of this period. That his family stayed at the same address for nearly 15 years also indicates a stable employment situation.

The Dougherty Household

Also on Block 4, 236 Fremont was the residence of a number of maritime workers over the years, including a shipwright, a sailor, a ship's carpenter, and three longshoremen. The archaeological deposit here is probably associated with William Dougherty, the last occupant of the house, in 1890–1891. It is not known whether William had a family. In 1890 and 1891 he was a longshoreman, but in 1892, he was involved in "Liquors."

The Fegan Household

On Block 5, the Fegan family resided on Block 5 at 47-1/2 Clementina, a building in the rear of the lot. The family consisted of John Fegan, his brother Christopher, also a longshoreman; John's wife, Mary; and their five children. John, Christopher, and Mary were all from Ireland. John is listed in the 1881 and 1882 City Directories as a rigger and a longshoreman, respectively.

The McIver Household

On Block 10, the McIver family lived at 125 Perry from at least 1880 to 1881. This building was a duplex, with the Abraham Martin family also in residence. Murdock McIver, from Scotland, was a widower with eight children, three of whom were adults living at home. He was listed in the 1880 Census as a rigger and stevedore. In the city directory of that year he was listed as a foreman at Menzies & Co. In 1881, 1882, and 1883 he was listed as a longshoreman, stevedore, and rigger, respectively. Interestingly, 125 Perry is listed in 1894 as owned by master mariner Ferdinand Gee, who lived next door at 123 Perry from 1867 to 1883.

The Baker Household

The final household in the sample is the U.S.-born Baker household—Stephen and Mary Baker and their three children. They lived on Block 10 at 108 Silver Street from 1861 to 1871. Stephen Baker held a variety of jobs. From 1864 to 1867 he was listed as a captain of police. In 1869 he was a wharfinger (a dock manager), and in the 1880 Census, a telegraph operator.

MILITARY AND UNIFORM BUTTONS

Sunshine Psota

A smattering of military and other uniform buttons from West Bay Approach features tell us about past service (see photo and table).

From a filled feature (Privy 849) at 115 Perry Street on Block 10 came a British Royal Navy Officer button. The back of the button is embossed ". . . edsam & Sons" and is attributed to Thomas Ledsam & Sons of Birmingham and London, which operated until 1850, when it was absorbed by Pigott & Company (Tice 2003:157). The coat-sized button is a gilded copper-alloy of one-piece construction. The flat face is embossed with a crown above an upright fouled anchor, on a lined background. A plain oval border with inner and outer rope edging surrounds this design. Measured in lines with 40 to the inch, the button is 34 lines or almost 7/8 in. wide. With age and use, parts of the gilding may have worn off, leaving a brass button that would tarnish. None of the clothing from this feature could be attributed to the button. The button likely provided a wonderful keepsake or treasure for someone in the close-knit German–Jewish households of Bernard Strauss and Joseph Ackerman.

In the late 1700s, British Royal Navy Officer buttons were produced from white metal or silver shells over wood or bone molds. A transition to a solid one-piece, flat button occurred between 1780 and 1800. Many of these buttons were then made from pewter, while brass was worn by higher ranks. The image of a fouled anchor was first used in 1774, but when the Merchant Navy started to use a similar image, a crown was added to officer buttons in 1812, providing a beginning date of manufacture for this button. This same design continues to be used today (British Royal Navy 2006; Hughes and Lester 1991:690). During the Victorian period, the uniforms of the British Royal Navy officers were constantly changing to be consistent with the gentlemen's fashion. While the Admiralty authorized uniforms, the board did not regulate them, allowing civilian tailors to provide "minor fashionable alterations." Thus the image of officers' uniforms as a standard, classic, traditional design is erroneous; instead, each was a unique reflection of the latest civilian fashion and individual requirements. Many of these details now comprise the "traditional design" in use today.

A California militia button from Well 6 on Block 9 is a two-piece, gilded-bronze dome with the back missing. The coat button (35 lines, or 7/8 in.) bears the California state seal, consisting of a grizzly bear (state symbol), Minerva (wisdom), the Sierra Nevada in the background, a miner, a ship, and wheat sheaves and grapes (agriculture), with the state motto "Eureka" above this scene and "California" below it (Hughes and Lester 1991:723, Plate 309.5).

As specified in the state constitution, the California militia was created in 1849. Modeled after the British militia, the first of several militia companies was formed that year to protect and defend the state. Based on the Militia Act of 1792, the militia was open to free, white males between the ages of 18 and 45, or those who had served a full term in the army or navy. Many of the men were veterans of the Mexican War or from the New York Volunteers, providing necessary military experience. At first they were most active in quelling disturbances with Native Americans. During the Civil War, most did not fight in any eastern battles, but instead were in charge of safekeeping the area west of the Rocky Mountains. In 1866, the state legislature changed the name of the uniformed force to the National Guard of California (Marshall and Denger 2006).

San Francisco was home to many militia companies, with the first—established in July 1849—called the First California Guard. By September of that year there were 100 members. The artillery company formed as a joint stock company of guard members only, who bought 300 shares of stock at $100 each (Marshall and Denger 2006). The funds were used to build a members-only, two-and-one-half story hall and armory, with elegant apartments, a drill room, and more rooms for social entertainment, such as billiards. They drilled in infantry tactics and sponsored many social occasions, such as parades, balls, banquets, and receptions. By 1854 San Francisco had six militia companies, which formed a battalion. Their first military service was in 1856, when a vigilance committee took over control of the city government.

Military and Uniform buttons from West Bay Approach. Top row: U.S. Navy, U.S. Navy, U.S. Naval Reserve, U.S. Naval Reserve. Middle row: U.S. General Services, first three; U.S. Artillery. Bottom row: California Militia, Civil War Patriotic Token, U.S. Imitation, Southern Pacific, British Royal Navy Officer.

Along with the militia button, Well 6 also contained a fairly common, patriotic Civil War Token embossed with "THE FEDERAL UNION (upper arch)/ IT MUST (upper arch)/ AND/ SHALL/ BE/ PRESERVED (lower arch)/ (stars) (lower arch)//[reverse] (surrounded by leaves) ARMY (upper arch)/ AND (upper arch)/ NAVY (upper arch)/ (anchor and swords)" (Fuld and Fuld 1993). This privately issued token has a diameter of 3/4 inch. The token was produced from copper-alloy around 1863, when companies and tradesmen began issuing their own currency to compensate for the hoarding of coins during the Civil War. Patriotic coins such as this one were often cast alongside individual company and craftsman coins and handed out with purchases. (After the war, the U. S. government forbade all private coinage.)

Other copper-alloy buttons include two U.S. Navy buttons stamped with a spread-wing eagle on a fouled anchor: the large coat-sized specimen sports a horizontal anchor with cannonballs, while the cuff-sized item bears a vertical anchor. The larger button was manufactured for Horstmann Brothers & Co., a large retail firm that operated out of New York and Philadelphia between about 1850 and 1865 (Tice 2003:129–131). While variations of the name Horstmann are found on the back of many buttons, the retailer never made buttons; instead they purchased them from Scoville Manufacturing Company and Steele & Johnson of Waterbury, Connecticut, through various companies in their retailing empire. Two other buttons are from General Services, both from Privy 9 on Block 9, associated with the John Usher household. The buttons contain a spread-winged eagle and striped shield insignia; and were made some time up to about 1860 for Horstmann and Allien (Tice 2003:133). An encrusted coat-sized button with the eagle and an "A" in its shield represents the U.S. Artillery; this button came from someone in the Strauss or Ackerman households. Two buttons with fouled anchors represent the U.S. Naval Reserves, each

Military and Nonmilitary Uniform Buttons from the West Approach Project

Block	Feature	Cat. No.	Branch/Company	Date	Reference
4	Privy 1326	1566-133	U.S. Navy	1853–1865	Tice 1997:165–166; Woshner 1999: 152, 267, 281
	Privy 1304	1433-17	U.S. Navy	ca. 1850–1865	Tice 2003: 129, 131
9	Well 6	140-41	California Militia	1849–1866	Marshall and Denger 2006
	Privy 9	208-246	Southern Pacific	ca. 1865–1907	San Francisco City Directories
		208-232	U.S. General Services	1850s–ca. 1860	Tice 2003:133
		209-380	U.S. General Services	1854–1884	Herskovitz 1978:38–39, Figure 12n; Hughes and Lester 1991:715, Plate 307 #14
10	Privy 849	1149-15	U.S. Artillery	1855–1902	Hughes and Lester 1991:717, Figure 25
		1155-65	British Royal Navy Officer's	1812–1850	British Royal Navy 2006; Hughes and Lester 1981:709, Plate 305:29; Tice 2003:157
	Well 866	1269-98	Imitation		
		1270-133	U.S. Naval Reserve, Chief Petty Officer		Hughes and Lester 1981:714–718, Plate 307 #47
11	Privy 1600	1653-145	U.S. Navy	1830–1852	Hughes and Lester 1981:714–718, Plate 307, #44
		1654-218	U.S. General Service	1854–1860s	Hughes and Lester 1991:714–718, Plate 307 #14; Tice 2003:65–77)
		1654-161	U.S. Naval Reserve, Chief Petty Officer		Hughes and Lester 1981:714–718, Plate 307 #47

from a different Chief Petty Officer's uniform. One of these buttons, along with a Navy and a General Services button, came from Privy 1600 on Block 11, associated with the George Donnelly or William Beal household.

The single non-metal button was a molded hard-rubber, four-hole, sew-through item, produced by the Novelty Rubber Co. in Connecticut, New Jersey, or New York sometime between 1853 and 1865 (Johnson 1948:79, Plate 35, Figure 332; Tice 1997:165–166; Woshner 1999:152, 267, 281). The concave façade is embossed "U.S.N. (upper arch)/ (3 offset stars)/ (upright anchor)/// NOVELTY RUBBER CO. (upper arch)/ GOODYEARS (upper arch)/ PATENT (lower arch)/ 1851 (lower arch)." This U.S. Navy button would have been sewn to an officer's coat. Naval uniform regulations for 1864 describe a double-breasted, navy-blue frock coat with two rows of large navy buttons, a rolling collar, silk lining, and full skirts beginning at the hip bone (U.S. Department of the Navy 1864).

Aside from the above items, a nonmilitary uniform button was also identifiable. The two-piece, vest-sized brass button embossed with an intertwined "S P" and was part of a Southern Pacific uniform that was probably from John Usher's conductor's uniform. The Southern Pacific Railroad was founded in 1865 and operated out of San Francisco. The button was produced by J.M. Litchfield & Co. of San Francisco, who is listed in the San Francisco City Directories between 1876/77 and 1907.

The popularity of military and other uniform buttons resulted in some imitations. Three similar buttons recovered from Well 866 at 112 Silver on Block 10 appeared at first glance to be from some kind of military or other type of uniform. The two-piece, domed button was gilded, but is now heavily corroded. The vest or cuff-sized button measures 23 lines, or a little less than 5/8 inch wide; the face is stamped with a U.S. flag on the front, with a lined background, and two outside bands (one plain and the outermost a rope design). The 18 stars are arranged with 6 in each of the three rows, creating a fictitious flag that never represented the United States. The button may have belonged to James McDonald or John Tobin, or may have come in with the clothes altered by Annie McDonald, a dressmaker. One legitimate military button—perhaps also from one of Annie McDonald's customers—was recovered from this context: the second U.S. Naval Reserve, Chief Petty Officer's button.

Nationality and Maritime Workers

Defining the nationality of households is not straightforward. Archaeologists often equate ethnicity with nationality, but without considering national identity as a problematic construction in itself. When people migrated, their lived identities in their home communities did not, could not, migrate with them untransformed. Their identities in America were constructed within entirely new sets of social relations that were the product of nationality, intertwined with work and class relations. Furthermore, ethnic/national identities are not rigidly bounded entities: there was interaction, often intermarriage, between the new communities.

The national origin of the maritime workers was in many ways similar to that of the railroad workers, in that there was a pronounced concentration of Irish households among the seamen and longshoremen, much as the unskilled railroad-worker households tended to be Irish. While there were many U.S.-born workers on the railroad, most of the maritime workers households tended to be immigrants. Anders Furuseth's observation that less than 10 percent of the sailors in the 1890s were U.S.-born (Nelson 1988:14) is not necessarily confirmed by the West Approach sample, but there is certainly a predominance of immigrant households: of the 13 maritime worker households, 5 were born in the United States. The association of northern Europeans with the coast trade is certainly indicated in the sample. Ferdinand Gee and his wife were Prussians and Michelson and his wife were Norwegians. The remaining captain, Metcalf, was American, but he had a Prussian wife, suggesting some sort of strong connection with the Prussian community. Except for U.S.-born Henry Mayne (the ship's carpenter) and Scottish Murdock McIver, the rigger and foreman, all the seamen and longshoremen were either Irish or had an Irish wife.

The ethnic composition of the West Approach households was often multinational; the male head of one nationality and the female head of another, and often children of a third—the United States. Table 9.3 acknowledges some of this complexity in listing the nationality of both the male and female heads.

Meat and Diet

The analysis of the maritime household assemblages conducted here is an expansion of that conducted for the West Oakland railroad workers. The groupings used for the railroad-worker households (Immigrant/U.S.-born and Skilled/Unskilled), however, are not practical here because of the differing demographics and labor relations between the two sectors.

The main comparisons between the West Approach households are the following:

- The amount of meat consumed per person
- The costs of the meat consumed (the percentages of low, moderate, and high-priced cuts within each assemblage)
- The manner in which food was consumed, as suggested by the overall complexity of the dining service and the kinds of vessels used.

Meat weight was calculated by dividing the estimated total pounds of meat represented by food bones in the archaeological feature divided by the estimated minimum number of individual adult and juvenile people in the household (Table 9.4). It is important to note that many seamen and dockworkers lived in temporary and group lodgings, so the household size is an estimate

Table 9.3. National Makeup of Households by Job Class

Household	Occupation	Prussian	Norwegian	Irish	U.S.	English	Scottish	Unknown
Gee	Captain	M/F						
Michelson	Captain		M/F					
Metcalf	Captain	F			M			
Rowe	Shipowner				M/F			
Johnson	Seaman			F	M			
Griffin	Fireman			M				F
Mayne	Carpenter				M	F		
McIntyre	Steward			F				M
Cadigan	Longshoreman			M/F				
Dougherty	Longshoreman			M				
Fegan	Longshoreman			M/M				
McIver	Longshoreman				F (Daughter)		M	
Baker	Wharfinger				M/F			

Table 9.4. Meat Weights by Household

Maritime Association	Occupation	No. of Individuals (Census)	Total Meat Weight (lbs.)	Meat Weight per Person (lbs.)	Mean Weight ± sd
Gee	Captain	5	1,942	388	
Michelson	Captain	7	1,219	174	
Metcalf	Captain	5	1,045	209	
Rowe	Shipowner	7	473	68	**210 ± 133**
Johnson	Seaman	6	269	45	
Griffin	Fireman	?	1,250	--	
Mayne	Carpenter	6	2,380	397	
McIntyre	Steward	10	1,721	172	**205 ± 178**
Cadigan	Longshoreman	6	283	47	
Dougherty	Longshoreman	?	2,533	--	
Fegan	Longshoreman	7	387	55	
McIver	Longshoreman	8	479	60	**54 ± 6**
Baker	Wharfinger	6	2,572	429	**--**
			Overall Mean Weight ± sd		**186 ± 152**

from the nearest census. The actual household sizes may have varied considerably from the time of the census to the deposition of the relevant feature assemblage.

The mean meat weight across all categories was 186 lbs./person, which is close to that of the West Oakland railroad workers, who had a mean of 174 lbs./person. Looking at the meat weight within each job class shows that the masters and the seamen households varied widely in the amount of meat their households consumed, while the longshoremen households all clustered between 47 and 60 lbs./person. In contrast, the masters and the seamen households each had a similar broad range: from 67 to 388 lbs./person for the masters, and 44 to 397 lbs./person for the seamen. The wharfinger household, the Bakers, appear to have consumed the most meat, at 429 lbs./person.

The wide dispersal among the seafaring households reflects a number of factors, most important no doubt being that the household sizes are only estimates. Another factor may be the range of conditions that are encompassed under the rubrics of "master" and "seaman." There are the complex hierarchies of seafaring life, within the ships, between different kinds of ships, between the deepwater and coastal-trade sailors, and between different corporate organizations, from independent captain/shipowners to large corporations, such as the PCSS Co. that had multiple vessels. Coupled with this, are the variations in housing and the attendant difficulties with historical association.

Paralleling the trend towards less meat, the dockworkers also ate much cheaper cuts on average than the seamen (Table 9.5). The average percent of high-cost meat weight in the dockworkers' assemblages was 19, with a range from 13 to 21 percent. The seamen actually had the highest percentage of high-cost cuts—57, ranging from 49 to 62 percent. The mean for masters was 38, with a range from 28 to 54 percent high-cost cuts. The bulk of the dockworker households' meat weight was divided nearly equally between moderate (43%) and inexpensive cuts (38%) of meat. The seaman households spent comparatively little on these cheaper cuts (17%). The masters' and the wharfinger's assemblages were divided equally among expensive, moderate, and inexpensive cuts. Overall, the dockworkers favored cheaper than average cuts of meat, while the seamen favored more expensive cuts. The masters and the wharfinger fell in between.

The patterning is difficult to interpret. The frugality of the largely Irish dockworkers contrasts with the relative extravagance of the West Oakland railroad laborers, largely unskilled immigrants, who tended to have more expensive cuts than expected. The unionized skilled railroad workers had less-expensive cuts than average. A similar pattern has also been noted in other settings, such as Bootts Mill in Massachusetts and Five Points in New York. The irregular nature of longshoremen's employment would have caused financial hardship. A diet containing little meat, with only a few cheap cuts, may have been an economic necessity, especially in the depressed dockyard conditions following the completion of the transcontinental railroad. The sailors' relatively expensive diet may reflect the seamen's well-known willingness to engage in a higher standard of living while on land, after the Spartan conditions at sea.

These possible explanations are obviously *post hoc*. The sample suggests a difference in household economy between casual labor on the docks and the, roughly analogous, unskilled laborers on the railroads. The sailors and the railroad laborers do, however, show similar patterning—an expenditure on expensive cuts of meat that is much greater than would be expected. The samples are small, however, and the patterning tentative. As the database grows and archaeologists start to make comparisons between workers in different industries and sectors

Table 9.5. Percent of High, Moderate, and Low Cost Meat Weight by Household

Name	Occupation	Meat Cost (Percent)			Total
	Masters	***High***	***Moderate***	***Low***	
Gee	Captain	37	38	25	100
Michelson	Captain	28	40	31	100
Metcalf	Captain	55	32	13	100
Rowe	Shipwright/Owner	31	37	33	100
	Mean (percent)	38 ± 12	37 ± 3	26 ± 9	
	Seamen	***High***	***Moderate***	***Low***	
Johnson	Seaman	50	33	17	100
Griffin	Fireman	62	25	13	100
Mayne	Carpenter	49	35	16	100
McIntyre	Steward	50	27	23	100
	Mean (percent)	53 ± 6	30 ± 5	17 ± 4	
	Dockworkers	***High***	***Moderate***	***Low***	
Cadigan	Longshoreman	13	53	35	100
Dougherty	Longshoreman	21	44	35	100
Fegan	Longshoreman	21	30	50	100
McIver	Longshoreman	21	45	34	100
	Mean (percent)	19 ± 4	43 ± 10	38 ± 8	
		High	***Moderate***	***Low***	
Baker	Wharfinger	40	34	26	100
	Mean (percent)	--	--	--	

of the economy and under different economic conditions, it is likely that explanations for these variations will become more refined.

Table Settings

Comparison of the table settings among the groups of maritime workers shows none of the rigid divisions that the railroad worker assemblages exhibited. Figure 9.13 shows the size of the assemblages plotted against the assemblage diversity (the number of different vessels in each assemblage). The diagonal line is the regression line for assemblage size and diversity, and shows the strong relationship between the two. Each household is plotted as a data-point, using symbols for job class.

There is little patterning visible, which stands in contrast to the railroad-worker assemblages. In West Oakland, the divide between the craft-unionized U.S.-born railroad workers—such as the firemen, brakemen, and skilled shopworkers—and the largely immigrant unorganized laborers was reflected in the table settings. It was argued that the craft-unionized workers were reinforcing their status as civilized American citizens who maintained their Americanism through exhibiting a certain standard of living (Walker 2004). The maritime assemblages of the West Approach Project do not show significant patterning. The masters do all exhibit slightly higher diversity

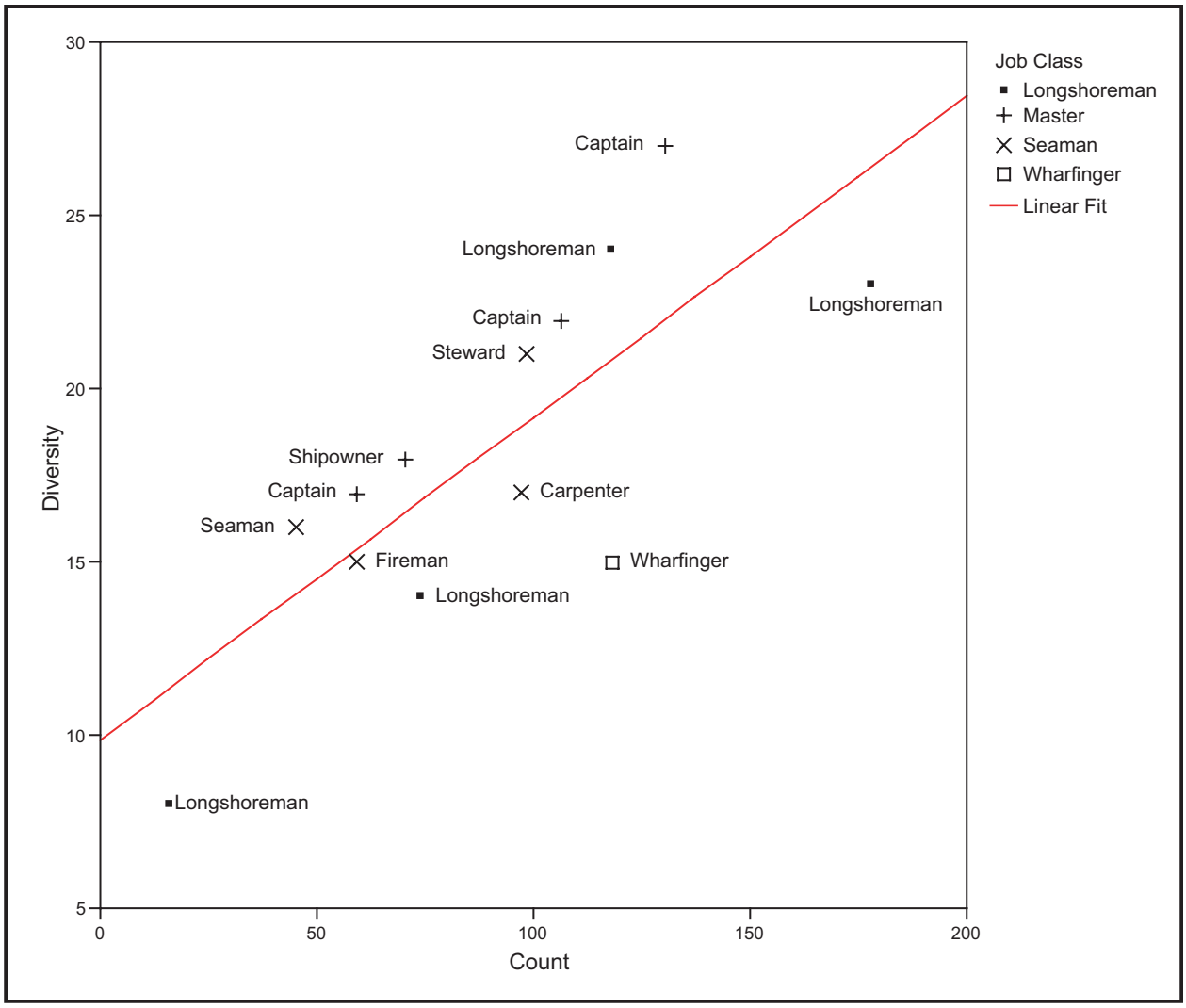


Figure 9.13. Tableware assemblage size and diversity by occupation

relative to their assemblage size than the other households, and all but one, of the longshoreman households display less diverse assemblages on average for their sample sizes. The exception, the McIver household, might be explained by the fact that McIver was a foreman and may have had relatively steady work. The seamen all had smaller assemblages than the other households, but no particular patterning in their diversity. All else being equal, the overall lack of significant differences in the assemblages probably comes down to the fact that seamen and longshoremen tended live in multiple-household residences, and their archaeological assemblages reflect more than a single family's table settings. A second factor is that the term "seamen" covers a broad range of statuses and jobs, some more privileged than others. This, too, would result in diverse assemblages (Figure 9.14).

Table 9.6 shows the presence and absence of different vessel types in each maritime household. These are distinguished by serving and tableware vessels. Some bowls, for example may be part of individual place settings while others are for serving. The basic tableware that every household possessed consisted of individual place settings—a plate, a tumbler, a teacup and saucer. The cup and saucer attest to the prevalence of tea and/or coffee drinking at all levels of American society in the late 19th century.

continues on page 359

Table 9.6. Presence/Absence of Vessel Types within Each Household, by Occupation Class

Vessel	Masters				Seamen				Longshoremen				Wharfinger
(by frequency of occurrence)	Rowe	Gee	Metcalf	Michelson	Johnson	McIntyre	Griffin	Mayne	Fegan	Cadigan	Dougherty	McIver	Baker
Tableware Cup	+	+	+	+	+	+	+	+	+	+	+	+	+
Tableware Plate	+	+	+	+	+	+	+	+	+	+	+	+	+
Tableware Saucer	+	+	+	+	+	+	+	+	+	+	+	+	+
Tableware Tumbler	+	+	+	+	+	+	+	+	+	+	+	+	+
Serving Oval Dish	+	+	+	+	+	+	+	+			+	+	+
Serving Platter	+	+	+	+	+	+	+	+			+	+	+
Tableware Stemware	+	+	+	+	+	+	+	+		+	+	+	
Serving Bowl	+	+	+	+	+			+	+	+	+		+
Tableware Soup Plate	+	+	+		+	+		+	+	+	+	+	
Tableware Goblet	+		+	+		+	+	+	+		+	+	+
Serving Slop Bowl	+	+	+	+	+				+		+	+	+
Serving Teapot		+	+	+	+	+	+			+	+	+	
Tableware Cordial Glass		+		+		+	+	+		+	+	+	+
Tableware Motto Mug	+	+		+		+	+	+		+	+	+	
Tableware Berry Dish		+		+		+	+	+			+	+	+
Serving Dish	+	+			+	+	+				+	+	
Serving Creamer		+		+	+	+					+		+
Serving Pitcher	+	+	+			+		+			+		
Tableware Egg Cup		+	+	+		+				+			
Serving Castor	+		+							+		+	
Serving Decanter		+				+					+	+	
Serving Spooner/Celery Vase		+	+	+		+							
Serving Tureen		+						+			+		+
Tableware Mug	+			+							+		+
Tableware Bowl		+				+	+	+					
Serving Butter Dish			+							+		+	
Serving Gravy Boat					+	+						+	
Serving Small Pitcher	+			+								+	

Table 9.6. Presence/Absence of Vessel Types within Each Household, by Occupation Class *(continued)*

Vessel	Masters				Seamen				Longshoremen				Wharfinger
(by frequency of occurrence)	Rowe	Gee	Metcalf	Michelson	Johnson	McIntyre	Griffin	Mayne	Fegan	Cadigan	Dougherty	McIver	Baker
Serving Sugar Bowl		+		+									+
Serving Master Salt		+		+									
Serving Relish Dish?		+		+									
Tableware Dish					+							+	
Serving Compote												+	
Serving Cruet												+	
Serving Salt/Butter Dish										+			
Serving Salt/Pepper Shaker											+		
Serving Sauce Dish					+								
Tableware Cup, Demitasse												+	
Tableware Saltcellar	+												
Tableware Slop Bowl		+											
Tableware Tiny Cup								+					
Tableware Toothpick Holder		+											
Tableware Whiskey Glass											+		
Tableware Butter Pat Dish							+						
Diversity	16	27	17	22	16	21	15	17	8	14	23	24	15

EVERYDAY SOLES, OR THE SOLES OF A NEIGHBORHOOD

Sunshine Psota

Pull-on boot with cuts at top. Clockwise from bottom left, size 9 pull-on boot; close-up of where part of the boot was cut away; and an illustration from an 1891 catalog advertising pull-on boots for sale (Privy 18).

Examples of normal everyday men's footwear from the late 19th century rarely make it into museum collections. Instead they were worn constantly, became well-worn, and then, when no longer of service, were simply thrown away.

Such was the case with the remains from 513 pairs of footwear represented in 37 of the West Approach Project features. To obtain a minimum number of footwear from all of the pieces, these pairs were grouped by owners or possible owners, and then further divided by the kind of manufacturing techniques used, and, if possible, the style of footwear represented. Very few were complete, with many comprised of just a few bits of leather. Those that could be confidently assigned to the men's category document the interaction between the type of pavement traversed and the life style of the wearer. Not since the 1986 excavation of the San Francisco Gold Rush-era Hoff Store have so many basic working boots and shoes been examined (Huddleson and Watanabe 1990). In contrast to the offerings that survived the store's fire and its demise, the West Approach men's footwear came from residential contexts, or in one case, from a cobbler.

During the mid-1800s, England was the center of handmade shoe production, typically using wooden pegs to attach the heels and layers of the soles together. Yet all of the pegged footwear in this collection was machine made. In fact, the entire footwear collection was mass-produced, probably from the centers of the mechanized footwear industry: eastern Massachusetts and the Philadelphia region. Styles of men's footwear changed more gradually than women's. Most of the men's articles reflect a practical approach, with the owner choosing well-built and long-lived styles. The best preserved samples of men's footwear were found in the ca. 1870-filled privy from 16 Perry on Block 9, the home of Ebenezer Shaw, a fire-insurance agent and mining agent. These included pull-on boots, brogans, congress, and oxfords.

Four pull-on boots are men's size 9 to 9-1/2 and another four are an adult size 5-1/2 to 6 and 7 to 7-1/2. All have pegged soles, with most

containing a double row of pegging crossing the sole by the foot's arch. When present, all of the stacked heels were pegged. The height of the machine-sewn upper portion of the boot is approximately 13 inches for the largest group and at least 6 to 10 inches for the smaller size, which consists of items worn by either two or three smaller-footed men, or a still-growing youth. Two of the three men's size 9 boots are worn on the heel from the outside edge to the center back and heavily worn on the ball of the foot, with holes in the upper sole under the big toe and a small slit or tear just above the sole at the big toe in the vamp-portion; this suggests the owner had a bunion (Leno 1905:22). The other size-9 boot has no signs of wear, but the front and back of the bootleg has been cut and possibly scavenged (see photo inset; the accompanying illustration, and the subsequent illustrations are from an 1891 catalog [brogan is from 1895 catalog]). The size 9-1/2 is also well worn, but by another wearer, not the one who left the distinctive wear pattern. While the size 5-1/2 shows no sign of wear, the size 6 is well worn on the ball of the foot and the heel; additionally, a crack from wear is visible through all of the soles' layers. The two size 7 and 7-1/2 boots are similarly well worn, not only on the heel and ball of foot, but under the big toe as well.

Pull-on boots of this type of construction were very popular and represent the most common style found in historic-era photographs from the 1860s and 1870s (Severa 1995:315). Prior to 1872, they were issued to mounted troops in the military (Brinckerhoff 1976:3-6). The Hoff Store had 14 of this style. The store's sample ranged from 8 to 18 inches high, addressing both the needs of gold miners who bought their gear in San Francisco and of the local San Franciscans in especially rainy years. Changes to the pull-on boot style since 1851 are documented in those items recovered from the 1860s Shaw household. Over that time period, pull-on boots were made in a wider range of widths, had a more noticeable left and right, and a more limited height range was available or preferred.

Another basic style was found in the brogans: the shoes of slaves, miners, soldiers, hard-working country folk, laborers, and those who ventured out onto San Francisco streets in the winter. Again the sample from the Shaw house provides the best-preserved examples (see inset).


brogans

Ten pairs are present, ranging in size from 5-1/2 to 11, with almost every size represented. These basic ankle-high work boots were made from thick leather and sport one or two pairs of holes for lacing. All of the soles and half of the stacked heels were pegged, while the other items were joined by ferrous cut nails. Four have a double row of pegging on the sole near the arch. There is very little variation to this style of boot, although a size 6-1/2 specimen has a more pointed toe and the size 11 is almost a straight—an older style of footwear where rights and lefts were interchangeable. Most are worn to well-worn, with no truly distinctive wear patterns, although again the size 5-1/2 shows no sign of wear.

After the unusually wet winter of 1849-1850, when merchants had sold out of such rugged footwear, San Francisco merchants stocked up on brogans for the next year, only to be met by a mild winter and stock that failed to sell. In May of 1851, when the Great Fire burned down the Hoff Store, many pairs remained, some still stacked (Huddleson and Watanabe 1990:99). Those brogans had either 3 holes for lacing or none, and the tongue was either a part of the rest of the boot or a separate sewn-on piece. In contrast, none of the West Approach brogans had the tongue as a separate piece; all are clearly rights or lefts and likely wider than those offered for sale in 1851. Heavily worn, pegged brogans are also the most common type of footwear concealed in the walls of 1700 and 1800 houses in the eastern United States, a practice employed to protect the house's occupants (Geisler 2003:38).


congress boot

Another style of boot, Congress boots, was a more recent design that is rarely preserved in a men's size. The elastic-sided insets that define this style were created in England and first imported to the United States in 1848 (Rexford 2000:206-208). The men's size 8-1/2 boot is almost a straight with a square toe. The pegged sole has an arc of pegging across the sole by the arch; the heel is also pegged. Like the similar-sized pull-on boots, it is well worn—especially under the big toe—and there are multiple slits above the ball of the foot to the toe area for comfort (see inset). This shoe was worn in the privacy of one's home, where comfort was more important than the condition of the shoe. This suggests that the owner had three pairs of boots, probably not worn concurrently—just old ones waiting to be thrown out.

The last distinguishable style of shoe attributed to the Shaw household is an Oxford (see inset), a closed-toe shoe with three or more eyelets. The men's size 9 is a closed tab, with five pairs of holes for lacing. The shoe's toe is square with rounded corners. The sole is pegged and a low-stacked heel is attached with ferrous cut nails. Both the heel and the ball of the sole exhibit some wear.

The soles of men's footwear from the Shaw privy—as well as those recovered from the 1880s Wolf Samuel or Leonard Smith household and the contemporaneous William Beal and George Donnelly households—have hobnails added to selected areas to ensure better wear. One that might have belonged to Leonard Smith, an engineer, or Wolf Samuel, a tailor, had a five-sided star design in hobnails on the ball of the foot. Other common locations for hobnails are combinations of sides and backs of heels, and an arch across the step by the arch of the foot. This afforded the wearer, who was prone to a certain gait, longer footwear life. Such conveniences were either created at the factory or as cobbler additions.

Men's pegged shoes and boots lasted a long time, if kept out of the extreme heat of desert and other dry places that shrunk the wooden peg enough for them to fall out of the sole. While pegged footwear was durable, the wearer's foot conformed to its shape and rigidity. When this did not happen the sole would crack, usually at the point of the greatest flexing, where the ball of the foot becomes the arch. Nailed footwear, either using ferrous or copper-alloy tacks, was more flexible, but it was still not as comfortable as the various kinds of the more expensive machine-sewn footwear. Pegged and nailed footwear was used for boots, and working and walking shoes. Indoor shoes and slippers were sewn, as were shoes for Sunday best and other dapper shoes.


oxford

Figure 9.14. Tableware and stemware from Privy 2 (Johnson family). Included in this collection are common earthenware dishes, along with more elegant porcelain pieces, which suggest both informal and formal dining.

More than half the households also had serving vessels, including serving dishes, platters, bowls, and slop bowls, and individual food-consumption vessels consisting of soup plates and "berry dishes" (small individual dishes). The rest of the common vessels included a variety of drinking vessels—stemware goblets, cordial glasses, and motto mugs. Oddly, motto mugs seem to be one of the only defining artifacts of maritime workers (Figure 9.15). Sixteen motto mugs were recovered from the 42 household assemblages recovered from West Approach Project excavations. Eleven (69% of the motto mugs) came from the 13 maritime worker households, which were 31 percent of the 42 households examined. Six of the maritime worker cups had some sort of legible inscription. Three dealt with memory: two inscribed with "REMEMBER ME" and one "FORGET ME NOT." The other three dealt in some way with relationships or activities—"FOR MY FATHER," "TO A FRIEND," and "KITE FLYING." While it is tempting to ascribe the sentiments to the long absences that seamen took from their families, three of the motto mugs came from longshoremen households, and one from the shipbuilder/owner (Rowe) household. The association

Figure 9.15. Motto mugs. Pictured on the left and right, are two mugs with the phrase "Remember me" (Privy 806 & Privy 857). The center mug reads "To a Friend" (Privy 807).

of motto mugs with maritime workers possibly has more to do with localized supply sources than with occupation-specific symbolic or ideological meaning.

While there is little distinction between the classes of worker as far as the types of tablewares used, the common assemblage—a plate, cup and saucer, and stemware, with a teapot, dishes, and platters being the usual serving items—is similar to that identified for the railroad workers. The West Approach maritime households add to our understanding of what a basic table setting was among the 19th-century Bay Area working class.

CONCLUSIONS

The West Approach assemblages from individual maritime worker households provide snapshots from a time of revolutionary industrial change. The completion of the transcontinental railroad and the consequent abrupt decline of the Panama and Cape Horn routes had resulted in a long-term depression in San Francisco's maritime industry. A more global change in the industry was the replacement of sail by steam. The skilled sailors who were essential on sailing vessels, had virtually no role on steamships, and the mechanization of the maritime trade, as with any industry, depressed wages and shrank the labor force. The last "holdouts" were the schooner crews of the coast trade. These seamen eventually formed the first successful seamen's union, the Seaman's Union of the Pacific. The West Approach sample includes captains of coast schooners, a ship's carpenter, a steamship fireman, and their opposite numbers on land, longshoremen.

The rigid hierarchies of maritime life have passed into popular legend. But these hierarchies are not reflected in the archaeological record in a straightforward manner, beyond the obvious observation that captains had more "stuff" than sailors or longshoremen. There is the immediate problem that these hierarchies have their fullest expression at sea. On land, many if not most common sailors lived sharply circumscribed lives with little to call their own—an archaeological footprint that might consist of a few bottles and food remains in a waterfront boardinghouse deposit. Barring further development in archaeological techniques, these workers will remain archaeologically, and historically, invisible. The common seamen that we were able to identify archivally in the West Approach work may be exceptional. These men appear in their own housing and outside the crimping system; they may have been relatively privileged or possibly transitioning out of seafaring life, or it may be that the crimping system was not as pervasive as it is historically portrayed. Until this invisible economy is rendered more visible through historical research, it is difficult to assess the actual dominance of crimps in most sailors' lives.

In a study of railroad workers in West Oakland, I used the distinction of skilled and unskilled to analyze differences in the workforce. This distinction was formulated within the context of late-19th-century nativism and the intertwined ideologies of craft unionism and Americanism. The railroad industry was quite centralized and its labor processes highly structured, and well-documented. Wage scales and work conditions were similar for workers with the same job title.

This was not the case with the maritime industry. A dichotomous notion of skilled/unskilled does not translate well to less-structured industries. Maritime workers are not exceptional in the sense of being some sort of breed apart from the rest of the U.S. working class, but the conditions within the industry are unusual and need to be considered. Sailing ships have been noted as the original industrial workplace—communal, isolated, and with a highly technical division of labor. The seaman's workplace was a mix of mediaeval hierarchies and the very modern demands of

global commerce. The elaborate hierarchies of maritime life are well-known, but the hierarchies were worked out in different ways on the multitude of different ship types that served different aspects of regional, national, and international trade. These nuances of these hierarchies cannot be understood from the standard historical documents that link up with city blocks and addresses. A "first mate" on a coast schooner was very different from a common seaman on an oceanic steamer, yet they would probably both appear as "seaman" or "sailor" in the census.

Another problem is that even when we catch seamen on land, they were not in fact working as seamen. They were between jobs. The places sailors lived in while they were working are the province of nautical archaeologists and present their own problems of recovery and interpretation.

The seamen were primarily deepwater sailors and several of them worked for a large enterprise, the Pacific Coast Steamship Company. Compared to the longshoremen and captains/shipowners, the sailors were a diverse group, encompassing a wide variety of skills, pay scales, and work relations.

The captains form a comparatively coherent occupational grouping, all of whom, other than Metcalf—a local steamer and tug captain—were involved in the coast trade. Those in the coast trade would have worked in schooners in relatively egalitarian conditions with small skilled crews. It should, however, be noted here that egalitarian work conditions do not equate to equal pay or social relations. Captains derived far greater returns from the enterprise (assuming it was successful) than did their crews. The captains on the coast trade tended to form stable households, own their homes, and are thus far more visible in the historical record than the average sailor.

The longshoremen also appear to have formed a relatively coherent group. Historically, the close subculture of longshoremen has been noted by numerous authors (Barnes 1977; Miller 1969) as well as in popular culture. The West Approach sample does indicate commonalities in diet, but ones that are probably the result of impoverished economic conditions rather than "cultural" preference or distinctiveness.

The wharfinger household was only tenuously linked to the maritime trades. Baker was originally a captain of police and later, after his stint as wharfinger, a telegrapher. His occupation of managing a wharf was simply one of a series of jobs, and was only incidentally maritime. Managerial work could as tenuous as manual labor.

The lives of sailors when they are on land are as opaque as when they are at sea. Much of the 19th-century working class lived in a transient landscape of boardinghouses, cheap hotels, and flophouses. While these workers are difficult to identify archaeologically, the situation for many sailors may have been even

This small tile or "game piece" was found in Well 853 on Block 10 (scale approximately 2 to 1; illustrations by M. Stoyka). It shows a ship on one side, and a crossed caduceus and anchor with a Hermes hat in the foreground. This design is very similar to the symbol for the U.S. Public Health Service. Formerly known as the Marine Hospital Service, the U.S. Public Health Service can be traced back to a 1798 law that provided for the medical care of merchant seaman and the construction of marine hospitals.

more extreme. Their lodging was part of a system that, at its worst, functioned solely to separate sailors from their savings and move them back out to sea as quickly as possible. How pervasive the crimping system actually was is an open question, but archaeological signature of seamen on land would certainly be more indistinct than that of most groups. Unlike sailors, longshoremen's appearance in the archaeological and historical records is not necessarily the result of interludes between jobs. While many workers maintained dock work as a year-round, if not necessarily full-time, job, more often it was part of a cycle of different jobs that workers held during their lives, or even during the year. Sailors often moved into longshoreman positions after tiring of the sea, and loggers made up seasonal downtime with dock work.

The divide between sailors and middle-class life was about as absolute as such divisions get, but sailors were not completely a breed apart from the rest of society. In some sense they were simply one extreme of the transient workers that comprised the bulk of the late-19th- and early-20th-century working class. Many workers spent the spring, summer, and fall cycling from job to job and from temporary work camp to temporary work camp, spending the winter months in temporary quarters in towns and cities.

The maritime sector is far more complex than most sectors of the 19th-century economy. It consists of overlapping networks—global, national, and local shipping routes—all with their own demands and traditions in nautical technology, labor organization, and capitalization. These networks of commerce converge on break-in-bulk points such as San Francisco, where goods make the transition from sea to land, and are warehoused and dispersed through land-based networks, such as railroads, to markets. Compared to the highly organized and centralized rail networks, the maritime sector of this vast flow of commerce is so complex as to appear almost chaotic. This complexity—the numerous intersecting trade networks, work hierarchies, and different enterprises—is reflected in the archeological record of the maritime workers.

Although no discrete patterns have been revealed, some suggestions have emerged in comparing maritime and railroad workers. The sample sizes are small and, due to the nature of maritime life, the associations with sailors and other maritime workers are often tentative. Any meaningful analysis of working-class life entails not only identifying a person as a worker in a specific industry, but identifying what *kind* of worker they were in that industry. Longshoremen are relatively easy to identify in the historical record, and the nature of their work is well known. With sailors, both masters and seamen, this is far more difficult and requires identifying the kinds of ships they worked on, the nature of the trade they were engaged in, and the nature of their life on land.

Although they worked under industry-specific conditions, maritime workers form a continuum with other workers. Their struggles were, at heart, the same as those of workers on land, although waged within specific historical contexts.

This section concludes with the *de rigueur* appeal for more research. This is not simply a matter of adding to the pile of site reports on sailors, but one of overcoming romanticism and research specialization, and considering sailors as workers, part of the broader working-class history of the United States.

CHAPTER 10

RIVALS ACROSS THE BAY

MARY PRAETZELLIS

Bay Area residents all know that Oakland and San Francisco are very different places; take the longstanding folk images contrasting Oakland Raider fans as crazed biker outlaws and the San Francisco 49er fans as wine drinking, quiche eating wimps. In the 19th century, Oakland was the suburb, San Francisco the city; Oakland was the railroad town, San Francisco was maritime; Oakland was family oriented and safe, San Francisco diverse, sophisticated and dangerous (Figure 10.1). A recent history of San Francisco nicely sums up that city's characteristics:

> San Francisco has always drunk eagerly from the mother's milk of materialism (the Forty-Niners, after all, didn't come for the view), but it has always also had a place for the visionary and the otherworldly. . . . San Francisco's artistic contribution probably lies in its style of doing things rather than in a high-priced finished product. . . . The arts in San Francisco . . . are products of a long tradition of experimentation, very much a part of the ethic so prevalent in this city: democratization, participation, innovation, sharing, having fun.
>
> Always a city of the unexpected, from Gold Rushes and earthquakes to tragedy and style and experimentation, never quite the same, always San Francisco [Cole 1988:139–140].

This chapter will provide some background on San Francisco and on some literary perspectives on the historical differences between San Francisco and Oakland before presenting the statistical findings related to the recovered archaeological assemblages from the two cities. The statistical differences seem to vary in ways not connected with the sum of their parts.

Figure 10.1. Oakland, 1900 (left) and San Francisco, 1878 (right). (Images courtesy of Library of Congress, Geography and Map Division)

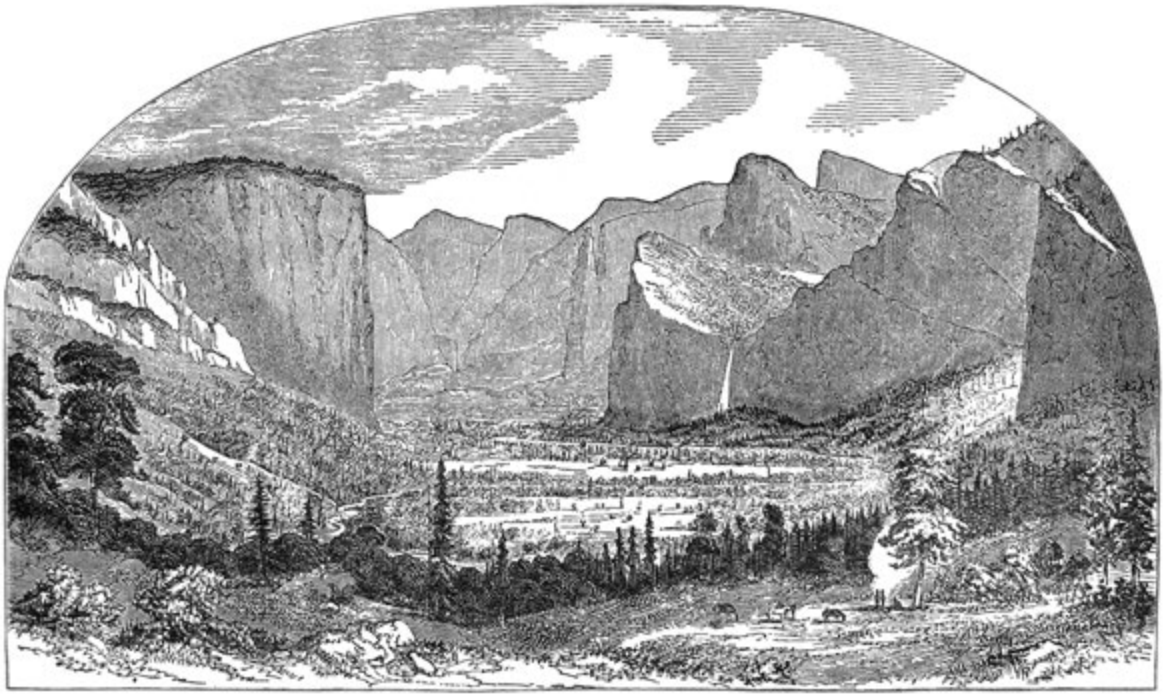


Figure 10.2. First illustration of Yosemite Valley, Thomas A. Ayres, 1855.

THE VIEW FROM ABOVE

Natural Wonders

Writers and artists employed by "illustrated" magazines got rich on the wonders of California. An almost endless variety of materials presented themselves for description (Figure 10.2). California boosters, such as Charles Nordhoff (1873) and General James Brisbin (1881) sought to lure prosperous easterners from their complacent superiority and love of home by reassuring them that numerous opportunities presented themselves to those willing to work and that Californians were a no less cultured group then themselves: That California possessed the "finest climate, the most fertile soil, the loveliest skies, the mildest winter, the most healthful region" (Nordhoff 1873:118). This grandeur failed to win over Bret Harte, who longed for the smaller scale refinements of New England:

> The country is youthful and ambitious, and nature has not yet completely adjusted herself to new conditions. She offers grandeur, sublimity and picturesqueness, and delights in heroic attitudes before the tourists, but of purely bucolic and pastoral comfort she knows nothing. She offers you quantity instead of quality—opulence in place of refinement. The same law she obeys in producing monstrous cabbages and gigantic trees is shown throughout the details of her landscape. If she has to make a mountain it is something stupendous; if a valley, it is perpendicular chasm of several thousand feet, like the Yo Semite; if she has even to cover a field with flowers, it is done so extravagantly that the scentless blossoms seem to have been furnished by contract. Her rains are deluges—her droughts are six months long. What she loses in delicacy she makes up in fibre—whether it be strawberries that look as if they should be arrested on their way to become pine-apples, or a field of wild oats, whose every

> stalk is a miracle of size, but whose general effect is most unpastoral and unmeadow-like. The effect on inhabitants may be readily conceived [1866a].

The natural site of San Francisco has been described as a lump of baker's dough:

> The peninsula, as you looked westward, presented the appearance of a lump of baker's dough, which had been kneaded into fantastic hills and vales—a lump of baker's dough, too, which, after having been worked, had been forgotten for so long that the green mould had begun to creep over it [Upton 1869:238].

Edwin Bryant visited San Francisco in September 1846. The town had a permanent population of between 100 and 200, a garrison of marines, and sailors connected with merchant and whaling vessels. He saw its potential for commerce as the best port on the Pacific Coast and the fertility and richness of the surrounding lands. Bryant predicted that San Francisco would become "one of the largest and most opulent commercial cities in the world" (1846:301–302). With the discovery of gold a few years later, San Francisco became the jumping off point for adventurers from around the world. The population exploded and an "instant city" blossomed. An instant city impeded by lumps of sand hills and real hills blocking the easy flow of traffic and the superposition of an orderly cityscape (Figure 10.3).

Figure 10.3. Earliest Panoramic View of San Francisco, ca. 1851. Taken from the 60-foot sand ridge at First and Howard streets, this panel shows Howard's Row. Yankee trader W.D.M. Howard imported the first 24 precut wooden houses in 1851 and put these up between the sandhills on Natoma Street within his 100-vara lot at First and Mission. This area is now, of course, the center of downtown crossed by freeways and home of the Transbay Transit Terminal (Daguerreotype courtesy San Francisco Maritime NHP)

Jean-Jacques Vioget Imposes a Grid

Well in advance of the Gold Rush, the founding fathers began to layout the future city of San Francisco, never suspecting it would arise so quickly. French Captain Jean-Jacques Vioget in possession of a theodolite received the assignment. Vioget's grid has been questioned ever since:

> He had before him the most beautiful and picturesque site for a city that could anywhere on the face of the earth be found! . . . What if he had terraced these hills, and applied the rule and square only to the space lying between them! . . . He little knew, when he was at work in his adobe office, with his compasses and rulers, that every line he drew would entail a useless expenditure of millions upon those who were to come after him; and that he was then, in fact, squandering money at a rate that would have made a Monte Cristo turn pale [Upton 1869:240].

So in Vioget's name, but really in the name of progress and commerce, the "Steam Paddy"—a combination steam-shovel and railroad-car—moved sandhills to fill the marshes and the infamous "Second Street-Cut" blasted through Rincon Hill to connect the city (Figure 10.4). But the chaos of the baker's dough was not easily subdued: "We have gone on leveling hills and filling up valleys till we have got ourselves into such a bewilderment of grades that the most lame and impotent conclusions are reached by many of our thoroughfares, and jumping-off places

Figure 10.4. Second Street Cut in Progress, Looking Northwest from Bryant Street, 1869. Two hundred and fifty teams of horses and wagons, together with five hundred men, worked from April through November trying to shore up the cut as avalanches, "sometimes fatally interrupted" grading (SF City Directory 1869-1870:16). The peaked-roof and gabled house at the west corner of Harrison and Second Street eventually fell into the ditch below, as did the house across the street (Photo courtesy of the Bancroft Library, University of California Berkeley: 1905.07052--PIC).

are as plentiful as the most suicidal could possibly desire" (Upton 1869:244). These same cut-fill sequences formed the earliest part of the West Approach project's archaeological sensitivity study and the basis of our predictive models. It was complicated for us to reconstruct and very difficult while in progress. The city while beautiful from afar, appeared desecrated up close:

> Nature has been cut and slashed, dug down and filled up, out of existence; unsightly defiles confront him wherever he goes. He finds a house, like an inquiring urchin at a dinner-table, barely peeping over the sidewalk, and evidently straining itself in the operation; while five good stories are revealed in the rear. Others still, elevated in so reckless and impertinent a manner, above grade, as to be suggestive rather of a pigeon-house than a human habitation [Upton 1869:246].

M.G. Upton, a harsh critic of this work in progress, nevertheless predicted that it would result in "a metropolis in every way adapted for trade and commerce; but by no means as handsome and picturesque a city as might have been built, if some attention had in the beginning been paid to the suggestions of Nature" (1869:246). Ironically, this small-scale historic city is now viewed as natural in opposition to the new massive high-rises proposed for the South of Market area in the 21st century.

A Nation of Gamblers

As predicted San Francisco became a metropolis, a "magnet" to which the wealth of the gold fields flowed along with conservative social aspirations for permanence and order (Cole 1988:43). The incredible mix of fortune seekers who came to "see the elephant," the shortage of material goods, and the unpredictability of fortune—both good and bad—spawned a society in which social status was so vague and changeful as to be essentially useless as a ranking devise. Bret Harte characterized Californians as "not much affected by titles or position, at least not to the extent of older civilizations; there is very little toadying to place or office, and public sentiment runs rather to satire and skepticism than to tuft-hunting or toad-eating. Men and women pass for what they are worth from a California standard, which I need not say is remarkable elevated" (1866j:97). While the general state of flux with its tremendous, but often unpredictable, opportunities did not last past the coming of the railroad, its spirit and expectations continue in some ways to this day.

While miners gambled on finding and then keeping their fortunes, San Francisco merchants gambled on commodities. Merchants brought in whatever goods they could ship from the East Coast. If their shipments brought goods in scarce supply, they made a fortune; if on the other hand, they found an already quenched market, they faced ruin and the goods became landfill (see Boom/Bust sidebar, this chapter). Others speculated in land; any good or service that could be bought and sold contributed to the community's chaotic field of commerce.

Recklessness in life as in financial matters also characterized San Franciscans, where negligence is said to have caused more deaths than disease. Bret Harte regaled his East Coast readers with their horrors:

> Californians are a nation of gamblers—taking chances ever as the regular operations of natural laws; speculating even upon the merciful interventions of Providence. We are whirled over our mountain roads, galloping down declivities where Eastern drivers would walk their horses and lock their wheels; we race with the opposition steamboat, with a rag

> stopping yesterday's leak in the boilers; we live in shells, erected over night like Aladdin's palace and as likely to disappear, as if by enchantment, at the first earthquake; we drive half-broken horses with a free rein, or leave them standing unhitched before our doors; our milkmaids milk cows but one removed from the vicious wild cattle of the Spanish rancho, and our tourist and pleasure-seekers risk their lives in picnics at inaccessible mountains and precipitous canons. But that a special Providence looks after this impulsive people, we would soon be depopulated [1866f].

The Quest for Pleasure and the Meaning of Poverty

The combination of boom/bust cycles and material shortages created from the beginning of the Gold Rush a propensity to splurge when able without cares of future scarcity—to live for the present. San Franciscans appreciated and participated in the good life. Bret Harte quoted the "discreet remark" of a French philosopher that the "great secret of happiness was in doing what you liked, provided you didn't prevent others from doing what they liked" and concluded that "San Francisco nearly approaches the perfection of such a moral atmosphere. A higher privilege than that guaranteed by the signers of the declaration—that of doing as we please, when in quest of pleasure, is indulged in here" (Harte 1860a). He also quoted an "epicurean individual who uttered that flashing social paradox, 'Give us the luxuries of life and we will dispense with its necessaries;'" another principle at work in San Francisco where "music, dancing and flowers had been in continental significance as great social elements as bread, clothing and beef" (Harte 1860b).

Those with money in 1860s California only wanted to purchase the "best" and poverty was a relative matter. More than one author ironically wrote on the markings of poverty: "Where, but in San Francisco, would a sturdy beggar ask alms with a cigar between his lips?" (Brooks 1868:466). "The few beggars who appear on the streets and flout their rags in the true mendicant style, are promptly arrested as imposters" (Harte 1867:148). San Franciscans dressed well and took pride in their appearances:

> Even the stranger, who accosts you with the request for money to buy his breakfast, wears spotless linen, the spendthrift or bankrupt contemplating suicide to-morrow, to-day at least passes you in carefully brushed broadcloth. It may be parenthetically remarked here as a kind of illustration of our habits, that according to a rude, unwritten code of propriety and honor, few Californians permit themselves to sink into the seedy stage of poverty—stopping by crime or suicide that humiliating condition [Harte 1867:148].

The California boosters did not misrepresent California's bounty, at least not in relation to the San Francisco Bay Area. The local markets always filled with something fresh, cheap, and good to eat. Bret Harte raved about the "picturesque and showy" fruit:

> Golden pumpkins that might have contained Cinderella's coach without great stretch of the imagination; potatoes, like small boulders, but clear-skinned and pink-eyed; cabbages, graceful in outline—perfect Brobdignagian roses; radishes, "pink as Aurora's fingertips," but somewhat large for that goddess; beets of a preposterous bigness and carrots of exasperating length, heap the stalls of the green-grocer.… Nothing is so wonderful to the stranger as the extraordinary quality, quantity and variety of grapes in California [1866e:58–59].

BOOM AND BUST

Mary Praetzellis

The cyclical nature of economics in California is both well known and easily forgotten. From the beginning, San Franciscan merchants gambled on getting best price on the first shipment of sparse commodities or housing unsalable overstocked merchandise. The value of a given thing ranged according to its perceived scarcity and potential uses:

> A singular extravagance and reckless disregard of things for the time valueless pervaded society. I remember, several years ago, to have been shown the foundations of a house near one of the wharves built up on boxes of plug tobacco, which, at the time it was laid, was worth less than the necessary, though scarcer, timber. It had been of course ruined by salt water. A sidewalk of the same material is said to have been once put down in front of what is now known as the Montgomery block, on the principal avenue of the city [Harte 1866f].

Mining stocks provided one of the first California examples of "the reign of stock gambling." Once "bubble prices had been pricked and fictitious values exploded," business settled down and found its legitimate channels. During the mining boom of 1864 a second stock board, the Pacific board of brokers came into existence:

> Here, stocks which had no value beyond the artistic beauty of their prettily printed certificates, shares of mines not yet opened and often not yet discovered, were bandied about at enormous but hypothetical figures. Here sharpers found their dupes, or "diamond cut diamond." Over its desk, now tenantless, were lost hard-earned fortunes, and often harder-earned reputations, the savings of poor men, the integrity of clerks and employees. . . . Companies were incorporated at the rate of 40 or 50 per day, and the county clerks waxed fat upon the fees. . . . Nice young men found openings at fair salaries, with the contingency of fine stock-jobbing opportunities, as secretaries; superintendents were appointed to oversee mines whose office was as illusionary as that of the Adelantado of the Seven Cities. Every man you met was a president, every other one a trustee, and all stockholders. Your washerwomen had ten feet in the "Highflier," your office-boy held certificates for 50 shares of "Aladdin." … Everybody talked stock. It was the subject of the conversation in parlor and kitchen, at ball and soiree [Harte 1866i].

The bubble burst and the Pacific board of brokers shut down, leaving a trail of failure and ruin: "People who supposed themselves wealthy, found themselves reduced to exceedingly small practical incomes. Riches vanished; no one knew where or why. It is roughly estimated that over $20,000,000 evaporated thus mysteriously" [Harte 1866i]. Perhaps visions of easily plucked gold still inspire and explain why so few small investors heeded warnings that neither the recent dot.com nor real-estate booms could last indefinitely.

Of course, as usual, he continues in disparaging fashion against all but the worthy grape, which in "flavor and delicacy really surpasses Eastern products":

> In spite of size and prolific bearing, with this exception, the pomological exhibition of this country is deceitful; your mammoth strawberries are stringy, your pears are fibrous, your large apples are Dead Sea fruit, and your magnificent looking peaches are leathery. But the grape alone is sincere [Harte 1866e:59].

Within this Garden of Eden, the good life held sway for decades as reported by newspapers and journals of the times. A good life enabled by a mild climate, abundance of cheap fresh food, and relatively high wages for the working classes. San Francisco restaurants adopted the French framework of dinner, with multi-courses from soup to fruit and café noir to cordials, with French cooking and French wines and they reportedly set these meals out at one-fourth the cost of similar repasts in major cities on the East Coast (Brooks 1868:467–471). One journalist suggested: "this cheapness and convenience of living, added to the harrowing reflections which most young men have upon the extravagance of women, has something to do with keeping the ranks of bachelors so full" (Brooks 1868:471). While in the late 1860s there was no California specialty dish, the beginnings of California cuisine could be seen in the artful combination of fresh, varied, rich and inexpensive ingredients from around the world.

Poverty, apparently, did not manifest itself in the same way in San Francisco as elsewhere:

> Leaving out the abjectly and squalidly poor, it is nevertheless true, that the lowest and most moneyless classes of society have more daintiness of palate and contempt for coarse or homely fare than the same sort of people anywhere else. . . . The butchers complain that they cannot find customers for the coarser cuts of meats; . . . A distain for the lower grades of flour, and beefsteaks "off the round" seems to pervade all ranks of life. If a few pieces of coin stand between the San Franciscan and beggary, he must have his sirloin and café noir to-day; to-morrow may be leanness and abstinence; to-day he must have the best that the markets yields [Brooks 1868:466].

In April 1876, the *San Francisco Morning Call* printed an article titled "What We Live On" including "Statistics of Our Daily Consumption of Animal and Vegetable Food"; "The Enormous Amount of Victuals that Annually Passes Down our Throats"; subtitled "An Exhibit that Will Doubtless Astonish many Readers" (*SF Morning Call* 9 April 1876:8). This intriguing article ranges from discussions of beasts of prey, cannibalism, and the usefulness of eating rats, mice, and horses before tackling the eating habits and markets of San Franciscans. The author provides figures developed from seven chief caravansaries and a detailed list of the costs for meals for one day at the Palace Hotel ($1,194.20). The Palace Hotel opened in October 1875 to wild public acclaim as San Francisco's most magnificent address. It housed 755 rooms, main dining room seating 600, two "grille" rooms, a hall for receptions, and a private dining room (Cooper 2008; Figure 10.5). The detailed account did not include alcohol or

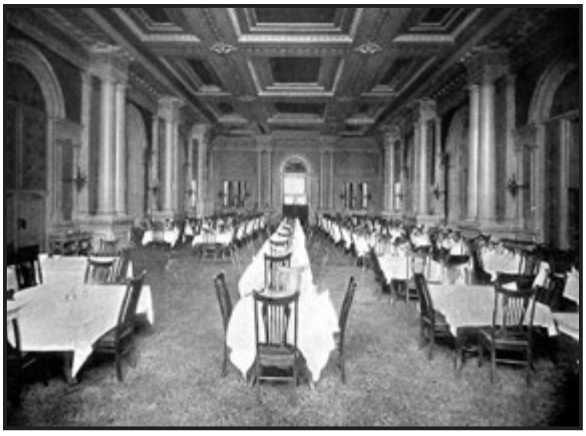


Figure 10.5. Palace Hotel American Dining Room, 1895 (Cooper 2008). (Courtesy Bruce C. Cooper, ThePalaceHotel.org)

staff time, just provisions and one would assume, relatively expensive provisions. "What We Live On" also provided quantities of game and other food products brought into the city. Table 10.1 displays that information along with quantities consumed in the chief hotels. Taken together, these figures suggest the relative amounts of food types consumed in a city of approximately 275,000 (*SF Morning Call* 9 April 1876:8).

Eight years later, the *San Francisco Morning Call* revisited the topic with an article titled: "Paradise for the Poor: How Much May be Accomplished with a Small Income" bragging that there was no city in the United States where a man with a small income could live so comfortably as in San Francisco (24 April 1884:5). High wages, mild climate, and cheap food each factored into this Mecca for the low paid. The average weekly wage for skilled and unskilled workers in San Francisco was $18.22 in 1878 in comparison to New York where it averaged only $12.07 (Decker 1976:166). Wages for 1884 as reported by the *SF Morning Call* are provided in Table 10.2 and appear to be in the same range. The *Call* reporter interviewed a laborer, grocer, butcher, young independent woman, and a mill worker on their income, expenses and quality of life and concluded that employed workers in San Francisco lived more comfortably than their counterparts anywhere in the America or Europe.

Once again the *San Francisco Morning Call* visited the topic of "What We Eat" in February 1887 concluding (yet again) "there is no city in the world where there is better eating, or more of it" (19 February 1887: supplement p. 1). To the usual recital of cheap foodstuffs and favorable comparisons relative to the East Coast, this article adds the perspective of the food critic in discussing "How We Spoil it in Cooking." In the 19th century, beef was the centerpiece of good eating: next to "the liberty of the press and the habeas corpus," Americans "put a livelier faith in beef than in anything else" (*SF Morning Call* 19 February 1887:1). At this time, San Francisco's average beef consumption was said to exceed the half-pound average in New York and London. The reporter compared costs of various meals prepared at home and in various classes of restaurants concluding that restaurants fared very well (Table 10.3). The price of poultry was noted as a "standing disgrace" and more expensive than in midwestern cities hampered by snow and frost. The price of eggs at this time was also notably high in relation to other staples.

Literary Visions of Oakland and San Francisco

Over the decades novelists from Bret Harte to Armisted Maupin have used Oakland and/or San Francisco as the backdrop and subject of their stories. Bret Harte parlayed the stories (a.k.a., lies) told around Gold Rush mining camps into a lucrative literary career that fed romantic images of Western life to the hungry reading public around the world, modernized the short story, and gave birth to the Western genre popularized in novels, films, and television series to this day. "The Lost Heiress," one of Harte's earliest stories, published in February 1861, provides distinct images of San Francisco and Oakland. Subtitled "A Tale of the Oakland Bar," the story parodies an overly elegant literary style now lost to us in the 21st century.

Bret Harte lived with his mother for two years in Oakland upon arriving in California. While the literary "burlesque" may be lost upon us, Harte's budding talent and humor shine through in this story, which begins: "Not a hundred miles from the luxurious and glittering metropolis of this State breaks upon the enraptured view the fair city of Oakland. Its inhabitants are chiefly composed of pure and exalted beings whom it is a pleasure to visit and an honor to know. They are generally affluent and genteel" (1861:83). It continues with a love story told by a third

Table 10.1. San Francisco Victuals in 1876

Food Stuff	Quantity	Timing	Notes
Deer	4,000	Annually	
Buffalo saddles	700	Annually	11 pounds each
Bear	60	Annually	200 pounds of meat
Hares and rabbits	10s of 1,000s	Annually	Purchased by French and German restaurants
Wild pigeons	10,000 dozen	Annually	Numbers of game birds sold outside of the markets incalculable
Prairie chickens	7,500 pairs	Annually	
Wild turkeys	400	Annually	
Wild geese	1,500	Annually	
Wild duck	15,000	Annually	
Snipe	10s of 1,000s	Annually	
Partridges	12,000	Annually	
Quail	80,000	Annually	
Oysters	750 bushels	Daily	
Clams	125 bushels	Daily	
Potatoes	10,000 barrels	Daily	
Turnips and such	750 barrels	Daily	
Hogs	8,000	Week	Consumed by Chinese
Beef, short loins, and ribs	2,000 pounds	Daily	Seven chief hotels
Mutton chops	1,800 pounds	Daily	Seven chief hotels
Spring lamb	4,000 pounds	Daily	Seven chief hotels
Veal hind quarters	1,000 pounds	Daily	Seven chief hotels
Corned beef	80 pounds	Daily	Seven chief hotels
Goats and kids	80	Annually	Seven chief hotels
Roasting pigs	16	Weekly	Seven chief hotels
Hams	1,000 to 1,500	Weekly	Seven chief hotels
Tame turkeys, ducks, geese, guinea fowls	400 tons	Weekly	

San Francisco Morning Call 9 April 1876:8

Table 10.2. Wages for Working Men in San Francisco in 1884

Class	Day	Week
Ordinary Day Laborer	$1 – $2	$12.00
Good Labor, requiring familiarity w/work	$2.50	
Skilled, machinists, jewelers, etc.	$3 – $4+	
Bricklayers	$2 – $3.50	$21.00
Carpenters	$2 – $3	$18.00
Masons		$21.00
Painters	$2 – $3.50	
Blacksmiths		$21.00
Cabinet-makers	$2.50 – $3.50	
Shoemakers		$16.25
Tailors		$17.00
Tinsmiths		$15.00
Stone-cutters	$3 – $4	
Barbers		$14 – $18
Woolen Mill Workers	$1.60	

San Francisco Morning Call 24 April 1884:5

Table 10.3. Representative Costs

Expense	Cost	Other	Date
4-room house w/yard	$12.00 per month		1884
Groceries	$2.50 – $3 per week	Family of 4, everything except fresh meat and vegetables, clothing and coal	1884
Fresh beef	7 – 8 cents per pound		1884
Fresh mutton	4.5 – 6 cents per pound	Cut from forequarters with an occasional good steak or batch of chops	1884
Beef on the hoof	67.5 cents		1887
Beef choice cuts	18 – 25 cents		1887
Spring lamb	15 – 20 cents		1887
Mutton	10 – 12.5 cents		1887
6 lb. leg of mutton	85 cents	Cooked at home w/ fixings for 5 people	1887
Chicken broilers	50 – 60 cents		
Full grown fowl	$1.00	33 cents per pound	1887
Turkey	20 – 22 cents per pound	Serves 4	1887
Dinner w/wine	25 cents – $1.25		

San Francisco Morning Call 24 April 1884:5; 19 February 1887:1

party. The heroine grew up in a stately Oakland mansion: "She had *all* the accomplishments, and performed with equal ease upon the piano and accordeon. Accustomed from her earliest infancy to gymnastics, in the Indian Club and Parallel Bar exercise she stood unrivaled. Sent to a fashionable boarding-school at a tender age, she received a diploma for 'manners'" (Harte 1861:84). The hero, a young man of high estate and noble bearing though down on his luck due to gambling, worked as a deckhand on the Oakland–San Francisco ferry—"the transition from 'poker' to the furnace was natural" according to the narrator, refraining "from mirth" at his wit.

The two met when the hero retrieved the young lady's forgotten luggage to be rewarded with a playful smack on the head with her parasol: "This characteristic act proved that from thence their hearts were one. Such is inconsistent girlhood" (Harte 1861:85). Unfortunately, the affluent father disapproved and sought to relocate his daughter from the "soft seclusion of Oakland" to San Francisco where "in the giddy whirl of fashion and aristocracy" she would forget the past (Harte 1861:85). His plan failed when the late night ferry hit a sand bar in the dense fog and the couple escaped in a small boat; he "holding the American flag in one hand," and she "leaning upon his arm in the favorite attitude of the Goddess of Liberty"; neither ever to be seen again (Harte 1861:86–87).

Fanciful romanticism aside, Oakland clearly represents the secluded, safe, suburb; and San Francisco the sophisticated, entertaining, and dangerous city. By the late 19th century, Naturalism arose as a literary genre in contrast to the soft romanticism going out of vogue. Naturalists use scientific principles such as Social Darwinism to objectively view and detachedly describe the human condition. They explore questions of heredity and environment in people's lives. They also avoid the flowery, classical image-laden prose en vogue with the Romantics. According to literary historian Donald Pizer: Naturalistic novels usually contain two sources of tension. In writing of the lower classes and fictionalizing commonplace, unheroic, everyday events, they also discover and relate human behaviors that are heroic, extraordinary or excessive. While focusing on characters controlled from the outside by environment, heredity, or circumstance, the novels nevertheless offer the possibility of humanistic values in the characters and their fates to affirm the significance of individual lives (Campbell 2008:1–2, citing Pizer 1984:10–11). In some ways, this is not too different from the goals of a humanistic historical archaeology.

Two practitioners of the Naturalism school wrote about our area; each provided vivid details on life at the time: Frank Norris on late 1890s San Francisco in *McTeague* (1899) and Jack London on approximately the same period in West Oakland in *Valley of the Moon* (1913) and other works. This was a period of economic depression and profound social strife based on race, ethnicity, and class. Both authors followed Social Darwinism, but Norris took the more brutal approach; London's stances, Socialist and Social Darwinian, having softened with his relocation to his Beauty Ranch on Sonoma Mountain.

Frank Norris' Sensate San Francisco

Frank Norris populated his San Francisco with a mishmash of individuals struggling to make their simple ways in a city they did not comprehend, but whose riches appeared vast and ever just out of reach in the chaotic, changing post-Gold Rush world. These are the characters left over from Harte's yarns; the ones who did not strike it rich, overcome the odds, or even find their ways. Born of wealth and privilege, Norris created characters far from his own ilk. According to literary critic Kenneth Rexroth, "Frank Norris is not just a California writer, but a San Francisco one. . . . Not only are his people sensate, they are not Protestant. Frank Norris knew as little about the existential dilemma as Aristotle, and cared less. This is San Francisco speaking, and

a city mercifully spared the westward radiation of the great light from Plymouth Rock" (1964:346–347). Norris' main character, McTeague, is large, brutish, insensitive, and deficient, perhaps genetically inferior, slow, and dim. A dentist, who learned his trade informally as an apprentice, McTeague manages a basic practice, marries a young German woman, Trina, who promptly wins $5,000 in the lottery. The couple is comfortable and happy; Trina invests her winnings and makes wooden toys for sale by a relative. McTeague drinks bottled, rather than steam, beer, eats well, sports a silk hat, and receives a large tooth to advertise his trade as a present from his wife. Everything falls apart when an enemy reports McTeague for operating without the appropriate dental credentials and he is prohibited from practicing. Trina's avaricious streak grows with their poverty and she withholds money from McTeague, who eventually gives up trying to find a job, walks the streets, gets drunk when he can, abuses Trina when he pleases, eventually killing her for the lottery winnings.

Figure 10.6. Interior of McTeague's three-room flat. Director Erich von Stromheim filmed *Greed* based on *McTeague* in San Francisco in 1923. Von Stromheim meticulously followed Norris' story. While the film was later destroyed, an album of production photographs is in the Bancroft Library. (Courtesy of the Bancroft Library, University of California, Berkeley: 1993.034:34--faLB)

Rexroth (1964:342) applauds Norris' "restless photographic veracity"—referring to Norris' ability to fully create an authentic physical environment of things, sounds, smells, and tastes within which his characters live (Figure 10.6). These things provide the images that reinforce the materialistic theme running through the novel. Each step of McTeague's downward spiral includes the loss of his prized possessions from his stone pug and steel engraving to his large golden molar, concertina, and finally the canary in a gilded cage, as if these material objects housed his humanity. Prior to his marriage, McTeague frequented Frenna's corner grocery. Like corner groceries throughout the South of Market, Frenna's had a bar in the back:

> Advertisements for cheap butter and eggs painted in green marking ink upon wrapping paper, stood about on the sidewalk outside. The doorway was decorated with a huge Milwaukee-beer sign. Back of the store proper was a bar where white sand covered the floor. A few tables and chairs were scattered here and there. The walls were hung with gorgeously colored tobacco advertisements and colored lithographs of trotting horses. On the wall behind the bar was a model of a full-rigged ship enclosed in a bottle [Norris 1964:110].

McTeague brought his pitcher to be filled with beer on Sunday afternoons. Other men played piquet and talked politics.

Upon their marriage, McTeague and Trina moved into a three-room flat, composed of a sitting room that doubled as a dining room, a bedroom and a tiny kitchen, in part furnished by her lottery winnings:

> The sitting room was particularly charming. Clean matting covered the floor, and two or three bright-colored rugs were scattered here and there. The backs of the chairs were hung with knitted worsted tidies, very gay. The bay window should have been occupied by Trina's sewing machine, but this had been moved to the other side of the room to give a place to a little black-walnut table with spiral legs, before which the pair were to be married. In one corner stood the parlor melodeon, a family possession of the Sieppes, but given now to Trina as one of her parents' wedding presents. Three pictures hung upon the walls. . . . These pictures were hung on either side of the mantelpiece. . . .
>
> A door hung with chenille portieres…admitted one to the bedroom. The bedroom could boast a carpet, three-ply ingrain, the design being bunches of red and green flowers in yellow baskets on a white ground. The wallpaper was admirable . . . This room was prolific in pictures. Most of them framed colored prints from Christmas editions of the *London Graphic* and *Illustrated News*, the subject of each picture inevitably involving very alert fox terriers and very pretty moon-faced little girls.
>
> Back of the bedroom was the kitchen, a creation of Trina's, a dream of a kitchen, with its range, its porcelain-lined sink, its copper boiler, and its overpowering array of flashing tinware. Everything was new; everything was complete [Norris 1964:125–126].

After McTeague closed his Dental Parlor, the couple sold their personal possessions and moved to cheaper accommodations:

> She and McTeague stood in a tiny room at the back of the flat and on its very top floor. The room was white-washed. It contained a bed, three cane-seated chairs, and a wooden washstand with its washbowl and pitcher. From its single uncurtained window one looked down into the flat's dirty backyard and upon the roofs of the hovels that bordered the alley in the rear. There was a rag carpet on the floor. In place of a closet some dozen wooden pegs were affixed to the wall over the washstand. There was a smell of cheap soap and of ancient hair oil in the air [Norris 1964: 210].

McTeague and Trina failed to find the California life; each died a violent death on losing their most coveted possession: Trina her lottery winnings and McTeague the gilded bird cage and beloved, protected canary.

McTeague did not just vividly recount the downfall of his hero, others in the flat and its vicinity met similar fates connected with deficient heredity and the inability to function in the materialistic world that was 19th-century San Francisco without access to the promised riches. Norris' depictions of flat life that mixed the ethnicities and genders in close proximity provided fodder for domestic reformers of the time who decried the immorality of such places. But those living these lives also functioned as fictive kin, looking out for each other and providing what little help could be mustered. The only couple whose fates were not twisted by selfishness connected under these circumstances. Miss Baker, a retired dressmaker, and Old Grannis, an English pamphlet binder and helper at the dog hospital, never spoke, but occupied adjoining rooms that shared a thin wall:

> Old Grannis came home from his work at four o'clock, and between that time and six Miss Baker would sit in her room, her hands idle in her lap, doing nothing, listening, waiting. Old Grannis did the same, drawing his armchair near to the wall, knowing that Miss Baker was upon the other side, conscious, perhaps, that she was thinking of him; and there the two would sit through the hours of the afternoon, listening and waiting, they did not know exactly for what, but near to each other, separated only by the thin partition of their rooms [Norris 1964:17].

One day Miss Baker impulsively knocked on Old Grannis's door and the two connected:

> It had come at last. After all these years they were together; they understood each other. They stood at length in a little Elysium of their own creating. They walked hand in hand in a delicious garden where it was always autumn. Far from the world and together they entered upon the long-retarded romance of their commonplace and uneventful lives [Norris 1964:254].

This is as happily ever after as Norris could provide.

Jack London's Oakland: A Place to Start From

Oaklanders exalt in the claim their city can make upon one of America's most famous authors—visitors can follow the "wolf paws" etched on a path to Jack London's waterfront haunts. Ironically, Jack London had no such heartfelt ties to Oakland, although the city itself takes center stage in many of his best writings.

Jack London was born in San Francisco in 1876, the son of Flora Wellman, a runaway from a respectable Ohioan family and follower of spiritualist astrologer "Doctor" William Chaney. Chaney is widely believed to have been Jack's father, although he never acknowledged it. When Jack was an infant, Flora married John London, a widower with two young children. The family lived briefly in Oakland from 1879 through 1881 and then moved back to Oakland when Jack was 10, after the family lost their Livermore ranch to foreclosure. The family's fortunes continued on a steady decline from a position of middle-class respectability and land ownership to the precarious footing of the laboring class, John working as a night watchman and renting their home by the month. Jack spent a painful adolescence in Oakland and fled the place and its memories at his first brush with success (Figure 10.7).

With his parentage in question and his family's declining social status, London wrote from a very different perspective than Norris. His heroes are pure Anglo-Saxons, who through superior heredity are able to overcome, for the most part, the obstacles posed by the environmental factors of capitalism, materialism, and immigration. London identified with his heroes and reworked his past. With his monetary success, Jack London moved from Oakland to rural Sonoma County. Oakland became for him a metaphor for the workings of capitalism, its residents representative of the downtrodden working class. In various guises, he reconstructed his past in this image with workingman Jack London defeating, disarming, exposing the wily capitalists. As a storyteller, Jack wrote about what he knew, as a socialist he worked toward the revolution. It is not surprising that he recast his own history and that of Oakland in his revolutionary sagas. A historical materialist, Jack focused on social structure and the role of commodification in creating the moral—or in this case, immoral—foundation of both society at large and the individuals which the system debased. Jack loved this particular metaphor and used it generously in his writings. London condemned Capitalism by exaggerating the material deprivations suffered by West Oakland's working class. This kept them pure in relation to their morally depraved, spiritually dead employers. In missing

Figure 10.7. London family home from 1888 to 1890 at 807 Pine Street on Cypress Project Block 20. (Photo California State Park Archives)

the materialism that increasing pervaded all classes in America at the turn of the 19th century, London lost an opportunity to explore deeper consequences of the industrial revolution. Were workers really better off because they ate steak off white ceramics?

Like many of his contemporaries, he saw that the material benefits of the consumer revolution masked deep inequities and in so doing effectively prevented political revolution. Through labor unions, the working class strove to improve their conditions of employment, not to overthrow the capitalist relations of production itself. According to Jack, some unions did their job too well. In his futuristic revolutionary tome *The Iron Heel*, London wrote: "The members of the favored unions became the aristocracy of labor. They were set apart from the rest of labor. They were better housed, better clothed, better fed, better treated. They were grab-sharing with a vengeance" (1957 [1908]:199).

Jack London was an incredibly successful and prolific author. Having achieved success, London wrote for money: money to finance the building of his boat the *Snark*, for expansion and improvement of his ranch, and for building his fantasy home, the Wolf House. London drew heavily from personal experience for his writing. After moving to Glen Ellen, the inspiration for his work came in part from his travels, his relationship with his wife Charmian, his studies of agriculture, and—at least for the first few years—from his conviction in the inevitability of a Socialist Revolution. However, London's responsibilities and diverse interests produced a cash flow problem of immense proportions; he took and spent cash advances long before producing final copy. A friend once lamented that Jack had "mortgaged his brain." He had to write just to make good on these cash advances.

Throughout his career, London's writing habits were very strict and regimented. He set himself a goal of one thousand words a day, which he reached each morning before socializing or attending to ranch business. By 1912 London was tiring of the pressure of having to write just to keep the ranch going; and he came to hate writing (Watson 1983:3). Nevertheless, London continued to meet his quota, often filling his work with events and scenes close at hand. To meet his goal, Jack London wrote about things that he knew including his homes in Oakland and

Sonoma County. These places figure prominently in many of his best novels*: Martin Eden* (1909), *John Barleycorn* (1913a), and *Valley of the Moon* (1913b), as well as in many essays and short stories. Jack London's life and writings provide focal points from which much that was important a century ago can be vividly recreated and understood in modern terms.

Jack London simply put words to paper; he did not edit or reflect; his work is an unselfconsciously natural portrait of the times, seen, of course, through the filter of his life. It provides a wealth of everyday details on what his characters wore, what they ate, their surroundings, their pastimes. *Valley of the Moon*, for example, touches on housework, cosmetics, underwear, fishing, gangs, prostitution, roomers, and the interior and neighboring surroundings of 807 Pine Street — the Oakland cottage where London lived as a boy of twelve and where the ASC recently conducted archaeological excavations for the Cypress Replacement Project (Praetzellis and Praetzellis, eds. 2004; Praetzellis 2005). *Martin Eden*, the rags to riches story of a young West Oakland man who becomes a successful author, provides a wealth of detail on laundry work, Portuguese immigrants, dental care, rooming, urban cows, and much more.

In his novel *Valley of the Moon*, Jack London sited his figurative struggle between Capital and Labor in West Oakland—a very logical choice, as the streets and railyards of this city had seen many actual battles. From the front window of his family's home on Pine Street, Jack had had a good view of the comings and goings at the Southern Pacific Railyards. It is from this cottage that Saxon, London's heroine, witnessed a brutal confrontation between strikers and Pinkertons. The violence of the event caused the young woman to think deeply about the modern, urban way of life and to conclude that, "jobs are bones" (London 1913b:189) over which poor men fight; and that "the man-world was made by men, and a rotten job it was" (1913b:254). "Her eyes showed her only the smudge of San Francisco, the smudge of Oakland, where men were breaking heads and killing one another, where babies were dying, born and unborn, and where women were weeping with bruised breasts" (London 1913b:256). Even the clams that people gathered from the nearby marsh caused typhoid fever, "still another mark against Oakland, she reflected—Oakland, the man-trap, that poisoned those it did not starve" (London 1913b:286). Hardly material for an Oakland Visitor's Bureau brochure.

In the midst of her despair, Saxon meets a boy—who surely represents Jack London himself—who casually speaks the words that would change her life: "Oakland," he says, "is just a place to start from" (London 1913b:267). Saxon then begins her journey to the rural Valley of the Moon, a natural world where men didn't fight over bones. London's early Socialist juxtaposition of labor and capital changed to an artist's conception of the healthy, natural world opposed to the brutal, artificial, man-world that included both labor and capital, by which all human relationships are tainted. His characters' flight from Oakland and its problems to the countryside mirrored London's own journey. For Saxon and Billy, at least, the journey had a happy ending.

THE VIEW FROM BELOW

Statistical analyses of the West Oakland/Cypress and San Francisco SF-80 Bayshore and West Approach collections were conducted by archaeologist Dr. Bruce Owen. Owen is a specialist in quantitative methods who has worked in the coastal valleys of Peru for over 20 years. His lack of connection with American historical archaeology benefited this analysis. Owen has none of the preconceived notions or taken-for-granted positions that would be expected of a historical archaeologist and, consequently, no investment in any of the outcomes.

Chapter 1 provides and dates and associations for the archaeological collections used in this analysis. Features from San Francisco are connected primarily with 1868 earthquake deposits and with 1880s sewer construction. As such they span the immediate post-Gold Rush period through the post-Southern Pacific Railroad downturn of the mid 1870s and beyond. Oakland deposits come into being primarily as a by-product of 1880s sewer construction and are associated with the post-Southern Pacific railroad boom related to Oakland's status as the railroad terminus and hub.

Quantitative Analyses: Neighborhoods and Cities

Bruce Owen

The quantitative analysis of archaeological refuse from 19th-century San Francisco and Oakland neighborhoods lived up to its promise, confirming or rejecting ideas based on historical sources and assumptions, and suggesting new ones. Because most of the patterns described here are based on multiple tests of statistical significance, they are reasonably certain to reflect actual behavior in the past. Their interpretations can be debated, but the patterns to be explained are probably real. The detailed statistical report is presented in Appendix F.

Nevertheless, almost all of these general patterns belie tremendous variability in individual and household behavior. While there were real tendencies among, say, Irish households, any given Irish household might have deviated from some or all of them. Noteworthy findings related to the two cities are summarized below.

Maritime, Ironworking, and Railroad Workers Made Different Consumption Choices

People's consumption decisions may have paralleled the general industries in which they worked. The roles of different industries in San Francisco were difficult to define, however, because although 13 households could be identified as being supported entirely by the maritime industry, only 4 could be categorized as ironworking households. All the rest were either mixed or unknown. Patterns became clearer when Oakland households were added for comparison, but since almost all of the Oakland households were associated with the railroad industry, it is difficult to say how much of the patterning reflects the industries, and how much reflects cultural or economic differences between San Francisco and Oakland. In fact, since in these samples San Francisco was largely a maritime town, and Oakland was largely a railroading town, many of the differences between the cities were essentially differences between the industries, and vice versa (Figure 10.8).

The only significant differences between maritime and ironworking households in San Francisco involved social drugs. Ironworking households consumed more alcohol and tobacco combined, more beer and ale, and less wine and champagne than did maritime households.

Figure 10.8. Ironworkers from San Francisco and Railroad workers from Oakland had some significantly different consumption patterns. (Top photo courtesy of the Bancroft Library, University of California, Berkeley: 1960.023:60--ffALB; bottom photo reproduced with permission of Vernon Sappers)

Adding 18 railroading households and one maritime household from Oakland brought out some additional contrasts. Maritime households (all but one in San Francisco) drank relatively more wine and champagne, and less liquor, than did the Oakland railroading households, which consumed the most liquor. Maritime households used more white improved earthenware, and less ordinary earthenware. They used proportionally fewer consumables and more equipment in their mix of grooming and health items, took more patent medicines, and had more collecting items than did railroading households. The 4 ironworking households in San Francisco tended to be intermediate on all these counts.

The San Francisco ironworking households consumed higher proportions of hunted game, more beer and ale, and more tobacco than did the Oakland railroading households, while the railroading households drank the most bottled soda water and the ironworking households drank the least, with the mostly San Francisco maritime households in between on all counts. The ironworking households consumed more social drugs in general than did the railroading or maritime households.

Overall, the maritime households tended towards the highest-status consumption patterns, the railroading households were intermediate, and the four ironworking households fairly clearly

reflected the lowest-status mix of goods. Nevertheless, the patterning by industry was probably more complex than is suggested by a single scale of status. First, the occupation ranks of the maritime and ironworking households were virtually identical, and the railroading households averaged only very slightly lower. By this measure, there was little difference in socioeconomic standing between households supported by the three industries. Second, the consumption patterns are not all consistent. For example, although railroading households consumed the most patent medicines, which were generally associated with low status, they eschewed the game, tobacco, and beer and ale usually preferred by households of lower occupation rank.

While some of the contrasts between these households may relate to general social status differences among the industries, some of the variation must have other causes, such as city-level differences that affected most households in San Francisco in one way and most households in Oakland in another, or non-economic cultural differences between workers in the different industries. The railroad industry might, for example, have discouraged tobacco use, or working in the maritime industry might have increased one's access to collectable items.

San Franciscans and Oaklanders Consumed Differently

San Francisco households and Oakland households differed in many ways. While households in the two cities were similar in their relative consumption of cheap, medium, and expensive cuts of meat, they differed considerably in the species of meat that they ate. San Franciscan households consumed more of both high-status beef and low-status pork, while Oakland households bought more of the intermediate- or indeterminate-status mutton and chicken. Since these differences were not significant in comparisons of San Francisco maritime households and Oakland railroading households, they may reflect other differences between the cities, such as their different geographic positions relative to meat producers and transportation links.

Households in Oakland used more porcelain than did households in San Francisco, which compensated with more opaque porcelain and white improved earthenware. These ceramics suggest somewhat higher average status in Oakland, but that was not corroborated by significant differences in other ceramic markers of status. Since only the difference in white improved earthenware also holds between maritime and railroading households, the ceramic differences, like those in meat species, may relate to factors other than the industries prevalent in each city.

By one measure, households in San Francisco consumed more social drugs overall than did households in Oakland, although the lack of corroborating evidence makes this a tentative conclusion. San Franciscans drank more beer and ale, more wine and champagne, and consumed more tobacco than did Oaklanders, who consumed more liquor. In general, these differences suggest a lower-status pattern of social drug use in San Francisco. The comparison of neighborhoods and the study of status indices (see below and Chapter 11) clarify the dramatic city-level contrasts in social drug use.

While San Franciscans may have consumed more social drugs, Oaklanders took more patent medicines, associated with lower occupation rank and with the railroad industry. Maybe patent medicines were a socially acceptable substitute for some drinking in Oakland or in railroading households. If so, it might be worth considering what beliefs or values might have led Oaklanders or railroad workers to contain their social drug use in this way, as opposed to maritime or San Francisco households.

Households in San Francisco discarded more grooming and health equipment, and a smaller proportion of consumables as a fraction of grooming and health items, than did households in Oakland. The first difference suggests higher status for San Francisco, while the second suggests lower status.

Collecting items were more common in San Francisco than in Oakland, just as they were more common in maritime households than in railroading households. Maritime households might have had greater access to collectable items, or greater interests in the exotic places that they might have represented. Alternatively, the generally more status-oriented society of San Francisco suggested in the status index study may have fostered other reasons to own and display such items.

Some of the differences between San Franciscans and Oaklanders might have reflected differences between the maritime and railroad industries, as noted earlier. The two cities differed in the same ways as did the two industries, plus some additional ones.

On the other hand, the differences between San Francisco and Oakland probably did not reflect overall differences in socioeconomic status. The households from each city comprised similar mixes of occupation ranks. In addition, neither city was consistently on the high or low status side of the comparison, except in one area: social drugs. In this sphere, San Francisco households followed a seemingly lower-status pattern than did households in Oakland.

The patterns in social drugs might suggest differing attitudes towards drinking and tobacco in the two cities. They could also reflect differences between maritime and railroading subcultures, with maritime households consuming more social drugs in general, and proportionally more wine and champagne, beer and ale, and tobacco, in contrast to more restrained railroading households that, when they did drink, preferred liquor. As noted earlier, the characters of the two cities and of the two principal industries might be part and parcel of the same thing. There is a hint, however, that the differences in social drug consumption could be citywide tendencies, rather than reflections of two main industries. The neighborhood analysis below suggests that San Francisco's generally high tolerance for the low-status pattern of social drug use prevailed not only in the largely maritime Rincon Hill and Mission Bay neighborhoods, but also in Tar Flat, where employment was roughly split between maritime and ironworking industries. Either ironworkers happened to share maritime workers particular attitudes towards social drug use, or there was some citywide effect apart from the influence of the maritime industry.

The Six Neighborhoods in San Francisco and Oakland were Ranked by Status

Adding three Oakland neighborhoods corroborated the findings about the San Francisco neighborhoods (see Chapter 3) and about the differences between San Francisco and Oakland in general. It also defined neighborhood patterns of status and consumption in Oakland, and suggested some additional insights about the differences between the two cities and the nature and expression of social status.

The six neighborhoods fell into a fairly clear rank order by general socioeconomic status, as indicated by the combined neighborhood rank for meat species, meat cut cost, ceramics, and miscellaneous artifacts, although the picture was more complex than it was in San Francisco alone. Social drugs are excluded from this ranking scheme because they were patterned so differently in the two cities, as discussed above. See Appendix F for details of this procedure. From highest to lowest status, the neighborhoods were Rincon Hill and Mission Bay in San Francisco, West of Market, East of Market, and Oakland Point in Oakland, and Tar Flat in San Francisco (Figure

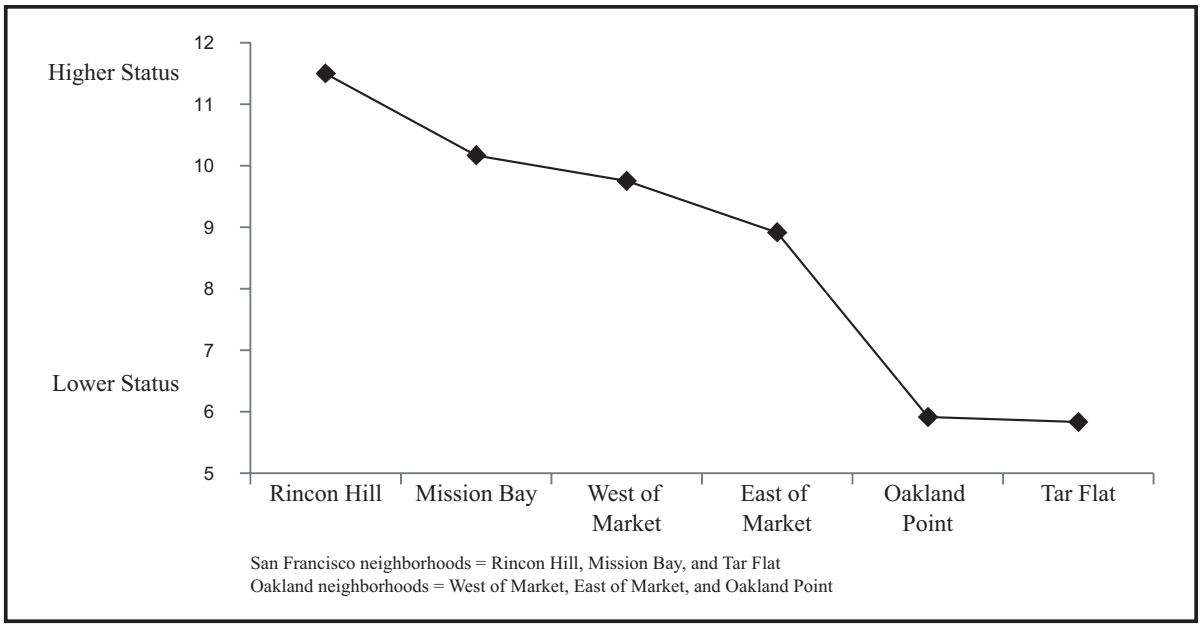


Figure 10.9. Status rank of neighborhoods by total of meat, ceramic, and miscellaneous status ranks.

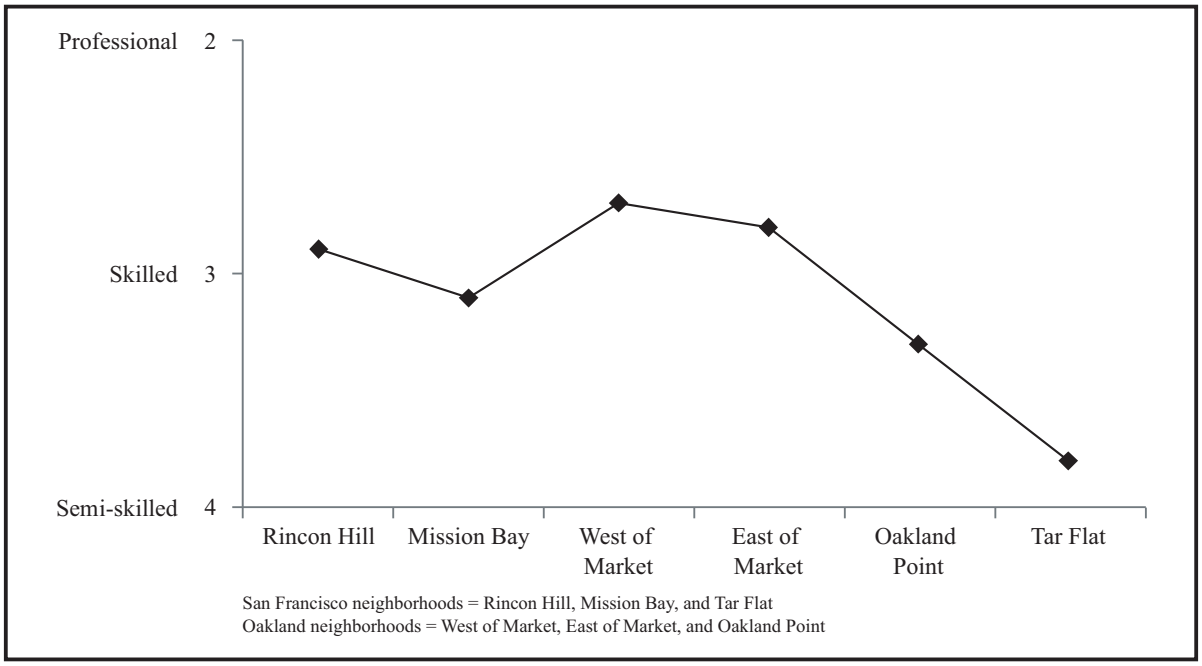


Figure 10.10. Mean primary occupant's occupation rank by neighborhood.

10.9). This ranking by consumption preferences corresponds roughly to the ranking of these neighborhoods by mean occupation rank of the primary occupants of households (Figure 10.10), suggesting that both the consumption variables and occupation rank may reflect the same thing: general social status. Neighborhood differences in average occupation rank were fairly minor. The highest and lowest ranking neighborhoods differed by only about the step between a semi-skilled and a skilled worker. The intermediate neighborhoods were even more similar in terms of occupation ranks.

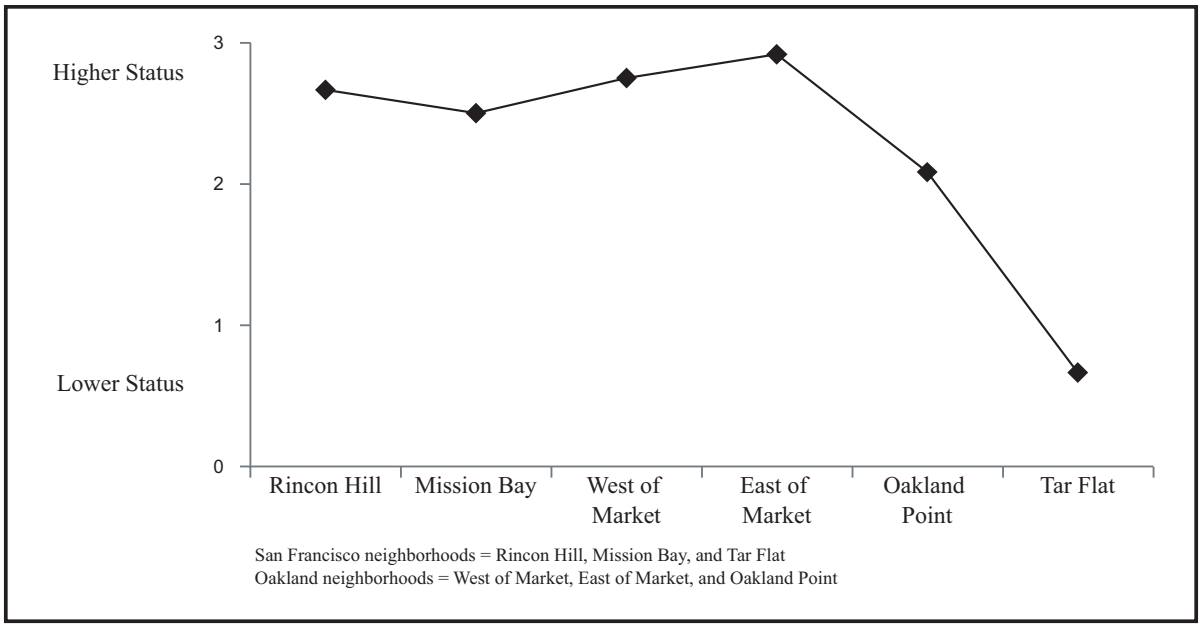


Figure 10.11. Status rank of neighborhoods by meat variables.

On the other hand, the neighborhoods did differ strongly in the industries in which their residents worked. Although many households could not be assigned to a single industry, based on the known households, most of the residents in all three neighborhoods in Oakland worked in the railroad industry. Most residents of Rincon Hill and Mission Bay worked in the maritime industry. Tar Flat was the only neighborhood with a strongly mixed workforce, including both maritime and ironworking households. The Tar Flat neighborhood stood out in many ways, and either the presence of ironworkers or the mixed nature of the neighborhood might have contributed to that mix.

Material Status is an Emergent Quality across Multiple Spheres of Consumption Behavior

While the status ranking of the three San Francisco neighborhoods was consistent across most spheres of consumption except social drugs, the rankings of the six neighborhoods depended on which artifacts were considered. Neighborhood rankings based on any single type of artifact, such as porcelain or patent medicine bottles, did not agree well. It would be foolish to select any single artifact as an index of general social status.

Neighborhood rankings based on multiple artifact types within a single material category, such as porcelain, export and exotic wares, and earthenware, or four different meat variables, tended to agree with each other better (Figures 10.11, 10.12, and 10.13). All have a general downward trend from high-status Rincon Hill to low-status Tar Flat. Each would result in a similar, but slightly different rank order of neighborhoods if used on its own.

Ranking the neighborhoods by combinations of artifact types across multiple categories, such as several ceramic variables and several meat variables, produced the most consistent rankings. That is, adding meat and ceramic ranks together caused a slight change in the implied rank order (Figure 10.14), and finally adding in miscellaneous artifacts caused no further change in the neighborhood ranking at all (Figure 10.9). The more variables that are considered, the more the neighborhood rank order approaches a consensus that averages out the differences between rankings by any single artifact or artifact category.

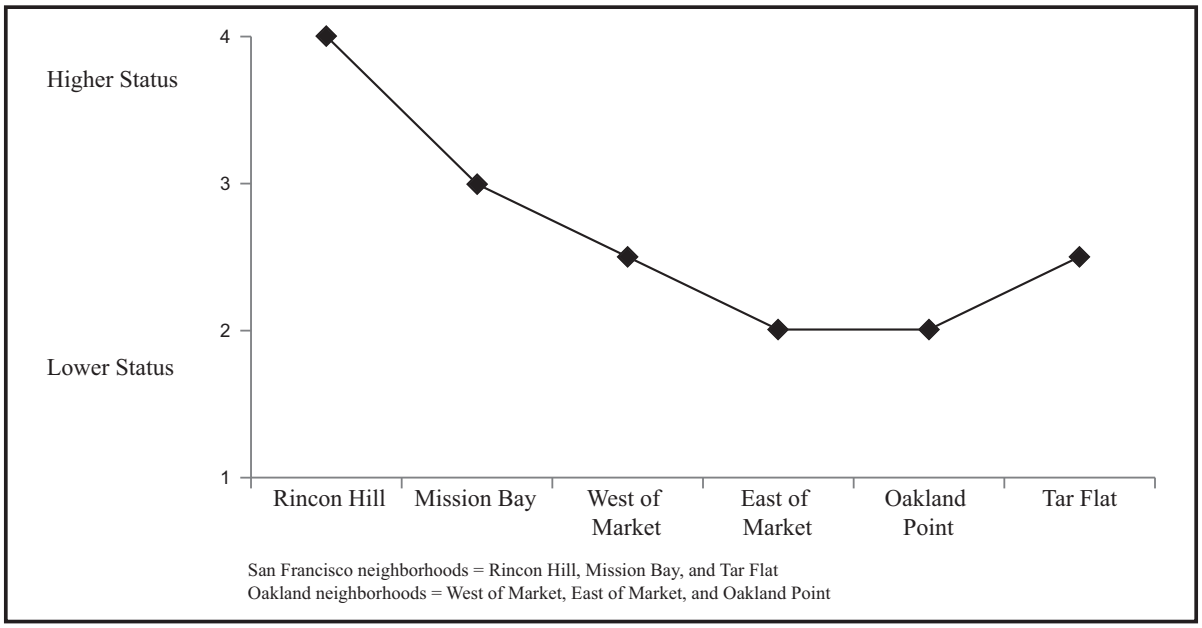


Figure 10.12 Status rank of neighborhoods by ceramic variables.

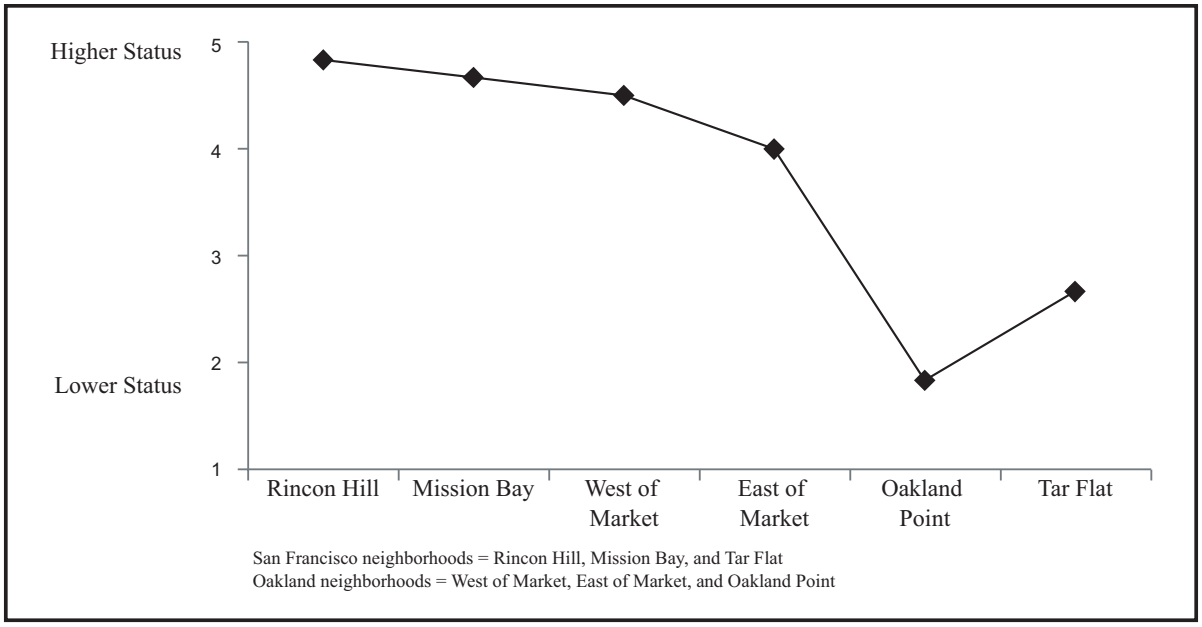


Figure 10.13. Status rank of neighborhoods by miscellaneous artifact variables.

This cumulative or averaging quality of gross social status ranking might seem obvious, or even a mathematical necessity, but these archaeological data (detailed in Appendix F) empirically demonstrate it. The social status ranking of neighborhoods was an emergent, collective characteristic that was only apparent when a range of decisions about multiple kinds of consumption were averaged or lumped.

Social status is an emergent, cumulative characteristic probably because only when a wide sample of consumption decisions are combined does the approximate total amount of resources being allocated to all consumption (that is, the household's general level of disposable income) begin to become apparent. While a beef fancier might buy more beef than his social status would

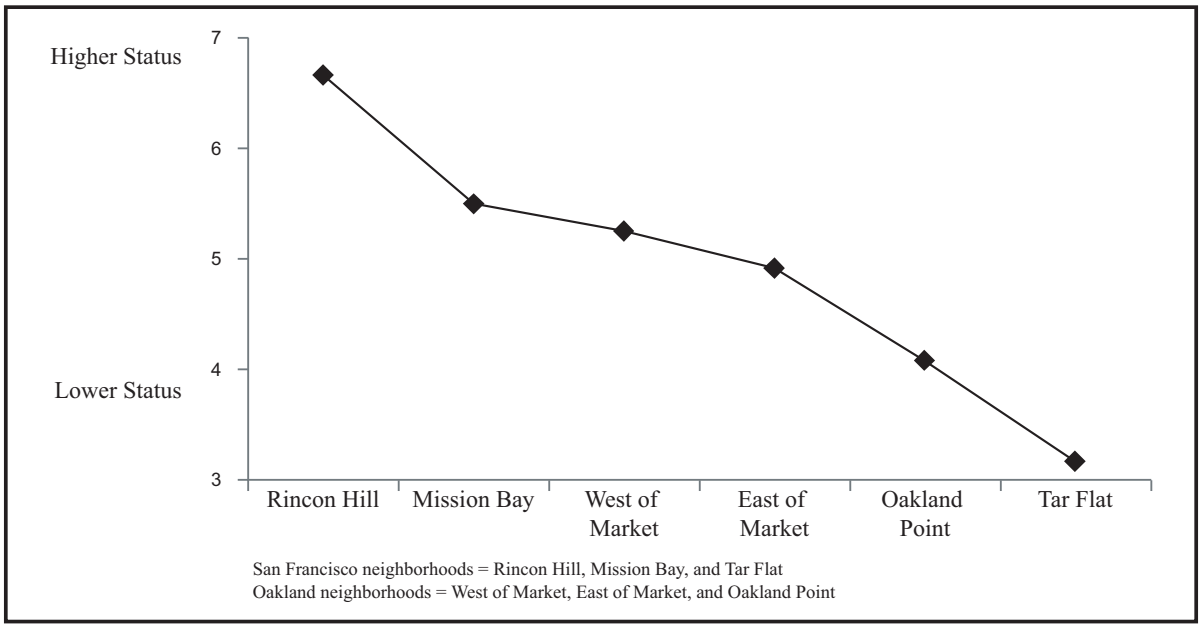


Figure 10.14. Status rank of neighborhoods by total of meat and ceramic status ranks.

otherwise suggest, he presumably compensates by also buying more inexpensive pork or cheaper cuts than is typical for his social status. He might look like a wealthy consumer if we consider only beef or a poor one if we consider only pork. We can only begin to appreciate his total budget or broad socioeconomic standing by adding up a number of his consumption practices.

That the neighborhood status rankings inferred independently from a number of different categories of material remains (meat, ceramics, etc.) fit reasonably well to a single ordering of neighborhoods supports the notion of a single gross scale of socioeconomic status, as does the rough correspondence between the neighborhood ranking and the neighborhoods' average occupation ranks. On the other hand, the discrepancies in this correspondence suggest that occupation rank may not have been the only factor that affected people's consumption choices.

Consumption Choices that Reflected the Prestige or Wealth of People's Neighborhoods

People in higher-ranked neighborhoods tended to buy more expensive cuts of meat, while people in lower-ranked neighborhoods tended to buy more medium-priced cuts, although these patterns did not fit the neighborhood ranking perfectly.

Similarly, households in higher-ranking neighborhoods tended to discard trash with a lower percentage of ceramics in it, just as households with higher occupation ranks did. On the other hand, the amounts of various ceramic wares such as porcelain, export or exotic wares, overseas porcelain, white improved earthenware, and basic wares that households discarded did not particularly reflect the status rank of their neighborhood. Households in the highest-ranked Rincon Hill neighborhood did discard the least low-status earthenware.

People who lived in higher-ranked neighborhoods generally bought more grooming and health items overall, more grooming and health equipment specifically, more perfume and primping items, and fewer patent medicines. The exception to all these patterns was Tar Flat, where people discarded somewhat more grooming and health refuse, more perfume and primping items, and fewer patent medicine bottles than would be expected based on their neighborhood's low status rank.

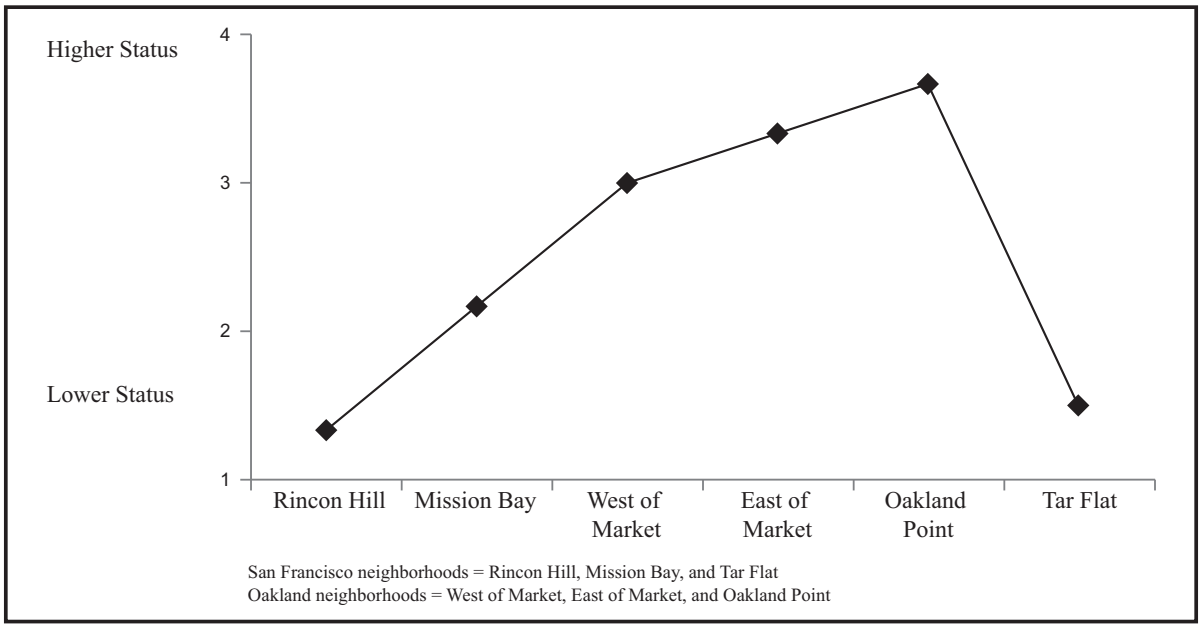


Figure 10.15. Status rank of neighborhoods by social drug variables.

Households in different neighborhoods discarded significantly different amounts of apothecary or druggist's bottles, but the amounts do not correspond to their neighborhood's status rank, their use of patent medicines, the city they lived in, or the industry they worked in. Residents of the West of Market neighborhood in Oakland were the biggest consumers of apothecary or druggist's items. Maybe West of Market residents happened to have easier access to apothecary shops than did others.

As in the analysis within San Francisco, households in Tar Flat stood out for using almost three times as much bottled soda water as the next closest neighborhood, Mission Bay. Adding the Oakland neighborhoods to the comparison only further emphasizes the dramatically higher consumption of soda water in Tar Flat.

The comparison of the two cities found that San Franciscans generally had more collectable items, and the neighborhood analysis confirmed this strong pattern across all neighborhoods of both cities. Households in San Francisco's highest-status Rincon Hill neighborhood averaged over an order of magnitude more collecting items than those in any Oakland neighborhood. Even the lowest-status San Francisco Tar Flat neighborhood had substantially more collectable items than did any Oakland neighborhood did.

The strong differences between the two cities in meat species consumption was also confirmed by the neighborhood analysis, since all the neighborhoods in each city followed the patterns. For example, households in every San Francisco neighborhood consumed more beef than did households in every Oakland neighborhood.

San Franciscans Viewed Alcohol and Tobacco Differently than Oaklanders Did

The one artifact category that did not conform at all to the neighborhood ranking was social drugs (Figure 10.15). The reason was the dramatic difference in social drug use between the two cities. All three San Francisco neighborhoods had much greater proportions of refuse related to alcohol and tobacco than did any of the Oakland neighborhoods (Table 10.4). All three San Francisco neighborhoods had much lower status ranks according to combined social drug

Table 10.4. Means of MNI of Social Drug Containers and Equipment as a Fraction of All Significant Items (MNI Subset)*

Neighborhood	Features	Social Drugs	All Alcohol	Ale/ Beer	Wine/ Champagne	Liquor	Unspecified Alcohol	Tobacco
Rincon Hill, SF	9	16.3	12.0	7.9	2.3	0.8	0.9	4.3
Mission Bay, SF	21	18.3	13.8	7.4	3.5	1.6	1.3	4.5
West of Mkt, Oak	20	10.4	8.4	4.1	1.8	1.1	1.5	2.0
East of Mkt, Oak	23	11.6	9.0	4.6	2.1	1.3	1.0	2.5
Oakland Pt., Oak	29	9.7	7.4	2.4	1.3	1.6	2.1	2.3
Tar Flat, SF	13	23.1	16.9	6.3	3.1	6.2	1.3	6.2
Total	115	13.8	10.5	4.9	2.2	1.9	1.5	3.3

*Shown as "percentages" (multiplied by 100)

variables than did any of the Oakland neighborhoods. The differences within each city were small by comparison. By Oakland standards, even the highest-status neighborhood in San Francisco was off the low end of the social status scale for social drug use. Social drugs were apparently broadly more acceptable at all status levels throughout San Francisco. In effect, the social status significance of social drugs was measured on a different scale in each city.

These differing attitudes towards social drugs probably reflected cultural differences between the two cities, more than differences between the principal industries there. While all three Oakland neighborhoods were associated with the railroad industry, and the two higher-status San Francisco neighborhoods were primarily supported by the maritime industry, the small sample of classifiable households in San Francisco's Tar Flat suggests that Tar Flat had a mix of maritime and ironworking households. Nevertheless, people in Tar Flat used social drugs much as did those in the other two San Francisco neighborhoods. The explanation probably lies not in a contrast between San Francisco's maritime industry and Oakland's railroad industry, but in differences that affected each city as a whole. For example, differing city laws regarding alcohol sales or public drunkenness might have affected social drug use city-wide, crosscutting the different industries represented in San Francisco neighborhoods. Alternatively, the cities could have differed in their alcohol and tobacco distribution networks, public water quality, or in other ways that affected people in every neighborhood of the city. San Francisco's renowned tolerance for behavior that is problematic elsewhere may have been present already in the 19th century in its relatively high use of low-status alcoholic beverages and tobacco compared to people of similar social statuses in Oakland.

Being Poor in San Francisco was Different from Being Poor in Oakland

The neighborhood ranking is based on the finding that rankings by different combinations of variables tend to converge on a single, consensus order. This, in turn, probably works because totals of many different expenditures begin to reflect a household's overall budget. A corollary of this cumulative or total-budget view of social status is that there could be different ways to be high or low on the social status scale. Low-status households all have a small budget, for example, but they might divvy it up in different ways. That is, the clarity gained by ranking neighborhoods by overall status comes at the cost of obscuring different consumption priorities in neighborhoods of similar status. The evidence from San Francisco and Oakland suggests that

neighborhoods did indeed vary within the single scale of status. Specifically, being poor in San Francisco was different from being poor in Oakland.

The lowest-ranking neighborhood was Tar Flat in San Francisco, followed by Oakland Point in Oakland. The households in these two neighborhoods expressed their low status in different ways. People in San Francisco's Tar Flat ate a dramatically lower-status mix of meat species and cuts, but used relatively more moderate-status assortments of ceramic and miscellaneous artifacts.

The two low-status neighborhoods also differed in some more subtle ways. Households in Tar Flat consumed mixes of meat that were richer in both the preferred beef and the low-status pork, and were richer in both high and low cost cuts. Households in Oakland Point consumed more moderate mixes both by species, with more of the middle-status mutton, and by cost, with more medium-cost cuts. Put another way, low status in San Francisco's Tar Flat involved more extremes in consumption, perhaps boom and bust spending, or more emphasis on occasional particularly good meals compensated for by particularly poor ones. Low status in Oakland's Oakland Point involved a more measured husbanding of resources, or more value placed on consistently eating decently, if not particularly well.

In the same way, households in Tar Flat used a more diverse range of ceramics. Tar Flat households discarded more overseas porcelain, opaque porcelain, and export/exotic wares than did their comparably low-status peers in Oakland. All of these wares suggest higher status, and all might be linked to the maritime trade that dominated San Francisco, even though it was mixed with ironworking in Tar Flat. Tar Flat households also discarded more of the low-status basic wares than did Oakland households. As in their meat purchases, people in Oakland Point stuck to a more moderate mix of ceramic wares.

Low status in San Francisco, like every status there, involved more social drugs, wine and champagne, beer and ale, and tobacco than did low status, or any status, in Oakland. Low status in San Francisco, like all statuses, involved more collecting than it did in Oakland. Low status in San Francisco's Tar Flat involved drinking much more bottled soda water than did low status in Oakland Point, perhaps reflecting some geographic aspect of Tar Flat such as a poor or absent piped water supply.

Moderate and high status was expressed more consistently across neighborhoods, except for the city-level differences in social drug use. Higher-status people may have been more connected to regional networks of interactions, and may have shared more homogenized, widespread concepts about appropriate consumption.

CHAPTER 11

THE POWER OF NUMBERS—MATERIAL STATUS INDEX AND MOVING FORWARD

Mary Praetzellis, Adrian Praetzellis, and Bruce Owen

This chapter will use the power of numbers to explore the correlation between occupation and material status at a level never approached before through archaeological data. As Chapter 10 established, San Francisco and Oakland were very different places. This chapter will demonstrate that they even had distinctive ways in which material culture and foodways reflected achieved material status. This will be explored through the development of a statistical site ranking using the variables identified in each city as reflecting material social status. These findings will be recast through the writings of mid-19th-century economist Henry George. Lastly, we will reflect on the future of urban historical archaeology in 19th-century cities.

The ASC database for work in San Francisco and Oakland contains 44 features from the West Approach Project, 7 from SF-80 Bayshore, and 120 from the Cypress Project in West Oakland. The statistical analyses reported on for this volume used features dating from the late 1860s to 1900, associated with domestic deposits that contained an MNI of non-trivial items of at least 35. The resulting sample is 115 households: 72 from Oakland and 43 from San Francisco. The Material Status Index excluded features that contained fewer than 100 faunal items, reducing the sample to 59 for Oakland and 39 for San Francisco. Each of these features was excavated using standardized stratigraphic methods and cataloged using a pull-down menu system to avoid inconsistency. Historical research linked most collections with a specific, historically documented household. These collections are truly comparable.

The unique openness of early San Francisco's social and economic structure has been covered in many places and in many ways in this volume. Two further observations are presented here. Twenty-first century historian, Barbara Berglund sums it up briefly: "Part of what made early San Francisco so unusual was the disjuncture between social class and occupation as well as the lack of expected social difference" (2007:3). Author Frank Norris provides the interior perspective of late-19th-century working people seeking to negotiate their way:

> Marcus was not sure of himself as regarded certain proprieties, nor, for that matter, were any of the people of the little world of Polk Street. The shopgirls, the plumbers' apprentices, the small tradespeople, and their like, whose social position was not clearly defined, could never be sure how far they could go and yet preserve their respectability. When they wished to be proper, they invariably overdid the thing. It was not as if they belonged to the tough element, who had no appearances to keep up. Polk Street rubbed elbows with the avenue one block above. There were certain limits which its dwellers could not overstep; but unfortunately for them, these limits were poorly defined. They could never be sure of themselves. At an unguarded moment they might be taken for toughs, so they generally erred in the other direction and were absurdly formal. No people have a keener eye for the amenities than those whose social position is not assured [1964:75-76].

Social scientists have looked at social mobility through occupation in San Francisco and other cities (Thernstrom 1964; Decker 1978). With our database in hand, we set Bruce Owen to look at material well-being, as measured by discarded consumer goods to see if this correlated with occupation. A second task was to explore if there was a correlation between the resulting Material Culture Index and the occupational ranking.

SOCIAL STATUS IN SAN FRANCISCO AND OAKLAND: STATUS INDICES AND SOCIAL REALITY

Bruce Owen

This section proposes some quantitative indices based on artifact data to measure the general material social status of the 19th-century San Francisco and Oakland households in this study. It tests these indices in two ways, in order to evaluate how effectively they measure material social status and to pick the indices that do so best. First, it compares household status rankings based on each proposed index to an independently documented historical measure of household socioeconomic status: the ranked occupation categories of the workers in the household. Second, it compares household status rankings based on the various indices to the status ranking of neighborhoods suggested by previous analyses. Those indices that correlate well with occupation ranks and/or neighborhood ranks probably reflect general material social status, at least to some extent. This exercise has four purposes:

1. to find the variables and combinations of variables which were most related to social status in 19th-century San Francisco and Oakland,
2. to gain insight into the material expression of social status in general,
3. to learn more about the social and material world of the 19th-century San Francisco and Oakland residents studied by the SF-80 Bayshore, West Approach, and Cypress projects,
4. and to produce some general status indices that can be used to rank the households in the present study on a single scale of social status from low to high, and that could be used to evaluate the social status of households with incomplete historical documentation or that are studied by future lab analyses or excavations.

The work described here clearly achieves the first three goals, and arguably achieves the fourth. While the best indices developed here do significantly correlate moderately to strongly with the historical indicators of social status, the correlations are only good enough to suggest generally higher or lower status. The correlations are not tight enough to be used to infer occupation rank from material remains. In addition, the effective indices involve numerous variables and are somewhat unwieldy to apply. The reasons for both of these difficulties may be inherent in the nature of social status and its material expression. For that very reason, this analysis suggests some characteristics and limitations of the concept of social status as it is commonly used by archaeologists studying both historical and prehistoric societies.

Well 8, Block 9, West Approach Project. Suzanne Howard-Carter excavates a cross-section through the feature; below are toys she found in the fill. Well 8 was 4 ft. square and the initial section made for tight working quarters. Originally identified as a privy, because of its shape, archaeologists later found the feature to be a well 12 ft. deep. (The address on the photo board should read 37 Perry St. not "35.")

Methods: General Approach

The approach used here is to devise a large number of potential indices of social status based on the archaeological material, and then to evaluate how well each index correlates first to the historically documented occupation categories associated with each feature, and second to the neighborhoods in which they are located. This procedure is repeated for all the potential indices considering the households from San Francisco only, then the households from Oakland only, and then both cities combined.

The potential indices include individual standardized variables (such as percentage of beef in the meat weight assemblage, or percentage of beer and ale bottles among all alcohol bottles), numerous combinations of variables within artifact categories (meat weight, ceramic ware, social drugs, and miscellaneous items), and numerous combinations of variables drawn from multiple categories. The number of possible combinations is large, so the subset of combinations actually tested was based on the results from repeated iterations of testing. This method may not have produced the best possible index, but it gives a general sense of what is possible by combining these variables.

The results are evaluated not only in terms of how well each potential index correlates with occupation rank or neighborhood, but also as groups of indices. For example, is any one variable included in all of the ten best-correlating indices for San Francisco? Such a variable would be more convincingly related to social status than would a variable that played a role in only two, or none, of the ten best indices. Similarly, how many variables are involved in the best indices? Do any individual variables correlate well with occupation rank, do combinations of just a few correlate better, or do combinations of many variables correlate best with occupation rank? The answers to such questions suggest some insights into how the material expression of social status works. Do any variables play a part in well-correlating indices in one city, but not the other? Additional questions along these lines are discussed below.

Constructing the Indices

The variables used to make up the indices are already standardized in order to minimize the effect of varying sample sizes from feature to feature. That is, the variables measure artifacts as ratios of an amount of something inferred from a feature's artifact assemblage (MNI of beer bottles, pounds of pork originally on the discarded bones, etc.) divided by a standardizing variable for that feature (MNI of all alcohol containers in the feature, total pounds of meat, etc.). While the analysis includes checks of the correlation of many of these variables individually with the occupation rank associated with each feature, the assumption (borne out by the evidence below) is that combinations of two or perhaps many more variables should better capture variation in social status than does any single variable, and thus should correlate better with occupation rank.

Combining these measures of different artifacts requires a further standardizing step. Consider an index of status that involves both the percentage of beer bottles (which are common) in the alcohol container assemblage and the percentage of export and exotic wares (which are rare) in the ceramic assemblage. The values for the beer bottles will tend to be much larger than the values for the export and exotic wares, and will vary over a much wider range. If we simply add the two percentages, the contribution of the rare exotic wares to the result will be swamped by the beer bottle percentage. Nevertheless, there is no reason to assume that the ceramic wares do not merit equal weight in the status index. An ideal status index might even assign intentionally

Privy 507, Block 5, West Approach Project. Mike Stoyka has nearly finished excavating the feature, which contained many artifacts including those shown below. The pitcher that Mike is holding is the third from the left in the lower photo.

different weightings to different artifact categories, such that small variations in the amount of exotic ceramics might be assigned a greater influence on the index's value than large variations in beer bottles discarded. Unfortunately, estimating and testing those weightings would be a task far beyond the scope of this analysis.

Instead, the goal here is to develop indices that minimize complex biases by ensuring that each included variable contributes equally. To do this, the variables must be transformed in some way such that the amount and variability of the material in general (rare exotic ceramics versus common beer bottles) is factored out. To neglect this step would be to accept arbitrary weightings based on the amount and variability of each artifact type, which may be quite unrelated to the variable's actual role in the expression of social status.

A common way to make data with different distributions comparable is to use z-scores. Z-scores are based on the mean and standard deviation of the data's distribution. A data value's z-score indicates simply how many standard deviations it lies above or below the mean of the distribution. Z-scores essentially put all distributions of data on the same scale, so that a medium-high value for export or exotic ceramics is similar to a medium-high value for beer and ale bottles. Once the variables are on the same scale, they can be summed or averaged with each exerting the same influence on the total or average.

Z-scores are parametric statistics, that is, they make sense only if the data are normally distributed, or not too far from it. Z-scores can be strongly affected by outliers or non-normal distributions, as are common in archaeological assemblages, especially ones that are not too large, as in the present analysis.

Most of the statistical analyses up to this point have emphasized nonparametric statistics based on rank orders of values. Rank orders and the statistics based on them make no assumptions about the shape of the data distributions, and are minimally affected by outliers. The lowest score is ranked one and the second-lowest is ranked two, regardless of whether the two values are close together or the lowest is an extreme outlier.

A nonparametric approach to combining variables uses the rank of each value within its own distribution. In this approach, the lowest value for beer and ale bottles has rank 1; the next value has rank 2, and so on. Since there may be different numbers of values, the ranks are normalized to a 1-to-100 scale. In this way, a medium-high value for beer and ale bottles might be 83, and a medium-high value for export and exotic ceramics might also be 83, regardless of the actual amounts or percentages recovered. On this shared scale, the rankings have the same weight in totals, averages, and so on.

Two versions of this analysis were carried out, one using parametric methods, and another using nonparametric methods, and the results were similar. The discussion here will cover only the nonparametric results, because they involve fewer assumptions and are more appropriate for archaeological data. Both the nonparametric and the parametric results are presented in Appendix F.

The indices developed here involve an additional simplification. They assume that all variables have a simple, linear relationship to social status. That is, a given variable is assumed to either increase with increasing social status, or decrease with increasing social status. In fact, the previous analyses have shown that some variables have more complex relationships to social status as measured by occupation rank. For example, porcelain may have been purchased new by wealthy families, and acquired second-hand by poorer families, leaving intermediate families

Privy 851, Block 10, West Approach Project. "Tea anyone?" asks Sandra Massey who excavated this feature. The top right photo shows the same teapot that Sandra is holding, along with other serving dishes from the feature. The bottom right photo shows three porcelain figurines; the woman (center) and the man (left) would have formed a set.

with relatively less porcelain. Inversely, intermediate families appear to have bought white improved earthenware in place of expensive porcelain, while poor families could not afford to buy as much white improved earthenware new, and wealthy families preferred true porcelain. White improved earthenware was most prevalent in middle-status households, and less so in both high and low status households. While it would be possible to construct indices that would account for these more complex patterns, there is no attempt to do so here.

The indices are calculated for each household. The index values are simply means of the values of a number of normalized variables for the given household. The non-parametric indices are means of the ranks of the variables, normalized to a scale of 1 to 100. This adjustment to a 1-to-100 scale is necessary to compensate for differing numbers of cases to be ranked. For those variables in which a higher value is associated with lower status, the opposites of the value are ranked. In this way, higher rank is always associated with higher status. The rank indices fall between 1 and 100, with higher values (higher average rank) intended to indicate higher status.

Selecting and combining variables for the potential indices was an ad-hoc, empirical process. There are far too many possible combinations to test them all. Instead, potential indices were generated by a judgmental, iterative process through which the more successful variables and combinations in one iteration were used to guide the creation of many additional potential indices in the next iteration.

The variables used to construct possible status indices were those that the previous analyses by artifact type and by neighborhood (Appendix F) had suggested might be associated with higher or lower occupation rank or status (Table 11.1). Twenty-three different kinds of items

Table 11.1. Relative Status of Neighborhoods According to Materials Present

Artifact type	Standardized by	High rank might indicate
Meat		
Beef meat weight	Total meat weight: beef, mutton, pork, chicken, game	High status
High price meat weight	Total meat weight: beef, mutton,, pork	High status
Pork meat weight	Total meat weight: beef, mutton,, pork, chicken, game	Low status
Low price meat weight	Total meat weight: beef, mutton,, pork	Low status
Ceramics		
Overseas porcelain MNI	All ceramic MNI	High status
Porcelain MNI	All ceramic MNI	High status
White Improved Earthenware MNI	All ceramic MNI	High status
Export and Exotic Wares MNI	All ceramic MNI	High status
Opaque porcelain MNI	All ceramic MNI	Low status
Earthenware MNI	All ceramic MNI	Low status
Basic Wares MNI	All ceramic MNI	Low status
Social drugs		
Wine/champagne MNI	All food preparation and consumption items MNI	High status
Wine/champagne MNI	All ceramic MNI	High status
Wine/champagne MNI	All alcohol MNI	High status
Liquor MNI	All food preparation and consumption items MNI	High status
Liquor MNI	All ceramic MNI	High status
Liquor MNI	All alcohol MNI	High status
All alcohol and tobacco MNI	All food preparation and consumption items MNI	Low status
All alcohol and tobacco MNI	All ceramic MNI	Low status
Ale/beer MNI	All food preparation and consumption items MNI	Low status
Ale/beer MNI	All ceramic MNI	Low status
Ale/beer MNI	All alcohol MNI	Low status
Tobacco container and spittoon MNI	All food preparation and consumption items MNI	Low status
Tobacco container and spittoon MNI	All ceramic MNI	Low status

Table 11.1. Relative Status of Neighborhoods According to Materials Present *(continued)*

Artifact type	Standardized by	High rank might indicate
Miscellaneous items		
All Grooming/health MNI	All food preparation and consumption items MNI	High status
All Grooming/health MNI	All ceramic MNI	High status
Grooming/health equipment MNI	All food preparation and consumption items MNI	High status
Grooming/health equipment MNI	All ceramic MNI	High status
Grooming/health consumables MNI	All Grooming/health MNI	High status
Perfume/primping MNI	All food preparation and consumption items MNI	High status
Perfume/primping MNI	All ceramic MNI	High status
Perfume/primping MNI	Grooming/health consumables MNI	High status
Patent medicine and bitters MNI	All food preparation and consumption items MNI	Low status
Patent medicine and bitters MNI	All ceramic MNI	Low status
Patent medicine and bitters MNI	Grooming/health consumables MNI	Low status
Druggist/apothecary MNI	All food preparation and consumption items MNI	Low status
Druggist/apothecary MNI	All ceramic MNI	Low status
Druggist/apothecary MNI	Grooming/health consumables MNI	Low status
Soda water MNI	All food preparation and consumption items MNI	Low status
Soda water MNI	All ceramic MNI	Low status

(apothecary bottles, opaque porcelain, etc.) were included, some standardized in multiple ways (relative to all ceramics, relative to food preparation and consumption items, etc.), for a total of 40 variables initially considered.

These variables were evaluated individually, and were also combined into indices with multiple variables. For each material type (meat, ceramics, etc.), a variety of indices combining multiple variables were proposed. Additional indices were created from combinations of these material-specific indices, resulting in indices with quite a few variables. After the first run of correlations, it was clear that some individual variables correlated somewhat with occupation rank, while others did not correlate at all. The better-correlating variables were combined into pairs, triplets, and larger sets, while the better-correlating complex indices were trimmed into many slightly simpler combinations. Results from testing these indices guided further iterative rounds of new indices and tests.

This process of generating potential indices was neither exhaustive nor systematic. It resulted in 24 single-category indices and 197 indices that were not limited to a single category such as meat and ceramics. All were calculated in a parametric form and a non-parametric form. The parametric form (the mean of z-scores) is labeled with an initial "s" (as in index s152). The

non-parametric form (the mean of ranks) is labeled with an initial "r" (as in index r152). While it is possible, even likely, that the very best index remains to be found, there was a clear leveling off of the best correlations with each iteration. With each iteration, more indices were discovered that produced good correlations, but after a few rounds, the quality of the best correlations did not improve much. The better indices developed in this way thus probably approach the best possible indices of this form.

Testing the Indices

In prehistoric archaeology, it is a common practice to define indices of social status and then treat them as given. Examples might include defining high status as being indicated by a house size above a certain threshold, or by a certain minimum percentage of decorated wares in the ceramic assemblage. Historical archaeology projects like this one uniquely allow for this type of construct to be tested against independent evidence. Not surprisingly, simple concepts of status do not fare well when they can be checked.

Even historical evidence of social status is far from clear-cut. There is no direct historical indicator of "social status" (nor even a clear meaning for the term in its own right). In this analysis, the primary proxy for historically documented social status is occupation rank, ranging from 1 (wealthy professional), through professional, skilled, and semiskilled, to 5 (unskilled). These occupation ranks are clearly not quite the same as social status ranks, but they should roughly parallel whatever is generally meant by social status.

This analysis also checks the correlation of the status indices with neighborhood status rank as determined by the neighborhood analysis, ranging from 1 (the high-status Rincon Hill neighborhood in San Francisco), through Mission Bay in San Francisco, West of Market in Oakland, East of Market in Oakland, Oakland Point in Oakland, to 6 (Tar Flat in San Francisco). Within each city, the respective neighborhoods are ranked simply 1 through 3. While interesting patterns are noted by neighborhood rank, occupation rank is considered to be a better proxy for household social status.

Complicating matters is the fact that many of the excavated features were produced by households with multiple wage earners who often belonged to different occupation ranks. These households might be described by the occupation rank of the primary occupant (usually the property owner), by the highest occupation rank present, or by the mean occupation rank of all the known occupants. The analyses presented in full in Appendix F have suggested that each of these different measures of occupation rank may be significant for certain variables. It is not clear that any one is generally preferable, so the present analysis continues the practice of presenting results with the households categorized in all three ways. Patterns that are apparent regardless of the categorization scheme for multi-worker households are presumably stronger than those that appear only when a particular one or two of the occupation categorization schemes are used.

The effectiveness of each index is indicated by how well it correlates with the features' occupation ranks. The measure used is Spearman's correlation coefficient, which considers only the rank, not the magnitude, of the values. This is appropriate for variables like occupation rank, which can take only a limited number of discrete values that can be placed in order, but for which there is no meaning to the distance between the categories. Correlation coefficients can range from -1, a perfect negative correlation in which (setting aside the issue of the spacing between occupation ranks) all the points fall on a line descending to the right, through 0, in which the index and the occupation rank are completely independent, to 1, in which the index

Privy 1310, Block 4, West Approach Project. Maria Ribeiro excavates a cross-section through this shallow but very productive feature.

and the occupation rank are perfectly positively correlated. A graph of data with a correlation coefficient of 1 would show points along a straight line rising to the right (again, disregarding the issue of the arbitrary or meaningless spacing between the occupation rank categories). In the present case, we hope for large negative correlations, since high indices should suggest high status, which is indicated by low occupation rank.

High-correlating Indices

It is, in fact, possible to create indices of material status that correlate relatively strongly to social status as measured by occupation rank. The best indices have correlation coefficients that average in the -.50s. Table 11.2 presents the correlation coefficients for the ten best rank indices for San Francisco, the ten best for Oakland, and the ten best for the two cities combined, ordered with the highest average correlation in the target city (the best index) at the top of each section. The left-hand columns describe the makeup of the indices in terms of how many variables each includes for meat species, meat cut cost, ceramic ware, miscellaneous artifacts, social drugs, and the total number of variables. The cells are shaded so that the best correlations of -.50 and better are white, the next best from -.40 on are light grey, and so on, with the darkest shade for the poorest correlations.

Many of the best indices correlate moderately or well with some or all of the measures of household occupation rank. A common rule of thumb (Cohen 1988) for social sciences calls a correlation coefficient of .30 to .49 a "moderate" correlation, and anything over .50 a "large" correlation. Most of these correlations are significant at the 10% confidence level or better (Table 260, Appendix F).These indices are clearly related to occupation rank. The relationship could be direct, in that higher occupation rank may in a sense cause more of the consumption measured by the indices. Alternatively, both the occupation rank and the index could be influenced by a third variable. For example, workers who were raised in higher-class families might tend to have both higher-ranking occupations and the consumption preferences measured by the indices. Either way, the best indices clearly do reflect something resembling social status.

Despite the large correlations, there is still so much variation in discard behavior within each occupation rank that the indices are of little use for estimating occupation rank. There is a clear tendency for the index to be greater in households with higher occupation ranks. Even so, very high and very low indices occur in most of the occupation ranks. It would be foolish to use the value of this index for a given household to estimate the household's mean occupation rank.

The conclusion here is that the best indices have moderate to large correlation coefficients but still vary so much that they are not useful measures of occupation rank. This finding can be interpreted in three ways. First, it is possible that the approaches used here to generate the indices simply failed to work well, and other, better indices could be developed using other methods. In that case, the inability to determine occupation rank from artifact assemblages would be due to weaknesses in the method, not realities of social status and associated behavior.

Second, it is possible that consumption behavior is simply not strongly determined by social status. The material expression of status may simply be extremely variable from one individual or household to the next.

Table 11.2. Rank Indices that Best Correlate with All Three Measures of Occupation Rank: Correlation Coefficients

Index	Number of variables in the index: Meat Sp	Meat Cost	Ceramics	Misc	Drugs	Variables	San Francisco Occupation rank: Prim.	High	Mean	Oakland Occupation rank: Prim.	High	Mean	Combined cities Occupation rank: Prim.	High	Mean	SF Neigh Rank	Oak Neigh Rank	Combined Neigh Rank
Best 10 for combined San Francisco and Oakland occupation ranks																		
r326	1	1	2	2	2	8	-0.48	-0.53	-0.52	-0.42	-0.37	-0.34	-0.46	-0.49	-0.43	-0.56	-0.21	-0.42
r331		1	1	2	1	5	-0.39	-0.47	-0.47	-0.48	-0.45	-0.43	-0.44	-0.48	-0.45	-0.45	-0.43	-0.44
r233		1	1	1	1	4	-0.43	-0.48	-0.47	-0.53	-0.48	-0.46	-0.45	-0.48	-0.43	-0.53	-0.18	-0.38
r179	1	1	2	2	2	8	-0.48	-0.50	-0.51	-0.44	-0.37	-0.36	-0.47	-0.45	-0.44	-0.54	-0.27	-0.39
r153		1	1	2	1	5	-0.45	-0.50	-0.50	-0.52	-0.47	-0.45	-0.44	-0.49	-0.42	-0.55	-0.22	-0.43
r123		2	2	4	2	10	-0.40	-0.47	-0.47	-0.49	-0.43	-0.41	-0.44	-0.48	-0.43	-0.57	-0.27	-0.44
r125		2	3	4	2	11	-0.40	-0.49	-0.45	-0.49	-0.44	-0.41	-0.44	-0.48	-0.42	-0.56	-0.27	-0.43
r338		1	1	3	1	6	-0.42	-0.50	-0.48	-0.50	-0.41	-0.39	-0.44	-0.49	-0.42	-0.60	-0.13	-0.39
r152		1		2	1	4	-0.40	-0.52	-0.51	-0.47	-0.42	-0.39	-0.41	-0.49	-0.44	-0.46	-0.27	-0.40
r168		1	2	3		6	-0.33	-0.44	-0.37	-0.53	-0.50	-0.51	-0.41	-0.49	-0.42	-0.56	-0.32	-0.45
Best 10 for San Francisco occupation ranks																		
r175	2	2	3	4	2	13	-0.54	-0.59	-0.58	-0.19	-0.14	-0.14	-0.39	-0.37	-0.36	-0.48	-0.26	-0.35
r108	2	1	5	6	4	18	-0.54	-0.62	-0.54	-0.16	-0.10	-0.09	-0.38	-0.33	-0.31	-0.44	-0.27	-0.30
r113	2	2	5	4		13	-0.50	-0.62	-0.57	-0.17	-0.10	-0.10	-0.31	-0.40	-0.31	-0.50	-0.11	-0.35
r310	1	1	1		1	4	-0.58	-0.50	-0.61	-0.11	-0.07	-0.02	-0.31	-0.26	-0.26	-0.56	0.16	-0.19
r173	2	2	5	6	4	19	-0.52	-0.61	-0.54	-0.16	-0.09	-0.09	-0.39	-0.35	-0.33	-0.44	-0.26	-0.30
r174	2	1	3	4	2	12	-0.50	-0.55	-0.54	-0.18	-0.13	-0.11	-0.37	-0.34	-0.33	-0.51	-0.29	-0.37
r176	2	1	3	3	2	11	-0.52	-0.54	-0.52	-0.22	-0.16	-0.11	-0.37	-0.37	-0.31	-0.43	-0.21	-0.35
r110	2	2	4		2	10	-0.48	-0.54	-0.56	-0.08	-0.07	-0.06	-0.28	-0.27	-0.29	-0.46	-0.09	-0.20
r172	1	1	2	2		6	-0.48	-0.56	-0.53	-0.37	-0.36	-0.36	-0.39	-0.46	-0.41	-0.59	-0.29	-0.44
r161	1	1		2	2	6	-0.48	-0.52	-0.56	-0.32	-0.25	-0.20	-0.35	-0.39	-0.34	-0.45	-0.05	-0.33
Best 10 for Oakland occupation ranks																		
r247		1	1	3	1	6	-0.41	-0.49	-0.48	-0.58	-0.54	-0.52	-0.40	-0.50	-0.40	-0.55	-0.19	-0.44
r332		1	1	3	1	6	-0.34	-0.45	-0.44	-0.55	-0.52	-0.51	-0.39	-0.49	-0.42	-0.48	-0.40	-0.48
r168		1	2	3		6	-0.33	-0.44	-0.37	-0.53	-0.50	-0.51	-0.41	-0.49	-0.42	-0.56	-0.32	-0.45
r157		1	1	3		5	-0.35	-0.48	-0.42	-0.54	-0.47	-0.47	-0.39	-0.49	-0.39	-0.56	-0.22	-0.43
r233		1	1	1	1	4	-0.43	-0.48	-0.47	-0.53	-0.48	-0.46	-0.45	-0.48	-0.43	-0.53	-0.18	-0.38
r155		1		3	1	5	-0.36	-0.50	-0.50	-0.51	-0.48	-0.46	-0.34	-0.47	-0.37	-0.46	-0.25	-0.43
r153		1	1	2	1	5	-0.45	-0.50	-0.50	-0.52	-0.47	-0.45	-0.44	-0.49	-0.42	-0.55	-0.22	-0.43
r324		1	2	3		6	-0.35	-0.42	-0.39	-0.47	-0.48	-0.48	-0.37	-0.47	-0.39	-0.62	-0.33	-0.48
r140			1	2		3	-0.33	-0.45	-0.36	-0.48	-0.46	-0.46	-0.34	-0.44	-0.33	-0.59	-0.16	-0.41
r248			1	3	1	5	-0.37	-0.48	-0.43	-0.49	-0.47	-0.45	-0.34	-0.45	-0.34	-0.57	-0.17	-0.45

Note: Lighter shading indicates stronger correlations.

Finally, it may be that occupation rank is not a good proxy for social status as expressed in consumption behavior. Maybe the indices actually correlate well to social status, but the correlation is obscured because people in the same occupation rank vary in social status.

The sloppy fit between indices of consumption and occupation rank is an interesting finding in itself. One might think that in a highly stratified, industrialized, market society such as that of 19th-century San Francisco and Oakland, there would be clear and unambiguous material markers of social status in archaeological refuse. Yet, in the case of San Francisco and Oakland, this simply does not appear to be true. There were differences in material consumption that tended to be associated with higher or lower status, but there were apparently no markers that were unambiguously tied to status. Some people of moderate to low status as measured by their occupation rank left debris that looks higher in material status; and some people of moderate to high status as measured by occupation rank left debris that looks lower in material status. Unless other methods would be dramatically more successful, an observer simply cannot tell with any reasonable confidence what someone's occupation rank was from the garbage that he or she left behind.

Measuring "Material Status"

Nevertheless, an observer can tell that some people left garbage that was like that associated with high social status. That is, the status indices may measure "material status," or the actual, lived consumption behavior of a household, more precisely than occupation rank does. Unfortunately, this cannot be verified without more historical, comparative data. That is, we can define an index as indicating something called "material status," but there is no way of assessing to what degree such a concept is meaningful or if the index measures the concept any better than does occupational rank.

An analogy would be to rank modern households by a combination of the square footage per occupant, and size of its largest TV screen. One could argue that this measure reflects the occupants' material conditions of life more accurately than does the job category of the principal wage earner. On the one hand, the index seems to be a more direct summary of actual material living conditions than is the job category, since there could be great variation in both earnings and consumption choices among workers in the same job category. On the other, the utility of such as index has to be accepted on faith. If the material status index and the job category tend to covary, that would suggest that both describe related aspects of the household. It would not, however, show that the material status index was superior, or even equal to, the job category, nor what exactly it means.

With this epistemological conundrum in mind, Tables 11.3 through 11.5 rank the features (representing households) in San Francisco, Oakland, and both cities combined, in order of the best rank index of material status for each. At best, these orderings of households may accurately reflect some meaningful sense of material status, perhaps even better than do measures of the occupations of the households' workers. That is a matter of definition, rather than something that can be verified. At worst, these orderings may simply be poor proxies for occupation rank. Nevertheless, these supposed material status rankings do provide a framework for material status comparisons that might be useful for other analyses of these features.

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Table 11.3. San Francisco Features Ranked by r175

Analytical Unit	r175	Status
WBA-A507	71.56	Highest
WBA-A849	71.30	
WBA-A853	71.27	
WBA-A812	70.70	
WBA-A851	70.66	
WBA-A2	69.01	
WBA-A8	68.19	
WBA-A807	62.45	
WBA-A6	61.89	
WBA-A801	59.41	
WBA-A857, 858	57.71	
WBA-A1326	56.52	
SF80-A3	56.12	
WBA-A505	54.85	
WBA-A810	54.58	
WBA-A1300	54.06	
WBA-A1318	53.87	
WBA-A18	53.22	
WBA-A813	52.38	
WBA-A515	51.86	
WBA-A866	51.83	
WBA-A806	51.36	
WBA-A516	50.60	
WBA-A1316	49.98	
WBA-A808	49.08	
WBA-A1600, 1601	48.33	
WBA-A9	48.10	
WBA-A1333	43.04	
WBA-A1322	42.26	
WBA-A1301	38.72	
WBA-A1303	38.40	
WBA-A1311, 1320	37.16	
WBA-A1307	36.46	
WBA-A1304	35.95	
WBA-A1305	34.85	
SF80-A30	34.38	
SF80-A38	33.84	
SF80-A20	27.64	
WBA-A1310	26.66	Lowest

Table 11.4. Oakland Features Ranked by r247

Analytical Unit	r247	Status
CYP-A985	89.76	Highest
CYP-A3346	81.55	
CYP-A1404, 1452, 1461	76.36	
CYP-A3802	71.39	
CYP-A4243	68.53	
CYP-A955	66.77	
CYP-A1785	65.92	
CYP-A8445	64.37	
CYP-A4714	64.23	
CYP-A4731, 5167, 5169	62.81	
CYP-A3196	62.43	
CYP-A100	62.36	
CYP-A6300	61.79	
CYP-A1387	61.78	
CYP-A2784, 2877C	61.61	
CYP-A3139	61.17	
CYP-A3800	60.37	
CYP-A1358, 1372	59.46	
CYP-A900	59.30	
CYP-A3106, 3119	58.87	
CYP-A2786, 2864, 2873, 2874	56.26	
CYP-A3178	55.84	
CYP-A968	54.24	
CYP-A951	53.93	
CYP-A2822	53.57	
CYP-A2007	52.90	
CYP-A4234	52.78	
CYP-A3830	52.00	
CYP-A6292	51.81	
CYP-A1376	51.40	
CYP-A1300	51.37	
CYP-A3300, 3301	51.15	
CYP-A300	49.10	
CYP-A947	49.05	
CYP-A7511	48.37	
CYP-A141	47.90	
CYP-A933, 1112	47.47	
CYP-A954	47.42	
CYP-A7175	43.95	
CYP-A4245	41.96	
CYP-A6325	41.68	
CYP-A6282	41.51	
CYP-A3185	41.30	
CYP-A4281	39.91	
CYP-A1409	39.08	
CYP-A4648	38.93	

Table 11.4. Oakland Features Ranked by r247 *(continued)*

Analytical Unit	r247	Status
CYP-A6260	38.22	
CYP-A156	38.10	
CYP-A953	36.99	
CYP-A6270	36.99	
CYP-A1321B	36.81	
CYP-A1454	35.56	
CYP-A4724, 5112	35.09	
CYP-A3828	34.49	
CYP-A1747	33.79	
CYP-A4239	31.97	
CYP-A2809, 2812	25.64	
CYP-A101	25.20	
CYP-A6239	22.98	Lowest

Table 11.5. Combined San Francisco and Oakland Features Ranked by r326

Analytical Unit	r326	Status
CYP-A100	77.40	Highest
WBA-A849	76.34	
WBA-A812	74.57	
CYP-A985	73.56	
WBA-A851	71.82	
CYP-A3346	71.10	
WBA-A8	70.98	
CYP-A1404, 1452, 1461	70.36	
CYP-A1785	70.19	
WBA-A853	69.96	
CYP-A3196	69.64	
WBA-A507	68.63	
WBA-A2	66.83	
CYP-A4243	62.08	
WBA-A18	61.95	
CYP-A900	61.44	
CYP-A3800	60.54	
CYP-A1387	60.33	
SF80-A3	60.15	
WBA-A505	60.07	
CYP-A955	59.98	
CYP-A2007	59.55	
WBA-A6	59.52	
WBA-A813	59.23	
WBA-A1300	58.74	
CYP-A2784, 2877C	58.67	
CYP-A3802	57.33	
WBA-A801	57.27	
WBA-A1326	56.87	
WBA-A806	55.81	
CYP-A947	55.68	
CYP-A7511	55.46	
CYP-A3139	54.91	
WBA-A516	54.68	
WBA-A807	54.39	
WBA-A810	54.39	
WBA-A9	54.07	
WBA-A857, 858	53.10	
CYP-A1358, 1372	52.74	
CYP-A4731, 5167, 5169	52.42	
CYP-A3106, 3119	52.42	
CYP-A1300	52.29	
CYP-A3300, 3301	52.22	
CYP-A4714	52.11	
CYP-A6325	52.08	
CYP-A8445	51.51	

Table 11.5. Combined San Francisco and Oakland Features Ranked by r326 *(continued)*

Analytical Unit	r326	Status
CYP-A4234	51.21	▲
WBA-A1318	51.12	
CYP-A968	51.01	
CYP-A3185	50.79	
CYP-A933, 1112	50.63	
CYP-A6270	50.41	
WBA-A515	50.27	
CYP-A951	49.98	
WBA-A1600, 1601	49.24	
CYP-A6282	48.97	
CYP-A953	48.85	
CYP-A3178	48.83	
WBA-A1333	48.48	
CYP-A1376	48.27	
WBA-A1316	47.72	
WBA-A1301	46.59	
CYP-A2822	45.66	
CYP-A6300	45.56	
CYP-A7175	45.45	
CYP-A954	44.86	
CYP-A1321B	44.58	
CYP-A2809, 2812	44.29	
SF80-A30	44.19	
CYP-A4648	44.12	
CYP-A300	43.60	
CYP-A3830	43.26	
WBA-A808	42.97	
CYP-A2786, 2864, 2873, 2874	42.53	
WBA-A1305	42.18	
CYP-A1409	40.88	
CYP-A4245	40.25	
CYP-A6239	40.15	
WBA-A866	39.91	
CYP-A6292	39.84	
WBA-A1322	39.23	
CYP-A156	38.71	
CYP-A4239	37.72	
SF80-A38	37.39	
CYP-A141	37.30	
CYP-A1454	35.93	
WBA-A1303	35.80	
CYP-A6260	35.43	
CYP-A1747	35.28	
CYP-A4281	33.90	
CYP-A101	33.11	
WBA-A1304	33.04	▼
WBA-A1311, 1320	31.06	

Table 11.5. Combined San Francisco and Oakland Features Ranked by r326 *(continued)*

Analytical Unit	r326	Status
WBA-A1307	30.52	▲
SF80-A20	28.44	‖
WBA-A1310	27.89	‖
CYP-A4724, 5112	25.53	▼
CYP-A3828	21.56	Lowest

Conclusions about Status in San Francisco, and Oakland

More Evidence that Material Status Is a Broad, Composite Characteristic

Corroborating the results of the neighborhood analysis (see Chapter 10), the status index study showed that the best indices of general social status involved multiple types of artifacts, and specifically, multiple types of artifacts spread across multiple spheres of consumption such as meat species, meat cuts, ceramics, and grooming and health items. As in the neighborhood analysis, status proved to be a complex thing, expressed across a range of material culture choices in different ways by different people, but with general society-wide tendencies such that combining multiple variables averaged out the variations in each. While this polyvalence may seem like an obvious feature of the concept of social status, it is interesting to see it empirically confirmed by archaeological data controlled by the independent historical measure of occupation rank.

The best indices correlated roughly, but by no means tightly, with occupation rank. These indices could not be used, for example, to infer a worker's occupation rank from his garbage except with a very large margin of error. This poor fit in any individual case might be because consumption decisions did not precisely reflect occupation rank. While the poor fit could be seen as a weakness of the indices, it could also be considered a weakness of the relationship between occupation rank and how people actually lived. We could just as well define "material status" as meaning the relative cost or prestige of the goods a person actually consumes. This "material status" could be operationally defined as the value of one of the status indices, meaning a household's position on a single scale of value attributed to material culture as actually lived, as opposed to the household's wealth, cultural background, or even occupation rank.

Consumption Choices that Reflected People's Positions on a Single Scale of Material Status

Regardless of whether the status indices are interpreted as poor proxies for occupation rank or as good measures of lived material status, the process of evaluating the best of them suggested which areas of consumption were most related to overall material status in 19th-century San Francisco and Oakland.

Using patent medicines was probably the single behavior most strongly related to status. Lower-status households used more patent medicines. Conversely, higher-status households almost as strongly tended to use more perfume and primping items.

Expressing higher material status involved owning relatively less earthenware and, to a lesser extent, more porcelain.

Higher material status also involved consuming fewer cheap cuts of meat, and to a still lesser extent, more of the expensive cuts. The strong avoidance of cheap cuts by households that

Privy 1600/Privy 1601, Block 11, West Approach Project. In the top photo, the excavators are standing in the vicinity of Privy 1600; Privy 1601 (which has already been sectioned) is visible in the left midground. The dark saturated materials visible in the buckets and the long hose attached to the water pump speak to the saturated conditions. Below left are selected toys from the feature; middle right is a decorative bone carving, shown at about 300 percent; and below right is a British penny shown at about 200 percent.

could afford to was not picked up by the neighborhood analysis, but it is clear in this analysis by individual households.

People of higher material status drank a mix of alcohol that included relatively more wine, and to a lesser extent, relatively less beer. The low-status association of beer, however, seems to have applied only in San Francisco, and not in Oakland.

These results might seem both obvious and duplicative of findings from the neighborhood analysis. In fact, they are interesting for two reasons. First, these results are empirical evidence that our assumptions and findings by other methods about these variables' relationships to social status are actually borne out by the archaeological record as tested against historical controls. Second, other potentially relevant variables, including hard liquor, apothecary items, basic ceramic wares, export-exotic ceramics, overseas porcelain, opaque porcelain, white improved earthenware, and tobacco items, were all found not to relate as strongly to a single scale of material status.

Rejecting Low Status versus Seeking High Status

Expressing high status may have more consistently involved minimizing consumption associated with low status than maximizing consumption associated with high status. These conclusions are less rigorous than those that involved significance tests, but suggestive quantitative support for them is presented in the section of Appendix F on material status indices.

For example, expressing high status involved avoiding low-cost cuts more consistently than it involved selecting high-cost cuts. Since the percentage of low-cost cuts is included in almost all of the status indices that correlate well with occupation rank, while the percentage of high-cost cuts plays a role in far fewer, and mostly in San Francisco, it appears that status was more clearly involved in consumption choices about cheap cuts than in choices about expensive ones. That is, expressing higher material status might have been more about escaping or rejecting a dietary marker of low status than about seeking a dietary marker of high status. While this pattern holds well in Oakland, and in both cities combined, it is not clear in San Francisco, where expressing high status involved seeking out high-cost cuts of meat to a greater extent than it did in Oakland.

Similarly, avoiding low-status pork played a greater role in material status in Oakland, and in the two cities combined, while seeking high-status beef was more strongly related to material status in San Francisco. That this pattern in meat species parallels the independent pattern in the prices of meat cuts suggests that there may have been a real difference in how consumers expressed material status in the two cities.

The same pattern held in ceramics. Avoiding low-status earthenware was more strongly tied to higher material status than was preferring high-status porcelain.

Yet again, avoiding low-status patent medicines played a greater role in high material status than did preferring perfume and primping items in San Francisco and both cities combined, although the results are ambiguous in Oakland.

As usual, social drug consumption broke the general pattern. In the realm of social drugs, preferring high-status choices was at least as important as avoiding low-status ones. In Oakland, high status consistently involved preferring high-status wine and champagne over low-status beer and ale, while in San Francisco and in both cities together preferring wine and champagne

A BOHEMIAN'S THANKSGIVING

Mary Praetzellis

In "Town and Table Talk," Bret Harte's early column in the *Golden Era*, Harte wrote as "the Bohemian" and recounted fanciful tales of his adventures with friends. Popularized by various authors of the time, the title Bohemian brought to mind literary gypsies, starving artists, and alternative lifestyles. South of Market may well have been San Francisco's first "bohemian neighborhood," as many artists resided here.

The following excerpt from the *Golden Era*, clearly playful and ironic, nevertheless, touches on a number of themes of this and other chapters. Locals did hunt and fish in the Mission Creek and the surrounding marshes; rats were an entertaining problem; and activities abounded for young men on the town.

> Our arrangements were to assemble at half past 3 A.M. and pull a boat to Mission Creek, and shoot ducks till sunrise. Then we were to return to the city where a team had been engaged for us, ride to San Mateo and take breakfast. Then returning in time for church, we were to proceed after services to Bill Wiggles' and see Bill Wiggles' terrier slut, "Gentle Annie" perform her celebrated feat of killing 50 rats in 15 minutes. This done, it was our intention to visit the Ocean House, taking the Presidio, Lone Mountain, and the Willows on our way back to dinner. This would leave us fifteen minutes to shoot a turkey's head at Bob Winkelried's, and we trusted that if we economized time we might be able to witness the last heat of the scrub race between "Honest John" and "Poor Richard." After dinner we calculated to visit the Opera, Melodeon, and be able to attend a cotillion party at the engine house where we had all been invited [Harte 1860c].

The Willows ca. 1864, pleasure gardens at 18th and Valencia streets. (Photo Courtesy San Francisco History Center, San Francisco Public Library)

was related to material status to about the same degree as was avoiding beer or ale. In no case did avoiding beer and ale play the greater role. While cheap meat, pork, earthenware, and patent medicines were all apparently generally perceived to be lower-status and to be avoided if possible, beer was less consistently associated with low status and avoided.

Material Status Was Constructed Differently in San Francisco and Oakland

Material status was expressed in a wider range of different consumption choices in San Francisco than in Oakland. The best indices of material status for San Francisco included twice as many kinds of artifacts, including all the artifacts that figured into material status in Oakland, plus measures of the consumption of beer, the choice of meat species, decisions about buying high-cost cuts of meat, and decisions about acquiring export/exotic ceramic wares, among others. In Oakland, people's consumption decisions about these goods were more independent of their occupation rank. That is, San Franciscans expressed their material status more clearly in their drinking habits, eating habits, exotic ceramics, and other choices.

More specifically, higher-status San Franciscans ate more beef, and lower-status San Franciscans ate more pork, while in Oakland, meat species choices were less tied to occupation rank. In Oakland, higher-status households avoided cheap cuts of meat, while all households bought comparable proportions of medium and high cost cuts. Material status in Oakland, at least with regard to meat, was more about not acting low status than about affirming high status. In San Francisco, higher status involved not only avoiding low-cost cuts, but also preferring high-cost cuts. This accords with the generally more pervasive influence of social status on consumption choices in San Francisco. It may also reflect a general tendency in San Francisco to more explicitly express high status, rather than to merely avoid markers of low status.

Material status in San Francisco affected choices about a wider range of ceramic wares, especially export or exotic wares, which were strongly tied to material status in San Francisco, but not at all in Oakland. Maybe the maritime industry in San Francisco provided greater access to export and exotic ceramics, or fostered more appreciation of them as a means for expressing material status.

Oaklanders of higher status discarded more grooming and health equipment, while San Franciscans of higher status discarded more grooming and health consumables such as perfumes and primping items.

People in San Francisco structured their use of social drugs more clearly by occupation rank or material status, while Oaklanders' use of social drugs tended to be more independent of social status rank. In San Francisco, households of higher occupation ranks tended to consume relatively more wine and less beer. In Oakland, while wine was somewhat associated with higher occupation ranks, beer was consumed in similar proportions across the board.

All together, these differences hint that nineteenth-century San Francisco was a more status-conscious, stratified society than Oakland. In San Francisco, material status influenced a wider range of consumption decisions; it involved not only avoiding items with lower-status associations when possible, but also affirmatively preferring options associated with higher status; and it correlated with using more perfumes and primping consumables relative to the associated basins and other equipment.

San Francisco Neighborhoods Were more Segregated by Overall Status

The notion that expressing material status was more salient in San Francisco is borne out by the fact that the best material status indices correlate much better with neighborhoods in San Francisco than with neighborhoods in Oakland (Appendix F). That is, San Francisco was more spatially segregated by material status, while Oakland was more mixed. The historical data on occupation ranks in the different neighborhoods weakly suggest this pattern, but the artifact data strongly confirm it.

RESPONSE TO HENRY GEORGE'S "WHAT THE RAILROAD WILL BRING"

Mary Praetzellis

Author and economic analyst Henry George was one of the most famous residents of the West Approach Project area (Figure 11.1). Dubbed the "Prophet of San Francisco," Henry George is known for his works on the socialization of land. George was the first economist to write for the general pubic and succeeded in introducing economic theory to non-academics. Most importantly, his predictions about the trajectory of social and economic change in late 19th-century San Francisco provide a way to interpret our archaeological findings about the material expression of status.

He wrote his most famous book, *Progress and Poverty*, while living at 417 First Street on Block 8. George's writings reflect the influence of the social and economic instability of the 1870s on his life. According to historian Glen Prince: "Henry George explicitly stated that he was enabled to grasp this concept and so understand the major social problem of the time, because of his experiences and observations in a California, which was in process of development from frontier to a settled society" (1959:81).

George's book offered an alternative economic system that he believed would assure equality and create social progress. His idea was to create a single-tax system in which land would be taxed equal to its value in rent. In this way, the socialization of land would ensure the right of every man to use land for his own betterment and thus prohibit the few from monopolizing large tracts.

This work was widely read, selling thousands of copies and gaining the author international fame especially in Britain, where he was credited with inspiring a renewed interest in socialist ideals. *Progress and Poverty* is still in print today and the Henry George Foundation of America works to promote his theory of political economy and "to push for the taxation of land values and for the reduction of taxes on labor and capital" (Henry George Foundation of America 2007).

Figure 11.1. Undated portrait of Henry George. (Photo courtesy of Prints & Photographs Division, Library of Congress, George Grantham Bain Collection, LC-DIG-ggbain-37132)

Henry George and his family lived at 417 First Street during a crucial period in their lives. While he was writing his book, the *Post* newspaper for which George had been working was sold and he had to find other means to support his family. In 1876 George was appointed a State Inspector of Gas Meters. One can only assume that although this job probably did not give him much satisfaction, it did allow him to complete his great work and, more importantly, provided him with house-by-house glimpses of San Francisco life on the small scale. The George family at the time consisted of his Australian wife, Anne, their three teenage children, a toddler, Henry's brother John who worked as a painter, and an Irish servant.

The Henry George Foundation of America placed a plaque to honor Henry George at 417 First Street in 1930. The plaque read: "Here in 1878-1879, Henry George, 'the Prophet of San Francisco' wrote *Progress and Poverty* expounding natural laws that, breached, caused poverty but, obeyed, assure us all peace, progress and plenty. Plaque erected September 8, 1930 by Henry George Foundation of America" (Shumate 1988:85).

Writing for the *Overland Monthly* in October 1868, George established his reputation with an article titled "What the Railroad Will Bring Us." He asked what the transcontinental railroad, considered the "greatest work of the age," would "do for us?—this railroad that we have looked for, hoped for, prayed for so long?" (George 1868:313).

From Gold Rush settlement onwards, life in California had displayed, according to George:

> 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 general hopefulness and self-reliance, and a certain large-heartedness and open-handedness which were born of the comparative evenness with which property was distributed, the high standard of wages and of comfort and the latent feeling of every one that he might "make a strike," and certainly could not be kept down long [1868:323].

These characteristics born of isolation and prosperity contrasted with the highly structured Victorian urban world of the eastern U.S. The isolation of San Francisco from the national economy grew during the Civil War; California's rejection of Federal script—"Greenbacks"—distinguished the significance of San Francisco as a distinct financial center. George keenly foresaw the advantages and pitfalls of a closer connection with the rest of the nation and the attendant social problems:

> The California of the new era will be greater, richer, more powerful than the California of the past; but will she still be the same California . . . ? She will have more people; but among those people will there be so large a proportion of full, true men? She will have more wealth; but will it be so evenly distributed? She will have more luxury and refinement and culture; but will she have such general comfort, so little squalor and misery; so little of the grinding, hopeless poverty that chills and cramps the souls of men, and converts them into brutes? [1868:317].

According to Henry George, California had "no very rich" or "really poor class"; everyone "started from the same level," as miners and pioneers, where "social lines could not be sharply drawn nor a reverse dispirit." The "great possibilities" and "immense latent wealth" created a unique and open social environment with fewer barriers to success or stigmas to failures, as either could be accomplished in rapid fashion due to talent, luck, or situation (George 1868:323). Henry George believed that the railroad would change all this. It would reduce wage rates, which

since the Gold Rush had been higher than the rest of the country, and in general concentrate the wealth of the rich and the poverty of the poor (1868:319).

In 1868 George's article seemed maliciously contrary to most hopes and all conventional wisdom. But his words accurately predicted the direction of social and economic change in San Francisco, and most markedly in the South of Market, over the last two decades of the 19th century. Henry George had hit the mark in 1868; the momentum of the 1860s boom would continue in San Francisco through the early 1870s only on the increasingly shaky foundations of pure speculation, especially in mining shares. The completion of the transcontinental railroad in 1869 was widely expected to usher in a still higher level of prosperity for San Francisco. For the four proprietors of the Central Pacific, the rewards were, indeed, magnificent. But 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. A principal reason why San Francisco had grown so rapidly from the Gold Rush right up through the Comstock boom was that unemployment was usually low and wages relatively high in comparison to the nation as a whole; much of the city's economy, and most of its industries, had been driven first by local and then by regional demand.

Henry George and others before and after have echoed this characterization of pre-railroad California society as more open socially and economically than the newer California made home to increasing numbers of immigrants and refugees from other harsher political, economic, and social climes. The lack of easily visible differentiation between classes is born out by Bruce Owen's statistical analyses, which concluded that occupational rank could not be observed with confidence in the archaeological assemblages recovered from 19th-century households in Oakland and San Francisco. Looking at the associations of households ranked on the best three indices provides insights into just how households stood in relation to each other. Note that for the most part the differences in score are not very great.

Table 11.6 lists San Francisco features ranked by the best index (r175) for that city. It also shows how the features ranked on the best composite index (r326) for San Francisco and Oakland combined. The top 10 San Francisco households are headed primarily by German, English, and East Coast professionals: an English merchant; German butcher; New York wharfinger; a multifamily household with Massachusetts clerk, Canadian machinist, and Irish stockdealer; a German sea captain; California seaman; New Jersey shipwright; German master mariner; a multifamily household with an Irish boilermaker and Alabama widow; and an Irish teamster. Except for one unknown, the bottom 10 households are all headed by Irish; occupations include porter, blacksmith, boilermaker, two laborers, stevedore, widow, longshoreman, and painter. One Irish family shared their residence with that of a French carpenter.

Approximately 36 percent of San Francisco households in the sample owned their home, although the number is probably low since this variable could not be determined for all features. Of those households in the top third of the ranking, 62 percent owned their homes; of those in the bottom third, only 8 percent did so. The middle third nearly mirrored the sample percent at 38. The percent of homeownership among Irish households was below the average at 25 percent.

The family of Jonathon and Mary Peel ranked highest on Index r175. Jonathon was an English merchant and real estate investor. This feature is profiled in Chapter 3 and in Figure 11.2. Privy 507 was remarkable for its quality, quantity, and variety of materials. Over half of the ceramics were porcelain and nearly half of the meat cuts were high priced. The family of Patrick and Nancy McSheffrey ranked lowest on Index r175. Patrick was an Irish laborer. Their feature

Table 11.6. San Francisco Features Ranked by r175, Highest to Lowest with Associations

Analytical Unit	r175	Neighborhood	Address	Association	r175	r326
WBA-507[1]	71.56	Rincon Hill	540 Folsom	Peel family, English merchant P+	1	12
WBA-849	71.30	Mission Bay	115 Perry	Strauss household, German butcher, S	2	2
WBA-853	71.27	Mission Bay	108 Silver	Baker family, NY wharfinger, P	3	10
WBA-812	70.70	Mission Bay	129 Perry	Towne/Hill household; Maloney family; MA RR clerk, Canadian machinist, Irish stockdealer; P, S, P	4	3
WBA-851	70.66	Mission Bay	114 Silver	Metcalf household, German sea captain, P	5	5
WBA-2	69.01	Rincon Hill	14 Perry	Johnson family, California seaman, SS	6	13
WBA-8	68.19	Rincon Hill	16 Perry	Rowe family, NJ shipwright, S	7	7
WBA-807	62.45	Mission Bay	123 Perry	Gee family, German master mariner, P	8	35
WBA-6	61.89	Rincon Hill	12 Perry	Hannan and Dent families, Irish boilermaker, AL widow; S, W	9	23
WBA-801	59.41	Mission Bay	142 Silver	Sheridan family, Irish teamster, SS	10	28
WBA-857, 858	57.71	Mission Bay	109–111 Perry	Dolan and Michelson families, Irish commercial agent, Norwegian sea captain; P, P	11	38
WBA-1326	57.52	Tar Flat	240 Fremont	Amanda Scales and tenants, PA widow and clerk, W, P	12	29
SF80-3	56.12	Mission Bay	1031 Harrison	Duisenberg family, German merchant, P+	13	19
WBA-505	54.85	Rincon Hill	546 Folsom	Mayne household, O'Connor family; LA ship's carpenter, Canadian sawyer; S, S	14	20
WBA-810	54.58	Mission Bay	137–139 Perry	Monahan family, Thomas Griffin; Irish saloon keeper, and ship's fireman; P, S	15	36
WBA-1300	54.06	Tar Flat	416 Folsom	Samuel and Smith families; Polish tailor, PA engineer; S, S	16	25
WBA-1318	53.87	Tar Flat	11 Baldwin	Murphy family, Irish laborer, U	17	48
WBA-18	53.22	Rincon Hill	16 Perry	Shaw and Dent families, MI insurance agent and clerk, P	18	15
WBA-813	52.38	Mission Bay	133 Perry	Mary Moynihan and Collins families, Irish washerwoman, and barber, U, S	19	24

[1] Shading indicates homeownership

Table 11.6. San Francisco Features Ranked by r175, Highest to Lowest with Associations *(continued)*

Analytical Unit	r175	Neighborhood	Address	Association	r175	r326
WBA-515	51.86	Rincon Hill	49 Clementina	Fegan family, Irish longshoreman, SS	20	53
WBA-866	51.83	Mission Bay	112 Silver	McDonald and Tobin families, Irish laborer, NY bookkeeper: U, P	21	79
WBA-A806	51.36	Mission Bay	125–127 Perry	McIver and Martin families, Scots stevedore, English merchant; SS, P	22	30
WBA-516	50.60	Rincon Hill	540 Folsom	Mary Peel, English widow, W	23	34
WBA-1316	49.98	Tar Flat	414 Folsom	McEvoy family, Irish furniture maker, S	24	61
WBA-808	49.08	Mission Bay	120 Silver	Schreiner, Johnson, Degnan and McIntyre families; German barkeeper, Danish saloonkeeper, Irish laborer and steward; SS, P, U, SS	25	73
WBA-1600, 1601	48.33	Mission Bay	207–209 Perry	Donnelly and Beal families; Irish blacksmith, Scots goldminer; S, S	26	55
WBA-9	48.10	Rincon Hill	20 Perry	Usher household, MD sailmaker, S	27	37
WBA-1333	43.04	Tar Flat	236 Fremont	William Dougherty, Irish longshoreman, SS	28	59
WBA-1322	42.26	Tar Flat	242 Fremont	Hurley and Conniff families, Irish laborer, Australian fireman; U, S	29	81
WBA-1301	38.72	Tar Flat	412 Folsom	Taylor family, Irish porter, SS	30	62
WBA-1303	38.40	Tar Flat	21 Baldwin	Thompson family, Irish blacksmith, S	31	87
WBA-1311, 1320	37.16	Tar Flat	7 Baldwin	Clark family, Irish boilermaker, S	32	93
WBA-1307	36.46	Tar Flat	13 Baldwin	Brown family, Irish laborer, U	33	94
WBA-1304	35.95	Tar Flat	19 Baldwin	Unknown	34	92
WBA-1305	34.85	Tar Flat	13 Baldwin	Fuchs and Cadigan families, French carpenter, Irish stevedore; S, SS	35	75
SF80-30	34.38	Mission Bay	36 Kate	Anne Mills, Irish widow, W	36	69
SF80-38	33.84	Mission Bay	31 Kate	Dean family, Irish longshoreman, SS	37	84
SF80-20	27.64	Mission Bay	520 Eighth	Noonan family and lodgers, Irish painter, S	38	95
WBA-1310	26.66	Tar Flat	9 Baldwin	McSheffrey family, Irish laborer, U	39	96

Note: P+ = Wealthy Professional; P = Professional; S = Skilled; SS = Semi=skilled; U = Unskilled; W = Widow

had very little porcelain, lots of pork and low-priced meat cuts. Privy 1310 was remarkable for its quantity of soda water and alcoholic beverage bottles (Figure 11.3).

Table 11.7 lists Oakland features ranked by the best index (r247) for that city. It also shows how the features ranked on the best composite index (r326) for Oakland and San Francisco combined. The top 10 households are headed by German, Scots, East Coast, and African American, mainly professional, households: a German brewer, Indiana druggist, African American barber, Scots bridge builder, Scots clerk, Massachusetts capitalist, New York salesman, German merchant, and two unknowns. The bottom 10 households are headed by German, English, East Coast, and Irish, from a mix of occupations: Irish widow, Irish laborer, Virginia retired farmer, New York carpenter, Irish butcher, New York coffeemill worker, a multifamily household of a German fisherman and an English railroad worker, and two unknowns.

Approximately the same number of Oakland households in the sample owned their home at 38 percent, although again there were unknowns and the number of actual homeowners is probably higher. While homeownership in San Francisco was stratified, approximately the same number of households owned their homes in each of the thirds reported for Oakland: 42 percent in the top third and 37 percent in both of the next thirds. In the Oakland sample, 92 percent of the identified Irish households were homeowners.

The family of Charles and Margaret Bredhoff ranked highest on Index r247 for Oakland. Charles was a German brewer who lived in a large Victorian home and took in boarders. The feature is profiled in Figure 11.4. Privy 985 had a high percent of beef and high-priced meat cuts.

At the lowest end of the rank for Oakland was the Hansen family and the Hayles family who lived in a cottage divided into two units. One household was headed by a German fisherman; the other by an English railroad worker. This feature is profiled in Figure 11.5. Privy 6239 had less than 10 percent porcelain and nearly one-half low-priced meat cuts

Table 11.8 lists the combined rankings for Oakland and San Francisco by Index r326. It also shows association and date, rounded to half decades. The top 10 households are headed by East Coast, German, and African American professional and skilled households: New York coffeemill worker; German butcher; multi-family household of Massachusetts railroad clerk, Canadian machinist, Irish stockdealer; German brewer; German sea captain; Indiana druggist; New Jersey shipwright; African American barber; Massachusetts capitalist, and New York wharfinger. The bottom 10 included Irish and East Coast households of a variety of occupational levels: From the bottom, Virginia retired farmer, Irish laborer, Irish laborer, Irish painter, Irish laborer, Irish boilermaker, unknown, New York coffeemill worker, unknown, and New York carpenter.

When combined between the two cities, 37 percent of the households owned their own homes. Of these, 48 percent within the top third did so, 39 percent within the middle, and 21 percent within the bottom third.

A multifamily household ranked highest on combined Index r326. Widow Elizabeth Huddleson from New York lived with her son Frederick who worked as a coffeemill hand and John and Ellen Stryker. John also worked in the coffeemill as a machinist and Ellen worked as a dressmaker. The family lived in "almost polite" house in Oakland Point. This feature is profiled in Figure 11.6. Privy 100 had nearly half high-priced meat cuts. The privy was remarkable for

continues on page 433

Table 11.7. Oakland Features Ranked by r247 from Highest to Lowest with Associations

Analytical Unit	r247	Neighborhood	Address	Association	r247	r326
CYP-A985[1]	90.1683	E of Market	663 Sixth	Bredhoff household, German brewer, P+	1	4
CYP-A3346	82.1077	W of Market	819 Market	Morgan/Mullen household, IN druggist, clerk, P	2	6
CYP-A1404, 1452, 1461	76.5349	E of Market	713 Sixth	Stewart/Gibson household, African American barbers, P	3	8
CYP-A3802	71.7730	W of Market	817 Myrtle	McDonald family, Scots bridge builder, P	4	27
CYP-A4243	68.8623	W of Market	817 Filbert	Unknown	5	14
CYP-A955	67.0732	E of Market	671 Sixth	Irving family, Scots clerk, P	6	21
CYP-A1785	66.0606	E of Market	765 Sixth	Curtis family, MA capitalist, P+	7	9
CYP-A8445	64.6249	Oakland Point	793 Wood	Holderer family, NY sewing machine salesman, S	8	46
CYP-A4714	64.4876	Oakland Point	1868 Seventh	Goshen family, German merchant, P	9	44
CYP-A4731, 5167, 5169	63.0367	Oakland Point	1868 Seventh	Unknown	10	40
CYP-A100	62.7314	Oakland Point	1708 William	Stryker/Huddleson household, NY coffee-mill worker, S	11	1
CYP-A3196	62.6437	W of Market	824 Myrtle	Scott household, NY bookkeeper, P	12	11
CYP-A6300	61.9983	Oakland Point	1827 William	Unknown	13	64
CYP-A2784, 2877C	61.8221	Oakland Point	883 Cedar	Unknown	14	26
CYP-A1387	61.7013	E of Market	715/717 Sixth	Unknown	15	18
CYP-A3139	61.5194	W of Market	814/816 Myrtle	Bush family, music teacher, P	16	33
CYP-A3800	60.5555	W of Market	810 Filbert	Farmer household, Irish widow, W	17	17
CYP-A1358, 1372	59.6331	E of Market	719 Sixth	Unknown	18	39
CYP-A900	59.4726	E of Market	654 Fifth	Mann family, NH capitalist, P+	19	16
CYP-A3106, 3119	58.8818	W of Market	810/812 Myrtle	Unknown	20	41

[1] Shading designates homeowners

Table 11.7. Oakland Features Ranked by R247 from Highest to Lowest with Associations *(continued)*

Analytical Unit	r247	Neighborhood	Address	Association	r247	r326
CYP-A2786, 2864, 2873, 2874	56.3734	Oakland Point	883 Cedar	Lewis family, NY brakeman, S	21	74
CYP-A3178	55.9498	W of Market	818 Myrtle	McDonald family, Canadian carpenter, S	22	58
CYP-A968	54.3224	E of Market	812 Castro	Brady family, Irish plumber, P	23	49
CYP-A2822	53.6442	27	881 Cedar	McLaughlin household, Irish butcher, S	24	63
CYP-A951	53.5655	E of Market	667 Sixth	Paddock/Swain household, MA painter, S	25	54
CYP-A2007	52.9584	Oakland Point	1812/1814 Goss	Lawrence and Ward families, English railroad fireman; WY RR brakeman, S, S	26	22
CYP-A4234	52.8343	W of Market	816/818 Linden	Barry family and tenants, Irish RR conductor, S	27	47
CYP-A3830	52.0462	W of Market	812 Filbert	Quinn family, Irish RR fireman, S	28	72
CYP-A6292	51.8484	Oakland Point	1823/1825 William	Finley family, PA shoemaker, S	29	80
CYP-A1376	51.2788	E of Market	718 Fifth	Unknown	30	60
CYP-A3300, 3301	51.1777	W of Market	828 Myrtle	Chapman, IN paperhanger, S	31	43
CYP-A947	49.1848	E of Market	666 Fifth	Donavan family, Irish sewer contractor, S	32	31
CYP-A300	49.0843	Oakland Point	1817 Goss	O'Brien family, CA plumber, P	33	71
CYP-A7511	48.3489	Oakland Point	1776 Atlantic	African American porters; SS	34	32
CYP-A141	48.0136	Oakland Point	1712 William	O'Connell family, hairdresser, S	35	85
CYP-A933, 1112	47.5775	E of Market	662 Fifth	Tilghman/Holland, African American, widow, porter, SS	36	51
CYP-A954	47.3793	E of Market	669 Sixth	French family, IN RR conductor, S	37	66
CYP-A7175	43.8530	Oakland Point	812 Pine	Unknown	38	65
CYP-A4245	41.8254	W of Market	824 Linden	Corrigan family, Irish boilermaker, S	39	77
CYP-A6325	41.5432	Oakland Point	814 William	Robertson family, Canadian foreman, P	40	45
CYP-A6282	41.5122	Oakland Point	1820 Atlantic	Haynes family, MI ship's carpenter, S	41	56

Table 11.7. Oakland Features Ranked by R247 from Highest to Lowest with Associations *(continued)*

Analytical Unit	r247	Neighborhood	Address	Association	r247	r326
CYP-A3185	41.1532	W of Market	822 Myrtle	Murray family, Irish gardener, SS	42	50
CYP-A4281	39.7432	W of Market	830 Linden	Unknown	43	90
CYP-A1409	38.8947	E of Market	712 Fifth	Barnett/Jacobs household, German fruit peddlers, S	44	76
CYP-A4648	38.8807	Oakland Point	1871 Goss	Unknown	45	70
CYP-A6260	38.0240	Oakland Point	1821 William	Leonhardt household, German cooper, S	46	88
CYP-A156	37.9041	Oakland Point	1726 William	Long family, German butcher, S	47	82
CYP-A953	36.7635	E of Market	668 Fifth	Carter household, African American porter, SS	48	57
CYP-A6270	36.7607	Oakland Point	1820 Atlantic	Unknown	49	52
CYP-A1321B	36.5818	E of Market	812 Brush	Unknown	50	67
CYP-A1454	35.3158	E of Market	711 Sixth	Fallon, Irish widow, W	51	86
CYP-A4724, 5112	34.8403	Oakland Point	1865 Goss	McNamara family, Irish laborer, U	52	97
CYP-A3828	34.6516	W of Market	831 Myrtle	Tate household, VA retired farmer, P	53	98
CYP-A1747	33.5189	E of Market	770 Fifth	Hickey family, NY carpenter, S	54	89
CYP-A4239	31.6668	W of Market	817 Filbert	Unknown	55	83
CYP-A2809, 2812	25.3638	Oakland Point	881 Cedar	McLaughlin household, Irish butcher, S	56	68
CYP-A101	24.9225	Oakland Point	1708 William	Stryker household, NY coffeemill worker, S	57	91
CYP-A6239	22.5151	Oakland Point	1823/1825 William	Hansen and Hale families, German fisherman; English RR worker, S, U	58	78
CYP-A1300	NA	W of Market	802 Brush	Breen family, Irish laborer, U	NA	42

Note: P+ = Wealthy Professional; P = Professional; S = Skilled; SS = Semi=skilled; U = Unskilled; W = Widow

Primary Association(s): William Dougherty
Primary Place of Origin: Ireland
Primary Occupation(s)/status: Longshoreman/semi-skilled
Secondary Occupation(s)/status: Longshoreman/ semi-skilled

Residence sq. ft./lot sq. ft.: 1,300 sq. ft./2,000 sq. ft.
Date: early 1890s
Ownership: Rental
Religion: Unknown

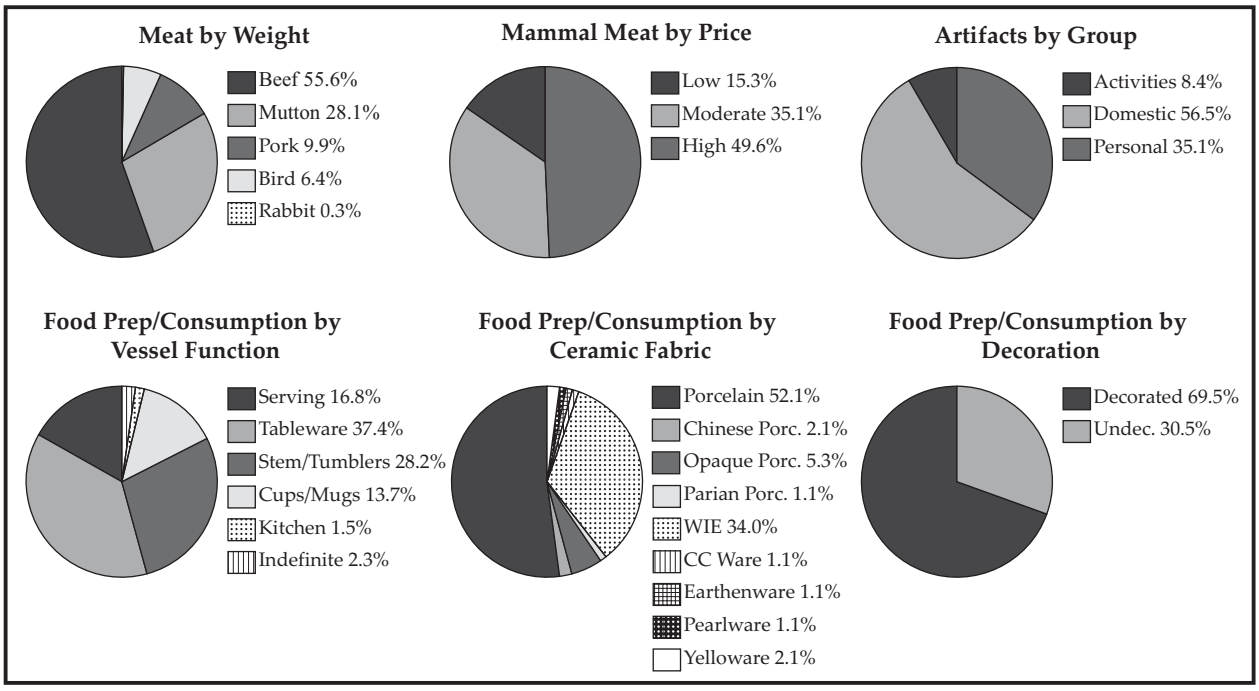
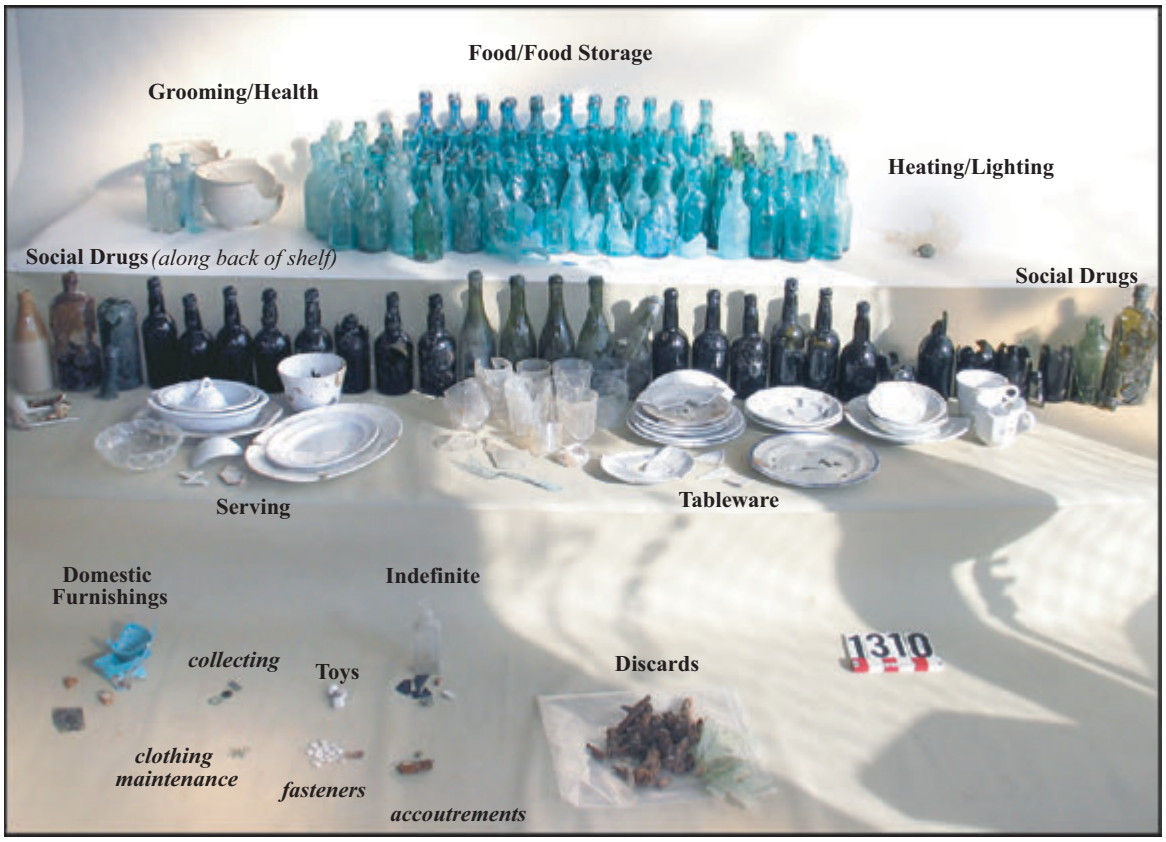


Figure 11.2. Privy 507 Feature Snapshot, 540 Folsom Street, Edge of Rincon Hill, San Francisco



Primary Association(s): Patrick and Nancy McSheffrey
Primary Place of Origin: Ireland
Primary Occupation(s)/status: Laborer/unskilled
Secondary Occupation(s)/status:

Residence sq. ft./lot sq. ft.: 750 sq. ft./600 sq. ft.
Date: early 1870s
Ownership: Rental
Religion: Unknown

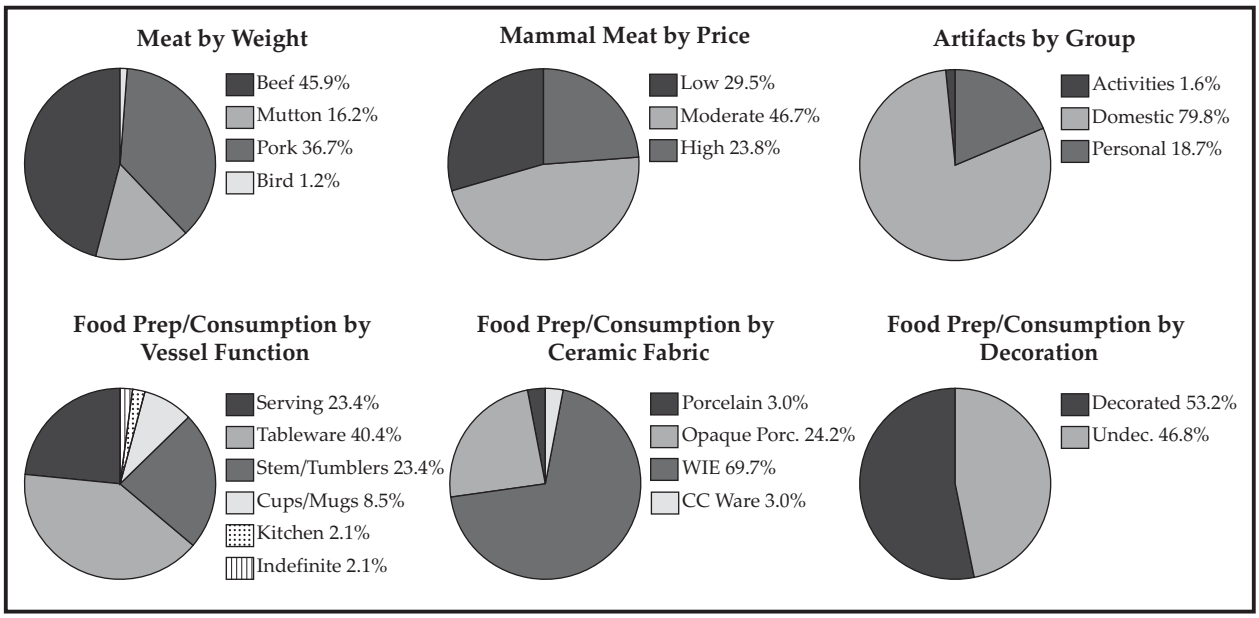
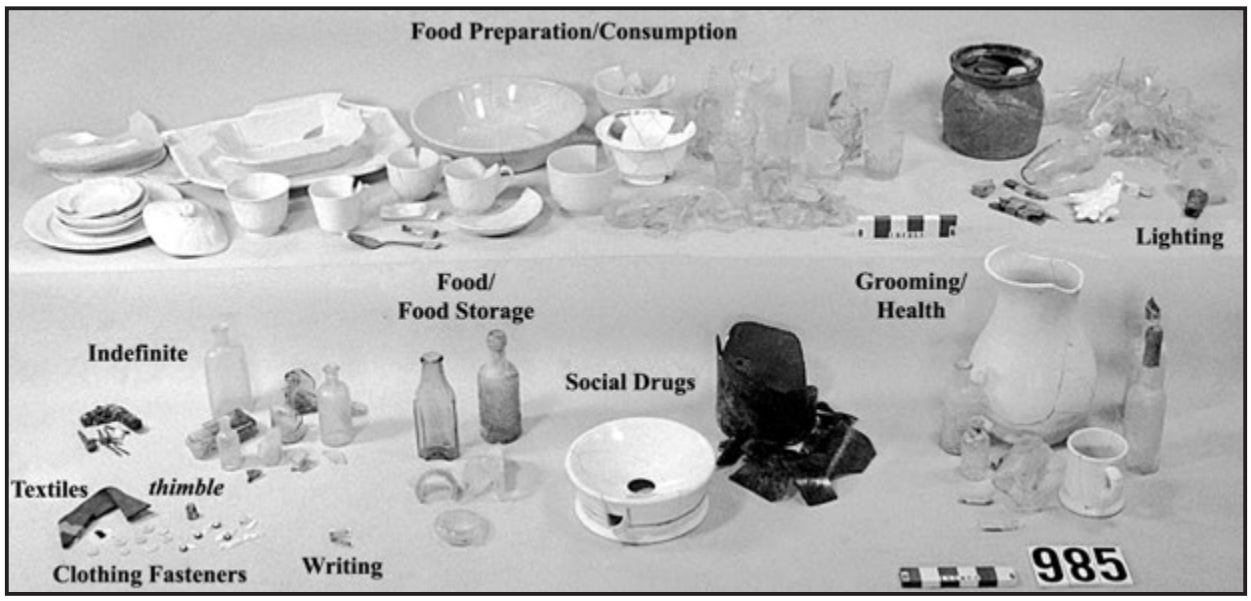


Figure 11.3. Privy 1310 Feature Snapshot, 9 Baldwin Court, Tar Flat, San Francisco



Association: Bredhoff household
Occupation(s)/status: Brewer, bookkeeper, saloon-keeper/professional
Place of origin(s)/ethnicity: Germany
Household type/number (max.): nuclear family with boarders/7 individuals
House type/sq. ft.: Polite Victorian house/1,740 sq. ft.

Date: ca. 1880
House owner: Charles Bredhoff (husband), also owned interest in a brewery
Pets:
Pests: 1 rodent
Bric-a-brac: 1 item

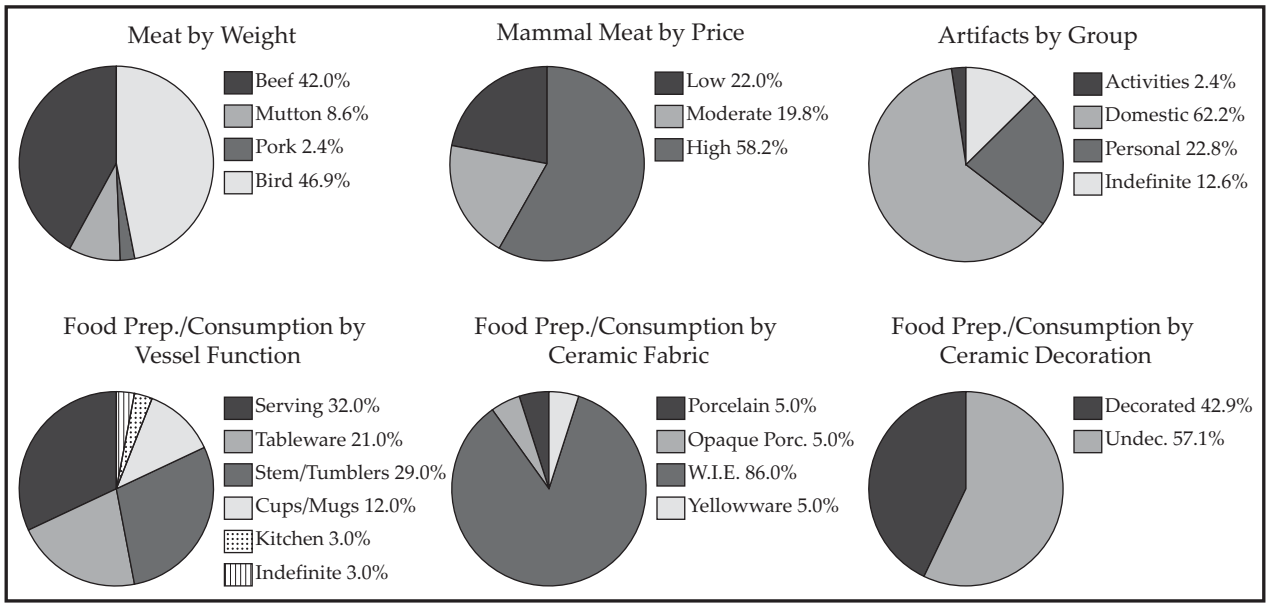
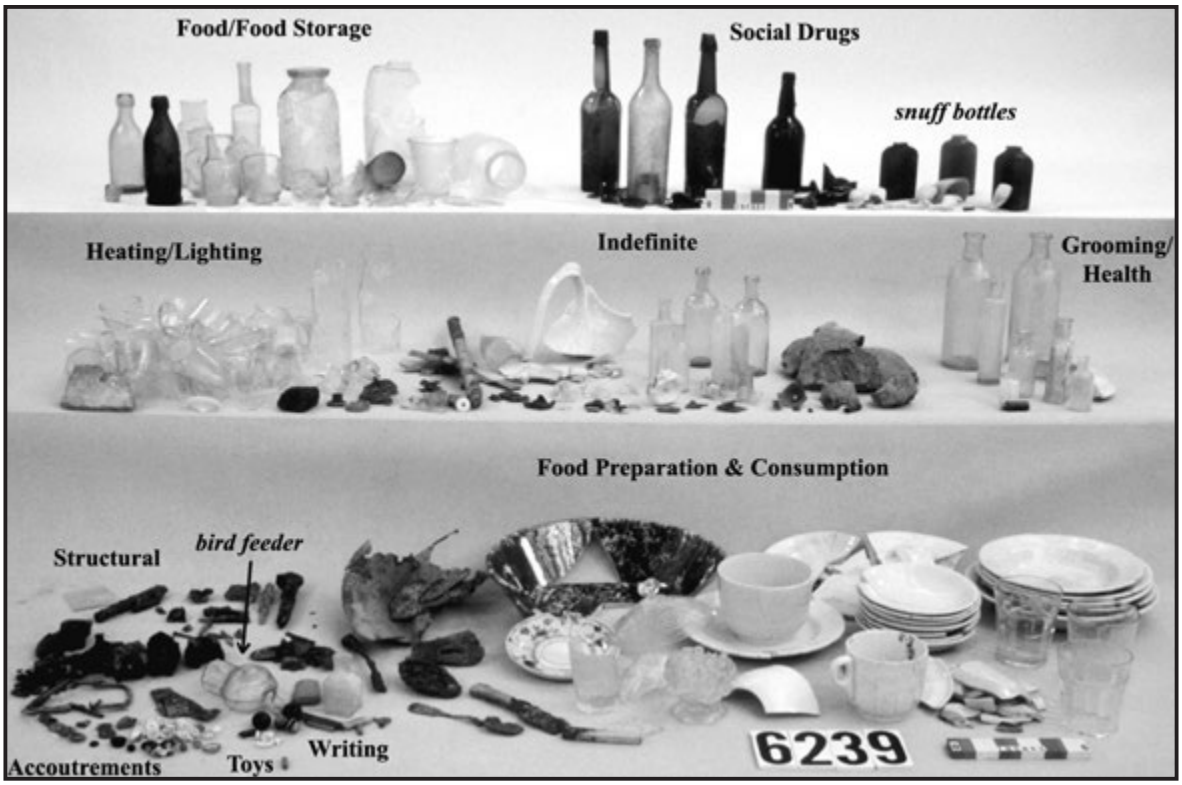


Figure 11.4. Privy 985 Feature Snapshot, 663 Sixth Street, East of Market, Oakland (adapted from Praetzellis and Praetzellis 2004: D.6).



Association: Hansen family and Hayles family
Occupation(s)/status: fisherman and railroad worker, fisherman/skilled
Place of origin(s)/ethnicity: Germany and England
Household type/number (max.): nuclear family/2 individuals and nuclear family/5 individuals
House type/sq. ft.: Informal workers' cottage divided into two units/748 sq. ft. total

Date: ca. early 1880s
House owner: Margaret Graffelman (neighbor-owner)
Pets: bird, 2 cats
Pests: 1 mouse
Bric-a-brac:

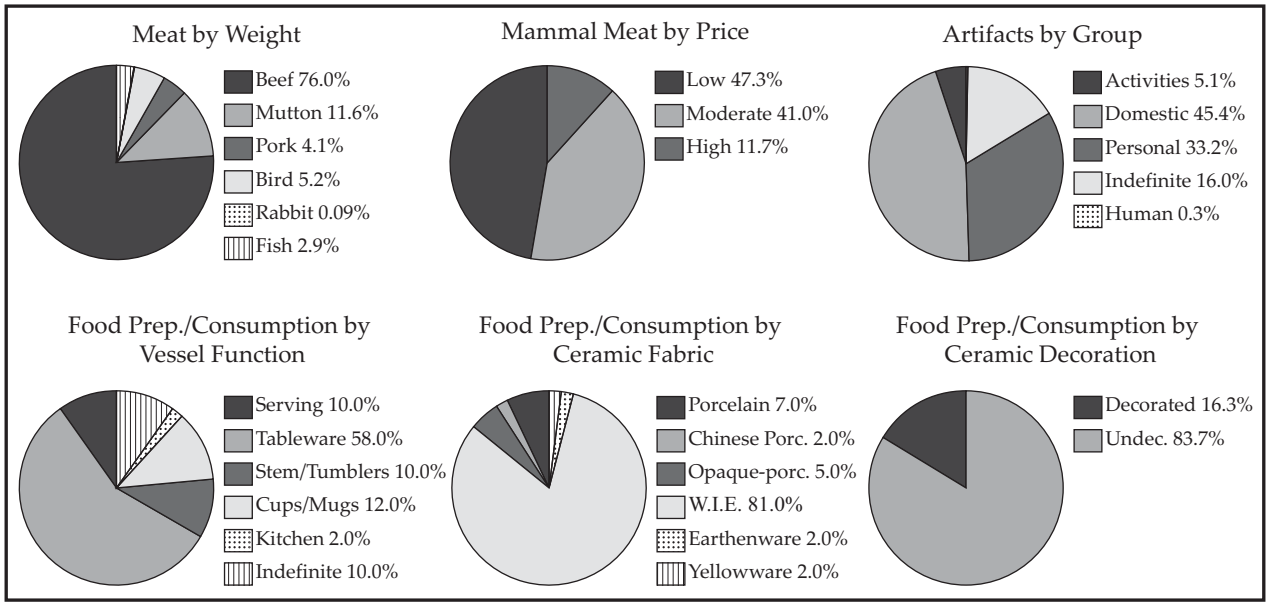


Figure 11.5. Privy 6239 Feature Snapshot, 1823/25 William Street, Oakland Point, Oakland (adapted from Praetzellis and Praetzellis 2004: D.44).

Table 11.8. San Francisco and Oakland Features Ranked by r326 from Highest to Lowest with Associations

Rank	Analytical Unit	r326	Neighborhood	Address	Association	Date
1	CYP-A100	77.40	Oakland Point	1708 William	Stryker/Huddleson household, NY, coffeemill worker, S	1880
2	WBA-A849	76.34	Mission Bay	115 Perry	Strauss household, German butcher, S	1870
3	WBA-A812	74.57	Mission Bay	129 Perry	Towne/Hill household; Maloney family; MA RR clerk, Canadian machinist, Irish stockdealer; P, S, P	1880
4	CYP-A985[1]	73.56	E of Market, Oakland	663 Sixth	Bredhoff household, German, brewer, P+	1880
5	WBA-A851	71.82	Mission Bay	114 Silver	Metcalf household, German sea captain, P	1880
6	CYP-A3346	71.10	W of Market, Oakland	819 Market	Morgan/Mullen house-hold, IN druggist, clerk, P	1880
7	WBA-A8	70.98	Rincon Hill	16 Perry	Rowe family, NJ shipwright, S	1885
8	CYP-A1404, 1452, 1461	70.36	E of Market, Oakland	713 Sixth	Stewart/Gibson household, African American barbers, P	1880
9	CYP-A1785	70.19	E of Market, Oakland	765 Sixth	Curtis family, MA capitalist, P+	1875
10	WBA-A853	69.96	Mission Bay	108 Silver	Baker family, NY wharfinger, P	1870
11	CYP-A3196	69.64	W of Market, Oakland	824 Myrtle	Scott household, NY, bookkeeper, P	1880
12	WBA-A507	68.63	Rincon Hill	540 Folsom	Peel family, English merchant, P+	1870
13	WBA-A2	66.83	Rincon Hill	14 Perry	Johnson family, CA seaman, SS	1880
14	CYP-A4243	62.08	W of Market, Oakland	817 Filbert	Unknown	1880
15	WBA-A18	61.95	Rincon Hill	16 Perry	Shaw and Dent families, MI insurance agent and clerk; P, P	1870
16	CYP-A900	61.44	E of Market, Oakland	654 Fifth	Mann family, NH, capitalist, P+	1885
17	CYP-A3800	60.54	W of Market, Oakland	810 Filbert	Farmer household, Irish widow, W,	1880
18	CYP-A1387	60.33	E of Market, Oakland	715/717 Sixth	Unknown	1880

[1] Shading designates homeowners

Table 11.8. San Francisco and Oakland Features Ranked by r326 *(continued)*

Rank	Analytical Unit	r326	Neighborhood	Address	Association	Date
19	SF80-A3	60.15	Mission Bay	1031 Harrison	Duisenberg family, German merchant, P+	1895
20	WBA-A505	60.07	Rincon Hill	546 Folsom	Mayne household, O'Connor family; LA ship carpenter, Canadian sawyer; S, S	1880
21	CYP-A955	59.98	E of Market, Oakland	671 Sixth	Irving family, Scots clerk, P	1880
22	CYP-A2007	59.55	Oakland Point	1812/14 Goss	Lawrence and Ward families, English RR fireman, WY brakeman; S, S	1900
23	WBA-A6	59.52	Rincon Hill	12 Perry	Hannan and Dent families; Irish boilermaker, AL widow; S, W	1895
24	WBA-A813	59.23	Mission Bay	133 Perry	Mary Moynihan and Collins families; Irish washerwoman and barber; U, S	1880
25	WBA-A1300	58.74	Tar Flat	416 Folsom	Samuel and Smith families; Polish tailor, PA engineer; S, S	1885
26	CYP-A2784, 2877C	58.67	Oakland Point	883 Cedar	Unknown	1880
27	CYP-A3802	57.33	W of Market, Oakland	817 Myrtle	McDonald family, Scots bridge builder, P	1880
28	WBA-A801	57.27	Mission Bay	142 Silver	Sheridan family, Irish teamster, SS	1885
29	WBA-A1326	56.87	Tar Flat	240 Fremont	Amanda Scales and tenants, PA widow, clerk; W, P	1875
30	WBA-A806	55.81	Mission Bay	125/7 Perry	McIver and Martin families; Scots stevedore, English merchant; SS, P	1880
31	CYP-A947	55.68	E of Market, Oakland	666 Fifth	Donavan family, Irish, sewer contractor, S	1880
32	CYP-A7511	55.46	Oakland Point	1776 Atlantic	African American porters, SS	1895
33	CYP-A3139	54.91	W of Market, Oakland	814/816 Myrtle	Bush family, music teacher, P	1880
34	WBA-A516	54.68	Rincon Hill	540 Folsom	Mary Peel, English widow, W	1880
35	WBA-A807	54.39	Mission Bay	123 Perry	Gee family, German master mariner, P	1870

Table 11.8. San Francisco and Oakland Features Ranked by r326 *(continued)*

Rank	Analytical Unit	r326	Neighborhood	Address	Association	Date
36	WBA-A810	54.39	Mission Bay	137/9 Perry	Monahan family, Thomas Griffin; Irish saloon keeper and ship's fireman; P, S	1880
37	WBA-A9	54.07	Rincon Hill	20 Perry	Usher household, MD sailmaker, S	1880
38	WBA-A857, 858	53.10	Mission Bay	109/11 Perry	Dolan and Michelson families, Irish commercial agent, Norwegian sea captain; P, P	1880
39	CYP-A1358, 1372	52.74	E of Market, Oakland	719 Sixth	Unknown	1880
40	CYP-A4731, 5167, 5169	52.42	Oakland Point	1868 Seventh	Unknown	1880
41	CYP-A3106, 3119	52.42	W of Market, Oakland	810/12 Myrtle	Unknown	1880
42	CYP-A1300	52.29	E of Market, Oakland	802 Brush	Breen family, Irish laborer, U	1880
43	CYP-A3300, 3301	52.22	W of Market, Oakland	828 Myrtle	Chapman, IN paperhanger, S	1895
44	CYP-A4714	52.11	Oakland Point	1868 Seventh	Goshen family, German merchant, P	1870
45	CYP-A6325	52.08	Oakland Point	1814 William	Robertson family, Canadian foreman, P	1885
46	CYP-A8445	51.51	Oakland Point	793 Wood	Holderer family, NY, sewing machine salesman, S	1895
47	CYP-A4234	51.21	W of Market, Oakland	816/18 Linden	Barry family and tenants, Irish RR conductor, S	1890
48	WBA-A1318	51.12	Tar Flat	11 Baldwin	Murphy family, Irish laborer, U	1880
49	CYP-A968	51.01	E of Market, Oakland	812 Castro	Brady family, Irish plumber, P	1900
50	CYP-A3185	50.79	W of Market, Oakland	822 Myrtle	Murray family, Irish gardener, SS	1880
51	CYP-A933, 1112	50.63	E of Market, Oakland	662 Fifth	Tilghman/Holland household, African American widow, porter, SS	1880
52	CYP-A6270	50.41	Oakland Point	1820 Atlantic	Unknown	1870
53	WBA-A515	50.27	Rincon Hill	49 Clementina	Fegan family, Irish longshoreman, SS	1880
54	CYP-A951	49.98	E of Market, Oakland	667 Sixth	Paddock/Swain household, MA painter, S	1880

Table 11.8. San Francisco and Oakland Features Ranked by r326 *(continued)*

Rank	Analytical Unit	r326	Neighborhood	Address	Association	Date
55	WBA-A1600, 1601	49.24	Mission Bay	207/9 Perry	Donnelly and Beal families, Irish blacksmith, Scots goldminer; S, S	1880
56	CYP-A6282	48.97	Oakland Point	1820 Atlantic	Haynes family, MI ship captain, S	1880
57	CYP-A953	48.85	E of Market, Oakland	668 Fifth	Carter household, African American porter, SS	1885
58	CYP-A3178	48.83	W of Market, Oakland	818 Myrtle	McDonald family, Canadian carpenter, S	1880
59	WBA-A1333	48.48	Tar Flat	236 Fremont	William Dougherty, Irish longshoreman, SS	1890
60	CYP-A1376	48.27	E of Market, Oakland	718 Fifth	Unknown	1880
61	WBA-A1316	47.72	Tar Flat	414 Folsom	McEvoy family, Irish furniture maker, S	1870
62	WBA-A1301	46.59	Tar Flat	412 Folsom	Taylor family, Irish porter, SS	1870
63	CYP-A2822	45.66	Oakland Point	881 Cedar	McLaughlin household, Irish butcher, S	1880
64	CYP-A6300	45.56	Oakland Point	1827 William	Unknown	1880
65	CYP-A7175	45.45	Oakland Point	812 Pine	Unknown	1900
66	CYP-A954	44.86	E of Market, Oakland	669 Sixth	French family, IN RR conductor, S	1880
67	CYP-A1321B	44.58	E of Market, Oakland	812 Brush	Unknown	1885
68	CYP-A2809, 2812	44.29	Oakland Point	881 Cedar	McLaughlin household, Irish butcher, S	1880
69	SF80-A30	44.19	Mission Bay	36 Kate	Anne Mills, Irish widow, W	1880
70	CYP-A4648	44.12	Oakland Point	1871 Goss	Unknown	1880
71	CYP-A300	43.60	Oakland Point	1817 Goss	O'Brien family, CA plumber, P	1895
72	CYP-A3830	43.26	W of Market, Oakland	812 Filbert	Quinn family, Irish RR fireman, S	1880
73	WBA-A808	42.97	Mission Bay	120 Silver	Schreiner, Johnson, Degnan, and McIntyre families; German barkeeper, Danish saloonkeeper, Irish laborer and steward; SS, P, U, SS	1880
74	CYP-A2786, 2864, 2873, 2874	42.53	Oakland Point	883 Cedar	Lewis family, NY RR brakeman, S	1880

Table 11.8. San Francisco and Oakland Features Ranked by r326 *(continued)*

Rank	Analytical Unit	r326	Neighborhood	Address	Association	Date
75	WBA-A1305	42.18	Tar Flat	13 Baldwin	Fuchs and Cadigan families, French carpenter, Irish stevedore; S, SS	1880
76	CYP-A1409	40.88	E of Market, Oakland	712 Fifth	Barnett/Jacobs household, German fruit peddlers, S	1885
77	CYP-A4245	40.25	W of Market, Oakland	824 Linden	Corrigan family, Irish boilermaker, S	1880
78	CYP-A6239	40.15	Oakland Point	1823/25 William	Hansen and Hale families, German fisherman, English RR worker; S, U	1880
79	WBA-A866	39.91	Mission Bay	112 Silver	McDonald and Tobin families, Irish laborer, NY bookkeeper; U, P	1885
80	CYP-A6292	39.84	Oakland Point	1823/25 William	Finley family, PA shoemaker, S	1885
81	WBA-A1322	39.23	Tar Flat	242 Fremont	Hurley and Conniff families, Irish laborer, Australian fireman: U, S	1890
82	CYP-A156	38.71	Oakland Point	1726 William	Long family, German butcher, S	1880
83	CYP-A4239	37.72	W of Market, Oakland	817 Filbert	Unknown	1880
84	SF80-A38	37.39	Mission Bay	31 Kate	Dean family, Irish longshoreman, SS	1880
85	CYP-A141	37.30	Oakland Point	1712 William	O'Connell family, Irish widow and hairdresser, S	1880
86	CYP-A1454	35.93	E of Market, Oakland	711 Sixth	Annie Fallon, Irish widow, W	1890
87	WBA-A1303	35.80	Tar Flat	21 Baldwin	Thompson family, Irish blacksmith, S	1880
88	CYP-A6260	35.43	Oakland Point	1821 William	Leonhardt household, German cooper, S	1880
89	CYP-A1747	35.28	E of Market, Oakland	770 Fifth	Hickey family, NY carpenter, S	1880
90	CYP-A4281	33.90	W of Market, Oakland	830 Linden	Unknown	1880
91	CYP-A101	33.11	Oakland Point	1708 William	Stryker household, NY coffeemill worker, S	1880
92	WBA-A1304	33.04	Tar Flat	19 Baldwin	Unknown	1895
93	WBA-A1311, 1320	31.06	Tar Flat	7 Baldwin	Clark family, Irish boilermaker, S	1870
94	WBA-A1307	30.52	Tar Flat	13 Baldwin	Brown family, Irish laborer, U	1870

Table 11.8. San Francisco and Oakland Features Ranked by r326 *(continued)*

Rank	Analytical Unit	r326	Neighborhood	Address	Association	Date
95	SF80-A20	28.44	Mission Bay	520 Eighth	Noonan family and lodgers, Irish painter, S	1885
96	WBA-A1310	27.89	Tar Flat	9 Baldwin	McSheffrey family, Irish laborer, U	1870
97	CYP-A4724, 5112	25.53	Oakland Point	1865 Goss	McNamara family, Irish laborer, U	1880
98	CYP-A3828	21.56	W of Market, Oakland	831 Myrtle	Tate household, VA retired farmer, P	1880

Note: P+ = Wealthy Professional; P = Professional; S = Skilled; SS = Semi=skilled; U = Unskilled; W = Widow

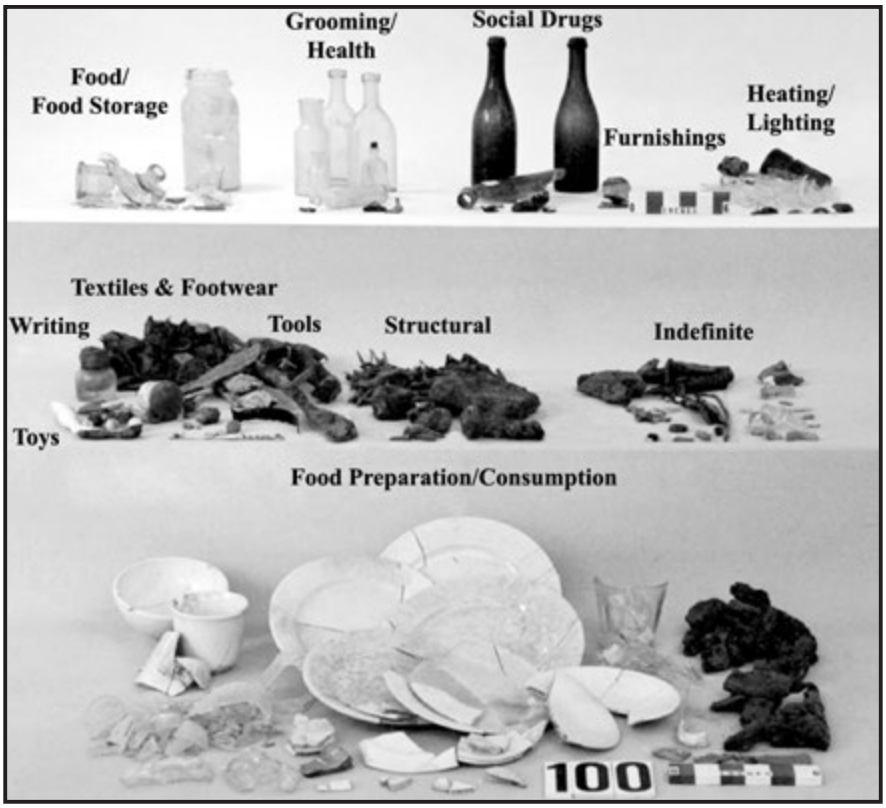
the large quantity of grape and berry seeds, representing over 50 pounds of fruit, as well as over 1,000 fragments of charred coffee beans.

An extended family household ranked lowest on combined Index r326. Retired farmer Samuel Tate and his wife Margaret lived with their son-in-law, who worked as a druggist, and his family in a relatively large Victorian home in West of Market Oakland. The feature (Privy 3828) is profiled in Figure 11.7. The family originated from Virginia, via Kentucky and Missouri. In the Southern style, they consumed less beef and more pork than their neighbors. In this case, the consumption of pork, which was deemed of low status in the analysis, may have skewed their rank on the combined material status index.

The combined rankings differ from the city rankings in interesting ways that reinforce the notion that San Francisco and Oakland were very different places and that material status manifested itself differently within each. San Francisco was more obviously stratified with German, English, and East Coast professionals at the top and Irish skilled and unskilled laborers at the bottom. Homeownership concentrated in the upper rankings. Oakland, on the other hand, was more egalitarian in terms of nativity and occupation with Germans, English, and Irish of various occupational classifications spread throughout the ranking. While there were no African American households in the San Francisco sample, it is noteworthy that these households ranked so highly in the Oakland sample: 3, 34, 36, and 48. While the Irish appear to have faced obstacles to homeownership in San Francisco, the vast majority of Irish households in the Oakland sample achieved that goal.

We are only just beginning to unravel the meaning of these city comparisons, but want to emphasize the importance of place for future archaeological studies. We also think that Henry George's question about change brought by the railroad lends itself to the formulation of the most important question of our time. How does change affect peoples' lives and to what extent is this predictable? Obviously some segments within California benefited from the arrival of the railroad, others did not, and still others adapted or availed themselves of the opportunities presented. From our work, it would appear that skilled railroad employees in Oakland prospered and continued to do so until the decline of the railroads in the mid-20th century. The standard of living of San Franciscans, particularly ironworkers and to a lesser extent those in the maritime trades, declined following the arrival of the railroad.

Change, whether brought about by the decline of mining or the arrival of the railroads, is something that can be viewed through material culture and the material culture index studies



Association: Huddleson and Stryker households
Occupation(s)/status: coffee mill hand, machinist/skilled; dressmaker
Place of origin(s)/ethnicity: New York and California
Household type/number (max.): 2 nuclear families (one boarding)
House type/sq. ft.: Almost-polite house/1,140 sq. ft.

Date: ca. 1880
House owner: not known
Pets: 1 dog
Pests:
Bric-a-brac:

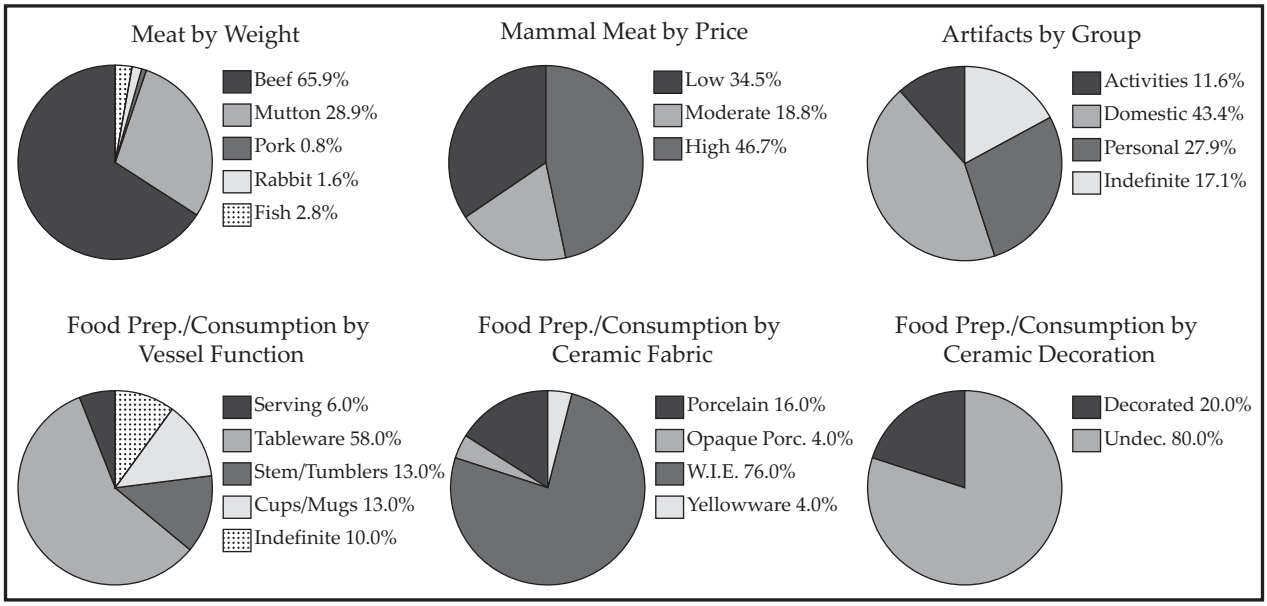
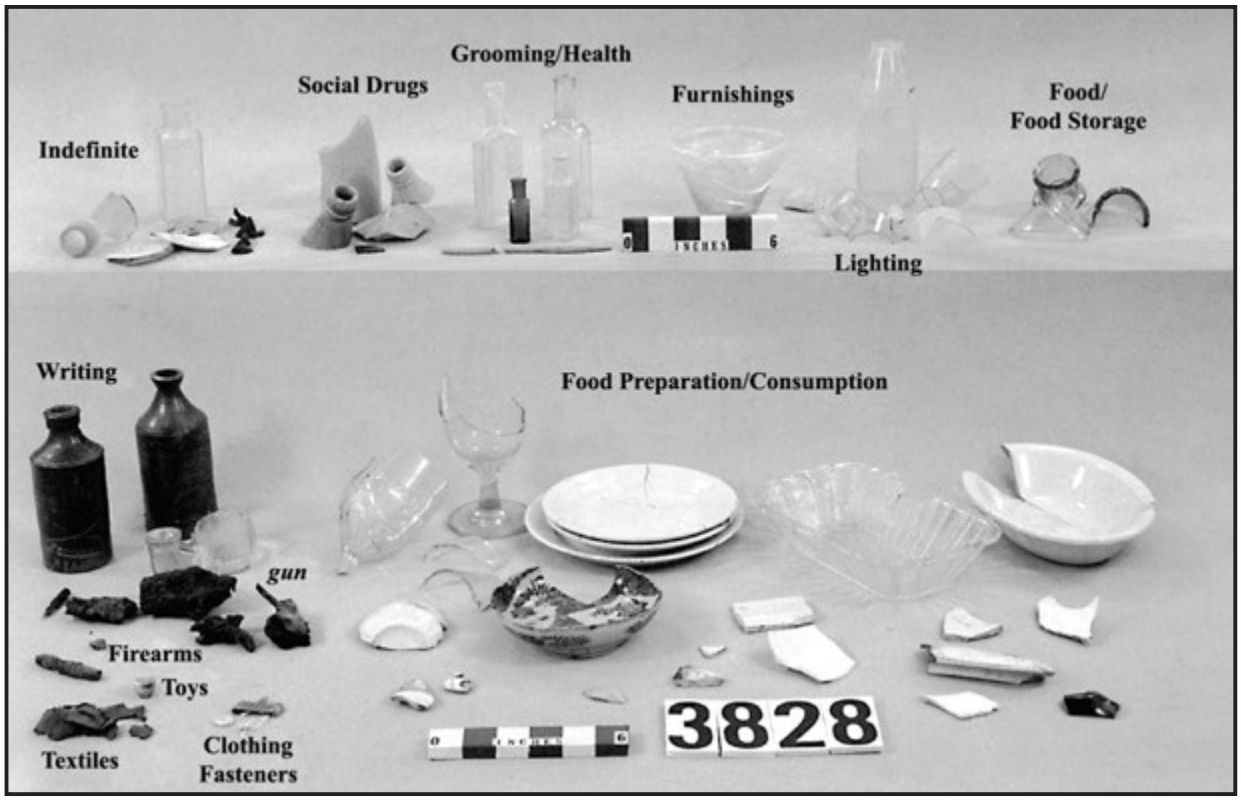


Figure 11.6. Privy 100 Feature Snapshot, 1708 William Street, Oakland Point, Oakland (adapted from Praetzellis and Praetzellis 2004: D.68).



Association: Tate family
Occupation(s)/status: retired farmer, druggist, dentist/professional
Place of origin(s)/ethnicity: Virginia/Kentucky
Household type/number (max.): extended family/6 individuals
House type/sq. ft.: Polite Victorian house/1,700 sq. ft.

Date: ca. 1880s
House owner: Samuel P. Tate (husband)
Pets:
Pests:
Bric-a-brac: 2 items

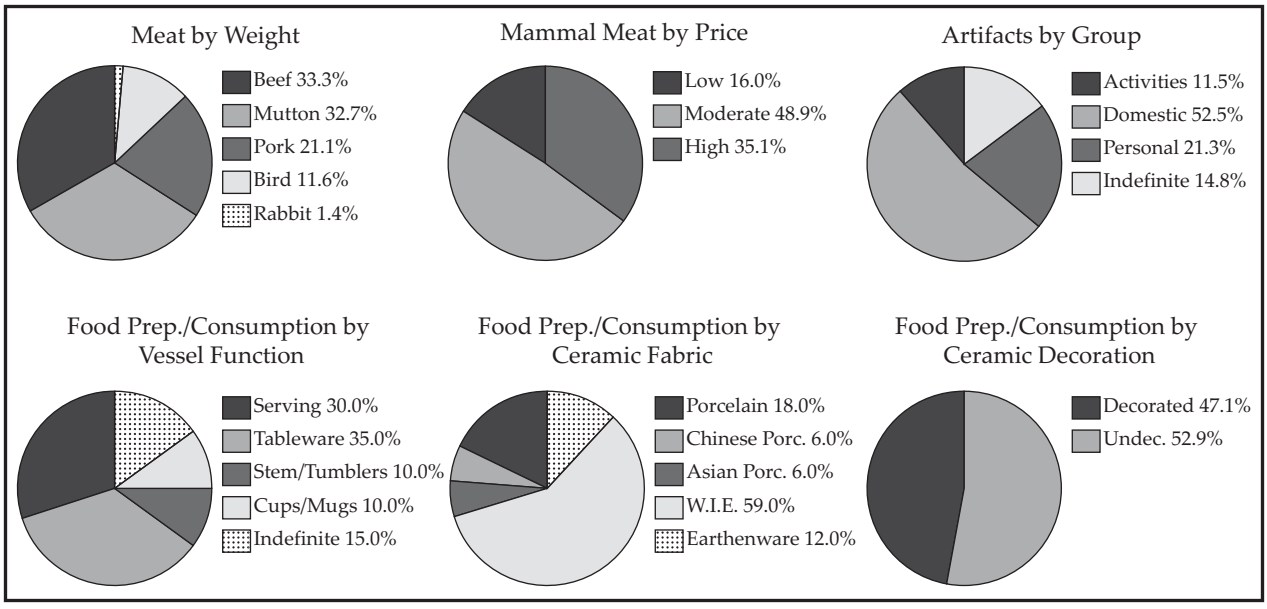


Figure 11.7. Privy 3828 Feature Snapshot, 831 Myrtle Street, West of Market, Oakland (adapted from Praetzellis and Praetzellis 2004: D.33).

presented in this report. Does material wellbeing move from the top down or from the bottom up or in both directions? Does it move in ways that can be predicted and controlled? Does it move evenly, erratically, or randomly? Affecting change was the central question of the 2008 presidential election and continues to stump the leadership of this country as they try to fix the current financial crisis.

FREEWAY RECONSTRUCTION PROJECTS CONCLUDED

Conclusions about Quantitative Methods

Bruce Owen

While the goals of the statistical study as fully laid out in Appendix F were substantive, not methodological, the study does demonstrate a number of novel methods that might be useful for other analyses. Most basically, it shows that quantitative analyses of historical archaeological data can yield insights into social processes, some surprisingly subtle and unexpected.

This study argues that non-parametric statistics are conceptually more appropriate for relatively small and poorly behaved archaeological datasets than are the more commonly used parametric statistics. It successfully uses a handful of simple, non-parametric approaches, especially Wilcoxon rank-sum tests and Spearman rank correlations, throughout. This is certainly not the first study to use non-parametric statistics, but it does demonstrate that these underutilized methods are effective.

The analyses by neighborhoods and the study of social status indices demonstrate simple tabular ranking methods for summarizing and synthesizing numerous pairwise statistical tests (parametric or not) to reveal broader patterns such as the general status rankings of the neighborhoods.

The study of status indices presents a simple method of constructing artifact-based indices of socioeconomic or material status, with both parametric and non-parametric versions. It demonstrates a method of finding effective status indices by generating large numbers of potential indices and winnowing them down to those that best correlate with historical indicators of status. These indices allow individual households to be ranked on a single scale of material status, based on artifactual evidence that arguably measures differences in material standards of living more directly than do historical data such as occupations.

The status index study shows how a sample of effective indices can be used as a dataset in itself to identify which artifact variables are most related to general social status. It also demonstrates a "minimal pair" method for comparing the relative contributions of any two individual variables to overall social status.

The "minimal pair" method is particularly useful for comparing the relative importance of avoiding low-status options, as opposed to seeking high-status ones. This is a fairly subtle quality of behavior and attitudes that are accessible by quantitative means, but might not even have been considered by archaeologists or historians using other approaches.

Finally, the status index study demonstrates how status indices can be used to assess the relative degree of social status segregation in neighborhoods.

Conclusions about Statistical Approaches

The study of status indices compared parametric and non-parametric approaches. The results were similar. While this might suggest that there is no reason to prefer one kind of statistic over the other, it could also indicate that since in practice there is no disadvantage to using non-parametric statistics, these more conservative and conceptually appropriate statistics should be preferred for archaeological applications.

Pairwise Wilcoxon comparisons were used throughout the analysis, supplemented by Spearman correlations where the classifying variables could be arranged in rank order, as in the occupation ranks from unskilled through wealthy professional. While the results generally agreed, they were often clearer with one or the other of these approaches. Using both pairwise tests and correlations is a good strategy to maximize insights into the data.

This study classified the occupation ranks of multi-family households in three different ways: by the occupation rank of the primary occupant, usually the owner; by the highest occupation rank present; and by the average occupation rank of all the household's workers. While this approach tripled the number of statistical tests and tables to work with, it paid off in that different patterns were clearest in different classification schemes. Choosing any single scheme would have meant missing some patterns in the data. Even more interesting, it was possible to identify which areas of consumption were most influenced by the homeowner, and which were more influenced by all the members of the household. Where there are multiple reasonable ways to classify cases, using multiple classification schemes rather then settling on a single one is a productive strategy.

Quantitative Measures of Status must Include Multiple Artifact Types

The status ranking results clearly showed that good measures of overall material status must include multiple artifact variables. No single artifact type, or even any combination of a small number of artifact types, was a good index of higher or lower socioeconomic status. While this might seem obvious, it constitutes a practical warning to archaeologists. Using any single variable, such as the proportion of porcelain in the ceramic assemblage, as an indicator of general socioeconomic status simply will not work, and results based on such a procedure will be suspect, if not meaningless.

Interpretations Based on Alcohol or Tobacco Artifacts must Be Handled Carefully

The meaning of social drugs with regard to social status varied between San Francisco and Oakland more than did that of other goods. This suggests that the interpretation of social drugs should be handled with caution in other studies in this general region and period that might include multiple populations with different attitudes towards these drugs. For example, drawing conclusions from the mixes of wine, beer, and liquor bottles at households in different towns may be more problematic than basing them on other artifact types, because while the meaning of certain ceramic wares or other goods may have been relatively uniform from place to place, residents of different towns may have interpreted social drugs in more radically different ways.

Samples from Wells Are Comparable to those from Privies

It is reasonable to suspect that garbage discarded in wells might differ systematically from garbage discarded in privies, creating problems in comparing material from the two. Fortunately, this analysis found only minimal differences between collections from privies and from wells, and they all seem simply to reflect the higher socioeconomic status of households with wells.

EARTHQUAKE COUNTRY

Mary Praetzellis

Arrivals to the Gold country quickly learned that this was earthquake country. The drill was old news by the middle 1860s, without however losing its

> . . . awe-inspiring qualities. There was the premonitory thrill, followed by an interval of awful suspense; the ominous rumble and rattle; the shock in its different manifestations of rolling, bumping, swaying or jolting, and the succeeding hush, broken at last by anxious voices, shuffling feet, barking of dogs, neighing of horses and crowing of cocks [Harte 1866b].

I have survived numerous earthquakes and visitors to our fair state like nothing better than to experience one for themselves and take the story home. Earthquakes can be deadly. The man who owned my house in 1906 died in that quake. Luckily not in my house—or in the house he owned a few blocks away that burned to the ground in the event—but in a brick hotel a few more blocks away, where he unexplainably slept that fateful early morn.

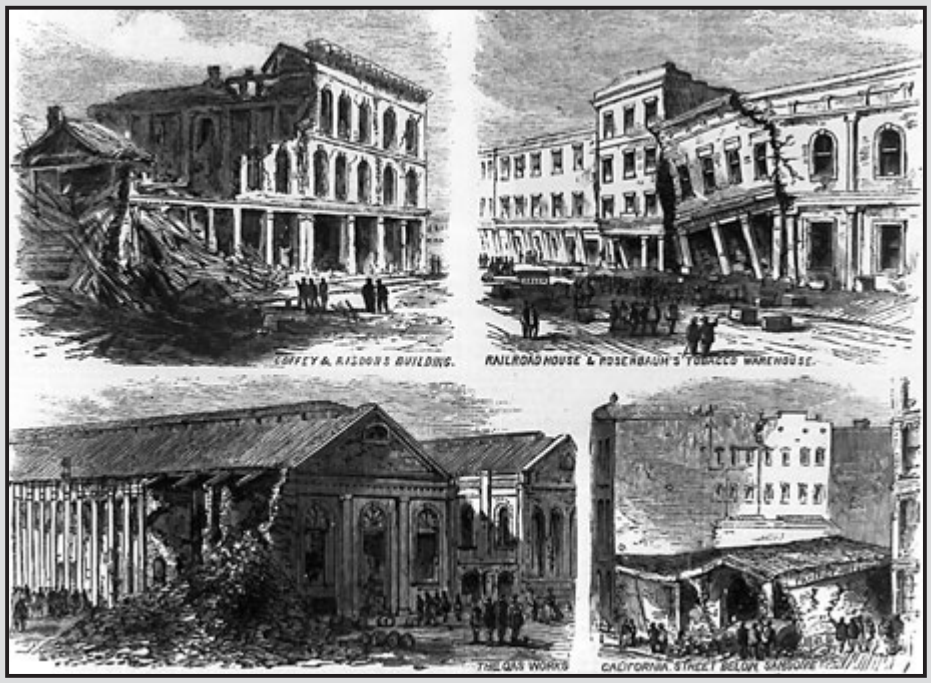
By the mid 1860s, new Californians had experienced sufficient tremors to create a scale of sorts. Bret Harte described the earthquake of 26 April 1866 as a "rather good-humored affair," while the earlier quake of October 1865 was "a trespass with assault and battery superadded." Nevertheless, no one doubted their true danger:

> Familiarity with earthquakes does not beget contempt—there is a surprising freshness and novelty in each new alarm—and although Californians are not inclined to confess timidity, and although some affect to treat these phenomena in the light of a gigantic practical joke, it may be noted that for an hour or two after a shock, out-of-door exercise and promenading become fashionable and popular, and the influx of passengers in the streets is remarkable large. An earthquake is one touch of nature that makes the whole world kin. The slightest shock is sufficient to overthrow the artificial barriers of society. Mistress and maid faint in each other's arms. "Washoe" in his gilded palace and Pat in his shanty forsake their respective habitations to find safety in the democratic thoroughfare [Harte 1866b].

The now familiar reference to "earthquake weather" may originate in this time and Harte, with his weather fascination, may have been the progenitor: "I think the fact of their having been preceded, accompanied, or followed, usually by some meteorological phenomena, is pretty well established (1866c:42).

Then at around 8 in the morning on 21 October 1868, a magnitude 7 earthquake sent waves through the San Francisco Bay Area and beyond. Known as the "great San Francisco earthquake" until relieved of that title by a certain more devastating event, the quake took the lives of 5 San Franciscans (out of a population of 150,000) and resulted in property loses estimated to range from $5 to $100 million in 2007 dollars (USGS 2008).

The one-minute quake sent panicked San Franciscans into the streets in their early morning attire, which reportedly for some was not much. Schools and businesses closed and excitement reigned with strong aftershocks continuing into November. Upon a detailed inspection of property damage, things were not as bad as expected (*San Francisco Morning Call*: 22 October 1868). The greatest damage was reported in neighborhoods built on fill, particularly to poorly constructed brick buildings. Harte even joked that "with a little more care and preparation on our part, the earthquake would have been very badly damaged in this encounter," but he also warned that if businesses continued "to occupy badly built structures on 'made ground,' commerce will suffer. It is only a question of time" (1868:162-164). Damage was reported on West Approach Block 3 at the Gas Works and along Fremont Street. Harm done to small residences would not have made the newspaper accounts. Based upon archaeological evidence, it is likely that families living in the small cottages on filled ground suffered



"Earthquake in San Francisco, California, October 21, 1868;" Illustration in *Harper's Weekly*, 28 November 1868. (Illustration courtesy of Library of Congress Prints & Photographs Division, LC-USZ61-1261)

considerable loss of personal property. Privies 1316 and 1301 on Block 4, and Privy 807 on Block 10 appear to have been filled with broken goods after this event.

San Francisco boosters quickly proclaimed that the earthquake "did not have a depressing effect upon property for even a day," but did caution that heavy brick buildings should not be constructed on "swamps," and that outside heavy ornamentation and badly constructed walls be banished (*San Francisco Real Estate Circular*, October 1868).

Unfortunately, the warnings were not heeded. And on 18 April 1906 much of San Francisco burned to the ground following one of the most devastating earthquakes on record. Jack London railed on San Franciscans for their selfish choices:

> They that dwelt in San Francisco were dishonest. They lied and cheated in their business life (like the dwellers in all cities), and because they lied and cheated in their business life, they lied and cheated in the buildings they erected. Upon the tops of the simple, severe walls of their buildings they plastered huge projecting cornices. These cornices were not part of the construction, and they were lies. The earth wrinkled its back for twenty-eight seconds, and the lying cornices crashed down as all lies are doomed to crash down. In this particular instance, the lies crashed down upon the heads of people fleeing from their reeling habitations, and many were killed. They paid the penalty of dishonesty.
>
> They that lived in San Francisco were dishonest in the materials they used. They sold one quality of material and delivered another quality of material. They always delivered an inferior quality….A seven-million dollar city hall became thirty cents in twenty-eight seconds. Because the mortar was not honest, a thousand walls crashed down and scores of lives were snuffed out. There is something, after all, in the contention of a few religionists that the San Francisco earthquake was a punishment for sin. It was a punishment for sin; but it was not

The collapse of these wood-frame houses into piles of kindling took place in less than a minute in the early morning of April 18, 1906. (Photo courtesy San Francisco History Center, San Francisco Public Library)

> for sin against God. The people of San Francisco sinned against themselves [1910].

In clearing the rubble, workers found that the visually impressive stone columns of City Hall shielded fakes—cemented over rolled newspapers. San Franciscans lost faith in their city government.

The 1906 earthquake packed 16 times the force of the 1989 Loma Prieta earthquake that triggered our archaeological work. Survivors of the 1906 quake still gather on the anniversary date each year, but their numbers are fewer and fewer. Three of my grandparents had their stories, and I keep a letter from a great-grandmother written to a country cousin from her family's porch in San Rafael.

> Thursday morning, April 20. All night the people of San Rafael slept in the streets all of us on the porch, Irene and Helen on the chairs on the front sidewalk. My father on a cot at the front door. Light shocks all night and every half hour explosions from the city, where they are blowing up the Buildings. All San Francisco is gone now, out to 20th Street on one side and Dayton and Union on the north beach side. Trains ran all night, you see the Earthquake broke all the main water pipes and left the city without water. Water is selling at 25 cts a glass, potatoes in San Rafael today are five dollars a sack. The company D is ordered out and tents are going to be put up all over town this afternoon for the thousands of people coming over. Automobiles are charging 50 dollars an hour in the city. Conrad has gone down to see if his place is burned. If it has well I don't know what to do. Lou has not come home yet. Jim is marching up and down Market street with a gun. The Hibernia Bank went down. All the Banks are gone. The fire is out near Kates now. But their house I think is safe. Stanfords Colage [sic] all down, took all the patients out of Saint Marys Hospital in boats and blew up the Building. One little paper of two sheets was printed this morning, Call, Chronicle and Examiner combined. I tell you

> George, I am sick. Ted has a gun on his shoulder with the other Boys belonging to the League of the Cross and are guarding San Rafael from the rough crowds that are coming in. Sauclito [sic] is in riot, people breaking in to the stores for something to eat. Marshall Law is all over. I just came from up Town trying to get some groceries as people are afraid of a famine. Not a ham or a bag of flour to be got in town. Now George, I am afraid you will throw this scribble aside before you are half through but I thought you would like to hear how everything is if your sun is dark it is from the smoke of the lost dear old city. It is a true saying that one touch of nature, makes all the world kin. Hoping you are well and safe, I remain your loving Cousin [Praetzel 1906].

Undated photo of Maria Praetzel née Cochrane. (Photo courtesy of the Praetzellis Family Collection)

Loma Prieta was our generation's earthquake and has become part of our collective history. As predicted in 1868, the worst damage happened on "made ground" in the Marina District and along freeway corridors sited above old marshes and Mission Creek. This volume is part of its legacy in moving forward and correcting the problem. As Bret Harte wrote so many earthquakes ago: "I do not think the future of California is disturbed by these shocks. . . . Only weak walls and weaker principles and theories have thus far been overthrown, and earthquakes have been beneficial in so far as they have tested the fealty of Californians to their adopted state" (1866b).

"Loma Prieta, California, Earthquake October 17, 1989. San Francisco. An automobile lies crushed under the third story of this apartment building in the Marina District [USGS Open-File Report 90-547]." (Photo by J.K. Nakata, USGS)

All four wells sampled in San Francisco were from households with one or more professional workers, and all were from either the intermediate-status Mission Bay or high-status Rincon Hill neighborhood. Wells may, then, have been indicators in themselves of higher household status.

People who dumped trash in wells ate a higher proportion of expensive cuts of meat, used more perfume and primping items, had more collectable items, and drank less bottled soda water than did those who dumped trash in privies. These could all reflect the higher-status households represented by the well samples, rather than biases introduced by the type of trash deposit. It is reassuring that there were no significant differences between wells and privies with regard to meat species, ceramics, alcohol, or tobacco consumption.

At least in these 19th-century urban settings, the trash dumped in privies does not seem to have differed in any consistent way from that dumped in wells. The two kinds of context may be included interchangeably in archaeological analyses without introducing any serious bias.

Rethinking Scale and 'Redundancy,' and Facing the Unknown

Adrian Praetzellis

Archaeology on a Large Scale

The freeway rebuilding and retrofit projects in San Francisco and Oakland that came after the 1989 Loma Prieta Earthquake gave us the opportunity to change how we did urban archaeology. It was clear from the onset that these were not just another series of archaeological projects. They were big—consisting of much of 48 city blocks in Oakland and 24 in San Francisco, although the number subject to excavation was lowered through sensitivity studies that identified where research potential and archaeological survival coincided with direct project impacts.

The scale of these projects required a whole new model of how to do the research and how to analyze and present the findings. For more than a decade, we had been working the bugs out of our field and laboratory methods and by the early 1990s were in a position to develop the truly comparable datasets envisioned in our original research design for urban historical archaeology developed in the 1970s and '80s with Marley R. Brown III (Praetzellis, Praetzellis, and Brown 1980).

In the Field

Most of the excavations for these freeway-related projects were in residential neighborhoods, and since we were uncovering many discrete artifact-filled features our basic unit of study was the household. Our study period was the era just before the introduction of municipal refuse collection and sanitary sewers, so there was no lack of these collections in privy pits and disused wells. In fact, the number was so overwhelming—over 2200 artifact-filled features in Oakland alone—that we were forced to devise a triage system to decide which to keep and which to discard. In the event, only about 5 percent of the artifact-filled features uncovered in Oakland were fully excavated and their contents analyzed.

To quickly and defensibly evaluate the research potential of literally thousands of archaeological deposits we devised a series of principles by which we could decide which deposits should be excavated and analyzed, and which should not. The principles were named AIMS-R by Jack Mc Ilroy from the initial letter of each—Association, Integrity, Materials, Stratigraphy and Relative Rarity and because they help determine what our 'aims are.' These

principles would, it was hoped, allow us to take a sample of contexts that had similar historical associations, rather than having to recover them all. "How many Irish deposits do you need?" was the question asked by agency officials who were disturbed by the prospect of archaeology without end. The rationale for this principle seemed reasonable and eminently practical. In the event, using a sampling strategy whose criterion was a single demographic category was found to be hopelessly naive.

In the Lab

To ensure comparability, artifacts must be cataloged consistently. To this end, ASC developed the MS-Access based system known as SHARD—the Sonoma Historic Artifact Research Database. The system is structured around a series of nested pull-down menus that prompt the user to select the appropriate category. From these data we developed a series of standard tabulations for each minimal unit of analysis, generally a single archaeological feature or sub-set that we believe represent the contribution of a distinct social unit. SHARD is a relational database that can be manipulated in many ways. It forms the basis of Bruce Owen's statistical studies that preceded this section. At the time of writing, the SHARD database contained nearly 1,000,000 entries. Plans are underway to make both the cataloging system and the database available on the Web.

Traditionally, archaeological projects separate their cataloged finds by material and pack them off to specialists. Each expert prepares a somewhat arcane report on 'the ceramics' or 'the glass bottles' that becomes an appendix to a technical report the thickness of an urban telephone directory. Although experts identified and provided insights into the objects as individual artifacts, we held to the principle that the *collection* is the most important unit of analysis. We maintain the integrity of the collection by considering it as a group of objects whose meaning derives chiefly from its use as a group.

Presenting the Information

With such a huge volume of data it was essential to devise a way to present the results that would be palatable to the reader. We wanted to avoid hiding behind lists of objects and technical descriptions. We wanted to integrate history, artifacts, and site structure. Most importantly, we wanted to give readers the data they need to discern the basis for our interpretations without drowning them in data. Most archaeological reports consist of several discrete sections: historical context, fieldwork, artifact analysis, and, some kind of interpretation. Our model dispenses with that division. All the data—from the field, from historical research, and from artifacts—are assembled into a series of Block Technical Reports in a way that professionals can find what they need. This information is integrated back into an Interpretative Report—of which this is an example—a separate document organized thematically by research issues.

The approach is intended to be authoritative without being authoritarian. Each contributor gets their own by-line in the Interpretive Report and can use their own voice. By design, reports on this model employ approaches ranging from the symbolic to the statistical—from highly contextualized interpretations of idiosyncratic artifacts to the kind of analysis of patterned behavior to which the most hard-core scientific archaeologist would not object. And since there is no party line, contributors may disagree with each other or use the same data to suggest different interpretations. The goal is to have a coherent storyline but one that is not driven by any particular theoretical orientation.

How Much Is Enough?

The industrial revolution placed an unprecedented quantity of artifacts into the systemic context. While only a small proportion of this material ended up as archaeological remains, urban sites are frequently awash in artifacts from the mid-19th to the early-20th centuries. Elsewhere I suggested that the repetitive nature of industrial production makes it possible for us to discard certain classes of artifacts without much of a loss to posterity (Praetzellis and Costello 2002). Furthermore, in the section above I described how the AIM-R system helped us decide which archaeological collections should be kept and which should not based on the probable quality of the data each would produce. While this necessary triage helped winnow out many collections (too many, some have suggested), the question remained whether we had reached the level of redundancy. In our report on the SF-80 Bayshore project (Praetzellis, ed. 2004), we asked whether categories of archaeological collections—those that are associated with Irish households, for example—should no longer be collected because, as Wilson wrote ironically of historic farmsteads, "we've got thousands of those" (1990:25)? In a world of limited good (Foster 1965) for archaeology, it is reasonable to ask if the funds could be better employed elsewhere? Is more to be discovered by continuing to accumulate more artifacts associated with a group that is already well represented by archaeological collections?

Implicit in this question is the idea that an archaeologist can define the research potential of a site if they know its supposedly defining characteristic—in this case, the national/ethnic origin of its creators. Our analysis shows that this is incorrect or, at least, only partly true. If our goal were to study a particular national group, then the case could be made that a sample would be sufficient. However, our statistical studies of the archaeology of people we identify as ethnically Irish has revealed patterns that cannot be explained by reference to this demographic category. As the scale of urban archaeology has allowed us to dramatically increase our sample size, we must take a more sophisticated approach to the definition of 19th-century, urban social units. In other words, even if one were to suggest that the study of Irish-ness in San Francisco needs no more archaeological data, the archaeology of households that just happen to be Irish will continue to contribute to the study of urban life in their individual complexity. Nativity is only one defining characteristic in urban life, and perhaps not even the most important.

The Next Step in Urban Historical Archaeology

Driven by the cultural resource management context of the studies, our initial concern has been to assess the research potential of archaeological remains in the short term in order to make the case that a site was worth digging: what could this deposit tell us here and now? Frequently we did this by demonstrating that the remains are associated with a historically identified household, and by constructing interpretations about these people's lives. It is reassuring and safe to interpret things in relation to well-documented historical contexts as all aspects of the data set are as controlled as an archaeological study is ever likely to be. In this report, however, we decided to work on both the large scale, dealing with groups of people, as well as with named individuals. Venturing into archaeology of groups and neighborhoods has required us to step out of our comfort zone. It has taken from us both the security blanket and the tyranny of the historical document. The "written and archaeological remains of the past," wrote John Moreland, "were not created with questions of future archaeologists and historians in mind" but functioned in the reproduction of social life in the past itself. Since text is and was an agent of social transformation, historical archaeologies are more than simply experiments in "text-controlled laboratories" (Mooreland 2001:26). This is not to say that documents become

BLOOMERS CAUSE A SENSATION

Mary Praetzellis

Amelia Bloomer, editor of the first newspaper for women *The Lily* founded in 1849, is credited with the invention of "bloomers." An advocate of dress reform, while not taking credit for the pants-and-tunic outfit, Amelia wrote about the outfit in her magazine. Women responded favorably to the knee-length dress with pants beneath, which provided freedom from the long, heavy skirts of the day. Circulation of *The Lily* increased eight fold, and while it would take many years for women's dress reform to truly succeed, the seed had been planted (National Park Service 2007).

Bloomers became associated with various women's reform movements and those modeling the attire took their share of abuse, even in such a liberal place as San Francisco, as the following piece by Bret Harte demonstrates:

> We have lately had a sensation in the shape of a Bloomer. Unfortunately for the woman who essayed this difficult role, the population did not take kindly to this product of an older civilization and progressive ideas, and she was followed through the streets by a mob of half-grown boys, and finally arrested. Luckily for the credit of the city, after being committed by the police judge, she was released on a *habeas corpus* before another magistrate, who failed to appreciate the legality of any municipal ordinance regulating a woman's dress. The more sensible portion of the community recognized the abstract justice of this decision, although they expressed no sympathy for the offender, whose conduct before and since certainly exhibited no higher purpose than notoriety and the reputation for martyrdom that she acquired. I do not think she made many converts in the community, and perhaps it is well for our social condition and prospects that she did not. Our society is too material in tone already; we cannot afford to accept any innovation which tends to lower the standard of female modesty—to make her more masculine and confident. There is already too great lack of feminism, bashfulness, exclusiveness and timidity in our women, and California cannot countenance any theory, the effect of which is to broaden the sphere of female action at the expense of the home and social circle. There are too few homes here now. There is too great lack of such orthodox institutions as mothers and wives, to exchange them for feminine reformers and prophets [1866g].

A lithograph titled "The Bloomer Costume," published by N. Currier, 1851 (New York). (Illustration courtesy of Library of Congress, Prints & Photographs Division, LC-USZC2-1978)

irrelevant. However, as we move up in scale—an act made possible by the quality and quantity of the archaeological data—we are not longer tied to the immediate, household-level context.

One of the core research issues for urban historical archaeology is the process by which people adapted to life in an industrialized society. It is an intentionally open-ended question and has, of course, no definitive answer. We understand the process by investigating it. The importance of an archaeological collection is, in part, a function of how it advances our understanding. The data created by the Oakland/San Francisco investigations contribute immediately through the interpretations we have presented here and as a resource for the future. The historic problem for California historical archaeology—the lack of truly comparative collections—although not solved, has been reduced significantly. While an archaeological project of the size and productivity of these may not appear for years to come, smaller excavations will produce individual collections that can be added to the database. Furthermore, future archaeologists will be able to use the database to help interpret a newly discovered collection by comparing it with others at a variety of scales and in relation to an almost endless number of material, social, and geographic variables.

Elsewhere, we have suggested that the concept of 'material status' may be useful in understanding the variability of urban life. In particular, we see it as a way of complicating reified constructions such as class and ethnicity. We have seen that material status varied significantly between communities just across the San Francisco Bay as well as between social groups within those communities, showing the variability in how individual households and the groups of which they were a part structured their ideas about status and wellbeing. Using the database, future archaeologists should ask:

- How is this collection similar and different from subsets of those in the database?
- Why is this? What was it about the lives of these people and the conditions in which they lived that created these similarities and differences?
- How was material status constructed *here and at this time*? And why?

For the present, we have achieved our mission within the CRM process. We have recovered important data from sites destroyed in the reconstruction of the West Approach to the San Francisco-Oakland Bay Bridge. We have organized the data and subjected it to various statistical analyses. We have presented the insights of archaeologists at ASC and elsewhere in this volume, in presentations, and in publications. But we have in no way exhausted the potential of these data. We hope that others will continue from where we and our colleagues have left off and bring new approaches to rework our interpretations, as we will continue to present this work in other venues.

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Appendixes on CD

APPENDIX A

Features Associations by Block

APPENDIX B

Feature Snapshots

APPENDIX C

West Approach Block Technical Reports
and Prehistoric Site Report

APPENDIX D

Faunal Data and Artifact Catalogs

APPENDIX E

Beads of the West Approach Project
by Karlas Karklins and Lester A. Ross

APPENDIX F

Consumption and Status in Nineteenth-century San Francisco and Oakland:
Statistical Analyses for the San Francisco West Approach Project
by Bruce Owen