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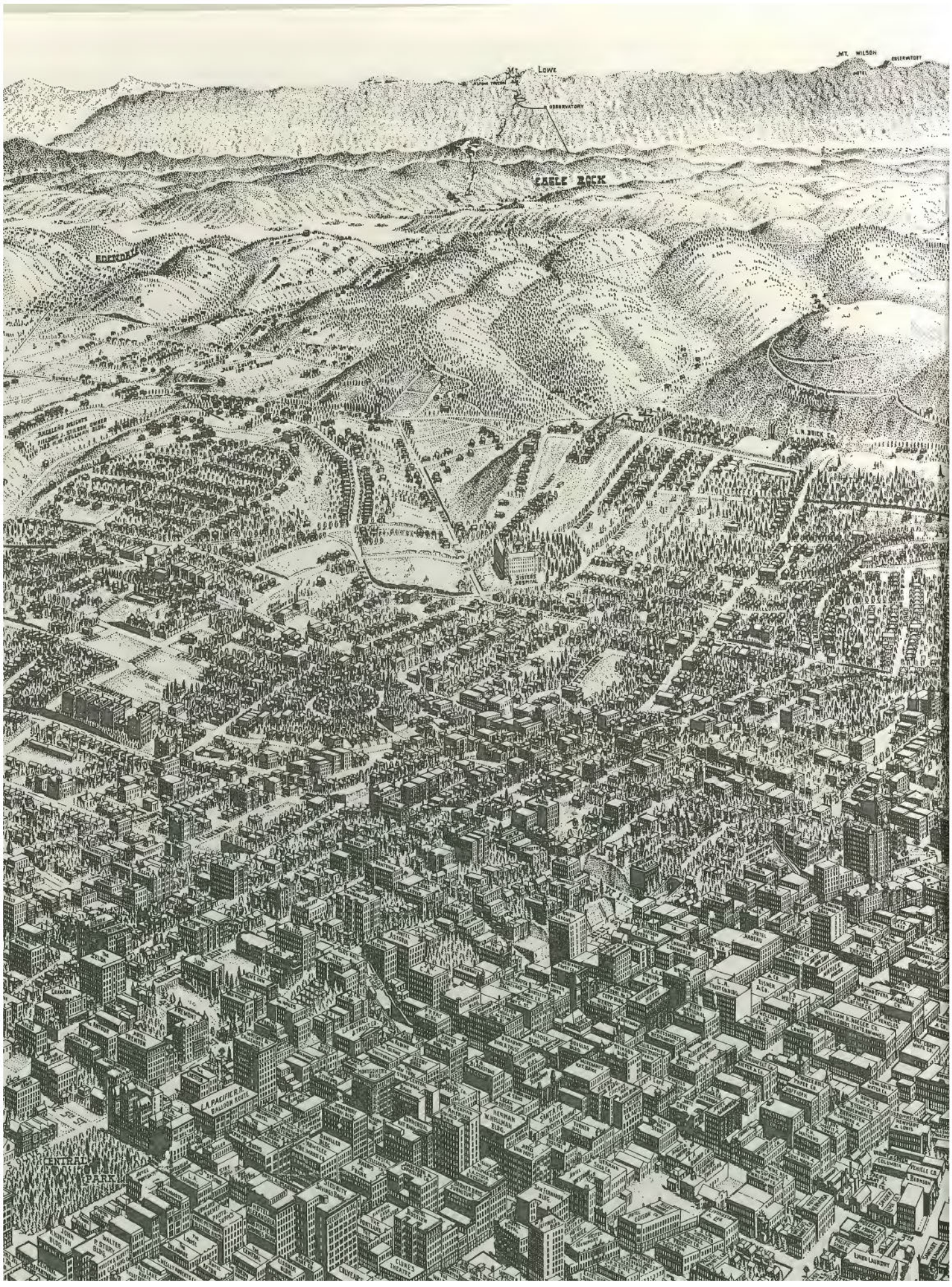
Los Angeles Chinatown
1880-1933



Roberta S. Greenwood



MONUMENTA ARCHAEOLOGICA 18
INSTITUTE OF ARCHAEOLOGY
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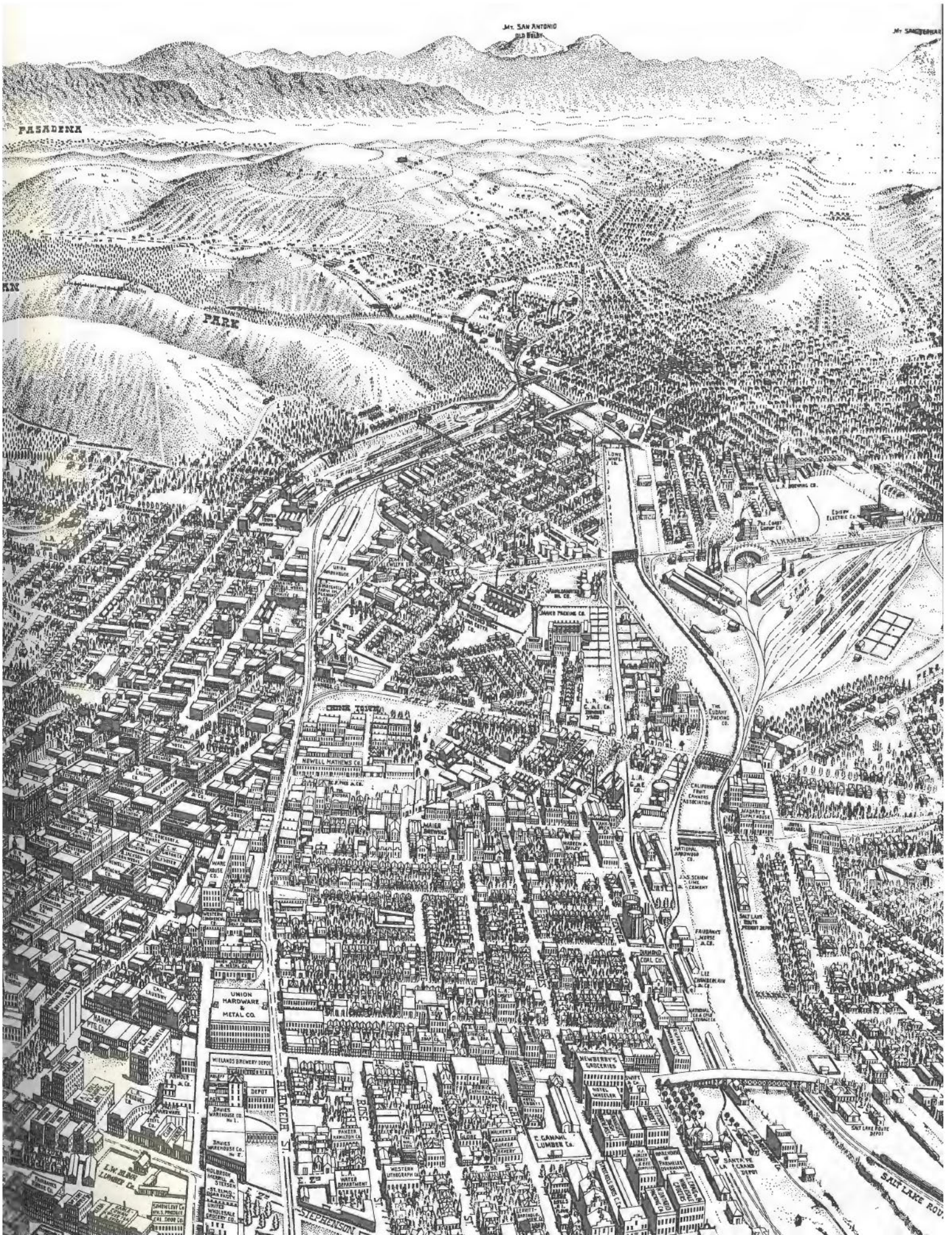
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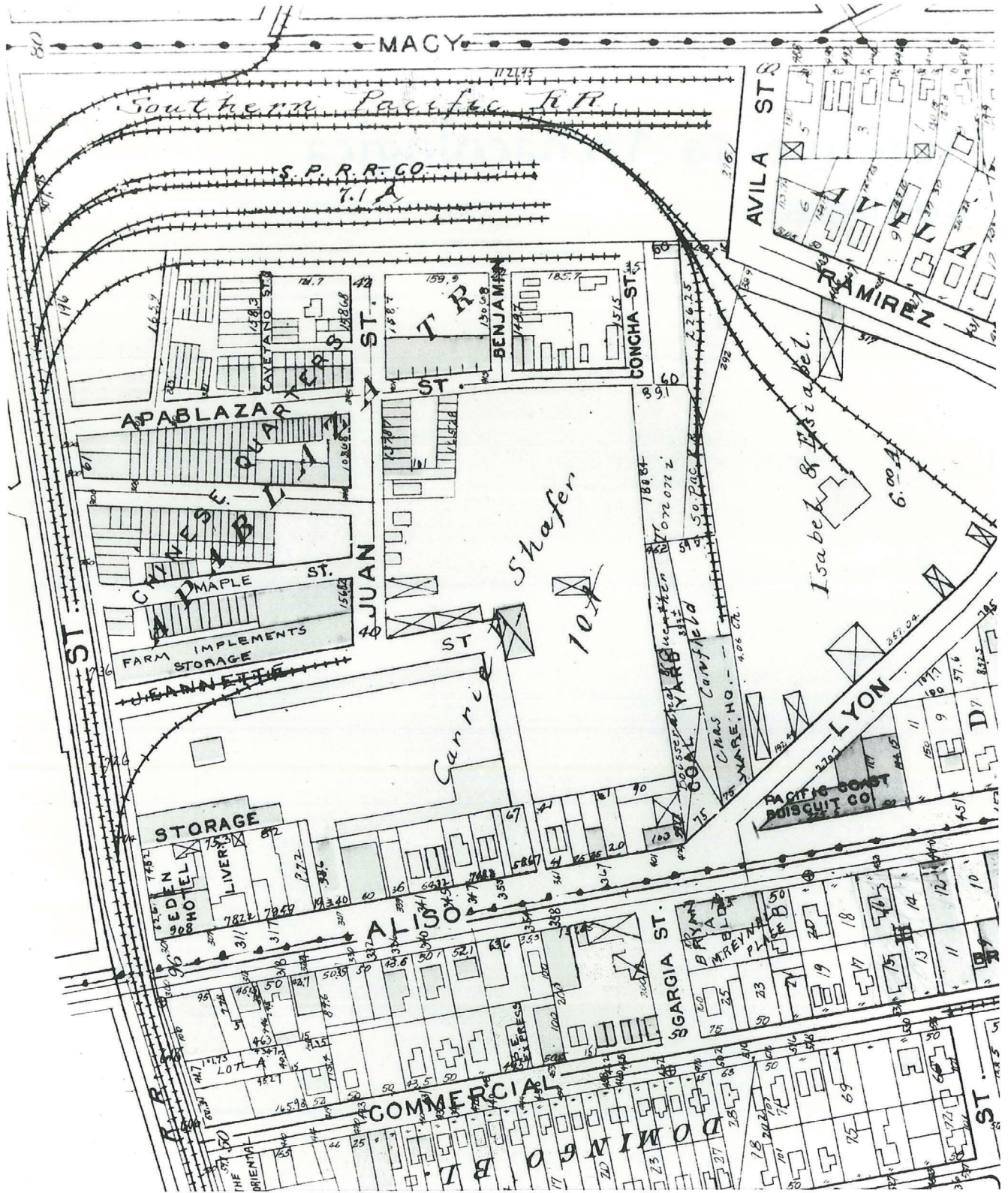


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scholarship was recognized by all
those whose lives she touched.

Monumenta Archaeologica

Volume Eighteen

Institute of Archaeology
University of California, Los Angeles



Chinese Quarters. Baist's Real Estate Atlas: Survey of Los Angeles, California, 1910

Down by the Station

Los Angeles Chinatown, 1880-1933

ROBERTA S. GREENWOOD

*with contributions by Margie Akin, Ronald C. Egan,
Lothar von Falkenhausen, Lynn C. Kronzek, and Mark A. Roeder*

MONUMENTA ARCHAEOLOGICA 18

INSTITUTE OF ARCHAEOLOGY  UNIVERSITY OF CALIFORNIA, LOS ANGELES

1996

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Acknowledgments

THIS VOLUME is a version of the technical report prepared for compliance with the historic preservation stipulations governing the planning and construction of Los Angeles Metro Rail (Greenwood 1993b). As part of the effort to preserve and protect cultural resources which might be affected by construction of the new subway, the public agencies had to avoid and conserve archaeological resources whenever possible, and where preservation was not feasible, to recover and interpret the information which might otherwise be lost. The efforts began with background research, continued during construction with monitoring, included the scientific excavation reported here, and culminated in the analysis of many thousands of artifacts. Comparable efforts were directed toward the many types of fossils present below downtown Los Angeles; the paleontology reports were submitted separately.

Many people contributed to this endeavor by facilitating the contract and fieldwork or by providing special information and insight about the history and remains. I wish to acknowledge the assistance of John Adams, Vice President, Construction, Rail Construction Corporation; James L. Sowell, Manager, Environmental Compliance; Nadeem Tahir and Lynn Struthers in administrative support; and the many Inspectors and Resident Engineers for their cooperation in the field.

In addition to those who contributed to the report, many other specialists assisted in the interpre-

tation of the cultural remains. Lester Ross and Roderick Sprague examined the glass beads; Prof. Robert Kibler advised on the manufacture of Chinese stoneware; Dr. Donald Corbett identified dental items; and Alison Stenger tested the elemental constituents of Chinese ceramics. Mr. David Kaman-sky, Asia Pacific Museum, and Dr. Michael Engh, Loyola Marymount University, provided information on art objects and the early missions, respectively. Nuts and seeds were identified by Elizabeth A. Honeysett. The faunal analysis was conducted at the Zooarchaeology Laboratory, Institute of Archaeology, University of California, Los Angeles, under the direction of Elsie C. Sandefur and Susan M. Colby.

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— ROBERTA S. GREENWOOD

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Time Line

Events, People, and Places in Chinatown, Los Angeles, and the World, 1850-1939

COMPILED TO SUGGEST the setting, atmosphere, and specific events that contributed to the development of Los Angeles and Chinatown, some of these items are intended to recall events on and around the specific parcel studied here, and others may help to establish the human context that conditioned the Chinese settlement and the host community's response to it. Among the many sources are Thompson and West's *History of Los Angeles County, California*. (1880), Newmark's *Sixty Years in Southern California 1853-1913* (1930), and Steve Harvey's "Only in LA" columns in *The Los Angeles Times*. Certain entries pertain to events affecting Chinatown; others reflect the goods, services, entertainments, and utilities available to the greater community as a whole.

- 1850s The *zanjero* (ditchtender) is the highest paid Los Angeles official and earns \$1,200 per year.
- 1851 First Los Angeles newspaper, *The Star*, appears, with two pages in English and two pages in Spanish.
- 1852 Captain Jesse D. Hunter founds first brickyard in Los Angeles; Joseph Mullally founds the second in 1854.
- 1854 Two Frenchmen open the first tannery, on the corner of Aliso and Alameda.
- 1855 First large land sale in the city: Jean Louis Sansevaine purchases the vineyard, cellars, and enterprise of his uncle, Louis Vignes, for \$42,000
- 1856 First shipment of wine from the county to New York is made.
- 1856 Sisters of Charity open a school, orphan asylum, and later a seminary in an imported frame house at the southeast corner of Alameda and Macy.
- 1864 Earliest known Los Angeles embossed bottle is marked "M. Keller California Wine Bitters."
- 1865 W. H. Perry is awarded a franchise for lighting the city streets by gas.
- 1866 Pershing Square is declared an official city park and is surrounded by picket fence to keep out cattle and horses.
- 1867 First local gas plant is built on Olvera Street.
- 1868 First two banks open in Los Angeles.
- 1868 Los Angeles City Water Company receives franchise; begins to replace old *zanjas* (ditches) and horsecart deliveries with wooden pipes and reservoirs.
- 1869 Railroad depot is built at southwest corner of Alameda and Commercial Streets, to serve the line between Los Angeles and Wilmington.
- 1869 Pico House and Merced Theater are built in El Pueblo.
- 1870 There were 110 saloons in the pueblo, one for every fifty residents. (In 1996, there is one bar for every 800 residents.)

- 1870 Houses in Los Angeles are numbered by City Council, with even numbers for the south and east sides of streets and odd numbers for north and west sides.
- 1871 Machine-manufactured ice first goes on sale. Previously, ice was shipped from Truckee and was therefore very expensive.
- 1871 Nineteen Chinese are killed in night of rioting at El Pueblo.
- 1872 First Los Angeles City Directory appears.
- 1872 First fire engine, a second class steamer, is brought to Los Angeles
- 1873 High school and Los Angeles Public Library are constructed.
- 1874 First street railway, 2½ miles long, is put into operation,
- 1874 Exploratory boring for oil begins in the mountains around San Fernando.
- 1875 Joss house in El Pueblo is demolished.
- 1876 Southern Pacific Railroad reaches Los Angeles.
- 1877 Caroline Severance opens first kindergarten.
- 1877 Evergreen Cemetery is laid out.
- 1880 University of Southern California is founded.
- 1881 *Los Angeles Times* begins publication.
- 1882 Chinese Exclusion Act is passed.
- 1882 *Los Angeles Times* publishes first illustration in a news story.
- 1882 On December 30, first seven electric street lights are turned on; thirty-six masts are installed by 1886.
- 1882 First Los Angeles telephone directory appears, with ninety assigned numbers. Evergreen Cemetery is 69.
- 1882 Gas streetlights are replaced by electric.
- 1882 Castelar School is founded. It is the second oldest Los Angeles school in continuous operation and is still the only predominantly Asian school.
- 1883 Worried pedestrians request that City Council enact a law requiring bells on speeding bicycles. Ralphs Grocery is founded.
- 1884 Southern Pacific operates out of River Station, out of Arcade Station from 1888 to 1914 and out of Central Station from 1914 to 1939.
- 1885 Santa Fe Railroad enters Los Angeles. There are eighty practicing lawyers.
- 1885-86 Los Angeles Trades & Labor Council, Anti-Chinese Union, and Knights of Labor promote boycott of Chinese.
- 1887 Major fire, of uncertain origin, destroys most of the earliest Chinatown west of Alameda Street.
- 1887 Chinese United Methodist Church is present at 204 Marchessault (at different location in 1893).
- 1887 Charity Street is renamed Grand Avenue because downtown residents didn't want to "live on Charity."
- 1888 Eastside Water Company lays 20 miles of pipes, serving Boyle Heights and area north of Aliso Street.
- 1888 First Sears, Roebuck catalog is distributed
- 1888 Stone monument to deceased Chinese is erected in Evergreen Cemetery.
- 1888 George Eastman markets the first Kodak camera. Cracker Jacks are introduced.
- 1889 First Tournament of Roses Parade in Pasadena.
- 1890 Sisters of Charity move from Macy and Alameda to Boyle Heights.
- 1890 Twenty-seven women doctors practice in Los Angeles; no female lawyers. Census records forty Japanese residents.
- 1891 First elevator, in the four-story Nadeau Hotel, operates in Los Angeles. Bekins Moving and Storage Company is established.
- 1893 Santa Fe Railroad dedicates La Grande Station on Santa Fe Avenue between First and Second Streets.
- 1893 On July 4, Mt. Lowe Scenic Railway in the San Gabriel Mountains opens.
- 1893 The first Ferris wheel is installed, in Chicago.
- 1894 Juan Street Mission School is known to be in operation.
- 1894 Bradbury Building is completed at 3rd Street and Broadway. Labor Day becomes a national holiday.
- 1895 Fossils are discovered at La Brea Tar Pits.
- 1896 Broadway Department Store is opened at 4th and Broadway. American premiere of *La Boheme* is staged at Los Angeles Theater, 227 S. Spring Street.
- 1897 *Guide to Los Angeles Brothels* is distributed during the City's annual fiesta.
- 1897 First golf course, at Pico and Alvarado,

- opens. First record of an automobile being driven on Los Angeles streets.
- 1898 Fire destroys fourteen Chinese dwellings on Apablasa Street.
- 1901 Angel's Flight inclined railway is installed at 3rd and Hill Streets. It is removed in 1969 and reinstalled in 1996.
- 1902 Chinese Gospel Mission operates at 425 Apablasa Street.
- 1905 Chinese soldiers, training with the US Army in Los Angeles, march in Tournament of Roses Parade.
- 1905 State requires license plates on autos; owners had to make their own until 1914.
- 1906 First motion picture studio in Los Angeles opens.
- 1907 Bullock's opens at Broadway and 7th Street. Mother's Day is observed for the first time in US.
- 1908 Philippe's opens on Alameda Street. First taxicab in Los Angeles operates, with a fare of 30¢ for the first ½ mile and 20¢ for each additional ¼ mile.
- 1909 City reform administration eliminates brothels.
- 1909 First motion picture filmed entirely in Los Angeles is made at the rear of Sing Loo Laundry, on Olive Street between 7th and 8th.
- 1910 Los Angeles appoints Alice S. Wells as first policewoman.
- 1912 First gas station operates at Grand Avenue and Washington Blvd., with gas costing 8¢ per gallon. Boos Brothers, first cafeteria, opens.
- 1913 Automobile Club of Southern California reports that California leads all states in number of autos owned, one car per twenty-eight people.
- 1913 William Mulholland opens Owens Aqueduct.
- 1916 First power pole for overhead lines goes up in Highland Park area. Driver's licenses are required.
- 1916 David Jung, Los Angeles noodle manufacturer, invents fortune cookie.
- 1917 First Los Angeles parking lot, at 4th and Olive Streets, charges a 5¢ a day.
- 1920 Female suffrage amendment passes.
- 1923 Auto dealer Earle C. Anthony operates first neon display in US, at corner of Wilshire and La Brea.
- 1927 Charles Lindbergh flies nonstop from New York to Paris.
- 1928 Los Angeles City Hall is completed.
- 1933 On December 23, demolition of Chinatown begins.
- 1937 First McDonald's restaurant, near Pasadena, opens.
- 1938 Built on a vacant Santa Fe Railroad yard, New Chinatown opens on June 26. The main square is one of the first pedestrian malls in southern California.
- 1939 On May 7, first train arrives at the new Los Angeles Union Passenger Terminal.

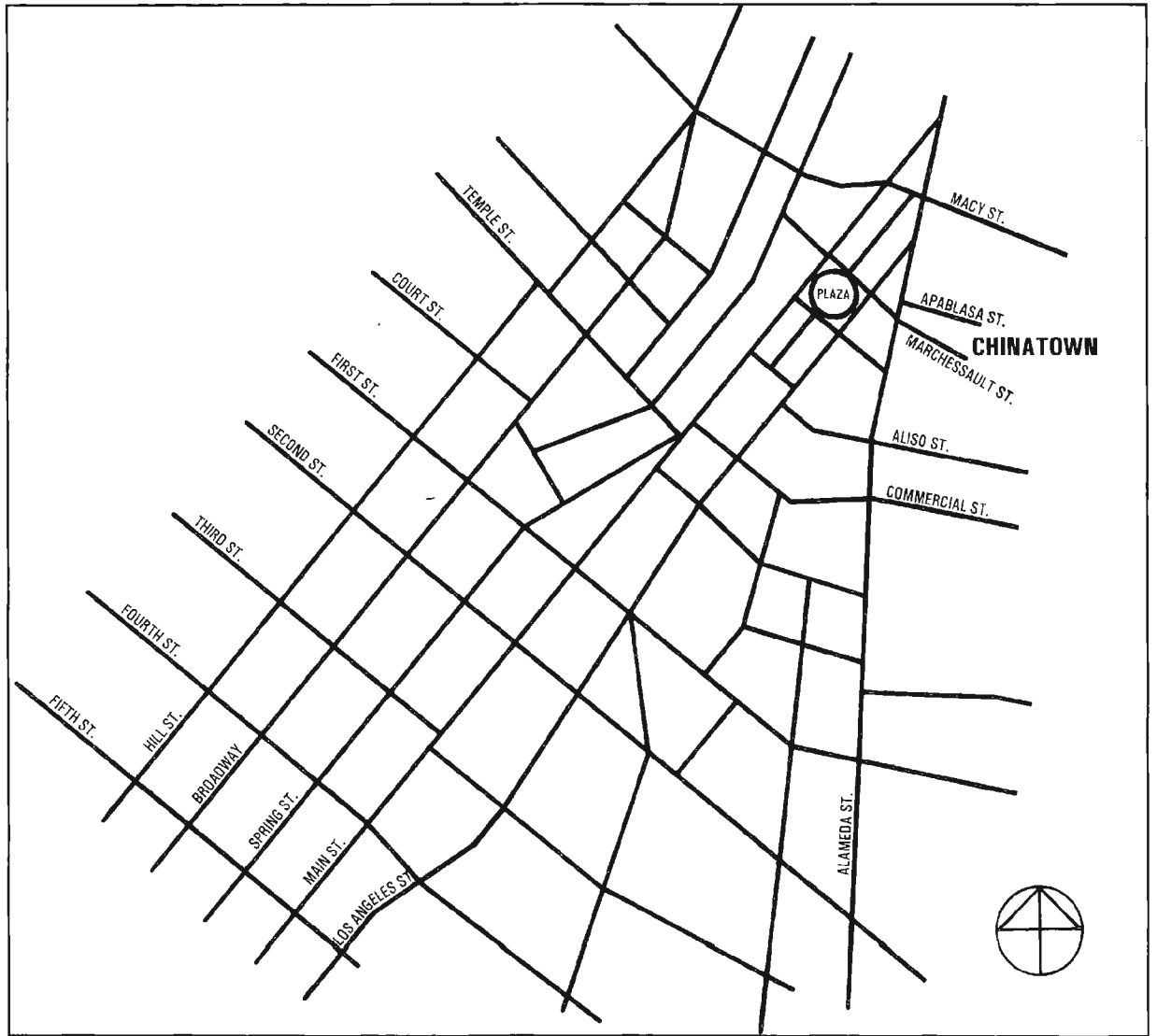


FIGURE 1.1
Location of old Chinatown.
Map by D. Slawson

Introduction

No one anywhere has written anything meaningful on the cultural life of “ordinary” Chinatown people. For all of their extensive efforts in the 1960’s and 1970’s, scores of social scientists, historians and psychologists provided very little in the way of substantive, penetrating insight. The myths, legends, folklore, rituals, festivals and beliefs of a burgeoning segment of the American community have neither been taken seriously nor fully understood for what they represent: the very context within which an entire people exist and assert their being.

– Benjamin R. Tong,

Chinatown Popular Culture, p. 233

THIS VOLUME makes no pretense of filling that great gap in the portrayal of the experience of Chinese Americans. It does attempt to add to the “very context” for a portion of the Chinatown of Los Angeles. Historical research and archaeological excavation are combined to illuminate a way of life that escaped adequate or accurate documentation at the time. Although human behaviors are not fully represented by objects found in the ground, such artifacts can provide evidence of rites or customs and can be used to test the conventional beliefs expressed in the English-language press and scholarship alike. Explained by some as a voluntary association for sociability and economic exchange, as a mechanism to guarantee the survival of traditional lifeways, or as a defensive response to hostility on the part of the host community, Chinatown’s very

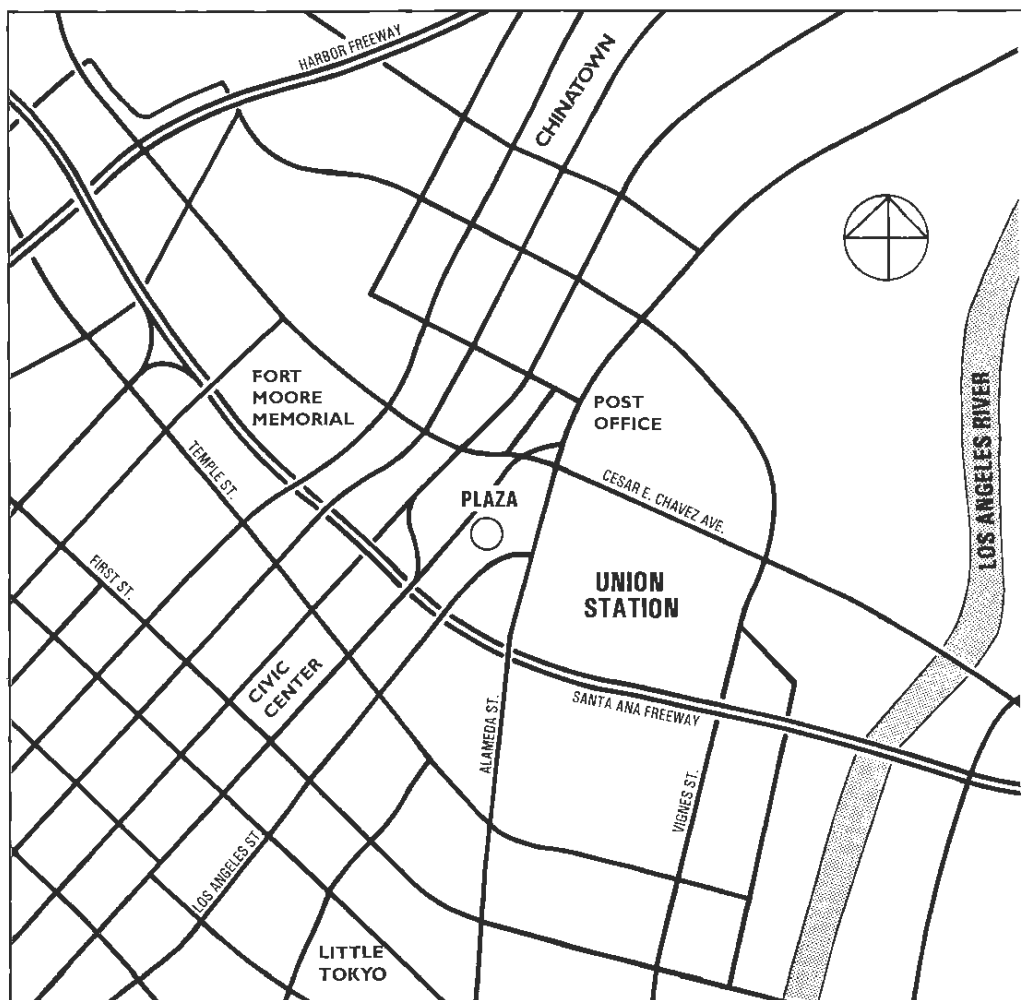
existence eludes the assignment of any single cause or motivation. Conventional wisdom also tells us that there were no women in Chinatown, that gambling was exclusively a Chinese pastime, that the society of Chinatown was rigid and unchanging, and that there was no interaction between the people of Chinatown and the rest of Los Angeles. Such oft-stated beliefs can be evaluated in light of the evidence from the documents and the physical remains.

The physical remains reported here come from a portion of the Chinatown of Los Angeles that is circumscribed in time, from the 1880s to 1933 when all the structures were demolished, and in space, being limited to the area behind the 1939 Union Passenger Terminal exposed by construction of the Metro Rail subway system. The settlement reported here was not the very first area occupied by the Chinese in Los Angeles, but the earliest focus – in the adobes around the Plaza abandoned by the Hispanic pioneers – has largely been destroyed by successive development and redevelopment. The community reported here took root on vacant land that had been used almost entirely for agriculture and persisted intact until the demolition that sealed its remains below many feet of sterile fill – unique therefore in its state of preservation and the unmixed nature of its deposits.

Los Angeles was not unique in having a Chinatown. “There is not a large city west of the Rocky Mountains free from a Chinatown” (Wu 1928:149);

FIGURE 1.2

The construction of the Metro Rail subway system exposed the area behind Union Station, which was occupied from the 1880s to 1933 by Chinese settlers and was demolished in 1933 to make way for the station. The area is unique in its state of preservation and the unmixed nature of the deposits. Location of new Chinatown and other landmarks are also shown. Map by D. Slawson



so, too, New York, Boston, and Chicago all had early Chinatowns. There were Chinese settlements in the small Gold Rush towns of the Sierra, as well as in labor camps supporting the construction of railroads and water systems and the fishing and agricultural industries. By 1860, there were Chinese in all but five counties of California, and by 1870, Chinese Americans in all the counties (Wey 1984:319). At first, the majority resided in rural areas (Miller 1955:177), but as the railroads were completed and employment opportunities dwindled in mining and water projects, the newcomers moved to the cities.

The study of the Chinatown of Los Angeles (fig. 1.1) is unusual because of its unparalleled integrity, its size, its fifty years of continuous occupation, and the federal requirements for data recovery. Further, this was a total community – with families, businesses, social and ceremonial organizations, and an internal structure. Smaller or transient occupations, created by small, largely male groups engaged in

mining, farming, railroad construction, or fishing, have left behind scant evidence at best and little archival history. These occupations have often gone unrecognized or unstudied before being destroyed. Some sites – those in Phoenix, San Francisco, and several in Idaho – are of mixed national origin; the deposits in Riverside were disturbed; and others – including San Luis Obispo and Santa Barbara – have been excavated but never reported. Dating and association of materials from the Tucson Chinatown are somewhat obscured by the culturally mixed long-term occupation and inclusion of ethnological collections as late as the demolition for urban renewal in 1973. Beyond civic improvements and the inexorable pace of urban growth, natural forces, such as the flooding in Napa and erosion on the Channel Islands, have contributed to the destruction of other sites.

This volume summarizes the historical research, fieldwork, and laboratory analysis undertaken dur-

ing the construction of the Los Angeles Rail Rapid Transit Project, Minimum Operable Segment 1 (MOS-1), from 1987 through 1992. The studies of cultural resources were conducted in compliance with the regulatory context of Section 102(2)(c) of the National Environmental Policy Act of 1969; Sections 3(d) and 14 of the Urban Mass Transportation Act of 1964, as amended; Section 106 of the National Historic Preservation Act of 1966; and Section 4 (f) of the Department of Transportation Act of 1966. The Memorandum of Agreement among the California State Historic Preservation Officer, Urban Mass Transit Administration, Southern California Rapid Transit District, and Advisory Council on Historic Preservation specifically recognized the potential for significant archaeological resources below the Union Passenger Terminal which would be affected by the construction of the Metro Rail tunnel and its associated facilities. Already listed on the National Register of Historic Places for its historical and architectural qualities, the railroad station is now also recognized as a unique archaeological resource.

One of the first five stations of the Metro Rail Red Line, the Union Passenger Terminal vicinity (fig. 1.2) was monitored for archaeological resources beginning in April of 1987. During monitoring, isolated or displaced historical artifacts were collected, and professional personnel responded to unanticipated discoveries: an intact Chinese deposit underneath an elevator shaft inside the station and another within the baggage handling area. These finds confirmed predictions that significant remains of Chinatown would be affected when heavy construction began. Historical maps and data were compiled and digitized maps – illustrating the structures of Chinatown with reference to modern streets, the railroad terminal, and the projected Metro Rail alignment – were generated in preparation for encountering the anticipated resources behind Union Station. An archaeological site record was developed, and the Union Station block was designated CA-LAN-1575-H.

Controlled archaeological excavations in Chinatown were limited to the right-of-way and further constrained by existing passenger tunnels, facilities, operation of the trains, and prior impacts such as excavation for the passenger bridge (fig. 1.3). The fieldwork was planned to accommodate the construction schedule; in effect, the investigations were conditioned in both time and space by windows of opportunity. Major phases of excavation occurred



FIGURE 1.3
Excavations for the passenger
bridge. Photo by R. S. Greenwood

during construction of the slurry wall (24 October to 4 November 1989), at emergency exit no. 10 (8 to 13 February 1991), and at the west entrance (25 February to 15 March 1991). Most of the materials described here were recovered during these efforts.¹

Within the small areas accessible for scientific excavation, fifty-nine distinct features were identified and either sampled or recovered in full. Many contained unprecedented numbers and densities of artifacts. In feature 29, for example, there were 1,171 pounds of stoneware shipping jars, 456 porcelain vessels, 207 glass tokens used in gambling, 17 Asian coins, 25 items related to opium smoking, 10 ceremonial candlesticks or incense burners, fragments of 5 Chinese porcelain spittoons, a carved ink stone, pieces of at least 2 clay stoves, 113 medicinal vials, 10 toothbrushes, 321 buttons, 17 toy marbles, 3 dolls, and an abundance of food remains and other materials. Together, the assemblage documents food import, preparation, and service; recreation; health practices; presence of women and children; rubbish disposal practices; and participation in local retail network. Translations of Chinese characters on ceramics, glass, and newsprint; elemental analysis of stoneware and porcelain; identification of seeds; faunal study of two features and selected fish; and interpretation of more than three hundred Asian coins all contributed to creating a rich picture of community life and relations.

The events, structures, persons, and organizations within the Union Station context before and during the years of Chinatown are documented. To

gether with the artifacts and structural remains, this material illuminates aspects of lifeways not previously reported. Evidence for asserting that acculturation was limited (right up to the demolition of Chinatown) includes containers for the same imported foods and herbal remedies, diagnostic selection of food animals and butchering patterns, persistence of Chinese names and burial practices, Old World leisure activities, and settlement patterns as revealed in traditional architecture and land use. Euroamerican businesses were never able to penetrate the internal economic organization; Chinatown residents responded to hostility and prejudice by drawing ever closer to maintain their ethnic boundaries and cultural traditions. Social interactions with the host city were limited but included Chinese patronage of Euroamerican pharmacies, herbal doctors practicing in the broader community, and children's attendance at public and mission schools. The closest organizational ties were with Chinese groups based or originated in San Francisco. Relations with the homeland involved political action, importation of goods, return of the deceased to China for reburial, and, despite efforts by the US to restrict immigration, a demonstrable – if sporadic – flow of newcomers.

One of the most important results of the work conducted is proof that the site retains its integrity, buried beneath the some 14 feet of fill imported to build the station and level the trackbed. The upper limit of the site in some areas is marked by a layer of brick, pavement, and other rubble that remained following demolition. Below this layer are the early streets and sidewalks, floors, privy pits, refuse deposits, structural remains, and sheet (surface) trash – these are pristine – as they were created, abandoned, and covered. Because they have not been disturbed, such features are invaluable to scientific inquiry: each has a context that can be related to a specific household, occupation, or function. Given that it was created on previously unoccupied ground and continued to exist until it was destroyed, its constituents are unmixed with the remains of either earlier or later occupations.

The manner of presentation of very large archaeological collections has taken many approaches:

by materials (grouping all glass items or all ceramics together), by function (food preparation or recreation), and by place of origin (Chinese or Euramerican manufacture). All may be defensible, yet each fails in one regard or another to illuminate the full picture of life as it was lived by a certain group of people in a particular locality at a given period. Presenting the data needed to contribute meaningfully to an understanding of the Chinese Americans who lived on the Union Station property from the 1880s to 1934 is the objective of this volume. For this reason, the division of data into chapters is eclectic. For example, Chinese porcelains and stonewares are grouped because many researchers may wish ready access to information about these imported ceramics. The section on health and hygiene is more broad based, given that the excavations demonstrated that the residents cleaned their teeth with brushes made in both China and Europe, with European and American dentifrices, and when ill, used both traditional, imported Chinese remedies and the prescriptions of local pharmacies. The organization is basically functional but departs from rigidity when the objectives of interpretation or comparison are better served. Not every artifact is included in this report; the full catalog, all working papers, and tabulations, including inventories and identifications of discarded materials, are available for reference at the curating institutions.²

Notes

1. Cultural resource services included installation of both temporary and permanent artifact exhibits and the fully detailed technical report submitted to the Metropolitan Transportation Authority (Greenwood 1993b).
2. A cooperative agreement among the Los Angeles County Transportation Commission, Metropolitan Transportation Authority, Rapid Transit District, and Catellus Corporation has provided for the curation of the artifacts, field notes and catalog, and descriptive materials far beyond the scope of this report to itemize in detail. The faunal and floral remains have been accessioned by the Institute of Archaeology, University of California, Los Angeles; all other cultural materials have been curated by the Chinese Historical Society of Southern California.

Historical Background

Lynn C. Kronzek and Roberta S. Greenwood

LONG BEFORE Union Station was built and before there were enough Chinese in all of California to form a community, the area just east of the founders' Pueblo de Los Angeles was used to cultivate orchards and vines. Although the area northeast of San Francisco is now synonymous with US viticulture, it was Southern California which promised to become the major center of grape growing and wine-making during the nineteenth century, when the industry was in its infancy. In fact, when eighty residents of San Francisco gathered in their City Hall in 1847 to celebrate their first Thanksgiving in California, the beverage was "Don Luis" wine made in Los Angeles on this property. This city has a viticultural heritage of its own, particularly in the tract of land hedged by Alameda Street on the west and what became Macy and Aliso to the north and south.

Early Land Use

As early as 1831, there were vineyards on the east side of Alameda Street; Ballesteros had 4 acres in grapes, Luis Vignes, 5 acres, and Maximo Alanis, 5 acres. Juan Ramirez had 5 acres, Juan Apablaza had 2 acres, and other growers in the area "northwest of Aliso Street" were such familiar names as Abila, Sepulveda, and Carillo (Thompson and West 1880:64). Shipping from San Pedro to San Francisco, New York, and on to Europe had begun in the 1850s, and in 1867 Los Angeles had fifteen of the



FIGURE 2.1
Matthew Keller's circa 1860 home at 726 Alameda was reputed to be Los Angeles' first brick residential structure. Keller was a leading agronomist and viticulturist in early Los Angeles. Photo courtesy of Marian Francis, granddaughter of Matthew Keller

thirty-six distilleries in the county (Thompson and West 1880:66).

The growth of the industry owed much to one man. A native of Cork County, Ireland, Matthew Keller came to Los Angeles in 1850 and opened a small store on the southwest corner of Commercial and Los Angeles streets, which soon led him to another pursuit: packing and shipping grapes. He then decided to grow his own (*Los Angeles Express* 1881) and purchased between 10 and 20 acres of city-owned land bordering on Aliso and Alameda streets. His empire later spread to present-day Malibu. Keller's

circa 1860 home at 726 Alameda was reputed to be Los Angeles' first brick residential structure (fig. 2.1). In 1862, he divided the Aliso-facing property into lots, supposedly to insulate his vines from pilferers (Gordon 1933:11).

Matthew Keller was more than a viticulturalist: he creatively pursued agronomy, buying Central American and Hawaiian orange seeds for Southern California cultivation and becoming the first Californian to raise cotton. Keller nevertheless devoted his lands bordering Alameda Street to vines – about a hundred thousand (Salvator 1929:63, 69). To fulfill his long-range plans, he sent his son, Henry William Workman Keller, to New York to study German and other formal subjects. Because his father wanted him to be fluent in both languages of viticulture, the nine-year-old lad then headed for France (Francis 1991).

When Austrian Archduke Ludwig Louis Salvator toured the United States in the 1870s, he noted that Matthew Keller “largely controlled” the vineyards in and around Los Angeles. The “garden . . . on Alameda Street . . . merits mention,” wrote the Archduke. Here, Keller’s vines yielded “claret, port, white wine, madeira, sherry, and angelica.” According to Salvator (1929:139),

To prepare them, he has purchased a complete equipment of presses, distilleries, and miscellaneous equipment. His wines are exported in large quantities and his products have an enviable reputation on the market.

Keller apparently ordered the first embossed glass beverage bottles used in Los Angeles (Loakes 1991). In 1863, and only in that year, he bottled “California Wine Bitters” in a light olive bottle with a push-up base (Wilson and Wilson 1969:18). His use of the name was challenged as a patent infringement, and he discontinued this bottle but continued to sell brandy bitters. His sherry earned special distinction, capturing the silver medal at the Centennial in Philadelphia. Accordingly, his local operations bustled with activity:

The wine and brandy manufactory and cellars are located on the home place, Alameda Street. The machinery has a capacity for crushing fifty tons of grapes in a day, and turns out during the season, 200 gallons of brandy and 1,000 of wine daily. . . . The wine cellars, of which there are two – one 60 x 60 and the other 50 x 300 – are located on the home place adjoining the works. With all the old stock sold and only the

vinegar of 1879 on hand, he still had one hundred thousand gallons of wine in the store. (*Los Angeles Express* 1881)

A civic-minded individual who became fluent in Spanish, Keller served as a Los Angeles City Councilman, a “Public Administrator” for the county in 1854–1857, and a County Supervisor in 1864–1865. He was also on the boards of the Pioneer Oil Company and Farmers and Merchants Bank and was vice president of the “Los Angeles Grape-growers’ and Wine-makers’ Society” in 1866. His death in 1881 prompted an outpouring of tributes:

His robust frame and blond hair, in which scarcely a streak of gray could be detected, gave him the appearance of a man of not over fifty years of age. His friends were frequently in the habit of rallying him on his healthy and youthful appearance, and most of them thought the old gentleman, although past seventy, was good for ten years of life. Universally known in Southern California, and a favorite with great numbers of our people, the death of this useful citizen and worthy man will cast a pall over a larger circle. (*Los Angeles Express* 1881)

Keller’s property was subdivided among heirs, who owned the land until the early 1900s when the railroad companies began their battle over it.

Directly to the south of Macy Street lived Benjamin D. (B. D.) Wilson. Another notable pioneer whose name lives on in Mt. Wilson, he shared with Keller certain ideas about land use: an 1855 map depicts Wilson’s 7.5 acres as covered with vineyards. Like Keller, he was a leading agronomist. Wilson demonstrated, for example, that seeding – rather than grafting – was the most effective way of growing orange trees. His Macy-Alameda property was dwarfed by his other holdings, including as many as two hundred thousand vines in San Gabriel (Salvator 1929:63,69).

Wilson had civic interests, too, being one of the earliest and most vocal advocates for urban development and railway expansion. Speaking to a group of four hundred citizens at the county courthouse in 1872, he warned that “the Southern Pacific has the line of survey . . . laid down through our city, but being 50 miles shorter direct to San Bernardino (via Cajon Pass), it may prefer to leave us without calling” (Jarel 1991). City and county subsidies subsequently enticed the Southern Pacific, and the company later purchased what had been Wilson’s Macy Street property.

Local viticulture continued even during the era



FIGURE 2.2
Home of the Sisters of Charity in 1856, this large wood frame house was shipped around Cape Horn to Los Angeles from New York. The Sisters of Charity established their first Los Angeles hospital in 1853. *Drawing courtesy of Seaver Center for Western History Research, Natural History Museum of Los Angeles County, no. 10*

of railway acquisition. East of Wilson's property and the Avila estate, Ballesteros Vineyards flourished. A photograph from February, 1939 captured the Padre Vineyard Company, across the Alameda-Macy intersection from the new Union Station.

In 1856 Wilson sold the parcel to the Sisters of Charity for \$8,000 (Gordon 1933:18). It is not clear whether it was Wilson or the Sisters who caused a large wood-frame house to be shipped around Cape Horn to Los Angeles (fig. 2.2). A caption on photo no. 1-78 in the collection of the Seaver Center attributes the structure to Wilson, but Newmark (1930) reported that the Sisters sent to New York for the house. Once it arrived, he also noted, nobody could reassemble the structure, even though the parts were numbered, and the nuns had to send back to the East for a carpenter to complete the job (1930:203). This Catholic religious order had established its first Los Angeles hospital in an old adobe on upper Main Street in 1853. Three years later, the Sisters held a public fundraiser so that they might start a school and orphanage, and they moved to the Wilson property in February of 1856 (Engh 1991).

The nuns added to their local holdings by purchasing adjoining lots. A delinquent tax list noted that the land contained "a college, two wooden houses, a hospital, 6,000 vines, and 300 fruit trees," the latter undoubtedly remnants of the Wilson era (*Los Angeles Star* 1861). The Alameda site and the Sisters' infirmary also housed the County hospital from 1858 to 1869 (Engh 1991). Other sources mention a seminary for nuns, although it might have been the same institution as the "college." In 1872 the Sisters

operated both boarding and day schools for girls, offering instruction in French, Spanish, and German; tapestry and embroidery; art and music; piano and guitar; and "etc." Room, board, and tuition were \$200 per term of ten months, with laundry service costing an additional \$30 (King and Waite 1872:32).

Arrival of the Railroad

The Southern Pacific found boosters in B.D. Wilson and other pioneers who advocated trains as a catalyst for Los Angeles' growth; public subsidies were soon provided as encouragement to the railroad: in 1873, the railroad extended its tracks along Alameda from the Commercial Street terminus past Macy Street to what became known as "Naud Junction" at the intersection with North Main Street. Operations commenced early in 1874, as trains chugged 22 miles farther north to San Fernando. When completed, Sacramento was the final destination for the "San Joaquin Route," which continues to serve Los Angeles today (Jarel 1991).

Train lines also proliferated on the east-west axis. Designed to simplify the transfer of freight from trains to individual vehicles, team tracks were installed sometime after the Southern Pacific purchased its land, probably around 1890 to 1894. The brief route started at Alameda and ran east along Macy for a few hundred feet, curving through what had been the Sisters of Charity estate. The term "team tracks" harks back to the time when wagons, pulled by teams of horses, awaited the arrival of railroad cars – and the merchandise aboard them (Jarel 1991).



FIGURE 2.3
The Apablasa family homestead, credited as Los Angeles' oldest wooden structure, was razed as part of the Chinatown demolition. *Photo courtesy of Regional History Center, University of Southern California*



FIGURE 2.4
Son of landowner Juan, Cayetano Apablasa, Sr., expanded the family holdings. *Photo courtesy of Seaver Center for Western History Research, Natural History Museum of Los Angeles County, no. 3866*

Henry Huntington's Los Angeles Railway Company laid track for streetcars on Macy Street in 1899. About eleven years later, under the Pacific Electric Company, this became the "Brooklyn Avenue Route" and, later, the "B Line" (Kielty 1991).

The increasing encroachment of railroads and commercialism upon what had been a tranquil, rustic environment caused the Sisters of Charity to remove from the location. Selling their property to J.M. Griffith for his lumberyard, the Sisters moved the orphanage to Boyle Heights in 1890. The Southern Pacific Railroad ultimately purchased the estate. Another factor may have hastened the move: growing numbers of Chinese, Sister Mary Scholastica Logsdon lamented, posed a "more objectionable feature" (Engh 1991). A thriving Chinatown came to dominate the community, specifically the land of Juan Apablasa. Both the archeological excavation and this historical synopsis focus on the evolution and culture of what was soon called Apablasa Street.

The Apablasa Family

Little is known of when Juan Apablasa first came to Los Angeles and why. According to the 1850 census, he was born in "Chili" (Chile). The patriarch was supposed to have gone to San Francisco, according to his great-great-grandson, but a layover in Los Angeles convinced him of this area's merits (Apablasa 1991). The family consistently spelled their name as Apablasa, but the street appears in maps and documents as Apablasa, Apablaza, and even Apple Blossom. (When documents are cited here, the spelling is given as it appeared.)

Juan Apablasa probably leased land before purchasing it in 1848 and, like the Sisters of Charity, added to his original holdings. The former owner, Rosalia Dalton, possessed a garden bounded by the properties of Encarnación Sepulveda, Juan Ramirez, and Maria Antonia Pogerión. Ramirez and his descendants retained their parcel for years as reflected in a surviving street name. The 1855 map shows Apablasa directly south of B. D. Wilson's holdings; perhaps the Chilean had consolidated his holdings quickly. A more solid line of demarcation existed on the opposite end of the parcel, as Keller laid fence around his vineyards (Superior Court of the State of California, case no. B15709, 1914). There is evidence that Apablasa, too, cultivated the grape. The 1848 deed to his property reads:

She [Dalton] delivers the place to Juan Apablasa at the rent of half the products and expenses, and when she dies, if it happens after the year 1849, Apablasa will give as the value of the vineyard and appurtenances, \$250, and it will remain his property; but if she wishes payment before to conclude the sale, Apablasa will give to the said Señora one barrel of grape brandy each year during her life. (*Los Angeles Herald Express* 1959)

According to 1850 census, "Juana Pablasa" was a 50-year-old farmer with a California-born wife, Maria, who was twenty years his junior, and five children. The "Joaquim Feliz" family also resided on the property. Judging from their ages and places of birth, the adults might have been siblings of Maria.

At the 1860 census, Apablasa rectified the official spelling of his name but remained 50 years old. Maria and some of the children had died and another daughter was born — although enumerators frequently misspelled the names and confused the girls with boys. At this time, however, the Feliz family were no longer dwelling on Apablasa land. The Chilean's estate was now valued at \$3,950 with personal property amounting to \$200, considerably more than the initial investment of \$250 or the annual barrel of grape brandy.

A later source suggests that Apablasa may also have been the "village blacksmith" (Gordon 1933:18). When Juan Apablasa died in 1863, son Cayetano, then 16, inherited the land and the family homestead (fig. 2.3). His two surviving siblings were both younger and female. Estafa probably died, as no further mention is made of her. Candelaria married and, in any event, did not claim the family property.

Cayetano (fig. 2.4) wed Concepción Carrasco,

daughter of Francisco and Concepción Avila de Carrasco. Avila is an historic Los Angeles name. The city's oldest surviving house, the Olvera Street adobe dating to 1810, was first inhabited by cattle rancher Francisco Avila. Another branch of the family purchased land to the immediate east of B.D. Wilson; a city street still bears testimony to this legacy. Given the proximity, small population, and constraints upon long-distance romances during the 1860s and 1870s, it is probable that Concepción Apablaza was related to the historic Avilas.

Cayetano died in approximately 1889 at the age of 42. Calling his unassuming house Los Angeles's oldest wooden structure, one article states that the patriarch, Juan, had built the house "ten feet from the spot where the [Union Station] terminal's main entrance will be" (*Los Angeles Times* 1933a). Another clipping is more specific, placing the residence on Juan Street (Carlos Apablaza collection, clipping from 1933).

Although these accounts place the homestead east of Alameda, several historic maps suggest that Apablaza owned at least two other lots west of Alameda, near the Plaza. Ruxton's map of 1873 and the Lecouyreur map of 1874 depict such a lot with a structure on Bath Street (later, Main) dated 1854, and Stahlberg's map of 1876 shows the same Bath Street property and adds another, dated 1855, at the north end of "Negro Alley." It is not known whether Apablaza either built or ever occupied these structures. Descendant Carlos Apablaza is reasonably sure that the wood-frame homestead was erected on the Apablaza tract during Cayetano's lifetime, perhaps before young Cayetano, Juan (John), Maria (Mary), Conchita, Lara, Candelaria, and Benjamin were born.

Until Union Station obliterated the old thoroughfares, the names of the streets recalled the youngsters who played there: an 1889 Dakin map revealed the main thoroughfare, Apablaza, intersected by Cayetano Alley and by John and Benjamin streets. Ten years later, Los Angeles City Ordinance 5834 officially set boundaries for what had actually been little more than private footpaths; the County assessor's map of 1904 shows the entire tract owned by Concepción A. de Sepulveda and subdivided into parcels bounded by Mary, Cayetano, Juan, Apablaza, Benjamin, and Concha streets. (The street is also called "Apple Blossom" on one historical map, either accidentally or in an attempt at anglicization.)

Upon Cayetano Sr.'s death, Concepción married Ildefonse Sepulveda, scion of another family whose

name is intertwined with Los Angeles history. The Apablaza children joined their mother at her new home at 537 South Grand, where the Checkers (previously Mayflower) Hotel now stands. The family's departure may have accelerated the expansion of Chinatown to the east side of Alameda Street.

Toward An Expanded Chinatown

Like the Argonauts, the Chinese were drawn to gold – specifically California's Gold Rush. This golden incentive was reinforced by the prevailing political and economic conditions in China (McDannold 1973:22). The US government was also eager to develop its vast, unexploited western acreage. A larger labor pool was needed and, in 1868, the US and China signed the Burlingame Treaty, which encouraged the flow of immigrants.

Chinese immigrants took up the fields of cookery and laundry because of a shortage: it has been said that "not a woman was to be found in 500 miles" (Ong 1983:71–72). Not having the means to do it themselves, the male prospectors replaced soiled clothes with new or sent their laundry to Hawaii or Canton by clipper ship. There were relatively few women of any ethnicity or national background in unsettled California. So, too, after the readily accessible deposits of placer gold were depleted and the pressure to exclude them from the mines increased, the Chinese – who had also come to California seeking gold – pursued other livelihoods. Wage work in agriculture or railroad construction was one avenue; another was offered by laundries or small shops, which were labor-intensive but required little start-up capital.

Los Angeles claimed few Chinese residents until about 1870 (table 2.1). The 1850 census counted only

TABLE 2.1
Chinese population in the City of Los Angeles, 1880-1940

	<i>Chinese</i>	<i>Total population</i>	<i>Percentage</i>
1860	14	4,385	0.3
1870	172	5,728	3.0
1880	605	11,183	5.4
1890	1,871	50,395	3.7
1900	2,111	102,479	2.1
1910	1,967	319,198	0.6
1920	2,062	576,673	0.4
1930	3,009	1,238,048	0.2
1940	4,736	1,504,277	0.3

Source: Chinese population statistics from McDannold (1973:21); general population data from US Department of Commerce, Bureau of the Census, eighth through sixteenth censuses, 1860-1940.

two men, both house servants living in what was then center city, the area immediately surrounding the Plaza. Within the next ten years several more entered Los Angeles; all were laborers, mostly laundry workers. The first Chinese businessman, an herbalist, opened his shop in 1861. In the late 1860s, laborers were brought in to build a wagon road near Newhall, and others arrived as employment in railroad construction ended. By 1880, more than half dwelled in a narrow street south of the Plaza: the former neighborhood of Mexican Americans, Calle de Negros was then called Negro Alley. (The derogatory “Nigger” was also used by some city dwellers and mapmakers when naming this street.)

Through the 1870s, the block between the Plaza and Alameda Street was settled by such well-known pioneer Hispanic families as Lugo, Sepulveda, Sanchez, Uribe, Avila, Cota, and Pico. The irregular streets around the Plaza jogged to accommodate the existing adobes, and the *Zanja Madre* (Mother Ditch) channel coursed north-south parallel to Alameda Street. The name of Negro Alley was changed officially to Los Angeles Street in 1877, although the old name continued to appear on maps.

By the 1880s, physical changes had occurred. Marchessault Street on the north side of the Plaza had been cut through to Alameda, and a new street, Sanchez, had been cut through between Los Angeles and Main streets. Most profoundly, the area from Alameda to Sanchez, north to Marchessault, and extending to the east side of Alameda, was depicted as Chinese. The vicinity would be further divided – in response to population density and Chinese settlement custom – by Ferguson Alley, which connected Los Angeles Street with Alameda. The pioneer Hispanic families were no longer residents, leaving their old adobes for the newcomers to occupy. The Sanborn map of 1887 identifies Chinese tenements, a Chinese church, joss house, stores and restaurants, wash house and kettle, and other enterprises with solid frontages on both sides of Los Angeles Street. Facing Alameda were the Italian Hotel and a series of “female boardinghouses,” a euphemism for the brothels that lined both sides of Alameda (Robinson 1964). Already present on the east side of Alameda were a large Chinese theater and other structures labeled as Chinese.

Chinese came to Los Angeles for many reasons. Responding to the end of the Gold Rush and changing economic conditions, immigrants scattered to other living situations. Fraternal organizations within

San Francisco’s well-established and overcrowded Chinatown even recommended that some of their countrymen relocate to Los Angeles; a small delegation arrived in 1866 (MacDannold 1973:32). Many of the Chinese had worked on the railroad. When the Central Pacific transcontinental railroad was completed in 1869 and the Southern Pacific in 1876, Los Angeles was linked to the rest of the country, leading to the boomtown era of the 1880s. At the same time, thousands of Chinese lost their employment in construction and flocked to the cities to seek other opportunities in service occupations. The land boom of the 1880s would have made Los Angeles an attractive destination, as well as the other cities in Southern California whose Chinatowns also burgeoned in these years: “Every town and hamlet . . . had its Chinatown, even such a village as Saticoy” (Bates 1967).

Many regarded Los Angeles as a temporary residence in the early years, having come with the intention of working, saving, and returning to China. Longing for the homeland could have been reinforced by the anti-Chinese sentiment prevalent throughout California and the nation.

A well-known local episode, which took place on 24 October 1871 may have fueled such sentiments or been the result of it. Although details of the so-called Chinese Massacre have been recounted many times, the actual cause is not clear. The oldest and most often repeated account traces the incident to two Chinese men who enlisted others in their battle over rights to a woman. De Falla (1960) portrays the situation as less dramatic but more complicated, involving general tong rivalry and a police force which accepted “gifts” from opposing sides. Other scholars (Stern and Kramer 1973:164–165) indicate that a “race riot” exploded after a white Angeleno attempted to rob a Chinese merchant and the latter defended himself.

Whatever the cause, the episode drew armed factions and violence erupted. The intervening police officers, a small group in number, sought support from the general population. When a Euroamerican was mortally wounded, mob violence erupted. The resulting massacre took nineteen Chinese lives and left the community singed and looted. Several historians claim that once this bloody melee ended, racial tensions subsided and everyday life in Los Angeles resumed a calm pace. Several subsequent events easily disprove this assessment. Indeed, friction between the Chinese and Euroamerican working-class

populations had been building statewide. Some Euroamericans resented what they perceived as job or commercial competition. Others simply feared what they did not understand: a different culture.

Various municipalities throughout the state attempted to enact poll taxes, commercial license fees, and other methods of limiting Chinese trade and social mobility. In Los Angeles in 1878 local officials imposed licensing and regulatory requirements on vegetable peddlers, a trade group overwhelmingly dominated by Chinese. With the support of the Chinese truck farmers, the vendors went on strike. City dwellers soon felt deprived of fresh produce and the city was forced to back down (Bingham 1942:26).

The efforts to harass, tax, or otherwise regulate the Chinese largely failed at the local level, but they did not end there. As California interests lobbied the federal government for further controls (Bingham 1942:16–20), the first Chinese Exclusion Act was passed in 1882. It suspended most immigration for ten years and for the first time in US history defined which classes of immigrants would be admitted. When the law was renewed and reinforced in 1892, a proviso was added requiring resident Chinese to register or face deportation. Ten years later, the act was again renewed.

Some argue that subsequent racial relations were much more tense in other parts of the state — particularly San Francisco — than in Los Angeles. San Francisco had the largest Chinese community in the country, numbering 12,000 in 1870, 22,000 in 1880, and 26,000 in 1890, perhaps leading to more formalized institutional constraints. For example, Chinese could not live outside Chinatown unless as live-in servants or inside laundries, and Chinese children were banned from public schools from 1850 until a segregated school for them was built in 1885 (Cherny 1994:131–132). The comparison may be correct, but it does not minimize the indignities that Chinese residents of Los Angeles suffered or the degree to which they were made scapegoats for perceived economic problems. Independent Labor Union No. 1 was formed in 1885; its real intentions crystallized when it became known as the Anti-Chinese Union. Collecting 1,271 signatures during a Fourth of July parade, it petitioned the Los Angeles City Council to expel all Chinese residents. The attempt failed and the group dissolved but not without imparting its mission to the larger, more powerful Los Angeles Trades and Labor Council (Haget, Kinney, and Kroll 1982:1–6).

This organization subsequently conceived the

notion of a Chinese boycott. Even the Knights of Labor, which in other parts of the country organized minority and ethnic workers, joined the movement. The Los Angeles Trades and Labor Council organized its grassroots forces into “anti-Chinese ward clubs” (Evans and Boyte 1986:127). By 1 May 1886 — the May Day holiday established to honor the working people — four thousand people had committed themselves to the boycott. Supporters vowed to cease all forms of Chinese patronage; to fire and replace immigrant laborers; encourage others to engage in the produce and laundry businesses; and boycott any individual or business conducting commerce with, employing, or renting property to the Chinese. This movement faltered, because its demands were excessive and because — as witnessed in the success of the vegetable peddlers’ strike — the Chinese may have already filled too vital a role in the local economy. Racial hostility was hardly limited to the working class; even civic leaders harbored these attitudes. In November 1901, the Los Angeles City Council received a petition from the San Francisco-based Chinese Exclusion Society. “Members of municipal legislative bodies,” it was explained, “are ex-officio members of the Society”; therefore, five additional persons could be appointed as delegates to an upcoming meeting (Los Angeles City Council 1901). The underlying motivation was to exert pressure for the renewal of the Chinese Exclusion Act, due to expire in 1902. The discussion was referred to a special committee consisting of the City Council president and two other members. Less than a week after the formal issuance of this “invitation,” the ad hoc group did appoint delegates to the Chinese Exclusion Society meeting.

Such hostile racial attitudes help to explain how the Apablasa tract became Chinatown. A blaze consumed the better part of Negro Alley in 1887; at around the same time, a new Chinatown was born to the east of Alameda. Mason (1967:16) suggests that arson may have been involved in the Negro Alley fire, thereby causing the relocation. This theory is plausible. Even though displaced railroad workers or gold miners still found their way to Los Angeles seeking employment, immigration from China had tapered off after the Exclusion Act. The rapid growth of Apablasa Street cannot be attributed solely to demographics and population pressures:

The removal of Chinatown from its present quarters on “Nigger” alley and on the east side of the Plaza to a section

more remote and less obtrusive, is a good fortune which has literally been forced upon Los Angeles. Nobody thought seriously of undertaking such a beneficent work until Col. Bee, the Chinese Consul, came here and set about accomplishing it. Col. Bee is a man of affairs. If he is not oversanguine as to the results of his negotiations, Chinatown will be removed very shortly. It is "a consummation devoutly to be wished." Undoubtedly the late incendiary fires and the withdrawal of insurance from the Chinese quarters by the insurance companies have been the most potent influences in securing this quick result. THE TIMES denounced the lawlessness which sought to burn the Chinamen out, but the good results which have unwittingly sprung from evil causes cannot be gainsayed or deprecated. Now Los Angeles street, which has so long been held in suspense, can be put through to a juncture with Alameda street, and an unsightly and noisome quarter of town can be revolutionized. The change cannot come too quickly. (*Los Angeles Times* 1887b)

While Los Angeles's total population grew by even greater proportions, the Chinese community had more than trebled, from 605 in 1880 to 1,871 in 1890 (table 2.1). Although there was no scarcity of open vacant land, the density around the Plaza — with its cramped living conditions — fueled already existing tensions. Newcomers of all ethnic origins needed to spread out beyond the city's settled borders. Macy Street had recently been converted from a dirt road to a wide, paved street, further displacing the small Mexican houses and shops that once lined the route to and across the Los Angeles River.

Other factors influenced the growth of this expanded Chinatown. Although some of the Chinese elected to move southward along San Pedro Street in what became the produce district, the land east of Alameda Street was relatively open and recently vacated by the Keller, Wilson, and Apablaza families. Adjacent to the railroad tracks and gas works, and bordered by the Los Angeles River, the land had low value and was not attractive to others. According to the *Times* (1887b), the new location was "more remote and less obtrusive." In 1884, the river swept away orchards, vineyards, and homes, and "all below Alameda Street" was under water up to several feet deep, depositing mud and debris as far as Main and Spring streets. The river overflowed its banks again in 1886 (Baxter 1893:77), and in another flood even washed out the first dam and flutter wheel constructed by the City Water Company (Gordon 1933:18). Furthermore, racial hostility not only imposed barriers to Chinese mobility but also intensi-

fied community cohesiveness — for physical safety and the maintenance of cultural traditions.

The undeveloped Apablaza tract and environs thus presented an alternative to the crowded Plaza area. There is evidence that the Chinese were no strangers to this land. An undated picture, for example, shows a group of immigrant laborers tending grapes. The photo's caption places it in Los Angeles; while impossible to pinpoint, it may have been the tract east of Alameda which was historically a viticultural hub. Discussing the Apablaza tract under Cayetano's stewardship (1863–1889), the author of a television special about the Chinese community in Los Angeles hints at continuing agricultural involvements:

Since most of it was used for agriculture, farmers were needed. The Chinese were good with the earth and eager to get back to it. In Apablaza's fields, they raised beans and other vegetables, winnowed, cut and sacked them. But they were a little more than the mere coolies they would have been in the old country. What they grew here, they also sold. The Chinese vegetable gardener with his shoulder-slung baskets, peddling vegetables door to door was one of the more familiar sites in old Los Angeles. (Story 1966)

The Chinese connection to the produce business has long been a fact of local history. By 1880, Los Angeles registered 60 vegetable peddlers; 50 were Chinese. By 1894, there were 103 licensed Chinese wagons. The congestion of wagons, horses, and stables around Chinatown led to the creation of a more remote produce market, where the Chinese continued to dominate the production and distribution of market crops (Yee and Yee 1986:5–7).

In addition to those working for the Apablaza family, other Chinese may have worked or lived east of Alameda well before 1887, when the Chinese theater and some dwellings were designated on maps. Marian Francis, granddaughter of Matthew Keller, recalls that her father, William Henry Workman Keller, mentioned Chinese cooks in the household during his youth. Uncertain whether they actually lived on the estate, Francis believes these workers may have "commuted" from a relatively short distance. After Matthew Keller's death, portions of the land were sold off whenever his married daughters needed money. The northern half of the estate became Marchessault Street, which — with Apablaza — became the heart of the new portion of Chinatown. For purposes of work or residence, it is clear that

the Chinese had crossed Alameda Street from the Plaza prior to the late 1880s.

On maps of the period, Marchessault was depicted as an alley connecting to Alameda as early as 1874, and Apablasa was cut through westerly to Alameda at least by 1888 (Dakin). The shift was so complete that by 1910 none of the structures around the old Plaza, west of Alameda, was identified as Chinese or Chinese quarters, although a few merchants lingered; a photo taken in 1905 illustrates the Pekin Curio Store in the old Lugo Adobe (California Historical Society Collection, no. 4638), and Wong Fong, said to be a “high binder, hatchetman, and gambler,” lived in one room of the old mansion (Carr 1935:237).

The conversion of the Apablasa tract to Chinatown began when local property owners started to vacate their land and sold or leased it to more commercially inclined interests. Upon Cayetano Apablasa’s death and his wife’s remarriage, the pioneer family moved away. Other changes in the city hastened its settlement: the centers of population were moving west; commercial enterprises were shifting north, west, and south; the value of the property was depressed by the railroad and gas works; the property was regularly subject to flooding; and the resettlement was encouraged to remove persons and conditions found objectionable around the Plaza. Alameda Street was already an historic and important route of travel that provided a physical, as well as cultural, boundary.

Even though the full history of Chinese life in Los Angeles and how it was manifested in material culture through time cannot be told by examining just part of a single block, this study of Apablasa Street can be factored into events and structures of a broader landscape. For our purposes, the parcel east of Alameda Street between Macy and Aliso is called “Chinatown.” Because this neighborhood evolved from the Plaza settlement, Chinese quarters on both sides of Alameda – when viewed together – are called “Greater Chinatown.”

Physical Environment & Infrastructure

The Los Angeles City Archives contain voluminous records of municipal land acquisitions, ordinances, and various infrastructural developments that require approval from the City Council. Yet, a scan of pre-1930 documents reveals hardly any activities concerning Apablasa Street or Chinatown, suggesting that the area endured a dearth

of municipal services. Nor do Department of Building and Safety records offer insights into Chinatown’s early years. Regulations proved virtually nonexistent before 1905 and while permits were mandatory afterward, none has been found for Chinatown.

Evidence shows that the land was owned by the Apablasa-Sepulveda family into the second decade of the twentieth century and was leased to Chinese tenants, but the terms cannot be readily documented. Although some characteristics of the old Apablasa neighborhood may be reconstructed, a number of issues are open to speculation. Pinpointing dates of construction, for example, is difficult. Some Chinese-occupied structures, in addition to the theater, appear east of Alameda on a Dakin map of 1883–1888; these might have been built for other purposes or to house farm laborers. A few manufacturing companies were scattered in their midst. Sanborn and Dakin maps indicate that much of Chinatown was built by 1888 (fig. 2.5).

A contemporary observer, Nora Sterry, principal of Macy Street School stated that the community was “laid out and the houses . . . constructed by the Chinese according to their old world ideas” (1922:73). Several members of the Chinese Historical Society of Southern California denied Sterry’s assertion, insisting that the dwellings may have been constructed for the Chinese but almost certainly not by them. With rare exceptions, the shops and dwellings were rented, frequently from such historic families as the Sepulvedas.

By “old world ideas,” Sterry may have been referring to *feng shui*, a set of principles followed in matters of construction, placement, orientation, and other aspects of life that borrows from the I Ching and astrology; environmental factors (orientation to water sources and so on) as well as traditional beliefs (designs inviting or inimical to the spirits) were considered. It is difficult to know how thoroughly the principles were followed. On a very basic level, *feng shui* encourages retrofitting, largely through furnishings and special features. If a dwelling is not in harmony with spiritual and environmental elements in its original construction, it can be realigned with ritual or talismans. Then, too, the astrological element of *feng shui* suggests that personal characteristics – residents’ birthdates, for example – must figure into the equation (Loh 1991). Certain aspects of *feng shui* were not observed; some traditions maintain that buildings should face the south, town plans and dwellings should be square, and blocks should

OVER: FIGURE 2.5

Much of Chinatown was built by 1888. Most buildings were rented, since Chinese property ownership was restricted. Dakin 1889

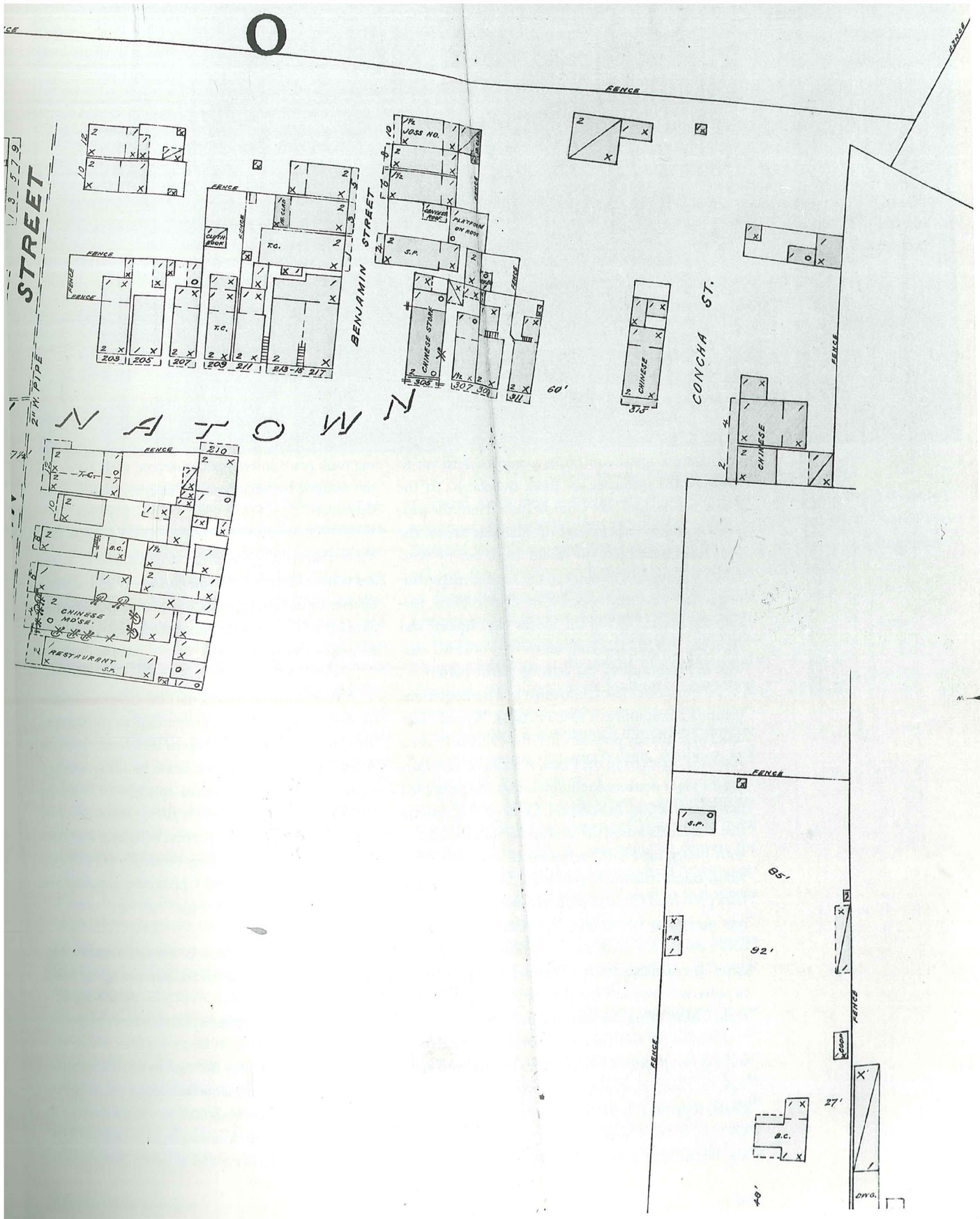


FIGURE 2.6

The earlier dwellings were small, wooden structures, jammed together. Fires were frequent. Photo courtesy of Chinese Historical Society of Southern California, 75-02/35



be aligned on a north-south axis. Without historical and chronological context, it would be difficult to measure the influence of these traditions. At the Plaza, for example, the Chinese moved into the adobes vacated by others; east of Alameda Street, the structures were built on vacant land, but by non-Chinese owners. Reference to the various maps confirms that structures opened in all directions, neither the residences nor the blocks were square, and Apablaza and Marchessault streets were oriented east-west in extensions of the existing traffic pattern.

Nor can one view Chinatown as a homogeneous planned community; it rose in stages. Several older units were already present when the Chinese crossed Alameda Street from the Plaza. A series of fires during the 1890s destroyed some buildings and prompted new construction. In addition, Louis (1931:15) asserts that “residents leased the land and rebuilt the houses with better materials,” referring to the shift from wood-frame construction to brick. While restrictive laws prevented Chinese property ownership, at least one exception was found. The County Assessor’s office contains a deed, dated 8 January 1902 to a lot at 317–319 Apablaza Street; Concepción and Ildefonso Sepulveda purchased the property from a Chinese man, Ching Wing, for one dollar.

Despite the difficulties of dating construction, some generalizations can be made. The earlier dwellings, for example, were small wooden hovels jammed closely together often lacking proper ventilation (figs. 2.6, 2.7). If the Chinatown of more recent memory was brick, such construction was at least partially

owing to conflagration. Sterry emphasizes that cooking took place in cramped quarters, with ovens often wedged between wooden sleeping bunks. Furthermore:

Many of the buildings have flimsy wooden porches in the rear and wooden sheds, built in some instances of nothing more substantial than packing boxes. On such insecure additions are often located open brick fire places, which ensure a perpetual fire menace. (Sterry 1922:71–73)

A report of the Board of Fire Commissioners for the period from 1 December 1898 to 30 November 1899 noted alarms at fifteen different Apablaza Street structures. Even one brick building was ignited because of its proximity to a row of thirteen blazing frame shacks. There is also a record of a fire consuming two other properties. Whatever the case, most of the wooden buildings eventually fell to more durable construction, and Chinatown acquired its distinctive look (figs. 2.8, 2.9):

One of the most striking points in viewing Chinatown is its bright color. The houses are for the most part of red brick, built flush with the street, two stories in height and offering a surface unbroken by any apparent division between properties. The windows are small and are usually barred or covered with solid wooden shutters. Here and there are wooden balconies ornamented profusely in brilliant hues, yellow, red, and green. Occasionally are window boxes filled with bright flowers. On holidays variegated lanterns are hung on all porches and doorways and gay pennants flutter thick in the air. (Sterry 1922:71)



Chinatown's reputation for squalor was owing at least partially to municipal neglect. While other local neighborhoods enjoyed modern improvements, residents of Apablaza Street did not. Contrasts between the two worlds abounded. Los Angeles became the first US city to abandon gas lamps for electric lighting; the new lights were turned on in 1882. A promotional brochure printed by the World's Fair Association, *The Land of Sunshine: Southern California*, boasted about other urban amenities. Around 1880, Los Angeles stretched roughly 30 square miles, with 100 miles of streets graded and graveled, 11 miles paved, and 90 miles of sidewalks set in cement (Brook 1893:63).

Chinatown waited for these improvements. Testimony from a 1913 court case hinted that street lights, sidewalks, and curbs had been installed elsewhere in the city. While the "common council" in 1875 resolved to grade the section of Aliso Street running from Alameda to the Los Angeles River (*Los Angeles Herald* 1875b), contemporary photographs show paved roads only beginning to appear in Chinatown in the 1920s. Previously, the community's thoroughfares were deeply rutted and dusty. As late as 1922, only two streets in Chinatown, out of the thirteen thoroughfares the postal authorities recognized as streets, were paved (Sterry 1922:70).

In a relative way, the neighborhood was more developed before the Chinese arrived. *Zanjas* had been the first "utility" to benefit the Apablaza tract. Rem-

nants of the Californio era, these irrigation ditches — several miles long — spread water via a "crude system of wooden and iron pipes" (Los Angeles Board of Water Commissioners 1902:4). One channel, the *Zanja Madre*, meandered along the west side of Alameda Street; another, *Zanja 2*, flowed between Chinatown and the Los Angeles River (Los Angeles Bureau of Engineering 1884: map 5535). The city's earliest ice factory, at the corner of Apablaza and Alameda, capitalized on its location by extracting power from *Zanja 2* (Gordon 1933:18). More importantly, however, it was through this rather primitive irrigation system that the Wilson, Apablaza, and Keller lands bore harvest.

The Los Angeles City Water Company, predecessor to today's Department of Water and Power, was formed in 1868, its goal being to convert the *zanja* system into modern waterworks. The company soon purchased land and established its first service center at the corner of Alameda and Marchessault. Later designated as the "Old Office" (Los Angeles Board of Water Commissioners 1906:47), this building may have been abandoned by 1906.

The central part of the city, including Chinese quarters, claimed a very dense population and, consequently, the need for diverse utilities. A gas plant stood two blocks to the east of Chinatown. Along with the railroads, it was to "pollute the air with soot" (Sterry 1922:70). Indeed, some utility companies were probably drawn to Chinatown for the in-

FIGURE 2.7
Apablaza Street. Photo courtesy of
California Historical Society, University
of Southern California, Special
Collections

FIGURE 2.8

802 to 806 Juan Street illustrates Chinatown of more recent memory: brick buildings built flush with the street, two stories high, with no apparent division between properties. *Photo courtesy of California Historical Society, Los Angeles History Center, no. 35173CH*



dustrial setting rather than by any desire to provide service to the local community. Two mains supplied gas to the neighborhood, one running through what appears to have been the center line of Apablasa or Marchessault Street (Los Angeles Department of Public Works, Bureau of Engineering N.D. map 5551).

Water and drainage facilities were less abundant. As late as 1914, the area from Macy to Aliso and Alameda to the Ramirez-Lyon Street triangle constituted a single drainage "district." A far more common contemporary practice was one district per square block (Los Angeles Department of Public Works, Bureau of Engineering 1914; map 5025). Similarly, the City of Los Angeles had constructed 2,086 flush tanks by 1909. Chinatown possessed none, the closest being located near the Plaza and at Ramirez and Commercial streets (Los Angeles Department of Public Works, Bureau of Engineering 1909; map 5625). A water line did eventually serve the community; in 1907, 604 feet of six-inch piping were installed on Apablasa from Alameda to east of Juan Street (Los Angeles Board of Water Commissioners 1907:14).

Utility maps, including those cited above, lend insight into why the community may have been underserved: the entire area from Macy to Aliso and Alameda to the Ramirez-Lyon triangle is almost always shown as one huge block. The Apablasa street history card at the Bureau of Engineering shows that the main thoroughfare was "private, not dedicated,"

although Apablasa Street was a very crowded, densely settled, urban place. An 1888 map, for example, revealed that the tract had been subdivided into 62 different parcels (Los Angeles Department of Public Works, Bureau of Engineering 1888; map 2182), and the area brimmed with activity.

Its status as private property probably contributed to Chinatown's limited access to city services. Furthermore, Los Angeles cared little about enforcing building and health code violations that pervaded the community. A 1914 report to California Governor Hiram Johnson by the state's Commission of Immigration and Housing studied 252 greater Chinatown apartments, including those on Apablasa and Marchessault streets. In 133 of these units (53 percent), the toilets were located in the kitchens (Commission of Immigration and Housing of California 1914:264). This layout was undoubtedly cost effective, with plumbing being directed to only one part of the house, but it certainly constituted a health hazard. Other living conditions posed sanitation problems:

Of the 1,572 rooms investigated, kitchens included, 878 were found totally dark and windowless, lighted only by a dim candle . . . or gas jet which seemed to enhance the blackness. These rooms, partitioned off from the store in front, are often hidden away behind heavy bolted invisible doors.

The built-in mezzanine-like floors found in almost every house are also dark and even more stuffy than the rooms be-



FIGURE 2.9
Wooden balconies were sometimes ornamented profusely in brilliant hues. Northern side of Apablasa Street, ca. 1933. Photo courtesy of California Historical Society, University of Southern California, Special Collections

low. They are reached by steep, narrow, ladder-like stairs, or by ladders which hang on the wall when not in use. The ceilings are sometimes less than four feet high and usually only six feet. Dust, dirt, and filth accumulate here in the darkness and provide breeding places for disease. . . . As shown by the health records, the deaths from tuberculosis were more numerous than in other sections of this [the Macy Street School] district. (Commission of Immigration and Housing of California 1914:262–263)

Additional problems resulted from the combination of lack of code enforcement, inadequate municipal services or utilities, and absentee ownership. Apablasa Street was situated in the flat lands, close to the Los Angeles River. With only one drainage district and no flushtanks in the larger area, health hazards were manifold:

In spite of the general cleaning up on account of the Chinese New Year season, the houses were, as a rule, in a bad state of repair, in a filthy condition. The wall paper was generally torn and dirty, sometimes eight layers thick; plaster was broken and falling off in many places from leakage in plumbing; the rough flooring broken and rat eaten.

Cellars were found full of standing water and rubbish. In the rear of one restaurant there was a large, deep hole near the cellar door, filled with several feet of water, and, at the time of investigation, a dead chicken and rotting garbage, floating in the water polluted the air throughout the neighborhood . . .

Little attention seems to be paid by the city officials to the insanitary plumbing conditions that were found. Five instances were noted where the sink was not connected with the sewer at

all, and other cases where it was improperly connected. In one case the water from the sink drained into a tin bucket; in another, it drained into a Chinese basket, and the floor underneath was a slimy mass of wet, rotten refuse and vermin; a third sink emptied into a deep hole worn under the flooring. Leaking drain pipes were numerous in both sinks and toilets, making the floors wet and causing them to rot. (Commission of Immigration and Housing of California 1914:263–264)

Housing codes had not been established when Chinatown's wooden hovels rose during the late 1880s, or even when brick structures began to replace them at the turn of the century. Some low-cost construction elements were at fault, yet they could have been rectified through enforcement of newly imposed municipal regulations. Inadequate drainage and sewage systems throughout the community compounded the host of health problems cited above. Why was nothing done to ameliorate the situation? Again, the Commission of Immigration and Housing report lends poignant insight:

There seems to be a separate housing standard for the Chinese. Comment on their bad living quarters usually brings forth a remark such as, "yes, conditions are bad, but they are Chinese." (1914:22)

Still later, Sterry observed that "practically no effort is made at enforcement, presumably because the interests owning the district . . . are unwilling to have their income interfered with and are too pow-

erful to be opposed" (1922:73). Living under adverse conditions on a tract of land deemed private property and practicing a unique culture, the residents of Chinatown continued to remain apart from their fellow residents of Los Angeles.

Social & Economic Texture

At first, Chinatown primarily attracted recent immigrants and displaced laborers, who called their new hometown "Lo Sang," pronounced with a hard "g" at the end. Aggregated census data give a fuller dimension to the long-gone residents of Apablasa, Benjamin, Juan, and Marchessault streets and adjacent areas. The 1900 figures for the immediate neighborhood at its peak tallied 602 persons, of whom 545 (89 percent) were born in China. Men accounted for 90 percent of the community's population as enumerated, and their median age hovered at 42 years. The 58 women named (10 percent) were considerably younger. Nine were from 0 to 19 years old, twenty-six fell into the 20 to 29 age bracket, and another thirteen were between 30 and 39, with a median of 26.5 years. An imbalance between men and women was not unusual for a recent immigrant group, nor was it unique even for the American-born population in the early West. It has been said that "most" Chinese women were routinely turned away by immigration authorities hoping to forestall family formation and American births (Cherny 1994:132). The disproportion was almost certainly less dramatic than the census suggests, however; the women were sheltered, names were poorly understood and recorded by the enumerators. Birth and death records do document females, and the archaeological evidence confirmed the presence of more than a few women and children. Census records should not be accepted without question: for example, the 1900 census listed nine children between 0 and 19 years of age in Chinatown, although forty-four children were enrolled in the grammar grade level in the single Chinese Children's School at 766 Juan Street (Commission on Immigration and Housing of California 1914:264).

Many Apablasa residents lacked local family ties. Of the 544 men enumerated in 1900, some were single or had wives in China, 181 (30 percent) could be identified as household heads, with another 48 (8 percent) listed as relatives. Some 295 lodgers and 73 boarders, together totaling 67 percent, accounted for the majority.

Few non-Chinese ever conducted their lives or

businesses from the Apablasa neighborhood. One notable exception was the prostitutes who plied their trade in single-story cubicles along both sides of Alameda Street, between the two loci of Chinatown, until about 1910. Of various extractions, these women were primarily Americans and Europeans (Mason 1967:116). Advertisements in an 1897 *Souvenir Sporting Guide* offer the following on the east side of Alameda: Madame Weir and four charming young ladies at 312 N. Alameda; Madame Boulanger and Minnie Wilson, Bessie Berlina, Edna Nanet, May Wilson, and Madeline Moss, "Southern beauties of the Octoroon type" at 438 N. Alameda; and Lena Shepard with a couple of charming young ladies at 316 N. Alameda (Robinson 1964). None of these names appears to be Chinese; some of the Euroamerican artifacts, perhaps the French cosmetics, may have come from this source. Another exception was a physician, F.D. Bullard, who briefly practiced at 421 Apablasa Street; his name appears only once, in the 1904 *Los Angeles City Directory*.

A few non-Chinese families dwelled in the community in the later years. The 1900 census shows that Apablasa Street was home to one German, an Irish immigrant, and a Japanese couple (Franklin 1991:5–8). By 1914, Greater Chinatown, including both sides of Alameda Street, counted eleven Japanese and three Mexican families, and one each Korean, Cuban, Armenian, and "Chinese and American" household (Commission of Immigration and Housing of California 1914:265). One Euroamerican resident was so imbued with the community (and it with him) that he became the unofficial "mayor" during the 1920s and 1930s. Ah Fong, first known as Tom Gubbins, supposedly was the Shanghai-reared scion of a German-Irish marriage. As Chinatown emerged from its relative isolation in the late 1920s, he served as a conduit to the outside community; Fong/Gubbins even brokered small acting roles for local residents (Henstell 1984:91–92).

Generally, interracial relations were few and not always so positive. A long-forgotten dispute had caused a rift between the Chinese and nearby Mexicans and may have been why many Chinese did not send their children to the Macy Street School (Commission of Immigration and Housing of California 1914:264).

Social & Political Associations

Non-Chinese added very little to community culture. The residents themselves

came from Canton province exclusively, and place of origin and lineage had much to do with the social structure. At the top of the organizational hierarchy were the district societies, consisting of individuals born in the same region of China. Family associations engaged the local émigré community to a greater extent, with the Wong and Louie societies being among the largest and most influential. Multifamily groupings also existed, arising from the need of the smaller units to achieve greater numbers in order to influence local events; their ties were based on associations, sometimes mythical, to common ancestors. Some of these groupings were forged in San Francisco through intermarriage, community ties, or close political affiliations.

Los Angeles boasted numerous family and multifamily association chapters, but the structure was geographically broader and more complex; national headquarters tended to be in San Francisco. Wherever a Chinese community flourished, however, family societies integrated the poor and newcomers into local life, crossing social and class lines. Kim Fong Tom described the way things were in Los Angeles Chinatown:

In time of emergency and distress, the members can go to their family association for help. They may get a loan directly or indirectly from it. In case of unemployment, the Kung Saw can give a recommendation to its members and sometimes provide them with room and board. In the past, the family association paid the fare for the poor, aged members to go back to China. (Tom 1974:34)

The societies proved versatile, hosting social functions and offering insurance, burial arrangements, and other human services. Often, involvement was greater; bachelors were granted permission to sleep in some of the local headquarters (Tom 1974:34).

A connection also existed between family societies and what might be called trade associations or guilds. The Louies, for example, focused their commercial energies on agriculture and related pursuits. "Through nepotism there was a tendency for people of the same name to be engaged in the same job" (McDannold 1973:51). With or without family ties, trade groups endured, including the Chinese Laundry Alliance, Chinese Restaurant Association, and Chinese Produce Merchants Association; the latter continues today.

Of less benign reputation than the family or multifamily associations were the tongs. In fact, their

existence and activities frequently tainted the entire community. The Chinese word "tong" means "hall" or lineage. It implies cousinhood, and even the family associations used the term in their formal nomenclature. The Chew Poy Kuo Tong, for example, embraced members of the Chu clan (McDannold 1973:52). Associations like these enjoyed a strong, but benign, community presence:

The Wo Kong Tong has one of the most interesting clubhouses on Apablasa street. Great wooden panels swing before the windows, and a small tree casts its interesting tracery upon the ivory white of the old brick walls. One must be a good hunter to get photographs of the wily old men who live there. (L'Allemand 1933:13)

Generalizations of a more pejorative nature resulted from relatively recent historic circumstances. Because Chinese émigrés typically organized their communities very tightly, the tong was a way for small clans to limit the powers of large family societies. They often became associations for those who had lacked old-world status or who would otherwise be disenfranchised from Chinatown's prevailing power structure. The Kwong Duck Tong, founded on San Francisco's Barbary Coast around 1870, appears to have been the very first of its type.

Unlike the district organizations that restrict membership to persons of certain particular districts, the tongs are opened to any one without drawing a district line. Unlike the family associations, the tongs do not limit membership to those who have the same surname. Unlike the trade organizations, the tongs receive membership from various trades. (Tom 1974:35)

Los Angeles was home to two large tongs: the Apablasa Street-based Bing Kongs and the Hop Sings, who maintained offices near the Plaza. Relations between the two had never been cordial. The Bing Kongs originated in Los Angeles, stemming from the Chee Kung Tong (fig. 2.10), a secret political group first established in San Francisco in 1863. For the sake of respectability, the Chee Kung Tong called itself a freemason's society (Tsai 1983:126). The organization moved back to San Francisco, where it soon became extremely powerful. The Bing Kong offshoot decided to reestablish a Southern California presence during the 1880s. In Santa Barbara, the chapter was large enough that in 1899 seventy-one members commissioned an elaborate gilded shrine to be handcarved in Kong Mun, a city near Canton



FIGURE 2.10
The Chee Kung Tong, located at 315½ Apablaza Street, was a secret political group first established in San Francisco in 1863. Tongs often became associations for those who lacked old-world status or were otherwise outside Chinatown's power structure. Photo courtesy of Huntington Library, Pierce 1986, Album 217/125

(Kong 1967). By that time, the Hop Sings had gained influence in Los Angeles Chinatown and did not welcome the intrusion (Bingham 1942:90). Chee Kung would later raise money in Los Angeles, San Francisco, Santa Barbara, and elsewhere to support the revolutionary activities of Dr. Sun Yat-sen against the Manchus.

So interrelated was the broader Chinese American community that strife in Los Angeles actually began in San Francisco. There, a Hop Sing sold the beautiful Chinese slave “Queen Helen” to a prominent Bing Kong. The young woman was found to have tuberculosis a short time afterward. Meanwhile, half of her original “cost” was outstanding and hotly disputed. Both societies entered into negotiations,

but failure to reach a settlement soon sparked bloodshed. The inter-tong warfare begun in San Francisco soon spread to Portland, Chicago, and later Los Angeles. The first major episode in Los Angeles occurred at the corner of Juan and Apablaza streets, where America's only Chinese blacksmith kept shop. Two Hop Sing gunmen hid in the store and opened fire on two Bing Kongs. Another incident occurred in San Francisco during 1910 with the murder of Chinatown's “mayor,” Wong Fong. This Bing Kong luminary earned his title through mercantile sophistication, accumulated wealth, and community involvement. He had gone north to testify against a Hop Sing hatchetman when slain.

Animosity between the tongs continued to plague Chinatown, although at different, often less violent, levels. In 1925, another San Francisco episode rocked Chinese communities throughout the west. Los Angeles Police Chief James E. Davis was determined to intervene. A *Times* article quoted him on his reasons and intentions:

But the lack of evidence in prosecuting Chinese gunmen was traditional. In most cases it has been impossible to find anyone who would talk. To testify against a tong man means death to any Chinaman . . . While the tongs exist in this country their members will continue to spread terror and murder through Chinatown. Therefore, the tongs must go. Those who are not American citizens will be deported as undesirable aliens, and those who are captured breaking the laws will pay the penalty by long terms in the penitentiary. (Pallen 1925: 2)

Davis's efforts succeeded in part because he devoted resources – patrol officers and undercover agents – to the task, but also because Chinatown wanted to be rid of tong activity (Bingham 1942:96–97). The fraternal tong had a violent history because of fights over control of antisocial activities. As early as 1909, Apablaza Street alone counted thirty-four businesses that were at least partially dedicated to narcotics and gambling (table 2.2). Yet, the violent sectors probably constituted only a small minority of the community. It is also important to emphasize that Davis's intervention was quite rare.

Most community matters were settled internally by a super organization known as the Chinese Consolidated Benevolent Association (CCBA), which embraced the fraternal tongs, district and family associations, and other societies. The CCBA, as a national organization, was founded in San Francisco prior to 1880 and called the Chung Wah Kung Saw,

“meeting hall of the middle kingdom.” Membership ideally included every Chinese male, with all associations sending representatives to what became a community governing body. The Los Angeles branch of the CCBA was located in Greater Chinatown, on North Los Angeles Street. It boasted spacious, well-appointed quarters that were used for many different functions, much like a civic center.

The CCBA had many roles. It mediated disputes between various organizations or individuals, served as a liaison with the Chinese government when required by a local citizen, fought against unjust discrimination, and regulated and executed diverse legal and business transactions. The organization was also highly involved in the delivery of social services, running a Chinese language school and purchasing burial grounds from the old Evergreen Cemetery. Further, if a family association lacked the financial or other resources to look after its members, the CCBA could provide assistance.

While the CCBA fostered strong attachments to China, the Los Angeles chapter of the Chinese American Citizens' Alliance was organized in 1895 in San Francisco to focus on the political needs of the second generation. Most of the Alliance members were US born (or naturalized, after 1943), and English was the group's official language. For economic and cultural reasons, however, the Alliance wanted to make sure it was considered a part of Chinatown; the organization thus engaged a “Chinese secretary” to communicate with other organizations (Tom 1974:38).

Politically, the Chinese American Citizens' Alliance took a different posture, seeking the advancement of civil rights and involving itself in electoral affairs. A few of its members served in the US armed forces during World War I, possibly among the first Chinese to do so. The group also was known for its musical performances, which would have increased its visibility:

The band which was organized under the auspices of the Chinese-American Citizens' Alliance practices every Sunday evening from half-past eight to half-past ten o'clock. There are about twenty-five . . . The director is a Chinese. They play for the churches, funerals, and for the different organizations as they are needed. (Louis 1931:22–23)

Besides the Alliance, Chinatown hosted other political groups. The previously mentioned Chee Kung was associated with the Bing Kong Tong, but the Chee Kung presence is significant in other ways.

TABLE 2.2
Gambling and vice purveyors on Apablasa Street, 1909

Address	Name	Activity
300	Hong Yuen	Barber shop, lottery
301	Wong One	Opium joint, lottery
303	Sook Kee	Butcher shop, lottery
307	Quong Hing	Barber shop, lottery
307	Wing Kee	Barber shop, lottery
308	Tong Fook	Barber shop, lottery
311	Quen Kee	Clothing store, lottery
311	Kim Sam Lung	Fan-tan
313	Wong Ark	Gambling house, lottery
315	Wah Lee & Co.	Drug store, lottery
322	Yuen Sing	Opium joint, lottery
324	Ming Lee	Opium Joint, lottery
325	Mow Kee Hohm & Co.	Vegetable market, lottery
326	Ching Lee	Vegetable store and opium joint, lottery
328	Charley Fook	Fan-tan
335	Hing Kee	General merchandise, lottery
335	Hong Yeck	General merchandise, lottery
335	Chin Wy	Fan-tan
336	Kwong Mow Yuen & Co.	General merchandise, lottery
336	Kwong How(?) Yune & Co.	Fan-tan
338	Wing Chung John	General merchandise, lottery
339	Wing Chemie Lung	Fan-tan
340	See Wo & Co.	Fan-tan
340	See Wo & Co.	Lottery
341	Mon Ching & Co.	General merchandise, lottery
342	Dock Hop & Co.	Vegetable market, lottery
344	Quong Lee Wo	Opium joint, lottery
345	Wing Jun	General merchandise, Quong Hi Chung Lottery Company, Chung Wing Lottery Company
346	Kam Lim	Tailor shop, lottery
403	Quong Si & Co.	General merchandise, lottery
409	Quon Wo	Lodging house and opium joint, lottery
411	Come Lung	Tin shop, lottery

Source: Chas Elton, Chief of Police, 7 August 1909.

Their building, located at 315½ Apablasa Street, bore the date 1900, testimony to Chinatown's “revitalization” when brick structures replaced wooden ones. Legend also states that Dr. Sun Yat-sen, founder of the Republic of China, came to Los Angeles Chinatown in 1908 to discuss his republican views with community dignitaries (Cheng 1991).

As the revolution against the Manchus unfolded, Chinatown developed different organizations to support the political parties in the homeland. A hall at 346 Apablasa Street served as a secret meeting place; there, a revolutionary flag replaced the five-colored banner of the Yan Shi Kai administration (Bingham 1942:124). Chinese soldiers committed to overthrowing the Manchu Dynasty trained with the US Army in the Los Angeles area in the early 1900s and

marched in the 1905 Rose Parade (Harvey 1991).

Despite their fervor, the political organizations had less influence over the community as a whole than the Chinese American Citizens' Alliance and the Chinese Chamber of Commerce, both of which remained active. Chamber membership included most of the community's male merchants. Especially during the early days, its primary function was to ensure favorable monetary exchange rates between the US and China (McDannold 1973:47). The organization later looked to Los Angeles for broader commercial activities. A 1924 decree served as the rallying cry (Bingham 1942:125):

Whereas, Chinatown has been made to suffer in the past because of the bad name generally applied to this district, the same being no fault of the Chinese residents; be it resolved:

First, that we, the merchants of Chinatown, use every opportunity to induce white people of the city and tourists to visit Chinatown; that we extend to visitors every courtesy on visiting our shops and places of interest.

Second, that we use every opportunity to spread the word that Chinatown is a safe place for women to come to, whether escorted or alone.

Third, that we use every opportunity to suppress rowdiness among the lower class of white people visiting Chinatown. . . .

Fourth, that we extend to Los Angeles an invitation to visit Chinatown on the celebration of the New Year and see for themselves the conditions that prevail here.

Signed,

Lew Sing Kai, president

Lew Yeon, vice-president

Wong Sun Ying, secretary

In addition to its public relations value, this statement had another effect: it enabled the Chamber to become the voice of Chinatown during the 1930s when proposals for the new Union Station threatened the community's existence. The Chamber grew less insular in outlook as more individuals graduated from wage employment to proprietorship. The 1900 and 1910 census rolls for Apablasa, Benjamin, Juan, and Marchessault streets and two alleys bisecting Apablasa dramatically reveal the change in occupations within ten years. Although the produce business remained Chinatown's primary industry, those residents identified as "farm laborers" declined from 19 to 10 percent during the ten-year period; at the same time, "vegetable peddlers" increased from 21 to 41 percent.

Commercial Activities

The vegetable peddlers operated as a cross between laborers and jobbers. Their operations were based in fifty small sheds, jutting out of old wooden buildings on the east end of Apablasa Street. Conditions were harsh:

The corrals or barns, accommodating from two to three hundred Chinamen, horses and wagons present a peculiar problem to the city. Horses, wagons, Chinamen, and the fruit and vegetables left over from the day's sales, are housed indiscriminately in long sheds and barns; the rooms in which the Chinese live are without windows, light, ventilation, and present the same appearance of filth and disorder as the rooms of the tenements. The flies from the horse stalls and the privies are an everpresent nuisance. In one of these sheds, the horses were seen drinking out of the same trough in which a Chinaman had placed large bunches of celery to keep it fresh for the next day; a large pile of uncovered manure adjoined the trough. All the unsold vegetables and fruit brought in at the end of each day are kept in these corrals overnight. From these places comes the chief vegetable supply of the city. (Commission of Immigration and Housing of California 1914:264)

The long hours and harsh conditions did, however, forge a communal existence among the vendors. Not only did they live in and above the vegetable warehouses, they shared hot meals over a large "community grill" in the center of the vegetable market at 810 Juan Street, which survived until the final demolition (*Los Angeles Times* 1933B:1).

The 1900 census reveals that 7 out of the 561 people dwelling on or near Apablasa Street had become grocers; by 1910, 22 were so engaged. Because business and residence typically overlapped, many of these commercial establishments were located in the Apablasa neighborhood. The contents of the Yee Sing Chong market on Marchessault Street were probably typical of all:

A great brown and white striped awning keeps the direct rays of the sun from the sidewalk array of vegetables, terrapins, snails, Chinese cabbage, long stalks of sugar cane and stacks of rice. Inside, the numerous shelves are literally groaning under the weight of imported foodstuffs: green jars of candied lichee nuts, preserved in their own syrup; containers of the delectable amber plum sauce, without which no good Chinaman will eat roast meat; tinned bamboo shoots, mushrooms, pottery jars of preserved ginger, bean sauce or soy sauce — and a thousand and one other interesting delicacies.

About the floor are opened tins of duck preserved in peanut oil, duck eggs imported in chocolate-colored mud, barrels of dried shrimp and pans of the delicious peeled water chestnuts. Strings of flat, dried fish hang from the ceiling. Piles of hredded wood - in reality, seaweed - a choice soup ingredient. Shark fins and dried birds' nests - two of the finest of Chinese picturean treats. (L'Allemand 1933:12)

Wholesaling, too, became a commercial pursuit, although its practitioners were semi-jobbers who simultaneously conducted retail operations. Their line of business involved the importation of almost eighty demand goods from China: antiques and curios; jewelry; bamboo, rattan, and ivory products; traditional silk, laces, and clothing; porcelains; canned fish; preserved fruit; tea and coffee; various oils, drugs, spices, and herbs; and other items that were not or could not be manufactured here (Wu 1934:11-14, 35).

City and county directories and newspaper advertisements document that the Chinese merchants sold Japanese goods as well, not only to Chinese customers but in "curio" shops as tourism increased. The Japanese were exporting substantial quantities of ceramics to the United States by 1876, and gradually these included the less costly table and decorative wares available to all customers (Greenwood et al. 1980). The City Directory of 1886-1887 listed six Chinese shops offering both Chinese and Japanese goods, ostensibly to Euroamerican customers; these were not located in the Apablasa neighborhood but around the Plaza. Several operated over the years in the old Lugo Adobe. Kan-Koo, which opened around 1885, promoted itself as a free exhibition, "a place of resort where one can spend an hour among the beautiful articles made by the artful Jap, the strange Chinaman, and curios found in the blue Pacific" (Los Angeles City Directory 1886-1887:273). The respected importer Fong See lived above his antique shop at 510 Los Angeles Street and, at times, operated branches in Pasadena and Long Beach (See 1995:88-91).

Although Los Angeles' Chinese population grew very slowly and remained small in proportion to that of the larger community (table 2.1), the import figures continued to grow and reached a peak of \$4,433,800 in 1931 (Wu 1934:20). This increase is probably owing to one to several factors. First, during the period immediately before the Depression, some Chinese had attained enough wealth to buy luxury goods - antiques, curios, jewelry, and so forth. Second, the majority of the population had not assim-

lated to the point that they would disregard their traditional food, clothing, table service, and customs. Third, small numbers of Los Angeles residents became intrigued with exotic Oriental items:

... you will find tea-pots, the apparent models of those first imported to Europe (such were used in the day of the interesting Mr. Pepsy) that have proved very satisfactory to the Chinese tea-drinkers for hundreds of years. Why, pray, should a change be made? There are infinities of tea-cups, all handleless, saucerless; there are brandy-pots with their accompaniment of thimblebowls; there are bracelets and ear- and hair-ornaments and fans and vases and sandalwood-boxes; there are silks and embroideries. (Percival 1899:51)

For the most part, Chinese mercantile goods did not find favor with American consumers until considerably later in the twentieth century, and the tourist industry contributed little until after 1910 (Chen 1940:20). Partly in anticipation of the impending station construction, the Chinese community began to spread out during the 1930s. Yet, as table 2.3 suggests, wholesalers who catered mostly to basic needs (general goods and foodstuffs as opposed to curios and antiques) remained on Marchessault Street in the heart of Chinatown (fig. 2.11). Those seeking a broader, perhaps more affluent, client base or who depended upon Euroamerican customers, dispersed.

While native-born Angelenos did not exactly perceive the Apablasa-Marchessault area to be an exotic shopping center, they gradually developed a taste for the foreign foods served there. Chop suey, a California-Chinese creation, at first delighted American palates. Yet, the dining experience could

Table 2.3
Chinese wholesalers, by type of merchandise sold

	<i>Artwork, antiques</i>	<i>General</i>	<i>Herbs, drugs</i>
Marchessault St		5	1
N. Los Angeles St	1	1	1
N. Alameda St		1	
S. Flower St	1		
S. Main St			1
S. Hill St			1
S. Spring St			1
W. Pico Ave			1
W. Seventh St	1		
W. Tenth St			1

Source: Wu Shan (John S. Wu) 1934:33.

FIGURE 2.11

Pong Tsue, general merchandise, was located on Marchessault Street. In the 1880s, this street became the heart of the new portion of Chinatown. *Photo courtesy of Chinese Historical Society of Southern California*



become more diverse and sophisticated:

There are several Chinese cafes where you can get excellent dinners – if you know how to order. If you ask for chop suey, they know you for a tenderfoot and treat you accordingly. Real Chinese food is delicate and rare; supposed to be tasted rather than eaten, for the number of courses is stupendous. If really to the manner born, you reach into one general dish with your chop-sticks; it is a clean and delicate way to dine. Unless you go in for too much bird's nest soup and century-old eggs, the prices are reasonable. Bird's nest soup is delicious, but any one can have my share of the heirloom hen fruit. (Carr 1935:239)

Some Chinese operated ornate restaurant-lounges, while others leased tiny dilapidated quarters and served simple fare to a racially mixed crowd that was not accepted elsewhere. Marchessault Street was Chinatown's restaurant row for the local residents. Restaurants for other customers began to appear in non-Chinese neighborhoods by the 1930s (Tom 1974:19).

Church & School

Despite the fact that Cantonese immigrants survived—and flourished—on hard work and skill, education was thought to be the passport to a better way of life. Learning for its own sake held an important role in the Chinese tradition. The approach to education was twofold. Chinatown's scions learned English as a vehicle for success in the larger community while also attending Chinese-language classes to maintain communications with their kin (fig. 2.12). The result of so much schooling was a discipline typically well beyond their youthful years:

Their great handicap is that they do not know how to play. This presents one of the hardest problems of the public schools in this section, for the Chinese children stand aloof from the social life of the school and are with the greatest difficulty induced to mingle with children of other races for anything but study. . . . Most of the Chinese children however attend the mission schools for the first few years or come direct from

China at the age of twelve or more. The routine of their daily life outside the public school does not allow for play and they must actually be taught what seems instinctive in other children.

Every boy and nearly every little girl attends Chinese school in addition to regular day school. Within half an hour after the completion of the latter the child must report at Chinese school where he remains until seven or eight o'clock at night with only half an hour off for supper. On Saturday he goes from ten till four and sometimes he goes on Sunday for half a day. He continues to attend through the summer, with no vacation period. These schools teach reading and writing and, as the child progresses, the Classics There are at present five of them [mission schools] in Chinatown. One, which has recently opened, is in the nature of an innovation and prides itself on being modern. It recognizes the child's need for recreation and therefore runs from four-thirty to eight-thirty through the week and from ten to four-thirty on Saturday, and in addition a daily recess is allowed. In each school a monthly fee of four dollars is charged.

The mission schools, which are largely attended during the day by the younger children, have night classes for adults. These classes, which have been in existence for nearly half a century, have been of great civic value in as much as they have taught English to many men. (Sterry 1923:326–327)

Christian missions fulfilled a variety of educational needs, serving both adults and children, and treating all students to a dose of Anglo-Christian values. Particularly because the Chinese prized learning, evangelists used the schools as enticements to religion. Chinatown during its heyday boasted eight missions, and the goal of large-scale conversion to Christianity may have been a grand plan for, as Reverend Ng Poon Chew wrote:

Every Sunday afternoon there is a preaching service on a street in Chinatown where all the different missions cooperate. This meeting consists of singing, prayer and preaching, and, of course, the preaching is mostly in the Oriental tongue. The Chinese seem to listen well throughout the service, and seldom any bad feeling is aroused. (Chew 1894:103)

Indeed, missionaries frequently divided non-Christian communities among themselves territorially. Although there is no record of such a practice in Chinatown, the heavy concentration of church schools and apparently cooperative spirit among them indicate a collective intent.

One of the first Christian institutions to enter the community was the Chinese Presbyterian Church, in 1876, under the leadership of Ira M. Condit. In a mission house near the Plaza, both English and

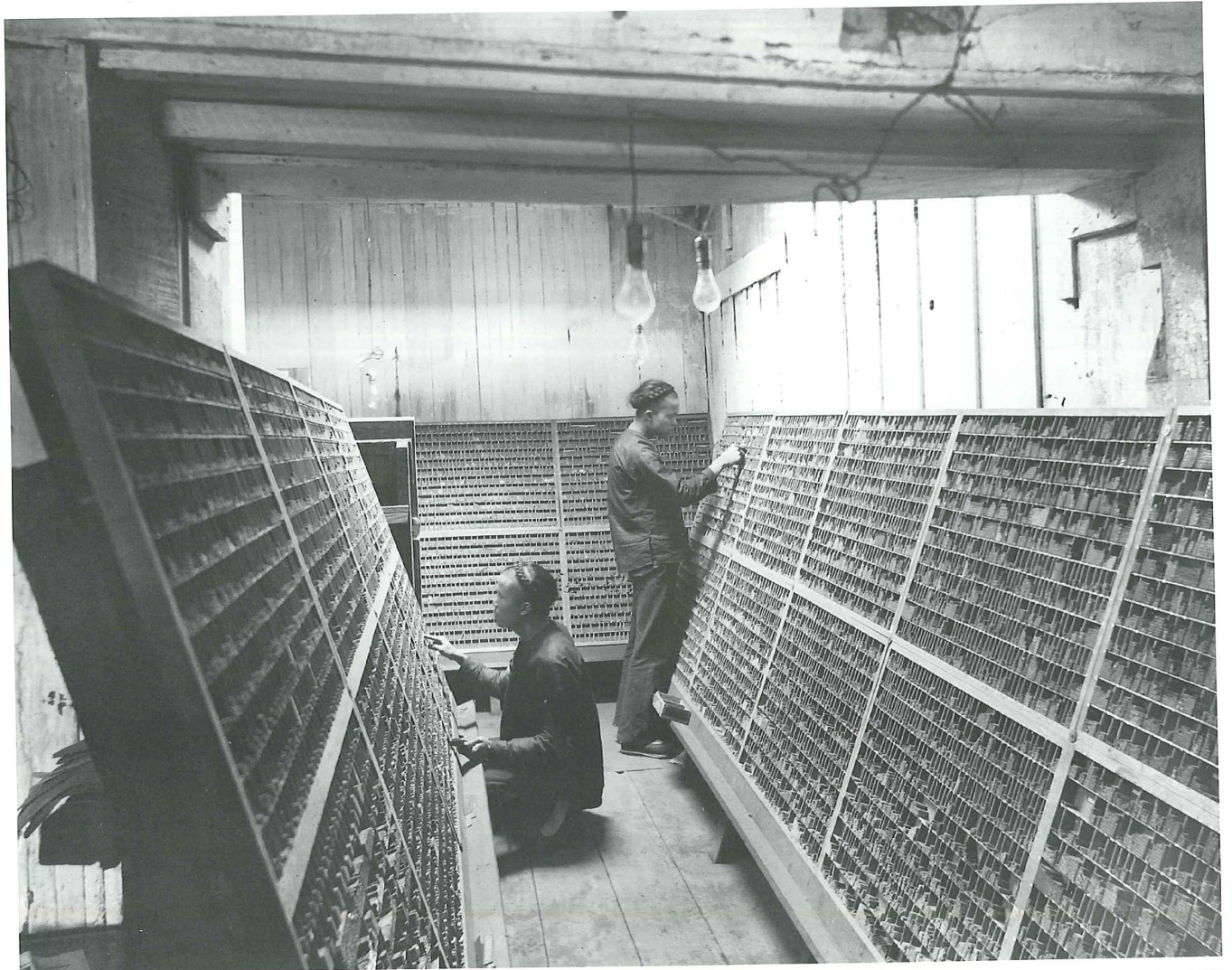


Cantonese were taught. These efforts continued with the development of the Chinese Children's School, 766 Juan Street (off Apablasa), around 1894. Twenty years later, public school enrollment figures listed twenty-one children in the "primary department" and twenty-three in the "grammar grades" (Commission on Immigration and Housing 1914:264). One early account portrays the Chinese Children's School very favorably:

The most interesting and unique place in Chinatown is the kindergarten for Chinese children, maintained by the Presbyterian church. It is situated in a quiet nook, away from the bustling portion of Chinatown. It is tastefully furnished and arranged, and in every respect it is the most pleasant and healthy place. Here gather a dozen or more healthy and active urchins in their quaint dresses, daily. (Chew 1894:103)

The Reverend Ng Poon Chew was not the most unbiased source, however. A tenant at 421 Apablasa Street before fire in the thirteen adjacent wooden buildings ignited this brick structure, he guided the Chinese Presbyterian Mission at 214 N. San Pedro during the late 1890s and early 1900s. The United Presbyterian Mission, possibly a kindred organization, was located at 336 Marchessault. Born in 1866, he emigrated from China at the age of 15 and moved with an uncle from San Francisco to San Jose. The young man worked as a houseboy by day and studied English at night. While showing an early preference toward Methodism, he became a Presbyterian minister. Rev. Chew arrived in Los Angeles in 1894.

FIGURE 2.12
Chinese kindergarten, ca. 1900.
Photo courtesy of Seaver Center for
Western History Research, Natural
History Museum of Los Angeles
County



ABOVE: FIGURE 2.13
A Chinese-language weekly was founded by the Reverend Ng Poon Chew, of the Chinese Presbyterian Mission. *Photo courtesy of Regional History Center, University of Southern California, no. 7166*



RIGHT: FIGURE 2.14
Various church schools, like the Congregational Chinese Mission School, were established in Chinatown in the late 1800s. They performed dual functions of education and religion. *Photo courtesy of Regional History Center, University of Southern California, no. 7166*

During his missionary tenure, Rev. Chew founded *Chung-Sai-Yat-Po*, a Chinese-language weekly that initially reflected Christian perspectives (fig. 2.13). Changes were about to take place, however, as both publisher and paper moved to San Francisco. The journal soon commenced daily operations, becoming the first of its kind in the US (Robinson 1902:33). He also revised the contents, adopting more of a community/news orientation; Christian elements eventually disappeared. The editorial board grew more professional, too, with the addition of Professor John Fryer, Chair of Chinese Literature, University of California at Berkeley. The *Chung-Sai-Yat-Po* outlived its founder by thirteen years, the last issue being published in 1946. Yet, the other institution with which Rev. Chew was affiliated, the mission, survives to this day as the True Light Chinese Presbyterian Church.

The Methodists were also active. In 1887, an ex-missionary named Mrs. A. A. Birdsall organized local Chinese Christians into a fellowship. The fledgling group met at 204 Marchessault Street. By 1890, the fellowship became a mission, choosing affiliation with the Methodist Episcopal Church. Several benchmarks occurred during 1893, among them: a move to North Los Angeles Street, where the institution was to remain for more than 50 years, and appointment of a Chinese cleric, Chan Lok Shang. Today's Chinese United Methodist Church is the product of this tradition.

Other church-schools existed where Union Station now stands. The Chinese Gospel Mission, housed at 425 Apablasa Street, provided an unusually nurturing, relaxed environment:

Classes in the mission vary. Grades disappear. Regulations are elastic as attendance in this factory of private coaching is not unlike a country school . . .

One boy wrestles with fractions, another scratches his head over the complicated verbs of the English language which stick out their tongues at rules. The smaller girls learn to sew and sing psalms interchangeably in Chinese and American until they can do handsprings. Unfortunately, at the same time, they find "American" names more euphonious. Tea of the olive skin becomes Joan; Oi is Rose . . .

The old gray frame house has two bedrooms in the rear which accommodate young men who are out of work, which happens virtually never. There is a kitchenette where they can prepare their meals, an office or rather a shabby sitting room for the teachers, and the large front room which gives on the rickety porch. Not an imposing structure! (Paule 1926:20)

At 427 Apablasa Street, the Nazarenes established their local operations. Catholic, Congregational (fig. 2.14), and unaffiliated institutions selected sites in Greater Chinatown, while the Young Women's Christian Association also made its presence known locally by starting a Chinese school.

Still, the dual functions of education and religion which were so much a part of Chinese mission life began to splinter during the 1920s. Missions, which generally received support from their mother institutions, were replaced by more self-sufficient churches, and more and more children, sometimes the offspring of English-speaking parents, attended the public schools. Further, the Exclusion Act had barred the entry of unskilled Chinese immigrants; newcomers to Los Angeles therefore tended to be merchants, professionals, or "refugees" from other US cities who were acculturated to some extent. The traditional purposes of the missions had been supplanted by new demographics and institutions.

Thirty years ago Los Angeles was not equipped as today to present foreign students with the key to the language. If classes were attended at all it was so much Greek in their ears. There was no organized attempt to teach them the rudiments of English speech. They floundered in an unfamiliar medium.

It was then that two women – one of whom, Mrs. Clara Swan, is at present head – founded the mission in Apablasa Street. Newcomers in Chinatown went there; they were helped with their first intelligible words in a language that was gibberish. They were taught, as they are still taught in the mission, the ABCs. The city grew. More Chinese came into an already populous quarter, and later the public schools of Los Angeles recognized the need to care for the numbers that arrived if they were to be at all assimilated. Classes strictly for beginners were formed, and latterly have been instructed in the newer system, by sound:

Obviously, the time had come for the mission to slip into a new groove or find oblivion in the company of ghosts which included so many old Los Angeles undertakings. (Paule 1926:20)

The Chinese Gospel Mission adapted through its tutoring and social service activities, but the same could not be said of other institutions that had offered education. One survey proclaimed that more than two-thirds of Los Angeles's Chinese youth were enrolled in the public schools by 1929. In addition to the Macy Street School, a few children attended



FIGURE 2.15
Chinatown got its own recreational facility in 1927, the Apablaza Street Playground, carved out of what had been old stables on the south side of the street. City Hall is shown in the background. Photo courtesy of Regional History Center, University of Southern California, no. 68

the California Street Elementary, Custer Avenue Intermediate, and Lincoln High School. They were ignored, kept to themselves, and returned to Chinatown immediately after classes (See 1995:101). There are conflicting accounts of how “integrated into the system” these children really were. Some claim that they enjoyed the same recreational activities as many of their peers – basketball, football, and volleyball – and that public facilities soon became available to them. Considerably later, the Board of Education gave permission for Chinese boys to practice at the Sentous Junior High and Jefferson High School gymnasiums (Louis 1931:19,22).

Chinatown celebrated the creation of one of its own recreational facilities when the Apablaza Street Playground opened in 1927. Carved out of what had previously been old stables on the south side of the street, the little park contained swings, a slide, and a small clubhouse (with restrooms) enough to keep children actively occupied and off the streets. It also boasted a commanding view of Los Angeles’s new City Hall (fig. 2.15). The Apablaza Street Playground represented one of the few efforts by the larger community to serve Chinatown. A Macy Street School teacher, Margaret Cope, was a prime initiator in its development; the land itself may have been donated by the Southern Pacific Railroad Company.

Just as educational and recreational functions were being transferred to public authorities, there was doubt about the missions’ success at converting the Chinese to Christianity. One source states that

First Presbyterian, Congregational, and Methodist churches together counted eight hundred members and that an average of 20 percent attended Sunday services in any given week (Louis 1931:21). Writing more than a decade later, Tom (1974:50) indicated a downward shift; combined membership in the Catholic and Protestant churches did not exceed three hundred. As many scholars have pointed out, the Chinese could simultaneously practice Taoism, Confucianism, and Buddhism. Ethical and philosophical elements were just as absorbing as purely spiritual considerations, and religious interpretations varied with social class and age. To the residents of Chinatown then, Christianity most likely was an additional, although not exclusive, aspect of life.

The same individual who listened to the Methodist minister’s Sunday morning sermon might also seek solace at a Chinese temple or joss house (shrine). In contrast to the churches, this was an old-world institution. Writing for the *Los Angeles Times*, Agnes Pallen (1925:2) noted five of these structures, “one in the heart of Chinatown, others scattered throughout the city.” The first had been located on Negro Alley and torn down in 1875 (*Los Angeles Herald* 1875a). Ferguson Alley soon boasted a more enduring structure, the Kong Chow Temple (1890), where the josses (idols or cult images) represented long-gone Chinese historic figures, individuals who had led exemplary or heroic lives (Lui 1948:75). In the Apablaza neighborhood, a joss house was present on Benjamin Street by 1889. This elaborately decorated structure



had a look of permanence, with twice life-sized figures of the guardian deities flanking the door. By 1895, the temple had electric service (Engh 1992: Fig. 18). In joss houses worshippers found a quiet atmosphere where they could experience a few moments of reflection.

Customs of Life & Death

Not all facets of cultural and religious life were contemplative or inner focused for the Chinese residents of Los Angeles (figs. 2.16, 2.17). The festivities of the Chinese New Year, which piqued the curiosity of the Anglo community, included public participation and reciprocity in the form of an exchange of gifts between shopkeeper and customer or between servant and employer. Local informants recall that their families would dress in their finest and make visits to Chinese acquaintances on the Chinese New Year and that the hosts would serve tea, ginger, and lichee nuts. On Christmas, the Chinese would dress in the finest and bring gifts to acquaintances. Laundrymen and vegetable peddlers would give choice lily bulbs to their customers (Greenwood 1976: 466, 449). Pallen (1925:2) reported:

With the beginning of Chinese New Year, January 17 at midnight, the Chinese dragon with a hundred feet, also an importation for the occasion, dances before the restaurants and homes of the Chinese, swallowing impure air and breathing good wishes to all. The dragon is the imperial emblem of

China, the emblem of imperial power; its eyes glitter, its head sways, and its long silk body of deep green hue swings back and forth with grace. Every night for two weeks you will see firecrackers shot off from the balconies of the restaurants in front of the stores. These, too, are believed to have a power to keep away evil spirits.

If you wish to begin the New Year properly, you must pay all your debts and make friends with your enemies. Such is the Chinese code and most religiously observed. Chinese family societies, of which there are a number, gather in restaurants and feast together.

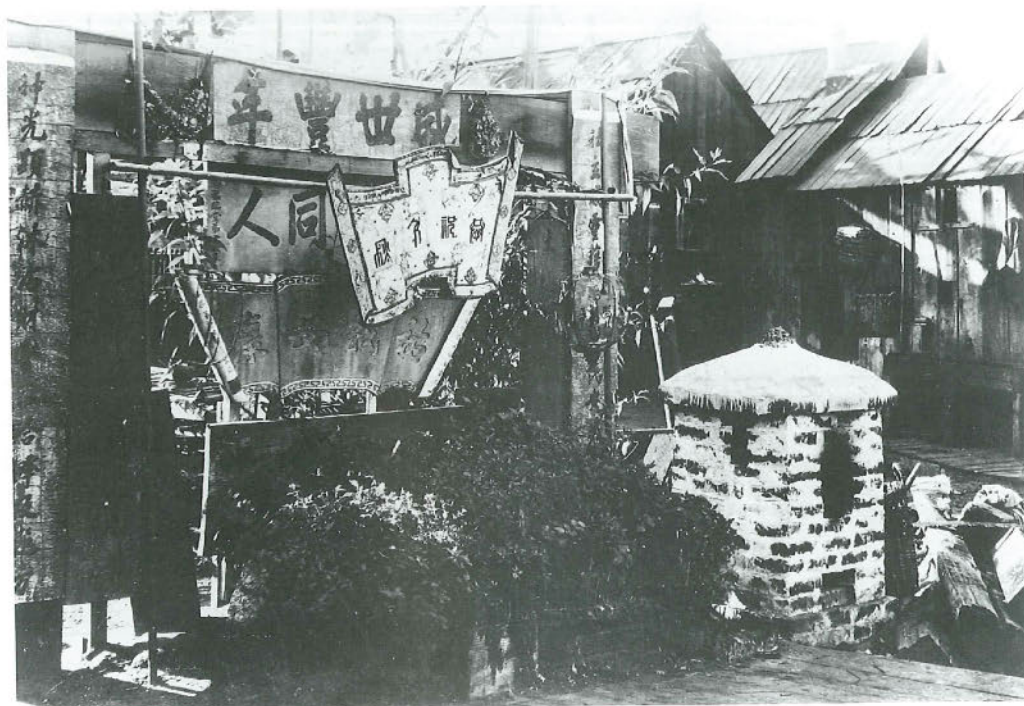
This combination of religious and spiritual symbolism and public observance was manifest in life-cycle events, especially weddings and funerals. The rituals piqued the curiosity of the broader community to the extent that the press described the more elaborate occasions in detail. As early as 1878, the funeral of Lee Pai was described at great length in the *Los Angeles Daily Evening Express*. The following represent only excerpts:

All Chinatown was out to witness the absorbing event and a pretty full representation of the white population of the city was on hand as well. A tent cover had been pitched . . . to protect the extensive paraphernalia employed in the ceremonies. At one extremity of the canopy the coffin of the deceased Lee Pai was placed, the head of which was overshadowed by a large banner of gauzy brown cambric. At the other side of the tent, a capacious table was spread and literally loaded down

FIGURE 2.16
Chinese rituals and processions were manifest in life cycle events, especially weddings and funerals. Photo courtesy of Seaver Center for Western History Research, Natural History Museum of Los Angeles County, no. 3467

FIGURE 2.17

Family altar. Photo courtesy of California Historical Society, University of Southern California, Los Angeles History Center, Title Insurance and Trust Co. Collection



with edibles; the menu including a pig roasted whole, another pig splitted, but uncooked, and a kid neatly dressed, with head and horns intact, except as to hair, resting on its haunches in a wooden tray. There were Chinese confections of all known kinds, cakes, candies, nuts, some plates of apples, and some dishes which would defy the unsophisticated Caucasian to make out. (30 August 1878)

The accompanying rituals were described in great detail. Funerals were still occasions of interest in 1909, when the following article referred to observances on Apablaza Street:

Funeral services were held for Louie Chew, one of the most prominent merchants in Chinatown. The funeral, with full Chinese ceremonies, was one of the biggest held in Chinatown in several years, approximately 60 hacks containing friends and business acquaintances forming the funeral cortege. The body was placed beneath a large canopy in front of the Chew residence at 343 Apablaza Street. On another table was placed a large assortment of edibles which are supposed to furnish food for the deceased on his voyage to the "great unknown." Louie Chew, of the Louis Guan Produce Company, was a member of the Chinese Free Masons and their religious service was carried out at the grave. Between the dead man's lips an American 25¢ piece was placed and that with other Chinese coins was supposed to be needed for the expenses for the eternal journey. (*Los Angeles Herald Express* 1959)

Syncretism was evident in weddings as early as

1887. When Yee Fong, "a celestial long enough from the Flowery Empire to understand American manners and customs," wished to marry Ah Yon, they dutifully applied for a marriage license at the County Clerk's office and were joined by Justice Tanner with constables as witnesses, but then celebrated the occasion with a daylong parade and traditional "various excesses" (*Los Angeles Times*, 1887a).

If these rituals sometimes inspired awe, they were also misunderstood and reviled by the public:

Down on the eastern end of Apablaza Street there is a three-room shack inclosed (*sic*) with a high board fence. This building economically combines two enterprises. It is known as the Chinese hospital and "Dead House." In two of the miserable rooms the poor, decrepit old Chinese who are so diseased and unable to work that their end is considered near, are allowed to eke out their miserable existence. . . .

In the third room of this building is the "Dead House." When the bones are taken from the graves at the cemetery they are sacked up and carted to the "Dead House." Here they are poured on tables and the old men scrape them clean The bones are then placed in tin boxes, labeled, and stored away until enough have accumulated to make a shipment to the Flowery Kingdom. (*Los Angeles Times* 1902)

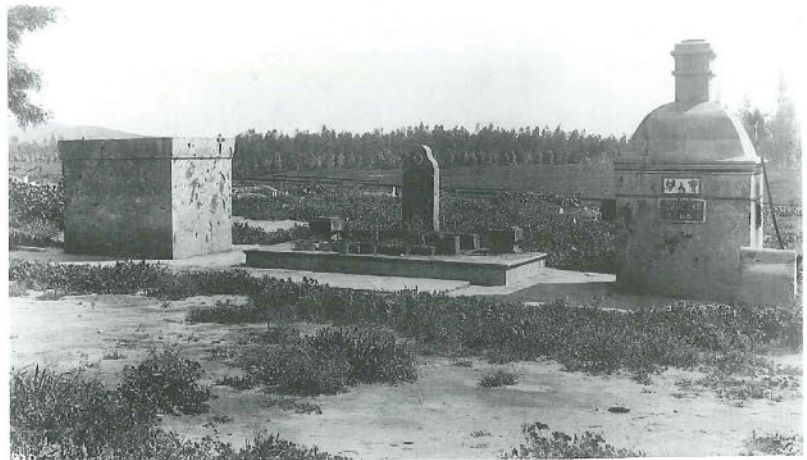
No other information has been found about the "hospital," except that early maps do depict a small isolated wood structure at the east end of Apablaza Street, before it was replaced by the vegetable ped-

dlers' sheds. Given Chinese attitudes toward ancestors, however, one might question whether families would have totally abandoned their elders to such a bleak institution. Yet, the article quoted above is consistent with descriptions of the exhumation and repatriation practices. Part of the immigration process included arrangements for the return to China of individuals who died abroad. Within the culture, the disturbance and moving of skeletal remains was not an uncommon practice. The practice in California was described in 1861 as follows:

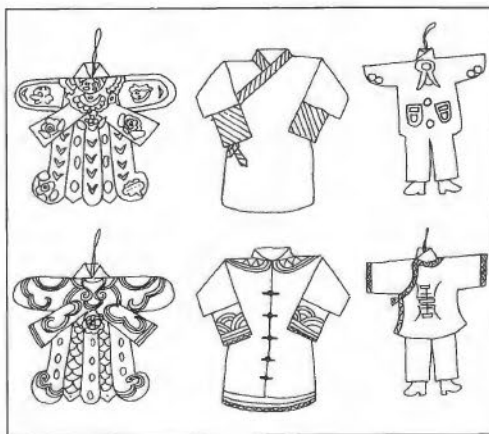
In about five months, little or nothing will be left of the body. . . . There are four companies [in San Francisco]. Each have two or three men, whose business it is to travel over the State, making proper calculations for decomposition, and gather up the relics of their late members. They take from the box . . . the longest bone, say the leg, get a box made of that length, and 18 inches or 2 feet wide and deep . . . Each bone is . . . dipped into a bucket of brandy and water. They are then polished with a stiff brush until they almost shine, and are then packed closely in the smaller receptacle. The polishers do not touch the bones with their hands, but handle them very dexterously with two sticks. They are very scrupulous in preserving every bone. (Lister and Lister 1989b:97–98)

Such transoceanic voyages would decrease as Chinese-born Americans developed stronger attachments to the United States and began to think of this country as their permanent home. By the 1880s at least, Chinese were using the Evergreen Cemetery in Boyle Heights and observing the annual “feeding of the souls.” They came early in the day bearing “all manner of Chinese delicacies, including roast pig, chicken, confectionery, tea, saki . . . and a great amount of prayer papers to be burned during the ceremonies” (*Los Angeles Times* 1888). Two 12-foot-high concrete urns and a stone altar had been built by 1888 as a shrine (fig. 2.18, pl. 15). The Chinese would burn incense, paper money, and clothing in the urns for use by the dead in another world, and leave food on the altar. The traditional customs of processions, prayers, food offerings, distribution of coins, and burning of clothing (fig. 2.19) were combined with Christian prayers at least as late as 1922 (*Los Angeles Express* 1922).

The cemetery was originally owned by the city, with a portion set aside for use by the county as an indigent graveyard. The Record of Interments provided monthly to the Board of Supervisors makes clear that while burial was free to others, each Chinese interment cost \$10 in 1918 and \$16 by 1923. The



ABOVE: FIGURE 2.18
At Evergreen Cemetery in 1888, two 12-foot-high concrete urns and a stone altar were built as a shrine. Photo courtesy of Regional History Center, University of Southern California, no. 7166



LEFT: FIGURE 2.19
Paper clothing. In the annual “feeding of the souls,” the Chinese burned incense, paper money, and clothing in urns for use by the dead in another world. Drawing by Helle Grey, after Osgood 1975a: 589

only exceptions were a few marked “Free,” presumably indigents who had died in County Hospital. About a thousand Chinese were buried here, with no grave markers and, in the early days, no plot plan other than the records of the Chinese Cemetery Association. Photocopies of the burial and disinterment records back to 1898 show that many individuals were “out” in 1900 and later, presumably for shipment of the remains to China. By 1923, however, the county portion of Evergreen was badly crowded, partly because of the 1918 flu epidemic. The county approached the Chinese Chamber of Commerce with an offer to reimburse \$2 per individual if all bodies were relocated to the new Chinese cemetery on East First Street (Martin 1923). There is no indication that any mass removals resulted then, but in 1937, the Ning Young Chinese Society did disinter a number of individuals between June and August under the supervision of William F. Ung, according to a cemetery caretaker (Voss N.D.)

At least 850 of the deceased were returned to



ABOVE: FIGURE 2.21

Effects of disinterment are evident in this photo of the Chinese cemetery at Evergreen. The process caused a public outcry. Photo courtesy Huntington Library, Album 217: 129

RIGHT: FIGURE 2.20

In 1937, 850 deceased Chinese were disinterred and returned to China, to be placed in family tombs. Photo courtesy Special Collections, University of California, Los Angeles



China in 1937. Under the auspices of the Ning Yung, Yin Hoi, and Kwong Chow societies, the bones of each individual were gathered in a white cotton bag which was placed in a metal urn, and these urns were packed eight to a wooden crate for shipment to Hong Kong and then on to the native villages (fig. 2.20). Upon arrival in China, the remains were to be sealed in earthenware jars and placed in family tombs (*Los Angeles Times* 1937). The area of the 1888 shrine was declared a Los Angeles Cultural-Historic Monument in 1990, and the Chinese His-

torical Society of Southern California acquired the parcel in 1992 for preservation and restoration.

The reconstructed burial records for 1898 to 1902 and 1911 to 1922 were scanned for demographic data, cause of death, and reinterment information. Only the last six months for 1911 were available, and cause of death was not noted until 1911. From these partial records and with all due concern for errors, 698 names yielded some insight. Of this total, 306 individuals had been removed in the early 1900s, and 226 were relocated in 1937. It seems that females, infants, and victims of homicide or suicide were not commonly disinterred either for shipment to China or relocation in 1937. Of those moved to the new cemetery, most were the more recent burials; according to the records, none of those who died in 1902 or before was relocated (records are not available for 1903 to 1910).

In the 420 records after 1911, when the cause of death was cited and when it can be correlated to modern medical terminology, the following causes precipitated the death: tuberculosis (139), homicide (11), heart disease (89), suicide (9), kidney disease (52), railroad accident (5), pneumonia (34), auto accident (2), cancer (27), other accidents (18), diabetes (9), childbirth (2), syphilis (7), and miscellaneous stomach disease (7). Among infant or child deaths, there were ten stillborn, two “inanition” (failure to thrive), and one each caused by typhoid, tetanus, diphtheria, and whooping cough. A few of the infants were given Euroamerican first names after 1913. Other observations include the presence of a female Chinese physician in 1920, Dr. Margaret Chung.

The causes of death, particularly tuberculosis, are those commonly seen among overcrowded populations living under less-than-optimum sanitary conditions and at a low economic level. Diseases of the gallbladder, liver, “apoplexy,” peritonitis, cerebral hemorrhage, and other causes were mentioned in the records in fewer numbers, and have not been included in the above tabulation. The suicides were about equally divided between hanging and gunshot. Some of the eighteen accidental deaths resulted from a fractured skull or other trauma that may have been caused by interpersonal violence. The ages at death (table 2.4) reflect both the gradual aging of the population and the presence of children.

It is possible that some temporary, or even permanent, burials were made outside dedicated cemeteries. A human burial was discovered during construction of the Metro Rail on 25 July 1989. Dam-

age by nonarchaeological personnel inhibited a comprehensive analysis of the remains and any recognition of pathology, but the individual was an adult, buried in what appeared to be a tightly flexed position. Elements essential in identifying ethnicity and sex (the face and pelvis) were missing. The individual was long headed, with shovel-shaped incisors indicating Mongoloid descent. If a female, she would be about 5 feet 2 inches tall, and 5 feet 4 inches in height if male (Suchey 1993:319–322). Attempts were made to determine whether the individual was a Chinese male or possibly a Native American female. Tooth wear was typical of agricultural groups, and a radiocarbon evaluation yielded a time of life between AD 1650 and 1950; the sample was too recent for more precise dating. No Native American artifacts were found on the site at any depth. It may be that these remains, and perhaps others, were buried near their homes in anticipation of shipment to China.

The process and debris of the disinterments obviously offended the public (*Los Angeles Times* 1902). The lead paragraphs note a complaint to the health department about a “noisome, death-laden air” wafting from the burial grounds, and the disturbed surface was certainly unsightly. Figure 2.21 shows that each of the visible tomb markers is lettered with the deceased’s name and place of origin and sometimes a date. The one in the foreground marks the grave of Yu Rongda, born in En yi, who died in the “seventh moon of the sixteenth year” (1891). Directly behind this spot is the burial place of “Elevated Ancestor Fang Hongxiu” from Guishan, Huizhou District, in Guangdong Province, who died in 1896. The two tablets in the middle ground, right, are for two individuals born in Min yi in the present day province of Fujian. The smaller marker in front is for Tan Guan hong from the village of Maoping. The partial characters on the larger obscured marker in back denote the place of origin as Min yi. It can only be conjectured whether the adjacent tablets from the same province mean that regional consideration determined placement in the cemetery (von Falkenhausen 1995).

No matter what the complaint, Chinatown would be blamed for anything that was alien or alienating. The old quarters were so packed with people and activities that observers failed to separate reality from preconceived notions arising from prejudice. Soon the Chinese would regroup in a new community owned and explicitly designed by Chinese Americans, one more acceptable and inviting to the larger

TABLE 2.4
Age at death, by percentage

	0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	Total
1898	7.5		5.0	22.5	42.5	22.5				100.00
1899	3.0	3.0	6.0	30.3	27.3	21.2	9.1			99.90
1900	2.1		6.4	38.3	27.6	19.1	6.4			99.90
1901			5.4	18.9	43.2	24.3	5.4			97.20
1902			7.3	19.5	34.1	31.7	7.3			99.90
1911	3.8				30.8	38.5	19.2	7.7		100.00
1912	2.1		10.6	10.6	21.3	38.3	17.0			99.90
1913	8.0	2.0	6.0	12.0	16.0	28.0	26.0			98.00
1914	4.6			7.0	18.6	39.5	23.2	4.6		97.50
1915		3.0	6.0		15.1	33.3	27.3	12.1	3.0	99.80
1916	2.1	6.3		2.1	14.6	27.1	33.3	12.5		98.00
1917	12.5	4.2	2.1		6.3	37.5	31.2	2.1		95.90
1918	9.4	1.5	10.9	4.7	9.4	26.5	29.7	6.3		98.40
1919	4.6		7.0	4.6	11.6	37.2	30.2	7.0		102.20
1920	5.7	5.7		8.6		25.7	25.7	20.0	8.6	100.00
1921	9.1	2.3	9.1	9.1	6.8	22.7	29.5	11.4		100.00
1922	5.9		11.8	5.9	5.9	29.4	35.3	5.9		100.10

public. Yet, the decision to obliterate Apablasa Street, and Old Chinatown generally, was beyond the control of local residents.

End of an Era

The Macy-Alameda vicinity had long been a transportation nexus, and this status was greatly elevated in 1913. From that time forward, development issues, planning, and controversies would revolve solely around the train and those having interests in it. It was then that Edgar B. Carrol, Vice President of the Industrial Terminal Railway Company, brought suit against Ildefonso and Concepción Apablasa de Sepulveda in an effort to wrest their holdings from them. The plaintiff claimed that one John Martin had recently purchased the Apablasa tract and given part of the money to five “unknown defendants.” Carrol was simply fulfilling John Martin’s offer.

In addition to disputes over purchase and acquisition agreements, a major stumbling block persisted: the City of Los Angeles (also named a defendant by Carrol) could have claimed “China Town” as public land, although the city collected taxes on the parcel as though it were private property. Ildefonso Sepulveda testified:

Not anytime . . . has there been an offer of dedication on the part of these defendants and their predecessor, nor has there been an acceptance of any offer of dedication of the same either by the public or the City of Los Angeles as an agency of

the public. (Superior Court of the State of California, case no. 97717, 1913)

The verdict in Case 97,717 was handed down on June 25; Carrol became landowner and, as such, was required to pay Concepción and Ildefonso Sepulveda the sum of money outstanding from the Martin deal. Concepción sought to expedite the process by submitting through her attorneys on July 1 a request to the Los Angeles City Council:

The undersigned petitions you to authorize and direct the City Attorney to waive an appeal to the Supreme Court or the Appellate Court from said decision, so that the same may become final and the litigation be ended. The undersigned is satisfied that the Supreme Court would not in any event change the decision of the lower court and as the undersigned has now a sale on for the said property which cannot be closed without the right of appeal being disposed of, it would work a great hardship on the undersigned if the same be not waived.

The Sepulvedas thus wanted to end the dispute and collect their money, but the transaction could not occur unless the city relinquished all claims to the land. This issue proved a bit muddier than expected. In response to the Sepulveda petition, the Public Works Commission reported on July 19, 1913:

... that street lights, sidewalks and curbs have been installed and to all appearances are public streets, and we suggest before any action is taken upon said petition, that the entire Council inspect the streets proposed to be vacated, and if ... Council should find said streets were unnecessary for use of the public, that said petition be granted.

No record of such an inspection has been found, and on 20 November 1913 the Los Angeles City Council waived its right to appeal *Carrol vs. Sepulveda*. The fact that the land was “to be vacated” surely meant Chinatown’s demise. Yet, an apparent savior entered the picture in 1914 when Lewis F. Hanchett purchased the property for \$2 million, an incredible sum of money at the time.

At least in his statements to the press, Hanchett envisioned something of a planned community. Current residents and business people could secure long-term leases, enjoying the benefits of

... [a] new and greater Chinese colony, picturesque and interesting as was the old Chinatown in its palmyest days but cleaner, more sanitary and modern in every detail than any other Chinatown that has ever been. (Bingham 1942:138)

The “Chinese colony” was probably no more than a public relations ploy. Hanchett actually established the Industrial Development and Land Company to rival Carrol’s Industrial Terminal Railway Company. Both men vied for the same territory and, specifically, the right to build, own, and operate lucrative freight and railroad facilities. The erstwhile Apablaza and Keller estates, now known as the “Hanchett Tract,” changed hands frequently.

Hanchett soon fell on hard times, however. When his true commercial intentions were discovered, the courts dismissed his land condemnation suits, arguing that he had not been acting in good faith (Bingham 1942:138). The Industrial Terminal Railway Company reclaimed the Hanchett Tract in 1925. Two years later, county assessor’s records show it to have been owned briefly by a different firm. Then, in 1928, the land became the possession of the Southern Pacific Rail Road (SPRR) Company. SPRR had obtained the old Sisters of Charity property long before. Now, it consolidated its holdings by acquiring the former Keller and Apablaza estates. Together with the Union Pacific Railroad Company, SPRR planned to construct a terminal on Alameda Street near Macy.

Chinatown surely seemed doomed when the Apablasas – John V. (Juan) and Cayetano, Jr. – reappeared. The two men were a study in contrasts. A University of Pennsylvania–trained dentist, Cayetano practiced his profession for fifty years, lived quietly on S. Manhattan Place, and died during the early 1960s at the age of 83. John V. Cayetano, conversely, was frequently the subject of gossip. He married at least five times, depending on whose account one believes, and the divorces resulted from what a few of his wives described as abusive behavior. Each incident made local headlines. Still, John V. may have held a historic distinction: he claimed that his 1874 birth was the first formally recorded in Los Angeles County. Whether it was or was not, John V. had a way of creating his own legends. Although his estate was estimated at \$27 million, his last wife failed to recover a penny when he died at age 75.

In 1924, the two Apablaza joined forces in seeking what they believed was their birthright: the ancestral plot in Chinatown, a hotel on Normandie Avenue, property at Sixth and Grand, and other land, collectively worth \$6 million. They alleged that their father had left the property to their mother with the understanding that it be held in trust for them and their siblings, although their four sisters did not

join the suit and, in fact, were cited as defendants.

John V. and Cayetano seemed to have failed initially. The Superior Court sustained a demurrer without leave to amend and dismissed the case. An appeal to the state Supreme Court reversed the decision, however. The Apablaza case appeared on the docket again in 1928, with the defendants claiming that John V. had relinquished his property rights. Concepción Sepulveda died the following year. The details of the case from that point forward remain sketchy. Whatever the volley of allegations, the Supreme Court approved construction of Union Station on 19 May 1931. Yet, about seven years later, the five surviving offspring of Cayetano, Sr., and Concepción Apablaza were jointly awarded the returns from the sale of their parents' estate, estimated at \$750,000. This award excluded the Alameda-centered homestead, which by then no longer existed.

If 1931 is generally cited as the year of the land transfer, the Chinese community had been atrophying for at least twenty years before. Old-timers talked of a neighborhood that once stretched along both sides of Alameda and numbered – according to various newspaper interviews – anywhere from five to fifteen thousand inhabitants. Census data doesn't support these figures, even though immigrant populations have never been tabulated accurately. Regardless of the enumerators' counts, the withering of Chinatown certainly was apparent to one *Los Angeles Times* writer:

Today the quarter occupies but a scant block and a half on Apablaza, Marchessault, and Jeannette streets, with a few outlying dwellings and stores – a crumbling reminder of what once was America's second largest Chinese city.

As the Chinese slowly vacated the old blocks, the formerly isolated ethnic enclave was part of the broader area described as an integrated, polyglot, inner city hub.

At North Alameda and Marchessault streets we are in the center of the quarter. Traffic roars by; now and then a long freight or passenger train rattles and booms over the intersection, and we find ourselves in that eternal undertone that marks every great city.

Crowds of Chinese and Mexicans, from infants to graybeards, line the benches along the walls. The effervescent chatter of alien tongues is heard on every hand, and how inscrutable are the faces we look into.

Today, as yesterday, a polyglot mass of humanity flows along these streets – whole Mexican families from smallest niños to black-be-shawled grandmothers; Filipino dandies, negroes, tourists, school children and a few white residents. (L'Allemand 1933:12)

The gradual Chinese exodus can be attributed to many factors. First and most obvious, ever since *Carrol vs. Sepulveda*, a number of residents probably doubted the neighborhood's ability to withstand large-scale commercial development. Each ensuing land grab or court case underscored the ultimate verdict as the railroad terminal began to look more and more inevitable. To a lesser extent, Chinatown might also have been the victim of some of its own communal practices. One example was *po-dai*, a real estate transaction ostensibly designed to protect small businesses from rent gouging. Writing in 1944, Tom discussed the implications of this tradition:

When a Chinese wants to rent a store which was once occupied by a Chinese, he must pay the former tenant a prohibitive sum . . . for the so-called "basic property right." If that demand is not met, no Chinese would dare to rent that store. This practice not only hampers the free movement of Chinese stores, but also infringes on the rights of the property owners. The recently remodelled buildings in Old Chinatown which were vacant for two years were not occupied for this very reason. (Tom 1974:31)

While *po-dai* was not the major reason for Chinatown's demise, it certainly added to the process of deterioration. A *Los Angeles Times* writer observed that, "Every other home in Chinatown seems a gambling concession; rents per square inch would give Hollywood a jolt" (Paule 1926:20). After operating in Chinatown for a number of years, the *po-dai* system might have rendered some leases so expensive that only purveyors of vice could readily afford them.

More directly, however, the community withered because it could not hold the second generation Chinese. Kit King Louis focused on this subpopulation; after interviewing a number of subjects, he found that "toward 'Chinatown' they have various attitudes which are in general unfavorable." The intensity of the opinions varied. Those who were trying to secure "outside" jobs and housing sometimes blamed discrimination on the bad images emanating from Chinatown. Another emotional response was embarrassment: "I have not cared much about Chinatown. It seemed such a dingy, dirty place. I went there as little as possible and think I was rather ashamed of it" (Louis 1931:109).

Pensive types could view the situation in a historic perspective:

The Chinatown of Los Angeles [near the Plaza] was built more than one hundred years ago. The buildings are very old. It could not help getting dirty and wearing a decayed appearance. But considering everything, it is not so bad as most of the people think. Most of its inhabitants are the older folks with their old-fashioned inheritance which could not be changed in a short time. It is known that it takes two or three generations for a country to change its customs. So all in all the progress the Chinese people have made in Chinatown is very surprising. (Louis 1931:109, 113)

It was these “older folks” who clung to their community even after the 1931 verdict had been rendered. In fact, one testimony hints that perhaps they confused the Union Station eviction with the deportation threats resulting from the recent police mandate against illegal tong activity:

But the Chinese are sure now that they are being driven from their homes. They cannot understand why; therefore, they view with suspicion and dark glances the stranger who appears in the quarter. If he has a camera, they quickly go indoors, for many of them fear that they are going to be sent back to China. (L'Allemand 1933:13)

In the meantime, all civically involved parties acknowledged that Chinatown had to be relocated. Building industry representatives submitted various designs to the City Planning Commission, as the Chinese Chamber of Commerce dispatched an architect to China to conceptualize a new community that would satisfy both residential and commercial needs. Engineer Peter Soo Hoo, the organization's president, also mounted efforts to delay the demolition process.

By the latter part of 1933, everything became definite – with the exception of where the Chinese would go. The *Los Angeles Times* reported: “Formal and official notices had been sent to all inhabitants of the various buildings several weeks ago” (1933b:9). Some of the residents hesitated. They ignored the warning signs, refusing to move out even when the utilities ceased to function and when the pavement was uprooted (Bingham 1942:133).

Whiting-Mead won the contract and placed operations under the direction of a superintendent named R. L. Joss. Demolition commenced at about 9:00 A.M. on 22 December 1933. The first building razed was a children's school located at 401 Apablasa, at the intersection of Juan Street (fig. 2.22). Soon the remnants of the vegetable market yielded to

sledgehammers and axes (*Los Angeles Times* 1933b). The residents, too, succumbed to reality:

Two . . . Chinese of advanced age, whose wrinkles and shuffle bespoke many years spent in the area, hurried to their small garden and began pulling the vegetables from the ground. All the time their chatter and apparent disgust at the disturbance could be heard near by above the roar of loaded trucks and the smashing blows. Others tossed their few belongings into a modern shopping bag and, with their favorite cooking utensils in hand, slowly plodded from the scene of a quickly wrecked home.

Not a soul stirred in the old vegetable market . . . All fifty stalls, in which they lived, were vacant. The stable, littered with hay and straw, where they cared for their weary animals after a day of slow driving throughout Los Angeles, was empty. The fire beneath the great grill, under the shed in the center of the inclosed (*sic*) square, was out; the ashes were cold.

One old, wrinkle-faced former resident, who came to look through faded eyes, explained they [the Chinese] had gone in all directions. (*Los Angeles Times* 1933b)

The Chinatown that had been so isolated during its heyday departed amid great fanfare. A special parade and formal ceremony occurred on 22 September 1934 to commemorate its passing:

A white dove fluttered skyward from a child's hands. Soaring higher and higher, it dwindled to a tiny speck, and disappeared. It symbolized the passing of Los Angeles's ancient Chinatown.

This ceremony dimaxed an entertainment yesterday afternoon for children of what Countess Karin de Roaldes, mistress of ceremonies, termed “a treasure chest of nations.” Boys and girls of twenty-one nationalities joined in the commemoration, held at the new union depot site at Marchessault and Apablasa streets . . .

Little Chinese girls clothed in delicately embroidered silk vied with Scandinavian and Spanish-American children dressed in the vivid-hued costumes of their native countries. (*Los Angeles Times* 1934c)

Most residents of the Apablasa neighborhood scattered to smaller Chinese enclaves (McDannold 1973:64–65), while others lingered several years after the wrecking commenced, watching their community slowly crumble around them. Peter Soo Hoo, an engineer with the city's Department of Water and Power, had successfully petitioned Union Terminal engineers for delays, but not a total halt, in the demolition process (Bingham 1942:147). Still,



FIGURE 2.22
Demolition begins at 401-403 Apablasa Street. The first building razed was a children's school at 401 Apablasa. *Photo courtesy of Collection of Carlos Apablasa*

the actual relocation of the community was awaiting a creative solution.

Nostalgia prevailed – initially. Particular attention was paid to the old Apablasa home, situated “ten feet from where the terminal’s main entrance” would stand. This four-room structure, often cited as the first wood-frame dwelling in the city, was to be “preserved for posterity” by the three railroad companies. Helen A. Lawson, a district agent for the Southern Pacific, announced plans to relocate the Apablasa abode and turn it into a museum (*Los Angeles Times* 1933b).

Yet, family members may have sensed that this preservation would not come to fruition. Sometime in 1934, Charles Apablasa (great-grandson of the patriarch Juan), his wife, and two young children made a final pilgrimage to their ancestral home (fig. 2.23). Indeed, the railroad companies’ “museum” would go the way of the Matthew Keller manse, the “first” brick house in the city and another victim of the wrecking ball.

Other issues evaded resolution. On 9 January 1934, two weeks after demolition began, the Los Angeles Municipal Housing Commission approved a plan to relocate Chinatown (*Los Angeles Times* 1934a). George



FIGURE 2.23
Left to right, Charles C., Carlos B., Panchita, and Ernestine Apablasa. In 1934, Charles Apablasa, great-grandson of the patriarch Juan, his wife, and two young children made a final pilgrimage to their ancestral home. It was to have been made a museum by the railroad companies but was demolished instead. *Photo courtesy of Collection of Carlos Apablasa*

Eastman, a consulting engineer and former Los Angeles Chamber of Commerce president, had submitted blueprints for a \$1 million residential and commercial development bounded by Ord, Alameda, New High, and Alpine streets, which could become home to 2500 Chinese. Deemed too expensive, the plan was scrapped.

Two competing plans subsequently emerged, and both materialized. China City opened in 1939, the brainchild of Olvera Street developer Christine Sterling. Like its sister Mexican quarter, this community was self-consciously ethnic in a somewhat exaggerated way, with rickshaws, film props, and even a "Great Wall" donated by moviemaker Cecil B. DeMille. China City contained small rental lots and attracted about fifty small shops. Located between Ord, N. Spring, Macy, and N. Main, it ultimately burned.

The other development, New Chinatown, had a different history, mission, and aura. It came into being when Peter Soo Hoo discovered that vacant Santa Fe Railroad land west of Broadway and north of College Street was for sale. Having dealt with the railroad companies before, he had made valuable contacts and ultimately secured the property for 75¢ a square foot through the assistance of Santa Fe agent Herbert Lapham.

New Chinatown was an exclusively Chinese American development. Soo Hoo and a group of some twenty-eight men and women formed a corporation for its creation north of the historical location. Shares were offered at \$500 each. What was one of the earliest pedestrian malls in Southern California and the only one in the country where the property was owned by Chinese Americans, opened in June of 1935 with brightly colored build-

ings and tiled pagoda roofs. The first enterprises were eighteen stores and a bean cake factory (*Los Angeles Times* 1988). The total investment hovered at approximately \$1 million by 1942. New Chinatown welcomed tourists, shoppers, and diners, but continued to serve the social and economic needs of the Chinese. Buildings assumed a clean, contemporary Chinese American appearance, representing the community's savvy founders (Bingham 1942:148-152). Neither New Chinatown nor China City could be defined solely by business activities, however. Residential units and organizational headquarters were incorporated into both commercial districts, and despite their disparate histories, the two developments merged into what is now called Chinatown (McDannold 1973:107).

Union Station opened on 7 May 1939 with the rumble of Union Pacific, Southern Pacific, and Atchison, Topeka & Santa Fe trains. Hailed as the finest depot on the West Coast, the terminal cost \$11 million, 18 percent more than originally anticipated. More than 500,000 cubic yards of fill (*Railway Age* 1939:768) had been brought in from old Fort Moore hill to establish the trackbed, burying the remains of Apablaza Street as much as 17 feet below the new facility.

Today, Union Station is listed in the National Register of Historic Places for its architectural, historical, and archaeological values, and the structure has been documented in the Historic American Buildings Survey. The site of Old Chinatown made a second brief appearance as construction crews prepared tunnels and entrances for the Los Angeles Metro Rail rapid transit system. As evidence of the past, Apablaza Street and environs have once again been buried, maybe forever.

Archaeology of Chinatown

ALTHOUGH the historical documentation is rich in such detail as land transfers, maps of land use, ordinances, court cases, immigration and customs files, and eyewitness accounts – however misunderstood, such records fail to reveal the daily life of the residents of Chinatown. Lacking direct testimony of these residents, archaeology attempts to provide such insight. Values, traditions, and beliefs are intangible but can find expression in structures, features, and artifacts.

Archaeological excavations at Union Passenger Terminal in connection with the Metro Rail station construction were conducted intermittently from 1988 through 1991. Conditioned by a complex set of variables, including as much as 18 feet of track fill and the construction schedule, the times and places of the investigation also had to accommodate keeping the trains running while work continued below the tracks. Consequently, data recovery was carried out when all factors combined to allow a safe work environment and only in those areas where Metro-Rail's right-of-way impacts the site (Greenwood 1987). Gathering data concerning the location, size, depth, integrity, nature, and research potential of the existing resources, we were also expected to mitigate the impact of construction by means of a rapid data recovery program. These objectives were accomplished by combining removal of 14 to 18 feet of overburden by mechanical equipment, hand tools, and backhoe trenches, with shovel test pits, controlled

excavation units, controlled hand exposure of structural remains and refuse deposits, and comprehensive instrument mapping of the site area, including elevations.

Fifty-nine cultural features – ranging from a single brick pier to large, complex refuse deposits – were encountered. When a particular area revealed what appeared to be significant or widespread cultural remains which appeared to be associated, a locus number was assigned; otherwise, recovered materials were combined in seven analytical units defined by geographic area. Four loci (fig. 3.1) were defined: Locus 1 consisted of features 1 through 15 located under the temporary passenger bridge; locus 2, features 16 through 38, was located at the intersection of the Union Passenger Terminal main tunnel and the Metro Rail station; locus 3 contained features 39 through 42, found during the excavation of the station's emergency exit 10; and locus 4 contained features 43 through 59, at the station's west entrance. Each locus was below a 14 to 18 foot cap of compacted fill imported for the railroad track beds. A layer of demolition rubble marked the top of the cultural deposits: bricks, concrete, pavement, other architectural materials, and artifacts. These deposits were sampled or removed.¹

Of the seven analytical units, AU-1 is the most general and broadly dispersed, including cultural materials found on the surface, in backhoe trenches, augering for the ramps, baggage handling excava-

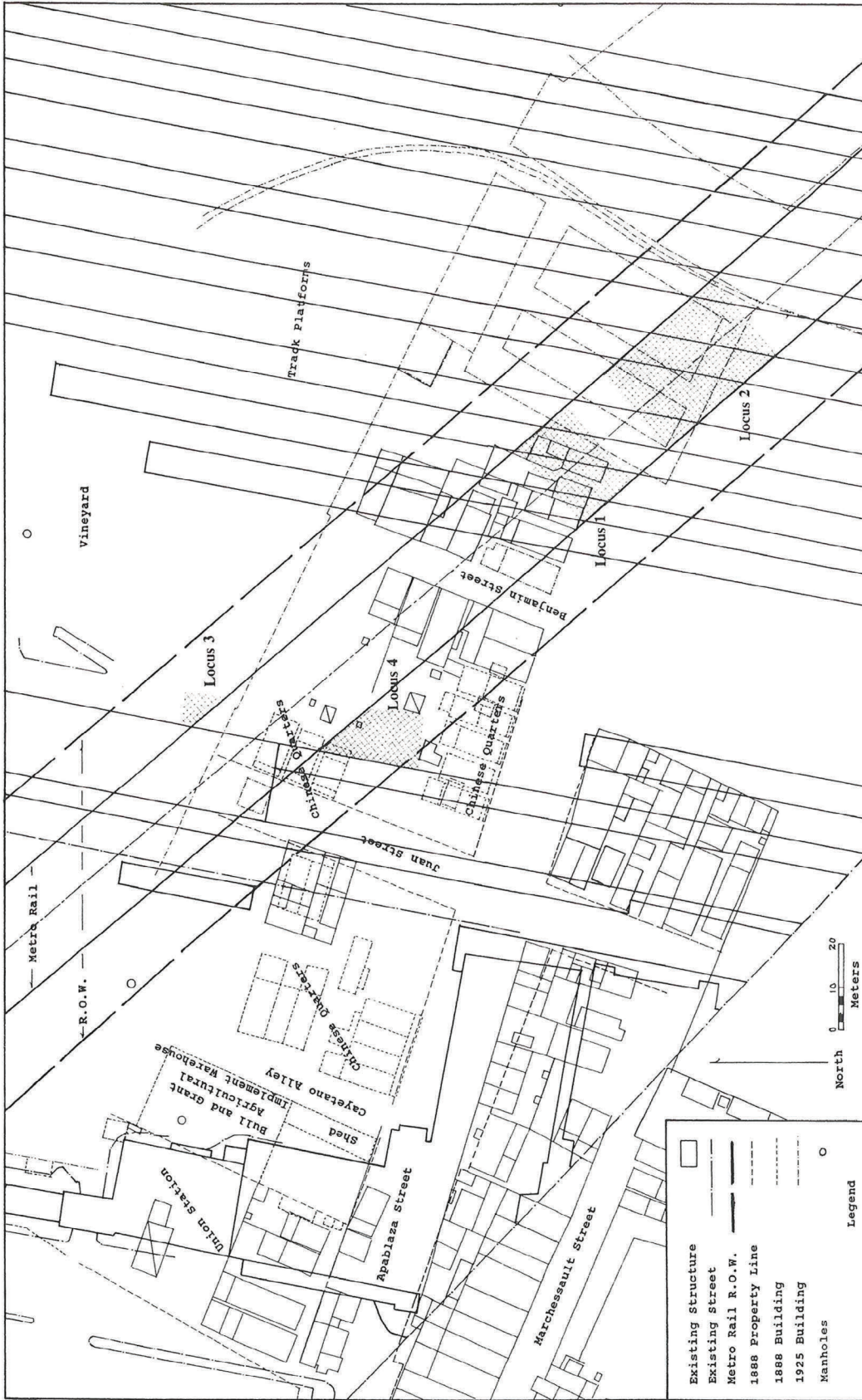


FIGURE 3-1

Within the area of excavation, four loci were defined: locus 1 was under the temporary passenger bridge (features 1-15), locus 2 was at the intersection of the main passenger tunnel and Metro Rail station (features 16-38), locus 3 was at the station's emergency exit 10 (features 39-42), and locus 4 was at the station's west entrance (features 43-59). *Adapted from Area Location Systems 1988*

tion areas, guidewall trenches, excavation units, observation wells, track area, drop shaft, retaining walls, feature 17, and artifacts collected by construction crews. AU-2 contains features 4, 6, 8, 10, and 15; AU-3, features 26, 28, 34, 35, 36, and 37; AU-4, features 19, 20, 21, 23, and 24; AU-5, features 44, 45, 46, and 50; AU-6, features 51 and 55; and AU-7, features 2 and 7.

Backhoe Trenches/Overburden Removal

Two types of backhoes were utilized: 220B, a large machine with a six-foot bucket, and the smaller 555 Ford backhoe with two- and three-foot wide buckets. D-9 tractors and front loaders were also used in the upper levels of compacted fill to enable the backhoes to reach the deeply buried cultural layers. In locus 2, where the area available for investigation was very restricted, a crane lowered the backhoe into the site. The backhoes were used to clear away the overburden only until cultural materials were found. To expose potentially intact cultural deposits, further clearing of the overburden and mixed soil lenses at the interface of the fill and original ground surface was done by hand.

Surface Collection

During removal of the overburden and borings by the construction contractor, diagnostic artifacts were collected from the disturbed upper soils, bagged, and labeled according to provenience. When correlated with historical maps, the relative densities of such scatters helped in predicting the location of subsurface features.

An archaeological vicinity map was prepared using transit and stadia rod for each area investigated. The maps accurately depicted the location of a site datum, cultural features, major topographic and structural elements that figure prominently on the site, excavation units, surface collection points, and auger borings.

Shovel Test Pits

Shovel test pits (STPs) were dug to determine the presence of subsurface features, evaluate the density and contents of subsurface deposits, and examine other conditions of potential interest. These pits, a secondary method of testing the site, provided preliminary parameters of the deposits. They were approximately 0.5 m in diameter and extended to depths of 0.7 to 1.2 m, supplemented by auger borings for an additional 0.5 to 1.0 m in depth. Soils were screened selectively when cultural material was

observed; all observed artifacts were collected, with provenience, depth, associations, and soil changes recorded.

Archaeological Excavation

Hand methods were the primary means of excavation to yield evidence of chronology, site complexity, stratigraphy, deposition, and integrity. The size of each unit investigated was 1 x 1 m, except where features or architectural elements prompted a change from arbitrary to cultural boundaries. Excavation was conducted in 10 cm incremental levels, except when natural or cultural strata were defined. All soil was dry screened through 0.25-inch mesh. Fire-affected rock and various types of bulk architectural debris were counted and weighed in the field, recorded on the unit level record, then reburied in the unit. Soil profiles, using Munsell color determinations, were drawn of the wall that most clearly represented a unit. Residue remaining in the screens and unscreened soil samples were returned to the laboratory in marked bags identified by site and feature number, unit number, depth, date, excavator, and any additional comments such as contextual associations. Fragile or perishable material was removed from the gross sample in the field, packed separately, labeled with full provenience, then placed within the larger sample bag.

Laboratory Methods

All residue in the screens and all surface collections were first scanned to isolate perishables and items that might have paper labels or inscriptions in ink, grease pencil, cinnabar, or other media. The large number of glass and ceramic artifacts recovered that can be interpreted or identified owes much to this precaution. All other material was washed and air dried before being sorted in the laboratory. Preliminary sorting followed standard procedures: faunal elements, ceramics, glass, and metals were grouped, except where functional categories were more meaningful. For example, all buttons – whether made of glass, ceramic, bone, or metal – were grouped together, and all marbles – whether made of glass or clay – were grouped as toys.

All whole, nearly whole, marked, or otherwise diagnostic artifacts were cataloged. Like items from a single provenience were batched under a single catalog number. When analysis indicated that some features designated separately in the field actually con-

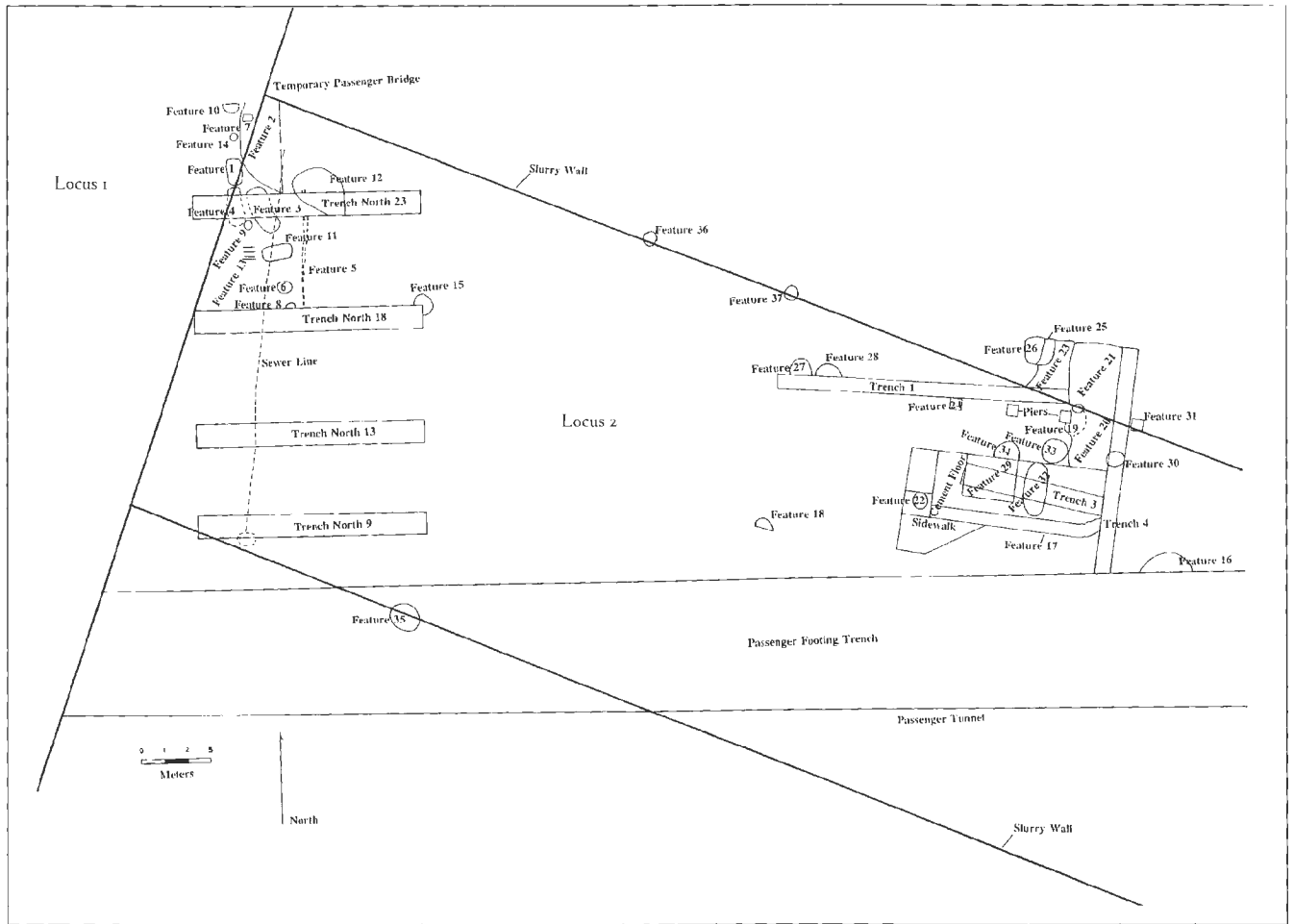


FIGURE 3.2
Locus 1 corresponds to the group of structures at the southeast corner of the block east of Benjamin Street on the historic maps. Locus 2 corresponds to the south end of the wagon shed and Chinese vegetable peddlers' storage at the east end of Apablasa Street.

stituted one larger deposit, the contents were combined in the laboratory (features 19, 20, 21, 23, and 24; features 44, 45, 46, and 50). Recorded with all pertinent detail and discarded were small fragments with little or no continuing research potential beyond their presence, location, and quantity.²

Dating the deposition of the features was accomplished by comparing dates and range of dates from primarily four artifact categories: ceramics, glass, electrical fittings, and coins, supplemented by technological attributes when the makers' or product marks were not present. The coins can provide only that date after which a deposit must have been made; the Chinese coins in particular do not contribute to the site chronology because of their antiquity; however, the ratio of zinc Vietnamese coins supports dates between 1885 and the late 1890s (chapter 5). The presence of earlier artifacts is attributed to primary deposition plus the backfilling of holes, pits, and general cleanup around the structures and reflects the span of Chinese occupation from the 1880s to 1933. Additional efforts in areas not avail-

able for investigation would probably have revealed earlier deposits left by the original owners, occupants, or users of the property.

Locus I

Locus 1 corresponds most closely to the group of structures at the southeast corner of the block fronting Apablasa Street and east of Benjamin Street, as shown on historic maps. On the 1889 Dakin map, it overlies the two easternmost buildings, what appears to be a narrow alley between them, and the rear and side yards. Features 1 through 15 were discovered during the excavation of footings for a temporary passenger bridge (fig. 3.2). Eighteen feet of compacted fill were removed by the 220B and smaller 555 Ford backhoes. Below this overburden, hand crews removed cultural stratum A, which consisted of a 30- to 40-cm layer of brick rubble and random artifacts. The second lower stratum (B) consisted of a sandy loam that was generally 30 cm thick and contained most of the features and architectural remains. Stratum C was an underlying light-colored, cultur-

ally sterile sand layer; a minimum of 1 m thick, it may be flood alluvium.

Feature 1: Trash Pit

Near the northwest corner of locus 1, a trash pit consisted of four separate strata designated features 1A, 1B, 1C, and 1D. This well-defined pit was covered by a layer of brick rubble. The overall deposit measured 168 x 54 x 110 cm deep. Feature 1A (approximately 15 cm thick) overlay feature 1B, (25 cm thick). Feature 1C was adjacent to the north end of feature 1A. Feature 1D (50 x 35 x 40 cm) was intrusive into feature 1A. Each stratum was clearly discernible by layers of fine-grained silts, making it possible to distinguish the various deposits.

Feature 1A contained numerous ceramic and glass artifacts and very few organic components. Most of the cultural material was recovered from feature 1B, a very dense mix of organic materials and extremely friable, organic loamlike soil. There were innumerable lenses of eggshell, ash, and charcoal; extensive amounts of fish and mammal bone; Wavy Chione shells; and a wide assortment of ceramics and glass. Feature 1C contained very few cultural materials. Encased in a very compact mottled clay, feature 1D yielded numerous ceramics, glass, and nails from fine gravel lenses amid small rounded rocks and cobbles.

The four elements of this feature were related to the deposition of refuse. The distinct differences in soil texture, constituents, and clearly defined strata suggest successive periods of deposition. The central portions of each component overlapped one other, indicating that the pit was open over time and intentionally utilized. The apparent removal of the central portion of feature 1C may have been an attempt to create more space.

Feature 2: Trash Deposit

Feature 2 was a thin, but concentrated, 30-cm-deep deposit of cultural materials spread out in a 4 x 2 m area. In profile, the feature was characterized by sloping walls. The west edge of the pit was within 15 cm of the east edge of feature 1. There was no internal evidence of stratigraphy. The materials recovered included ceramics, glass, amorphous metal, charcoal, and food remains (eggshells, fish, and mammal bone). The discards were placed in a natural depression or only slightly excavated pit. Clearly delineated, the profile of the feature did not show any obvious modification, suggesting that a natural de-

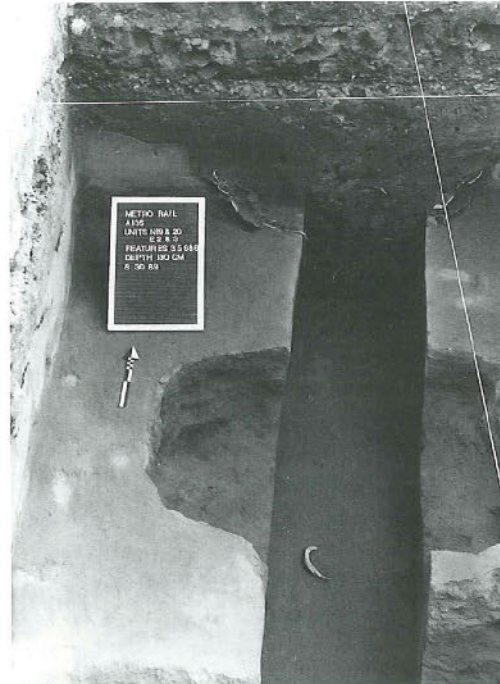


FIGURE 3.3
This refuse deposit (feature 3)
contained dense concentrations
of artifacts in the lower portion.
Photo by R. S. Greenwood

pression was used. The lack of stratigraphy indicated that use was probably limited to a relatively short period.

Feature 3: Trash Pit

Excavation of trench N23 revealed three refuse deposits designated features 3 (fig. 3.3), 4, and 12. Removal of the overburden indicated that feature 3 was an elongated oval (130 x 75 x 45 cm deep). Because the lowest 20 cm of the deposit contained dense concentrations of artifacts and the upper 25 cm consisted of mammal bones and layers of eggshells, suggesting an interruption in deposition. The deposit contained porcelains, stoneware, earthenware, and sheets of pane glass. This feature appeared to have been purposefully dug, with two episodes of dumping: the initial deposition relating to mostly domestic broken artifacts, followed by a subsequent filling with eggshells and discarded mammal bone. It may be associated with features 2 and 4.

Feature 4: Trash Deposit

Similar in appearance to feature 3, which is located immediately to the east with a 15 cm balk between it and feature 3, feature 4 is a small (125 x 90 x 29 cm) trash deposit with an elongated oval configuration. The sediment within the feature was a dark grayish-brown sandy silt containing decayed organic material. With walls almost vertical, the pit appeared to have been purposefully dug. The de-

posit contained a mixture of bird and mammal bone, eggshells, cuttlebone, amorphous metal, large cans, ceramics, glass, charcoal, and a shoe sole.

Because of the nature of the contents, the similarity of the configuration, and its close proximity to feature 3, the two deposits may have been dug by the same individual(s) or household unit. The singular difference between features 3 and 4 was the lack of stratification between food remains and artifacts in feature 4, suggesting its uninterrupted use. Feature 3 had a gap between the faunal remains and the deposit of artifacts. The vertical walls of feature 4 may represent an intentionally prepared trash pit or the filling of a depression originally created for household drainage or other purpose.

Feature 5: Brick Alignment

An alignment of bricks oriented north-south, feature 5 consisted of two parallel rows of fired bricks, half of them fractured or simply fragments, with no evidence that the bricks were mortared together. Toward the north end of the alignment, the fragments were jumbled and randomly placed, suggesting that they were dislocated from their original position during demolition. The overall length of the alignment is 5.1 m, with a width of approximately 0.5 m, including the fragments displaced.

The bricks were machine made, probably dating to the late 1800s. Artifacts found in association included a bottle neck of brown glass with applied brandy or wine finish, Celadon fragments, stoneware, earthenware fragments, tin sheeting, and an assortment of nails and pane glass. Two of the bricks have mold stamps of "J. Mullally/Los Angeles," the second oldest brick company in Los Angeles.

The alignment indicated that they were purposefully placed. The lack of mortar and the use of broken and fragmented elements suggest that the function was more symbolic than structural, perhaps a boundary or path. There was no evidence of any parallel or perpendicular alignment to suggest walls or foundations.

Feature 6: Trash Deposit

Removal of the overburden between base lines N18 and N13 not only revealed features 5 and 8 but also a shallow trash deposit, designated feature 6. A sewer trench (108 x 80 x 25 cm deep) was also found bisecting the feature. Feature 6 had relatively straight sidewalls and a bowl-shaped bottom. Cultural materials included fish and mammal bone, ceramics,

fragments of glass bottle, and Chinese stoneware. Inside the base fragment of a stoneware jar was found a semi-complete fish skeleton set in soft plaster. Fragments of turtle shell were associated with the skeleton. The pit functioned as a refuse depression, containing materials primarily domestic in nature.

Feature 7: Wooden Posts

Two vertical wooden posts stood in the northwest corner of feature 2, approximately 10 cm apart and aligned east-west. A small slat of wood, not unlike a fence board, was connected to both posts with wire nails. The westernmost post is 4 x 6 inches, and the easternmost post, made of milled lumber, is 4 x 4 inches. The tops of the two posts were burned and in a state of advanced decay.

Artifacts in the immediate area included Chinese gaming pieces, dice, marbles, ceramics, amorphous metal, pieces of (unburned) wood, and a fragment of brick. Because feature 2 surrounded this feature, it is unclear whether the artifacts were associated with the posts.

Based on the slight evidence of the connecting board, post size, and the minimal depth of the base of the posts, the feature may be related to a fence line, not to the wall of a structure. Intrusive into feature 2, it appears to be of a later deposition.

Feature 8: Trash Deposit

A small (53 x 37 x 25 cm) trash deposit was discovered during the excavation of trench N18. The walls were crudely stepped rather than sloped as in the other refuse pits. Approximately 75 percent of the feature was removed during the excavation of the trench. Artifacts recovered included fish and mammal bone, ceramics, fragments of glass bottles, and Chinese stoneware, an assemblage very similar to that of feature 6. The pit was prepared to receive domestic refuse.

Feature 9: Wooden Post

A wooden post and posthole within feature 4 were designated feature 9. The post, measuring 5 x 5 inches and 3.3 feet long, contained two wire nails on the south side. The posthole (45 x 70 x 159 cm) disturbed the eastern half of feature 4. The wooden post was not burned, except along a splintered edge of the top.

The soil of the posthole contained dense concentrations of ash and charcoal, with a high organic content characterized by fish scales, mammal

bone, and eggshells. Cultural materials were encountered throughout the posthole fill. Numerous short nails with small heads were recovered from the base, and several corroded coins were found on the east side of the post. This feature may be related to feature 7, interpreted as part of a fence.

Feature 10: Trash Pit

A shallow (126 x 57 x 12 cm) trash pit was discovered in unit N27/W0-E1. The north end of the feature was destroyed during construction of the slurry wall, and the west side was damaged by bulldozer activity. These disturbances precluded accurate observations, but the configuration appeared to be a shallow oval. The matrix was a light organic loam intermixed with sand. Artifacts included ceramics, nails, fish and mammal bone, and pieces of fabric. The nature of the deposit – primarily domestic materials – and configuration of the pit indicated feature 10 functioned as a receptacle for refuse.

Feature 11: Trash Deposit

Feature 11 was a refuse deposit (114 x 75 x 68 cm). The walls of the pit were straight, and the bottom was flat, not bowl shaped as were many of the other pits. The plan view was roughly rectangular. A sewer trench bisected this deposit and appeared to have removed approximately 30 percent of the contents. Artifacts included ceramics, nails, fish and mammal bone, coins, and figurines. A Walking Liberty \$5 gold piece dated 1901 and two fragments of an opium pipe bowl were found. The nature of the deposit and configuration of the pit indicated that it was dug to receive discards.

Feature 12: Trash Deposit

A large (150 x 150 x 16 cm) trash deposit, this feature's south half was cut through by trench N23, with the remainder exposed in the north and east walls of the trench. With an oval configuration and almost vertical walls, it appeared to have been purposefully dug to contain refuse. The matrix was a light organic loam intermixed with sand and silt. Artifacts recovered included mammal bone, fish bone, ceramics, glass bottle fragments, and Chinese stoneware. The nature of the deposit and configuration of the pit indicate that it served as a receptacle for household refuse.

Feature 13: Burned Wooden Planks

Vestiges of three burned wooden planks, spaced

TABLE 3.1

Temporal assignment of features

Feature	Electrical	Ceramics	Coins	Glass
1			1871-1898	1904-1921
2		1903-1918		
3		1896+		1894-1920
11		1904+	1901	1894-1915
12		1890-1906	1890	1884-1890
15			1861-1909	
16		1931-1954		1905-1915
18	1901+			1901-1921
22	1895+			1904-1920
27				1901-1936
29		1894-1911	1905-1931	1876-1905
30			1890+	1907-1925
31				1870-1920
32		1770+		1901-1920
33				1901-1920
35			1883+	
38		1896+		1880-1900
39		1903-1931		1906-1920
40		1892-1910		1901-1920
41		1901-1915		1884-1920
42		1905-1909	18XX-1904	1900-1905
43	ca. 1913			1913-1920
44-46, 50	1892+	1883-1889		
47	1910+			1900-1920
49		1891+	1912	1906-1920
51, 55		1880-1900	1912-1920	
53	1903-1911			
54		1875-1900		1897-1920
56				1887-1908
57		1883-1889		1890-1920
58				1906-1908

approximately 15 to 20 cm apart, were oriented east-west and covered an area of 200 x 200 cm. All three contained or are near wire nails. The traces consisted of charcoal, a charcoal smear, charred wood, and burned soil. Their configuration suggested that the wood was floor planks or fence boards. Fencing might seem more probable because of the gaps between them; there was no evidence of additional wood in between. Feature 13 was in alignment with features 7 (wooden posts) and 9 (wooden post); all may have been associated as well with feature 5 (brick alignment).

Feature 14: Brick Cache

Removal of the overburden between baseline N25 and N27 revealed four jumbled bricks in a small depression within stratum c. The hole was 33 cm in diameter and approximately 14 cm deep. Broken and unmarked, the bricks were associated with a few wire

nails, mammal bone, and a fragment of glass. Lacking diagnostic materials or obvious functional elements, there is insufficient information to determine the nature of the association.

Feature 15: Fire Pit

Feature 15 was a fire pit exposed at the east end of trench N18. Although a portion of the feature was lost in the trench excavation, there was sufficient integrity to estimate its diameter as 72 cm and its depth as 33 cm. The depth indicated it had been dug below the contemporary grade (20 cm) and then utilized. The contents were mostly burned wood fragments, charcoal, burned sand, and ash. A small charred bag containing Indian Head pennies was recovered from the center of the deposit. Other than amorphous metal and nails, little else was recovered. On the basis of the contents and fire-altered soil, it is probable that this feature functioned as a crude incinerator or cooking area.

Interpretation

It is possible – but not easy – to develop an historical geography of Chinatown and trace the many changes which took place as the settlement grew and uses of the structures evolved from the 1880s to the ultimate demolition in 1933. The system of street numbering changed at least twice, some of the early buildings were replaced by others, and the names of residents or proprietors were not always recorded in the commercial directories. Dates and street names were sometimes attributed to historical photographs when they were accessioned into libraries much later and should be used with some caution. Nevertheless, the following trial reconstruction of the block between Benjamin and Concha Streets, on the north side of Apablasa, helps to explain the nature, origin, and function of features within locus 1. The details were compiled by reference to a series of dated maps, photographs that reveal street numbers, and the sequence of city directories that report street addresses, and sometimes names, with reference to blocks and intersections.

The Dakin map of 1889 shows that the north-east corner of Benjamin and Apablasa was still vacant (fig. 2.5). To the east, the first building was numbered 305, a two-story store with a metal (probably tin) roof, a shingled one-story addition to the rear, and a window opening on the east wall of the second floor. There was a gap between this and two adjacent structures, numbered 307 and 309; both were

two stories in front, with lower additions at the back. Separated by another gap and a fence line was another two-story, shingle-roofed structure at 311. A more substantial vacant space of 60 feet intervened before the last structure before Concha Street, a larger two-story building at 315 with a shingle roof and one-story additions in back.

In the city directory for 1901, street numbers from Alameda east to Juan were now in the 300s, while everything east of Juan Street had been changed to the 400 series. On the Sanborn map of 1906, the Benjamin corner was still vacant, and neither the footprint nor the structural details of the store identified earlier as 305 had changed, but the address was now 521 Apablasa. Why this single structure appears to have been given a 500-series address, while the rest of the block was still in the 400s is not clear. The two adjoining structures previously at 307 and 309 were gone, replaced by a single, wider, one-story building with a shingle roof and street number of 423. What had been a two-story structure at 311 in 1889 was now a larger, one-floor building labeled Chinese Mission with an address at 425 Apablasa. This was present at least by 1902, according to the city directory. The Mission and the two-story tin-roofed store both lasted until Chinatown was demolished, and served as useful reference points in interpreting changes. A vacant space still intervened before the easternmost structure formerly at 315 Apablasa, which was labeled as a dwelling at 429, keyed on the Sanborn map as a one-story construction with two stove pipes or hot water heaters.

The Baist map of 1910 shows that the corner at Benjamin and Apablasa had been filled in and Concha Street was still present, but this map lacks the detail and precision of the Sanborns. By 1925, at least (fig. 2.7), the west corner was depicted as a one-story, shingle-roofed dwelling with an address of 515 Apablasa. The store (521 Apablasa) was unchanged. The next structure was now 523, and the Mission was 525. The east end of the block was substantially different and will be discussed in the section on locus 2.

The Chinese Mission had been organized in 1896 in the original frame building then numbered as 311 Apablasa, which measured 15 x 53 feet. Whether destroyed by fire or because of a need for more space, the old structure had been replaced by a larger, one-story building by 1906. The new one covered 21 x 65 feet, probably overlapping all of the older footprint. It was described in 1926 as:



FIGURE 3.4
The Chinese jail on Apablaza Street was used by the Chinese tongs to confine members who committed minor offenses.
UCLA Collection, Chinese photo file no. 98

...an unimposing old, grey frame house with two bedrooms in the rear. There was a kitchenette, a rather shabby livingroom for the teachers and a large front room opening on to a rickety porch. Ironically enough better quarters were unobtainable because of the grip gambling had on Chinatown. (Bingham 1942:117-118)

Features 12 and 15, in particular, may have been associated with the antecedent structure, and subsequently buried beneath the Mission. They would have been at the rear and on the west side of the earlier structures where there was no impediment to the discarding of trash.

Other features can also be correlated with structures and activity areas indicated on the maps. The fence posts recorded as features 7 and 9 correspond to the north-south fenceline between 309 and 311 Apablaza on the 1889 Dakin map. The burned wooden planks of feature 13 are perpendicular to the alignment of features 7 and 9 and may represent fallen fence boards. It is possible that the charred debris may be evidence of the fire in 1898, which destroyed thirteen wood-frame "shacks"; it probably occurred on this block since the residence of Rev. Ng Poon Chew at 421 Apablaza (the location shown on the Sanborn 1906 map as 521 Apablaza) was mentioned in the account. The brick alignment east of the pos-

tulated fence remains (feature 5) suggests a walkway or other feature which would be in the backyard of 311 Apablaza. Bearing in mind that the street numbering had changed by 1902, the 1925 Sanborn showed that the fence had disappeared, and a new building had been erected as 523 to replace the two older addresses at 307 and 309 Apablaza. According to the caption on an undated post card (fig. 3.4), the old store which was first 305 and later 521 Apablaza came to be used as the "old Chinese jail . . . Here the Tongs took care of any member that committed a minor offense. The L.A. City police allowed the Chinese to take care of their own."

Of the fifteen archaeological features in locus 1, most contained artifacts and faunal remains which seem to reflect the communal activities related to the peddlers at the vegetable and storage sheds (see locus 2), rather than individual domestic households. All of these features together yielded only 6 percent of all the rice bowls recovered ($N = 48$), no Celadon at all, and almost none of the other shapes and types of ceramic tablewares which would be anticipated in a family household. There were a few of the thick, undecorated British whiteware plates which were probably used by the teachers and are not typical of the Chinese cupboard or diet. The other anomaly among the deposits involved features 12 and 15, which contained notably early assemblages and no electri-

FIGURE 3.5

The brick footing and pavement (feature 17) appear to be the foundation and flooring of a structure. Photo by R. S. Greenwood



cal fittings at all. These were associated with the early dwelling at 311 Apablaza which was replaced by the newer Mission structure prior to 1902. The other early deposits were features 2 and 3, which would have been on the west side of the old fence line, in the alley or other vacant space adjacent to the original structure at 309 Apablaza, later buried below the newer building designated as 423 in 1906 and by 1925 as 523 Apablaza.

Locus 2

When portions of the existing passenger tunnel and adjacent ramps were removed during construction, the archaeological monitor observed numerous Chinese artifacts. Trenching was halted in the immediate vicinity, and the area was hand cleared. A large smear of artifacts embedded in tar and oily soil was designated feature 17A. Feature 17 (brick foundation) (fig. 3.5) had been encountered in the trenching of the main passenger tunnel, and a layer of what appeared to be associated artifacts was also found. Subsequent excavation revealed that the cultural material was pervasive over the entire locus rather than directly associated with feature 17. It probably resulted from the demolition of Chinatown because it overlay intact features (fig. 3.2) and architectural elements. Underneath feature 17A was an asphalt pavement that covered all the trash deposits and several architectural features, except 17, 24, and 31. The location is consistent with the south end of the “wagon shed” and “chinese vegetable peddlers’ storage” depicted by Sanborn at the east end of Apablaza Street (fig. 3.6). A secondary construction in this location, these large buildings would have replaced the isolated dwelling shown on the 1889 map and obliterated Concha Street. This locus contained features 17 through 38.

Feature 16: Trash Deposit

A large (120 x 90 x 100 cm) irregularly shaped trash deposit was located directly beneath the operational rail tracks. Because it was impossible to remove the overburden, the contents were excavated from the trench wall into dust pans, emptied into buckets, and raised to a safe area for screening. A significant number of Chinese artifacts, fish and mammal bone, and other items were recovered. The irregular depression did not appear to have been greatly modified for its eventual function as a trash pit. The wall on the west side were crudely sloped; the wall on the east side was almost vertical. The bottom of the pit was uneven and did not evidence any preparation.

Feature 17: Brick Footing

A brick footing eroding out of the wall of the old passenger tunnel trench was associated with a cement floor. Initially, the oily compacted layer of artifacts was designated as feature 17A to differentiate it from the brick foundation. Eventually, this layer, which continued over the entire locus, was interpreted as demolition debris. Approximately 125 cm below grade, the brick footing was 50 cm wide and 6.25 m long. The cement pavement was on the north side of the foundation, extending from the westerly end of the footing. In the center of the foundation was a brick pier measuring 60 x 50 cm.

The pavement on the north side had been scored into eight sections, of which the easterly end had apparently been destroyed (fig. 3.5). The north section of the pavement measured 2.5 x 9.5 m and was approximately 3 cm thick. The north edge was bordered by a 50-cm-wide alignment of brick rubble placed in a shallow trench less than 10 cm deep.

A sparse scatter of artifacts associated with the foundation included bottle glass, Chinese ceramics, pane glass, amorphous metal, and broken bricks. The diffuse scatter above it was separately cataloged as feature 17A. The brick footing and pavement appeared to be wall and flooring, respectively, of a structure. Features 24, 25, and 31, other architectural elements, appeared to be related.

Feature 18: Trash Pit

Excavation around the old passenger tunnel revealed a second trash pit in profile. A portion of the deposit had been cut away and the full size of the deposit was not determined. The diameter was esti-



FIGURE 3.6
The location of feature 17 corresponds to the south end of the wagon shed and vegetable peddlers' storage. Photo courtesy of Regional History Center, University of Southern California, no. 8921

mated at 102 cm; depth was 57 cm. The sides of the pit were nearly vertical, and the bottom was irregular. Artifacts recovered included fragments of bottle glass, broken bricks, Chinese porcelains and stoneware, dense concentrations of amorphous metal, what appeared to be decomposed mortar, and fragments of a metal pipe. The vertical walls suggested that the pit was purposefully dug and utilized as a refuse deposit. There was no evidence of stratification, indicating that the filling occurred over a relatively brief period.

Feature 19: Trash Scatter

This large trash scatter was found immediately north of the feature 17 pavement. The depression containing the deposit was shallow and dish-shaped, sloping to an irregular bottom. The concavity measured 300 x 200 x 31 cm deep. There was no evidence of modifications or preparation to receive the discards. Feature 20 intruded into the southeast corner of this feature. The recovered materials included Chinese gaming pieces, medicine bottles, a Chinese wooden comb, stoneware jar fragments, and mammal, bird, and cuttlefish bones. The feature represented a natural depression that was utilized for the

disposition of household discards.

Feature 20: Trash Scatter

Feature 20 (100 x 100 x 39 cm) appeared to post-date the deposition in feature 19, as it overlay and intruded into the latter. A thin layer of sand separated the two deposits. The roughly circular configuration tapered to a concave bottom. Among the various artifacts recovered were gaming pieces, Vietnamese coins, Chinese medicine vials, dominoes, and teapot fragments. The walls of the pit were hard to define; the bottom of the feature was uneven and did not show any preparation. The lack of stratigraphy within the deposit indicated that its use was probably limited to a brief period later than that of feature 19.

Feature 21: Trash Deposit

During the removal of stratum 17A, a dense deposit of refuse was exposed in a shallow circular depression (250 x 250 x 50 cm). The sloping walls of the pit did not show any obvious modification. Materials recovered included ceramics, glass, bone, and dense concentrations of eggshell and carbon. Other faunal remains included cuttlebone, fish bone,



FIGURE 3.7
A brick pier that had supported a structure was exposed while clearing fill from the asphalt surface (feature 24). Photo by R.S. Greenwood

and several pig jaws. Objects of special note were two whole ink bottles, gaming pieces, several medicine bottles, a ring set with three small opals, and numerous fragments of a black fabric. The seeming lack of a prepared pit or internal stratigraphy suggests that the deposit was more opportunistic than intentional and probably used for a short period.

Feature 22: Trash Pit

Work on feature 17 revealed the nearby trash deposit designated feature 22, an irregular oval (80 x 90 x 100 cm). No pit preparation was apparent, and the feature soil did not differ from the surrounding matrix, both light brown sandy silt. Only the concentration of cultural materials differentiated the feature from the surrounding sediment. In general, the deposit reflected a domestic orientation. The artifacts included a Chinese incense burner, fitted stoneware lids, Chinese condiment dishes, containers, and mammal, bird, and fish bones.

Feature 23: Trash Pit

Located in the northeast corner of trench 1, feature 23 (176 x 124 x 18 cm) is a roughly oval refuse deposit. The sloping walls of the pit show no obvious sign of preparation or modification. The recovered artifacts included fish and mammal bone, ceramics, fragments of glass bottles, and Chinese stoneware. In the west side of the pit was an 8-cm-square block of wood, possibly redwood; it did not appear to be a purposefully buried post.

This feature appeared to be another natural shallow depression utilized for the deposit of refuse. There was no obvious stratigraphy, which may indi-

cate a single or short episode of deposition.

Feature 24: Brick Pier

A brick pier (fig. 3.7) was exposed while clearing fill from an asphalt surface. The mastic sealed around the bricks indicated that the two elements were contemporary and probably associated. The pier was composed of two elements: a column with nine remaining courses and a base composed of five stepped layers. The mortar was evenly laid Portland-type cement. Some of the bricks composing the column and base had been previously broken and reused. The base (120 x 100 cm) was set in a hole (140 x 120 x 120 cm). A sparse scatter of Chinese and European American artifacts was found in the fill.

The brick pier was a support for a structure with an asphalt surface, almost certainly the vegetable sellers' warehouse, which coincides with this location and feature 17. A second pier (feature 31) of the same type corresponds in distance and direction (fig. 3.2) to the piers shown on the 1925 Sanborn map.

Feature 25: Brick Alignment

Consisting of twelve fired bricks without mortar, this feature (130 x 120 x 20 cm) formed a rough square, with one brick slightly out of alignment on the western side. The west side was composed of five bricks oriented east-west; the center consisted of two north-south bricks; and the east side duplicated the west side. The few artifacts associated with this feature included a small tea bowl fragment and a small stoneware jar.

Lacking diagnostic materials or obvious functional elements, there is insufficient information to determine its purpose. The lack of mortar suggests that the feature did not support any substantial architectural elements. Their careful placement suggested, however, that the bricks might have been a base for a portable cook stove.

Feature 26: Trash Deposit

Removal of stratum A in the northeast quadrant of the locus revealed an elongated shallow deposit (260 x 120 x 40 cm) of refuse. There was no obvious preparation of a pit, and the bottom was irregular. Mammal and fish bone, ceramics, fragments of glass bottle, and Chinese stonewares were recovered. The nature of the deposit, primarily domestic materials, and configuration indicated the pit functioned as a refuse catchment.

Feature 27: Trash Pit

A circular trash deposit (100 x 96 x 70 cm) was encountered in the north wall of trench 1. The sides of the pit were almost vertical and the bottom was a rounded concavity. This feature appeared to have been a purposefully dug refuse deposit with one or more episodes of dumping. The feature contained a dense concentration of eggshell, amorphous metal, Chinese ceramics, and glass bottle fragments. Items of note included one whole bottle with a printed paper label reading "olives," three shoe soles, two bone toothbrushes, two opium pipe bowls, and numerous whole bottles. The faunal remains and the majority of artifacts indicated that the origin of the materials was probably a household or tenant building. The density of the remains suggests that the latter may be the source.

Feature 28: Trash Pit

Exposed during excavation of trench 1 was a circular trash deposit (69 x 64 x 30 cm). The walls of the pit were generally vertical, tapering to a cone-shaped bottom. The contents appeared to be predominantly Chinese stoneware jars, fragments of jars, and jar lids. This pit appeared to have been purposefully dug, as evidenced by its depth, regularity, and diameter. A few porcelains and whitewares were recovered, but the assemblage reflects a utilitarian, not table, use.

Feature 29: Trash Pit

The densest concentration of artifacts was recovered from a massive square pit (2.2 x 2.2 m, and 1.3 m deep). Four strata were encountered: stratum 1 was dark loam with few artifacts (10-20 cm thick); stratum 2 was a mass of jumbled brick that covered the south half of the pit (20-40 cm thick); stratum 3 was a very dense concentration of charcoal and burned artifacts (20-40 cm thick); and stratum 4 was a dense deposit of unburned and whole artifacts (80 cm thick). The walls of the pit were vertical and the base was flat. All corners were square.

The lowest stratum (4), although containing some dark loam, was almost totally composed of whole and broken artifacts. The soil in the wall at stratum 3 was bright reddish-orange, indicating that it had been intensely fired. The artifacts recovered in stratum 3 consisted of melted bottles and fused ceramics, together with a very few, charred faunal remains. In stratum 4, the density of the artifacts was such that two excavators and ten screeners required two

full days to remove the contents. Artifacts included large-mouth storage jars, medicine bottles, soysauce jars, opium pipe bowls, porcelains, and a full array of Chinese artifacts. The seven US coins recovered ranged in date from 1876 to 1905.

Stratum 1, which was uppermost, appeared to be a fill that supported the cement of a later structure poured on the surface. Stratum 2 may also have been fill deposit for leveling. Stratum 3, which evidences intense burning, overlay a dense deposit of unburned artifacts in stratum 4.

Both the density and integrity of cultural materials in this assemblage are unprecedented. From this feature alone, 531.6 kg (1,172 pounds) of brown stoneware were recovered, representing 1,071 discrete stoneware items, 139 rice bowls, 71 tea bowls, 46 spoons, 95 serving bowls, 32 condiment dishes, 35 plates, 207 glass gaming pieces, 25 opium pipe bowls or lamps, 113 medicinal vials, 309 buttons, at least 3 different clay stoves, 10 ceremonial vessels (candlesticks or incense burners), and 10 toothbrushes.

The rectangular configuration, straight vertical walls, and dimensions suggest that the pit was not originally a trash repository but an earthen cellar that was later used to receive this great bulk of discards. An 1889 Dakin map showed a single-story wood-frame structure coinciding with the location of the feature. The large number of artifacts, including bulk shipping jars, suggests that the deposit may have originated from a communal kitchen or restaurant. Although large, the assemblage appears to represent a single episode of dumping over a short period of time. There were no indications of stratigraphy, chronology, or artifact groupings, which would suggest anything other than a rapid deposition. Considering the burned materials and layer of broken bricks and knowing that the numerous conflagrations swept through Chinatown, it is likely that the cellar was filled with debris resulting from a fire or that debris was discarded in the cellar and burned there before a new building was superimposed.

Feature 30: Trash Scatter

The excavation of trench 4 bisected an extensive, shallow refuse scatter (200 x 80 x 45 cm). The overall configuration was an irregular rectangle with an irregular bottom. Some of the more notable items from this feature included the mouthpiece of an opium pipe and several fragments of a Chinese stove. This feature appears to be another natural shallow depression utilized for discards. Given that there was

no obvious stratigraphy, it may evince a short period of deposition.

Feature 31: Trash Deposit & Brick Pier

During the excavation of trench 4, a trash deposit (100 x 50 x 120 cm) and associated brick pier were revealed. The refuse appeared to be within the excavation backfill of the pier and not associated with any other elements. This pier duplicated feature 24, except that there were 17 extant courses of brick, of which the bottom three were stepped.

Feature 32: Trash Pit

Trench 3 encountered feature 32, another trash deposit in a rectangular pit (150 x 100 x 35 cm deep). The walls were essentially vertical, the concave bottom slightly rounded. Some of the contents included butchered bone showing cleaver marks, Chinese toothbrushes, and an intact ginger jar. The vertical walls suggested that the pit was purposefully dug and utilized for refuse discard. Lack of stratification indicated the filling was continuous.

Feature 33: Trash Pit

The circular refuse deposit designated feature 33 was 40 x 30 x 75 cm deep. The walls were essentially vertical, ending in a conical base. The upper stratum was 25 cm in diameter and 10 cm deep, and blackened by wood charcoal with few artifacts. At 20 cm below the bottom of stratum A, stratum B contained a full range of domestic artifacts, including Chinese ceramics, mammal bone and fish bone, eggshell, amorphous metal, whiteware, and bottle fragments. The configuration indicated that this was a purposefully dug refuse pit. Unlike most of the other trash pits, its diameter is small. It is also considerably deeper and demonstrates stratification.

Feature 34: Trash Pit

While excavating feature 29, a second trash pit was found just off the northwest corner and under the cement pavement. The 90 x 90 x 40 cm deep pit was circular, with a concave base. Recovered artifacts included perfume bottles, Chinese medicinal vials, stoneware jars and lids (large and small), and Vietnamese coins. Its vertical walls suggest that the pit was purposefully dug and utilized as a refuse deposit. There was no evidence of stratification.

Feature 35: Trash Deposit

Feature 35 was a refuse deposit within a pit (150

cm in diameter and 70 cm deep), with sloping walls and a concave bottom. The artifacts included an insulator, an 1899 US dime, turtle shell, cuttlebone, stoneware jar lids, and fish bone. The configuration suggested a pit purposefully dug to receive refuse. There was no evidence of stratification.

Feature 36: Trash Pit

Another roughly circular deposit, feature 36 measured 66 cm in diameter and 34 cm deep. The walls were vertical and the bottom flat. There was no soil within the feature, which consisted entirely of cultural materials, predominantly Chinese stonewares. Artifacts included stoneware storage jars, a Chinese spittoon, Chinese teapot fragments, rice bowls, porcelain spoons, and mammal and bird bone. The depth and diameter of this pit indicated it was purposefully dug. The density and nature of the artifacts found suggested that the materials could have originated from a tenant building or restaurant.

Feature 37: Trash Pit

Feature 37 (94 x 94 x 58 cm deep) was a small, circular trash pit with gently sloping walls and a concave base. Artifacts included mammal and fish bone, ceramics, glass bottle fragments, and Chinese stoneware. The pit appeared to have been purposefully dug, and the discards seemed to be primarily domestic in nature.

Feature 38: Trash Pit

This trash pit had nearly vertical walls and a concave base (118 x 76 x 50 cm deep). The soil outside the pit was a light brown sand. Cultural materials included mammal and fish bone, ceramics, glass bottle fragments, and Chinese stoneware. The feature appeared to be a pit deliberately dug to receive discards. The contents appeared to be primarily domestic in nature.

Interpretation

Locus 2 is correlated to the most easterly group of buildings on the north side of Apablaza Street, from number 315 east and overlapping Concha Street, where there were substantial structures in the later years of Chinatown. In 1889, land use in this area consisted of a single isolated wood-frame structure, noted as "Chinese" (1889 Dakin map), at 315 Apablaza. It is tempting to speculate that this detached building could have been the so-called Chinese hospital and "Dead House" (*Los Angeles Times*

1902:1) described as a three-room shack surrounded by a board fence. In 1900, this structure was replaced by a two-story brick building. The city directories from 1901 through 1905 list Wah Lee and Co., a dry goods merchant, at this address, and the Chee Kung Tong Co. upstairs at 315½ (fig. 2.8). By 1925 both the former dwelling at 429 and Concha Street itself were replaced by two large north-south structures separated by 50 feet from the Mission, with a single address of 541 Apablaza. The western of the two was labeled “Wagon Shed”; it was one story, with a single opening on the west wall, and exterior hydrants and hoses on each of the long walls. The easterly structure was two stories high, identified as “Chinese Vegetable Peddlers” with storage on the lower floor and “Rooms” above. It had regularly spaced second-story windows and steel awnings or overhangs providing shelter the length of both long walls. The upper floor was supported by brick columns and steel girders. A stable extended east-west north of both structures and apparently the earlier wagon shed or stable was gone by this time.

Feature 17 corresponds most closely to an internal partition of the peddlers’ wagon shed (fig. 3.7). The associated elements do not match the structures recorded on the 1888-1893 Dakin maps and 1906 Sanborn map, but all fall within the footprint of the wagon shed depicted on the 1925-1933 Sanborn maps. The character of the artifact assemblage, including a minimum of 37 horseshoes of the very large and heavy draft types, at least two containers identified with horse medicines, and items attributed to the vendors who slept and cooked in this complex, are consistent with this interpretation. The building was supported by the piers designated features 24 and 31 and the associated bricks of feature 25, while the concrete elements of feature 17 north of the foundation are probably remains of the floor slab. The south façade would have been approximately 30 feet farther south. The alignment of the piers and foundation suggests that the structure was oriented at more of an angle to Apablaza than the historic maps indicate. Features 16, 18 through 23, and 26 through 38 were trash deposits that would have been located between the wagon shed and the vegetable peddlers’ shed. They yielded a relatively high proportion of gambling and smoking materials, with fewer household or personal artifacts. Most of the cultural materials recovered reflect the presence of the workers who lived, cooked, and spent their leisure off-hours at the corrals.

Feature 29, the largest of the trash deposits and with the greatest number of artifacts, is a qualitatively different assemblage containing domestic table service, toothbrushes, the greatest number of nineteenth century buttons (46 percent of all Prosser types) and Chinese medicinal vials, 40 percent of all ceremonial candlesticks and incense burners, sculptures and figurines, and other items more apt to be derived from households than from a stable or vegetable warehouse (pl. 2). From the stratigraphy, density, precisely vertical walls and square corners, evidence of burning, and datable artifacts, this massive deposit appears to represent the infilling of a basement or storage cellar associated with one of the early buildings, before the area was paved over during construction of the warehouses. The location is near to, and below, the east wall of the wagon shed, and clearly antedates its construction. Of the structures replaced by the peddlers’ complex, it is nearest to the southeast corner of the preceding frame dwelling at 315 Apablaza. Another alternative for the origin of the contents is any of the early shanties on the east side of Concha Street, which would have been approximately 22 to 30 feet away.

Locus 3

In February 1991, construction of emergency exit 10 (fig. 3.1) in an area potentially sensitive for cultural resources prompted rapid data recovery. Denoted locus 3, this area is northeast of the new Metro Rail station and approximately 15 m northeast of the northernmost extent of the Union Passenger Terminal baggage handling facility. Approximately 3.6 to 4.2 m of fill had been removed prior to encountering the original ground surface. The irregularly shaped excavation area measured about 41 m northwest-southeast by 5 to 14 m southwest-northeast (fig. 3.8). Construction necessitated the removal of at least another 5.4 m of soil. This locus contained features 39 through 42. The historical setting was at the north end of Juan Street. No structures are known to have stood in this area, and the locus appears to be outside and north of an historical fenceline.

Feature 39: Trash Deposit

Feature 39 was a broad but shallow cultural stratum approximately 15 m east-west by 9 m north-south, and about 24 cm deep in the northwest area. The mixed deposit contained both structural debris and household or commercial refuse, with the

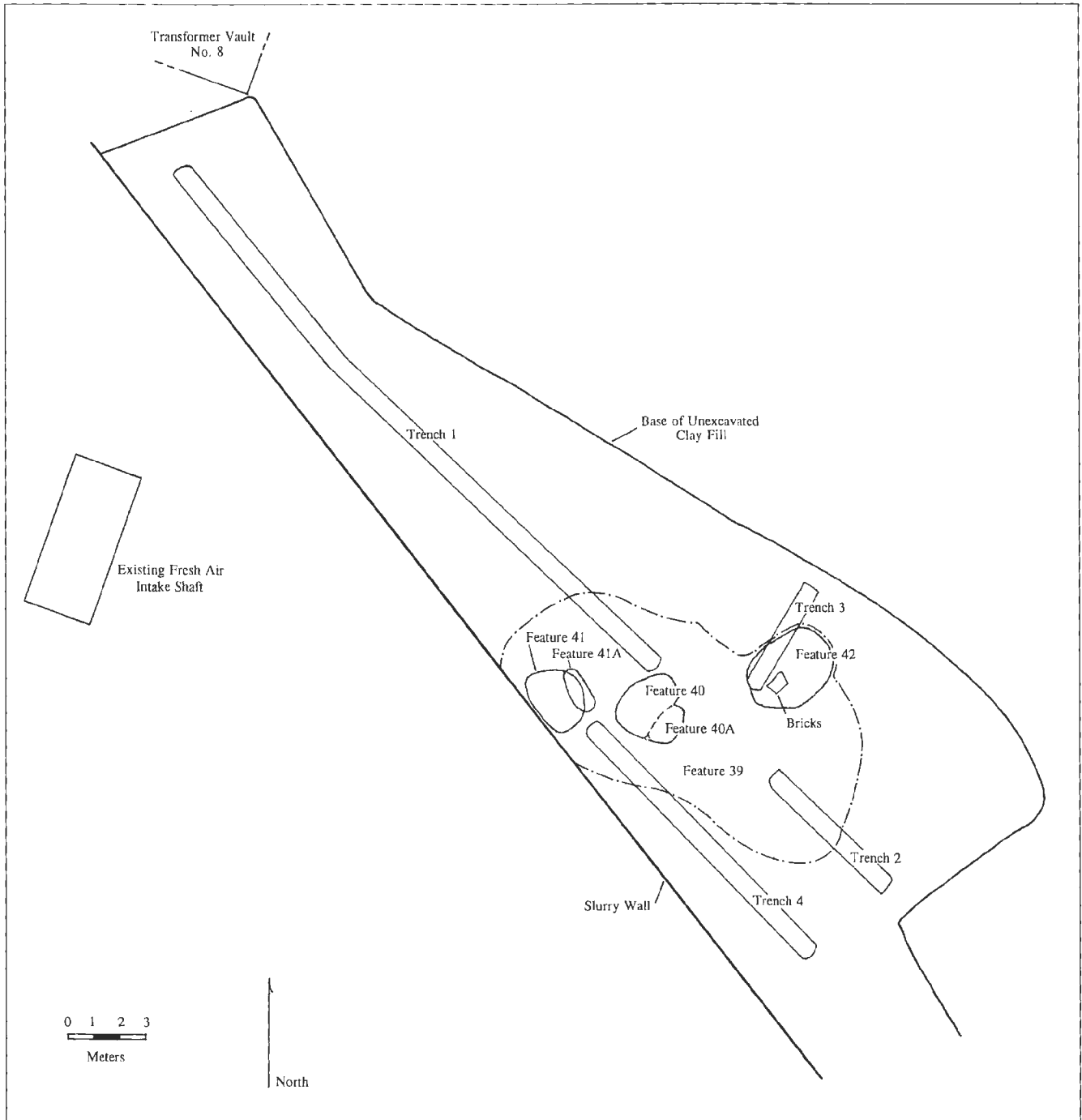


FIGURE 3.8
Locus 3 is 15 m northeast of the Union Station baggage handling facility and contains mainly refuse deposits. Historically, it is north of the structures at 10 and 12 Juan Street.

bulk of the building materials occurring in the unexcavated southeast half of the feature. Given construction priorities, the area could only be sampled.

Below the overburden, a dark brown, moderately compact, clayey-sand lens 15 to 25 cm thick contained a dense deposit of cultural refuse overlying 2 to 5 cm-thick patchy deposits of melted tar. The cultural stratum included varying densities of structural debris, primarily bricks, along with mortar, wood, win-

dow pane, and wire nails. These items, which were most abundant in the southeast area, were mixed with only minor amounts of other refuse. Materials from the northwestern portion of the stratum included a variety of Chinese ceramics (including food storage vessels and table wares), personal items (shoes, buttons, and jewelry), glass containers, and subsistence remains (for example, bone, shell, eggshell, and seeds), with lesser amounts of bricks,

mortar, wood, window pane, and wire nails.

Feature 39 reflected a mixing of domestic and commercial refuse with structural debris resulting from the demolition of buildings, followed by the placement of fill over the area. Refuse seems to have been purposefully discarded in pits northwest of the old structures. The burned lens covering only portions of the southeastern area of the feature may be a result of demolition and clearing.

Feature 40: Trash Pit

The feature was an intact, discrete refuse pit (1.7 m northwest-southeast by 2.5 m southwest-northeast and 18 cm deep), separated from feature 39 by approximately 33 cm of nearly sterile fine-grained sand. The fill consisted of a friable blackish-brown sand containing a very high charcoal content. Cultural materials included high densities of Chinese ceramics, glass containers, and faunal remains. None of the building debris encountered in the overlying features (39 and 42) was recovered. The feature, which predated the demolitions, represented a purposeful, intact refuse pit. Based on its lower elevation, it may have been associated with the former brick structures located to the southeast or with a slightly earlier occupation.

Feature 40A: Trash Pit

An intact, discrete refuse pit (0.8 m northwest-southeast by 1.3 m southwest-northeast and 17 cm deep) was exposed. It was designated feature 40A in the event that excavation showed the two features to be connected; they were not. Its contents were similar to those of feature 40 (for example, high densities of Chinese ceramics, glass containers, and faunal remains). Due to time constraints, only approximately half of the volume was recovered. This intact feature represented the purposeful disposition of domestic refuse.

Feature 41: Trash Deposit

This irregularly shaped, intact, discrete refuse pit measured approximately 2.5 m northwest-southeast by 2.2 m southwest-northeast and was 32 cm deep. It was approximately 20 cm higher than features 40 and 40A, although its base was at about the same level as these two features. It was covered by a nearly sterile 14-cm-thick deposit of sand, beneath feature 39. The contents were similar: Chinese ceramics, glass containers, faunal remains; there was no building debris. The feature represents a purposeful, intact refuse

pit. The contents are most likely contemporaneous with features 40 and 40A.

Feature 41A: Trash Pit

The feature underlay feature 41, and its surface and base were 20 cm lower than those of features 40 and 40A. This oblong-shaped pit was 2.0 m northwest-southeast by 0.8 m southwest-northeast, and 18 cm deep. The cultural materials were similar to the adjacent features (for example, Chinese ceramics, glass containers, and faunal remains). The feature was associated with the purposeful act of refuse deposition, earlier in time than features 40, 40A, and 41.

Feature 42: Tar & Trash Pit

The remains were within a shallow semi-circular pit that measured 3.75 m east-west by 2.5 m north-south and about 30 cm deep, the same elevation as feature 39. The irregularly shaped pit was lined with 2 to 3 cm of melted tar, with some pockets extending into the sterile sand base for approximately 10 cm, and covered with a lens of ash and charcoal. The southern border was destroyed.

The remnants of a mortared brick pier were encountered toward the southwest edge of the feature, just north of dense building rubble. The bricks measured 21 x 9.5 x 6.4 cm (8¼ x 3¾ x 2½ inches). Two edges were three courses high, laid head to side. The disturbed center was filled with a dense accumulation of burned and broken ceramics and glass, charcoal, and ash. Cultural materials occurred around and below this element, along with a thick portion (5 to 6 cm) of the melted tar lens.

The feature contained very high densities of Chinese ceramics, glass containers, and other refuse, and lesser quantities of building debris. Two intact rolls of roofing paper (24 inches wide) were found just above the melted tar lens.

Feature 42 may have served first as a pit to melt tar for waterproofing and installing roofing paper during the construction or repair of adjacent structures. It was probably filled with debris, including the discarded brick pier, during demolition.

Interpretation

Locus 3 is 18 m north of the structures present at 10 and 12 Juan Street in 1889 and subsequent structures, and south of the Southern Pacific Railroad yard. Only a very limited area was briefly available for investigation. All the features investigated (39

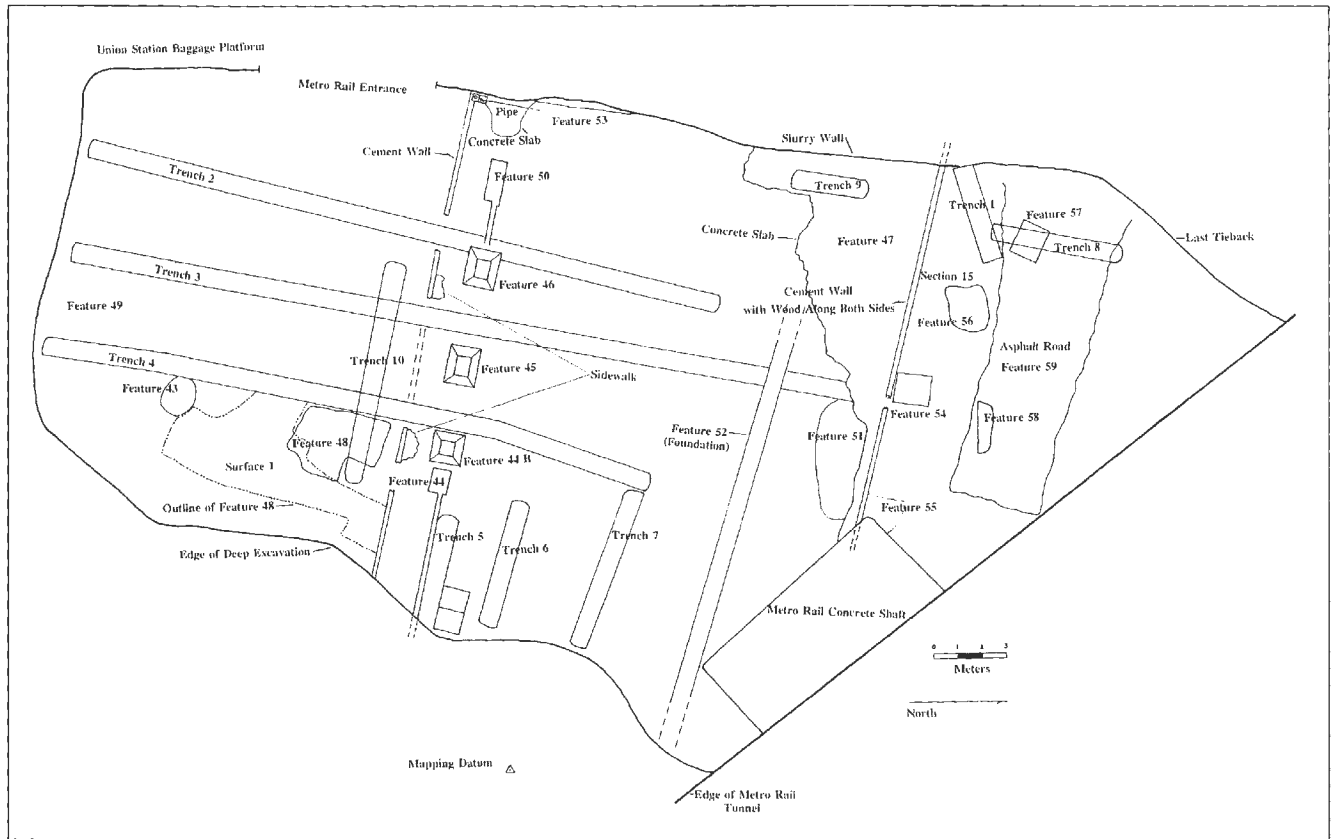


FIGURE 3.9
Locus 4 was historically between Juan and Benjamin streets, north of the row of structures on the north side of Apablaza Street.

through 42) were refuse deposits that lacked in situ architectural elements. The contents of features 39 and 42, largely the result of demolition, included bricks, concrete, window pane glass, round wire nails, paving, roofing paper, wood, and mortar. Features 40 and 41 were discrete trash pits for the discard of domestic ceramics, glass containers, and faunal remains. Located below the elevation of the demolition debris, they demonstrated a pattern of disposal, literally, over the back fence and into the railroad yard. The absence of any known structures in this vicinity and the nature of the trash pits are in keeping with the probable usage that a track yard would have. Deposits in the trash pits appear to date from 1900 to 1920, and the structural remains are attributed to demolition in the 1930s.

Locus 4

Subsequent to construction of the Metro Rail station, a new east-west access to the station was designed to facilitate passenger traffic between the station and Union Terminal. During the excavation of this facility, features 43 through 59 were encountered (fig. 3.9). Historically, the locus was between Juan and Benjamin Streets, north of the contiguous row of structures on the north side of

Apablaza Street. The buildings depicted on the 1889 Dakin map had been replaced prior to 1925 by the very large east-west oriented shed or stable labeled “Vegetable Men’s Storage.”

Feature 43: Building Debris & Trash Scatter

Building debris and a refuse scatter overlay two perpendicular trenches excavated for a deeply buried water pipe T connection. The exposure of this feature was 80 cm north-south by 190 cm east-west. The old trenches, dug into nearly sterile sand, were covered by four lenses of historical cultural fill 35 to 45 cm deep. The trenches were about 85 cm deep below the fill. The east-west pipe was 6 inches in diameter and connected to a 4-inch pipe that continued north. The pipe extended beyond the west entrance exposure both east and west of the site area.

Five poorly preserved redwood boards were encountered in and below the rubble layer. The greatest densities of cultural materials occurred above the pipe trenches, which were primarily filled with building rubble (fired bricks, wood, concrete, and mortar, and a possible adobe brick fragment) and lesser amounts of Chinese ceramics and bottle glass. The lower levels contained minor amounts of rubble with more intact artifacts, such as whole bottles, and

pockets of charcoal and ash. The cultural materials within the trenches, which decreased with depth, included small and medium size mammal bones, wire nails, a portion of a leather shoe, small glass and ceramic fragments, and five pieces of brown stoneware.

The deposition of sheet trash occurred after the excavation of the trenches, as evidenced by the continuous nature of the deposit above and beyond the trenches. It appears that feature 43 contained remnants of the feature 49 wooden structure or fence that was located 1 m to the southwest. The northern extension of the pipe trench was identified in feature 48, and the severed end of the pipe was exposed in feature 44. Segments of the western extension of the pipe were encountered in trenches 2 and 3, and the pipe was probably connected to the water meter in feature 53.

Feature 44: Structural Elements

Four structural components were found within an exposure 4 m north-south by 9 m east-west: a brick foundation wall, a large concrete pier, a concrete slab, and two segments of a cement curb. Other elements included identifiable construction trenches, the severed north end of a north-south metal pipe, and two shallow, rubble-filled pits.

The mortared brick foundation was a combination of a stepped footing and wall with two brick piers aligned east-west. It was at least 6.6 m long, with the east end being inaccessible. The top of the foundation was 23 cm wide. Both piers were 46 cm wide; the disturbed western pier was 44.5 cm long east-west, whereas the more intact pier was 1.07 m long. The base of the 31-cm-wide footing was stepped out by one course of bricks on both sides. The 77.5-cm-wide bases of the piers were stepped out by five courses of bricks on either side. Five courses remained at the west end of the foundation, and nine at the east end. Wire-nailed form boards were still in place around the base and sides of the western pier.

Two segments of a disturbed cement curb were located 2.1 m to the south, parallel to the foundation. The segments measured 3.2 and 1.86 m long, respectively. They were separated by 1.15 m of disturbance resulting from a pipe trench and by later demolition activities that reduced their height to a maximum of 20 cm. The south side of the curb was faced with about 0.6 cm of smooth, dark plaster; the north side was left rough. The lower portion of the western curb was abutted by a 2.5-cm-thick slab of

smooth concrete, 1.8 m long east-west by 0.9 m wide north-south, and 12.7 cm higher than the top of the pier. The slab extended north to about 20 cm from the outer edge of the concrete pier mapped as 44b and was terminated by demolition. The sand lenses immediately above the concrete slab were nearly sterile.

Great quantities of building rubble (broken red bricks, wire nails, mortar, concrete, wood, window pane fragments, and pieces of the curb and slab) were encountered, with the densest deposit located north of the structural remains. Other cultural materials included pieces of cut leather, shell buttons, Chinese ceramics and medicinal vials, faunal remains, and Euroamerican bottles.

The brick foundation was parallel to the feature 50 brick foundation on the west side of the site, with the northern edges of the three large concrete piers located between them (features 44, 45, and 46). None of these structural elements was articulated. Disturbed segments of the mortar curb and concrete slab were also found to the west in features 46 and 53, and only traces of the curb were visible in the area south of feature 45. The impacted end of the metal pipe was the northern extension of the pipe revealed in feature 43.

The two brick foundations and three concrete piers appeared to be supports for a single large structure that probably extended to the north, based on the distribution of building rubble. Construction of these elements does not seem to have been a contemporary event, however. The brick connection between features 44 and 52 (which were of similar construction) may have been built first. Later, possibly due to remodeling or structural fatigue, the concrete piers were added for greater support. Installation of the piers required the excavation of a fairly wide trench, later filled in with sand that contained moderate amounts of building debris, as opposed to the high density of debris contained in the overlying demolition layer. The curb, which does not articulate with the slab but overlaps a broken edge, was most likely added later.

Feature 45: Concrete Pier

Feature 45 was the centrally located of three pyramidal concrete piers. The original milled lumber form boards joined with wire nails were still in place around the base and northern tapered side. A single course of eleven mortared bricks rested on the pier, with traces of mortar indicative of additional su-

perstructure. The concrete base measured 1.5 m east-west by 1.2 m north-south, and the wood form was 1.7 x 1.27 m. The tapered top measured 1.04 x 0.7 m.

The 25-cm-thick demolition level corresponded with the top of the south side of the pier. The feature was aligned with the brick foundation and concrete pier of feature 44, 2 m to the east; the feature 46 concrete pier, 2.5 m to the west; and the feature 50 brick foundation, located at the west end of the site. Only traces of the cement curb that extended east-west across the exposure south of the piers were observed, along with a few dislodged chunks of the concrete slab. Very few artifacts, largely fragments of Chinese ceramics and bottle glass, were associated. Most of the cultural materials consisted of building debris, especially along the north side.

For interpretation, see feature 44.

Feature 46: Concrete Pier

Feature 46 was the western concrete pier similar to and aligned with the large feature 44 and 45 piers. The form boards were still in place. A 2-inch-outer diameter metal pipe sloped up from the south, beneath the intact cement curb and broken concrete slab. It was mortared into the east side of the tapered form, terminating in a T connection on the northeast side. Remnants of mortar conforming to missing form boards were visible along the tapered sides. The concrete base measured 1.5 m east-west by 1.2 m north-south, and the pier was 60.5 cm high.

The upper 5 to 10 cm of dark, fine-grained sand contained *Tivela stultorum* shells, Chinese ceramics, and a few brick fragments. This course overlay a 30-cm-thick lens of sterile sandy silt. The cultural remains close to the pier included Chinese ceramic and bottle glass fragments. Other cultural materials consisted of building debris such as broken bricks, mortar, and wooden board fragments.

The interpretation is incorporated into the discussion of feature 44.

Feature 46 South: Concrete Slab & Curb

A segment of the cement curb and concrete slab was exposed between trenches 2 and 3, approximately 1.5 m south of the feature 46 pier. The surface of the slab was about 30 cm higher than the top of the pier. The intact segment of the curb was 2.3 m long east-west, 22 to 40 cm wide north-south, and about 20 cm high; the top had been impacted by demolition. The base of the curb was about 10 to 12 cm lower than the top of the slab. A few fragments of bottle

glass and Chinese ceramics and one shell button were recovered.

Other segments of the curb and concrete slab were located in the southern areas of features 44, 45, and 53. Ferrous water pipes were found in features 43, 44, 47, and 53, and in the southern end of trench 1. Because the pipe was mortared onto the side of the concrete pier, it was probably brought in after the pier was constructed, possibly as an additional feature in the renovation of the existing building.

Feature 47: Architectural Elements

At the north end of the Metro Rail station's west entrance exposure were the remains of a poured concrete slab, a poured concrete footing, three brick piers, two possible segments of scored concrete sidewalks, and three rubble-filled trenches. This exposure measured 8 m north-south and 15 m east-west along the north concrete footing.

The remains of the slab floor were 2.4 m north-south by at least 15 m east-west and 6.4 cm thick. The concrete was poured in wood-lined sections 2.1 x 2.4 m. Most of the southern part of the slab was destroyed by an east-west rubble-filled trench. Approximately 85 percent of the cultural materials came from the overburden covering the floor. A small fragment of linoleum adhered to the concrete. Nearby were three articulated courses of bricks, possibly the remnants of a collapsed wall; numerous charred wood fragments; and other burned cultural materials. Abutting the slab to the north was a wood-framed concrete footing (17.8 cm wide at the top, 30.5 cm wide at the base, and 30.5 cm high).

Three brick piers were encountered at varying intervals within the footing. From west to east, they were 4.0, 4.5, and 3.5 m apart. The tops of the piers measured 30.5 x 33 cm. The eastern pier was described as feature 55. The western pier was 1.25 m high from the base, and the lower part was plastered. The 17 courses of brick (at least seven more than the eastern pier) were stepped below the ninth course.

Two segments of scored "sidewalks" existed. One piece (1.6 m wide, about 8 m long, and 6 cm thick) was scored into 91 x 83 cm sections. The other segment was two sections east-west by seven sections north-south. No wood forms were associated with either pavement.

A thick lens of fill and about 20 to 30 cm of building rubble mixed with large quantities of refuse covered this feature. Numerous fragments of Chi-

nese ceramics, bottle glass, faunal remains, metal objects, wire nails, and other discards were recovered.

The remains of an earlier structure, feature 51, were located below the northeastern corner of the concrete slab and footing. The east-west feature 52 brick foundation was aligned parallel to the northern footing. Its projected orientation would have been under the sidewalk area of the feature. The concrete floor area may represent the interior of a long, narrow structure flanked by pavement on the north and south. Its connection with the aligned structural elements located in the central part of the site (brick foundations and concrete piers) is unclear because there was no articulation, but they were essentially parallel in their orientation.

The feature 52 brick foundation, which was parallel to the concrete footing, was probably not a structural element of feature 47, because it did not continue below the concrete slab. These features may have represented different sequences of construction or modification because of fire or other causes and later reconstruction in the same localities to conform to the existing street alignments.

Feature 48: Paved Surfaces

The remains of two paved surfaces were located in the southeast area of the station's west entrance exposure. The upper surface, designated number 1, consisted of an extremely compact 5 to 8-cm-thick horizontal lens of rounded quartzite and granitic pebbles (2 to 4 cm), cobbles (5 to 10 cm), and crushed brick within an oily sand matrix as in Macadam pavement. This irregular surface began approximately 40 cm north of feature 43 and continued to the north for 9.5 m to the east-west cement curb in feature 44. Surface 2 was 18 to 25 cm lower and directly below surface 1 only along its southeast edge and an isolated area to the east. It consisted of an unmortared single course of poorly fired red bricks of inconsistent size, together with some well-fired standard red bricks and large cobbles that may have been placed there for repair. There was no pattern to the placement of the bricks. The surviving surface measured 3.8 m east-west by 3.7 m north-south. None of the bricks appeared worn enough to indicate heavy vehicular traffic.

Both paved surfaces probably represented the remains of roads. Based on a speculated projection of surface 1, the road would have extended to the west. If it had followed the alignment of the southern

east-west building, it would have been about 40 feet wide. Both surfaces continued beyond the west entrance exposure to the east. The earlier brick pavement probably preceded the construction of the curb in feature 44 because the base of the curb was at the same elevation as the top of the bricks. The concrete slab may have related to an adjacent contemporary structure because its surface was slightly higher than the bricks.

Surface 1 was built after the brick pavement and the concrete slab because it was at least 20 cm higher. The curb was probably earlier than the Macadam road because its faced surface would have been below the grade level. A gravel and cobble surface adjacent to the brick pavement may have been an earlier attempt to solidify or weatherproof a dirt road.

Feature 49: Architectural Elements

This exposure represented the highly disturbed remains of a wooden feature and occupation surface in the southern end of the west entrance exposure between trenches 3 and 4. Within a 3 x 4 m area, numerous unarticulated fragments of wood were encountered along with three upright wood posts, one anchored in concrete, one partially supported by concrete, and one within a post hole. Other wood was suggestive of joists.

Numerous fragments of Chinese ceramics and bottle glass, as well as structural debris, were encountered. The fragments of wood, upright wooden posts, and numerous nails suggested the remains of a small wooden structure. Comparable wooden structural elements were also encountered in feature 43 located a meter to the northeast.

Feature 50: Architectural Elements

Feature 50 was a combination of a stepped footing, wall, and pier made of mortared bricks oriented east-west. The eastern half consisted of a narrower stepped footing and wall 46 cm wide at the base and 33 cm wide at the top. The western half included a stepped pier 79 cm wide at the base and 46 cm wide at the top. Nine courses of bricks 61 cm high survived, although imprints in the mortar indicated at least one more course. The base of the pier was stepped out on both sides by four courses of laterally placed bricks, with the two basal courses superimposed. The narrower eastern foundation was stepped out, with one lateral brick on either side.

Excavation revealed that the foundation had been built in a trench. There were no indications of other

walls stemming from this feature. A few cultural materials were recovered from the surrounding soil matrix, including bottle glass, Chinese ceramic fragments, and building debris.

Because the eastern end was impacted, the actual spacing between the end of the foundation and the feature 46 concrete pier is not known. The western end appeared to be nearly intact and representative. The architectural elements were in alignment with the feature 44 brick foundation and the concrete piers in features 44, 45, and 46. All probably represent one wall that had been disrupted.

Feature 51: Burned Structural Debris

The burned remains of an early structure were found below the southeast corner of feature 47. They consisted of numerous levels of charred wood and charcoal above a fragile, unburned wood plank floor that was about 38 cm lower than the concrete slab of feature 47. Cultural materials recovered from above the slab were labelled feature 47, and artifacts below the slab were attributed to feature 51.

The upper disturbed 20 to 30 cm consisted of a high density of carbon, building rubble, layers of charred and unburned board fragments, and extensive amounts of other refuse. Between 30 to 35 cm, two displaced 30 x 2.5 cm partially burned boards measuring 91 cm long were encountered just below the carbon zone. The remnants of two thin upright boards, connected perpendicularly in the southeast corner, were also exposed; both were fastened with cut nails. The floor boards, oriented northwest-southeast, and measuring 13 cm wide and approximately 1.7 to 1.8 m long, were below the base of the concrete footing of feature 47. The entire area was inaccessible, but the east end of the structure was probably about 1.5 m beyond the exposed floor. Associated with the presumed occupation level was a high density of faunal remains (fish bone and scales, eggshell, and shellfish), with some ceramic, glass, and metal fragments, and one complete brick.

This feature seems to represent the burned remains of a wooden building that predated the feature 47 structure. It may be contemporary with the two privies encountered to the northeast (features 54 and 57) at the same elevation. Feature 47 was built above feature 51. Feature 55 represented a smear of the burned remains, as well as its exterior northeast corner.

Feature 52: Brick Foundation & Wall

This feature was a mortared brick footing and

wall aligned east-west. The top of the wall was 48 cm wide, and it stepped out to 72 cm wide at the base. The more intact eastern end of the wall consisted of seven courses of bricks; the disturbed western end had four. Traces of mortar were observed on top of the entire length. The foundation was stepped out on both sides by three courses of laterally placed bricks. The brick was laid in common bond, alternating bricks in rows set head to head, side by side, and side to head. The foundation was at least 15.2 m long, with its east end continuing beyond the west entrance exposure. The west end was destroyed by demolition approximately 1 m west of the northern end of trench 3, where it was first observed. The foundation was built in a trench cut into sterile sand and did not articulate with any of the other features.

The artifactual materials were recovered from the demolition layer immediately above the foundation. These materials consisted of building debris (broken red bricks, pieces of milled lumber, mortar fragments, and window glass), Chinese ceramics, bottle glass, leather, metal, and other domestic or commercial items.

Observations suggest that this feature was not associated with feature 47, and that it predated feature 47. More likely, this foundation was associated with the structural supports located in the central area of the site, especially because no other foundations were encountered between these features.

Feature 53: Brick Foundation & Wall

Feature 53 was a portion of a stepped, mortared brick foundation and wall, aligned north-south. It had been severely impacted by construction, leaving a vestige 3.17 m long by 26 cm wide and 30 to 38 cm high. It consisted of four to five courses of bricks stepped out along the two basal courses. The bond consisted of the basal and top courses laid side by side and the middle courses laid head to head.

The impacted slab extended 1.2 m east from the foundation, 40 cm above the feature 50 brick foundation. A concrete water meter box (81 x 58 cm and 30.5 cm high) was incorporated in the southeast corner. This box contained a water meter, shut-off valve, gate valve, and water reducer valve. Segments of the wood form still adhered to the north and east sides. Several inches below the water control mechanisms and a 2 ½ inch water pipe was a 6 ½ to 8 inch ceramic sewer pipe. Both pipes continued north, but were impacted by construction.

Fill and sand mixed with moderate amounts of building debris covered the concrete slab, curb, meter box, and foundation. The feature yielded a moderate amount of Chinese ceramic and bottle glass fragments, some building debris, and chunks of the curb and concrete slab.

Neither the 1889 Dakin map nor 1925 Sanborn map depicted any structures that matched the location of this foundation and wall. Based on the higher elevation of the foundation relative to feature 50, an adjacent footing, it was evident that this feature post-dates 1925 and was the remains of a later, undocumented structure.

Feature 54: Privy

This feature (154 cm north-south by 115 cm east-west and 94 cm deep) was a rectangular wood-lined pit filled with a dense deposit of refuse. It was located 50 to 62 cm north of the feature 47 floor. The wood lining consisted of 2.5 x 15 cm horizontal planks, with 2 x 4 inch corner supports. The nails were too corroded to determine whether they were machine cut.

Light sand containing moderate amounts of building rubble was mixed in with the top 30 cm of the refuse deposit. Below this, the cultural deposit was mixed with a fairly friable dark-brown sand with inclusions of clay and organic material that terminated in sterile, dense, dark-brown mottled clay. The fill contained many nearly intact soy sauce jars; other Chinese ceramics; opium paraphernalia; glass bottles; broken and whole red bricks, particularly in the upper 30 to 50 cm; and fragments of other domestic refuse.

This feature was a privy, later filled with refuse. Demolition destroyed the superstructure, depositing bricks and a metal pipe segment in the upper 30 cm of the deposit. Feature 57, located about 6 m to the west, was a similar, slightly larger, and much deeper wood-lined feature. The other two refuse deposits, features 56 and 58, were also located in this area north of feature 47.

Feature 55: Burned Structural Remains

Remains of the earlier structure encountered in feature 51 were located below the northeast corner of feature 47. Successive layers of burned wooden board fragments and charcoal were exposed north of the footing. The crudely constructed remains of a possible brick base for the wooden floor were found adjacent to and below the footing of feature 47.

Excavation exposed various layers of scattered burned wood and thick deposits of charcoal. A line of 2.5-cm-thick, 21-cm-wide upright boards was found 36 cm north of the footing, just below the level of its base. The tops were burned, and the remaining portions were about 20 cm high. The east end was attached to the remains of a single horizontal board; the line was intact for 91 cm to the west.

The upright boards outlined two rows of at least eight dry-laid upright bricks that supported two courses of bricks laid side by side. Beyond this area to the west were jumbled bricks, brick fragments, and numerous cobbles. When this material was cleared away, the impacted ends of the feature 51 wooden floor boards were exposed in the profile. Along the east side of the board set on edge and below the concrete slab, a thick layer of charred wood and charcoal covered a row of four intact bitters bottles lined up against the board. The plank bordered two rows and three courses of dry-laid bricks placed side by side. This feature ended at a rubble-filled trench.

During the exposure of the north side of the footing, two metal brackets or braces, 61 cm apart, were found attached to the top of the exterior wood form board, east of the pier. The pier consisted of ten courses of bricks. The lower four stepped courses, just below the base of the footing, were crudely laid and mortared. The basal course was one brick lower than the adjacent earlier feature.

Soils and cultural materials were comparable to those in feature 51, with an abundance of whole and broken Dr. Hostetter's Bitters bottles found upright against the outside wall of the burned wooden structure. This feature represented the exterior northeast corner of the structure encountered in feature 51. The bricks may have functioned as a crude support for part of the floor. The large quantities of burned wood are suggestive of a wood-frame structure, with the north area representing the remains of a fallen wall. The extensive amount of ash and charcoal suggested that the structure was destroyed by fire.

Feature 56: Trash Pit

A moderately dense refuse deposit was found in part of a former trench or oblong pit. It measured 220 cm north-south by about 110 cm east-west and sloped up from 70 cm in the south to just beneath the asphalt road bed in the north. It was located in the same general area as the other refuse deposits



FIGURE 3.10
 Mon Chong & Co., 341
 Apablasa Street, was a general
 merchandise store and lottery
 center. *Photo courtesy Seaver Center
 for Western History Research, Natural
 History Museum of Los Angeles
 County no. 3931*

(features 54, 56, and 58) and 1.8 m north of the feature 47 structural remains.

The deposit was covered by fill and a thin scatter of building debris. Cultural materials included one intact soy sauce jar, fragments of such jars, various Chinese ceramics, bottle glass, and metal fragments. It may have been an intentional one-time refuse deposit.

Feature 57: Privy

Another rectangular wood-lined pit similar to feature 54 contained dense refuse. It measured 120 cm east-west by 163 cm north-south and was approximately 3 m deep. It was encountered 35 cm below the top of the asphalt road (feature 59). The wood framing was composed of 1 x 6 inch lumber, the same as feature 54. Cut nails were observed in the western 1½ x 1½ inch corner braces. The fill consisted of dark-brown friable sand, with some clay inclusions, and terminated at alluvium.

The deposit contained an abundance of Chinese ceramics, glass bottles, and such food remains as mammal, fish, and bird bones; shellfish; and eggshell fragments. Additional materials included clothing, a coffee pot, wok, opium pipe fragments, and other domestic or entrepreneurial refuse.

This feature was first used as a privy, then aban-

doned, and subsequently used as a refuse pit. It was located approximately 3.7 m north of feature 47 and approximately 6 m west of and at the same elevation as the feature 54 wood-lined pit.

Feature 58: Trash Deposit

This feature was a small concentrated refuse deposit within a moderately sparse refuse scatter intermixed with building debris. The area measured 37 cm east-west by 30 cm north-south and 50 cm deep; the scatter covered 220 cm north-south by 50 to 70 cm east-west and was 30 cm deep. The feature was below 10 to 12 cm of dark-mottled-brown, compact, gravelly, clayey sand that contained oil-base material used for constructing the asphalt road. It was located approximately 3.5 m north of the structural remains of feature 47, approximately 27 cm lower than the top of the concrete slab, and 47 cm below the top of the asphalt road of feature 59. The primary constituents of the deposit were broken biters bottles and one intact ceramic ale bottle. In the general scatter, broken red bricks were mixed with fragments of bottle glass, Chinese ceramics, metal, and other domestic refuse. The major concentration may have represented a primary deposit rather than discards into a prepared pit; the broad scatter seems to have been an area of demolition debris.

Feature 59: Asphalt Pavement

This portion of an impacted east-west asphalt pavement measured 5.5 to 3.5 m wide by 14 m long and 10 cm thick. Most of the asphalt was poured over coarse, light-colored sand, although moderate amounts of building debris and brick fragments existed both above and below the surface. Other than the rubble, no cultural remains were encountered.

The asphalt pavement was probably associated with the former structures of Chinatown and could have been an alley for vegetable peddlers' wagons to access and leave the parcel. The 1925 Sanborn map showed corridors on the north and south sides of the large building at 810 Juan Street. The pavement was located 2.5 to 3.0 m north of the feature 47 structural remains, 37 cm above feature 57, and 47 cm above feature 58.

Interpretation

Locus 4 is between John (also, Juan) and Benjamin streets, specifically the back lot where only several detached, very small sheds or outbuildings were shown on the 1889 Dakin map. The open space was behind the dwellings at 10 and 12 John Street and north of the "Chinese Quarters" that fronted 203-205-207 (later, 403-405-407) Apablasa Street between 1888 and 1893. The wooden remains of feature 49 may be related to the mapped outbuildings at the rear of 205/405 Apablasa or the rear wing of 207/407 Apablasa Street. Not visible on the maps but recorded in the City Directory of 1901 was an alley splitting the block between 413 and 421; this gap might indicate demolition or other loss of structures.

Fronting on Apablasa in 1909 were the Quong Si & Co. general merchandise store and lottery at 403; Quon Wo's lodging house, opium "joint" and lottery at 409; and Come Lung's tin shop and lottery at 411 (Elton 1909). By 1909 at the very least, many of the structures contained shops and stores, many associated with games of chance. In the renumbered 300 block as a whole, now west of Juan Street, there were fifteen establishments with gambling as either a primary or secondary enterprise on the north side, and another thirteen on the south side. The ½ and ¼ street numbers probably reflect the splitting of ground floor plans and occupations on the upper floors. In a 1909 police document, Quen Kee was said to be operating a lottery from a clothing store at 307 Apablasa; Quong Hing had a barber shop and lottery at the same address; Wing Kee had a barber shop and lottery at 307 ½; Quen Kee operated a lot-

tery out of the clothing store at 311 Apablasa; and Kim Sang Lung ran a fan tan game at 311 ½ (spellings as in Elton 1909). The Mon Chong & Co. at 341 Apablasa (fig. 3.10) was a general merchandise store and lottery center. The Chinese telephone exchange was at 317.

The five gaming establishments on Juan Street in 1909 had disappeared by 1925; by then, the area had been significantly altered, with the two earlier dwellings at 10 and 12 Juan Street replaced by three new buildings – the Vegetable Men's Storage; another large, open-sided building; and a small wood-frame structure, all located at 810 Juan Street. The small structures fronting Apablasa had yielded to a contiguous row of "stores" and "baths" with an entry at 409, all tightly bounded on the north side by the 12-foot brick wall that enclosed the produce complex (Sanborn 1906); by the 1925 Sanborn update, the east end of the block was labeled "tenements."

Foundation remains and piers designated as features 44, 45, 46, and 50 are associated with the south wall of the large stable at the center of the complex. Feature 52 may be the brick foundation of the stable's north wall, while feature 53 may represent the brick west end wall. The concrete slabs and curbs of feature 44 may relate to a walkway along this structure. The brick, later Macadam, pavement to the south was probably within the open storage shed structure. The concrete foundation and brick piers of feature 47 appear to coincide with the south wall and roof of the Vegetable Men's Storage building on the north side of this complex; the concrete slab may have been between this structure and the stable. Part of feature 53, the brick foundation perpendicular to feature 50, may be part of the west end wall of the stable, and the asphalt pavement may represent a segment of Mary Lane.

The privies identified as features 54 and 57 are just north of the concrete and brick foundation of feature 47, the Vegetable Men's Storage area. Whether the two privies and storage area were contemporary cannot be proven, but it is a likely association because it is reported that produce men slept in the open at the corrals. Alternatively, they could relate to the small antecedent structure shown at the rear of 830 Juan Street on the 1888-1893 Dakin map. The wooden architectural elements of features 49, 51, and 55 also correlate to outbuildings behind 828 and 830 Juan Street, all of which were replaced by commercial warehouses.

At least three of the features (51, 55, and 58) in

locus 4 were under the later features 47 and 59 and consequently predate them. Feature 47, a cement slab, was superimposed on the burned remains of features 51 and 55; these were probably the antecedent dwellings burned either accidentally or deliberately to clear the land for new construction. Feature 58, a refuse scatter, was found under feature 59, which was probably a secondary road or driveway. The 1889 Dakin map implies that the parcel was initially utilized for domestic occupation, while the 1925 Sanborn map clearly indicates that the area had become a commercial operation related to produce distribution. The refuse deposits date from two periods, 1903 to 1911 and 1910 to 1920, reflecting the continuous use of this parcel in the early 1900s, but probably by different populations. The earliest structures had been predominantly residential, even with businesses behind or above them, while the entire block by 1925 was occupied by the produce market and tenements.

Summary

The archaeological investigations documented 59 cultural features that roughly correspond to five types: trash deposits, 24; architectural features, 13; landscape features (for example, fence posts), 6; privies, 2; and paved surfaces, 2. In all instances except those noted, the soils of features identified as trash deposits were readily distinguishable from the surrounding matrix by their dark color and organic matter. The dates from Euroamerican ceramics, glass, coins, and electrical

fittings (table 3.1) reflect the span of occupation and help to establish the sequence of both deposition within the features and the succession of demolitions and new construction.

The fieldwork successfully relocated deposits, structures, and roads that had been considered destroyed, correlating many of them with specific addresses and functions, and recovered data useful in interpreting the way of life in a limited section of the Los Angeles Chinatown. The sheer number of features, in every area accessible to excavation, is witness to the density of occupation and the fact that innumerable other features are still present on the station property. Artifact recovery was high in almost every location tested. Cultural materials from the exposures and excavation units spanned a wide range of types, in a functional and specific chronological context.

Notes

1. All sampling and removal were conducted in full accordance with archaeological procedures regarding historical features and their relative significance as measured by integrity and scientific research potential. Descriptions of the excavations, citing elevations, soil color and consistency, plans and profiles, and other details, are available with the collection curated by the Chinese Historical Society of Southern California.
2. These records are part of the total data compendium curated with the collection. The methods used to quantify and date ceramic and glass artifacts are described in the chapters about those artifacts.

Ceramics

TYPICALLY THE MOST ABUNDANT ARTIFACTS ON a Chinese American site, stoneware containers – used to import foodstuffs – and porcelain vessels – in which the foods were served – offer substantial proof of Chinese occupation. The presence of Japanese porcelain at a turn-of-the-century site does not offer such proof since their inexpensive exports were purchased from mail-order catalogs and in Chinese stores by Chinese and Euroamerican customers.

There is a recognizable difference between the wares used by the overseas Chinese and those that were manufactured – often much earlier – for export to Europe, Asia, and America. Marco Polo acquired some of these wares, the Duke of Normandy had them by 1363, and the Doge of Venice by 1461; export porcelain was the first official table service in George Washington's White House. This trade had achieved a steady flow by the sixteenth century. The porcelain was of high quality and refined decoration. In response to consumer orders, manufacturers gradually incorporated European forms, such as cups with handles and tureens with twisted handles or pomegranate knobs and such decorative motifs as coats of arms or scenic representations.

The common people of China utilized what might be called a vernacular equivalent to the highly refined dynastic wares. The typical forms of everyday tableware were bowls of various sizes, tea bowls without handles or saucers, and porcelain spoons.

These were made of less refined porcelain or of porcelaneous stoneware and tended to occur in one of four patterns (fig. 4.1). The more decorative or one-of-a-kind items are interpreted as reflecting higher cost and status. In the past, these items received very little attention in China where they were considered too ordinary for scholarly attention, even though the forms themselves are ancient and many of the motifs are attenuated or stylized versions of designs common in the Ming Dynasty. They are, however, of great interest to archaeologists in the US, Canada, and the South Pacific because they are diagnostic of a Chinese site and so abundant that, with the growing body of data, chronological and stylistic comparisons are possible. Detailed descriptions and associations with dated sites are still necessary because the forms, technology of manufacture, and decorative patterns changed very little over the centuries. Even small pieces are instantly recognizable as Chinese but they are difficult to date. In contrast, because both technology and style changed so rapidly among the European and American ceramic manufacturers, it is often possible to derive at least an approximate date from small fragments, although it is rarely possible to identify the country of origin without a maker's mark.

Analytical Approach

Neither weights nor counts of sherds are totally satisfactory in reflecting the quanti-

ties of ceramics or the distribution of forms and patterns within a subgroup. Other reports have provided numbers of vessels without specifying whether the totals reflect fragments, estimates, or whole items only. Counts of sherds are not comparable because they depend on the degree of fragmentation at a given site and the relative fragility of the several different bodies. The tabulations in this chapter are based on a conservative calculation of minimum numbers, although such figures do not begin to suggest the total abundance of the deposit. Full records of all fragments and discards are on file for reference and research with the collection curated by the Chinese Historical Society of Southern California. For distinctive types or examples – so that the descriptions can be matched to the specimens – catalog numbers and provenience are provided.

For most of the Chinese ceramics, bases were used to determine minimum numbers, with exceptions including porcelain spoons and specific stonewares. Because there is variation in the breakage patterns of various ceramics, and design elements can be useful in reconstructing a vessel, not all ceramic types were treated identically.

Bamboo pattern rice bowls were made of thick porcelainous stoneware, leaving many bases intact even though the bowl walls had been broken. Broken bases were therefore inspected for any possible cross-mends, and the remaining pieces were grouped to produce a base diameter equivalent to one whole base. Four quarters were, for example, counted as one base. The four fragments might represent four different vessels, but the minimum number would be tabulated as one. This method was used because of mixing that occurred among the features. If one half of a bowl was in one feature and the other half in another, counting each half as a minimum number of one would result in inflated error. Using the method of minimum numbers, if all pieces were present but scattered among various features, the total would be represented by reconstructing base diameters. Conversely, the four quarters may, in fact, represent four individual vessels; therefore, the estimate must be regarded as a true minimum number.

In the case of Four Seasons serving bowls and plates, the walls are thinner, the porcelain body more fragile, and the vessels larger – resulting in more breakage. Since all bowls and plates contain a peach in the center of the interior and a red base mark, the number of peaches and base stamps could be counted. Bases were also reconstructed as a control.

All three methods produced similar minimum numbers.

Celadon rice bowls are more fragile than Bamboo, but their bases have a relatively small diameter and are therefore more likely to be found intact. All bowls have a hand-drawn blue mark under the glaze on the bottom. To determine minimum numbers in this case, the blue marks were counted and the bases reconstructed.

For hand-painted, fine porcelain rice bowls, minimum numbers were calculated by making use of their design elements. If one-quarter of a bowl with orange glaze and white Chinese characters was present, it was counted as one because it was easy to determine that there was no matching piece in other features.

Minimum numbers in spoons were determined by counting the number of spoon handles in the more common types. If the design element was unique, any part of the spoon was counted as one.

Chinese stonewares were used to evaluate the validity of minimum numbers. Base diameters were reconstructed, then the total was compared to that derived from reconstructing another diagnostic trait of the vessel. The very large number of broken stoneware vessels in feature 29 was used to test the method. Wine bottle bases are distinctive, having a dry foot ring, a glazed bottom, and a highly refractive, iridescent glaze. Reconstruction of the bases gave a minimum number of 411. A count derived from examining the finishes of wine-bottles, which are also distinctive because of the narrow neck and flared lip, totaled 362, giving a 12 percent variation between the two methods.

The bases of medium-sized food jars and soy-sauce jars are unglazed and of comparable diameter, and they could not be distinguished by examining basal fragments. The food jars, however, have a wide mouth with a rolled rim finish; the minimum number by reconstruction was 122 vessels. The distinctive trait of the soy-sauce jars is the applied spout, and these numbered 202. The total of the two types of vessels using spouts and finishes was 324. The total number of bases representing both shapes was 341, a variation of only 5 percent.

The Chinese Table

The ceramics found in the Los Angeles Chinatown are typical of those made in south China, the major source of immigration. They are folk wares made and imported for the use of overseas Chinese, as opposed to the export wares

TABLE 4.1
Porcelain tablewares

Provenience	Rice bowls	Tea bowls	Wine bowls	Footed serving bowls	Spoons	Large bowls	Plates	Condiments	Japanese
Analytical unit 1	333	105	19	21	92	152	77	63	26
Feature 1	15	7	2	0	3	12	9	6	1
Feature 2	16	13	6	1	7	11	3	7	0
Feature 3	10	6	3	0	6	8	2	1	0
Analytical unit 2	13	5	0	6	7	3	0	1	1
Feature 11	3	2	0	0	4	3	1	2	0
Feature 12	4	0	1	1	1	7	1	0	1
Feature 16	16	5	3	2	6	3	2	4	2
Feature 18	3	11	0	0	0	1	1	1	0
Combined feature	32	10	10	1	10	21	10	9	2
Feature 22	26	3	0	0	2	10	6	5	0
Feature 27	3	1	1	0	3	5	3	4	3
Feature 29	139	71	7	14	46	95	35	32	17
Feature 30	9	4	1	0	7	2	1	2	0
Feature 31	6	1	1	1	2	3	1	2	0
Feature 32	15	12	3	0	9	3	7	5	1
Feature 33	1	2	0	1	1	2	0	4	0
Analytical unit 3	11	7	1	0	6	2	1	3	1
Feature 38	2	0	0	0	2	3	4	5	0
Feature 39	26	12	3	0	17	21	8	9	8
Feature 40	6	6	0	0	6	4	0	1	1
Feature 41	10	3	2	0	4	4	2	7	6
Feature 42	11	1	0	0	6	5	5	4	5
Feature 43	9	0	0	0	1	4	2	2	0
Features 44-46, 50	7	1	0	0	0	2	1	2	1
Feature 47	5	0	0	0	0	2	0	0	0
Feature 48	0	0	0	0	0	0	0	0	0
Feature 49	4	1	0	0	0	4	3	2	0
Features 51, 55	17	1	5	0	0	9	4	7	1
Feature 52	0	0	0	0	1	0	0	0	1
Feature 53	0	0	0	0	0	0	0	0	0
Feature 54	13	1	2	0	1	2	0	0	0
Feature 56	6	0	1	0	0	3	0	0	0
Feature 57	6	1	0	0	0	2	1	0	0
Feature 58	3	0	1	0	1	1	2	0	0
Feature 59	0	0	0	0	0	0	0	0	0
A-136	0	0	0	0	0	1	2	2	3
Emergency exit 10	3	1	0	0	3	2	1	0	0
West entrance	4	1	0	0	2	3	2	0	0
Total	787	294	72	48	256	415	197	189	81

produced for the European or American market. While most of the assemblage represents the forms and types found in other Chinese sites in America, their ultimate research value comes from comparing the proportions of types in chronologically secure and culturally unmixed contexts. For this site, horizontal distributions can be used to ascribe household or commercial units of deposition and, by correlation with historical data, the pattern of site development. Certain of the more refined examples may indicate owners of higher status, and many of these

are described individually.

The table service consisted of one or more serving bowls or high-footed flat servers; a rice bowl for each individual; tea bowls; wine bowls; condiment dishes; chopsticks and porcelain spoons; a teapot; and, often, a spouted pot for wine, oil, or soy sauce decanted from a stoneware shipping jar. The vessels for tea are called "tea bowls" here to distinguish them from cups with handles, which were also made in China for the export market. No Chinese cups with handles were recovered.

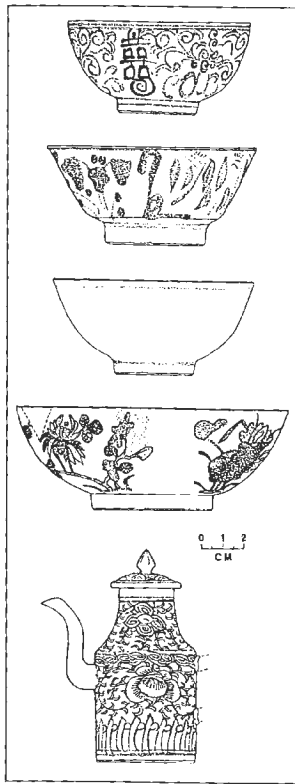


FIGURE 4.1
Major patterns of tableware. Porcelain types recovered include (top to bottom) Double Happiness, Bamboo, Celadon, and Four Seasons bowls, and a Sweet Pea or Simple Flower decanter. After Sando and Felton 1993:158

Type	Percentage
Bamboo	40.8
Celadon	40.0
Four Seasons	8.9
Figural (genre) paintings	2.7
Unique/one-of-a-kind*	3.3
Japanese	4.3

* Includes 4 Double Happiness-style bowls

Porcelain Tablewares

The numbers in table 4.1 reflect the proportions within the Chinese assemblage; of all porcelain tablewares, rice bowls constituted 34 percent, large bowls 18 percent, tea bowls 13 percent, and spoons 11 percent. Other forms occurred with less frequency. When the Japanese rice bowls are included (as they should be), the rice bowls account for 36 percent of all porcelain.

Porcelain Patterns

The major porcelain types recovered are Bamboo, Four Seasons, and Celadon (fig. 4.1). Using rice bowls, common to all types, as the criterion, table 4.2 summarizes the distribution by pattern. The Four Seasons pattern and the distinctive glaze called Celadon, Celadon-type, or Winter Green, are among the more expensive types, aside from the unique occurrences. While the Bamboo bowls and other inexpensive types averaged from 2 to 5 cents each from 1870 to 1884, the Four Seasons and Celadon bowls ranged in value from 6.5 to 8.7 cents apiece (Sando and Felton 1993:163).

Bamboo. This pattern, which occurs only as rice bowls, is a porcelaneous stoneware body which in the past has been variously called Three Circles and Dragonfly, Swatow ware, or Blue Flower ware. They are cruder than the others, thick walled and heavy, with a sharply carinated shoulder just above the foot and a rolled rim. Bodies tend to be gray and of a coarse texture, containing more grog than the translucent porcelains. Under the glaze are hand-painted cobalt blue plant forms, circles, and representations interpreted as dragonflies. There is typically a blue line where the foot joins the body, another at the rim, a third on the interior. Inventory records confirm that this was one of the cheapest varieties of rice bowl, comprising up to 80 percent of those recovered from railroad and mining sites of the 1870s to 1880s (Sando and Felton 1993:163–165). In Los Angeles, this pattern represented nearly 41 percent of the rice bowls.

Four Seasons. These ceramics (table 4.3) are among the more expensive patterns (Sando and Felton 1993:163–164) and occurred on the greatest number of different shapes: serving bowls, rice bowls, tea and wine bowls, spoons, condiment dishes, and plates. Many of the teapots with polychrome floral designs would have seemed to match. Here as elsewhere, all the serving bowls and most of the various size plates are of this style. All pieces are hand

painted over the glaze in polychrome enamel florals symbolic of the annual seasons, with the peach in the center of the interior signifying longevity. The seasons are represented by the cherry for winter, water lily/lotus for summer, peony for spring, and chrysanthemum for autumn (Williams 1976:192).

Celadons. These (table 4.4) may more properly be called Celadon type because they are variable in quality and rarely possess the depth and richness of the classical Chinese glazes. Celadons did not occur as serving bowls and only rarely in flat or plate form. As used here, Celadon refers to the melon green color rather than the technical analysis of the glazes. All are wheel thrown, with fine highly burnished white bodies. The bowls have a very slightly flared rim and a white or wiped border that was occasionally burned to light brown. The glaze formula is much the same as that used for the stonewares, but with less iron oxide (Kibler, 1991).

While it has been accepted for some time that overpainted green bowls are of Japanese manufacture, new questions are arising as to whether the undecorated Celadon-type wares are also of Japanese origin. From technical studies of the elemental composition of the glazes, nineteenth century Chinese products seem to have less calcium and phosphorous than the Japanese, and none at all in the twentieth century imports (Stenger 1993:327–328). Iron and manganese may be chronological indicators as well because they were not present in samples dated circa 1870 to 1890 but are significantly present from 1910 to 1930. Stenger tested a small preliminary group of samples at the Institute of Archaeological Studies, Portland. The results suggest that the Los Angeles Celadons contained lesser amounts of manganese, potassium, calcium, and sodium than artifacts from the 1870 to 1880 sites in Idaho and Nevada. Their percentages of potassium and sodium are comparable to Japanese Celadons and the Japanese blue and white transfer printed bowls. Stenger (1991) has commented that the Los Angeles ceramics were produced in many different kilns and display more diversity in clays within each category than samples from other sites.

The Double Happiness (or Swirl) pattern was found on only four rice bowls and a number of fragments. This variety is among the earliest and cheapest and occurs only rarely after the 1860s. These bowls, which were even less expensive than the Bamboo bowls, were represented by only a single entry in an 1873 store inventory (Sando and Felton

TABLE 4.3
Four Seasons tablewares

<i>Provenience</i>	<i>Serving bowls</i>	<i>Plates</i>	<i>Rice bowls</i>	<i>Tea bowls</i>	<i>Wine bowls</i>	<i>Spoons</i>	<i>Condiment</i>	<i>Total</i>
Analytical unit 1	152	71	27	10	16	32	59	367
Feature 1	12	8	3	1	2	0	6	32
Feature 2	11	3	3	0	6	3	7	33
Feature 3	8	2	1	0	2	3	1	17
Analytical unit 2	3	0	2	0	0	1	0	6
Feature 11	3	1	0	0	0	2	2	8
Feature 12	7	1	0	0	1	0	0	9
Feature 16	3	2	0	0	3	2	4	14
Feature 18	1	1	1	0	0	0	0	3
Combined feature	21	10	1	0	10	5	8	55
Feature 22	10	6	4	1	0	2	5	28
Feature 27	5	3	1	1	1	1	4	16
Feature 29	95	31	19	14	6	16	32	213
Feature 30	2	1	1	0	1	3	2	10
Feature 31	3	1	1	1	1	2	2	11
Feature 32	3	7	1	0	3	6	5	25
Feature 33	2	0	0	0	0	1	4	7
Analytical unit 3	2	1	1	0	0	1	3	8
Feature 38	3	4	0	0	0	1	4	12
Feature 39	21	8	1	1	3	4	7	45
Feature 40	4	0	0	0	0	3	1	8
Feature 41	4	2	1	1	2	0	5	15
Feature 42	5	5	1	0	0	1	4	16
Feature 43	4	2	0	0	0	0	2	8
Features 44, 45, 46, & 50	2	1	1	0	0	0	2	6
Feature 47	2	0	0	0	0	0	0	2
Feature 48	0	0	0	0	0	0	0	0
Feature 49	4	3	0	0	0	0	2	9
Features 51 & 55	9	4	0	0	4	0	7	24
Feature 52	0	0	0	0	0	1	0	1
Feature 53	0	0	0	0	0	0	0	0
Feature 54	2	0	0	0	2	1	0	5
Feature 56	3	0	0	0	1	0	0	4
Feature 57	2	1	0	0	0	0	0	3
Feature 58	1	2	0	0	1	0	0	4
Feature 59	0	0	0	0	0	0	0	0
A-136	1	2	0	0	0	1	1	5
Emergency exit 10	2	1	0	0	0	0	0	3
West entrance	3	2	0	0	0	0	0	5
Total	415	186	70	30	65	92	179	1037

1993:160). Under the glaze these bowls are painted in blue; they are not to be confused with the overpainted, enamel Double Happiness symbols which are interspersed among other designs on tea and wine bowls. The bodies are a thick, gray porcelaneous stoneware with a rolled rim and dry ring foot. The shape is distinctively broad but shallow. The larger 6.3- and 6.7-cm-high examples (from features 29 and 18, respectively) measure 16.5 cm at the rim, with foot diameters of 6.6 and 6.7 cm. The smaller size, represented mostly by fragments, has a 5.3-cm-diameter

ring foot. All have double blue line borders just below the rim and at the juncture of the foot and body. Interiors are undecorated. All the more intact examples are from feature 29, with small fragments from features 17A (2 examples), 18, and 24.

Form & Design

The following section describes the forms and designs found among the porcelain tablewares.

Tea Bowls (pl. 2). Their larger size differentiates this group of 294 bowls from those used for wine

TABLE 4.4

Celadon tablewares

<i>Provenience</i>	<i>Serving bowls</i>	<i>Plates</i>	<i>Rice bowls</i>	<i>Tea bowls</i>	<i>Wine bowls</i>	<i>Spoons</i>	<i>Condiments</i>	<i>Total</i>
Analytical unit 1	0	6	164	49	3	25	1	248
Feature 1	0	1	8	5	0	0	0	14
Feature 2	0	0	7	8	0	0	0	15
Feature 3	0	0	5	6	1	0	0	12
Analytical unit 2	0	0	8	4	0	1	1	14
Feature 11	0	0	2	2	0	0	0	4
Feature 12	0	0	1	0	0	0	0	1
Feature 15	0	0	8	1	0	0	0	9
Feature 18	0	0	1	8	0	0	1	10
Combined feature	0	0	16	3	0	0	1	20
Feature 22	0	0	12	2	0	0	0	14
Feature 27	0	0	2	0	0	0	0	2
Feature 29	0	4	13	24	1	2	1	45
Feature 30	0	0	3	2	0	0	0	5
Feature 31	0	0	4	0	0	0	0	4
Feature 32	0	0	3	7	0	0	0	10
Feature 33	0	0	0	2	0	0	0	2
Analytical unit 3	0	0	3	2	1	0	0	6
Feature 38	0	0	1	0	0	0	1	2
Feature 39	0	0	14	0	0	1	2	17
Feature 40	0	0	3	1	0	0	0	4
Feature 41	0	0	4	0	0	0	2	6
Feature 42	0	0	7	0	0	0	0	7
Feature 43	0	0	4	0	0	0	0	4
Features 44, 45, 45, & 50	0	0	2	0	1	0	0	3
Feature 47	0	0	0	0	0	0	0	0
Feature 48	0	0	0	0	0	0	0	0
Feature 49	0	0	1	0	0	0	0	1
Features 51 & 55	0	0	5	1	1	0	0	7
Feature 52	0	0	0	0	0	0	0	0
Feature 53	0	0	0	0	0	0	0	0
Feature 54	0	0	6	1	0	0	0	7
Feature 55	0	0	2	0	0	0	0	2
Feature 57	0	0	2	1	0	0	0	3
Feature 58	0	0	2	0	0	0	0	2
Feature 59	0	0	0	0	0	0	0	0
A-135	0	0	0	0	0	0	1	1
Emergency exit 10	0	0	1	0	0	0	0	1
West entrance	0	0	1	0	0	0	0	1
Total	0	11	315	129	8	29	11	503

and other spirits. Unlike those made for export to Euroamerican markets, the “infinities of tea-cups” available in the local shops were “all handleless and saucerless” (Percival 1899:51). They are more variable in dimension and basic form than the other categories. Three examples illustrate this range. A tall tea bowl (5.5 cm high, 7.5-cm rim diameter, and 3.2-cm-diameter dry ring foot) with straight sides (cat. 4080) has a genre scene with figures and animals painted over clear glaze and a red stamp on its base. A medium-height tea bowl (4.1 cm high, 6.7-

cm rim diameter, and 3.2-cm dry foot ring) with flaring rim (cat. 4245) has blue-green glaze overpainted with orange carp and green foliage and no base marks. A very shallow and broad tea bowl (cat. 2858; 3.8 cm high, \pm 8.0 cm rim diameter, and 2.5-cm small, dry ring foot) has a fungus design painted in blue under the glaze, a double blue line and single brush stroke on the interior. Although short, it held more than the wine cups.

Celadon. Celadon was the most common type of tea bowl, with 129 examples representing 57.7 per-

cent of the total. The bowl has a gently flaring white rim and a dry foot ring. In most cases, there is a hand-drawn blue mark or line under the glaze on the base of the bowl.

Four Seasons. Included in this category are thirty bowls with the typical Four Seasons flowers painted in enamel over the glaze. The glaze has a slightly blue-green tinge. The average height is 5.2 cm, with a diameter of 6.7 cm. Two examples are of a different size with a height of 3.7 cm and diameter of 6.0 cm. The bowls seem small for tea but too large for wine. This type represents 10.2 percent of all tea bowls.

Four Treasures. These bowls have white interiors and bases and an orange exterior. Over the glaze are the four treasures drawn in fine-line black and painted in polychrome. The symbols are related to literature: ink, paper, brush pen, and ink stone (Williams 1976:197). In most cases, the paint application is poorly executed. One example from feature 21 has longevity signs between the treasures. This group of 15 constitutes 3.1 percent of the total.

Double Happiness/Four Seasons. Double Happiness symbols in orange are interspersed between the typical polychrome Four Seasons flowers on clear glaze. This group of seven items amounts to 1.6 percent of the total.

Rose Canton. These bowls have two pictorial panels, one with a rose and the other with a figural design. The representations are drawn in fine line and covered with polychrome enamels. Some remnants of gilding can be seen on most bowls. There is no base mark. Two of the cups are octagonal. The 21 examples represent 5.0 percent of the total. This style is among those manufactured for Euroamerican export, and is still being made.

Carp. This motif occurs in two styles. One pattern depicts orange carp with green seaweed on a white background rendered in very fine lines and detail. Three bowls have brown glazed exteriors and a very light blue interior, with blue carp and stylized seaweed under the glaze.

The iridescent brown exterior of the second style resembles the "Batavian" landscape bowls dating back to circa 1750 (Christie's Amsterdam 1986:101), although it is not suggested that these examples are that old. Batavian was a favorite with Dutch importers, the name deriving from the Dutch East Indian settlement of Batavia. The lustrous brown glaze (*tzu chin*), also called dead-leaf, is formed like Celadon by mixing ferruginous earth with ordinary glaze. The

origin of Batavian porcelain is late K'ang Hsi, 1662–1722 (Hobson 1976:191). Comparable examples identified as export tea wares and dated to the eighteenth century have been recovered at Fort Michilimackinac (Miller and Stone 1970:90). The fish design on the interior (fish swimming among water plants) was used in ancient art to symbolize power and rank (Hobson 1976:294).

Pink and Green Floral-on-White. These twenty-two white bowls have a pink floral design with green leaves over the glaze and gilding in the form of a small spatter of flowers or a Chinese character in gold. There are no base marks. The group comprises 4.3 percent of the total.

Longevity. The border design consists of a diamond or hexagonal pattern interspersed with a double knot or flower design in orange. On twenty-seven examples, longevity symbols, in groups of six or eight, are painted over the glaze in alternating red and green enamel. The foot ring is dry. Base marks vary: a red knot, square seal, and one stamp reading "China" in a reversed, mirror image (cat. 126). This last was probably shipped after 1890 when the United States required the country of origin to be indicated on imported goods. Two cups have octagonal panels, with a longevity symbol on each panel and a leaf design in enamel at the border. There are variations in longevity patterns and symbols on 4805 and 3263. This type represents 6.6 percent of the total.

Genre. Three bowls are white porcelain with fine outlines of figures in black or red, and the shapes are rather carelessly filled with enamel. There is some evidence of fine line gilding over the enamels. One cup has three Chinese characters.

White Design on Orange Glaze. On one example, there is a white plant motif with Chinese characters on a bowl otherwise glazed orange. This seems to be some form of resist method: the design elements are actually the white porcelain body showing through the orange glaze, with a clear glaze applied over all.

Dragons. The foot ring has a fine black line design of vegetation overpainted with green enamel. The dragons are drawn in fine-line red over the glaze, with the traditional dragon pearl, fire, and clouds.

Other. Among the many variants and fragments, forty-three examples appear to represent unique or one-of-a-kind examples. The more complete are described separately below by catalog no. and provenience. Unless otherwise noted, the background color is white.

- ∞ Bowl with a orange spiral design (cat. 1428, feature 2). The four sections below the rim are in polychrome enamels and orange depicting flowers, bird, butterfly, and unknown.
 - ∞ White with small pink and yellow flowers over the glaze (cat. 1483, AU-1).
 - ∞ White with very fine-line scenic pattern in red with spatters of gilding over the glaze (cat. 1489, AU-1).
 - ∞ White with floral elements over the glaze (cat. 2326, AU-1).
 - ∞ Small white wall fragment displaying a peach, bat, and longevity sign (cat. 2495, AU-1).
 - ∞ Orange pattern on white over the glaze (cat. 2679, AU-1).
 - ∞ Blue on light blue with everted rim. The outside design consists of fruiting peach sprays and *ling chih* or fungus of immortality (Willetts and Poh 1981:68). The interior has a double blue line just above the base and a comma-like splash of blue in the center. No base mark (cat. 2858, feature 29).
 - ∞ Heavy bowl with straight walls and is 6.8 cm high. The black transfer print on one side of the cup depicts scenery; the opposite side has a handpainted green and blue circle the under glaze. Probably Japanese (cat. 3036, feature 29).
 - ∞ Bowl with very elaborate green enamel scrolls and flowers cover the entire exterior. Two gilded longevity symbols and pink and turquoise flower enhancements complete the design. The base has a red foot ring (cat. 3157, feature 29).
 - ∞ Bowl (cat. 3229, feature 29) with black fine-line design of florals and vines filled with polychrome enamels that are unidentifiable because of burning. It has two red longevity symbols. It may be very similar to 3850.
 - ∞ White bowl with polychrome flowers over the glaze; burned (cat. 3294, feature 29).
 - ∞ Circular design element in enamel on white; burned (cat. 3328, feature 29).
 - ∞ The small fragment (cat. 3339, feature 29) is white with an additional tan and black floral element. Red rooster in fine-line red over the glaze.
 - ∞ This item (cat. 3850, feature 17A) is similar to 3157 but colors are turquoise, yellow, and white with red longevity symbols.
 - ∞ Polychrome floral-on-white (cat. 3851, feature 17A).
 - ∞ This bowl (cat. 4080, feature 21) has particularly fine workmanship and a detailed polychrome depiction of the immortals.
 - ∞ White bowl (cat. 4253, feature 32) with three sets of peaches drawn in fine orange lines over the glaze.
 - ∞ Blue, green, and orange scenic pattern over the glaze (cat. 4533, AU-1).
 - ∞ White bowl with pink paint and incised Chinese characters (cat. 4542, feature 25). Very fragile paint flakes off on contact.
 - ∞ White bowl with straight walls, everted rim, and a red, green, and blue floral pattern (cat. 4729, AU-1).
 - ∞ Orange and gold stripe on the foot ring (cat. 4736, AU-1).
 - ∞ Fine-line black drawing of a floral spray, filled with fine brush strokes of orange and green enamel; brown rim (cat. 4801, feature 16).
 - ∞ Orange and gold stripe on the foot ring; polychrome floral design with gilded flowers and fine-line black outline over the glaze (cat. 5135, feature 30).
 - ∞ Green looped-chain border with four orange dashes in the center of each loop. Polychrome floral motifs separated by a panel of polychrome designs (cat. 5947, feature 39).
 - ∞ Panelled bowl (cat. 5948, feature 39) with red crosshatched band at the top and a green enamel border just below it. Green floral pattern in enamel over the glaze.
 - ∞ Hand-painted enamel over the glaze; floral design in green over a mustard-yellow background. Orange line at the rim and around the base, with a square orange seal on the base (cat. 6216, feature 41A; cat. 5940, feature 39).
 - ∞ Two framed polychrome floral design elements in enamel over the glaze. The rest of the cup has a floral design in shades of green. There is an orange ring at the base of the design and an orange square seal on the base (cats. 6026, 6177, 7122, feature 40 and feature 40A).
 - ∞ Bowl (cat. 7020, emergency staircase 10) with polychrome floral enamel over the glaze on white with bamboo design.
- Cup Holders.** These round-footed pieces, which serve the same purpose as Euroamerican saucers, are 10.3 to 12.5 cm in diameter and have hollow centers to hold the tea bowl. There were eight in all, three from AU-1, three in feature 29, and single examples in features 17 and 42. They are elaborately decorated. One (cat. 6108/6132) has a red crosshatched border, polychrome enamel florals, and gilded longevity sym-

bols. Another (cat. 3228) has a scalloped rim with bats and polychrome florals on the inside; like the others from feature 29, it is burned. Some others (cat. 1512, 3053, and 3270) appear similar, with gilded rims. Another (cat. 4930) has a polychrome floral motif repeated ten times on the outer rim, and florals, including water lilies and roses, over a gilded background on the interior. Another (cat. 406-300) has a scalloped rim with an orange foliate spray on the exterior and a finely rendered polychrome scenic on the inside.

Wine Bowls. The seventy-two smallest hollow forms are called wine cups or, more properly, bowls because they do not have handles. They could have been used to hold any of the Chinese spirits, brandy, *Ng-Ga-Py*, or other beverage. They are quite uniform in size, and all are either Four Seasons or Celadon. The sixty-five Four Seasons examples measure 2.6 cm in height, 4.5 cm in diameter at the rim, and 2.0 cm across the dry ring foot. The Celadon examples have the same flaring profile as the larger bowls and white rims. They are 2.4 cm high, 4.7 cm at the rim, and 1.8 cm in diameter at the white, unglazed ring foot. Each has a blue brush mark under the glaze on the base. Both types hold the same volume.

Footed Serving Bowls. These vessels came in two basic shapes: a footed bowl with a solid-color enameled interior and floral or other designs on the exterior, and a very high footed server with a flat top, usually with a scenic or figural pattern and calligraphy overpainted on the upper white surface. The former would have held wet dishes; the latter would be used to offer fried food or discrete items.

An estimated thirty-three bowls were enameled green on the interior, with various patterns on the outside. As reconstructed, rims ranged from 16 to 22 cm in diameter. Most bases had square red stamps over the glaze. Exterior patterns included yellow florals; yellow clouds; turquoise butterflies on paneled sides; mauve peach with green leaves alternating with five turquoise diamonds; different geometric elements in red, turquoise, yellow, and green on each panel of an octagonal vessel; polychrome florals with a perched bird on each of eight lobes; polychrome florals with animals; butterflies, florals, animals, and a rooster on a six-lobed vessel; and florals, bird, and butterflies on six lobes. An example from feature 33 (fig. 4.2) depicted the eight diagrams in yellow enamel outlined in red; these are ancient cabalistic symbols representing objects, their attributes, their appropriate animals, and points of the compass (Williams

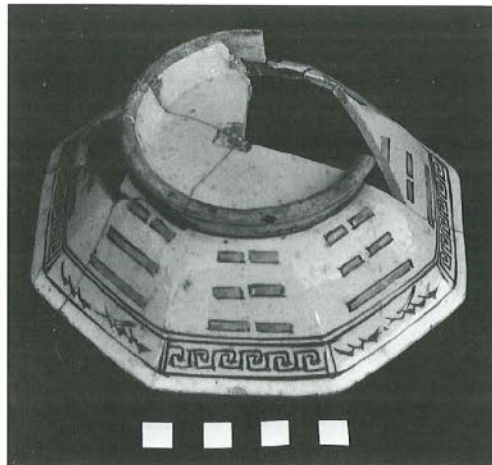


FIGURE 4.2

Octagonal bowl. This serving dish is patterned with ancient, cabalistic symbols. Photo by R.S. Greenwood

1976:148–150). The vessels tend to be hexagonal, octagonal, or lobed. The bases often had a red rope border painted over the glaze. Overall height of the more complete examples is from 5.6 to 10.0 cm; diameters at the foot range from 3.4 to 13.0 cm, and foot height is 1.2 to 1.7 cm. Six of the group came from feature 29, seventeen from AU-1, and five from AU-2.

Fifteen flat-topped serving pieces have a very high foot. Of these, at least three have a foot 5.5 cm high, with alternating red and green lappets above a red border at the base and then a double red line below a raised blue band, again bordered in red. The bases are hollow and glazed and dry only on the foot. The upper portion was round and flattened on the bottom where it joined the base (no diameter is available). Even the fragments do not show a distinct seam where the upper platform would have joined the bottom. The design on the upper aspect of each piece has peach and green leaves in the center, bordered by a red stripe, with polychrome flowers and leaves toward the rim. The stems of other comparable vessels have rope and wave patterns painted in red, blue, and/or green, sometimes outlined in black. Of the fifteen examples, eight were recovered in feature 29 and four in AU-1; none was present in any feature after feature 29.

The largest serving vessel is an incomplete bowl from feature 42. The bowl was thrown on the wheel with a low dry ring foot. The interior is lavishly decorated with polychrome flowers and one or more pheasant birds painted over the glaze on a white ground. The vessel has a straight rim 3.7 cm wide, with the same design elements within red borders, touched with gilding. The bowl is 14.7 cm high, with an estimated diameter of ± 40 cm. There are no

basemarks on the fragments. The ring foot has been wiped free of glaze for 0.9 cm at the heel, and there is at least one large floral motif on the exterior wall. About half of the bowl can be reconstructed.

Spoons. Examples are shown in plate 3.

Four Seasons. These spoons are thicker and more casually formed than other spoon types, except Celadon. The stems are short and the bowls are smaller than others, with an angular flare on both sides. The base has a dry foot, and the very light green/gray glaze is applied over the slightly uneven surface. The center of the spoon has a peach surrounded by the flowers of the four seasons. The flower outline is done roughly in black, and the colors (green, purple, pink) are unevenly dabbed on the outline. Examples number forty-nine, 35.9 percent of the total.

Polychrome Floral-on-White. Although related to Four Seasons, this group is distinguished by a clear glaze on the white body and a variant of the floral pattern. The floral elements and colors are similar, but rather than the typical four motifs of the Four Seasons, these spoons have an overall decoration of pink, orange, light green, dark green, blue, and purple. The design elements are finely executed in black outline and then filled with color. The floral symbolism is the same: the bowl of the spoon has a chrysanthemum with a locust resting on it, the tip of the spoon shows a water lily, above the heel of the spoon is a four-petalled flower (cherry blossom?), and around the sides and on top of the handle are small flowers in blue or orange (peony?). All the bases showed stilt marks (from the firing process), and thirteen had square red seals. Examples number 49, 19.1 percent of the total.

Celadon. These spoons are similar in shape and manufacture to the Four Seasons examples, except the tips are more rounded and the sides flare out. Most of the bases have a hand-drawn blue mark under the glaze. Some marks are real or simulated Chinese characters, while others consist of one to three parallel lines. The spoons have a dry foot. Examples number 29, 11.3 percent of the total.

Other. Nine additional spoons had polychrome floral designs painted over a solid blue, aqua, yellow, or black background. Six spoons have finely rendered paintings of dragons, and eleven depict green or red-orange carp swimming among seaweeds; both types are under the glaze. Three were overpainted in Rose Canton motifs and five with other figurals. Five carried symbols of the Eight

Ordinary Treasures (pearl, lozenge, stone chime, rhinoceros horns, coin, mirror, book, or leaf) (Williams 1976:157–158). Three were white with gilding, and the balance were white fragments with no design elements.

Plates. Fragments equivalent to a minimum of 191 place plates and one or more larger platters were recovered, mostly from feature 29 (31 examples) or the immediate areas designated as AU-1 (72 examples). Ten were Celadon and 179 were Four Seasons. The other two were of a coarse paste, block printed with unglazed centers, of a type that is early throughout southeast Asia. All are essentially flat, with a turned-up rim, but no formed brim or central well such as a Euroamerican saucer might have. The Four Seasons plates had the four characteristic floral designs with a peach in the center; bases most often had either a square red stamp over the glaze or the red endless knot under the glaze. All types ranged from 13.5 to 15.0 cm in diameter. The glazes on both the polychrome and blue-and-white vessels are very high in lead (Stenger 1991). The block-printed plates are approximately 14.0 cm in diameter, with five stamped openwork motifs on both the cavetto and the underside, which has a blue border below the rim and three blue lines just above the dry foot. On one of these, the glaze is particularly poor, evidencing pits, runs, and incomplete coverage.

One large serving platter from AU-1 is elaborately painted over the glaze in the Rose Canton style. If intact, it would be oval in shape and 24 to 28 cm long. Another well-decorated piece would be round and approximately 22.0 cm in diameter if whole; painted over the glaze are two large five-clawed dragons amid cloud symbols, with the *shou* design in the center and a thickly enameled polychrome foliate border 1.6 cm wide (cat. 2864). The colors are obscured by burning, but the body is thin and fine.

Condiment Dishes. Smaller flat dishes, resembling little plates with upturned rims, held condiments or sauces. Of the 192 recovered, eleven were Celadon, two orange, and the remainder Four Seasons. They were quite uniform in size, 8 to 10 cm in diameter. The coincidence in pattern and numbers suggests that a condiment dish was placed by each plate.

Teapots. Tea preparation and table service are represented by a minimum of sixty-eight teapots and forty-one lids. By type, thirty-five of the teapots are painted blue under the glaze, fifteen have polychrome floral designs painted in enamel over

the glaze, eleven have polychrome genre depictions, and seven are either plain white or fragments without decoration. Of the total, thirty teapots and five lids came from feature 29. The only other concentrations were the five pots and three lids from features 51/55, and three each pots and lids from feature 39. Other than scattered fragments, fifteen teapots and seventeen lids were recovered in the general area covered by AU-1. An additional 110 fragments, not included in these minimum numbers, have been cataloged, suggesting that the quantity was probably greater than it might appear. All are cylindrical in form (pl. 4).

There was greater variability in size among the teapots than other vessel forms. Diameters range from 10.0 to 15.6 cm, heights from 10.9 to 18.0 cm, and rim diameters from 5.0 to 8.0 cm. A few have twisted wire handles, suggesting repairs. The blue-and-white group is painted in broad brush strokes, depicting floral, scenic, or figural patterns. The polychrome florals were painted in enamel over the glaze, with flowers, birds, and butterflies. The genre figures painted over the glaze are typically outlined with fine black, brown, or red lines. Applied lugs for the handles uniformly have three perforations; some have molded or slip dot decorations.

Decanters. These vessels have a cylindrical body, constricting above the shoulder to the mouth, with one handle and an opposed curved spout, both applied below the shoulder, and matching lids with a knob handle (pl. 1, fig. 4.1). They have variously been called wine, sauce, or soy pots into which liquids from bulk shipping containers were decanted for table service. Of the fourteen most nearly intact examples, eight pots and one lid are blue and white, and the other six have polychrome or other decorations as described below. None of the bases is marked.

The blue-and-white examples, called "Sweet pea blossoms and foliage" are painted under the glaze in the recurring pattern grouped within the general category of "Shanghai ware" (Willets and Poh 1981:13–14, 70). The name Sweet Pea is used here following the description of an identical vessel illustrated by Willets and Poh:

Blue and white sauce pot with lid. The body ornamented with a chain of three concentric ellipses at the shoulder, sweet pea blossoms and foliage below, and at the bottom a border based on parallel oblique strokes. (1981:78)

The specimen Willets and Poh illustrated was 14.0

cm tall with its lid and ascribed to the nineteenth century. The seven measurable blue-and-white examples in the Los Angeles Chinatown collection average 11.0 cm tall to the rim and would be 14.0 cm with the lid. Diameters at the foot range from 6.0 to 6.8 cm, and at the mouth between 3.0 to 3.3 cm. Except for a dry foot, all bases are glazed, and all spouts are joined to the bodies with a single perforation. With its matching design, the lid (feature 17), measuring 4.2 cm in diameter with an unglazed 1.7-cm stem, fits within the orifice of the pot.

Other varieties conform to the same shape but have the following diverse decorations:

Calligraphy only. A shoulder and spout fragment from feature 11 has four characters in gray or faded black on white below the shoulder; the characters could not be translated. Other characters or designs were probably present on the other side of the spout at the point of fracture.

Polychrome floral. Three fragments in and around feature 12 are parts of a white pot of the same shape and size. A delicate array of flowers in two shades of blue, two shades of pink, and white, with red centers, green leaves, and dark stems has been overpainted in enamels on the body and neck.

Another group of fragments resembles elements of the polychrome floral style above. The excess parts must represent at least one additional specimen. Pink flowers and brown stems are present.

Genre. Fragments from feature 29 combine overpainted figures, a fence, and floral elements on a white background. Repeated on each side are two figures, one wearing a brown tunic over green trousers and the other a green robe over brown, standing in front of a low, one-rail, square fence. Both figures wear top-knots and appear to be smiling. Scattered grass is suggested by diagonal black lines painted over a green wash, and there are larger plants in the background.

Other. Polychrome floral over a pink-orange body. Complete except for the handle, this is the only solid-colored body other than white. It is 11.5 cm tall with a base diameter of 6.7 cm. Body and neck are painted over the glaze with enamel flowers, stems, and leaves in shades of pink, blue, and green. Petals or flowers that appear to be white have not been painted, but these areas were carefully left uncovered by the orange glaze.

A base fragment from feature 17A. This item, probably another decanter, is distinctive in that it



FIGURE 4.3
Japanese bowls. Japanese porcelain was historically imported and sold by Chinese merchants.
Photo by R.S. Greenwood

has a dry foot ring. The base is otherwise flat and glazed. A border above the foot is overpainted in red and, above this, repeated characters signifying longevity are painted in thick yellow enamel outlined in red. The upper portion is missing.

Of the total pots recovered, three were from feature 29; two from feature 51; one pot and its lid from feature 17; single examples from features 11, 12, 39, 43, 45, and 49; and four from AU-1.

Japanese Porcelain

A minimum of eighty-one vessels is regarded as Japanese based on form, technology, subject and method of decoration, and analogy to identical patterns which were either advertised as Japanese or backstamped with the country of origin. These items include sixteen examples of Celadon, thirty-four decorated with blue-and-white stencils or transfer prints, and thirty-one hand painted. The lack of country-of-origin stamps on the base suggests that most were imported prior to 1891, before tariff regulations made stamps obligatory. They could have been imported later and the paper labels used in lieu of stamps have disappeared.

A common pattern among the painted Celadons included thick white enamel or slip flowers under the glaze, usually enhanced with pink shading both under and over the glaze. Green leaves and black stems are sometimes present, and flower centers were occasionally gilded over the glaze. This style is present on a minimum of five large serving bowls, one rice bowl, three tea bowls, a globular teapot, one plate, and four other hollow forms. The serving bowls are 4.5 to 6.4 cm in diameter at the foot, with rim diameters of 13.7 to 15.8 cm and height of 5.8 to 7.0 cm. All have a painted blue line inside the foot

ing. The rice bowl has a foot diameter of 4.3 cm, rim diameter of 12.0 cm, and height of 5.0 cm, with the same blue line within the foot ring. The plate has the same underglaze decoration plus orange flowers over the glaze. The foot is 10.0 cm in diameter, and the rim diameter is ± 19.0 cm.

The stenciled and transfer printed wares are limited to thirty-three rice bowls and one straight-sided smaller item that could have been used for tea. The design elements resemble those illustrated by Costello and Maniery (1988) and are found in most Chinese sites: chrysanthemums, other flowers, fans, and dragons, with dashed or dotted lines used as fill and pendant rim designs on the interior (fig. 4.3). The origin of these items is beyond doubt: some of the identical patterns in later contexts have been found with Japanese backstamps. Some of the same patterns are illustrated in the mail order catalogs after the turn of the century, by which time the place of origin had to be marked. The rice bowls range in size from 3.5 to 4.2 cm in diameter at the base, 11.0 to 14.0 cm diameter at the rim, and 4.5 to 5.4 cm in height. The body tends to be thick and opaque.

The balance of the group includes various hand-decorated forms. Two domed lids, each with a knob, were painted blue, one, from feature 40 with a bird against a landscape background, and the other, from feature 39, with landscape elements. Two plates, 18.0 and 20.0 cm in diameter, were painted over the glaze with polychrome floral and figural motifs in fine-line drawing with some gilding. Handful of fragments from features 39 and 41A were rejoined to form a plate 20.0 cm in diameter, with a 12-mm border of cobalt blue and floral patterns in blue under the glaze. There were seven tea cups of extremely thin ("eggshell") porcelain, all painted over the glaze with some combination of polychrome landscape, flowers, scrolls, and butterflies. Some of the rims are bordered, and some have gold dots. Five saucers with foot ring diameters of 4.0 to 8.0 cm and rim diameters of 9.0 to 14.0 cm have comparable polychrome elements painted over the glaze.

Other painted fragments represent the rim, shoulder, and spout of a globular teapot decorated with blue florals under the glaze and white slip dots and green enamel applied over the glaze, and pieces of another similar teapot. Other fragments are interpreted as a bowl with a flared rim, 7.6 cm high and 18.0 cm in diameter, painted in blue and olive under the glaze; a planter with an everted flat rim; and at least five other incomplete small bowls or other hollow-ware forms.

This group of imports does not signify that Japanese were present on the site either as residents or merchants. While there is no evidence in the city directories or census records that Japanese were living on Apablasa Street, there is abundant evidence in contemporary business listings and advertisements that Chinese merchants were importing and selling Japanese ceramics. The same styles are regularly found on other Chinese sites of contemporary date, for example, in Ventura during the occupation of 1860 to 1900 (Foster and Greenwood 1991; Greenwood and Foster 1992), San Jose (Hampson 1988), Napa (Hampson and Greenwood 1989), Walnut Grove and El Presidio de Santa Barbara (Costello and Manieri 1988), and other sites where there was no known Japanese population. Not only do historical photographs and advertisements in the Los Angeles directories confirm that Chinese merchants, including a shop at the Plaza in the old Lugo Adobe, were offering both Chinese and Japanese ceramics in the nineteenth century, but imports plainly identified as Japanese were being marketed to the national trade in turn-of-the-century catalogs. Several blue-and-white transfer printed bowls identical to some of those found in this excavation were advertised to the general public at 39 cents a dozen (Butler Brothers 1907:180E).

Chopsticks

Chopsticks are included here because – although they are not ceramic – they are a part of the Chinese table. No chopsticks were identified with confidence, although several charred remains of the appropriate size may have been these multi-purpose implements. Although used in many Asian countries, it is likely that they originated in China; Chinese history claims they are as old as the Xia Dynasty (circa twenty first to sixteenth century BC) and were first made of bone or jade. They have a lore and legend all their own. Jade or gold chopsticks were symbols of affluence, and rulers once tested their food with silver chopsticks that would turn color in the presence of poison. They were placed in tombs so that the dead could eat and were included in brides' dowries – the word for chopsticks in Chinese is pronounced like “quick a son.” They were appropriate to the Chinese diet for at least two reasons: Taoism stressed union with natural forces, including a simple vegetarian diet still integral in the Cantonese cuisine, and the chronic fuel shortage prompted the quick stir-frying of small portions or chunks of food.

Stoneware Containers

The most common forms of stoneware shipping or storage containers have been adequately measured and illustrated elsewhere, so this discussion summarizes the numbers and distribution, describes the less abundant forms or anomalies, and comments on manufacturing methods. Translations of characters embossed into the clay or added to the surface in ink or cinnabar are listed in appendix A. The vast quantity of these containers, when fragments are considered, is not even suggested by the tabulations in table 4.5. From feature 29 alone, 1,172 pounds of stoneware jars and fragments were recovered. From trenches and profiles, another 643 pounds of fragments were examined, recorded by provenience, and discarded. The items almost exclusively represented medium-size food jars; wine bottles may be recognized by their superior glaze, and the large shipping jars by their size and thickness. The numbers have another implication: because these containers held imported foods (liquid, dry, and preserved), they emphasize the importance of the traditional diet and the inadequacy of estimating subsistence patterns from bony faunal remains alone.

The forms of the containers are ancient, and such containers are still being made, with only minor shifts from hand molding to use of the wheel and the introduction of the diesel-powered wheel. In the countryside, they are fired in climbing kilns having five to seven chambers (Greenwood 1993a:395–396, Fig. 85). In older archaeological sites, the globular forms were clearly made in two parts and joined by a band of clay at the midpoint or the shoulder.

This is the only ceramic type containing vanadium in both the clay and glaze. Thus, the raw materials were gathered from geologic deposits different from those exploited for the other ceramics. It is likely that these food containers were made at any number of kilns located relatively close together. The potteries may have been near the food and beverage processing locations, or the containers could have been transported to agricultural centers. All of the brownwares tested from sites in Idaho (1870–1880), Nevada (1880–1890), and Oregon (1890–1905) contained vanadium, as well as chromium. The later period appears to be characterized by lower quantities of manganese, with sodium and nickel consistently present. Boron appears to be exclusive to the Los Angeles samples tested (Stenger 1991).

Wine Bottles

The 928 wine bottles comprise 31 percent of all

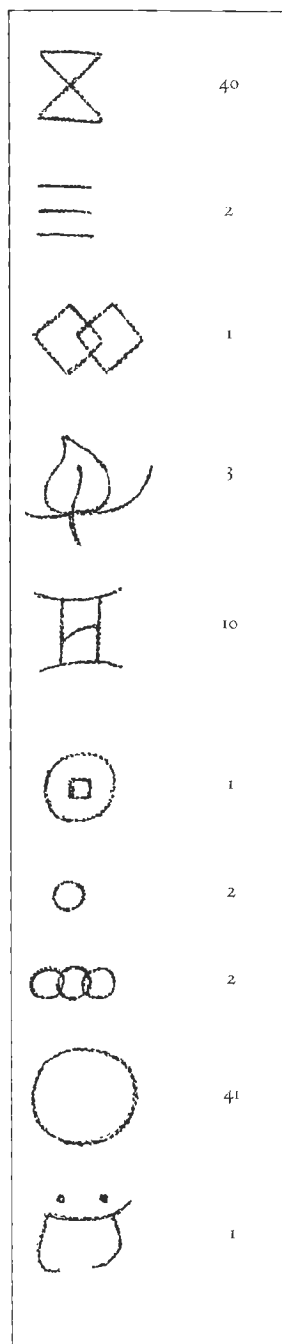


FIGURE 4.4
Wine bottle bases. Embossed or incised marks were found on 112 of the wine bottle bases. The most prevalent were the hourglass and the circle. Individual quantities are shown on right.
Drawing by Helle Grey

identifiable stoneware vessels. They are the most uniform of all containers: from 5.5 to 5.9 cm in diameter at the rim, uniformly 3.1 cm at the neck constriction, 12.2 to 12.6 cm in maximum body dimension, 8.1 to 8.6 cm in base diameter, and 16.2 to 17.1 cm in height. In contrast to the soy sauce or food jars, the bases of this group are glazed, except for a dry ring foot. Embossed or incised marks were present on 112 of the bases (fig. 4.4). The most prevalent were the hourglass or butterfly in the form of a double triangle (forty examples), and a simple circle on forty-one bases. Minimum numbers were computed from the distinctive neck finishes.

These bottles held any of several products that incorporated various herbs or flavors and were consumed at least partly for their medicinal or tonic properties. Distilled rather than fermented, the beverages were technically liquor and not wine. They were considered good for rheumatism or to increase one's vitality or life strength. In one of the very popular formulations, the bark (*pi*) of a certain tree (*wujia*) was placed into the wine, and the beverage was therefore called *wujia pi*. The product, produced mainly in Shanghai, was packaged exclusively in this style of bottle. The cork was made of wood and covered with lacquer (Hung-hsiang Chou, 1991). The form itself, a low-footed globular body with short neck and flaring rim, is at least as old as the Zhou dynasty, ca. 1000–476 BC (Frierman 1983:184).

According to Prof. Robert L. Kibler, Glendale College Art Department, who analyzed the process of manufacture, the containers were wheel thrown and assembled from three elements. The lower body half is bowl shaped, with a thick rim joining it to the upper half. The foot ring was formed by thinning the base. The upper body half was formed as an upside down cone with a narrow, solid base. This section was then turned over, and the narrow part trimmed out to form the neck of the bottle. The trimming marks are visible on many fragments. The flared neck was thrown separately and joined to the body with white slip. The bottles are then fired and glazed in a double-dipping sequence. It is first dipped completely, covering the base. The foot ring was wiped dry, and the bottle was dipped a second time while being held by the foot ring. The glaze saturated with iron, is called *temmoku* in Japanese (Prof. Robert Kibler, 1991). In an approximate, relative chronology, Olsen (1976:60) has suggested that those bottles where the glossy glaze does not extend to the base of the vessel sidewall, leaving an unglazed

strip just above the base, are older than those whose glaze extends all the way to the foot. Both types occurred in Los Angeles. Glazes range from reddish to near black and are often highly iridescent and fine grained. Of the stoneware categories, this type is the most well made.

Soy Sauce Jars

Of the 399 soy sauce jars, two were distinctly smaller than the others. In contrast to the average dimensions (rim diameters: 3.6 to 4.8 cm; neck orifice: 3.0 to 3.5 cm; body diameter: 12.2 to 15.3 cm; and height: 11.3 to 13.9 cm), the smaller size was 6.5 cm in body diameter and 7.5 cm high. Minimum numbers were computed from the distinctive spouts alone; the bases resembled those of food jars in both diameter and lack of glaze. Soy sauce jars accounted for 13.5 percent of the identified stoneware items.

Since the interiors of broken vessels were examined, it was determined that many were thrown in one piece, with a small, folded neck collar. The spout was formed separately by hand and attached crudely to the shoulder over a punched hole. There is no foot ring, and the bases are not glazed. The glazing on the inside is very uneven and, on the exterior, pitted and rough. As a group, these items evidence the poorest workmanship. Some of the spouts were still sealed with clay plugs, and some had been pierced for pouring. The larger plugs that sealed the mouths of the jars resemble unglazed gray mushrooms. The exposed upper hemispherical portion of the plug averages 4.0 cm in diameter where it overlaps the rim; the 2.0-cm-long stem is hollow. These items were found in place in some jars, but others were isolated in the deposit.

Jars: Medium Food

Jars of similar purpose and form, although variable in size, are grouped within this classification. They are globular, high shouldered, with wide mouths and rolled, everted rims. Bases are unglazed. The minimum number of this form, which occurs mostly as fragments, is only 370, or 12.5 percent of all stoneware; because this form occurs mostly as fragments, the total is profoundly under represented. These jars contained many different foods, including cabbage, radish, and other vegetables; shrimp or fish; other products that were dried, pickled, or salted; and a variety of sauces.

The bases range in diameter from 8.4 to 13.0 cm. One of the unbroken, smaller examples measures

TABLE 4.5
Stoneware

Provenience	Wine	Soy	Food	Shipping		Small straight		Small hemispherical		Other
				JARS	LIDS	JARS	LIDS	JARS	LIDS	
Analytical unit 1	209	67	121	76	98	69	46	44	30	59
Feature 1	36	5	13	2	7	5	4	3	1	6
Feature 2	6	5	9	0	8	4	5	1	0	4
Feature 3	13	4	7	1	1	1	2	0	0	1
Analytical unit 2	10	1	7	7	5	5	1	0	0	1
Feature 11	4	0	2	1	2	0	3	0	1	1
Feature 16	13	6	2	3	7	4	4	3	4	3
Feature 12	2	2	4	0	3	1	0	1	0	1
Feature 18	8	6	6	0	7	0	1	2	2	1
Combined feature	24	16	10	5	11	9	10	5	2	9
Feature 22	18	7	12	9	13	6	3	4	11	8
Feature 27	6	3	0	1	4	1	2	0	0	2
Feature 29	420	210	122	89	91	47	25	9	17	41
Feature 30	10	2	4	0	4	6	6	3	2	2
Feature 31	0	0	0	0	0	0	0	0	0	0
Feature 32	12	3	5	3	5	5	4	3	9	2
Feature 33	12	2	5	2	3	1	8	3	4	1
Analytical unit 3	21	3	3	1	7	11	6	5	2	6
Feature 38	7	5	1	0	0	4	1	11	10	2
Feature 39	10	3	4	2	2	5	7	3	6	1
Feature 40	20	4	7	3	3	5	9	2	4	0
Feature 41	14	8	6	0	1	2	1	1	1	1
Feature 42	10	2	1	3	8	2	2	2	3	2
Feature 43	6	3	0	0	0	2	1	0	1	0
Features 44, 45, 46, & 50	2	3	1	0	0	0	0	1	0	2
Feature 47	4	1	2	1	1	0	1	0	0	2
Feature 48	0	0	0	0	1	0	0	0	0	0
Feature 49	2	2	0	0	1	1	0	1	0	1
Features 51, 55	2	2	2	0	2	2	1	3	0	2
Feature 52	0	0	0	0	0	0	0	0	0	1
Feature 53	0	0	0	1	0	0	0	0	0	0
Feature 54	3	3	4	0	1	0	3	0	0	1
Feature 56	13	11	5	0	1	0	0	0	0	1
Feature 57	9	9	4	0	0	2	0	1	0	1
Feature 58	1	0	1	0	0	0	1	0	0	0
Feature 59	0	0	0	0	0	0	0	0	0	0
A-136	0	0	0	1	0	0	0	0	0	0
Emergency exit 10	0	0	0	1	0	0	0	1	0	0
West entrance	1	1	0	0	1	0	0	0	0	0
Total	928	399	370	212	298	200	157	112	110	165

7.5 cm in rim diameter, 11.2 cm in maximum body diameter, 10.8 cm in height, and 9.0 cm in base diameter. Manufacture was casual, with uneven, pitted glazes. These jars would have been sealed with dish-shaped, unglazed lids.

Jars: Large Shipping

The 212 recognizable examples of very large containers for bulk foods came in four basic forms. The

eighty-one from feature 29 provide the best distribution by type. The distribution by shape does not account for the estimated total of large shipping vessels. The minimum numbers by type were based on the identifiable necks and finishes, while the overall total included bases that were definitely associated with these large jars. Because the finishes were lacking, their vessels could not be assigned to a type.

Globular Jar with Flat, Folded (Everted) Rim.

Lugs were applied to some bodies between the shoulder and mouth. There appears to be a minimum number of eighty (thirty-nine from feature 29), with applied lugs on eleven of the fragments. Among the broken pieces, this is probably the most common form. The inside diameter, calculated from the broadest point above a broken base, would be substantially in excess of 32 cm. The undercut molding at the rim and loop lugs would have facilitated the securing of a closure over the lid. Thick interior glazes suggest that at least some of the jars contained liquids.

Globular Jar with Short Neck and Rounded Rim. Minimum of forty-nine, with twenty-three of these from feature 29. The average diameter is 40 cm. Two had unglazed resists on the shoulder with Chinese characters (see appendix A).

Large Cylindrical Form. Straight rim is recessed to receive a lid that fitted over the mouth. Minimum of eighteen examples from feature 29; potentially fifty-three more from fragments. The rims have been wiped free of glaze; the interiors have a very thin coat. These items vary from 21 to 40 cm in diameter. If turned over, the unglazed lids would resemble shallow pans with straight sides. The containers were glazed inside and out, except for the lip and flange to support the lid, which was fired in place on the jar. The sizes of the lids were appropriate to fit well on the flanges of the jars; diameters were 21 to 31 cm.

Very Large Jar. Shoulder is sharply carinated. At least one example – with unglazed inside, with a light brown exterior glaze – of this type was found in feature 29. The neck is 20.0 cm in diameter; the base is 23.0 cm in diameter and 1.03 cm thick.

Bases

Certain bases were characteristic.

Small Base. Abruptly flaring outward, these bases ranged in thickness from 0.86 to 1.4 cm; in diameter, from 11.4 to 11.9 cm. Although broken, one of the more complete fragments had expanded to a body diameter of 31.2 cm and was still flaring. Minimum of thirty-two examples; globular if whole.

Flat-bottomed Base. This base, though thinner, seemed to be associated with the globular shapes, possibly the second type above. The base diameters were 10.4 to 11.2 cm, with thicknesses from 0.41 to 0.73 cm. Minimum of nineteen examples.

Broad Base. Concave on the bottom, the largest variety, representing cylindrical vessels, ranged from

20 to 40 cm in diameter and from 0.5 to 0.7 cm in thickness.

Shallow Pans

Listed with the Other category on table 4.5 are a minimum of thirty-one shallow round pans, probably braziers for moist cooking. They have either sharply carinated shoulders at approximately midpoint in height or a less pointed shoulder. In diameter, they range from 10.7 to 18.0 cm, and they average 6.0 cm in height. Although thin, this clay body resists heat well; it is reinforced by a thickened lip and a ridge around the midsection. Modern counterparts are often further strengthened by being wrapped in wire. The interiors and outside down to the midpoint have a thin glaze. The lips are unglazed to facilitate stacking in the kilns.

Thin-walled Vessels with Lids

This appears to be a separate category of very thin-walled vessels having a distinctive gray, unglazed body with matching lids (fig. 4.5). None of the vessels is whole. The diameter at the base is 17.0 cm, and the walls are 0.2 to 0.3 cm thick. The lids are domed and fit into the recessed lip, with an applied loop handle. Kibler (1991) suggested that the vessel may have been closed by running a wire around the neck of the vessel below the rim, then passing the wire through the loop on the lid. No total was derived of these fragile items. Similar vessels, called high casserole with a single handle, have been reported from Chinese settlements in Sacramento, San Francisco, and New Zealand. Modern examples, called “sand pot,” are apt to have a knob handle on the lid rather than a loop, and they are usually reinforced with a wire basket (Wegars 1994). It is very likely that these are Shivan products; comparable examples are shown at a kiln in Foshan (Fung Ping Shan Museum 1979:10–12, 168).

Other Stonewares

Ink Bottles. A minimum of two brown glazed stoneware bottles, which contained ink, had flared necks with flat rims and pouring spouts (AU-1). Each had Chinese calligraphy on the shoulder, possibly as many as twelve characters.

Four Fragments. These fragments from features 1A and 1B represent a short globular vessel with a restricted neck and broadly flared rim, standing on four small legs. Diameter at the base is 12 cm, and at the wide rim, 17 cm. Wheel thrown, it is glazed brown

on the interior. The outside has a thin brown wash that appears to be covered with white paint. In shape alone, it resembles a Euroamerican spittoon.

Rim Fragment. This item from feature 2 appears to be the same shape as the category above. It is 19 cm in diameter, wheel thrown, unglazed, and painted with blue and a small amount of white.

Jars or lids. Five similarly shaped items could be either very shallow jars or more elaborate lids. All are between 7.3 and 9.0 cm in diameter and 1.6 to 2.0 cm in height. Unglazed and of poor workmanship, they flare out at the base and have beveled rims. All occurred in features 29 (two examples), 31, 32, and 33B.

Bowl-shaped Vessels. At least three bowl-shaped vessels were sharply scored on the interior with cross-hatching, as if to be used in grinding. The most complete item was 18 cm in diameter at the base and 34 cm diameter at the rim. These vessels were recovered from features 31, 29, and 44.

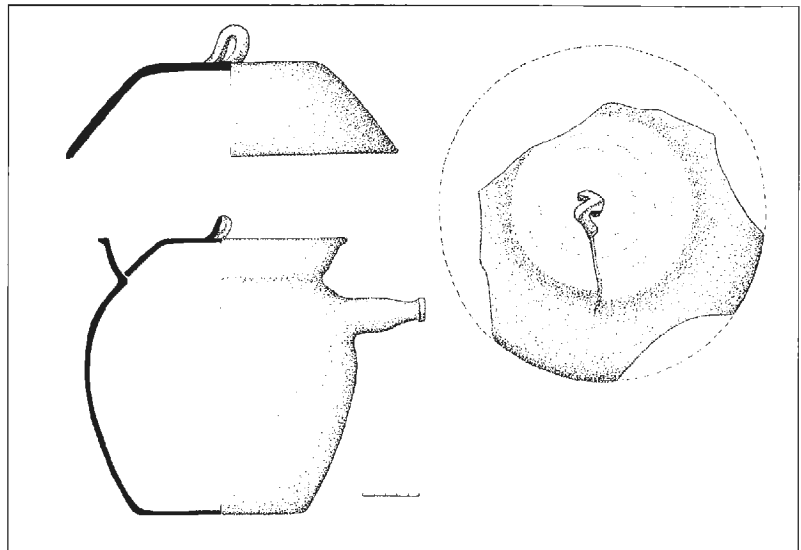
Globular Jar. One 16-inch-diameter globular jar with a wide mouth and rolled rim occurred in feature 29. Covered with brown glaze on exterior and interior, the vessel's impressed decoration is unique. Radial lines run from shoulder to mouth, and the center of the body is incised horizontally (fig. 4.6).

Stand. This item from feature 18 is an elaborate round stand 11.0 cm in diameter and 2.3 cm high. It has six lobes, and the exterior has an applied or embossed foliate pattern. The deep red-brown glaze covers only this outside edge; the upper and lower sides are unglazed. The object is scalloped on the sides and stands on three feet. The upper side has a 13-cm-wide perforation surrounded by a stamped lappet border. A small fragment, seemingly identical to this, is a second example.

Ginger Jars

Green glazed stoneware jars of the kind called "ginger jars" came in three forms: round body with straight neck, round body with rolled rim, and hexagonal. Six of the first form had a narrow green glaze band at the rim which dripped down into the interior; a 1.5-cm band wiped clear of glaze appeared below the rim; and the green glaze then resumed from shoulder to base. These jars were 4.0 to 5.0 cm in diameter at the neck and 6.5 to 8.0 cm at the base; none was complete enough to measure for height.

The twenty-two jars with a round body and rolled rim were wiped free of the glaze at the base above the heel but were green from this point up to and



over the rim. Base diameters were 6.5 to 8.0 cm; necks were 5.0 to 8.0 cm wide; and the more complete jars were 7.7 to 8.2 cm tall. Nine of the jars had Chinese characters in one or two cartouches.

Seven of the green hexagonal jars with designs were framed in rectangular patterns on the sides. Composite measurements are 4.5 to 5.0 cm in rim diameter, 8.0 cm at the base, and 7.5 cm in height. Another group, also called ginger jars, is of slightly larger globular forms with thin glaze washes of white over green, light blue, or beige. There were possibly as many as nineteen of these. Measurable fragments averaged 8.0 to 8.6 cm in height, 6.7 to 11.0 cm in diameter at the base, and 5.2 to 7.2 cm at the neck.

Jars: Straight-sided

This category of well-made cylindrical containers with excellent glazes inside and out, usually with embossed stamps on the base, almost certainly held a product of higher value than the more casually made and finished stonewares. These numerous items came in three size ranges: small, medium, and large. Most were glazed a glossy dark brown, but they also occurred in green, and rarely, in white or tan (pl. 5). The 200 jars and 157 lids tended to cluster in the same proveniences (table 4.5). All had straight vertical sidewalls with a short, recessed, unglazed neck to receive the matching lids. Bases were unglazed. The glazed lids, with their short, straight sides, fit over the rim of the jar.

Small. These jars, twenty-five of which were brown and one tan, measured 3.5 to 3.8 cm in diameter at the base and stood 2.6 to 2.9 cm high.

FIGURE 4.5
Thin-walled jar and lid. Some very thin-walled vessels had a distinctively gray body, unglazed, with matching lids.
Drawing by Helle Girey

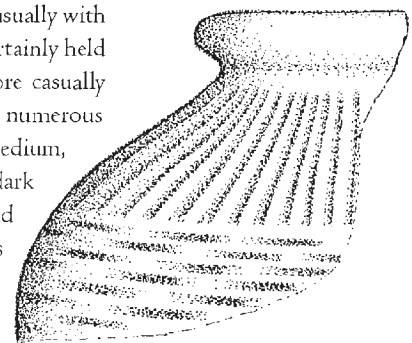


FIGURE 4.6
Incised jar. A globular jar with a wide mouth and rolled rim was unique in its impressed decoration.
Drawing by Helle Girey

Medium. This group of III brown, thirty-four green, and two white jars was 5.4 to 5.9 cm in diameter at the base and 4.0 to 4.5 cm tall.

Large. Twenty-seven brown jars had an average base diameter of 8.2 cm and height of 7.0 cm. This group represents a higher technological quality than the hemispherical jars described below and presumably contained a product of higher value. These individually thrown jars were worth marking on the base. Each jar was dipped upright into the glaze, and then the base was wiped off. One item shows very clearly where excess glaze was poured out from the interior of the jar (Kibler 1991).

Jars: Small Hemispherical

This is another distinctive type, with all examples being of similar shape and traits, and fairly uniform in size. They have very thin walls, a thin glaze wash, and a short, recessed neck for receiving a lid (fig. 4.11, extreme right). The lids were unglazed, with a very short side to fit over the neck of the jar. There were 112 jars and 110 lids. They co-occurred not only with one another but in the same proveniences as the straight-walled group. They ranged from 6.0 to 7.0 cm at the rim and 3.0 to 3.9 cm in height.

Professor Kibler observed that these jars were “thrown off the hump,” as a potter would say. A large lump of clay was centered on the wheel; the vessel was shaped from a small portion of the clay and then cut off at the base with a string or wire. Each succeeding vessel was drawn off the same lump until the clay was depleted. This is a time-efficient manufacturing method because it negates the need to center small individual lumps of clay on the wheel to make each vessel. From the slow circular cut marks visible on the jar bases, it can be deduced that the wheel was turning slowly while the jar was being detached. After the initial firing, the vessels were held by the base and dipped into the glaze. The glaze was swirled inside to cover the surface and the excess poured out. One of the jars shows two fingerprints on opposite sides where it was held while being dipped (Kibler 1991).

Euroamerican Ceramics

Both tableware and utilitarian forms of Euro-American ceramics were present. Appendix B, listing makers’ marks, cites ninety-eight of European (mostly British, but a few German and French) and seventy-four of American attribution. The numbers do not imply that all were used on Chinese

tables; for example, thirteen marks were recorded from jars or lids containing cosmetics, foods, or health care products; nine were stoneware ale bottles; and others were crocks, jugs, or ink bottles.

Marked tablewares included 97 plates, 9 small plates, 42 bowls, 14 saucers, 4 cups, 3 mugs, 4 butter pats, 2 chamber pots, and an oyster bowl. Among the discards lacking marks or other diagnostic attributes were fragments potentially representing an additional 170 plates, 100 bowls, 37 serving vessels, 109 cups, and 70 saucers. Any of these could, of course, have been used by the Chinese. On the other hand, there are alternative and more probable interpretations for at least some of the items. The earliest British products, mostly transfer prints (fig. 4.7), could have been used by any resident prior to the development of Chinatown.

The plain whiteware ceramics, which constituted the greatest proportion of the Euroamerican tablewares, typified in body, form, and dates the “industrial” or commercial products that could have been used by the Sisters of Charity in their school and orphanage. One decorated porcelain cup was clearly identified as Santa Fe Dining Car Service, and others may also have been railroad discards. One plate was the property of the Hollenbeck Hotel. Forms like the four marked butter pats and the creamer are not typical of the Chinese table or diet. Stoneware crocks and their lids and yellow ware mixing bowls were present but rarely marked. Chamber sets were represented by fragments of possibly five chamber pots, seven lids, one combinette, six basins, three pitchers, and one shaving mug. Eight were recovered from feature 29, three from feature 17A, and all others from the general area analyzed as AU-1, which encompassed the Sisters of Charity buildings and early Euroamerican dwellings.

One Euroamerican ceramic clearly came into the possession of Chinese. An earthenware plate (cat. 3539) has a Chinese character pecked into the center which was translated as “Tung,” possibly a phonetic rendering of a man’s name (pl. 6). The plate, of the kind variously called Gaudy Staffordshire or Peasant Enamel Ware, broadly hand painted in reds and purples, represents a class of sponged, spatter, or stamped edgewares only very rarely marked because they were often the product of a home or cottage industry in Great Britain. Where makers can be identified, they tend to date around the middle of the nineteenth century and to be among the cheapest decorated table wares available (Greenwood, Foster,

and Duffield 1989:54–56). This example is 17.2 cm (6 1/2 inches) in diameter, and has been burned.

The impressed marks and backstamps are listed in appendix B. The following notes provide new information on four of the less common marks.

Fragment of Plate Base

A plate base fragment (cat. 3121, feature 29) with S.F. & J., Venice Pattern, Rd. No. 142383, signifies a date of 1890 (Godden 1964:528). This date would be within the span for Smith, Ford and Jones, bracketed by the establishment date of 1889 and the formation of Smith and Ford in 1895.

Fragment of White Earthenware

A bowl base fragment (cat. 6469, feature 51) has the royal arms and T.S.C.P.CO. under the crest. This backstamp has not been found. Thomas Shirley & Co. used the mark of TS & Coy or TS&C, however, from about 1840 to 1859 (Godden 1964:574). The company subsequently became Clyde Pottery Co. and used the monogram C.P.CO. until 1903 (Godden 1964:154). It is possible that, during the transition, the company was called Thomas Shirley Clyde Pottery Company, with the initials of T.S.C.P.CO.

Fragment of Stoneware Base

This fragment (cat. 7077, feature 51) has twelve slightly outward flaring panels, brown glaze inside and out, with “Peoria Pottery” stamped on the base. Toulouse (1969:339) illustrates and describes a wax sealer fruit jar with sixteen panels, brown glaze, and slightly flaring sides made by Peoria Pottery in 1855 and later. Barber (1904:161) dated Peoria Pottery from 1873 to 1899. The impressed name of the pottery was used from 1867 to 1887. Lehner (1988:341) dates Peoria Pottery from 1873 to 1904 and refers to a wax sealer jar that was circulated around 1885 and later, made of slip cast pottery with sixteen panels, brown glaze, wider at the shoulder, and die stamped “Peoria Pottery” (1988:341). This fragment, which probably represents an early type of ceramic canning jar made in the last third of the nineteenth century, could have predated the Chinese occupation.

White Earthenware Plate

Plate (cat. 7260, disturbed horizon) has brown backstamp “S.F.& J. England, Established 1889.” S & F was used by Smith and Ford, Lincoln Pottery, Burslem, Staffordshire Potteries, from 1895 to 1898. This firm was formerly Smith, Ford and Jones



FIGURE 4.7
Deep saucer. Euroamerican ceramics were also found, mostly British like this transfer print saucer. Photo by R.S. Greenwood

(Godden 1964:581). Godden (1972:29) cites Jewitt in describing Smith, Ford and Jones as a firm working in Burslem in 1890. The piece most likely dates between 1889 and 1895.

Summary

In comparing assemblages of Chinese ceramics from different sites, authors have used many approaches to establish relative dates, preferences, and values. Differences in reporting standards, that is, sherd counts, weights, or minimum numbers, have been recognized as factors that inhibit comparisons. Not as widely acknowledged are distinctions in the type of site (a male work camp or a family settlement in a city) or the aspects of an assemblage being compared. For example, in Los Angeles Chinatown, an established community, if only rice bowls are considered, the proportions of Bamboo and Celadon types are almost equal at 40 percent. Four Seasons decoration accounts for only 9 percent. Bamboo occurred only in the form of rice bowls, however, whereas Four Seasons was present on the broadest variety of all ceramic forms. When the total identified assemblage is considered, Four Seasons accounts for 44.4 percent of all porcelain, and Bamboo amounts to only 13.3 percent. Distribution among the patterns is meaningless unless vessel form is considered:

	<i>Rice bowls</i>		<i>All vessel forms</i>	
	Qty	%	Qty	%
Four Seasons	70	8.9	1037	44.4
Bamboo	310	39.4	310	13.3
Celadon	315	40.0	503	21.5
Double Happiness	4	0.5	4	0.2
Japanese	34	4.3	81	3.4
All other	54	6.9	404	17.3

Not only is this differentiation by form important but the character of the site is also relevant. The literature has abundant references to mining or other work camps where the porcelain assemblage is almost entirely rice bowls and lacks other forms of tableware. For those, analysis of rice bowls by pattern may adequately reflect the inventory, but not in the urban context where a family residence, or even a boardinghouse, may have utilized the full array of traditional sizes and forms of service.

The closest comparison can perhaps be drawn to Ventura's Chinatown, where the recovery was smaller but the context and mode of analysis roughly comparable. In the earlier community occupied from the 1860s to 1905, Four Seasons was the most common of all types, followed closely by Celadon and Bamboo, approximately equal, with a small quantity of Double Happiness and unique items. In the relocated Ventura Chinatown, from 1905 into the 1920s, Four Seasons still dominated, followed by Celadon; Bamboo had declined, and the one-of-a-kind items increased (Greenwood and Foster 1992:43). In Ventura, where chronology can be more precise than at most sites, the change through time

was marked by the disappearance of Double Happiness, a decrease in the proportion of Bamboo, and an increase in the presence of unique or one-of-a-kind items that typically reflect higher cost. To the degree that Bamboo represents a cheaper variety and the unique items a greater expenditure, consumer preferences were perhaps influenced by a broader selection of imports being made available, greater affluence on the part of the consumers, and higher anticipations of permanence which would encourage the accumulation of household goods. The percentage of the more elaborate items in Los Angeles is approximately the same as in the later period in Ventura (22.4%), and suggests that some of the residents could afford more elaborate table ceramics.

Most of the rice bowls were recognizable as one of the three most abundant patterns. Various other serving pieces would have matched the Four Seasons or Celadon types and might have been purchased at the same time or as a "set." The greatest variability was among the tea bowls; while they occurred in Celadon, the most abundant group, or Four Seasons, the most elaborate and one-of-a-kind examples were of this form. Certain of the unique patterns would have matched the cup holders, but no other forms. The diversity, costliness, and quantity, second among table wares only to rice bowls, emphasizes the importance of tea service as a sign of hospitality, as well as for meal time consumption. The multiplicity of types and designs could result from upgrading or replacements of tea bowls broken in frequent use.

The Individual

with a contribution by Margie Akin

THE ITEMS INDIVIDUALS wore or used in their clothing, personal adornment, daily pursuits, and leisure are described here. Among these, recreation is reflected in the gambling activities of adults and the toys of children. The smoking category includes items related to both tobacco and opium; smoking paraphernalia was almost exclusively Chinese, with only a few tobacco pipes present. While buttons and haberdashery were predominantly of Euroamerican fashion and origin, half of the hair combs were Chinese in style and manufacture. Coins were almost exclusively Asian. Toys were Euroamerican, the dolls and marbles typical of the period, perhaps reflecting the Chinese children's exposure and greater adaptation to the ways of their schoolmates.

Clothing & Jewelry

The clothing includes Western dress for men, women, and children. Historical accounts (for example, See 1995, Larson 1990) relate that some professional men wore business suits when interacting with Euroamerican clients or customers. Herbalists within Chinatown were more apt to affect traditional dress, such as the individual who wore white socks with his "queer shoes," pale green trousers tied down around his ankles, and a sleeveless wadded jacket of violet brocade over a "splendid yellow tunic" (Percival 1899:50). It may be assumed that Chi-

nese children attending public schools eventually came to dress like their peers. The change was probably gradual, since one observation as late as 1899 describes a boy wearing a "faded green silk frock and Chinese shoes" with corduroy pants and an American-made sailor hat (Percival 1899:50).

Both See and Larson described how their ancestors changed into traditional clothing as soon as they arrived home; the women in their families always preferred Chinese dress. Even outsiders were able to differentiate the women who were "fine ladies" from the "pitiable slave-women." The former did not whiten their faces with rice powder nor redden their lips. Their dress would consist of a poplin frock and trousers in an inconspicuous color, with ornamentation limited to a jade bracelet and earrings. Instead of a hat, the lady would have an elaborate hairdressing, and she shielded her face from public view with a fan of pheasant feathers (Percival 1899:5).

Street scenes of the period illustrate persons of all ages wearing the traditional soft jackets, pants, and cloth shoes, while formal portraits show families dressed in the elaborate ceremonial clothing of the homeland. While the buttons, leather shoe parts, clasps, and miscellaneous haberdashery evidenced Western dress, this attire did not replace traditional clothing. The traditional clothing was fastened with braid frogs, not buttons or zippers, and little of these would have survived discard, burning, and burial.

TABLE 5.1
Buttons by material

Type	Quantity
Prosser	
4-hole, depressed center	662
2-hole, depressed center	10
Shell	
4-hole	108
2-hole	61
Shank back	11
Bone	16
Metal	32
Rubber	3
Composition	13
Glass (jet)	2
Ceramic	7
Shoe buttons	14
Total	939

TABLE 5.2
Uses of buttons

Size (mm)	Lines	Typical use
8	10-12	Baby clothes; lingerie
10	14-16	Shirtwaists (12-16)
14	22	Shirts (14-20 lines, 4-hole)
16	24	Vests (horn, metal, others)
20	30	Coats
24+	40-50	Overcoats

Buttons

About 70 percent of the 939 buttons recovered (table 5.1) were made by the Prosser process patented in the United States in 1841 (Kirk 1975:336-337). Various called porcelain, china, and even glass or "agate" in nineteenth century catalogs, these buttons were made by compressing a fine clay mixture in steel dies. The dies were fired at high temperature, glazed, and refired to produce the smooth appearance on the visible surface and the diagnostic "orange peel" texture on the under side (Sprague 1985:97). The buttons typically passed out of use after 1900.

The uses advertised for the various sizes of buttons (Brittain 1898:104; Butler 1907:16) are shown in table 5.2. Most of the Prosser buttons are plain white, with the largest button being 18 mm in diameter (table 5.3), larger than the typical shirt buttons of the period. Given this uniformity and quantity, especially in relation to the balance of the distribution by material types, the relatively low numbers of all other types and sizes, and the absence of any known laundries on this block, it is very tempt-

ing to conclude that these items were used in gambling. They could have served as the counters in *fantán* (Lydon 1985:205) or as the glass counters in go or various other games (Culin 1891:15).

Some of the metal buttons, which were not abundant, merit mention. From the lower level of unit 2, a two-piece brass button with a loop shank back (cat. 4660) is stamped "S. E. Co./Jas. N. Petris & Co., Chicago, Ill." A brass shank back military button, made by Horstmann of New York and Philadelphia, has the 1902 eagle design (Brinckerhoff 1972:7) (cat. 6875, feature 44). Another (cat. 4557, unit 1, AU-1) is a one-piece, sew-through pants button, 18 mm in diameter, stamped "Superior Make." Another of the same type (cat. 1242, AU-1) is marked "Victoria '97," and a third (cat. 7059, feature 51) reads "Best Ring Edge." A pants rivet (cat. 1793, AU-1) was made by "...by Bros./Los Angeles." Another local product is a brass two-hole button, 18 mm in diameter, made by "Polaski Brothers, Los Angeles" (cat. 6372, feature 56). A successor to the Polaski and Goodwin merchant tailor firm established in 1868, the firm reorganized as Polaski Brothers at 118 N. Main Street in 1883 (Los Angeles City and County Directories 1884-1885, 1886-1887).

A two-hole, depressed-center rubber button 22 cm in diameter was made by "N. R. Co. N. Y." under Goodyear's 1851 patent (cat. 5989, feature 39). Small faceted black glass buttons of the type called "jet" were popular on ladies' garments of the Victorian era.

Men's Haberdashery

At least three of the fragmentary chains were watch or vest chains. One with twisted pillar links (cat. 5153, feature 30) appears identical to the plated vest chain offered in the Montgomery Ward catalog of 1895 (p. 158).

There were 8 cufflinks: 1 gold plated with a blue stone, 1 plain round gold plated, 5 with shell inlays on a metal backing, and a fragmentary curved barbel. The 34 collar buttons included 2 metal types, 2 of shell, 5 of bone, and 25 made by the Prosser process. By provenience, 6 were recovered from feature 29, 3 each from features 51 and 54, 2 from feature 2, and 12 from the general location of AU-1. The bone and "pearl" examples are illustrated in the Sears Roebuck catalog of 1895 (p. 173).

The fifteen suspender clasps found were also typical of the turn of the century. Two were stamped "Wilson Bros. Make," and two had patent dates of

TABLE 5.3
Buttons by feature

Diameter (in mm)	Prosser (white) 4-hole depressed						Prosser (white) 2-hole depressed				Shell 4 hole						Shell 2 hole										
	20	18	16	14	12	10	14	12	10	20	18	16	14	12	10	20	18	16	14	12	10						
AU-1		36	14	21	22	6	1		1							3	5	4	9	8	1	1	1	4	1	9	
Feature 1		2		2																							
Feature 2		2	3	2	1	3			1				2	4	3												
Feature 3		3		1		1			1																		
AU-2		1												1	1												
Feature 11		18			1+									2													
Feature 12				1					2																		
Feature 16																											
Feature 18	1				1								1	1	1												
Features 19, 20, 21, 23		17	3	2	1	1								2	3				1								
Features 22, units 1 & 2		2	3	2	2	1							1		1												1
Feature 27			2																								
Feature 29	9	212	55	9	3	7	1		1			1	1	2	5				1		1	1					
Feature 30		2	1		2														1								
Feature 32		3	1	4	3	8							1	4	2												
Feature 33		4	13	2		2																					
AU-3		1	1	1	3								3														
Feature 38			1												2												1
Feature 39	1	4	3	1	1							4	1	3	3				1	2							1
Feature 40		1	1		1	1																			2		
Feature 41					2																						
Feature 42		1	3	1		3	2							1													1
Feature 43	1	2	1	2																							
Features 4, 45, 46, 50	1	5	1	1						1			1	4	2										2		9
Feature 47			1	1						1									1	2							
Feature 48		1																									
Feature 49		5	2										1	2													
Features 51, 55		18	8	29	9	3								2	3				2	4	1	1					
Feature 52			2	1													1										
Feature 53																											
Feature 54				3	2	1						1			2									1			
Feature 56					3							1															
Feature 57			5	3	1	1																					
Feature 58																											
Feature 59																											
Total	13	340	124	89	58	38	4	4	2	2	5	11	12	40	36	2	3	10	10	8	22						

190x and 1906. The "190x" specimen (cat. 6920, feature 44) was solid brass with elaborate chasing. Ten fasteners could represent either men's garters or female hosiery supports. The hinge of one (cat. 5880, feature 39) is stamped "World's Beauty." Eight other examples were almost certainly from women's garments; three of these were stamped "Velvet Grip," with patent dates of 1892, 1895, and 1897 (feature 2 and AU-1). These items are illustrated in the John S. Brittain catalog of 1898 (p. 12).

Bracelets

Forty-six fragments of rigid bracelets called "Pe-

king glass," still available in Chinatown, were recovered. It is not possible to estimate the minimum number of whole ones represented. They are mottled green and white, deep rose and white, or solid dark green, probably to resemble jade. At least one was mottled green and rose. Diameters average 8.8 cm. One mottled tan fragment (cat. 1759, feature 12) is almost certainly real jade.

Rings

Six rings were found, five for women or girls and one man's wedding ring: a very corroded woman's ring (cat. 1433, feature 2), possibly plated

TABLE 5.4
Bead-manufacturing technology

Type/location	Length (mm)	Min. dia.(mm)	Color/remarks
<i>Wound</i>			
Feature 23	10.9	11.2	Transparent greenish-yellow
Feature 39	6.7	5.9	Transparent dark green; possibly Chinese
Feature 50	10.2	11.2	Opaque light blue
AU-1	10.1	11.5	Transparent green
AU-1	5.7	7.7	Translucent blue
AU-1	6.2	5.4	Transparent blue
<i>Blown</i>			
Feature 39	6.8	6.9	Clear, black interior
<i>Drawn</i>			
Feature 30	1.4	1.7	Various colors. Minimum of 15 beads embedded in metallic lump
Feature 49	1.2	1.9	Opaque light blue
<i>Mold pressed</i>			
N 19/E 3	10.6	15.8	Clear; Bohemian cut, 18 facets
Auger backfill	5.9	5.4	Clear; Bohemian, 18 ground facets
Auger backfill	11.2	10.8	Clear; Bohemian, 45 ground facets
<i>Prosser molded</i>			
Feature 12	4.3	4.7	Opaque, light blue, banded, barrel
Feature 29	5.8	6.3	Transparent, white, no band
Feature 40	7.7	9.0	Opaque, pink, banded barrel, 5 examples
Feature 40	8.0	8.9	Opaque, pink, banded barrel, 24 examples
Feature 40	7.7	9.8	Opaque, pink, banded barrel, 13 examples
Feature 42	5.8	6.0	Opaque, blue, banded barrel
Feature 50	6.1	8.2	Opaque, white, tile
Feature 50	3.1	4.3	Opaque, green, tile, 2 examples
Feature 51	5.7	8.0	Opaque, yellow, tile
Auger	5.4	6.0	Opaque, green, tile
Auger	5.5	5.9	Transparent, gray, tile
Tracks, w	9.1	9.7	Opaque, light blue, banded barrel
No location	4.3	6.1	Opaque, light purple, tile
No location	3.2	4.4	Opaque, green, tile
<i>Miscellaneous, other</i>			
Feature 29	12.8	19.5	Wood, burned
Feature 21	5.5	9.5	Black, burned bone?
Auger	20.5	23.0	Pink; quartzite
Trench N-23	3.7	10.0	Opaque, red
Surface	7.8	7.5	Opaque, blue, near square

originally with a precious metal of which no trace remains. All the gems are missing except for one small round stone that appears to be turquoise set in a crude bezel. Diameter is 1.8 cm; a woman's gold ring (cat. 4916, au-1) set with three small opals and three pink stones; a man's wedding band (cat. 5846, feature 39), 24.1 mm in diameter and 10.5 mm wide. Although embossed "14K," it appears to be gold-plated over a base cuprous alloy. The interior is engraved "M to J"; a ring (cat. 6781, feature 54), gold in color and only 1.6 cm in diameter. It is made of two wires, one plain and

the other twisted, joined on top in the shape of the endless knot; a ring (cat. 6782, feature 54), gold in color and stamped "14" (karat?). Two of the original five stones are missing; the remaining three could be faceted garnet or red glass set in prongs. Diameter is 1.8 cm.; and a ring (cat. 7133, feature 40) that appears to be a jade circlet.

Beads

The eighty-four loose beads represent a broad array of types, sizes, colors, and materials, signifying the loss or breakage of many different pieces of jewelry. They are summarized by manufacturing technology in table 5.4.

There is archaeological and contemporary evidence of an industry in glass beads in both north and south China (Sprague 1985), and it has been suggested that blue glass beads distributed to mission neophytes may have reached California from China as early as the Manila galleons (Williams 1991:41). In the opinion of one analyst, however, only a single example from this collection is possibly Chinese made (Ross 1991): the translucent dark green wound bead (cat. 5942) from feature 39. It is 6.7 cm long and 5.9 cm in least diameter. The mold pressed, faceted beads are Bohemian (cats. 324, 325, and 5534).

The largest group of beads is composed of Prosser molded types, banded barrel, and tile varieties. Like buttons made by the same process, the beads are opaque and grainy on the surface; one end is smooth and rounded, with a seam often visible, while the other is flatter, often showing the diagnostic "orange peel" surface (Sprague 1983:167). The two common forms are the so-called tile bead, a truncated conical shape, and the banded barrel, which is spherical with a raised band around the middle (Ross 1989). Those that are as spherical without the equatorial band may have been highly fire-polished to the degree that the band has melted back into the body of the bead (Lester Ross 1991).

The wooden bead (cat. 3935) is flattened, with a diameter of 1.95 cm and thickness of 1.3 cm; the perforation is 0.62 cm. In material, size, and shape, this item appears to be an element from an abacus. An example purchased in China with overall dimensions of 27 x 13.3 cm has beads 1.73 x 0.92 cm with perforations of 0.6 cm; the proportion of diameter to thickness is approximately the same. Another abacus illustrated by Lister and Lister (1989a:89) measured 26.5 x 16.5 cm, with beads estimated to have been about 1.9 to 2.1 cm.

Because all the bead types were made over too long a period to contribute to dating the assemblage, it is possible that the colors may be useful for comparison to other collections, although they may indicate only availability and not preference. The most numerous are the 42 opaque pink-banded barrels that probably represent one necklace of graduated size beads. Other colors among the various types, in order of frequency, are blue (8), green (6), clear (4), white (2), and single examples of yellow, light purple, gray, greenish-yellow, and red.

Ornaments, Loose Stones, & Miscellaneous

Several isolated loose stones, probably lost from jewelry settings, were found: faceted blue glass (cat. 3884, feature 17); flat, round pink glass (cat. 1676, feature 4), and faceted, translucent amber (cat. 7062, feature 51). Four pieces of shell had been modified as ornaments, inlays, or even as parts of buttons. Two were hand cut into petal, or floral, shape, with a central perforation. Another item (cat. 2447, AU-1) is 22 mm in diameter, and another (cat. 2448) from the same location is otherwise identical but 14 mm in diameter. A plain shell disk (cat. 2449, AU-1) has a central perforation 9 mm in diameter. Another item (cat. 6245, feature 41) is rectangular, 14 x 5 mm, with a small perforation at each short end. Other fragments related to personal adornment are summarized in table 5.5.

The many short lengths of broken metal chains could be jewelry, watch chains, links attached to toothbrushes, or links serving another utilitarian purpose. The chains still attached to toothbrushes were made of two welded links attached in pairs to two other welded links. The same style links were attached to a brass tag embossed with Chinese characters (cat. 4970, feature 17) and noted on isolated segments (cat. 2115, 2118, 5076, and 2816). In contrast, another (cat. 849) is composed of single links. It has been suggested, but cannot be proven, that the double-link pattern may be associated with Chinese objects.

Combs

Thirteen fragments representing a minimum of six Chinese combs were found. Identical in form to those now being made with wood spines and plastic end caps, the archaeological examples were made with a wood spine, bone ends, and bamboo teeth (pl. 7). Two central spines are laid over a perpendicular series of fine bamboo teeth, with the lunate end caps

TABLE 5.5
Miscellaneous ornaments

<i>Catalog no.</i>	<i>Location</i>	<i>Description</i>
108	AU-1	Screw-on type gold-plated copper earring; setting for missing stone is 7 mm square
323	AU-1	Circle brooch with 16 mounted yellow stones, copper base, 34 mm diameter
809	Feature 22	Gold filigree acorn charm with organic "nut"; inset is not a seed, perhaps paper (Gumerman 1991)
1054	AU-1	Pea-pod-shaped bone charm, 40 x 11.3 mm, hole for suspension, highly polished
1308	Feature 2	Medallion with loop for hanging, brass, 31 mm diameter Roman scenes stamped on both sides, with Eiffel Tower in foreground. "Exposition Universelle/Republique Francaise/ ...schlos & Co."
1914	Feature 3	Cobalt blue glass-molded cross, 32 x 23 mm; probably glued to a backing since no hole for suspension
5943	Feature 39	Heart-shaped stone 10 x 9.9 x 3.3 mm, insert at top for attachment, green/white banded 5056 AU-1 Stone heart, hand carved, 23.3 x 22.7 mm. No visible means of suspension; flat back as if applied to something
6080	Feature 42	Carved green jade fragment (bowl of flowers ?) 14.4 mm wide
6081	Feature 42	Green jade perforated disk, 20 mm diameters, with open 8-mm center. Flat, 2.4 mm thick
6140	Feature 41	Jade charm of two peaches, gold wire loop at top, 18 x 13.5 x 7.2 mm

holding the teeth in place and filling the space between the spines. The archaeological examples vary between 10.1 and 12.6 cm in length, with the spines from 1.1 to 1.5 cm wide. The best preserved (cat. 3990, feature 17) has a punctate design in a circular pattern on the spine. Four were recovered within AU-1, two each in features 1 and 32 and single examples in features 19, 23, 40, and 41.

There were also six combs of Euroamerican manufacture. One, made of tortoise shell and curved with long teeth, was meant to be worn in the hair (cat. 2100, AU-1). The others were intended for grooming: 2 tortoise shell, 2 bakelite or other early composition, and 1 bone. One tortoise shell example (cat. 4300, feature 32) has diagonal grooving along the length and width of the spines, but the others are utilitarian, unmarked, and undecorated. One large tortoise shell hairpin (cat. 406, AU-1, privy) was 9.0 cm long.

Toys

According to See, "Most parents in Chinatown wouldn't spend money on luxuries for themselves, but they always tried to give something to their children" (See 1995:100). See, whose family was more prosperous than most, also

said that most of the girls had porcelain dolls and jacks, while their brothers had marbles, cast iron trains, and fire engines pulled by iron horses. Although they may have become familiar with such toys (pl. 8) while attending public school, the children returned to Chinatown directly after classes and played together. No playthings of Chinese manufacture were recognized, other than imported toy doll dishes, but these are common on Euroamerican sites as well.

Marbles

The collection of seventy-six marbles includes seven glass and sixty-nine ceramic, including natural clay, porcelain, glazed stoneware, and painted "chinas." They occurred in sixteen of the features, as well as in superficial and disturbed contexts. They were most abundant in feature 29 (17 examples), feature 43 (9 examples), and in the general scatter of trash in feature 17A (5 examples).

Four of the glass marbles are typical examples of early machine manufacture, ranging in size from 8.8 to 11.3 mm in diameter. One is opaque white with a self-swirl, one has an opaque green swirl, and the others are clear green and clear purple with white swirls. The other three are notably larger: one damaged 16.7-mm fragment appears clear but probably had a colored center, another of the same design is 22.0 mm, and the third, apparently of the same design, would be 40.0 mm if whole. The largest marble had a red and white swirl. Four of the seven glass marbles were recovered from feature 43.

Of the ceramic specimens, thirty-three are simple baked clays, unglazed, tan, pinkish brown, to gray in color, and 7.5 to 14.3 mm in diameter. Five other small ones, ranging from 8.4 to 9.7 mm, are extremely dark in color, approaching black. All examples recovered from feature 29 were this type.

Called "Benningtons," eight stoneware marbles had a blue or brown spotted glaze. Four blue examples ranged from 8.3 to 17.6 mm in diameter, while the four brown marbles were between 8.0 and 16.6 mm. Three of the blue occurred in feature 43.

Five porcelain examples have been overpainted. The surfaces are worn and eroded, but at least two were glazed before decoration. The smaller, 9.8 mm in diameter, has perpendicular bands of striping, six red and four gray (faded green?); the larger is 12.8 mm in diameter, more faded, with traces of four red and four gray or green stripes. Of the three unglazed examples, the largest (18.9 mm) bears just a

trace of red. The second shows five equatorial stripes that appear gray (14.4 mm), and the third has a broad red equatorial band and three blue leaves at each pole (18.0 mm).

The collection does not lend itself to absolute dating because both glass and ceramic types were imported early in the nineteenth century, and American companies were manufacturing both types by the time Chinatown was settled. None of the glass marbles shows pontil scars or other evidence of hand manufacturing methods. The striped porcelains have been found in archaeological contexts dating back to the 1850s, and imported examples of porcelain and stoneware probably produced in Germany have been recovered in a Maryland site dated to circa 1700 to 1750. The unglazed clay types are the most common variety found at sites occupied during the last quarter of the nineteenth century, and they tended to disappear from sales catalogs soon after 1900. The glazed ceramics, chinas, and Benningtons had disappeared prior to World War I. Sears offered the plain clay marbles through 1928. The stoneware and porcelain groups, fired at higher temperatures, were harder and more expensive (Randall and Webb 1988). The small glass category was not remarkable or diagnostic, and there were none of the more exotic or costly types such as sulphides, micas, or onionskins.

Dolls

Including fragments as small as a shoe or hand, forty-eight items (after reconstructions) were cataloged as ceramic doll parts. Most were bisque head fragments that had been attached to cloth bodies. The largest fragments and those identified by marks at or near the nape include the following.

A torso, one arm, and one leg of a small bisque doll (cat. 592, AU-1) with the chubby body of a child was recovered. The head is missing, but the estimated body height is about 9.0 to 9.5 cm if whole. The leg has a molded and painted white sock with a green border and a blue shoe with a flat sole. The limbs were attached to the body with copper wire, similar to nos. 20 and 21 illustrated by Coleman (1968:13).

Other fragments, unmarked and less complete, represent larger heads or different details. One fragment (cat. 1238, AU-1), for example, has a very large open eye socket with long painted lashes and an open mouth, painted red, with teeth molded rather than added. One forearm and hand (cat. 593, AU-1), 3.9 cm long, is solid with no visible means of attachment; the nearly illegible mold marks appear to read

"494" over "¾." Another, 3.4 cm long (cat. 3037, feature 29), is hollow with an open, opposed thumb. A solid leg, minus foot (cat. 1782, AU-1), is glazed, horizontally ribbed, with a black painted bow above the shapely calf; the leg has a molded groove at the knee for attachment to the body. Another solid leg is bisque with a molded sock and flat-soled shoe painted pink (cat. 219); the leg has been fired onto the porcelain body. A third leg (cat. 7189) is larger, 4.3 cm from the knee to the break above the ankle; this leg also has an exaggerated calf and a groove at the knee for attachment. It is glazed, with a painted blue garter and bow, hollow for a distance of 2.6 cm below the knee and solid at the point of break. A hollow left leg (cat. 381) is 2.5 cm to the break at the knee; midway on the calf, there is a red-painted garter or sock top where the glazing begins. A hollow right leg (cat. 3674) is all glazed, with bare foot and no color, 3.5 cm to the bent knee; it was fired to a white porcelain body.

A bisque head and shoulder (cat. 807, AU-1) is embossed "COD 93-2/0 DEP" and was made by the firm of Cuno and Otto Dressel, Sonneberg, Germany, in business from 1873 to 1925+ (Coleman 1968:200). A bisque head and shoulder (cat. 808, AU-1) is embossed "Germany/P. Sch. 1899-9/C" and was most likely from Peter Scherf, Sonneberg, Germany, circa 1879 to 1925+ or Paul Schmidt, but this firm was only founded in 1925, and the mark is slightly different (Coleman 1968:545, 548; Bach 1985:110). Another bisque head and shoulders (cat. 1238A, AU-1) has an open crown and would have had a wig; it has no marks. Another bisque head – solid, no wig – is of a baby doll (cat. 1238B, AU-1); it has a partial mark reading "dep 8 ¾." The letters could signify "depose" if made in France, or "deponiert" if made in Germany, and the numbers refer to the size or mold. It could have been made by Simon and Halbig, a Thuringian firm producing heads for Dressel (Coleman 1968:577).

A nearly complete head (cat. 1303, AU-1) with glass eyes and painted lashes is marked "Made in Germany." A similar mark was used by J. D. Kestner, 1816–1858; Kley and Hahn, circa 1902; Gebrüder Knoch, 1887+; and others (Bach 1985:70, 72, 74). Width from ear to ear is 4.1 cm. The mouth is open, and lips are painted red; there is no evidence of teeth. The top of the head is open at an oblique angle, with holes above the ears for attachment of a wig. The neck is finished, without shoulders.

Three bisque doll heads (cat. 3037, feature 29; cat.

3218, feature 29; and cat. 4075, feature 21) are marked I 11/0 Germany, I 14/0, and I 5/0 Germany. Various German mold or size marks are indicated. Each head is finished at the neck, without shoulders, possibly so it can swivel. On each, the crown of the head is open at an oblique angle, and there is a perforation above each ear for attachment of a wig. Mouths are open, and separate upper teeth applied on the interior are still present on two (cats. 3037 and 3218). Eyes are hollow as if they had contained glass inserts; eyebrows are painted but lashes are molded. Measurement from ear to ear is 3.8 cm. Comparable fragments with shoulders are marked 5/0 (cat. 4279, feature 32) and 18/0 (cat. 4539, AU-1).

Bisque fragments of medium-size head (cat. 5506, AU-1) are marked "8095 B/85/01/2" and could be from Gebrüder Heuback, Lichte, Germany, which used mold mark numbers 5,600 to 12,000. The firm adopted its trademark in 1882 and was making doll heads by 1910 (Bach 1985:60).

Three bisque miniatures (cat. 2741, AU-1; cat. 4278, feature 32; and cat. 5991, feature 39), only 2.5 cm (1 inch) long, are those sometimes called "frozen Charlotte" (Desmonde 1974:66).

A small bisque figure (cat. 3216, feature 29) is of a boy carrying a racket and wearing gray knickers with suspenders and a blue hat; he has brown hair and painted facial features. The figure is 6.5 cm tall, but the feet are missing.

Dishes

There were twenty-eight toy dishes: ten cups, seven saucers with wells, two teapot lids, two teapots, two bowls, one plate, three "dishes," and two pitcher or vase-like shapes. Many different sets were represented. Fourteen were undecorated white porcelain; other porcelain specimens included three with molded designs and another that was molded and gilt. One hexagonal teapot lid, 2.7 cm in diameter, with a small knob had a painted orange border and green leaves over the glaze (cat. 1219, AU1). Seven of the total were recovered in feature 29. Features 17 and 33 had two examples each. The miniature teapots had three perforations between the body and spout, replicating the number and arrangement on full-size vessels.

Included in the group, but with less certainty as to function, are six footed, bowl-shaped, clear-glass items. They are 3.7 cm in diameter and stand 2.4 cm high. They are not much smaller than some of the porcelain wine or spirits cups and could have been used by adults as drinking vessels.

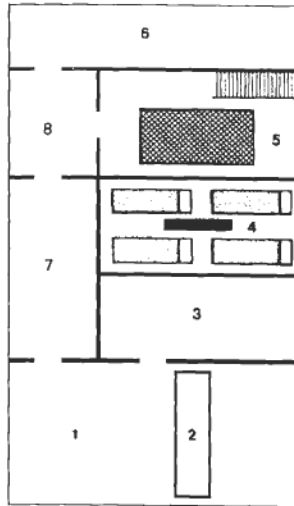


FIGURE 5.1
Game rooms where fan-tan and lotteries were played were often associated with opium and prostitution: 1, store; 2, counter; 3, small room with box window from which cigars and opium are dealt out; 4, tiers of bunks and opium table; 5, fan-tan room and stairway; 6, kitchen and eating room; 7–8, corridors. Adapted from Stockton Weekly Mail, 6 February 1892

Color	Qty
White	816
Clear	62
Black	152
Blue	178
Green	157
Red	12
Total	1,377

Other Playthings

Playthings other than the marbles, dolls, and dishes included a ferrous toy gun (cat. 361, AU-1), an enamel-over-metal clicker in an insect shape (cat. 1069, AU-1), two harmonicas (cat. 4943, feature 17; cat. 7103, feature 40, made by Reeds), a ferrous toy shovel (cat. 5085, feature 24), a jack (cat. 6101, feature 42), a wheel from a toy vehicle (cat. 7183, feature 39), possibly made of lead.

Recreation & Gambling

In a limited spatial environment, unwelcome elsewhere, and unable to afford other leisure pastimes, the Chinese who worked hard for long hours looked within their own community for companionship and recreation. Often, excitement and release were sought in gambling halls (Minnick 1988:224–228) where games familiar from the homeland were played. For example, in fan-tan, a simple elimination game, the bettor would attempt to guess how many objects would remain from a pile after groups of four were removed. The objects might be beans, coins, or “a handful of white buttons” (Lydon 1985:205), or it might be played with a heap of cash coins (Dobie and Suydam 1936:169). The game rooms were often part of shops or restaurant kitchens and dining rooms and were associated with opium sale and use and prostitution. Because fan-tan and lotteries were illegal in California in the 1890s, many operators of game rooms had to have lookouts and security systems (fig. 5.1), as well as having to make payoffs to government representatives.

The lottery required the player to pick from the first eighty characters in a classical poem, and the proprietors randomly called twenty characters twice a day. Only after English became commonly spoken did the lottery forms use numbers rather than characters. No physical evidence for the lottery was recovered, unless the abundance of ink bottles found was the result of this use of pen or brush. Both white buttons and ink bottles have been associated in other places (Ventura, for example) with laundries, but no laundries were known to be present on this block.

Gaming Pieces

The markers used in a variety of games are typically glass disks, averaging about 1.1 cm in diameter and approximately 0.5 cm in thickness. They tend to be slightly convex on one side and flat on the

reverse; the latter characteristic may be a result of the manufacturing process or a deliberate intent to make them rest more securely on the playing surface. Many reports have described them as either white or black, but upon holding them against a light, those that appear dark may actually be blue, green, red, or black. The light-colored ones are occasionally clear. Of the 1377 examples recovered, 878 (64%) are white or clear as opposed to 499 (36%) which are dark (table 5.6).

The counters were pervasive throughout the site, with the preponderance recovered from features 1 through 32 and AU-2 and AU-3. Proveniences containing forty or more examples were feature 1 (41), feature 29 (207), AU-2 (146), feature 30 (99), feature 22 (71), feature 32 (43), AU-3 (193) and features 51 and 55 (46). These markers could have been used in the game of go, fan-tan, the Chinese pebble game (*Wei ch'i*), dominoes, and others that involved a tally. In a modern set of go, each player is supplied with 180 “stones,” so-called because the black counters were originally made of slate. In fan-tan, the “white pearls” were one-fifth the value of the “black pearls” (Culin 1896:154). At most other sites that have yielded more than a few counters, the white pieces outnumber the black or dark ones. It is possible that as many as five small, flat pebbles (three of them slate); one lead disk; and two ceramic fragments were also used as gambling tokens.

The 340 white clothing buttons measuring 18 mm in diameter, larger than shirt buttons in size and disproportionate in number within the total button group, were probably used in gambling much the same as the white glass tokens of roughly the same size. The use of buttons as markers was suggested by Culin (1891:15). When these buttons are added to the white counters, the white items total 1,218 (71%) as compared to the 499 (29%) black or dark tokens, reinforcing the distinction in relative value. The blue, green, and red counters might have been used as “black,” or they could represent a higher value.

Dice

“Everyone played dice,” according to Chen (1980:61). The ten Chinese dice were readily recognized by the oversized single spot on one face. Made of bone, they are present in two size ranges. The larger group (six examples) measured between 10.8 x 10.9 x 11.1 mm and 15.0 x 14.6 x (broken) mm. Four examples measured from 6.8 x 7.7 x 7.9 mm to 7.2 x 7.8 x 7.8 mm. The dimensions are not uniform,

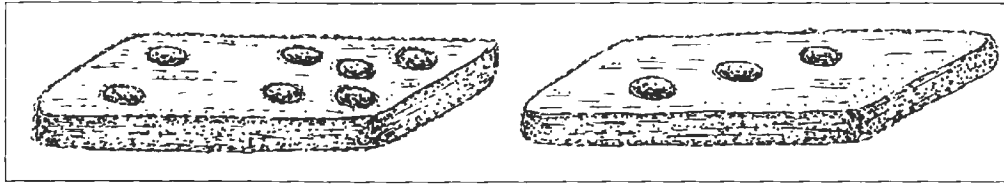


FIGURE 5.2
Dominoes. All the recovered dominoes were made of a dense dark wood. The dots on the obverse were red, white, or both; the reverse was plain in all cases.
Drawing by Helle Grey

and the corners were beveled or worn. At least three were burned. One each was recovered from features 29, 33, and 40; two from feature 2 and trench N-23; and the majority from AU-2.

Chinese chess

Two of the flat, round counters used in this traditional game were recovered, one each from features 1 and 2. Measuring 15.7 and 18.0 mm in diameter, these flat disks were 2.0 mm thick. Both were stamped with the character translated as horse (*Ma*). In Chinese chess, the pieces are arrayed in three rows. In the back row are those pieces representing the chariot, horse, elephant, sergeant, and general. The middle of the board is called the “river” which, once crossed, cannot be recrossed (Cheng, 1991).

Dominoes

All 153 of the recovered dominoes were made of a dense dark wood (fig. 5.2). The dots on the obverse were red, white, or both; the reverse was plain in all cases. The pieces frequently split along the long axis. The assemblage included 108 whole examples and 45 halves, none of which could be matched or rejoined. The corners of most pieces were rounded. The dominoes ranged in size from 2.4 x 7.2 x 0.8 cm to 2.7 x 7.7 x 1.1 cm. Two specimens had distinctly square (or unworn) corners; they measured 2.4/2.5 x 7.5/7.6 cm.

An anomaly not previously reported was observed on five specimens, four from feature 51 and one from feature 44. Each has one drilled and filled hole at each end. Dominoes used by Chinese in the province of Guangdong and those in the US were usually ornamented with one red incised spot on each end and sometimes by three spots on the reverse (Culin 1893:506). The trait (one incised spot) was rare here; decoration on the back was not observed. The dominoes occurred predominantly in the area covered by AU-1; proveniences with more than one or two included feature 17 (6); feature 29 (4); feature 30 (6); feature 39 (4); and feature 51 (4).

An intact boxed set found in Tucson contained thirty-one pieces (Lister and Lister 1989a:75), although Culin reported that the set consisted of thirty-two pieces (1893:508).

Opium Paraphernalia

The smoking of opium is represented by parts (bowls, connectors, or saddles) of at least 110 pipes and 65 lamps (chimneys, fonts, wick holders, or bases). The typical rectangular brass cans that contained the opium were also present, but most had deteriorated beyond quantification. While the habit was indulged not only by the Chinese, these distinctive artifacts are evidence of their presence, and the quantity indicates that the Chinese operated establishments where the substance was sold and used. By 1890, Los Angeles had enacted Ordinance 565 (new series) making it a misdemeanor punishable by a fine of \$500, imprisonment up to six months, or both, for any of the following offenses:

To keep or rent any place for the purpose of eating, smoking or inhaling opium; or visit the same; or to refuse to appear as a witness...; or to have in one's possession any article used to hold or smoke the same. To act as doorkeeper or lookout for opium joint (*Business Directory of Los Angeles 1890/1891:121-124*).

Because the use of opium often occurred in the same quarters as gaming, the ordinance also made it illegal to engage in games of chance, visit any gambling house, act as gamekeeper, or rent a building or room for that purpose. The evidence suggests that such municipal reform efforts were not successful.

The pipe bowls occur in all grades from coarse earthenware to highly burnished stoneware, and in colors that include gray (the most abundant), tan, orange, black, rust/brown, and dark red. The sufficiently intact examples were classified according to shape and method of manufacture (fig. 5.3) according to the Wylie and Fike typology (1988, 1990). The four typical manufacturing methods are wheel thrown in one piece, wheel thrown in a solid piece and the interior carved out, two-piece mold with a separate top (smoking surface) attached with slip, and two-piece mold with a separate top attached with a welded coil.

At least fifty separate bowl types have been differentiated on the basis of overall form, clay, and manufacturing technique (Wylie and Fike 1993:274). The most basic classification begins with the shape

FIGURE 5.3
Construction methods for opium pipe bowls. The four typical methods were these: I, wheel thrown in one piece; II, wheel thrown in solid piece with carved interior; III, two-piece mold with slip-welded top; and IV, two-piece mold with coil-welded top. A, finger prints; B, slip-welded joint; C, turning striations; D, rippled and distorted clay; E, carving tool marks; F, smoothly carved surface; G, coil-welded joint; H, wiping mark; I, tool prong mark. Drawing by Helle Girey

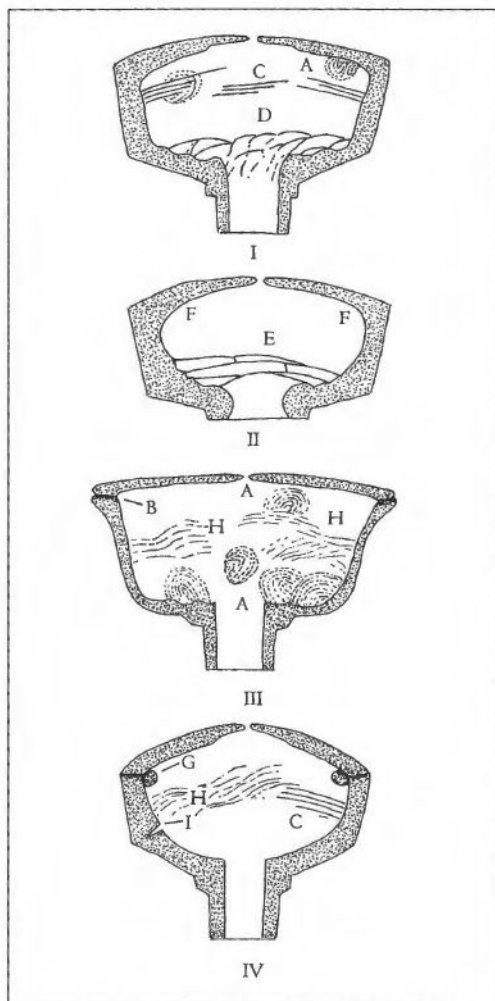


TABLE 5.7
Bowl types and construction methods

Type	Construction method	Qty
A1	???	3
A2	I	36+
A3	I	7
A6	III	2
A8	III	1
A15	III or IV	2
A25	IV	1
AG-33	III	1
B	III or IV	1
B5	III or IV	1
BG-14	IV	1
BG-15	III or IV	1
C	III or IV	1
CI	III	1
CG-3	III	1
DI	III or IV	1
EG-4	I	1
EG-5	IV	1
EG-6	IV	1

of the smoking surface: A (circular), B (octagonal), C (hexagonal), D (four-sided), and E (elaborate). Specimens that could be assigned to manufacturing and morphological groups are shown in table 5.7.

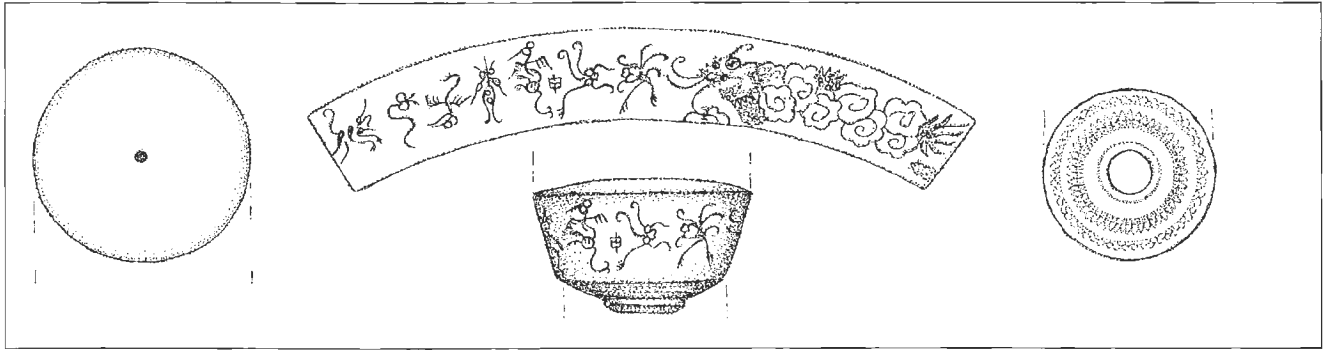
Many bore from one to ten or more impressed stamps and elaborate representational or symbolic designs. One example (fig. 5.4) seems to depict the Chinese zodiac. Those that could be translated or interpreted are listed in appendix A. At least two fragments are the detached "lids" or upper smoking surfaces made by construction method II. One of these fragments (cat. 6566, feature 57) is orange, highly polished or slipped, with a metal insert around the smoking hole (fig. 5.5).

The pipe bowl was attached by a connector set into a saddle fitting around the long stem. Some of the bowls had ceramic stems; on others, the stems had been removed or replaced by a metal fitting inset into the saddle. There were ten of these short metal connectors with outer diameters measuring 2.76 to 3.23 cm. Three brass saddles were recovered. An intact example (cat. 5954, feature 39) was 8.5 cm long parallel to the pipestem, with elaborately scalloped edges and a 1.73 cm aperture to receive the fitting (fig. 5.6). A shorter and less elaborate example (cat. 2078, feature 12) was otherwise the same in height and aperture.

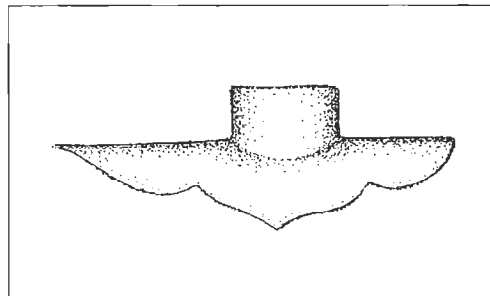
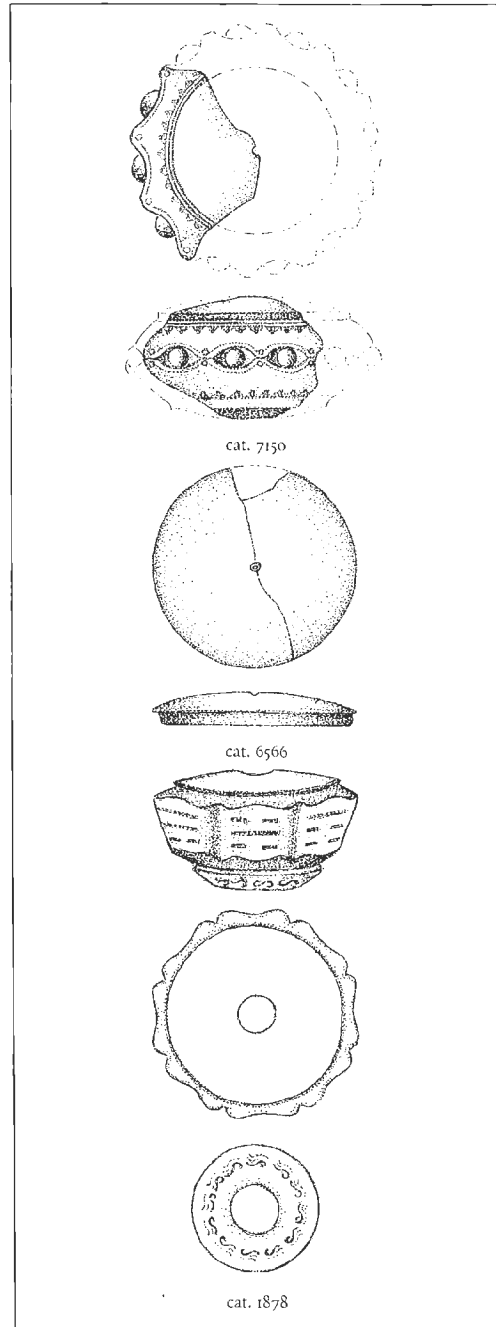
The glass lamp assembly includes a chimney, usually with ground opening, a base with short legs and stylized coin design, and a small disk to hold the wick, which rests on a fuel oil reservoir (fig. 5.7). These items show very little variation among the Chinese sites reported.

Of the eighteen measurable bases recovered, all but one were 9.05 to 9.16 cm in diameter; the sole exception was demonstrably smaller, 8.13 cm. All, including the small one, were 2.40 to 2.65 cm high to provide air flow and insulation to the unit. Eight of the bases were found in feature 29.

Nine fuel reservoirs were recovered. Two in feature 40 were whole, measuring 5.2 cm in diameter, with two rows of facets. One (cat. 6160/6029) is 7.7 cm high, with a stem 1.0 cm in diameter and 1.5,2 cm long; the opening is 0.23 cm wide. Another (cat. 5950) is 7.3 cm high, with a stem 1.1 cm in diameter and 1.2 cm long; the opening is 2.7 cm wide. Others appear comparable in size, with either plain or faceted sides. The seven wick holders are thin disks 2.87 to 4.0 cm in diameter, with central holes 0.64 to 0.73 cm wide. One example (cat. 4054, feature 18) has a painted red border; this item is nota-



ABOVE: FIGURE 5.4
Many opium pipe bowls bore elaborate representational designs. This example seems to depict the Chinese zodiac. *Drawing by Helle Grey*



FAR LEFT: FIGURE 5.5
Selected opium pipe bowls. One of the detached opium pipe bowl lids (cat. 6566) is orange, highly polished or slipped, with a metal insert around the smoking hole. *Drawing by Helle Grey*

bly thin, 0.14 cm, compared to the uniform thickness of 0.3 cm for all others.

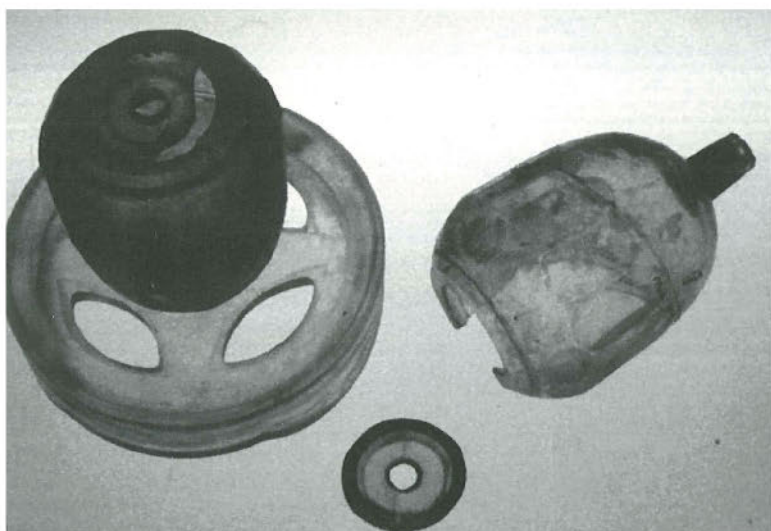
The brass boxes, represented mostly by scraps, measure 8.3 x 6.5 x 4.2 cm, typical for a five-tael container. Lids are 4.2 x 6.5 cm, and sealing strips are 1.5 cm wide.

While most of the imports probably arrived in these containers, there were many grades of opium and diverse ways, legal and otherwise, of transporting it. Wai Kin Tam (1992) described how some opium entered in powder form, packed in fist-size increments known as "dirt form." This substance had to be melted in a wok and filtered through cloth to remove the impurities; as it cooled, the substance would congeal and be packed into small jars. Other opium was smuggled through Mexico in an impure form wrapped in heavy, waterproof paper known as sandpaper. This material would also have to be processed into a more expensive, purer grade. At one time, one US pound was equivalent to twelve Chinese ounces, with 10 g equaling 1 oz. In another account, the opium came in small wax balls, each good for one smoke, stored in brass boxes (Kamansky 1992).

NEAR LEFT: FIGURE 5.6
The opium pipe bowl is connected into a saddle fitting around a long stem. *Drawing by Helle Grey*

Tobacco Pipes

This diverse group of pipes summarizes all smoking equipment other than those items securely associated with opium. The category includes bowls, stems, and bits (mouthpieces) ascribed to both Chinese and Euroamerican origins.



ABOVE TOP: FIGURE 5.7
Opium lamp assembly includes a chimney, a base with short legs and stylized coin design, and a small disk to hold the wick, resting on a fuel oil reservoir. Photo by R. S. Greenwood



ABOVE BOTTOM: FIGURE 5.8
Clay and wooden tobacco pipes as well as this terra-cotta pipe bowl were recovered. Photo by R. S. Greenwood

A minimum of three unglazed, white ball clay pipes from AU-1 could have been made in either Europe or America; one bowl fragment had a spur, but none of the stems was complete enough to reveal a maker's mark. Two terra cotta pipe bowls (AU-1) were of the elbow type, with a greater than 45° angle between the bowl and stem. Both bowls were plain, and the proximal ends had thick rims where the stems would have been inserted (fig. 5.8).

Three heavily charred wooden bowls were like those advertised by Sears Roebuck (1897:333) as "Bulldog" style. The most complete of them (cat. 7052, feature 55) has three incised lines at the point of greatest circumference, and the portion of the stem that is present is square in cross section. One

wooden stem with an oval bit and one of amber or simulated amber would also have come from similar two-piece pipes. An amber stem, square below the bit (cat. 1847, feature 2), has a screw insert for attachment; it appears to be the same as one illustrated in the Montgomery Ward 1895 catalog (Montgomery Ward 1895:505).

Four glass bits and two tiny bowls represent Chinese tobacco pipes. The former are aqua (3 examples) or green, probably intended to simulate jade. One of the very small bowls is glazed light brown with two incised lines, 1.53 cm in outer diameter; the other is a notably hard, unidentified material, 1.3 cm in diameter. In China, comparable pipes still being sold have a stem 34.0 cm long with a small brass bowl and the same glass bit. Of the Chinese tobacco pipe parts, two were recovered within AU-1, two from feature 31, and one each from features 17 and 39.

Coins

Asian and US coins were recovered. The Asian coins recovered from the excavations numbered 322, most in very poor condition, corroded, and almost illegible. The excavations yielded thirty US coins and one token.

Asian Coins: Dong, Wen, and Mon

by Margie Akin

Three hundred and twenty-two Vietnamese, Chinese, and Japanese coins were recovered. The coins, among the most common types in circulation at the time the Los Angeles site was occupied, were in very poor condition, corroded and almost illegible. What can an analysis of this material tell us about the everyday life and activities of the people who used them? Can the coins shed any light on trade or other economic aspects of community life? Will the coins help us to confirm the dating of any portion of the Los Angeles Chinatown? These questions will be addressed following an initial description of the coins themselves.

Of the 322 Asian coins recovered, 280 were from Vietnam, 41 were of Chinese origin and 1 was minted in Japan (fig. 5.9). With one exception, all are round with square center holes, and range in diameter from 19 mm. to 27.5 mm. Although the coins are of different denominations, were minted in different countries, and were produced over a period of 335 years, they share certain characteristics. Each coin, whether Japanese, Chinese, or Vietnamese, bears four Chinese characters on its obverse. All right and left char-

acters can all be translated as “circulating currency” or “current coin.” The top and bottom characters give the name of the reigning monarch. Each emperor, in consultation with historians, astrologers and political advisors, chose a slogan-like name for his reign. The emperor was officially known by this title, rather than his family name until his reign ended. (An American equivalent might be a reference to the “New Deal president” or the “Great Society president.”) The reign names usually have both political and religious significance, and have a multitude of nuances and possible translations.

Although all of the coins have the four Chinese characters on their obverses, the reverses vary. The earliest Chinese coin in the group, from the Wan Li reign of the Ming Dynasty, has no inscription on the reverse. The other Chinese coins were all minted during the Qing Dynasty and all bear mint marks on their reverses indicating the place where they were cast or struck. The mint mark is a single syllable written in the phonetic Manchu script, sometimes accompanied on the earlier coins of the dynasty by the Chinese character for the same syllable. The only Asian coin in the collection that lacks a center hole is a Guangdong cent minted between 1900 and 1906. It has a dragon and English inscription on the obverse, and Chinese and Manchu inscriptions on the reverse.

The Vietnamese coins have three types of reverses. Some are without any inscription, some have indications of weight and/or nominal value, and a single example in this assemblage bears the abbreviated name of a mint. The Japanese coin has no inscription on the reverse.

Historical Notes. Coins were developed in China about 2,600 years ago, and a multitude of Chinese words have been used over the millennia to refer to various types. The most common word for the lowest-denomination brass coins in nineteenth century southern China appears to have been *wen*, and the Chinese coins are referred to in this report as *wen*. Another word for coin, often considered more formally correct, is *qian* (*ch'ien*), but *qian* can refer to coins of larger denominations as well, and is not as specific. All these coins were often referred to by English-speakers as “cash,” from a word for small copper coins used in several languages of southern India. The word “cash” was never used by the Chinese themselves, although it appears on some turn-of-the-century Chinese coins as part of the English-language inscriptions.



FIGURE 5.9 Asian coins recovered from the excavations were the Chinese *wen* (left), Vietnamese *dong* (center), and Japanese *mon* (right). Drawing by K. Dougall

The *wen* had a value of about 1/1000th of a silver dollar in China during the nineteenth century, although that exchange value between silver and the brass currency varied widely from place to place and time to time (Krause and Mishler 1985:334). *Wen* were composed of brass or copper alloys that vary according to the mint and year of production. Strict official rules on formulation of the alloy were often stretched a little, even at Beijing, and in some remote provinces the rules appear to have been ignored, at least during some years. In 1889 modern minting methods were introduced to China with the opening of the Canton mint in Guangdong Province. Well over one billion brass *wen* were struck over the next eighteen years and in 1900 the striking of copper cents, nominally equal to ten *wen*, commenced.

The Vietnamese coins are called *dong*. The zinc coins were worth less than brass coins in circulation, but the relative values of the coins varied sharply. The Vietnamese government made some attempts to assign high values to some zinc and brass or copper coins, and many of the zinc coins recovered at this Los Angeles site bear numbers on their reverses, some of which were intended as denominations. These denominations were generally ignored by Vietnamese merchants, however, and were entirely disregarded when the coins circulated in China's Guangdong Province. At one point during the Tu Duc reign (1848-1883) a silver dollar was worth about 2,600 zinc *dong* and ten zinc *dong* were worth one brass *dong*, but these relative values changed often (Krause and Mishler 1985:2521).

Zinc *dong* are a grayish white when first cast, but soon take on a darker color, oxidize very easily, and

are not as attractive as the brass or copper coins. They are readily damaged by fire and deteriorate rapidly in soil, and most of the *dong* recovered at this site were in very poor condition. Most were broken to some degree, and eight were completely unreadable due to fire damage or oxidation after deposition. *Dong*, and other coins made of zinc, require special care when recovered from archaeological sites. Oxidized zinc coins should *always* be sent to an expert for cleaning; improper cleaning will lead to a loss of information and cleaning should only be done to the point at which identification becomes possible. Except for the one coin with the reign date of Canh Hung, the oldest Vietnamese coin recovered, all the Vietnamese coins recovered at the Los Angeles Chinatown were of zinc.

The Japanese coin that resembles the *dong* and the *wen* in both general appearance and value is the *mon*. Like the Chinese and Vietnamese coins, its relationship to silver and gold varied considerably. According to Krause and Mishler (1985:1582), "From time to time the government would declare an official exchange rate, but this was usually ignored". Only one *mon* was recovered.

Analysis of the Assemblage. The 280 Vietnamese coins (table 5.8), 85 percent of the total, dominate the Asian coin assemblage. The Los Angeles site has the highest percentage of Vietnamese coins yet found in a controlled archaeological excavation at any site in the western United States. The oldest Vietnamese coin is from the reign of Cahn Hung (who controlled only the northern half of the country) and dates from between 1740 and 1787. The most recent Vietnamese coins are from the reign of Tu Duc (1848-1883).

The coin assemblage from the Riverside Chinatown, 58 miles (93 km.) to the east of the Los Angeles site, is similar to this assemblage in both the high percentage of Vietnamese coins (60%), and the reigns represented (Akin and Akin 1987). The coins of the Minh Mang and Tu Duc reigns make up the majority of the coins recovered at both sites. This suggests that some of the same cultural and economic forces led to the deposition of coins at both sites. The Los Angeles and Riverside sites were approximately contemporaneous.

The forty-one Chinese coins make up only 15 percent of the coins recovered at the Los Angeles site. Eight reigns (table 5.9) are represented, the earliest being Wan Li (1573-1619), represented by one coin. Coins of the Kang Xi reign (1662-1722) are often

found in California, and seven coins of this reign were recovered in Los Angeles. Fifteen of the very common coins of Qian Long (1736-1795) were identified, and these are also often found in overseas Chinese occupation sites throughout the West.

The coins of Qian Long and Kang Xi make up the majority of the Chinese coins from the Los Angeles Chinatown. The Kang Xi coins have two characteristics that may help explain their higher numbers in the assemblage. First, they are generally larger than most *wen*, usually between 25 and 27 mm. in diameter. Second, Kang Xi was an exceptionally respected emperor, and his coins are said to have great talismanic value (Schjoth 1976:56).

Ping Lee, a lifelong member of the Chinese-American community in California's Sacramento River delta town of Locke, reported that the coins of Qian Long were preferred for gaming purposes. When interviewed in July of 1989 he related that his grandmother, who was involved in the opera-

TABLE 5.8
Vietnamese coins

Reign	Dates	Qty
Cahn Hung	1740-1787	1
Chieu Thong	1787-1789	0
Gia Long	1802-1820	54
Minh Mang	1820-1841	121
Thieu Tri	1841-1847	3
Tu Duc	1848-1883	93
Unreadable	-	8

TABLE 5.9
Chinese coins

Reign (Pinyin ^a)	Reign (Traditional)	Dates	Qty
Wan Li	Wan Li	1573-1619	1
Shun Zhi	Shun Chih	1644-1661	1
Kang Xi	Kang Hsi	1662-1722	7
Yong Zhen	Yung Cheng	1723-1735	0
Qian Long	Chien Lung	1736-1796	15
Jia Qing	Chia Ch'ung	1796-1820	4
Dao Guang	Tao Kuang	1821-1850	2
Xi Tong	ZhiT'ung Chih	1862-1874	0
Guang Xu	Kuang Hsu	1875-1908	8
Xuan Tong	Hsuan T'ung	1908-1911	0
Unreadable			3

^aPinyin is the official romanized alphabet of the People's Republic of China. Although its use is limited, it is the standard way in which the actual sounds of Putonghua (Mandarin) Chinese are communicated to foreigners. Diacritical marks have been omitted.

tion of a gameroom, preferred the Qian Long coins because they were thicker and sturdier than coins from other reigns. Along with the relative numbers of these coins available in the ports of Guangdong, these factors may contribute to the relatively high numbers of these coins recovered from this site, and other similar sites. Six struck coins of the Guangdong mint were found: five *wen*, and one cent or ten-*wen* piece. The one Japanese *mon* recovered bears the inscription of the Kan-Ei era (1624–1643), but coins with this inscription were minted until 1769. These coins are known to have circulated in Chinese port cities in the second half of the nineteenth century, together with Chinese and Vietnamese coins (Coole 1937:27).

Distribution of the Coins in the Site. The coins were well distributed in the excavation area, and were found in or around most of the features. The largest concentrations were found in features 2, 3, 4, 10, 29, and 39, all of which have been described as trash pits. The balance of the coins were fairly evenly distributed throughout the site, with only a few small areas failing to yield at least a few coins. Direct association of coins with any other class of artifacts was not recorded.

The distribution of the coins may provide some hints on the relative dating of some portions of the site, as well as provide confirming evidence for the dates of the site as a whole. Table 5.10 summarizes the breakdown of the number of Vietnamese and Chinese coins found associated with each of the features. Only features 17, 29, and 39 have a significant percentage of Chinese or Japanese coins recovered from them. Features 17 and 29 each have about 30 percent Chinese coins and feature 39 contains approximately 60 percent of the same. The numismatic evidence suggests that these features are probably more recent than portions of the site that contain a smaller percentage of Chinese coins. The explanation for this conclusion can be found in the discussion on dating in this article.

It is difficult to draw any conclusions from the association of the coins with other material in this site because many of the features in the deposit were poorly defined and badly disturbed. In addition, because most of the coins (more than 80%) were recovered from trash pits, we have few clues as to how they were used *before* their deposition in the site. Therefore, in order to determine how the coins were used by the occupants of the site we must rely on the information gleaned from the composition of

TABLE 5.10
Distribution of coins by feature

	Vietnamese	Chinese	Japanese	Total
Feature 1	3	2	0	5
Feature 2	13	1	0	14
Feature 3	24	0	0	24
Feature 4	14	0	0	14
Feature 6	1	0	0	1
Feature 7	1	0	0	1
Feature 10	20	2	0	22
Feature 11	5	0	0	5
Feature 12	1	0	0	1
Feature 17	5	4	0	9
Feature 18	2	0	0	2
Feature 20	6	1	0	7
Feature 22	1	0	0	1
Feature 23	9	0	0	9
Feature 24	12	1	0	13
Feature 27	2	0	0	2
Feature 29	11	5	1	17
Feature 30	4	2	0	6
Feature 31	12	1	0	13
Feature 32	11	0	0	11
Feature 33B	10	0	0	10
Feature 34	0	1	0	1
Feature 35	1	0	0	1
Feature 38	3	0	0	3
Feature 39	4	5	0	9
Feature 41	0	1	0	1
Feature 41A	2	0	0	2
Feature 49	0	1	0	1
Feature 56	1	0	0	1
Track area	58	0	0	58
Panel 46E	1	1	0	2
Trench N23	27	3	0	30
Surface (phase 2)	0	1	0	1

the assemblage as a whole, combined with ethnographic observation, historical records, and a systematic review of Asian coins recovered from other archaeological sites in western North America.

Function of the Coins. Asian coins, particularly Chinese *wen*, were used for a wide variety of purposes in the North American West. Talismanic, gambling, decorative, and medicinal uses have been reported, as has been their use as hardware. Speculation that the coins may have circulated as currency does not appear to be supported by a review of the evidence (Akin 1990). An examination of the known

uses will provide us with a range of possibilities for the function or functions of the coins recovered in Los Angeles. Some probable uses of some of the Los Angeles Chinatown coins will then be proposed.

Asian coins were imported into the New World by different populations over a period of two centuries. It is often mistakenly assumed that just because an artifact is a coin, its function at a particular time and place was to serve as circulating currency (for example, Kleeb 1976, Hattori 1979). In fact, in the case of the coins under consideration, it is unlikely that they ever were used as money in the New World. Each coin was incorporated into a distinct behavioral system from which it may have been laterally cycled (transferred from one set of activities into another) many times in the course of its use-life. In the New World any given traditional Asian coin was part of one of five behavioral systems. In each of these systems it had a value far greater than its monetary exchange value of less than one-tenth of a United States cent (Akin 1990).

The first behavioral system consisted of the trade represented by coins recovered from aboriginal and early trading-post sites from the period before the arrival of Asian immigrants in North America. During the eighteenth and nineteenth centuries the fur trade between China and ports along the coast of North America brought Chinese *wen* for exchange with aboriginal peoples. The *wen* is an attractive cast brass coin with a large square hole in it, making it especially suitable for sewing onto clothing and basketry. *Wen* have been recovered from aboriginal and trading-post sites in Alaska, British Columbia, Washington, Oregon, and California (for example, Akin 1988, Keddie 1978, Beals 1980).

This period of exchange between Asia and the Native American population of the West Coast of North America began by 1770, and possibly somewhat earlier in some areas, and was largely ended by 1850, though some aboriginal uses of coins continued into the twentieth century.

The second behavioral system involves activities generated by the traditional beliefs of the Chinese, and other Asian, immigrants. Coins play an important role as talismans, offerings, and symbols in Chinese folk religion (Huang 1981). Examples include small groups of coins tied with red thread and used as good luck pieces that could be attached to key-chains, instruments, or other items of personal importance. The coins that make up "coin swords", groups of coins tied onto a central iron

rod in the shape of a sword, were used in some Buddhist rituals and as offerings and gifts for special occasions (Armentrout-Ma 1984:3). Larger and earlier coins, such as the coins of Kang Xi, have long been preferred for most talismanic and religious uses.

The third behavioral system consists of gaming activities. The game most closely associated with both Chinese *wen* and Vietnamese *dong* was fan-tan. Fan-tan was very popular with both Chinese immigrants and their work associates and neighbors. Games were organized primarily in special shops in Chinese neighborhoods, but work crews often organized games in temporary work camps associated with their migratory labor. Coins were used in these games solely as game pieces and markers, never as currency. They were imported for this purpose by game operators (Culin 1891:5). Smaller, thicker coins of fairly uniform size seem to have been preferred in gambling; so, most are from the Ch'ien Lung reign (1736-1795) and its immediate successors (Ping Lee, personal communication 1989). During the 1880s, zinc Vietnamese coins came into circulation in Kwangtung, and they were very soon put to use in the United States in the game of fan-tan in which different coins represented different game functions (Culin 1891:6).

The fourth behavioral system is part of the practice of Chinese folk medicine. The two main traditional medical practices requiring coins are coin rubbing and the preparation of teas. Rubbing different parts of the body with the edge of a coin is a treatment for "hot" diseases and is related to the more familiar cupping and acupuncture (Walterspiel and Roberts 1987; Roberts 1988). Chinese medical treatment also includes the preparation of a variety of teas that incorporate coins as ingredients. The tea prescriptions required coins of different metallic composition, and therefore different coins, for the treatment of different ailments (Ching 1987).

Coins used as decorations were part of the fifth behavioral system. Coins have been used as buttons, as decorations on clothing, baskets, furniture, and for some other decorative uses. Most such coins seem to have been affixed in China to items intended for sale to non-Chinese. Some items with coins as decorations were so popular that they have been used in almost every house of every older town in the western United States, sewing baskets being the prime example. Additional holes may have been drilled into the coins to facilitate attaching them to other objects.

The zinc Vietnamese coins, which are found throughout the site, have not been reported as having decorative or talismanic uses in the American West. Their uses appear to have been limited to gambling and medicine, and contemporary reports of their importation mention only their large-scale use in gambling (for example, Culin 1891). It is reasonable to conclude that while a few of the Vietnamese coins may have been used to prepare medicines requiring zinc, the overwhelming majority of them were used in the game of fan-tan, and possibly in other gambling activities that used coins, such as mahjong and dominos. Like the other Asian coins used in gambling, they functioned as counters and game pieces, rather than as currency. Their distribution within the site would seem to indicate that gambling at Los Angeles Chinatown was quite as common as contemporary Euroamerican reports indicated. The Vietnamese coins were found almost everywhere any coins were found, and in many places where no other coins were recovered. The uses of the Chinese coins would have been more varied, although many must also have been used in gambling.

The Japanese coin and the brass Vietnamese coin of the Canh Hung reign should be considered together with the Chinese coins, as they would have circulated at the same value in Guangdong and could not have been distinguished from other brass coins by most Chinese immigrants. Larger and earlier coins were favored for many religious and talismanic purposes, and it is likely that the *wen* from the Kang Xi reign served these purposes at some time in America.

One Chinese coin with the reign name of "Shun Zhi" (1644-1661) had four evenly spaced holes piercing it, and may have been used for decorative or talismanic purposes, or some combination of the two. When *wen* were strung together for any reason the strings were usually passed through the center hole. If one of these coins was actually pierced it probably was attached to something, perhaps cloth or wood.

The post-1889 machine struck Guangdong *wen* were used in the same ways as other brass Chinese coins, especially in gambling. They were not highly regarded as talismans as a Kang Xi coin would have been, but they saw some talismanic use nonetheless, as their shiny, even surfaces were very attractive. They were often used to decorate coin swords. While the Guangdong cent may have been a simple souvenir, it should be noted that it is just the right size for coin-rubbing, and has the required smooth edges that

American coins of similar size lacked.

Relevance for Site Dating. The discussion of how coins were used to provide supporting evidence for the dating of this site, or portions of this site will follow an introductory review of the principle of dating through the use of assemblage analysis.

Generally speaking, coins are among the most useful tools available for dating sites of the historical period. Often even the most transitory of occupation sites can be fairly securely dated to within a narrow range on the basis of only a few coins. However, the most common Asian coins found in archaeological sites in North America, the Chinese *wen* and the Vietnamese *dong*, pose special problems for use in site dating.

In addition to the fact that the coins do not carry a year date, our ability to use them to date sites is complicated by the fact that in China they routinely stayed in circulation as money for centuries. Coins that had been buried and lost for centuries could be found and used at the local marketplace. This, of course, makes them even more difficult to use for dating purposes.

However, when recovered coins can be identified as part of an assemblage with a distinctive profile, we can decipher not only the behavior that was associated with the coins but also other characteristics of that behavioral system, such as period of importation. Viewing the numismatic material as parts of behavioral systems makes cross-cultural dating methods applicable in situations not previously recognized (Akin 1990).

An example of how this works can be provided by the Riverside Chinatown site. In the summer of 1985 some sections of the old Riverside Chinatown were excavated and 239 Asian coins were recovered from the site. Most were recovered from areas that could be dated to the period from January 1886 until July of 1893 by combined stratigraphy and historical documentation. The composition of the assemblage was, when first identified, surprising, as it turned out to be more than half Vietnamese. Vietnamese coins dating between 1802 and 1883 were found throughout the site (Akin and Akin 1987).

The residents of the Riverside Chinatown were part of the large agricultural workforce employed before and shortly after the 1893 Exclusion Acts. Almost all of these laborers came from Guangdong Province which adjoins Vietnam. The Riverside Chinatown site of 1886 was first occupied at about the same time that the Vietnamese coins were be-

coming very common in Guangdong. By six years later, Vietnamese coins had become ubiquitous at Riverside Chinatown, which argues for very close ties of trade between Riverside Chinatown and the ports of Guangdong. But the extensive survey, conducted by the California Asian Numismatic Survey, of coins from California Chinese sites with known occupations before the 1880s, revealed no zinc Vietnamese coins in the sites predating the 1880s. How could this change be explained?

The reason why California Chinese sites before the 1880s had no zinc Vietnamese coins is simply that Vietnamese coins, at that time, circulated only in Vietnam, and there was no commerce to speak of between Vietnam and California. However, during the 1870s and 1880s, Chinese bankers became increasingly active in Vietnam. As the French colonial officials minted modern colonial coins during the 1880s for circulation in Vietnam, Chinese bankers were buying up the zinc *dong* (which look like the Chinese *wen*) and transporting the zinc *dong* to Guangdong, where they placed them into circulation. There was a shortage of small change in Guangdong at the time, so the zinc *dong* were tolerated in circulation. In 1889 the Chinese government mint in Canton began production of high-quality machine-struck brass *wen*, and within a few years the market for the Vietnamese coins disappeared. So we know that it was only for a short, tightly defined period that large quantities of zinc Vietnamese *dong* circulated in Guangdong Province, center of trade and emigration to California.

The implications are clear. If Chinese *wen* and Vietnamese *dong* are found mixed together in an assemblage from a California archaeological site, there is a fair certainty that they were imported between about 1885 and the late 1890s (Akin 1990).

Coins of China, Vietnam, and Japan remained in circulation for long periods. Some Chinese coins used as currency during the 1870s had been minted as much as 2100 years earlier (Schjoth 1965:vi). For this reason the information that we must use for site dating purposes has to be the dates the coins were imported into the area rather than the actual ages of the coins themselves. The ratio of Vietnamese to Chinese coins at this site, almost 9:1, would indicate that a large number of all the Asian coins recovered were imported into the Los Angeles area from Guangdong between 1885 and the late 1890s as part of the general circulating currency of that period. Therefore the coins were in use, and the site

occupied, no earlier than 1885. The numismatic evidence thus supports conclusions derived from the historical research and artifact analysis.

As the Vietnamese *dong* were less favored and fell out of use faster than the *wen*, any well defined area that had a significantly higher ratio of *wen* to *dong* present was probably more recent. The coins recovered from features 17, 29, and 39 (table 5.10) had such a relatively higher ratio. This suggests that the portions of the site associated with those features were the youngest of the area excavated. Further support for a later date for these features comes from the presence, in feature 17, of struck coins from the Guangdong provincial mint, the most recent of the Asian coins at the site.

The assemblage of coins has provided important information regarding activities enjoyed by the occupants. In addition, by comparing the composition of the coins in circulation in Guangdong to the composition of the assemblage recovered from this site, numismatic support for the relative dating of various portions of the Los Angeles Chinatown has been established.

United States Coins

Of the thirty coins and one token recovered, those with legible dates covered a time span from 1871 to 1920. Including partial dates, twelve were minted in the nineteenth century, fifteen represented the 1900s, two were Indian head cents made between 1860 and 1909, and one was a liberty head nickel that could have been struck any time between 1883 and 1912. The denominations, any legible mint marks, dates, and feature associations are listed in table 5.11.

The dates on coins refer only to the year of manufacture and do not necessarily reflect the time when they were circulated or lost. A coin found within a feature does, however, indicate a year before which it could not have been deposited (table 5.12). This date may not coincide with the beginning of the deposit — only to the earliest coin found therein. With all appropriate caution, then, it can be suggested that features 49 and 51, in locus 4, were later than the others.

The 2.2-cm-diameter token (cat. 6039, feature 40) is a cuprous alloy in poor condition. It has a low border on both sides, with plain (not knurled) edges. The obverse is embossed "Olympic Hall" and the reverse reads "5 Cts in Trade." According to the city directories, Olympic Hall was a saloon in business at 119 W. 1st Street, at least between 1900 and 1911.

Ammunition

Ammunition remains recovered during the Metro Rail project are nearly all from pistol-specific cartridges (table 5.13). Exceptions include the remains of sixteen 44-40 Winchester cartridges. Nine of the 44-40 examples are complete cartridges, eight from a single provenience in feature 33; one additional example is a shell case with an unfired primer from feature 49. The 44-40 Winchester was introduced as a black powder cartridge in 1873 for the Winchester model 1873 lever-action repeating rifle. Colt soon introduced a revolver that also used the cartridge. Most of the American manufacturers chambered rifles and pistols for this cartridge: rifles until 1937, and pistols until about 1942 (Barnes 1989:89). Three 12-gauge shot shell cases were also found. A 12-gauge Peters Premier shot shell case was produced from 1897 to 1935 (Vinson 1968:91), and a 12-gauge Leader shell case was produced from 1894 until after 1909 (Dietz 1980). The latter example is marked 1901 and was likely manufactured during that year. The maker of the third was not identified.

The remaining forty-two examples range from additional .44 caliber pistol sizes down to two .22 CB cap shell cases. Twenty-three of these were recovered in AU-1. More than one-third of the examples represent unfired cartridges, twenty-one of which remain complete or nearly complete. Three additional shell cases are missing the primer, suggesting they were expended outside a weapon under circumstances such as a fire.

The high percentage of pistol-specific cartridges and the high percentage of unfired cartridges are in sharp contrast with the collections of ammunition remains usually encountered in rural contexts, such as homesteads, ranches, and farms where the function is related to hunting. The cartridge sizes recovered here cover a wide range, with comparatively few examples of any given caliber. Most fall within sizes commonly associated with weapons designed for self-protection.

The use of this ammunition for self-defense, aggression, or even suicide is further suggested by the causes of death contained in the burial records. Weapons would naturally be fewer in number than the cartridges, and the whole or broken examples were so corroded that little identification can be offered. One item (cat. 361, AU-1) has been grouped with the toys. Another (cat. 6405, feature 43) appears to be a pistol; another (cat. 2853, feature 33B) appears to be a handgun. Other gun parts include a trigger guard

TABLE 5.11
United States coins

Catalog no.	Feature	Denomination	Date	Description
235	A-130, box	1¢	192_ S	Lincoln
302	A-130, main yard	1¢	19__ P	Lincoln
1190	Trench N-23	10¢	1905	
1248	Trench N-23	10¢	1883	
1307	2	2¢	1871	
1559	1B	10¢	1898	
2050	12	1¢	1890	
2076	12	10¢	-	
2486	15	1¢, Indian	1864-1909	
2680	A-135	25¢	1898	
3007	29	10¢	1905	
3204	29	1¢	1904	
3205	29	25¢	1900	
3301	29	1¢	1876	
3302	29	1¢, Indian	1860-1909	
3306	29	25¢	1903	
3902	17A	5¢	1900	
3903	17A	1¢	1892	
3904	17A	1¢	1892	
3951	29	1¢	1893 P	unworn, burned
4472	33B	5¢	-	
4574	Unit 1 ?	1¢	1886	
4819	35	10¢	1899	
4821	35	10¢	1883-1912	Liberty Gold
5722	11	5¢	1901	
6136	42	5¢	1904	
6137	42	1¢	18__	
6681	49	1¢	1912	
7058a	51	1¢	1912	
7058b	51	1¢	1918	
7058c	51	1¢	1919	
7058d	51	0.01	1920	
7058e	51	0.01	-	

(cat. 6489, feature 39); a handle (cat. 6802, feature 44, level 4; and a fragment (cat. 5114, feature 31).

French Presence

Although there is no evidence from the census or other primary sources that individuals of French origin were actually living on the property during the Chinatown years, their presence within the general vicinity is made manifest through a number of distinctive artifacts. Jean Louis Vignes had arrived in Los Angeles in 1829 and set out the pioneering Aliso Vineyard bounded on the west by Alameda Street and on the north by Aliso, just south of the study area. I Iis nephew, Pierre Sansevain, arrived in 1839, followed around 1849 by another nephew, Jean Louis. The latter acquired the Vignes properties in 1855, and in 1857, Sansevain Brothers made the first California champagne (Newmark

TABLE 5.12
Dates of US coins in features

Feature	Qty	Range
1B	1	1898
2B	1	1871
11	1	1901
12	2	1890 - ?
15	1	1861-1909
17A	3	1892-1900
29	7	1876-1905
33	1	?
35	2	1883 - ?
42	2	18__-1904
49	1	1912
51	5	1912-1920

TABLE 5.13
Ammunition

Cartridge size	Qty	Description
.44-40 Winchester	16	One of oldest center-fire cartridges; first effective combination cartridge for interchangeable use in rifles and revolvers. Great favorite; still used for brush hunting to 100 yards (Barnes 1989:389).
.44 Short, rim	1	Old and once popular rimfire cartridge produced for use in derringers for self-defense. Nearly useless beyond 15 to 25 yards but frequently fatal at point-blank range (Barnes 1989:366).
.44 Bull Dog	1	Originally for British Webley Bull Dog pocket revolver; solely a short-range, self-defense round of little value for anything else (Barnes 1989:247).
.44 Webley	2	Popular for use in pocket or self-defense pistols; strictly short range (Barnes 1989:244).
.44 S&W American	1	One of earliest center-fire revolver cartridges, used by US Army 1871-1873; can be used for short-range hunting (Barnes 1989:244).
.44 S&W Russian	2	Good accuracy to 200 yards, favorite of western characters (Barnes 1989:245).
.44 S&W Special	1	Similar to and largely replaced .44 S&W Russian with advent of smokeless powders; for many years one of most accurate and powerful revolver cartridges (Barnes 1989:246).
.41 Long Colt	5 (6?)	Short range with good stopping power; popular but not as accurate as .38 Special (Barnes 1989:242).
.38 S&W Special	2	Also known as .38 Colt Special and .38 Special. Considered one of best balanced all-round handgun cartridges ever designed; widely used for match shooting (Barnes 1989:238).
.38 S&W	12	Widely used, well-suited to lightweight pocket guns, good short range (Barnes 1989:239).
.38 Long Colt	1	US Army cartridge 1892-1911; similar to .38 Special but not as accurate (Barnes 1989:238).
.38 Short, rim	2	Early black powder pistol cartridge allowing development of lightweight pistols (Barnes 1989:365).
.32-20 Winchester	1	Designed as rifle cartridge but popular for handguns to present (Barnes 1989:228).
.32 Automatic	1	Suited to small low-cost pistols for self-defense; one of most popular cartridges ever developed (Barnes 1989:225).
.32 Long Colt	1	Originally black powder cartridge, about same as .32 S&W but not as accurate (Barnes 1989:228).
.32 S&W	2	Widely used for European and American low-priced, pocket-type revolvers; considered minimum caliber for self-defense (Barnes 1989:226).
7-65 Luger	1	Original cartridge for Luger pistol; can be used for small game but relatively ineffective as self-defense cartridge (Barnes 1989:224).
.22 CB Cap, rim	4	Effective range not much more than 40 yards; generally useless cartridge that has been discontinued (Barnes 1989:358).
.22 (unidentified)	1	
12 gauge shot	3	Considered best all-round shotshell size for general purposes; can duplicate performance of most 16 through 10 gauge shotshells (Barnes 1989:382).

1930:198-199). Two Frenchmen established the first tannery in Los Angeles in 1854 at the corner of Aliso and Alameda (Thompson and West 1880:69). A major *fete* was held in the vineyards – perhaps on this parcel – in 1859. There was enough of a French community to support a French theater in 1859 and to found the French Benevolent Society in 1860. The French Hospital was founded in 1860; ironically, this hospital is now in the heart of “new” Chinatown. A weekly French language newspaper, *L’Union Nouvelle*, was published in 1879 (Newmark 1930:516). Other enterprises in the area included the Taix French Bread Bakery (antecedent to the restaurant of the same name), opened on Commercial Street in 1882 by Marius Taix, and the Hotel de France, present by 1883 on the southeast corner of Alameda and old Aliso Street, just south of the Keller property.

Many French had come to Los Angeles during the 1850s, attracted by the prospects of gold, then by opportunities to raise sheep and grapes. By 1859, there were already 600 French in the city, representing 20 percent of the total population. Damien Marchessault was elected mayor of Los Angeles in 1859, 1861-1864, and 1867-1868; during his tenure, the Old Plaza Church was rebuilt and the City Gas Company organized. Another French native, Jose Mascarel, was elected mayor in 1865 between Marchessault’s terms. The French quarter extended from First Street north to Aliso and from Los Angeles Street east to the river (Berger 1987:2-20).

Among the cultural materials that would probably not have been available in general commerce are the leather pouch, seemingly from a Parisian bistro, and early ceramics from a remote Alsatian pottery. These items suggest personal possessions rather than store inventories. Two small faience jats were brought or sent from Sarreguemines and another from Luneville. Information from the Musée de Sarreguemines suggests that these were terrines which contained *pâté de foie gras* of goose or duck or other preserved food products (Greff 1991). The potteries date back to the eighteenth century, and the backstamps are typical of circa 1875. The trifold leather pouch (cat. 7184, feature 52), stamped “Brasserie Victor/Ligeron Sur/12 Place de la Bastille,” may have held receipts or deposits of a business enterprise. In feature 2, a medallion from the “Exposition Universelle /Republie Francaise/Schios...& Co.” was found. It might have been brought back – or sent – from any of three such exhibitions held in the nineteenth century.



FIGURE 5.10

A turn-of-the-century view near the corner of Apablaza and Juan shows the mixture of western dress and ceremonial robes typical of Chinatown in those days. Photo courtesy Seaver Center for Western History Research, Natural History Museum of Los Angeles County no.1

French cosmetic products, imported from Paris and well established in the wholesale trade at least by 1882 (Morrison, Plummer & Co. 1882:425-427), were marketed broadly by American wholesalers. Three ceramic jar lids from preparations made by the Parisian house of Maison Dorin (2 from AU-1, 1 from feature 2) were recovered; these occur on many archaeological sites of the period. A lid from feature 2 was printed "Gelle Frères/Parfumeurs," a company with an outlet in New York by the 1890s (Devner 1970:54). Another product, whose name is missing, came from "82 rue de Watt...ies/Paris." These and many of the American toiletry products (for example, Colgate) may be discards from the brothels that lined both sides of Alameda Street (Robinson 1964). Patronage of the *Viola et Lopizich Pharmacie Francaise*, at 427 N. Main Street, may have been a deliberate, nationally influenced consumer choice.

Summary

Interaction with the host community is best reflected in the men's clothing and the children's toys. The children would have had contact with their Euroamerican peers and some adults at school and play, and the dolls, marbles, and other toys are much the same as occur on other contemporary archaeological sites. Whether such goods were sold by Chinatown merchants, whether they could have been purchased by mail order, or whether parents ventured

across Alameda Street to purchase them is not known.

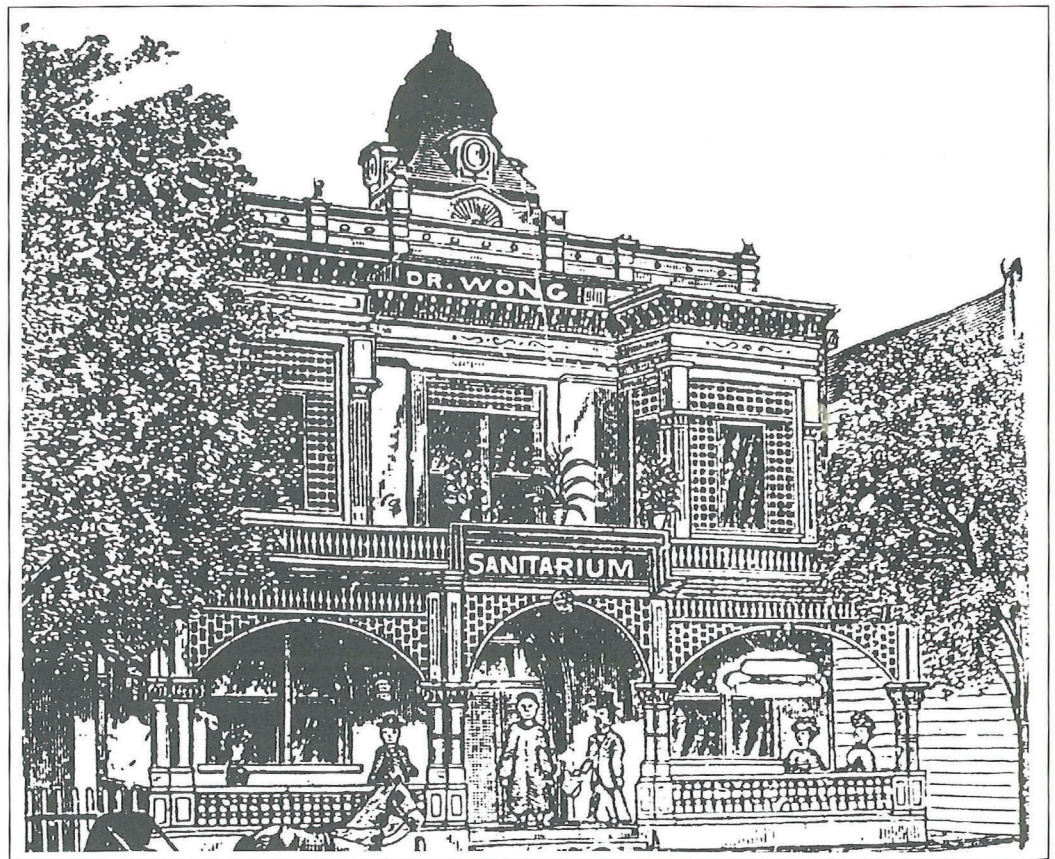
The plated vest chains, cufflinks, suspender slides, and collar buttons are not the garb of the workingman but rather part of the wardrobe of the professional or businessman who had contact with the outside world. One writer has described how her father, an herbalist with a Euroamerican practice, would wear a suit with the proper accessories when going to meet his patients; at home he and all the family wore Chinese clothing (Larson 1990:40-41). A turn-of-the-century view near the corner of Apablaza and Juan Streets (fig. 5.10) shows that both Western dress and ceremonial robes might be seen at the same moment. The women's jewelry is less readily identified as to the place of origin, but the Peking glass bracelets, at least one ring, and half of the combs are of Chinese origin. Their personal possessions are relatively rare in the collection, supporting the assumption that women were sheltered and more slow to acculturate.

Adult leisure was well illustrated in artifacts representative of traditional Chinese forms of gaming and opium smoking. The distribution by provenience supports the historical evidence that these activities tended to occur behind or above the shops rather than in the home. The abundance of uniform white buttons is attributed to their adaptive use as gambling tokens.



FIGURE 6.2
 Chinese drugstore and doctor's office combined the functions of consultation and dispensary. Photo courtesy Regional History Center, University of Southern California, no. 716634.

RIGHT: FIGURE 6.1
 Dr. Wong's sanatorium, as shown in an advertisement.



Health and Hygiene

UNDERSTANDING the life ways of Chinese Americans in Los Angeles necessarily includes evaluating the relative balance between their reliance on traditional Chinese or on Western medical and hygiene practices. The history and pharmacopoeia of herbal medicine, intertwined as it is with myth, symbolism, and folklore, goes back at least five thousand years (Reid 1990). While the patient's belief in the potential efficacy of medicine or treatment is often necessary for healing, many of the herbal, animal, and mineral drugs do have documented medicinal properties. In modern China, for example, hospitals frequently have practitioners of traditional medicine working alongside physicians trained in Western medicine. Treatments from traditional medicine are more commonly used for chronic conditions, whereas laboratory and surgical procedures are applied for acute or traumatic conditions (Henderson and Cohen 1984).

The method of diagnosis differs in the two systems. In traditional Chinese medical practice, the healer's approach involves three steps: the four diagnostic techniques (interview, observation, listening/smelling, and feeling) are used, the eight basic principles (yin, yang, internal, external, cold, hot, empty, and full) are considered to discover the extent of the disease, and an herbal prescription to correct the imbalances caused by the complaint is made. Disease is considered to be a constantly chang-

ing, not static, mode, and the prescription is adjusted until a complete cure is achieved (Reid 1990:42–50). Many of the traditional herbalists were – and still are – self-taught (Henderson and Cohen 1984:105). Methods of healing – in addition to the dispensing of pills, powders, broths, medicine wine, or fermented tonics – include such external treatments as acupuncture, acupressure, massage, bloodletting, scraping the skin with a coin or soup spoon, poultices, suction cups, and moxibustion (Reid 1990:50–61). Chinese herbalists in Los Angeles are known to have treated local citizens as well, and archaeological confirmation that the Chinese Americans continued to seek relief in traditional remedies.

Chinese Medicine

Two artifact groups suggest that traditional customs and beliefs in the curing properties of herbs and other plant and animal preparations were prevalent in Los Angeles Chinatown: glass vials and herbal steamers. The small blown glass vials held pills or powders and are ubiquitous on Chinese sites; steamers were used to boil or steam herbs, seeds, and other prescriptions to activate or intensify their properties. Typically, the Chinese doctor would prepare a prescription that matched the herbal pharmacology to the pathology of the disease or complaint, and the patient would

take the prescription to the Chinese herbal shop. The herbalist would then compound the prescription from the hundreds of natural ingredients on hand, adjusting the strength to the age and condition of the patient. Some might be consumed in the herbalist's shop, others — powders, tea leaves, or broth concentrate wrapped in paper — taken away to be prepared at home. The pills or liquids stored in the small glass vials might have been packaged and corked locally or in China.

Descriptions of the preparation of herbal medicines are provided by Larson (1990), Reid (1990), and Barlow and Richardson (1979). In discussing the practice of herbalist Ing Hay of John Day, Oregon, the latter authors recount that the characteristic method of dispensing medication was in a boiled broth:

No, we never did know — just herbs that was in there — he'd mix it up and give it to me. They cooked the medicine there at that time...Doc Hay would fix it all up and he done the cooking...You poured it out in a cup and warmed it up before you drank it (Barlow and Richardson 1979:60).

This anecdote also shows that health care provided an avenue for interaction with non-Chinese residents. In Los Angeles, at least twenty-six Chinese “doctors” advertised in local newspapers between 1871 and 1913, although it is uncertain whether they were qualified physicians, herbalists, pharmacists, or other health practitioners. Tom Leung, an herbalist at 903 South Olive, was arrested more than a hundred times on the misdemeanor charge of practicing medicine without a license; his daughter recalled that he affected Western clothing when meeting his patients, although he and his family maintained Chinese dress at home (Larson 1990:71). From their advertisements in English and Spanish, their offices located in the central business district outside of Chinatown, and illustrations depicting a Chinese doctor with a Euroamerican patient, it would appear that some of the herbalists were seeking to cultivate a non-Chinese patronage (Bowen 1994:11). Dr. Wong, with offices at 713 South Main Street (fig. 6.1), advertised as far away as Ventura, offering free consultations and testimonials from five individuals all of whom had Euroamerican names (*Ventura Free Press* 1891). Within Chinatown, the only identified individual offering health services in 1904–1905 was Fow Sang Hong, a “druggist” at 323 Apablaza Street. There may have been others, since

only a few names in the city directories provide an occupation as well.

The Chinese herbalists were part of the upper socioeconomic hierarchy, manifested in some command of the English language, residence and offices outside of Chinatown, and interaction with the host community. These characteristics were to some degree conditions of their profession. Nevertheless, it also true that the herbalists were regarded with respect within Chinatown as keepers of traditional medical practices.

The office illustrated in figure 6.2 seems to have combined the functions of consultation and dispensary. In spite of the poor quality of the photograph, the inferior calligraphy, and the obscured sections of the writing, the following interpretation was provided by Dr. Lothar von Falkenhausen:

The writer of the scrolls on the rear wall other than the partially obscured central item identifies himself as Li X (the personal name is illegible). The central item and the scroll on the left wall were written by Li Shengyou. The central item is dedicated to the occupant, referred to by his style-name (or courtesy-name) as Xiaoshi, a relative of the writer. Li X, or Li Xiaoshi, was not formally trained in calligraphy and wrote in the running cursive style. The four scrolls that he wrote on the rear wall (second, fourth, fifth, and sixth from the left) contain an essay titled “True Appreciation of Qin Shaoyou” written in 1084. The scrolls are hung in the wrong order, the second and third being reversed, suggesting that the calligraphy was not meant to be read as a text, but to be appreciated as decoration in a space occupied by an educated person. This series, and his matching scrolls at the far ends, were written in 1884.

The scroll on the left wall by Li Shengyou is a common Confucian motto. His calligraphy above the mirror suggests that the presentee was a person of prestige and perhaps the senior kinsman, although a strictly literal translation suggests the opposite as a convention of courtesy (von Falkenhausen 1995).

For a translation and discussion of the scrolls, see appendix D.

The respect accorded the Chinese herbal doctors by the American community for this other method of healing is reflected in this comment about Hay's treatment of meningitis:

The white doctors get ahold of 'em and they'd die, but this Chinaman would save them. He'd take a small white disk and go down the spine and all at once here would pop blood out of some place along the spine (Barlow and Richardson 1979:67).

The practice of scraping the back to increase circulation, often done with a coin, is akin to acupuncture.

Glass Medicinal Vials

There was a minimum of 666 typable whole or nearly intact small glass containers (fig. 6.3) that held herbal pills and powders, or possibly thin liquids or oils. The total exceeded 695 when all cataloged entries were counted. Some retained their cork stoppers. The vials were inspected before washing, and 36 proved to carry some form of identification: 23 had embossed characters and 13 had applied labels. The clear round bottles with drawn necks (type 3) were typically embossed on the base. Rectangular aqua vials (type 2a) were more often identified on the sides, with characters applied in gold, cinnabar, or ink. Those that could be translated are listed in appendix A; two are explicitly sourced to Hong Kong. They were then sorted by shape and color. Because handmade containers of this type are not absolutely uniform, they were further classified into groups within a range of sizes. The classification (fig. 6.4) is as follows:

Type 1. The distinctive characteristic of this group, the most abundant, is the gather of glass around a hollow tubular core. The hollow within the body is the same diameter as the neck. Color, size, and cross sections vary.

1a. Accounting for 72 percent of the total collection, this category occurs primarily in aqua, with 25 percent in pale green. The cores were dipped in molten glass and then formed into rectangular shapes. The body is tapered, being wider at the shoulder. The length from base to shoulder ranges from 3.2 to 5.6 cm, the length of unbroken necks is 1.0 to 1.4 cm, and the neck diameters vary from 0.6 to 1.0 cm. The average base-to-shoulder measurement is 4.8 cm. The width at midpoint is 1.1 to 1.4 cm, and the thickness is 1.4 to 1.5 cm. Eight of the vials are marked or labeled.

1b. Of the same technology as 1a, this group differs by being shaped into a round cross section. The 14 examples occur only in aqua. Base-to-shoulder measurements are 3.7 to 4.2 cm, smaller than the 1a sample. Unbroken necks are 1.0 to 1.6 cm long, and 0.7 to

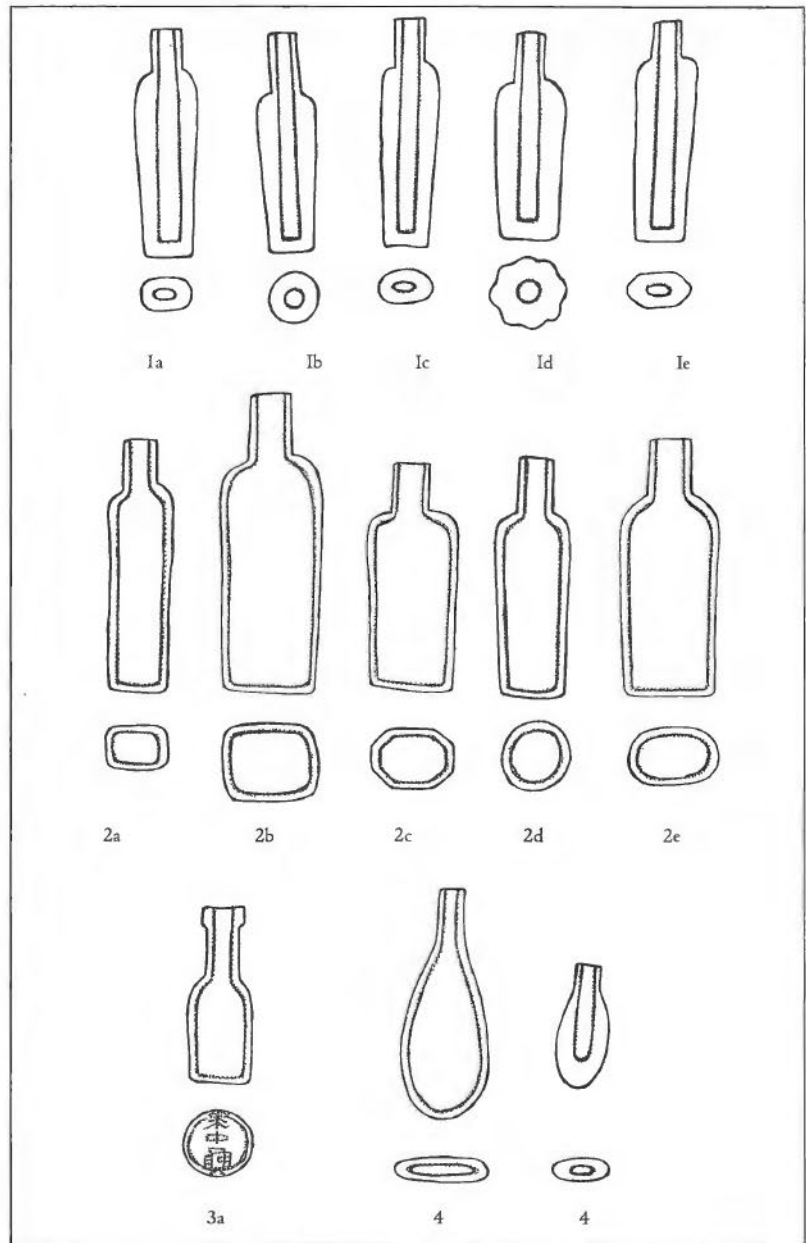


FIGURE 6.3
Glass medicinal vials. Photo by R.S. Greenwood

FIGURE 6.4
Small blown glass vials, used to hold herbal pills, powders, or liquids, are classified in four types: a gather of glass around a hollow tubular core; a hollow, blown body incorporating the neck; round, clear molded glass with long necks and hand tooled finishes; and teardrop shapes.
Drawing by Helle Girey

- 0.8 cm in diameter. The midpoint body diameter is 1.4 to 1.5 cm. One example (cat. 2146) has Chinese characters embossed on the base.
- 1c. Two clear glass examples are distinctly oval in cross section. In the first example, base-to-shoulder length is 3.95 cm and the neck is 1.0 long and 0.8 cm in diameter. In the second example, base-to-shoulder length is 4.95 cm and the neck is 1.3 cm long and 0.8 cm in diameter. At the midpoint, the width and thickness of both are 1.3 x 1.6 cm and 1.2 x 1.5 cm. One contains a fine red powder.
- 1d. Two examples in aqua glass have the same core center as 1c but were shaped into a “melon” or 8-lobed cross section. The first’s base to shoulder length is 3.95 cm, neck is 0.4 cm in diameter, and body is 1.6 cm in diameter. The second’s base to shoulder length is 4.1 cm, neck is 0.4 cm in diameter, body is 2.1 cm in diameter. Both examples (cats. 1183, 2392) have the same three Chinese characters embossed on the base.
- 1e. Made by the same method as those above, three aqua vials are hexagonal in cross section, with two parallel sides or faces wider than the other four sides. Base-to-shoulder dimensions range from 4.9 to 5.3 cm; necks from 1.0 to 1.3 cm long, diameters from 0.8 to 0.9 cm. Body widths range from 1.4 to 1.6 cm, and thicknesses from 1.4 to 1.8 cm.
- Type 2. The distinguishing characteristic of this type is the hollow, blown body that incorporates the neck. The body cavity is thus larger than the neck diameter and of a different shape. All are aqua.
- 2a. The most abundant of the type 2 class (88 out of 147), this group is rectangular in section and base and has three size categories.
- (1) Nine are relatively short and squat, with base-to-shoulder lengths of 3.3 to 5.1 cm, necks averaging 1.3 cm long, diameters of 0.9 cm. Width and length of the body at midpoint are between 1.4 x 1.6 cm and 2.0 to 2.3 cm. There are characters on two of the vials.
- (2) A larger group, otherwise similar, consists of 38 examples that measure 5.3 to 6.2 cm from base to shoulder. The necks are longer, ranging from 1.5 to 1.8 cm, and 1.0 cm in diameter. Body dimensions are comparable to 2a(1). Two have characters.
- (3) Falling between the two groups above in overall height, the final group (41 examples) have thinner walls and greater relative body capacity. Their base-to-shoulder height is more uniform – from 5.5 to 5.7 cm, with necks 1.0 cm in diameter and 1.3 to 1.7 cm long. The bodies are 1.7 x 2.1 cm at the midpoint. One (cat. 6884) contained tiny red pills, and two (cats. 3757, 5500) were embossed.
- 2b. Otherwise similar to 2a, these clear glass vials (26 examples) have very thin walls and nearly square bases and a broader range of sizes: base-to-shoulder height is from 3.5 to 7.1 cm; neck length is from 1.3 to 1.7 cm; and neck diameters are from 1.0 to 1.4 cm. At midpoint, the bodies range from 1.7 x 2.2 cm to 2.6 x 3.4 cm. Eight contain a red powder.
- 2c. Occurring as either aqua (14 examples) or clear (11 examples), this group is octagonal in cross section and base. The vials tend to be relatively large within the overall type, with base-to-shoulder height of 4.5 to 7.1 cm, and necks from 1.3 to 1.7 cm long. Neck diameters are 1.3 to 1.7 cm. The size range of the body at midpoint is 2.4 x 2.6 cm to 3.1 to 3.9 cm. Two examples (cats. 5848, 5849) were marked with Chinese characters in gold, and three others (cats. 3711, 4466, and 7205) contained red powder.
- 2d. Three vials are round with base-to-shoulder height of 3.5 to 4.8 cm, neck length of 1.6 cm, and neck diameters of 1.0 to 1.1 cm. Body diameters at midpoint are 1.8 to 1.9 cm. One aqua example (cat. 2489) has embossed characters on the base.
- 2e. Two brilliant emerald green vials are oval in cross section, broader at the shoulder, and taper to an oval base. Base-to-shoulder heights are 5.1 and 5.5 cm. Both necks are 1.4 cm long with a diameter of 1.0 cm. At the midpoint, the bodies are 1.3 x 1.7 cm. One (cat. 5499) has Chinese characters in gold on one side.
- 2f. Oval like 2e above, three aqua vials are straight-sided (do not taper toward the



PLATE 1
Orange glazed
vessels. Photo by
Dale Yudelman

PLATE 2
Tea bowls.
Larger than
bowls used for
wine or other
spirits, the tea
bowls are all
handleless. The
center example
rests in a hol-
low holder.
Photo by Dale
Yudelman



PLATE 3
Porcelain
spoons. *Photo by*
R. S. Greenwood



PLATE 4
Teapots. The
teapots are all
cylindrical in
shape but varied
in size. *Photo by*
Dale Yudelman

PLATE 5

Small stoneware jars. Well-made cylindrical containers with excellent glazes inside and out probably held products of higher value. Photo by Dale Yudelman



PLATE 6

This earthenware plate has a Chinese character pecked into the center. Photo by Dale Yudelman

PLATE 7
Old Chinese
combs (*left*)
were made with
a wood spine,
bone ends, and
bamboo teeth.
A modern ex-
ample (*right*),
made of plastic,
purchased in
1991. *Photo by*
Dale Yudelman



PLATE 8
Porcelain dolls and jacks were typical toys for girls, while boys had marbles, trains, and fire engines. *Photo by Dale Yudelman*



PLATE 9
Some of the
Chinese tooth-
brush handles
are carved, the
designs repre-
senting a bat,
endless knot, or
flowers. *Photo by*
David De Vries



PLATE 10
This soapstone
sculpture repre-
sents the god of
longevity, Shou
Lao. *Photo by*
David DeVries

PLATE 11

Traditional Chinese spittoons are made of porcelain, elaborately painted with birds and flowers in pink, turquoise, and blue. *Photo by R.S. Greenwood*



PLATE 12

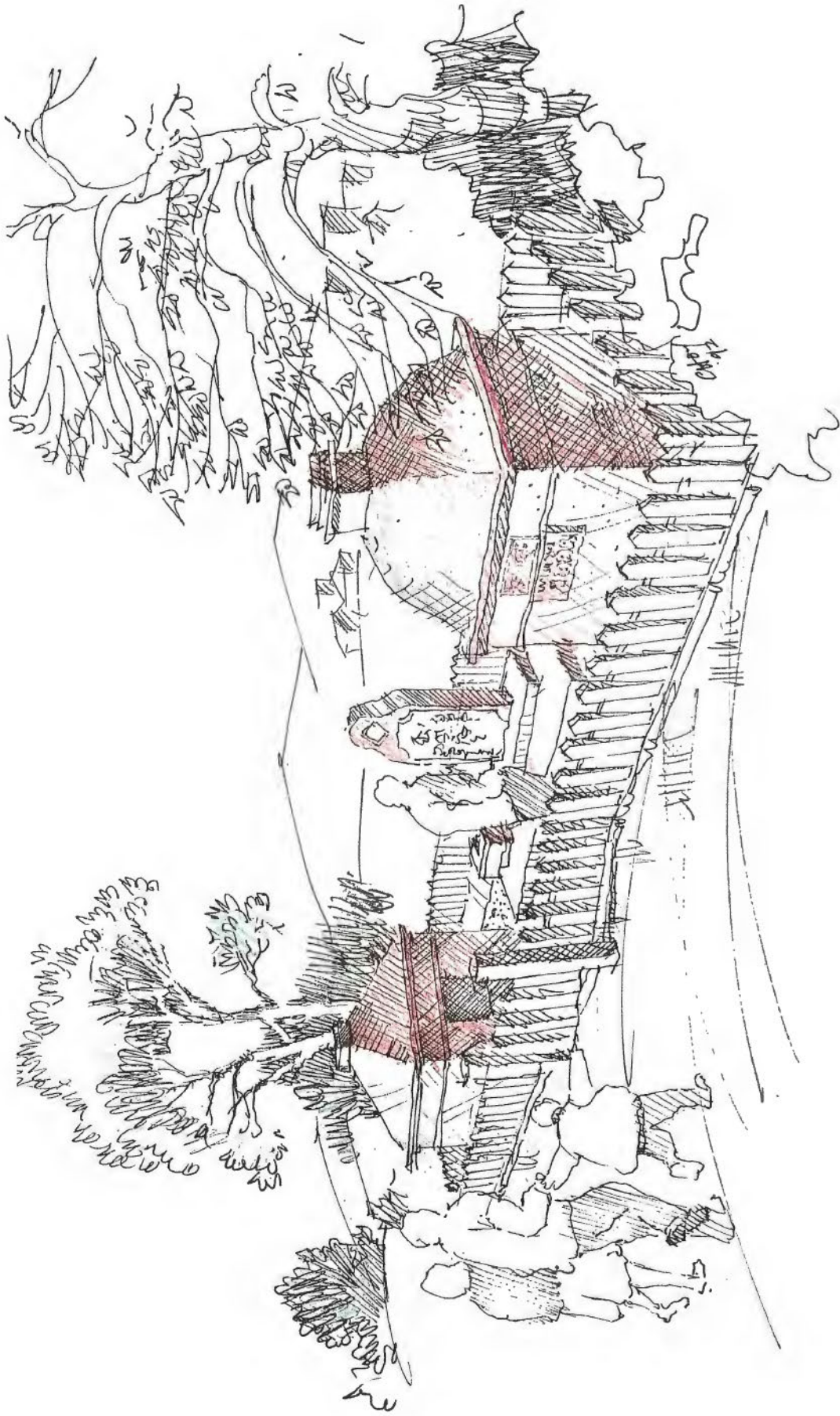
This clay sculpture represents a figure holding a bundle of sticks mounted on an animal that might be an ass or a water buffalo. *Photo by David De Vries*



PLATE 13
The monkey is believed to bestow health, protection, and success by keeping away malicious or evil spirits.
Photo by David DeVries

PLATE 14
Candlesticks, an incense burner, and a stand for the burner make up the ceremonial assembly used on a home or temple altar.
Photo by R.S. Greenwood





*Evergreen Cemetery
Los Angeles*

Chinese Burial Shrine

PLATE 15
Shrine at Evergreen cemetery. Drawing by Barton Choy

TABLE 6.1
Distribution of Chinese medicinal vials

Provenience	Quantity
Feature 1	28
Feature 2	15
Feature 11	10
Feature 16	26
Feature 18	17
Features 19-21, 23	43
Feature 22	23
Feature 29	113
Feature 30	13
Feature 32	17
Feature 33	16
Feature 39	46
Feature 41	17
Feature 42	14
AU-1	81
AU-2	68
AU-3	81

base). They measure 5.1 to 5.5 cm from base to shoulder, with necks 1.5 cm long and unusually large at 1.5 cm in diameter. Mid-point body dimensions are 1.8 x 2.6 cm.

Type 3. The 18 vials in this group are round, clear, molded glass with long necks and hand-tooled finishes. All have embossed characters on the base, wall, neck, or in combination. The glass is somewhat bubbly.

3a. This is a relatively uniform group of 17 clear, molded, hand-tooled small round glass vials with well-defined square shoulders and a lipped finish. Height from base to shoulder varies from 2.5 to 3.2 cm, and the body diameter is relatively uniform at 1.7 to 1.8 cm. Fifteen are embossed on the base with three characters that appear to be the same as those on the Riverside specimens (Great Basin Foundation 1987(2):205, Fig. 4c). One vial has a mark on the base and two rows of characters on either side of an elongated neck. One is unmarked.

3b. This single example (cat. 7270), distinguished primarily by its unique finish, is taller than 3a. Two mold seams are visible on the body and lower portion of the neck; the expanded hand-tooled finish has a flared lip (broken). The neck is relatively short, but the finish is elongated and flared as if for a prescription lip. While the mouth is missing, the finish is bulbous

TABLE 6.2
Chinese medicinal vials by type

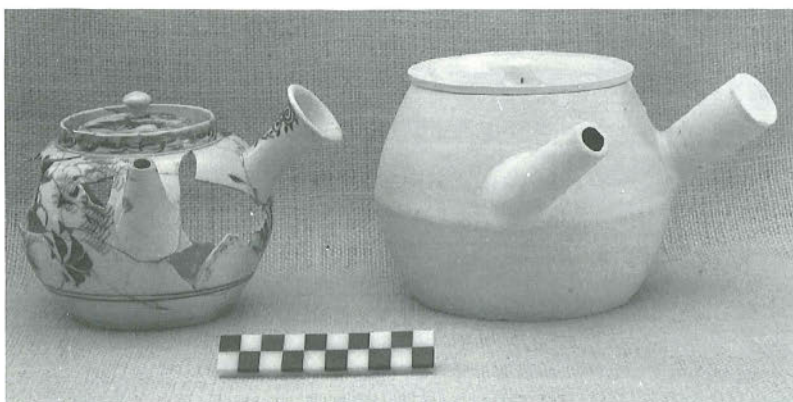
Type	Aqua	Clear	Light green	Dark green	Total	Embossed	Writing	Comments
1a	465		11		476		8	
1b	14				14	1		
1c		2			2	2		1 with red powder
1d	2				2	2		
1	3				3			
2a	88				88		2	
2b		26			26			8 with red powder
2c	14	11			25		2	3 with red powder
2d	1	2			3	1		
2				2	2		1	
2f	3				3			
3a		17			17	16		
3b		1			1			
4		4			4			1 with red pills
Total	590	63	11	2	666	22	13	

above the neck and seems intended for a cork seal. The vial is 3.5 cm from base to shoulder and would have been about 7.0 cm tall if whole. The body is 2.3 cm in diameter; the neck is 1.2 cm in diameter and 2.7 cm long. Five characters are embossed on one side, and three characters on the opposite side.

Type 4. Four teardrop vials are made of clear glass. The smallest (cat. 5866) was made by dipping or applying glass to a central tube to create the finished shape; the interior diameter is the same as the neck. Shoulder-to-base height is 2.4 cm, and the body is 0.95 x 1.45 cm. The others, which have an expanded cavity broader than the neck, include one (cat. 5856) that is 3.5 cm from base to shoulder and whose body is 1.2 x 2.3 cm (at widest point); a second (cat. 2145) that is 4.6 cm from base to shoulder and whose body is 1.1 x 2.7 (at widest point); a third (cat. 5826), which contains some red pills, that is 4.9 cm from base to shoulder and whose body is 0.9 x 2.4 (at widest point).

Vials were found everywhere on the site. The features or proveniences that contained ten or more are summarized in table 6.1, and the total distribution by type and provenience is presented in table 6.2.

The clear teardrop shape (type 4) did not usu-



ABOVE TOP: FIGURE 6.5
The unique configuration, with the spout at right angles to the handle, identified the reconstructed pot at left as an herbal steamer. The pot at right is purchased. *Photo by R.S. Greenwood*

ABOVE BOTTOM: FIGURE 6.6
The glass bottles provided evidence that some Chinese used local pharmacies for their medicines. *Photo by R. Paul Hampson*

ally contain preparations for internal use, but often held liquids for external application to soothe aches or pains. The remedies were sometimes made with an oil base and could be used with accupressure or for motion sickness (Toy 1991; Tam 1991). Some recovered vials of this type contained tiny red pills, and the same have been illustrated in the Tucson collection (Lister and Lister 1889a).

Aqua vials were used, for example, to hold travel medicine or medicine to ward off the affects of heat. Noting that such medicine is still used today, Professor Tong reported that he always carries a container of some in his pocket while traveling; as needed, he would just place a drop in the mouth (Tong 1991).

Herbal Steamer

One globular, blue-and-white porcelain spouted vessel with a lid was reconstructed from many fragments (cat. 3538). Its unique configuration, with the spout at right angles to the handle rather than opposed, led to its identification as a pot used to steam herbal preparations. Counterparts — made of brown or white coarse earthenware (fig. 6.5) — are still available in Chinatowns. The specimen is wheel made, 10.0 cm high, with a base diameter of 8.0 cm and a rim diameter of 7.7 cm. The foot and a 1.0-cm band

at the heel are unglazed. All decoration is painted in blue under the glaze: a double line border above the heel and floral patterns and diagonal lines on the body, rim, handle, spout, and lid. The spout is vented with nine neat round holes arranged in a diamond pattern. The handle is hollow and flared. The lid, unbroken, is 7.0 cm in diameter with a small knob and a rim pattern that matches the border on the neck. The lid, whose lower surface is unglazed, fits well on the unglazed ledge inside the rim.

Packaged herbs were steamed in such vessels, and apparently still are. Another use was suggested by an informant who recalled that tea leaves were “roasted” in such pots.

US Medicine

The glass bottle collection provides ample evidence that the Chinese consulted local physicians, filled their prescriptions (fig. 6.6), and purchased proprietary remedies. Names of the many patent medicines and local pharmacies are listed in appendix C. The drugstore addresses, where they can be derived from embossments on the containers or verified from city directories, suggest that the Chinese did not shop much beyond the streets adjacent to Chinatown. Some of the drugstores patronized are listed in table 6.3.

Proprietary products made locally include Dean's Delightful Dentifrice, dated 1902–1905, and Abel's White Pine Balsam. The latter was a cough and cold remedy; the label was filed with the Patent Office in 1884, and the bottle probably dates between 1891 and 1895 (Frank Sternad, 1992). Other nineteenth-century patent remedies that were marketed nationally are listed in appendix C.

Homeopathic Vials

The slender clear glass vials associated with homeopathic remedies numbered at least sixteen, in addition to many fragments. In various sizes from 4.4 to 7.5 cm long, 14 conform to the pattern advertised in 1880 as “round mouths, heavy lips, ‘patent tool’ finish” (Whitall, Tatum 1880:30); in modern terminology, the finishes would be called patent lip, square, and flat on top. They were meant to be sealed with a cork, and one example still has the cork in place. Two vials differ in weight, finish, and presence of an embossment. They (cat. 1396, feature 1) are 6.5 cm long, extra weight, case vials with a blown back finish (Putnam 1965:121). Both are embossed “Dr. Birney's Catarrhal Powder,” a patent remedy

sold from around 1894 to 1905 (Devner 1968:14; Fike 1987:154–155).

Other Products

Nine examples of health-related bulbs, syringes, tubes, and applicators could be related to personal hygiene, self-treatment, or grooming although positive identification was not possible from the fragmentary condition. One syringe attachment, for example, resembled those advertised as either a hot water bottle (Sears, Roebuck 1935:438) or a bulb syringe (Montgomery Ward 1895:106). Another bulb with narrow pipe could have been a cosmetic atomizer (Montgomery Ward 1895:260). The tubes and pipes were hard rubber, and the bulb syringe sets advertised typically came with an assortment of pipes suitable for rectal, vaginal, and infant uses. One glass applicator rod was attached to a stopper; another to a small rubber bulb as a medicine dropper.

Hygiene

Although toothbrushes were just coming into use in England about 1750, there are Chinese examples from much earlier (Hammond 1989:41). In fact, the style of toothbrush with the bristles perpendicular to the handle was invented by the Chinese in the 1490s (Ring 1985:81–83). Dentistry was also practiced early in China, with arsenic used to treat diseased teeth as early as circa AD 200, a silver amalgam used as fillings by AD 659, and full dentures constructed as early as the twelfth century.

Oral Hygiene & Dentistry

One hundred and seventeen whole or recognizable toothbrushes were found. Of the total, 52 whole or nearly whole specimens had been handmade in China, and 37 are head fragments of similar Chinese types (fig. 6.7). Seventeen (whole examples or marked handles) are of European manufacture (fig. 6.8). Four additional fragments appear to be the same. Seven handles are of indeterminate origin and, except for one of ivory, made of bone.

Chinese Toothbrushes. The primary attribute of the Chinese group is that the reverse of the head is scored in five (rarely, four) lines parallel to the length, with the holes for the bristles extending clear through the head. The cut lines extend down the handle below the bristle holes and often, below the shoulder, suggesting that they were incised early in the manufacturing process. The average number of bristle holes in five rows is 92; in four rows, 72. An open back may permit the toothbrush to be renewed by

TABLE 6.3
Drugstores patronized by Chinatown residents

Name	Location(s)	Date(s)
John U. Bodenmann	Broadway and Temple	pre-1900
Boswell & Noyes Drug Co.		ca. 1896
Godfrey & Moore, Pharmacists	First and Spring	1890+
C. F. Heinzeman	122 N. Main Street	1884–1900
Off and Vaughn Drug Co.	Alameda Street, 360 S. Spring	1887+ 1900–1901
Owl Drug Co.	320 S. Spring, 625 Broadway	???
McLain & Gleason, Druggists	Temple and Spring	1884–1890
McLain & Leland Drug Co.	unknown (?)	ca. 1904
Sale, Howard M.	268 S. Spring Street	1887
Sale and Off.	120 S. Spring Street	1890
Sale & Son Drug Co.	220 S. Spring Street	1887–1920
Viole et Lopizich	427 N. Main Street	1891–1912

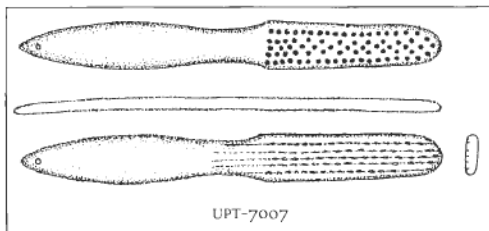


FIGURE 6.7
The reverse of the Chinese toothbrush head (UPT-7007) is scored in four or five lines parallel to the length. Drawing by Helle Girey

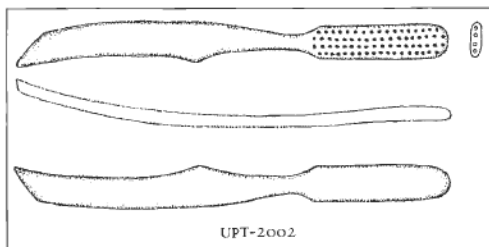


FIGURE 6.8
This French toothbrush (UPT-2002), like other European toothbrushes, tends to be longer than the Chinese and the bristle holes are not cut through to the back. Drawing by Helle Girey

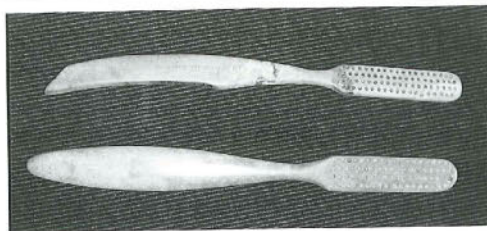
the insertion of new bristles. Seven of the handles (including the ivory example) are carved; designs represent the bat, coin, endless knot, flower, and rope (pl. 9). All are perforated at the proximal end as if for suspension, and three have remnants of metal chains attached. Most handles taper to a point, with only a few rounded or blunt ends. One example is beveled along both sides, producing an hexagonal cross section. Lengths vary from 13.3 to 14.4 cm.

An example purchased in San Francisco Chinatown in 1986 has the same shape and technology; of highly polished and bleached bone, it is pointed and perforated at the handle and 11.5 cm long (cat. ACC-86-8, Asian Comparative Collection, University of Idaho). The intact bristles illustrate that a bundle was inserted from the front through to the back side, bent over, and inserted back up through the next hole to the front; presumably, they were all trimmed at the same time. This specimen

FIGURE 6.9

French toothbrush handle ends are variously shaped: round, tapered, square, blunt, and oblique.

Photo by R.S. Greenwood



was stamped with “Hong Kong” in English and a series of Chinese characters translated as “Made by Liang Xin with the trademark of double crosses.”

Euroamerican Toothbrushes. The Euroamerican toothbrushes tend to be longer, and the bristle holes are not cut through to the back (figs. 6.8, 6.9). Length of the unbroken examples ranges from 15.5 to 17.5 cm. Most have four rows of bristle with 74 to 118 bristle holes; one has 40 holes arranged in three rows. The mode of manufacture is quite different; holes are drilled longitudinally from the end, the bristle holes are drilled from one face, and the holes at the end are capped or plugged after the bristles have been inserted. The handle ends are variously shaped: round, tapered, square, blunt, and oblique, but only three are perforated for hanging. Fourteen handles have these markings: Extra Fine France (1), Extra Fine Paris France (3), [Design] Paris Extra Fine (1), Superieure (1), Finest Quality Warranted Secure (1), Extra Fine (2), Superfine (2), The Perfection Brush (1), Trade [design] Mark (1), and Margherita (1).

The predominance of French imports is reflected in an 1898 catalog that illustrates all of the handle shapes in an assortment meant to be displayed on a wire rack. Those identified as French cost as little as 45 cents a dozen; they are made of bone with four rows of bristles (Brittain 1898:122). Of 14 varieties offered in 1883, including some specified as French, 10 had four rows of bristles, two had five rows, and one each had three or six rows. The most expensive, at \$2 per dozen, used badger bristles (Lauer 1883:29).

No significance could be determined from the spatial distribution; the features containing Chinese toothbrushes included a few European imports as well. For example, feature 2 yielded 12 Chinese examples and one European; feature 17 contained four Chinese examples and two French; and feature 29 had eight Chinese and two European specimens. Locations containing more than a few fragments, and thereby suggesting domestic discards, include features 2, 11, 19–21, 29, 32, 33, 39, 41, 51, and AU-1. Features 27, 40, 43–50, 52, 53, 56, 58, and 59 yielded none.

Teeth, Dentures, and Fillings. The practice of dentistry is represented by dentures and fillings. Five

upper dentures were made of a vulcanite material, in use after 1851 when Nelson Goodyear developed the process that changed flexible rubber into a rigid, unyielding substance (Ring 1985:242–243). One was a portion of a full upper denture (cat. 1628, feature 2); another replaced right canine 1, left premolar 1, left molars 1 and 2 (cat. 4310, feature 38); and another (cat. 6194, feature 41) replaced right molars 1 and 2, right premolar 4, left premolars 3 and 4, and left molar 1 (Corbett 1991).

The porcelain used in facing a denture (cat. 1959, feature 11) came into use during the 1880s, and the plaster casts used to make an impression of the teeth and gums (cat. 880; cat. 6189, feature 40) were used in America as early as the 1840s (Ring 1985:246, 265). A loose denture tooth was a worn premolar (cat. 39092, feature 29).

Isolated human teeth and fillings included a gold molar cap (cat. 1223); a right premolar 3 or 4 (cat. 3504, feature 23), gold foil filling on mesial marginal ridge; some wear and stain; a right molar 1 or 2 (cat. 6079, feature 42), gold foil filling on mesial lingual marginal ridge; moderate wear, some stain; probably more than 50 years old; a left molar 1 or 2 (cat. 6988, feature 41), severe distal occlusal decay, probably resulting in abscess, heavy stain; probably around 20 years old; and a right molar 1 or 2 (cat. 7070, feature 51), moderate wear, heavy calculus; more than 50 years old (Corbett 1991).

Eyeglasses

Eleven oval glass lenses were recovered, six of them pairs within the same provenience. In profile, they range from nearly flat with minimum correction to highly concavo-convex. One pair (cat. 3210, feature 29) is set within a metal frame with part of the bridge intact. In size, they vary from 3.4 x 2.3 cm to 4.2 x 3.1 cm. One pair is a uniform light gray (cat. 1177), and another pair (cat. 6537, 7064, feature 51) is dark gray.

Summary

The evidence suggests that the residents of Los Angeles Chinatown took an eclectic approach to health care, using traditional imported remedies (manifest in the little green vials) and tonics (evidenced by the brown stoneware containers described in chapter 4), consuming patent medicines and bitters, and consulting physicians who issued prescriptions. The addresses of the known purveyors suggest that the Chinese did not venture too far for either medical care or prescriptions.

The Household

IN THE EARLY YEARS, many unattached men resided in boardinghouses in Los Angeles Chinatown. Many structures contained both living and business quarters, and some of the vegetable peddlers lived and cooked together at the warehouses. In the twentieth century, census and other records confirm the increasing formation of more conventional family and extended family units. And, even after the severe restriction of immigration following the Exclusion Act of 1882 and its renewals, merchants and other professionals were allowed to enter the United States with their families and to visit China without fear of being denied reentry.

Because of the changing composition of the population in Chinatown, household artifacts include materials used in or to build dwellings and commercial buildings. Thus, glass containers, kitchen and cooking equipment, calligraphy, decorative and ceremonial articles, spittoons, lanterns and lighting devices, door hardware and other architectural materials are all reviewed in this chapter.

Glass Containers

The volume of recovered glass in the form of whole bottles and jars, broken but recognizable containers, and shards of all sizes precludes presenting a detailed analysis of the entire collection. Following inspection and brushing to reveal any paper labels or other markings, all materials were washed and sorted. Bottle fragments were sorted

and weighed by color to establish relative chronology, given that certain traits, such as clear sun-colored amethyst glass, are sensitive time markers. Such attributes, types of closures, and the quantities of miscellaneous shards and nondiagnostic fragments were recorded prior to discard. To reduce the curation load, only whole and embossed or diagnostic partial bottles were cataloged.

The cataloged glass collection was subjectively compared to the uncataloged fragments. In contrast to experience at disturbed archaeological sites elsewhere, where collectors have removed some or all of the whole bottles prior to systematic excavation, it was found to be representative of the entire assemblage in form, technology, and color. This congruence can be attributed to the early sealing and excellent preservation of the deposits.

The following observations are based on the cataloged collection and the record of redundant and discarded partial examples (for instance, although 61 examples of Dr. Hostetter's Stomach Bitters bottles were cataloged, many more fragments were recognized, recorded, and discarded). Cataloged bottles (and portions thereof) were identified to the extent possible for each example by product and maker, the bottle manufacturer, and manufacturing technology. Beginning and ending dates were recorded for both bottle manufacturer and product; these dates frequently overlap, giving a shorter interval during which production must have occurred.

Most bottle technology dates represent approximate or relative periods of use. Hand-applied bottle finishes, for example, generally preceded hand-tooled finishes, but there is no clear distinction between the periods of their use. Some hand-applied finishes can be found in collections dating to around 1900. Because the relatively large sample of bottle glass includes a high percentage of product and bottle manufacturer dates (see appendix C), only three of the manufacturing technology date periods have been used with this collection. Clear sun-colored amethyst glass, for example, is generally considered to have been introduced around 1880, and to have fallen out of use by 1916, when World War I interrupted the manganese supply; however, many examples of the glass have been recorded in collections dating to the early 1930s.

Well documented by patents and Owens Bottle Company records, the year 1906 is used as the beginning date of production for the automatic bottle machine (ABM). The ABM bottles are often identified by mold marks extending to and over the lip of the bottle. Semiautomatic bottle machines used in 1881 also produced a finish with intact mold marks that may extend over the top of the bottle. When the bottle base is absent or provides no distinct ABM indications, such as a cutoff scar, and technology must be determined from the finish alone, the term “(semi)automatic” bottle machine is used, with a beginning date of 1881. The dates for hand-tooled finishes are approximately 1870 to 1920.

A number of the bottles in the collection exemplify turn-mold production. Introduced around 1870, this process remained popular during the 1880s and later, continuing in use until about 1920. In the turn-mold process, a lubricant is applied so that the bottle could be rotated inside the mold and seam marks could be obliterated. Concentric rings similar to the marks left during hand-tooling of bottle finishes can frequently be discerned on bottles manufactured in this manner. Because it cannot be used along with embossing, this process was usually used for wine or other bottles to which paper labels were applied.

Several olive colored ale-type bottles exhibit manufacturing scars that suggest a different method of manufacturing: the profile tapers from base to shoulder as if the bottles were blown in a three-piece dip mold. Even though no mold scars are apparent, faint concentric marks around the body suggest that it may have been turned in the mold. The finish was applied by hand, with a slight twist in the

upper portion of the neck. These bottles are uniformly well made. The bases range from a shallow convexity to a moderate conical pushup.

Dating

The glass container assemblage spans manufacture or product dates from possibly 1832 (the date of company formation) to others that could have been made only after 1944. The post-1944 containers would have been deposited after the railroad station was built (see appendix C). According to the manufacturing technology, most are typical of the late 1800s and first quarter of the twentieth century. Chronologically diagnostic traits, other than makers' marks or product embossments, include blob tops, three-piece molds, hand-applied and hand-tooled finishes, Hutter stoppers, scars produced by the semiautomatic bottle machine, and dark olive and clear sun-colored amethyst glass colors.

Distribution by Contents

The collection is unusual because of its distribution by contents. In contrast to Euroamerican sites of this period, the glass containers from Chinatown represented a much higher proportion of ink and medicinal bottles and fewer beverage bottles and food jars (either commercial or home canning). The product types of the 609 whole or partial bottles that could be securely identified by embossments are shown in table 7.1.

Of the bottles placed in the medicinal category, 42 contained prescriptions filled by local pharmacies (23% of this category) and 141 contained proprietary remedies. To this total must be added the 666 whole and countless fragments of Chinese medicinal vials, sixteen homeopathic vials, some or all

Product type	Examples	Percentage
Medicinal	183	30.0
Bitters	89	14.6
Food	77	12.6
Soda	77	12.6
Ink	70	11.5
Beer	52	8.5
Spirits/wine	23	3.8
Toiletries	21	3.4
Household	9	1.5
Canning (jars & lids)	4	0.7
Water	4	0.7

of the bitters bottles, and some of the Chinese stoneware bottles that held spirits consumed as tonics. With the Chinese vials and homeopathic vials but without the bitters bottles and stoneware containers, medicinal bottles still number 865 (67%) of the 1291 bottles. In addition to the small unmarked Chinese medicinal vials, two were embossed in both English and Chinese, one marked in English but made in Hong Kong, and six made in Japan although embossed in Chinese. A translation of the markings on these is included in appendix A. The Chinese products originated in Shanghai, Canton, and Hong Kong, and most were medicinals – with one or two containing “wheat wine” (that is, beer) made in Japan.

This ratio of health-related bottles to all other types is distinctly different from those at Euroamerican sites of the same period. For example, a domestic trash deposit at an urban Euroamerican site in downtown Santa Ana (Brock 1985:195) yielded a sample of 206 bottles distributed as follows: liquor, wine, and beer (107, 52%); household (28, 14%); culinary (17, 8%); other beverages, including milk and nursing bottles (9, 4%); medicinal (5, 2%); and unknown (40, 19%).

In another example, a site in Lovelock, Nevada, appears to be transitional: the block at Ninth and Amherst was occupied by Chinese from about 1900 to the 1930s, and by non-Chinese before and after that time. Of 684 identifiable bottles, 52.7 percent held alcoholic beverages, 25.5 percent were medicine bottles, and the remainder were evenly divided among bottles for soft drinks, condiments, household products, and indeterminate contents (Armstrong 1979:238–239).

A relatively high proportion of medicinal bottles may not necessarily be a trait of Chinese occupation sites; the absolute percentages in other sites ascribed to a Chinese occupation may reflect the degree of mixing or disturbance. The preoccupation with health or, in another interpretation, the poor sanitary environment of the neighborhood is clear when the abundant Chinese medicinal vials are added to the Euroamerican containers. Conversely, the low proportion of glass bottles that contained alcoholic beverages must be modified in consideration of the contents of stoneware containers, which could have been consumed for their health properties or the alcoholic content.

Containers for oil, glue, poison (five examples), and one nursing bottle fall into the household category. Ink bottles were more abundant here than at

Euroamerican sites, along with the larger stoneware master inks used to fill smaller containers. The appearance of ink containers is commonly related to use in laundries and in connection with the lottery. There were no identified laundries but much documentary evidence of the daily lotteries.

Toiletary bottles include dentifrices, colognes (such as Florida Water), and cosmetics. Among the Euroamerican spirits, there were 5 identifiable wines and 18 hard alcoholic beverages. When contrasted with the 928 Chinese stoneware spirits containers recovered, the limited number of beverage bottles demonstrates the persistence of traditional preferences. Consumer choice is also evident in the abundance of imported food in stoneware jars as opposed to locally available foods in commercial tins or glass jars. For the most part, the food group consists of condiments and sauces, notably Lea and Perrins Worcestershire sauce bottles.

Kitchen and Cooking Equipment

Kitchen and cooking equipment was represented by traditional Chinese cooking implements and tools.

Chinese Stoves

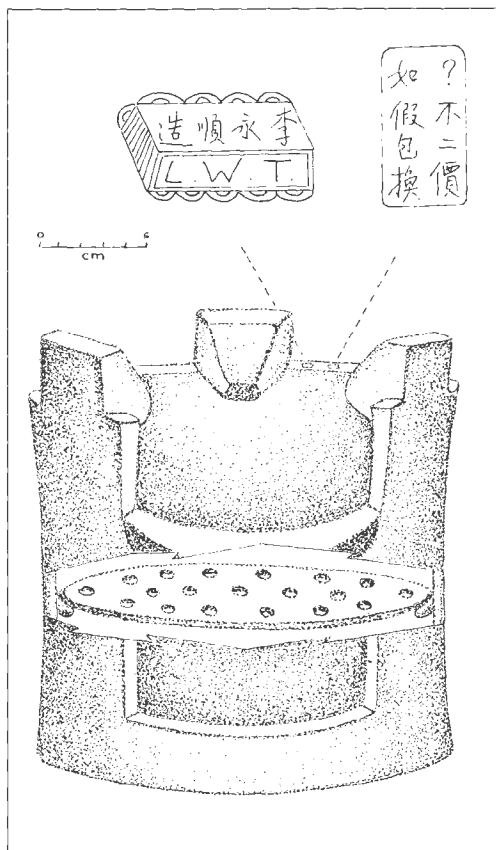
An old style of portable clay stove – a type of artifact not previously reported from excavations in Chinese communities in the US – was recognized only after matching color and paste and reconstructing fragments found in feature 2. Other fragments were subsequently recovered from features 2, 16, 29, 30, 39, 41, 42, and 54, as well as AU-1. The most complete example has a 19-cm base diameter, overall height of 19.5 cm, and height of 6.5 cm from the base to the interior ridge which supports the grate. The rim is burnished, in contrast to the very coarse paste, and stamped as shown in figure 7.1. Made of an unglazed coarse gray clay, the grate, with its punched holes, would most likely have been fired with charcoal.

Fragments found in feature 29 represent two additional stoves. One was of comparable size to the stove from feature 2, with a base diameter of 19.0 cm. A second, smaller example was 15.0 cm in base diameter, with total height of 9.0 cm and height from base to grate of 4.0 cm. At least thirteen additional grate fragments were recovered; those large enough to yield a diameter measured 9, 16 (3 examples), 18, and 19 cm. Several sizes were present.

Charcoal, wood, and even grass were burned in

FIGURE 7.1

Probably fired with charcoal, this portable clay stove (UPT-2776) could be either an auxiliary to the main built-in cooking structure or used outside at another location. *Drawing by Helle Gircy*



such portable stoves. In China, a brick stovetop was typically part of the kitchen, with one large hole used for wok cooking and one or two smaller holes used for pots for boiling. The heat from the stove's chimney was captured and circulated to a platform bed and the rest of the house (Tam and Toy 1992). Portable stoves may have been auxiliary to the main built-in cooking structure or the sole stove for poorer families, at work sites, or for outdoor cooking.

The wok or other cooking utensil rested on the three flaring wings. The space between the top of the wings and the rim provided ventilation for the fire, the fuel rested on the grate, and the squared hole above the base provided both the draft and access for removal of the ashes. Portable stoves ranged in size from about 4 inches to 2 feet in rim diameter, were shaped in molds, then trimmed and polished on the wheel. The center for their production at one time was in Chang-shu, Kiangsi province. The maker's chop was impressed on the rim with a wooden block and tapped with the trimming knife. Jewelers used smaller stoves, fitted with a lid having only a small opening, for melting precious metals (Hommel 1937:137-40).

Woks and Cleavers

Although most of the ferrous objects were deteriorated beyond positive identification, one nearly intact ferrous wok 38 cm in diameter and 10 cm high was recovered in feature 57. It could have been used for stir-frying or steaming on a portable clay stone, such as those described above, or on the cook top of an indoor kitchen. None of the tools typically used to handle or remove foods being cooked in the wok – such as a skimmer, whisk, or ladle – survived. These utensils could be made of brass, bamboo, or other materials. Chopsticks, used for cooking as well as for eating, are perishable and not likely to be recovered – and none was.

Four cleavers were recovered from features 39, 42, 49, and 58, and two possibly associated whetstones from feature 39. These were, and still are, the traditional implements used to portion foods and cut up meat, and the imprints of their use are distinctive on animal and poultry bones.

Euroamerican Pans and Implements

Among the enamel cooking wares were a gray pan 21.5 cm in diameter and 4.5 cm high from features 52 and 57 and a gray coffeepot 17.5 cm tall, also from feature 57. A white enamel bowl of 12.5 cm in diameter and 6.5 cm high (feature 43) was stamped on the base by a maker (name illegible) from Prussia, Germany. No other saucepans, frying pans, or pots common to the Euroamerican kitchen were found.

The Euroamerican implements found were a corkscrew, meat hook, five knives, two spoons, and two forks, all recovered from the surface or features 39 (3 examples), 40, 42, 44 (2 examples), or 47 (2 examples).

Spittoons

Both traditional Chinese spittoons and Euroamerican cuspidors and spittoons were recovered. Traditional Chinese spittoons consistent in size, shape, and pattern, are represented by 21 fragments; from color distinctions at the rim and one smaller diameter at the foot, at least seven individual specimens were present. Since these have been misidentified elsewhere, and are not presently available in Chinatown stores, full description is warranted. The shape, from the top down, is a flat mouth rim, tapering upper part, bulbous body, the “floor” of the containment vessel, and a high, straight-sided, flaring foot. All but the foot ring is carefully glazed

inside and out, and the exterior is elaborately painted:

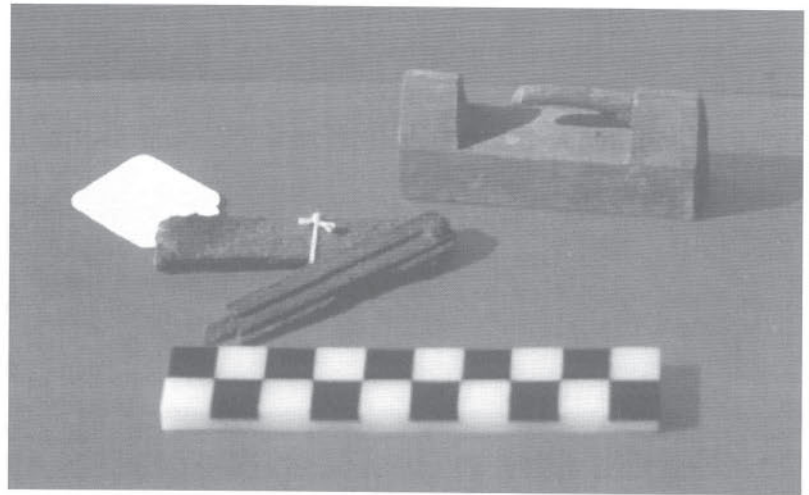
...decorated on two sides with ogival and trapezoid panels reserved in white containing, in the trapezoid panels [upper portion] birds and flowers, and in the ogival panels [on the body] flowers and birds with in one case a phoenix added, in the other pair of pheasants, on a rose-pink ground featuring scrolling lotuses in yellow and turquoise enamels, with borders of lotus panels on the splayed base, *ju-i* lappets on the underside of the mouth-rim, and stylized flowers and leaves on a rose-pink ground on the rim. (Willetts and Poh 1981:117)

The same designs and ogival reserves also occur on a tall, slender vase of baluster form with zooform handles (Willetts and Poh 1981: Fig. 175), but the shape of the spittoon, with its flared rim and solid interior surface above the high foot, is diagnostic. The example, illustrated by Willetts and Poh (1981:117), is 39.5 cm tall and ascribed to the nineteenth to twentieth century.

The most complete reconstruction is 39.2 cm high: 11.5 cm for the upper portion and rim, 17.5 cm for the round body, and 10.2 cm for the splayed foot. The rim diameter is 22.6 cm, and the base, 20.4 cm. The pure white porcelain is up to 1.0 cm thick on the foot. The fragments were most abundant in feature 29 (five examples), with three in feature 39, two in feature 36, and single examples in 16, 17, and 42.

The reserves and motifs (pl. 11) are identical to the complete vessel illustrated by Willetts and Poh (1981). The color variations that help determine the minimum number recovered include a mouth rim with a ground in pink or turquoise; ogival panels bordered in green or blue; and a base design bordered in either pink or blue. The design elements are the same. For instance, an example appears under the table in a photograph of the George Macy tea-tasting department in Shanghai dated around 1890 (Howard 1984:139); one is clearly identical in a formal portrait made in China in 1901 (See 1995:106ff), and another is on the floor in a formal portrait (Pastron, Pritchett, and Ziebarth 1981[2]: Fig. 9.01). This particular form and design, obviously popular a hundred years ago, is no longer being made.

From the twenty-nine fragments, it is estimated that a minimum of sixteen Euroamerican cuspidors and spittoons are present. Mostly earthenware, they vary in color and decoration. Nine are molded; most are decorated with foliage but one has a basketweave pattern. A minimum of two are glazed in the yellow-brown typical of Rockingham ware; others are



green, brown, mottled green and blue, mottled green and orange. Six fragments are sponged in blue, and three are spattered. The only unbroken example is a brown Rockingham spittoon with a molded shell pattern, 27 cm in diameter and 14 cm high. These may be replacements for the Chinese type described above, perhaps no longer available in the twentieth century.

FIGURE 7.2
Brass Chinese lock and folding key. Photo by R. S. Greenwood

Locks and Fasteners

Three brass Chinese locks and one folding key (fig. 7.2) were recovered, one each from AU-1 and features 15, 29, and 41. The keys to such locks, used to secure chests or boxes, do not work by turning tumblers. Instead, each key has a distinctive cross section on a straight shank. The key is inserted into the matching aperture at one end of the lock; it simply pushes against the opposite end until that end is released. The movable part has one exposed crossbar, and the portion within the body of the lock has a tapered spring on both the archaeological examples and modern counterparts.

Small closure tabs with one blunt and one pointed end were used to secure, but not to lock, boxes or books. The eight all-bone examples range from 24.4 to 36.7 mm long and 5.0 to 10.0 mm wide. Each has an elongated perforation at the straight end where a cloth, cord, or other attachment was fastened. The perforations were made by first drilling two or three holes and then connecting them. The pointed end is slipped through a loop on the box. Such fasteners are still in use, although commonly made of plastic.

Calligraphy

Traditional brush-writing is represented by ink stones and boxes related to the mixing of dry ink and a brush handle.

FIGURE 7.3

In traditional brush writing, the ink stone (*right*) would be used for mixing the dry ink with water; the wooden tray (*left*) would hold an ink stone. Photo by R.S. Greenwood



FIGURE 7.4

The broken fragments (UPT-6543) from feature 51 are identical in paste, size, decoration, and form to the unbroken bulb planter from a private collection. Photo by R.S. Greenwood

Ink Stones

One ink stone and the hardwood fitted stand for another illustrate traditions in calligraphy. The former (feature 29) is made of a shale-like material, measuring 12.8 x 9.2 cm, with a circular depression of 5.5 cm in the middle (fig. 7.3, right) and foliate carved reliefs at each end. The quality of the lithic material led Professor Chou to comment that it was a "regular one," not an expensive variety. In use, water was placed on the wider end above the applied leaf; the ink stick was used to take a small amount of water to the central depression for mixing (Chou 1990). A carefully carved shallow wooden tray from feature 44 is the same shape, slightly broader at one end, and would have held a comparable ink stone (fig. 7.3, left). It is 12.7 cm long and 9.8 cm wide.

Boxes

Small porcelain boxes are also related to classical calligraphy. Three rectangular boxes, used to hold compressed dry ink, and one matching lid were recovered. The unbroken example from feature 29 measures 10.0 x 7.5 cm and 2.7 cm high. It is unglazed on the foot, rim, and recessed ledge that receives the lid. The overall design, in blue under the glaze, is the Sweet Pea floral pattern enclosed by double lines on each side. The two fragmentary examples from feature 44 would be similar.

Brush Handle

A wooden brush handle from feature 44 of the size used to paint broad characters is also related to calligraphy. It was possibly made of bamboo (Chou 1990). The four characters appear to denote success and competition, or success in finishing (Tam 1992).

Bulb Planter

Thirteen fragments from feature 51 represent a minimum of one shallow rectangular vessel traditionally used as a bulb planter (fig. 7.4). Although enigmatic in themselves, the sherds are identical in paste, size, decoration, and form to the unbroken example from a private collection, shown with the fragments. The latter is 23.3 x 15.7 cm at the rim and stands 5.5 cm high on four stepped feet. The base is glazed with a hexagonal red stamp painted over the glaze. The sides are double-walled, and the outer walls bordered with two blue lines and pierced in four rows. The upper rim is 2.3 cm wide, painted under glaze with a diamond border and five-petaled flower at each corner. The interior is glazed but undecorated. The fragments are identical in all regards, including the border design. It was traditional to plant narcissus bulbs in such containers; if they flowered before the Chinese New Year, it was an omen that the family would prosper in the coming year (See 1995:105).

Pillow

An elaborate rectangle was partially reconstructed from seventeen fragments found in features 39 and 41. It is 15.0 cm long, 13.3 cm wide, and 6.6 cm high, approximately half the length of many porcelain pillows preserved in private collections and exhibits; the width and height are within the same range. Experts confirm that pillows did come in this smaller size. Another comparable detail is that, on all examples, one end is unglazed with a large opening.

The body of this example is notably fine and white, and the painting in blue under glaze is intricately executed with fine detail. The essential motif is the dragon, among foliate elements or clouds on the borders and alone on the short sides. The upper and lower surfaces are cut in the double coin design. The open space on the unglazed end is a scalloped oval shape, surrounded by blue flowers and scrolls.

Unidentified Wooden Object

One slender wooden article (feature 44) has not been identified by Chinese consultants or from the literature reviewed. It is rectangular

in cross section, with four holes drilled on one face and a round wooden plug in one hole (fig. 75). It is 12.8 cm long, 1.5 cm wide across the face, and 1.3 cm high or thick. The holes average 1.0 cm in diameter. It appears to be handmade with cut, not broken, ends. It could have been used as a tally in gaming.

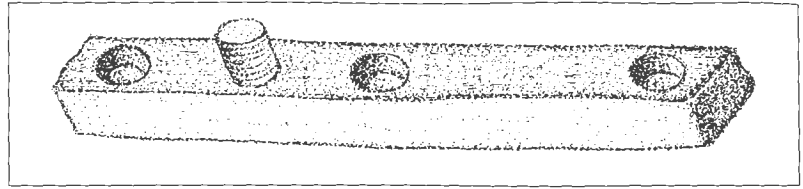
Ceremonial Vessels

Three forms compose the ceremonial assembly used on a home or temple altar: candlesticks, an incense burner, and the stand for the burner (pl. 14). All examples within each group are identical in size, form, and manufacture, glazed the same dusky off-white with a somewhat mottled appearance, over a white-slipped body. The stands are 10.5 to 10.7 cm in diameter, and 2.5 cm high, on three pyramidal feet which match those on the incense burners. The feet recreate a shape used on ancient bronze vessels. There were a minimum of four incense jars and four stands, plus fragments representing an unknown additional number.

The candlesticks number ten, suggesting that two were used to flank a central incense burner. Made in two parts and most often broken at the middle where they were joined, they measure 14.5 to 15.0 cm in height. The base is hollow for 7.1 cm above the foot and terminates in a broad ring 7.7 to 8.0 cm in diameter. The base and interior of the lower half are unglazed. The upper part is another 7.4 to 7.7 cm high, ending in another ring 5.9 to 6.0 cm in diameter. The top has only a small aperture. Both rings are dish-shaped, and contain excess, puddled blue glaze. A clear glaze, slightly crazed, was applied over a white slip and blue-green painting, which seems to have reacted with the glaze. The two most complete vessels come from features 38 and 57.

The incense burners are cylindrical: 10.8 cm high, with a 10.8 cm diameter rim, 0.5 cm thick base, and 1.05 cm thick rim. The interiors are unglazed and would have held sand to support sticks of incense. The stands for these jars have three round indentations to hold the feet of the incense burners and are decorated with three swirls in the clay. The stands also have three feet, attached below each of the indentations. The underside of each stand is unglazed.

Because they were associated in use, all pieces were combined to illustrate the distribution. Feature 29 yielded ten whole or fragmentary examples; feature 17 contained seven; features 22 and 39, three each; and feature 2, two. Most of the others were recovered from the general area of AU-1.



Chinese Figurines

Plate 10 is an 11.3-cm-tall soapstone sculpture, representing the god of longevity, Shou Lao, was recovered intact from feature 17 (pl. 10). The base has two round holes, as if the figure had been mounted, and a Chinese character. The face has the prominent forehead, arched eyebrows, and benign smile typical of this symbol. One arm holds a rod or staff, and the other cradles the peach (*Pan-t'ao*) that blossoms every three thousand years (Williams 1976:209). The folds of the flowing robe show traces of red pigment.

A soapstone monkey (pl. 13) was partially reconstructed from fragments found in trenches 18 and 19. It is posed semi-erect in front of a basin placed on a carved oval base. The height is 8.6 cm; length and width are 8.6 cm and 3.3 cm, respectively. The animal's pupils and eyelashes have been painted on the face. The lithic material is pale tan, with large black inclusions. The monkey is believed to bestow health, protection, and success by keeping away malicious or evil spirits (Williams 1976:278). Another pair of tiny soapstone paws could have come from a similar monkey.

Ceramic monkeys are depicted in two intact, unglazed figurines and in fragments of others. Two unbroken seated figurines represent two different sets of the "see-no-evil, hear-no-evil" symbolism. One from feature 29 (fig. 7.6 left) is 5.0 cm high, tan in color, has a hole in the base for attachment; it was previously joined to other figures at the sides of both legs. The limbs are crudely applied, but the molding of the facial details and body fur is distinct. The paws cover the mouth. From feature 39 (figure 7.6 right), the second monkey is 5.5 cm high, with the paws covering the ears. The modeling of face and fur is similar, but this one shows no evidence of having been joined to another figure. The paste is gray and the surface is black, possibly a result of burning. The monkey has traces of white in the grooves of the surface texture, which may be deliberate overpainting or a result of deposition. Small black fragments found in the same provenience appear to represent another figure that was part of the same set.

FIGURE 75

This slender wood rectangle, with four holes drilled on one face and a round wooden plug in one hole, could have been used as a tally in gambling.

Drawing by Helle Girey

FIGURE 7.6

Ceramic monkeys are depicted in two intact, unglazed figurines and in fragments of others.

Photo by R. S. Greenwood



FIGURE 7.7

A tiny sampan is modeled and glazed pale greenish-gray. Photo by R. S. Greenwood

A fragmented clay sculpture from feature 1 (pl. 12), executed with fine detail, represents a figure holding a bundle of eleven sticks mounted on an animal that might be an ass or, from the rider's position on the rump, a water buffalo. The heads of the rider and animal, arms of the rider, and limbs of the mount are missing. The rider is seated on a folded saddle cloth, with his pants legs rolled up. The mane, body hair, and genitalia of the animal are rendered with minute detail. If whole, the figure would stand about 12 cm high and would be about 14 cm from head to tail. Made in Shiwan or Foshan, Guangdong province, approximately 20 km southwest of Canton, the item dates to around 1820 to the 1850s, according to Kamansky (1991). The cluster of closely related places known collectively as "Shiwan" produces its own clay and has been prominent as a pottery center since the Neolithic. The local clay is very plastic, rich in iron oxides, lends itself readily to sculpture, and fires at a low temperature to a grayish body. An exhibition catalog illustrates many mounted figures and other small sculptures from Shiwan (Fung Ping Shan 1979:10–12, Fig. 2.29), some resembling this artifact. It is likely that the "sand

pot" (fig. 4.5) was also made at this source.

A highly fragmented, very complex clay figurine was found in features 31 and 32. The head and lower portions are missing, but the representation seems to be a female dancing or in some other motion. The torso is bare-breasted, with a shield or cummerbund rising from the belt to the nipples. One arm is holding a shawl that crosses the back over one shoulder, and the lower portion of the body is covered with a swirling drapery. Unglazed, the fragments show traces of red and green pigment. The figure has not been identified, but in the color and texture of the clay, it resembles other wares from the Shiwan pottery center.

A small clay head (cat. 1754, AU-1) represents a woman with a distinctive Manchu headdress. Including the flaring headdress, the head is 3.5 cm across the face and 3.5 cm from the topknot to the chin at the point of breakage. Each ear is pierced, as if there had been attachments, and the head was part of a larger figure. Such sculptures were typically painted or glazed (Kamansky 1991); the headdress on this example was apparently painted black, and there are traces of pink on the cheeks.

An animal head from feature 29 appears to be the Foo dog or temple lion often found guarding the threshold of official buildings. In Buddhism, this is an emblem of valor and energy (Williams 1976:254). Only 2.5 cm in diameter, this fragment is crudely modeled and covered with a red-brown glaze.

Four unglazed reddish brown earthenware fragments from the auger spoils have a molded pattern of bricks surrounding a gate or doorway. They may have been part of a model of a city wall or residential compound or possibly a toy.

A tiny 5.0-cm-long clay sampan with high stern (fig. 7.7) is glazed a pale greenish-gray (feature 42). The awning is depicted as woven wickerwork. Although the seams are indistinct, it was possibly made in a longitudinal two-piece mold.

Euroamerican Figurine

A bisque (unglazed porcelain) head wearing a broad-brimmed straw hat with a bow and streamers was part of the surface collection and is not necessarily related to Chinatown. It measures 4.8 cm across the width of the hat and 5.3 cm from top of the hat to the chin at the point of breakage. The head is hollow and not detailed on the back. The hair is parted in the middle and curly; the mouth is closed. This could have been a doll.

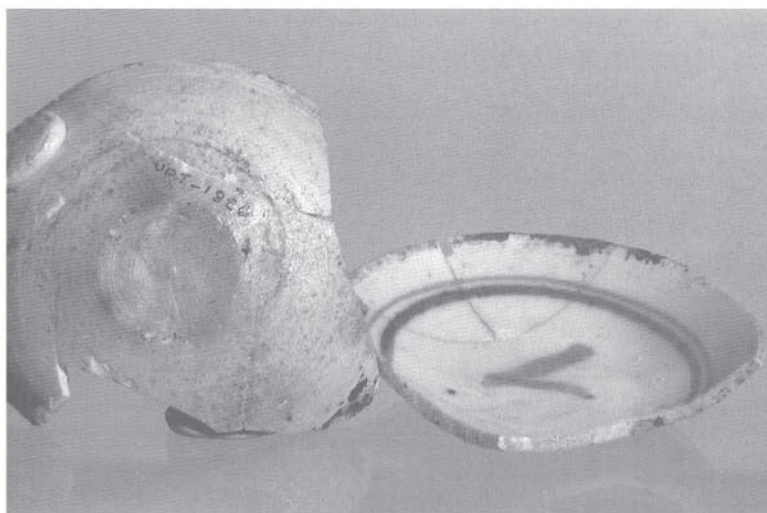
Lanterns and Lamps

Seven small porcelain dishes, unrecognized by any of the Chinese consultants, appear identical in size, shape, and decoration to those illustrated as oil lamps set on top of candlesticks. Resembling those described in the section on ceremonial vessels, they could have been used as candle holders in a ceremonial setting (International Photographic Salon 1957:77, 87). A photograph depicting their use as lamps was taken in Vietnam, and a view holding candles in Hong Kong, dates unknown (International Photographic Salon 1957:77, 87). The recovered specimens (fig. 7.8) are 7.0 to 8.3 cm in diameter, 2.0 cm high, and 2.5 cm diameter at the foot. Undersides are unglazed and unmarked. All specimens have one handle attached just below the rim. The upper side has a dry rim of about 0.5 cm, a double blue border below the rim, and a single Chinese character or emblem in blue in the center. The glaze is pale blue. The dishes, recovered from features 2, 17, 22, 24, 31, and AU-1, are larger and deeper than the condiment dishes. They differ also in having no glaze on the lower side, a flat base without ring foot, and evidence for a handle.

The rims of three specimens are encrusted with a dark substance, probably a product of burning. A Euroamerican butter pat of approximately the same size and shape has been put to the the same purpose and has the same tarry encrustation on the rim.

The Chinese have traditionally used small vessels such as these as lamps, inserting a wick and burning peanut oil or animal fat (Chou 1990). Hommel has described these small "bowls" of metal, earthenware, or porcelain which were used with unweighted rush wicks and sometimes with stands. Such vessels were used for more than four thousand years. He suggested that the closed oil lamp with holes for the wick and filling evolved from this simple form (1937:315–316).

Euroamerican lighting materials included kerosene lamps, regulators, wick holders, glass chimney fragments, as well as gas jets and burners. Kerosene lamp parts included globes, fonts, and burner assemblies. An intact Nutmeg night lamp, identical to figure 7.9, was stamped with the patent date of 1888 (Plume and Atwood 1906:40). Two other burner assemblies probably came from the same type or make, and there were numerous regulators, wick holders, and glass chimney fragments. Gas jets and burners and oil lamp chimneys are other evidence of illumination prior to electrification.



Brickmaking came early to Los Angeles, in response to increasing demands for building materials in an area which lacked wood. The first bricks were burned by Capt. Jesse Hunter in 1852. Joseph Mullally established the second brickyard in 1854. In 1859 alone, thirty-one brick structures were finished, requiring 4.3 million bricks in their construction. In 1861, the "old adobe buildings on the corner of Commercial and Main streets" were demolished, to be replaced by "a fine substantial brick block" (Thompson and West 1880). Urban redevelopment was already well under way. Mullally operated the brickyard in his own name until 1887–1890, when city directories listed him as the proprietor of the Pioneer Brick Manufacturing Co. The Los Angeles Pressed Brick Company, founded in 1887, was located north of Macy Street, just two blocks from Chinatown. Another manufacturer, the Simons Brick Company, opened its first yard in Pasadena in the late 1880s and a second on Boyle Avenue in East Los Angeles before 1900 (Rasmussen 1995:B3).

Bricks (fig. 7.10), isolated, aligned, or mortared together, occurred nearly everywhere, and most had been broken and dislocated during demolition. All the early technological processes were recognized—soft-mud, stiff-mud, and dry-pressed. Many had very coarse inclusions and soft edges; a number were misfired and misshapen. Only samples were retained. Most were fired red, although a few fire bricks were observed. Legible stamps on the bricks are listed in table 7.2.

Floor tiles included 1-inch white, hexagonal, unglazed examples, and round ones of $\frac{3}{16}$ -inch and

Small porcelain dishes like these have traditionally been used as lamps by inserting a wick and burning peanut oil or animal fat.

Photo by R.S. Greenwood



FIGURE 7.9
An intact kerosene night lamp identical to the one shown here was found, stamped with the patent date of 1888. After Plume and Atwood 1906:40

Table 7.2

Makers' marks on bricks

Stamp	Maker (probable)	Date
Atlas	Atlas Fire Brick Co.	1921-1927 (Gurcke 205)
Dougl.../Excel	Pacific Clay Products	1921-1942 (Gurcke 232)
G. McB	Gladding McBean	1875-1962 (Gurcke 240)
L.A. P. B. Co.	Los Angeles Pressed Brick Co.	1887-1926 (Gurcke 259)
L.A. Paving Brick Co.	Unknown	Unknown
J. Mullally/Los Angeles	Joseph Mullally	1854-? (Thompson & West 69)
Simons	Simons Brick Co.	1880s-1941 (Gurcke 296)
St L B & C Co.	St. Louis Brick & Clay Co.	1927-1935 (Gurcke 227,301)?
...CP	Tillotson Clay Products, Inc.	1953 (Gurcke 305)?

Sources: Gurcke 1987; Thompson and West 1880



FIGURE 7.10
Bricks found represented all of the early brickmaking processes; some were stamped with their makers' marks. Photo by R. S. Greenwood

1½-inch diameters. Two rectangular specimens were embossed:

- ☞ A. E. Tile Co. Mark of American Encaustic Tiling Co., in business 1875 to 1935; this mark was filed in 1905 (Lehner 1988:21); 6 x 1 x 0.5 inches. Feature 21.
- ☞ S.E.T.W. Mark of Star Encaustic Tile Co., 1886–1939. Monogram filed in 1905 (Lehner 1988:21, 480), Maroon. AU-1.

Door Hardware

There were thirty-seven ceramic doorknobs, with some paired examples still connected on the shank. Of the complete ones, twelve were white, eight

brown, and eleven black or extremely dark. There were four ferrous door rim locks and four backplates or keyholes; other hardware included hinges and one knocker. Padlocks may have served a number of purposes, and there were twenty-two keys to either doors or padlocks. At least three were made by the Eagle Lock Co. of Terryville, Connecticut, and appear identical to some in the 1908 Sears catalog.

Electrical Fixtures

Some structures in the community were apparently electrified around the turn of the century. The 132 marked and dated electrical porcelains include tube insulators, cleats, rosettes, switches, and other fittings. The patent dates and makers' marks go back to 1881, although historical photographs fail to depict poles and wiring until considerably later. The fifty-one nail knobs, compared to twenty-nine tubular insulators, suggest that electricity was more often added to selected existing structures rather than incorporated into new buildings. The eighteen rosettes may represent a single ceiling fixture in each room. The makers include Brunt, Thomas, T.T.P. Co., Paiste Co., Gordon, E. P. Co., A. I. & M. Co., A. M. C., A. P. C., H. F., and Freeman Electric (Tod 1976, 1977).

Summary

Even though most of the available historical photographs were taken in the twentieth century – probably with the deliberate intent of recording the best aspects of the tidiest blocks, the physical remains of structures can be related to the historical photographs and eyewitness descriptions (for example, Sterry 1922). The excavation results and historical views combine to suggest that many of the first buildings were wood frame and that the replacements, or newer structures, were built of brick. The predominance of cut nails over round wire nails and the bricks, which are early by both embossments and technology, are evidence that most of the structures date to the last quarter of the nineteenth century. The use of personal, portable lighting devices suggests that electrification was not available at the time of construction or affordable to all even later.

Subsistence

with a contribution by Mark A. Roeder

ANALYSES of faunal, fish, and plant remains provided information on the diet of the residents of Los Angeles Chinatown. The faunal remains were studied at the Zooarchaeology Laboratory, Institute of Archaeology, University of California, Los Angeles, to determine whether the Chinatown diet reflected the persistence of Chinese traditions or whether it showed major changes resulting from the adoption of traits and patterns of the host community.

The array of species was distinctive in contrast to faunas from Hispanic or Euroamerican sites in Southern California. Pork was the favored mammal, as opposed to beef. Mutton was absent. Chicken was the next favorite meat, followed by duck, turkey, goose, and pheasant. Turtles, both imported and local pond species, were used. Bone from imported cuttlefish was recovered from all features. Of minor importance, but visibly cut and cleaved, were ground squirrel, cat, and rabbit. Local fish species included horn shark, salmon, barracuda, corvina, spotfin and yellowfin croaker, white sea bass, ocean whitefish, sandbass, bonito, and halibut. From southern Baja California or the Gulf of California came parrotfish and shortfin corvina. Various types of yellow croaker and pufferfish were imported from South China, probably in dried or salted form. A minimum of three individuals was identified as *Gecko gecko*, an Asian lizard.¹ One crocodile tooth could not be identified as to genus or family, and two large snake

vertebrae are colubrid, probably *Pituophis* sp. Molluscan remains included black abalone, California and wavy chione, Pacific oyster (not native), Pismo clam, common littleneck clam, and California lucine.²

Fish remains were studied by Mark A. Roeder, Paleo Environmental Associates, to determine the species consumed, as well as Chinese involvement with regional fisheries, commercial fish distribution, and the participation in Chinese trade networks both with importation from the homeland and exportation back to China.

A sample of ninety seeds identified by Elizabeth Honeysett illustrates the importance of traditional commodities such as winter melon and bitter melon, two genera of the squash family, as well as such other Chinese staples as peanuts, peaches, olives, lychees, and ginkgo nuts.

Faunal Remains

A sample of 6,964 g of bone screened from features 2, 2B, and 3 was analyzed at the Zooarchaeology Laboratory, UCLA (table 8.1). The bone was in good condition, nonfriable but highly fragmented with the average weight of an individual specimen being only 1.5 g.³ Fish remains are discussed separately below.

As it was in China, where more pork was consumed than all other animal flesh combined (Anderson 1988), pork was the main meat consumed in

TABLE 8.1
Species from features 2, 2B, and 3

Common name	Taxa	Weight (in g)	%	NISP	%	MNI	%
<u>Mammals</u>							
Pig	<i>Sus scrofa</i>	2,487.7	35.72	958	21.26	23	11.56
Cow	<i>Bos taurus</i>	1,805.0	25.92	78	1.73	7	3.52
Squirrel	<i>Spermophilus beecheyi</i>	18.8	0.27	45	1.00	8	4.02
Cat	<i>Felis catus</i>	37.1	0.53	38	0.84	3	1.50
Gopher	<i>Thomomys bottae</i>	0.9	0.01	4	0.09	2	1.01
Rabbit/hare	Leporidae	2.1	0.03	2	0.04	1	0.50
Rat	<i>Rattus norvegicus</i>	1.3	0.02	2	0.04	1	0.50
Total		4,352.90	62.50	1,127	25	45	22.61
<u>Birds</u>							
Chicken	<i>Gallus gallus</i>	795.2	11.42	958	21.26	44	22.11
Turkey	<i>Meleagris gallopavo</i>	285.7	4.10	92	2.04	22	11.06
Duck	<i>Anas</i> sp.	81.4	1.17	95	2.11	20	10.05
Goose	<i>Chen</i> sp.	13.3	0.19	21	0.47	6	3.02
Pheasant	<i>Phasianus</i> sp.	4.8	0.07	5	0.11	1	0.50
Total		1,180.40	16.95	1,171	25.99	93	46.74
<u>Reptiles</u>							
Pond turtle	<i>Clemmys marmorata</i>	168.7	2.42	99	2.20	16	8.04
Turtle	Chelonia	6.9	0.10	7	0.16	4	2.01
Pond turtle family	Emyridae	2.9	0.04	6	0.13	1	0.50
Snake	Colubridae	0.1	0.01	1	0.02	1	0.50
Total		178.60	2.57	113	2.51	22	11.05
<u>Invertebrates</u>							
Cuttlefish	<i>Sepia</i> sp.	37.2	0.53	119	2.64	11	5.52
Crab	<i>Cancer</i> sp.	18.4	0.26	18	0.40	6	3.02
Cockle	<i>Chione</i> sp.	15.2	0.22	4	0.09	4	2.01
California lucine	<i>Epilucina californica</i>	1.2	0.02	5	0.11	4	2.01
Littleneck clam	<i>Protothaca staminea</i>	18.8	0.27	9	0.20	4	2.01
Black abalone	<i>Haliotis cracherodii</i>	26.1	0.38	8	0.18	3	1.50
Unidentified clam	Pelecypoda	0.6	0.01	3	0.07	3	1.50
Pacific oyster	<i>Crassostrea gigas</i>	22.8	0.33	4	0.09	2	1.01
Pismo clam	<i>Tivela stultorum</i>	9.9	0.14	2	0.04	2	1.01
Wavy chione	<i>Chione undatella</i>	T		2			
California chione	<i>Chione californiensis</i>	T		1			
Total		150.20	2.16	172	3.82	39	19.59
Total of all species		5,862.10	84.18	2,583	57.32	199	99.99
+ unidentified fragments		1,102.00	15.82	1,023	42.68	-	99.99
Total		6,964.10	100.00	4,506	100.00	199	99.99
T = trace							
NISP = number of identified specimens; MNI = minimum number of individuals							

Los Angeles Chinatown. The pig bones were mostly from juvenile animals one to two and a half years of age, and were frequently cleaved into 3-inch lengths. Ground squirrels are represented by the nearly complete mandibles and teeth of eight animals which were larger than those of modern reference specimens. In size, they compare favorably with the examples from Riverside Chinatown (Langenwalter 1987), but where that report denied their use as food, the remains at Los Angeles were visibly cut and cleaved, as were the cat bones. The gopher and rat remains were not modified and probably intrusive.

Chicken – like pork an excellent converter of cheap, inferior food into protein – was the second most common meat, with most of the bones being from adult birds. Only one of the ninety-eight recovered tarsometarsi contained a rooster's spur, suggesting that the flock may have been chiefly hens raised for both eggs and meat and that the aged, less productive hens were eaten. The duck bones compared to the mallard species in form, but they were larger than modern mallards. Possibly these were domesticated birds, because the feet bones showed a close comparison to those of cooked duck feet for sale in a modern Chinese delicatessen. The bones of geese were closer to those of the snow goose (*Chen hyperborea*) than to either the Canadian (*Branta canadensis*) or domesticated (*Anser anser*) goose; the latter are sold in modern Chinese poultry markets. The pheasants were probably the ring-necked species (*P. colchicus*).

Chickens and pigs were commonly raised in any available space. The abundance of eggshells in the deposits and the two nest eggs made of milk glass (recovered from AU-1 and feature 4 and embossed by the Cambridge Glass Co., which was formed in 1903 [Toulouse 1971:107]) provide additional evidence of provisioning.

Seven of the turtle bones are of species not known in the United States, and six other bones are too small to ascribe to the western pond turtle; all of these turtle elements could be imports, as was all the cuttlefish. Dried cuttlefish was imported as a traditional food item as early as the 1850s (Spier 1958). The dried meat was eaten, and the shells were added to poultry food. The meat was believed to be an aphrodisiac and the eggs a cure for bladder problems. Ground up cuttlebone was used to heal eye infections, asthma, and similar ailments (Grzimek 1972).

All the bone was examined for evidence of modification and burning (table 8.2). Most of the butch-

ered bone had been cut by cleavers (87 percent), with 7 percent cut by knives and almost as much by hand saws. Only two beef bones were possibly dismembered by machine saws. Very little of the bone was burned: only 4 percent by weight or 7 percent by the number of fragments.

Analysis of the body parts represented showed that rib fragments, metapodials, and phalanges were most abundant for pig, while the meatier parts of the animal, such as femurs, were underrepresented. The distribution suggests that the less expensive cuts of pork were being used, either by choice or necessity. One explanation might be that a family market sold the more choice cuts and retained the rest for family consumption, or the less costly cuts were purchased from an outside source.

There was not enough beef bone to yield a definite pattern. By numbers alone, bones of the foreleg, vertebrae, carpals, skull, and tarsals were most common. The low incidence says that beef was used rarely and that it was butchered off-site. Knife and cleaver cuts on the remains suggest that the beef parts were further divided before or after cooking.

Cleaver and knife cuts were found on bones from all parts of ground squirrels, cats, and chickens. The chickens were predominantly adult birds. One medullary bone showing the inner deposit of extra calcium common in egg layers suggests that the flocks were kept for meat and eggs.

Selected Fish Remains

by Mark A. Roeder

Except for recent studies of the fish consumed at Riverside Chinatown, little has been known about the fish species used by the Chinese at their Southern California settlements in the late nineteenth and early twentieth centuries. The excavations here yielded a large quantity of fish remains.

The sample of fish bones, bony parts, teeth, and scales examined constitutes only a small portion of the total recovery. Most of the elements are isolated vertebrae, which are difficult to speciate with confidence (Ritchie 1986). Salls (1988) has suggested that vertebrae can be identified to the species level, but the process is time consuming and prone to error. Even with local species, it takes a great deal of time to identify elements to the species level from vertebrae alone (Glassow 1965:6). While fish otoliths (earbones) are much easier to identify than vertebrae and skull elements, only the larger otoliths

TABLE 8.2
Modified bone from features 2, 2B, and 3

Fauna	Qty of Bones	Grams	MSW	HSW	KNF	CLV	KCL	BRN
<i>Anas</i> sp.	40	37.2	0	0	4	35	1	1
<i>Bos taurus</i>	68	1,693.1	2	34	13	27	3	1
<i>Chen</i> sp.	12	8.3	0	0	2	11	0	0
<i>Clemmys marmorata</i>	4	12.0	0	0	2	4	0	0
<i>Chelonia</i>	2	4.4	0	0	0	2	0	0
Emydidae	1	0.3	0	0	0	1	0	0
<i>Felis</i>	15	15.7	0	0	5	11	0	0
<i>Gallus gallus</i>	460	449.9	0	0	42	418	10	8
<i>Melagris gallopavo</i>	40	118.6	0	0	6	33	2	1
<i>Phasianus</i> sp.	2	3.3	0	0	1	1	0	0
<i>Spermophilus</i> sp.	4	1.4	0	0	1	3	0	0
<i>Sus scrofa</i>	640	1,848.4	0	46	40	568	8	14
Fowl	250	114.1	0	0	9	238	5	3
Cow-sized mammal	45	173.6	0	26	1	19	0	10
Pig-sized mammal	411	449.6	0	37	17	373	2	43
Dog-sized mammal	1	0.2	0	0	1	1	0	0
Cat-sized mammal	17	5.2	0	0	1	16	0	2
Rodent	1	0.2	0	0	0	1	0	0
Vertebrate	13	3.7	0	0	0	8	5	0
Total	2,026	4,939.2	2	143	145	1,770	36	83

MSW = number of machine sawed fragments; HSW = number of handsawed fragments; KNF = number of fragments cut by knife; CLV = number of fragments cut by cleaver; KCL = number of fragments cut by cleaver or knife unable to differentiate; and BRN = number of burned fragments

would be captured by the screen size employed by the necessarily rapid recovery excavation (Fitch 1967). Few skeletons were available for comparative purposes from other regions, such as Pacific mainland Mexico, the Gulf Coast of Louisiana and Texas, the Eastern seaboard, and South China, and only a few specimens of Chinese marine fish were available. Fish were imported from all of these areas (Collins 1987; Schulz 1982, 1984), and their remains may be present in the collection curated for future study.

Fish Fauna by Geographic Origin

Table 8.3 lists fifteen kinds of fish consumed and their geographic origin.

Southern California/Northern Baja California. Most of the fish identified probably came from the Southern California/northern Baja California area. Northern Baja California is included because in the late 1880s and early 1890s a fleet of Chinese junks based in San Diego Bay fished for bonito and barracuda from north of San Diego south 200 to 300 miles along the coast of Mexico. Of the 159 San Diego fishermen at the time, at least 52 were Chinese (Collins 1892). It is quite possible that the fish products were salted before they arrived; ice was

scarce.

The Chinese fishermen at San Diego salted and dried most of their catch to ship to San Francisco for subsequent export to China. In commenting on the nationalities of commercial fishermen in Los Angeles County, Collins stated, "The Chinese have no foothold" (1892:38). The same author listed barracuda, whitefish, roncador (probably refers to spotfin and yellowfin croakers), and smelt (probably including top and jack smelt and grunion) as the primary commercial catch at that time in Los Angeles and Orange counties.

Three of these groups were recovered at Los Angeles Chinatown. Collins also listed halibut, bonito, white sea bass, and sheephead as being sold fresh at various markets on the coast of Los Angeles County. Others, including barracuda, bonito, jewfish (black seabass), and whitefish, were salted and dried on Santa Catalina Island for the San Francisco market and shipped from San Pedro. Except for the black seabass, all were recovered.

Southern Baja California/Gulf of California. The southern Baja California/Gulf of California region is defined for two reasons. One is to reflect species that may have been taken by Chinese junks.

based at San Diego and other ports in northern Baja California, which fished in the warmer waters of southern Baja California (Collins 1892). The other reason is to reflect dried fish products exported from the mainland Mexico port of Mazatlan (Chace 1986) which possibly entered the Los Angeles market after 1900. Of the two species listed in table 8.3, the parrotfish was probably taken as an incidental species by Chinese junk fishermen in southern Baja California.

The shortfin corvina is included in both geographic areas in table 8.3. It is shown in the Southern California/northern Baja California region because it was taken commercially in San Diego Bay (Collins 1892). Although now extinct locally, it was caught into the 1930s in southern San Diego Bay (Fitch 1980). It is shown in the southern Baja California/Gulf of California region since shortfin corvina was mentioned by Collins (1987:129-130) in the analysis of the Riverside collection as a species imported from the Mazatlan area. Bell and MacKenzie (1923) listed "chalangandina" (shortfin corvina) as one of the species caught commercially in this area. They reported that Chinese wholesale buyers bought dried fish (croakers and other species) locally for export to San Francisco and, ultimately, China.

South China. Two species, the yellow croaker (*Pseudosciaena crocea*) and the larger pufferfish (family Tetraodontidae), represented dried fish imported from South China. These species have been reported from Riverside Chinatown and sites in northern California (Schulz 1982, 1984; Langenwalter 1980). Yellow croaker is still available in Asian fish markets in Southern California.

Discussion

Only a small fraction of the total number of fish remains has been examined; these conclusions are therefore preliminary and a more detailed understanding of that dietary category can be expected from future study of the collection. First, most of the fish identified were taken locally. No doubt, with greater effort, additional species from local and exotic sources can be added to the inventory. The local fish probably came from the fresh fish markets in San Pedro. The presence of parrotfish jaws possibly indicates that fish were obtained from the warmer water of southern Baja California and the Gulf of California. The pufferfish and yellow croaker signify the import of dried fish products from South China.

TABLE 8.3

Fish fauna

<i>Taxa</i>	<i>Common name</i>	<i>Qty</i>	<i>Feature</i>
<i>Southern California/Northern Baja California</i>			
<i>Heterodontus francisci</i>	Horn shark	1	2
<i>Oncorhynchus</i> sp. ?	Salmon	1	1B
<i>Sphyracna argentea</i>	Ca. barracuda	1	AU-1
		1	3
		2	29
<i>Cynoscion parvipinnus</i>	Shortfin corvina	1	21
<i>Roncador stearnsii</i>	Spotfin croaker	2	AU-1
		2	1B
		8	2
		1	10
<i>Umbrina roncador</i>	Yellowfin croaker	5	AU-1
<i>Atractoscion nobilis</i>	White sea bass	2	2
		16	3
cf. <i>Caudolatilus princeps</i>	Ocean whitefish	3	3
<i>Paralabrax</i> cf. <i>P. nebulifer</i>	Barred sandbass	1	2
<i>Sarda chiliensis</i>	Bonito	2	AU-1
<i>Paralichthys californica</i>	Ca. halibut	1	2
<i>Southern Baja California/Gulf of California</i>			
cf. <i>Scarus</i> sp.	Parrotfish	1	3
<i>Cynoscion parvipinnus</i>	Shortfin corvina	1	10
<i>South China</i>			
<i>Pseudosciaena crocea</i>	Yellow croaker	1	2
		1	12
		1	AU-1
Tetraodontidae	Pufferfish	1	2

Second, only two species, the parrotfish and shortfin corvina, possibly came from the southern waters of Magdalena Bay, Baja California Sur, Mexico. On the basis of the Riverside Chinese fauna and historical data of the Mazatlan fish markets, Chace (1986) has speculated that after the collapse of Chinese fishing off Southern California in the 1890s, dried fish products found their way into Chinese settlements in Southern California. If so, it is possible that the archaeological features analyzed were deposited prior to 1900.

Another explanation for differences between Riverside and Los Angeles may be the fact that a larger sample was analyzed at the Riverside site. Many of the identifications from the latter community were based on large otoliths that excavators could readily recognize and easily identify. More comparative material, particularly from the warmer waters of Baja California, the Mexican mainland coast, and South China, is needed to classify the large number of unidentified fish remains. Also needed are skeletons of

marine fish species from China and other areas that were sources of dried fish products and osteological material from freshwater species that were cultivated in ponds in China and harvested in other areas.

This first examination of a sample of these fish remains is important in demonstrating how osteological material can contribute to identifying and sourcing an important component of the Chinese diet. Because fish remains are small in size and require fine screening for recovery, they are not as obvious as mammal bones, and an important part of the subsistence pattern could thereby be underrepresented. With more reference collections of species from outside Southern California and further analysis of this assemblage, much additional insight and detail can be developed concerning Chinese fishing, marketing, and trade networks.

Plant Remains

Three species of melons were identified, one winter melon and two bitter melons. Twenty-five seeds represented *Benincasa hispida* (winter melon), whose fruits can be consumed during various stages of maturity. They can grow as large as 45 kg and have a thin, dark green skin that is hard and waxy, giving rise to the alternative popular name, wax gourd. Chunks of the mature melon are often used as a vegetable in soups. Two species of bitter melon, *Momordica grosvenori* (20 seeds) and *M. charnatica* (6 seeds), were also recovered. This light-green oblong fruit is parboiled in salted water to remove its bitterness.

Peanuts (*Arachis hypogaea*), of which four shell fragments were found, have represented an important staple in the Chinese diet ever since the peanut was introduced to China from South America in the sixteenth century (Ho 1955). Six whole peach pits (*Prunus persica*) and six halves were collected, along with three other pits identified only to the genus level.

The ten examples of the Chinese olive (*Canarium album*) are readily recognized by the ribbed seeds that taper to pointed ends. The pulp surrounding the stony seed is often preserved with salt. Also found were ten lychee seeds (*Litchii chinensis*), which come from the tropical and subtropical regions of South China where lychee has been cultivated for several thousands of years (Duke 1989). The edible fleshy pulp surrounding the single seed is translucent, juicy, and sweet when fresh; when dried, the fruits are dark brown, wrinkled, and sticky.

A single weathered shell fragment was tentatively identified as white nut (*Ginkgo biloba*). The maiden-hair tree from which the white nut comes has been cultivated as a sacred tree in Buddhist temple courtyards for more than a thousand years (Duke 1989). The pulp surrounding the seeds is removed before the seeds are boiled or roasted. This delicacy is served at feasts and weddings. Traditional lore maintains that white nuts aid digestion and alleviate the effects of alcohol, and the pulp and kernels are used in folk remedies.

Conclusions

The fauna identified in this sample are consistent with the arrays from other American Chinatowns, with perhaps a higher incidence of fish and shellfish because of proximity to the coastline and the screening and sorting methods. The numbers of pig and chicken bones are identical, but it is emphasized that by weight and meat mass, pork was by far the primary meat staple in Los Angeles. Within each animal group, the feet were disproportionately high, as they were in El Paso Chinatown (Mc Ewen 1984); the feet of pigs, chickens, and ducks are still regarded as delicacies.

Certain aspects of the faunal remains reflect traditional behaviors: the choice of animals and the use of cleavers. The preference for pork is consistent for Chinese American sites, and the consumption of ground squirrels and cats, although minor in the total protein intake, has been regularly reported. The quantity of duck and pig feet may represent another cultural tradition; both are distinctly overrepresented. The elements of beef and pork present represent the less choice, inexpensive cuts. Cleavers were used on all species from cow to cat, dog, and rodent. On cuts of beef most likely purchased from a market source and showing saw cuts, the cleaver was used for secondary dismemberment or stripping the meat, rather than for initial slaughter. Even with fowl, it is traditional to portion the meat into small pieces for rapid cooking in the wok or clay stove and for consumption with chopsticks. Comparatively little of the bone was burned, only 4 percent by weight; this may be at least partially attributable to the burning of trash deposits, rather an indication of cooking method.

Seafood was much more important in the diet than the small sample studied might suggest. A local demand existed among Chinese who were accustomed to fish in their diet, and an assured dis-

tant source existed in the homeland, where the means of preserving fish products for transport had existed for thirty centuries (Nash 1973: 7). Evidence of the imports is seen in the abundance of dried cuttlefish, certain skeletal remains, and the shipping jars. Yet fresh species were valued, and Chinese fishing enterprises developed in the 1850s. Chinese were active early in fishing off the California coast, in the shrimp industry centered around San Francisco Bay, and in the abalone trade based in San Diego, Santa Barbara, and the Channel Islands. They knew how to harvest, prepare, and dry abalone meat, which was considered a delicacy in China at a time when it was not consumed in this country, and had established an abalone camp in Monterey as early as 1853 (Lydon 1985). They sailed junks made in California until passage of the Exclusion Act of 1892 defined the junks as alien vessels operating in foreign water. Yet even after that, the Los Angeles Chinese contracted with others to provide transportation to the islands and controlled one-third of the trade (Chinn 1969).

Two facets of the analysis must be emphasized. First, the sample represents only a small portion of the total recovery from all features. Second, the mammals, birds, fish, reptiles, and mollusca which have left skeletal remains behind comprise only a very small part of the traditional Chinese diet. To the meat fraction must be added all of the preserved vegetables, grains, and other foods which were imported in the stoneware jars, plus the fresh produce grown and sold locally. It has been estimated that 98 percent of the Chinese diet is of plant origin (Baher-Stein 1979:107). There is little evidence, in the form of glass or tin containers, that much of the diet came from Euroamerican products or markets, and almost none that self-sufficiency was bolstered by canning or pre-

serving at home. Fresh vegetables, always a major component in the Cantonese cuisine, would have been abundantly available from the Chinese predominance in truck gardening, vending, and later, produce brokering, and there is documentary evidence that chickens and pigs were commonly raised in any available space. As mentioned, eggshells were abundant in the deposits, and two milk glass nest eggs are further evidence of this backyard economy. Overreliance upon animal bone in attempting to reconstruct the subsistence pattern would bias the interpretive effort; fresh meats have not traditionally constituted a major fraction of the total intake, and the archaeological remains – other than the sample of identified seeds – do not reflect the consumption of fresh vegetables.

Notes

1. Reptile remains were examined by Dr. Robert M. Sullivan at the Natural History Museum in San Diego.
2. Oysters were brought into Los Angeles as early as 1857, when commercially produced ice was available (Thompson and West 1880:67).
3. Selected examples of more complete bones from feature 16 were analyzed to estimate their comparability with the other provenienced material. Feature 16 yielded a pig cranium, juvenile turkey, cut and cleaved adult domesticated goose, cleaved Canada or snow goose, uncut whole long bones and pelvis from a chicken, and several types of duck bone (one about mallard size and another smaller one, more like pintail or other wild duck). This assemblage is comparable with the screened sample. The detailed reports of mammals, birds, and seeds, with quantifications and species accounts, are available at the University of California, Los Angeles.

Conclusions

THE METRO RAIL STUDIES in history and archaeology have contributed information and additional insight into the life of Chinese Americans in Los Angeles from the 1880s until 1933. The physical evidence of a specific population living in a particular place at a definite period in time can provide insight into a bygone way of life. Chinatown was clearly more than a neighborhood: it was a viable, self-sufficient community able to fill its own needs, with a diversity of enterprises providing employment, an internal social structure, an international trade network, and a flow of new arrivals.

Los Angeles Chinatown is significant as an urban neighborhood large enough to have sustained itself through the periods of restricted immigration until new immigrants arrived later in the twentieth century. In Ventura, San Diego, the Arizona settlements in Prescott, Phoenix, and Tucson, and others, the initial immigrant group was small. Around the turn of the century, a number of reasons – an aging populace, return to the homeland, dispersal to seek employment elsewhere, or redevelopment pressures from the host community that forced physical relocation – caused their disappearance. Other sites of Chinese occupation – mining, agricultural, railroad, and other construction camps – were temporary by nature, located in rural or isolated settings, and skewed toward a male population homogeneous in status, geographical origin, and occupation.

In Los Angeles, the Chinese population was sus-

tained not only by family units but by expansion in numbers and diversity through the arrival of professionals and merchants who were allowed to enter the country even after the Exclusion Act of 1882. The Immigration Act of 1924 was later amended to permit the entrance of Chinese women who had married American citizens prior to 1924. Other newcomers, “paper sons” (those claiming family ties or business obligations), and those smuggled in, were drawn to the existing nucleus.

The recovered cultural materials have yielded information about the nature and origin of the goods they used, consumed, wore, played with, sold, and discarded. The boundaries of certain buildings and streets have been established. Despite demolition and subsequent filling, the community settlement pattern is intact below the 14 to 18 feet of imported soil and the facilities of the railroad station. Although the history of Apablasa Street encompasses several different periods and functions, from the agrarian occupations of the Keller family to the domestic and commercial activities of twentieth-century Chinese Americans, the areas excavated are within the mapped boundaries of Chinese habitation, and the greatest proportion of the remains are confidently associated with Chinatown. The site reflects changes that came about in response to external conditions which are themselves the patterns of history.

The conclusions and interpretations presented here are based upon a synthesis of the historical background

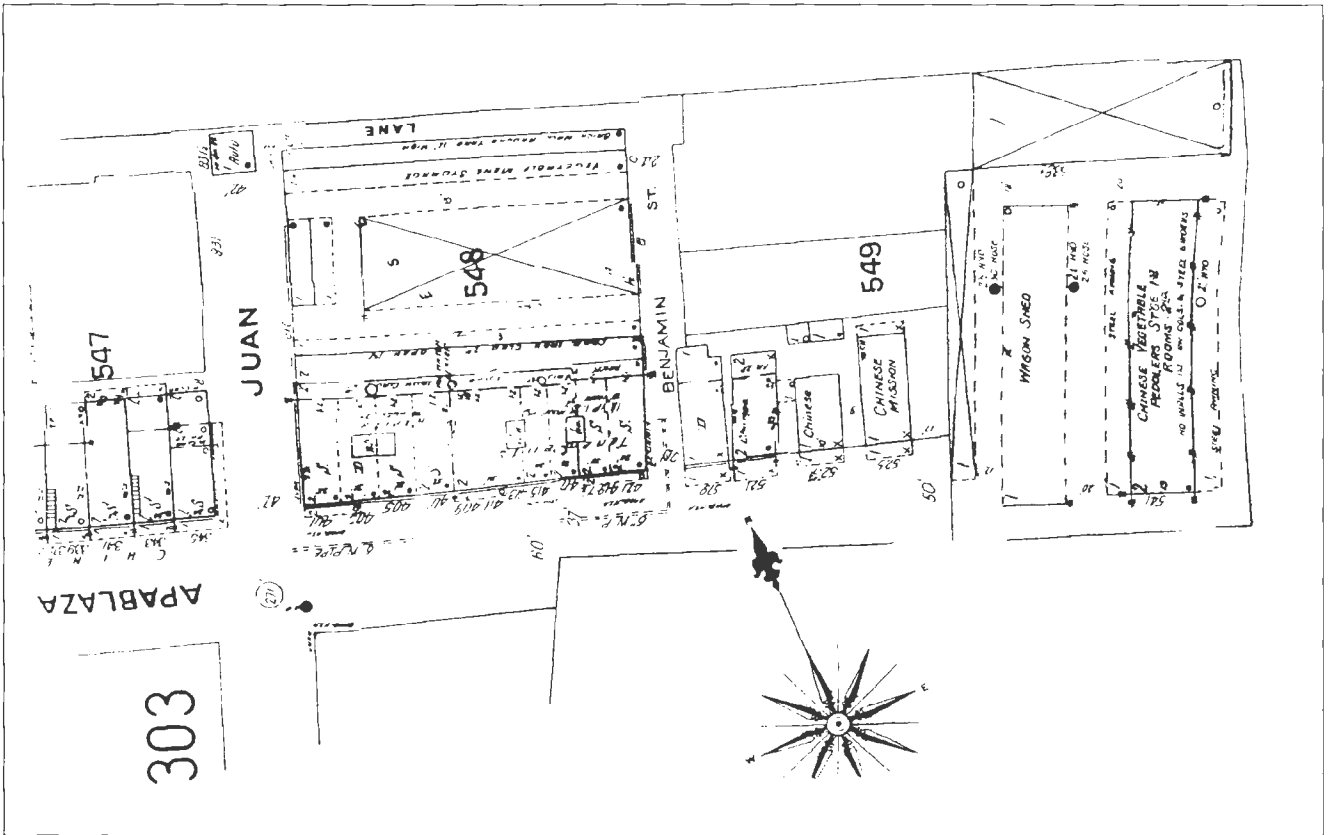
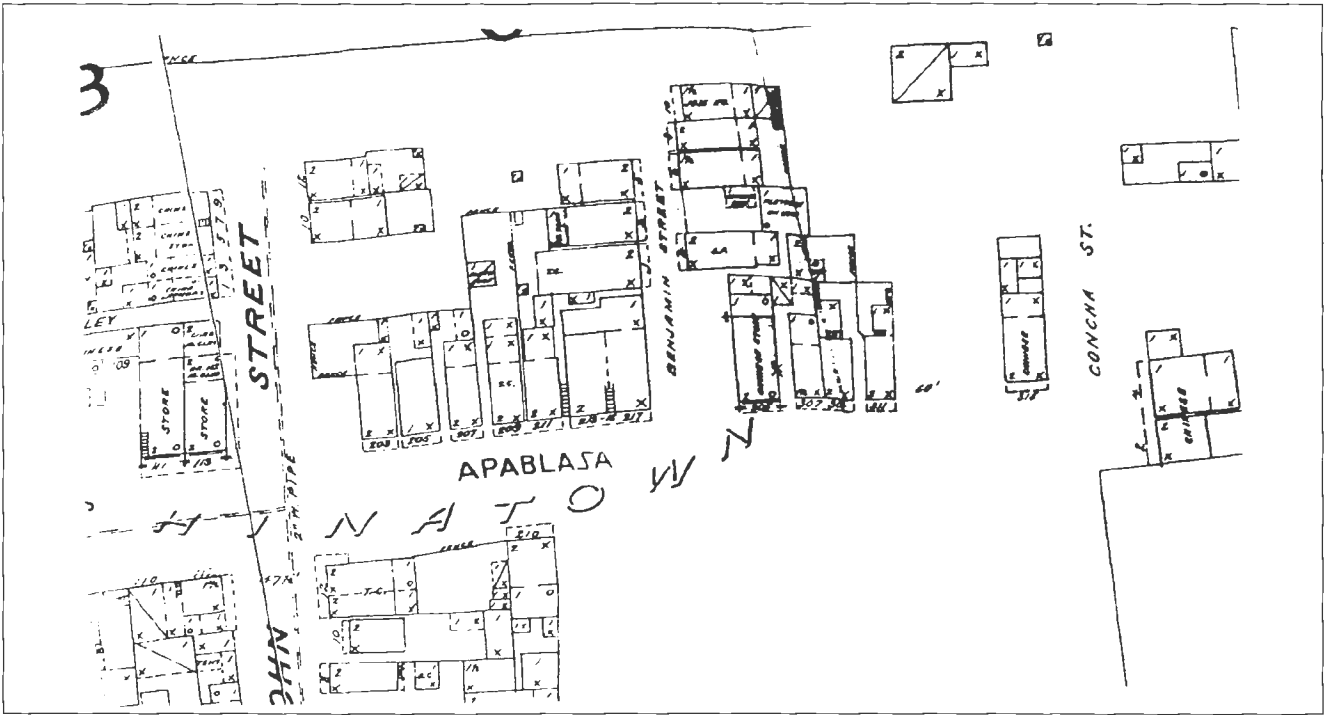


FIGURE 9.1
 The modest frame houses along Apablasa in the 1889 Dakin map (top) were replaced by the first vegetable marketplace prior to 1906 and by the later complex shown in the 1925 Sanborn map (below).

and the artifacts, structural remains, and other observations resulting from the excavations. The fifty-nine features examined correspond to five categories: trash deposits; architectural remains; landscape features, such as, fence posts; privies; and paved surfaces. Most of the architectural features were correlated with structures mapped or described in the historical documentation. This correlation, in turn, allowed a more refined dating and interpretation of the refuse deposits and some of the more ambiguous architectural features, such as brick alignments, piers, and fence posts.

Dating

Most of the refuse deposits contained artifacts that can be confidently dated by makers' marks from 1875 to the 1930s. These dates derive from items of Euroamerican manufacture. The far more numerous articles made and consigned in China were very rarely embossed or backstamped with datable marks. In contrast to the Euroamerican inventory, the Chinese wares are also not typically amenable to dating by either technology or decoration because of conservatism in forms, styles, patterns, and other traits.

The few datable Chinese artifacts include one tea bowl and a Four Seasons serving bowl made between 1736 and 1795, which were either heirlooms or fraudulently marked; a plate made between 1862 and 1874; two rice bowls made between 1875 and 1907; two rice bowls and one opium pipe bowl made in either 1843 or 1903 (based on the 60-year cycle); and one rice bowl from either 1840 or 1900 (again based on the 60-year calendar cycle). The scrolls hanging in the herbal shop (fig. 6.8) were written in 1883.

Settlement Pattern

The concentration of early 1900s trash deposits reflects the greater density of Chinese, who were then living in the brick shops, tenements, and boarding houses that replaced the single-story wood-frame dwellings of the 1880s. The Chinese population in the city had increased from 605 in 1880 to at least 2,111 in 1900. The larger replacement structures of 1900 created housing for those who grew and sold vegetables or worked in shops often located on the ground floors. As the older structures were demolished, this second generation of buildings contributed to the accumulation of discards and the preservation of the trash pits and other features later sealed below. The 1889 Dakin map and later 1925 Sanborn map depict these changes (fig. 9.1), with the modest wood-frame houses along Apablasa being replaced by the first

TABLE 9.1
Opium pipes and lamps, Asian coins, and gaming pieces

	Opium pipes	Opium lamps	Asian coins	Gaming pieces	Total
Analytical unit 1	34	15	100	34	183
Feature 1	3	1	5	41	50
Feature 2	4	4	14	25	47
Feature 3	3	3	24	35	65
Analytical unit 2	0	0	38	146	184
Feature 11	5	1	5	18	29
Feature 12	1	1	1	2	5
Feature 16	1	0	0	13	14
Feature 18	1	1	2	14	18
Combined feature	1	0	16	86	103
Feature 22	0	0	1	71	72
Feature 27	0	2	2	5	9
Feature 29	11	14	17	207	249
Feature 30	0	1	6	09	106
Feature 31	1	0	13	0	14
Feature 32	0	0	11	43	54
Feature 33	0	2	10	16	28
Analytical unit 3	1	2	15	103	211
Feature 38	0	3	3	6	12
Feature 39	1	4	9	22	36
Feature 40	0	2	0	6	8
Feature 41	1	0	3	18	22
Feature 42	0	0	0	14	14
Feature 43	0	2	0	4	6
Features 44, 45, 46, & 50	1	1	0	4	6
Feature 47	3	0	1	2	6
Feature 48	0	0	0	2	2
Feature 49	4	0	0	4	8
Features 51 and 55	8	2	0	44	54
Feature 52	0	0	0	0	0
Feature 53	0	0	0	0	0
Feature 54	10	1	0	0	11
Feature 56	7	2	1	0	10
Feature 57	8	1	0	1	10
Feature 58	1	0	0	2	3
Feature 59	0	0	0	0	0
A-136	0	0	0	0	0
Emergency exit 10	0	0	0	0	0
West entrance	0	0	0	0	0
Totals	110	65	297	1,177	1,649

vegetable marketplace prior to 1906 and by the later complex before 1925. In 1933, the vegetable market at 810 Juan Street (locus 4) still existed, although it was soon to be demolished (*Los Angeles Times* 1933b).

The co-occurrence of specific types of artifacts is useful for indicating the locations of various activities that would have been conducted in a communal setting rather than in individual households. For example, opium pipes, opium lamps, Asian coins, and glass gaming pieces tend to be found in the same deposits, suggesting common origin in a public facility. Table 9.1

FIGURE 9.2

In this view of the area before demolition, Chinatown is at right center; the vacant space is the playground. *Photo courtesy California Historical Society, Los Angeles History Center no.14531*



FIGURE 9.3

Pictures of the vicinity after demolition and filling make clear that the cultural horizon had been buried and sealed. *Photo courtesy California Historical Society, Los Angeles History Center, no number, no date*



shows that features in locus 1 (features 1 through 15) and locus 2 (features 16 through 38) have greater quantities of each artifact category, in contrast to loci 3 and 4. Features in areas or stratigraphic levels that can be associated with communal or commercial activities such as warehouses, stables, and corrals, were less apt to contain such domestic items as jewelry, toys, table porcelains, or other personal possessions. Analysis of artifact groupings thus suggests patterns of behavior and functional distributions.

Because the four areas excavated encompassed only a small part of the north side of Apablaza Street, they

do not represent the full range of activities and enterprises that occupied this colorful and busy block. Eyewitnesses have described a “fan tan house” and “the only Chinese blacksmith shop in America” at the corner of Apablaza and Juan streets (Bingham 1942:107, 130), although neither the dates nor corner were recorded. The latter may have been the smithy of William Winslow at 423 in 1901. Other enterprises on the north side of Apablaza listed in the city directories around the turn of the century include an employment agency at 307; a tea dealer at 335; tailors at 311 and 401½; a poultry shop at 303; fish market at 321½; bar-



FIGURE 9.4
The numerous trash deposits may be attributed to several factors including lack of municipal services and quantities of food imported in containers that were not recycled. Photo courtesy Chinese Historical Society of Southern California, no. 75-02/12.

overs at 301, 303½, and 307½; cigar maker at 337; drug-gist at 323; and numerous dry goods, grocery, produce, and general merchandise stores.

The settlement pattern on the south side of Apablaza was apparently quite different, with almost all the structures depicted in 1889 between Alameda and John streets actually facing Marchessault; only the rear yards or outbuildings were visible from Apablaza. The very few assigned even house numbers were on either side of the John Street intersection, and there was none east of 210, which was short of Benjamin Street. After the street numbering changed, an interpreter was listed at 310 Apablaza (west of John Street), and political rallies were held in a hall at 346 Apablaza (southwest corner of John and Apablaza) during the years of Nationalist agitation in China (Bingham 1942:124). Even farther south was one of two Chinese theaters, set slightly back from the southeast corner of Alameda and Marchessault, as indicated on the 1883 Sanborn map. By the time the 1889 Dakin map was drawn, this structure had been replaced by a commercial block. The other theater was west of Alameda Street and east of the Pueblo Plaza.

The earliest years of occupation on the site, by the vineyardists and the Sisters of Charity, were not well represented in the areas accessible for excavation, but experience suggests that such deposits are probably present in the vast majority of the Union Pacific Terminal block not yet investigated, that area closer to

Alameda Street. The historical research contributed clues to the locations and identities of potentially sensitive areas, but not all were within area that would be impacted by Metro-Rail construction. For example, even though the ground plan of the Sisters' complex is known, most of the Metro Rail construction through this northwest corner of the block was accomplished by tunneling below the cultural horizon. Cultural materials were recovered in the ramp area near this corner where construction augering was done and monitored. These materials included Chinese ceramics from the upper levels and, below that, the plain Euromerican whitewares of a date, type, and national origin suggestive of use in a school and orphanage.

Interpretation of the earliest years through archaeological methods was limited by the constraints placed upon the areas that could be investigated. It is probable that privies, trash deposits, structural elements, and comparable features associated with the vineyardists and the charity are present and, from the depth at which other features were found, that they probably retain their integrity below the modern station and its facilities.

It has been dramatically established that the intact remains are deeply buried. Pictures of the vicinity before demolition and after the import of fill (figs. 9.2, 9.3) make clear that the cultural horizon has been buried and sealed by as much as 5.2 m (17 feet) of fill, which was brought from Fort Moore Hill (*Los Angeles*

Times 1933b). The horizon was not been impacted by the construction of the station and subsequent improvements. Before construction of the Metro Rail, the only disturbance was the construction of the original railroad passenger tunnel.

The numerous trash deposits may be attributed to several factors. The documents demonstrated the lack of municipal services and showed that the codes and standards which prevailed elsewhere were not enforced in Chinatown. At the same time, great quantities of foods were being imported in containers that were not recycled, as Euroamerican canning jars would be in another context. Each product would come in another of the stoneware vessels, and so there was no need to save them. Rubbish from the produce market, and probably from households, piled up on the streets (fig. 9.4), in side or rear yards, and under structures, or became sheet trash. Lacking an institutionalized system of rubbish disposal, many discards would have been buried in prepared pits or used as fill. It is less clear whether the fire-affected artifacts were the result of the fires that swept Chinatown or of deliberate burning, as reported at 810 Juan Street in the vegetable market (*Los Angeles Times* 1933b).

Evidence of Economic Diversity

The diversity of the Los Angeles settlement is reflected in its artifacts. An upper social and economic hierarchy with broader social and economic interaction lived above the level of bare subsistence occupied by people working in the produce business and small shops. This class distinction became more apparent following the legislation that restricted the immigration of laborers but permitted the entrance of merchants and professionals. For example, the 1900 census enumerated 138 farm laborers and 87 vegetable peddlers, but also 5 doctors, a dentist, 2 druggists, 2 interpreters, at least 11 merchants above the level of shopkeeper. Others were sufficiently prominent that their lavish weddings and funerals were reported in the *Los Angeles Times*. Such possessions as gold cufflinks and vest or pocket watch chains, suspender clasps, garter fasteners, and collar buttons are not associated with the typical workingman's clothing, which was still commonplace in street scene photographs in the later years. The haberdashery suggests the presence of men more integrated into the broader community by wealth, status, occupation, and education, and is not an indication that the workingman had adopted Western clothing as an expression of acculturation. Rather, it is interpreted as evidence of stratification within the Chi-

nese community, just as jewelry and the more elaborate one-of-a-kind porcelain tablewares suggest the presence of more privileged women.

Los Angeles Among Other Chinatowns

The urban Chinatown is distinctly different from labor camps or rural agricultural sites and must meet different conditions to survive. One writer has concluded that the host city must have a population of at least 50,000 and support a diversified economy rather than a single industry (Takaki 1989:239). While the smaller Chinatowns declined as a result of the exclusionary laws, shortage of women, unemployment, and the aging of the first immigrants, Los Angeles attracted and sustained a flow of new arrivals. As employment opportunities in railroad construction, agriculture, and mining declined elsewhere, larger urban settings offered niches for the Chinese to work for wages or to operate small, low-capital but labor-intensive enterprises. Opportunities outside of Chinatowns, limited by prejudice, were further constrained by the depression of the 1890s and the increasing organized opposition by the growing American labor movement.

Location and Relocation

The Chinese, as a factor of their economic and social condition, occupied land of little value. Chinatowns typically developed in proximity to ports and docks (San Diego and San Francisco), railroad stations (Boston, Pittsburgh, and St. Louis), and lowlands that are subject to flooding (Ventura and Napa). The Chinatown described here was near the Los Angeles River and subject to flooding, next to the noisy and sooty railroad yards, and adjacent to the smoky and odoriferous gas plant.

Chinese settlements within the host city were regularly relocated as enclaves were forced to move by pressures for urban growth or redevelopment. The community reported here first occupied existing structures: the old adobes around the Plaza. Then, popular pressure, fear, suspicion, and commercial development forced it to move from its first location to a property that nobody else wanted and that was hemmed in by the railroad, gas plant, and such industrial enterprises as the lumber and brick yards.

In the relocated Chinatown, Chinese owned few structures, especially after 1913 when California's Alien Land Law prohibited noncitizen Chinese from purchasing property. Even though the structures themselves were built as typical Western buildings of the

period, the Chinese modified the elevations and adapted the interiors, furnishings, and functions to establish a more familiar environment. With no room for expansion, the settlement pattern recreated life in urban China by subdividing the blocks with alleys, utilizing balconies to maximize domestic space, building to the property lines, and creating contiguous structures.

Architecture and Use of Space

The architecture and use of space are also comparable to other Chinatowns. Settlement features included high-pitched, front-gable roofs on the wood-frame buildings; long-but-narrow floor plans so that more structures would have frontage on the street; party walls that obscured property lines or ownership; and the intermingling of shops, residences, and joss houses. Structures opened directly onto the street without steps or front yards; available space at the rear was often used to raise vegetables, pigs, or chickens. In Los Angeles where lumber was scarce, brick buildings replaced the earlier adobes and wood-frame buildings, but the pattern remained the same and reflected the great population density.

Feng Shui

From the placement of structures and their external appearance, there is no evidence for the use of *feng shui* in building design; the long-but-narrow footprint of the buildings would seem to be economically motivated, giving more of the shops a streetfront exposure. It cannot be known whether screens, mirrors, or talismans were used indoors to create an environment in harmony with nature. Given the density of settlement, the division of space into tiny rental cubicles, and the social background of the workmen, it is not likely.

Although the beliefs that motivated the practice are ancient in China, *feng shui* was applied primarily to the tombs of the most important families and imperial palaces. Its particular relevance to burial places is that the character of the grave was believed to influence the future well-being of the decedent's family (Osgood 1975[1]:111 and passim). Ethnographic studies among the working class in China are consistent in that many Chinese do not know about *feng shui* or if they are aware of the practice from elders, do not observe its traditions. The Catholic Church also discouraged the practice (Osgood 1975[1]:195; Kwok and Lam 1979).

Greater Los Angeles

In terms of the separation of home and workplace, the organization of spatial relationships in Chinatown did diverge sharply from the pattern in greater Los Angeles. In American cities, once the household ceased to function as a productive unit and became the place for consumption and family life, separate residential neighborhoods evolved apart from the place of employment (Wall 1985:185–189). In Los Angeles, those who could gradually moved away from the Pueblo center, while businesses became more concentrated downtown. Wholesalers flowed toward the railroad station, professionals concentrated on the Temple Street vicinity, and craftsmen spread over the south-central area. These enterprises covered only a few square blocks but dominated the town's economy by 1885 (Fogelson 1993:138). This shift did not occur in Chinatown, but density increased as a result of the multiple usage of such structures as shops, workshops, storage, and living quarters. Those few who did move away were apt to be the more prosperous and had the most interaction with the host community. Examples include the herbalist Dr. Tom Leung, who catered to an American clientele from his residence at 903 S. Olive Street (Larson 1990), and the antique dealer Fong See, first on Los Angeles Street and at 328 South Spring and 414 North Main. In all these moves, the family continued to live above the salesrooms (See 1995:64–65).

Interpretation of Ceramic Artifacts

The quantity of items reported from only a small area within Chinatown may seem overly large to the point of redundancy but has proven to be valuable. Sizable numbers are needed for statistical validation of the conclusions drawn; and the rare or unique items are more apt to be recovered in proportion to the volume of the sample. One example of a class of items not previously reported is the portable clay stove. Other artifacts for which new information is developed include the spittoons, toothbrushes, small porcelain oil lamps, herbal steamer, bulb planter, porcelain pillow, and works of representational and symbolic art in clay and stone. While Celadon-type ceramics are typically reported only as bowls of various sizes, the Los Angeles Chinatown collection also has plates, spoons, and handles. The sheer numbers of this and other wares make possible more focused analyses of the ceramic patterns, a continuing concern in developing interpretations based on chronology, date, and cost. Other studies have variously reported distri-

butions based on total vessel counts or sherd counts, undifferentiated among vessel forms even though Bamboo is known, so far, only on rice bowls, and, more than any other pattern, Four Seasons occurs on all ceramic forms.

In Los Angeles, it was possible to arrive at interpretations of patterns based on minimum numbers of rice bowls alone because the sample of just this shape numbered 787 pieces. Bamboo, among the least costly, was almost as prevalent as Celadon, an expensive ware. Had all forms (for example, tea and wine bowls, plates, spoons, serving vessels) been included in this calculation, Four Seasons would appear to be by far the predominant pattern. Clearly, this conclusion would be misleading because households apparently used many rice bowls of various patterns on the same table along with Four Seasons serving pieces and auxiliary wares. The array of ceramics was inconclusive for chronology, except that the Double Happiness pattern, generally accepted as having been replaced by Bamboo in the 1870s, was represented by only four rice bowls. The more exotic one-of-a-kind porcelains are interpreted as belonging to the more prosperous people.

Cultural Cohesion and Acculturation

For several reasons, measuring acculturation by computing the ratios of Chinese to Euroamerican artifacts or foods is less relevant to this collection than it might be at other sites. Most of the early Euroamerican ceramics, especially the thick, plain, undecorated whitewares that constitute the bulk of this category, can be associated stratigraphically and chronologically with the Sisters of Charity complex. Within the great volume of artifacts recovered from the Chinese context, however, a major consideration in assessing issues of consumer choice, as opposed to acculturation or adaptation, is the flow of population through Chinatown. Some have postulated that a gradual progression toward social integration occurs and is reflected by fewer goods being imported in the later years of a settlement. This theory assumes a static population and changes in consumer preference. The people present from 1910 to 1930 were not, however, necessarily the same people here in 1880, nor even necessarily descendants of the same families. Increasingly, there was greater diversity in place of origin, occupation, social and family status, and even in language as more of the merchants with international trade contacts came from the newly industrialized Mandarin-speaking centers north of Canton.

In Los Angeles, lack of access to goods could not

be an explanation for consumer choices because Chinatown was adjacent to the downtown commercial center. Products of all kinds were available within a few city blocks, as most obviously demonstrated in the prescription bottles and children's toys. The apparently steady ratios of American versus imported foods and beverages, health care products, tablewares, and forms of recreation apparent in this collection may instead indicate that subsequent waves of immigrants had the same level of preference. In other words, the proportions of homeland goods and foods might be the same, but the people who used them were different. New arrivals were likely to settle amid their countrymen and seek out and consume the traditional commodities with which they were familiar. This is particularly true in the twentieth century and is very dramatically expressed by the many Asian subpopulations in and around Chinatown today.

Another factor influencing this continuing cohesion in the twentieth century is an attempt at cultural survival by perpetuating – even reviving – traditional behaviors as a response to external hostility. In this urban context, the low level of acculturation is attributed both to aggregative forces from the compact and socially isolated settlement and to external sociocultural barriers to expansion imposed by the host city. The long hours required to run a laundry or restaurant would, for instance, contribute to social isolation. Chinatown was inward looking, largely self-sufficient in relation to Los Angeles; it maintained its ethnic boundary by avoiding assimilation and remaining dependent on the homeland and internal social networks. People were closely linked by ties of obligation, trust, contract, and expectation to the complex and overlapping hierarchy of societies, which were, in turn, related to others in San Francisco and responsive to evolving political events in China. These ties and the traditional familial obligations influenced the behaviors and perceptions of the members.

Interaction with Host Community

One process that illustrates how Chinese Americans in Los Angeles sought to express cultural resistance in the face of hostility was manifest in gambling (Lou 1984:160–169). Gambling was far more than an individual's way to pass what little leisure was left at the end of the day. It was an organized structure demonstrating a process by which Chinese Americans defended the legitimacy of an enterprise and control of their own community. In the 1870s, the first Chinese had settled in and around the old Plaza, a multicultural

area of the young city which was wide open to saloons, gambling, and prostitution. Open gambling was accepted by both sexes, all nationalities, and the city government that complained only of *faro*.

From 1876 to 1890, fan-tan parlors proliferated, and public pressure for abatement coincided with the rise of the anti-Chinese movement in southern California. The Chinese operators actively defended the legitimacy of their activities and their right to continue; they defined an acceptable level of police intervention, paid for protection, and contributed to political parties. The whole community turned out at open meetings to protest harassments. At one such meeting, 300 to 400 Chinese resolved that they would resist all city attempts to stop gaming, fortify all buildings used for gaming, and levy a tax of \$30 per week per game, to be used for police protection and a legal defense fund.

In 1890 to 1900, a new municipal administration and economic depression combined to drive fan-tan from the public eye, restricting it to Chinatown. Lottery, dice, and pool, however, found ready acceptance by people of all races. There were some 90 lottery games by 1897, prompting brutal repression by the police. New laws, penalizing landlords as well as operators and patrons, finally eroded the popular base and closed the shops outside Chinatown, where the games continued behind closed doors.

It was the business leaders – in this case, gambling operators – who had the language and political skills necessary to exert power and interact with the municipal and police authorities in defense of an activity important to the community. This is a later, and broader, expression of the resistance exerted by the vegetable peddlers in the vendors' strike of 1878, organized to protest license fees and regulations. Some of the herbal doctors also interacted with patrons outside Chinatown, soliciting patients via newspaper advertisements. While some doctors wore Western clothing in their offices, others chose to be portrayed in ads in traditional Chinese dress, perhaps to enhance the mystique of their practice. The other group having the greatest contact with local citizens was the children who attended public school. Although they were shunned in play and returned promptly to Chinatown after class, some assimilation is shown in their typical Western toys. In each case, whether in language, clothing, or playthings, these adaptations may be regarded as accommodations rather than cultural or behavioral transformations.

Language & Custom

Isolation was social and cultural, as well as geographic. Language was always a barrier for the newcomers. The early immigrants who worked in the mines, construction, or agriculture relied on the *compradors* (go-between or contractor between the employer and the coolie) who supplied their physical needs and transmitted instructions. Acquiring English was not necessary, and, because permanent residence in America was not an objective, there was little incentive to learn. The so-called sojourner was defined by what he perceived as temporary residence. To find support in the alien environment, he retained his accustomed ways, type of clothing, and food; he practiced great thrift, had Chinese agents represent him, and wanted his bones returned to the homeland if he died abroad (Nash 1973:44). Those who moved into the cities and those who arrived later in California found established settlements and moved into existing hierarchies on the lower levels. Despite efforts by missionary groups to teach English, most of the newcomers remained ethnically and economically isolated, insulated by language barriers and segregated by prejudice. Stratification within the community was thus social and economic rather than by national origin.

The Chinese on their part also experienced much of the same kind of fear, mistrust, and misunderstanding of social customs that so affected their reception and treatment in Los Angeles. A collection of Chinese observations and perceptions of life in America from 1848 to 1987 (Arkush and Lee 1989) illustrates the gulf between the two cultures. A diarist accompanying government envoys in California in 1868, for example, attempted valiantly to hold a knife and fork which he concluded were too noisy, tried coffee which he reported tasted like "the rank odor of sheep," considered it worthy of note that men and the "barbarian" women ate together, and that the "barbarian" (English) language sounded like "jujudongdong" (Arkush and Lee 1989:32–34). The same commentator drew a distinction between Chinese civility as expressed in prostrating oneself or bowing and American sentimentality shown by body contact such as, shaking hands or kissing (Arkush and Lee 1989:39). The sufferings and humiliations of Chinese at points of entry and America's harsh treatment of them were widely publicized in China, even leading to a boycott of American goods in 1905–1906 during renegotiation of the Sino-American treaty (Arkush and Lee 1989:58). Many compared the position of American women and the nature of American family life to Chinese customs, con-

cluding that the position of women was higher and more dignified in China where women were more sheltered and parents arranged marriages (Arkush and Lee 1989:108–109).

Food

Customs related to food have always occasioned comment and comparison. The labor contractor at a railroad construction site near Merced provided the following to his workers in 1870:

dried oysters, dried cuttlefish, dried fish, sweet rice crackers, dried bamboo sprouts, salted cabbage, Chinese sugar, four kinds of dried fruits, five kinds of desiccated vegetables, vermicelli, dried sea-weed, Chinese bacon, dried meat of the abelona shell, peanut oil, dried mushrooms, tea, and rice. . . pipes, bowls, chopsticks, large shallow cast-iron bowls for cooking. . . lamps, joss paper. . . Chinese shoes, and clothing imported ready-made from China [Spier 1958:130].

Imported foods were available even in the remote Gold Rush mining camps.

An ambassador complained in 1881 that “seafood, swallow’s nest, soy sauce, sesame oil, and such delicacies are generally unavailable in Western countries.” These items should be brought to America and also Chinese porcelains, “which are greatly appreciated by Westerners,” for use in reciprocal entertaining and as gifts (Arkush and Lee 1989:54). As late as the 1960s, some Chinese found eating away from home “the most troublesome aspect” and faced with dread an invitation to dine at an American house, finding the meals both simple and stingy – “just a lot of dishes and silverware on the table” – which left them hungry. To the Chinese, having a single main dish entree rather than a selection of many tastes and textures was very humble (Arkush and Lee 1989:219–225). Thus, even twentieth-century newcomers, whether from China, Vietnam, or Thailand, with ready access to supermarket abundance would still find themselves set apart by customs, as well as language, and tend to seek the company of countrymen who shared the same values in traditional ways.

Other Communal Bonds

In the closing years of the twentieth century, these communal bonds have been strengthened and overlaid by an interest in history and a search for a more accurate perception of the past experience. Examples in Los Angeles which illustrate this concern include the acquisition and restoration of the Chinese shrine in Evergreen Cemetery, martial arts academies that teach

the mechanics of the dragon parade, the recording of oral histories, public observations of the Chinese New Year and Moon Festival, the resurgence of Chinese language instruction and the practice of *tai chi*, purchase of an historic structure as headquarters for the Chinese Historical Society of Southern California, publications, and walking tours of New Chinatown. These and a variety of other activities are intended both to enhance the solidarity of the Chinese American community by participation in traditional events and to interpret these events to the general public.

The persistence of herbal medicine and the resurgence of interest in *feng shui* are also integrative and reinforcing mechanisms. While *feng shui* apparently played little part in the siting or exterior appearance of the buildings in historic Chinatown and was, in China, related to the selection of the burial place for a family of “great significance” (Yang 1945:88), it is now being applied, as a marketing device, to public buildings like the new Wells Fargo Trade Bank, which has ties to a Chinese financial institution. The “Art of Perfect Placement” is even being marketed to the American public in the form of a kit containing a *feng shui* compass, ruler markings, stickers, mirror, and a 112-page instruction book (Kwok 1995).

Monterey Park, a Recent Chinese Community

The phenomenon of how a large-scale Asian immigration affects an existing community has been repeated in the Los Angeles suburb of Monterey Park, where recent events have mirrored much of the Los Angeles model. The newcomers were first welcomed as low-paid employees by those who thought they would assimilate quickly and quietly as the local Japanese residents had done. Instead, they formed their own Chinese Chamber of Commerce, replaced existing single-family homes with large apartment buildings rented to Chinese, erected signage and conducted business in the Chinese language, and divided properties into ever smaller units of strip development. The resulting economy that emphasized the immigrant and overseas Chinese market created economic, social, cultural, and political consternation in the host city (Fong 1994). In Monterey Park, some of those who resisted change used the slogans of slow growth to carry their anti-Chinese agenda as the Asian population rose from 3 percent in 1960 to a projected 80 percent by the year 2000. The major difference from the historical Los Angeles Chinatown is that the Chinese Americans in Monterey Park are becoming the mainstream popula-

tion rather than a marginal minority, and they have greater economic and political power than their earlier counterparts. The challenge of the era of transition is to develop responsible public policy through better understanding of the international, multiracial, multicultural, and dynamic class reality here as elsewhere (Fong 1994:174–177).



It must be emphasized that the investigation presented here was limited to the construction areas of a very much larger site complex; it was also constrained in time by the exigencies of the construction schedule. And in method, some departures from the ideal orderly process of survey, testing, research design, and mitigation of impacts were prompted by the very nature of general problems in urban archaeology and special circumstances related to the construction of Metro Rail through an operating railroad station. All subsurface field work had to await the opening of a particular area and the removal of overburden by the construction contractor. The history and digitized maps developed in advance proved valuable for predicting the location of the old streets, buildings, and activity areas. For sampling purposes, the accessible area was not large enough to divide into such components as residential, commercial, or industrial, nor would it have been useful to do so because such usages were intermingled in the Chinatown setting.

The assemblage has provided raw data, artifacts, and food remains valuable for future research and reference. Avenues of continuing inquiry include a more comprehensive study of the faunal materials, identification of additional fish bone, additional translations of Chinese embossments and calligraphy to yield the places of manufacture (reflective of trade and import patterns) and insight into the symbolism, census re-

search, customs and immigration records, technical elemental studies of the pastes and glazes of the ceramics, more information concerning some of the Los Angeles businesses the Chinese patronized, and comparisons to sites and collections from other urban Chinatowns large and small and the more remote work camps.

The collection has continuing potential to contribute to studies of the early commercial, industrial, professional, and settlement patterns of downtown Los Angeles – a subject that has not received much attention either historically or archaeologically. In addition to the pharmacies represented by glass bottles, the early breweries, soda works, and other bottlers are well represented. Well-known names such as Maier and Zobelein are present, but less familiar producers such as the F. A. Heim Brewery, Crystal Bottling Company, Cascade/Peeverly Brothers, Star and Lagomarsino wine companies, and soda producers such as Ramona, Los Angeles, Stoll, Excelsior, Grape Deli, and Pacific are even more numerous. These enterprises, the brickyards, dairies, button makers, and other local manufacturers represented by cultural materials are all appropriate subjects for research, although beyond the scope of this study.

The opportunity to interpret units of refuse deposition by correlating the features with historical maps of known buildings or with photographs that show the house or shop numbers and, in some instances even the names of the occupants, is rare in historical archaeology. Such evidence can support interpretive analyses far beyond what is possible by inventorying or measuring artifacts. History can provide an outline of events and the artifacts can illustrate the physical remains of existence, but their synthesis can lead to an understanding of the life behind the doors of Los Angeles Chinatown – doors both real and cultural.

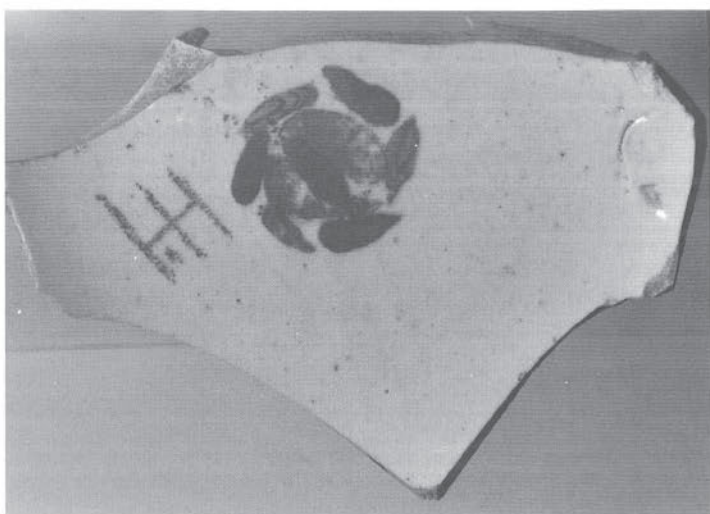


FIGURE A.1
Fragment of a serving bowl with
Four Seasons pattern (cat. 3544)



FIGURE A.2
Jar or box lid (cat. 415)



FIGURE A.5
Stoneware jar lid (cat. 3461)



FIGURE A.4
Underside of jar lid (cat. 4144)

Inscribed and Decorated Objects

Lothar von Falkenhausen and Roberta S. Greenwood

Inscribed Items

Inscriptions in Chinese characters and sometimes in Roman letters were found on many pieces of ceramics as well as on various other objects. Some of them are listed here, roughly classified according to the material and the shape of the inscribed objects. Such a classification is not always consistent with the thematic divisions emerging from an analysis of the contents of the inscribed texts; a brief concluding section will attempt to present a comprehensive panorama of the themes and ideas covered. Our translations and comments are not exhaustive but are intended to illustrate the potential for dating, for understanding the meaning behind artistic representations, and for interpreting these finds—both literally and figuratively—in their wider cultural context.

All those to whom the inscribed items were shown emphasized the difficulty in transcribing the inscriptions, let alone translating them into English; this is true for a number of reasons. Where artifacts are broken, often presenting only a few characters, the lack of full context obscures the meaning. Some characters are written in archaic or cursive writing styles and are thus well-nigh impenetrable to the average reader of Chinese. Basemarks on ceramics or embossments on glass are often worn or not clear. In each example below, the inscriptions are given in standard character forms (*kaishu* 楷書 and transcribed phonetically according to the *Hanyu pinyin* 漢語拼音 system. There follow tentative translations and comments (by Lothar von Falkenhausen unless otherwise noted).

In the transcriptions, punctuation is added to mark grammatical or prosodic subdivisions:

- ' line break in the inscription
- [] single missing character
- [...] unknown number of missing characters

In the translations, added words are placed in brackets. Items marked with * were not seen by Lothar von Falkenhausen.

Porcelain

Rice bowls. *Rice bowls* (cats. 219 and 5605). Three greenish-glazed white porcelain (mock celadon) rice bowls with blue hand-drawn mark under glaze on base. The mark is elaborate but makes no sense. The vessels were probably made in Japan and intended for export.

Rice bowls (cats. 2014 and 2338/2015/4875). Parts of several blue-on-white porcelain rice bowls, each decorated with a dragon flying among the clouds. Probably made in Japan. The inscription on the base consists of two handwritten characters: *wan yu* 玩玉 (in Japanese pronunciation: *bangyoku*), “playing with jade or jade for amusement.” Jade is a common metaphor for beauty, especially female beauty; appearing on such a vessel, the text may carry slightly salacious overtones.

Rice bowl (cat. 3042). Handpainted, dated, white porcelain rice bowl, with polychrome overglaze painted decoration showing banana trees. The eighteen-character inscription in running script (*xingshu* 行書) renders two lines from a poem in five-word meter, plus the date and the poet/artist’s name.

TRANSCRIPTION

Jing shi wu ‘xin du,’

"*baicao zai 'yan kan.*"

Xinbou dong yue 'Pan Zhinan 'zuo.

經史無心讀
芭蕉在眼看
辛丑冬月番植南作

TRANSLATION

"I am of no mind to read the Classics or the [Dynastic] Histories,
"as the banana tree has engaged my eyes."

Made by Pan Zhinan in the winter moon of the *xinbou* year.

The text is followed by a decorative seal in the shape of a peach (Taoist symbol of immortality), repeating the character *zuo* 作 ("made").

The *xinbou* year corresponds to the thirty-eighth year of the Cycle of Sixty; it could be 1841, 1781, 1721, and so on. This refers to the date of the poem; that it could not be the date of manufacture of the inscribed object is evident from the seal painted on the vessel bottom: *Tongzhi 'nian zhi* 同治年製 "made during the Tongzhi reign period." The dates for the Tongzhi reign period (*nianhao* 年號)—third to last period of the Qing dynasty (1644-1911)—are 1862-1874.

No individual named Pan Zhinan is listed in the standard biographical dictionaries. He probably was a Qing dynasty folk painter whose painting, comprising the inscription, formed the model for the bowl's decoration. A *terminus ante quem* is provided by the Tongzhi reign date for this vessel as well as for cat. 3400/4286, which features another Pan Zhinan ditty, dated a year earlier. The originals on which the decorations are based, however, cannot date to the Tongzhi reign period, which does not comprise a thirty-seventh or a thirty-eighth year.

Rice bowl (cat. 3138). White porcelain rice bowl with polychrome overglaze painting of scenery and a partially preserved poem in seven-word meter, written in standard script. The poem describes the scenery.

TRANSCRIPTION

[] [] [] *luo fu yun jin,*
xian guan sheng yin zhu shui liu,
[] *chuan(?) hua tu kan jiadie,*
[] [] [] *chu wen Zhuang Zhou.*
[] [] [] 落浮雲錦
絃管聲音逐水流
[] 川畫圖看蛺蝶
[] [] [] 處問莊周

TRANSLATION

... falling on the brocade of the floating clouds,
The sounds of stringed and wind instruments waft along the
flowing waters,
[...] river (?), painting a picture, watching the *vanessa*
butterflies,
[...] place, enquiring about Zhuang Zhou.

Half of a painted four-character "seal" in red is preserved on the vessel bottom; the two preserved characters read *gao feng* 高風 (literally "high wind"), but their intended meaning is impossible to establish in this fragmentary context—they could be part of a person's name or of a place or workshop name.

Zhuang Zhou is Zhuangzi 莊子 (ca. 369-286 BC), the Taoist philosopher whose name frequently appears in poetry as epitomizing a person living in accord with nature.

Although composed from stock motifs typical of the classical poetic tradition, this poem could not be identified in any of the standard indices; thus, it is apparently not a well-known work by a famous poet.

Rice bowl (cat. 3257). Base of white porcelain rice bowl (or possibly top of the lid of a bowl) with portions of polychrome painted decoration showing female figures and banana leaves. In the center of the base, a painted "seal" of four characters in blue is written in neat standard script: *yu cheng 'xin xuan* 玉成信選, "Yucheng, trustworthy selection." If this was the bottom of a vessel, Yucheng (literally "Jade Accomplishment") should probably be understood as the name of the manufacturer; in such a case the inscription presumably intends to convey an emphasis on quality control. The translation given above reflects such a reading.

Alternatively, if this was the lid of a tea bowl or rice bowl, the inscription—readily visible to the onlooker—might be understood as referring to the object's painted decoration, now almost entirely lost. Just possibly, this item relates to the series of objects with scenes from the classical novel *Hongloumeng* (see cats. 626, 1724, and 3300).

Rice bowl (cat. 3259). Fragments of white porcelain rice bowl with a blue double line below the rim on the outside and polychrome painting showing two women and one man (only their heads are preserved), apparently in a garden setting. The preserved continuous part of the inscription comprises seven characters in running script.

TRANSCRIPTION

shi nu 'nan wang juan 'zhong yi 仕女難忘眷中意

TRANSLATION

The gentleladies find it difficult to forget the significance of returning to visit among their natal families.

A coherent translation is impossible for remnants of other characters on other rim fragments of the same vessel, among which one can read only one: *duan* 斷, "break, segment."

The decoration on this object may relate to the group of objects with *Hongloumeng*-related scenes (see cats. 626, 1724, and 3300).

Rice bowl (cat. 3345). Base of white porcelain rice bowl, glazed orange on the outside with some indication of enameling; the

decoration consists of a stylized Double Happiness (*shuangxi* 雙喜) pattern. Painted seal on bottom: *Guangxu* ' *nian zhi* 光緒年製, "made during the Guangxu reign period." Guangxu (1875-1907) was the second to last reign period of the Qing dynasty.

Rice bowl (cat. 3399). Porcelain rice bowl, white interior, orange exterior with running-script characters left white. The fragmentary inscription renders the first six characters of a line from a poem in seven-word meter, followed by a small round "stamp" (illegible).

TRANSCRIPTION

ri nuan feng he ci di [] 日暖風和次第 []

TRANSLATION

When the sun is warm and the wind is peaceful, they [that is, orchids?] [verb lost; *probably*: blossom, flower, open up...] one after the other.

Like cat. 4542, which has characters of similar writing style and execution, this bowl probably featured painted decoration of orchids (symbols of gentlemanly refinement and purity).

Rice bowl (cats. 3400 and 4286). Half of a white porcelain rice bowl, covered with Chinese characters and indications of landscape decoration. The text is a ditty with signature and date by the poet/painter.

TRANSCRIPTION

"*Bajiao fen ' lü chu,*
"*liang mei bing jian yin.*"
Gengzi xia yue ' Pan Zbinan zuo.

芭蕉分綠處
兩美并肩吟
庚子夏月番植南作

TRANSLATION

"The banana tree defines, [with its shadow, lighter and darker portions in] the green area, [where]

"Two beauties sit shoulder to shoulder, chanting (or humming) [poetry]."

Made by Pan Zhinan in the summer moon of the *gengzi* year.

The text is followed by a round seal repeating the character *zuo* "made" (see cat. 3042).

Fittingly, parts of a banana leaf appear in the very fragmentary painted decoration.

Gengzi is thirty-seven in the Cycle of Sixty; it could correspond to 1840, 1780, 1720, and so on. The partly preserved painted seal on the vessel bottom reads *Tongzhi* ' *nian zhi* (see cat. 3042 for further discussion).

Rice bowl (cat. 3753). Base of a white porcelain rice bowl, interior hand painted over the glaze with decoration showing carp and seaweed; part of a stylized lotus-leaf decoration band is

visible on the outside. On the vessel bottom, an inept painted rendition of the Guangxu reign mark (vertical columns ranged exceptionally from left to right): *Guangxu* ' *nian zhi* (1875-1907, see cat. 3345)

Rice bowl (cat. 4939*). Porcelain rice bowl with red Double Happiness sign on interior; four smaller Double Happiness symbols on exterior, each surrounded by five bat motifs. Base stamp of four characters is the seal of a company, "made by Shengmao" (read by Prof. Hung-hsiang Chou).

Rice bowl (cat. 5674*). Rim fragment of rice bowl with leaf design and three Chinese characters: "banana tree" (read by Prof. Hung-hsiang Chou).

Rice bowl (cat. 5933). Two sherds of white porcelain rice bowl, once decorated with polychrome handpainted enameled genre design. The inscription is in black characters.

TRANSCRIPTION

"[...] tu." *Renyin qiu ' Mao* [] *zuo.*

圖。壬寅茂 [] 作

TRANSLATION

"Picture of [...]"

Made in the fall of the *renyin* year by Mao [].

The first character, written in formal, slightly archaic-looking clerical script (*lishu* 隸書) contrasting with the running script of the rest of the inscription, is in all likelihood the last word in the title of the picture represented on the vessel body, now lost.

The author/painter cannot be identified because the portion of the sherd with the second character of his name has been broken off.

The *renyin* year (thirty-nine in the Cycle of Sixty) may correspond to 1782, 1842, 1902, and so on.

Rice bowl (cats. 6523 and 6341). White porcelain rice bowl with overglaze painting in red on the outside rendering two rows of "seals." Rather than being square, as is usually the case, these have shapes, often Taoist-inspired, that indicate good luck. Moreover, these seals do not render the name of individuals, which is the function of most seals in China. Instead, the seals in the upper row, as well as some in the lower row, render the beginning portion of the "Loushi ming" 陋室銘 (Inscription of the Humble Dwelling), a famous prose essay by the Tang 唐 dynasty (AD 618-907) scholar-official Liu Yuxi 劉禹錫 (AD 772-842) See *Guwen guanzhi* 古文觀止 1958:315 and Margouliès 1926:166. The characters are written within a succession of painted "seals," for the most part without regard to semantic or prosodic breaks within the text.

TRANSCRIPTION (seal by seal)

Upper row (originally eleven seals):

1. Square: *shan bu zai gao* 山不在高
2. Bottle-gourd shaped: *you xian ze* 有仙則

3. In the shape of a scroll with streamers: *ming, shui* 名水
4. In the shape of two crossed tablets with streamers: *bu zai* 不在
5. In the shape of a *hu* vessel with streamers (partially broken off): *shen, [you]* 深 [有]
6. Not preserved: [*long ze*] [龍則]
7. Fragmentarily preserved: *ling* 靈
8. Peach-shaped: *si shi* 斯是
9. In the shape of a snuff-bottle: enigmatic (the essay has here: *lou shi, wei*) 陋 [室維]
10. Fan-shaped (partially broken off): *wu de* 吾德
11. Not preserved; may be identical in shape to seal 8

Lower row (nine seals):

- 12, 14. Oval: *xin* 馨
- 13, 16, 18, 20. In the shape of two superimposed squares. Inscription illegible (may not be a character)
15. = seal 10
17. Leaf-shaped, inscription illegible
19. In the shape of a mulberry: *yi* 義

TRANSLATION

Seals 1-12: [The eminence of] a mountain does not lie in its height: if there is an immortal, it will become famous. [The vastness of] water does not lie in its depth: if there is a dragon, it will be numinous. As to this humble dwelling, it is fragrant only on account of my virtue. Seal 19: Righteousness

The character in seal 19 does not occur in Liu Yuxi's essay. That text continues by describing the "humble dwelling," its absence of distracting luxuries metonymically denoting the plain and upright demeanor of its inhabitant, who is likened to sages of antiquity. In a climactic final flourish, the author denies that such a dwelling could be truly a humble one. On the vessel bottom appears a virtually illegible seal, possibly indicating a reign period: *Xianfeng ' zhi nian* (?) 咸豐之年 "Xianfeng reign period (?)." The dates for this reign period are 1841 to 1861.

Serving Bowls. *Serving bowl* (cat. 3544). Part of a serving bowl of coarse off-white glazed porcelaneous stoneware with polychrome enamel-painted decoration showing the Four Seasons motif. This type is extremely common (see also the following seven items), cheaper in its time than the rice bowls discussed above, and usually inscribed only on the bottom of the base. Some vessels of this category do, however, feature characters in punctate lines, posteriorly pecked into the glaze. This item has a single-character inscription of this kind (fig. A.1): *yu* 玉, "jade." Possibly part of a person's name, but see cat. 2014. On the bottom, there is a Guangxu reign mark (see cat. 3345).

TRANSCRIPTION

Da Qing Guangxu nian zhi 大清光緒年製

TRANSLATION

Made during the Guangxu reign period of the Great Qing dynasty

Serving bowl (cat. 5549). Base fragment of a Four Seasons bowl (similar in manufacture and decoration to cat. 3544) with a clear square-painted "stamp" containing characters in standard script.

TRANSCRIPTION

zheng shun ' yi zao 政順義造

TRANSLATION

Made by Zhengshunyi

Zhengshunyi ("governmentally approved, fortunate, and righteous") is probably the name of a company.

Serving bowl (cat. 5591). Base of a large Four Seasons serving bowl (similar to cat. 3544) with a base "stamp" of four characters.

TRANSCRIPTION

ding tai heng zao 鼎泰恆造

TRANSLATION

Made by Dingtaiheng

Dingtaiheng ("august, exalted, and persevering") is probably the name of a company.

Serving bowl (cat. 5615). Base of Four Seasons serving bowl (similar to cat. 3544). Square seal with inscription *zheng shun ' yi zao* (see cat. 5549), but here written in the archaic seal script (*zhuanshu* 篆書).

Serving bowl (cat. 5701). Base and side wall of a large Four Seasons serving bowl (similar to cat. 3544). Bottom inscribed with Qianlong reign mark in seal script (see cat. 4080).

TRANSCRIPTION

Qianlong ' nian zhi 乾隆年制

TRANSLATION

Made during the Qianlong reign period

As this vessel is exactly identical in size, execution, and ornamentation with cats. 5816 and 5822, it seems quite unlikely that it is a genuine Qianlong piece from the Imperial workshops. It is probably a late Qing product of a folk manufacture, such as the Wurongsheng Kilns, mentioned on cat. 5816.

Serving bowl (cat. 5816). Base of a large Four Seasons serving bowl (similar to cat. 3544). Bottom mark consists of four characters in standard script, surrounded by key pattern frame.

TRANSCRIPTION

Wu rong ' sheng yao 吳榮盛窯

TRANSLATION

Wurongsheng Kilns

Probably the name of a folk ceramic manufacturer in the Guangdong region, where most Chinese in Southern California had their home ties.

Serving bowl (cat. 5822). Base of a large Four Seasons serving bowl (similar to cat. 3544). Bottom mark consists of four characters in seal script.

TRANSCRIPTION

Kang xing ' *de zao* 康興德造

TRANSLATION

Made by Kangxingde

Kangxingde may be either the manufacturing company (if so, it can be translated literally as "happiness, elatedness, and virtue") or, since Kang is also a surname, it may possibly indicate the name of the artisan who made this vessel (in this case, it must be rendered as Kang Xingde).

Serving bowl (cat. 7258). Fragment of a Four Seasons bowl with posteriorly pecked Chinese character *yu*, "jade" (see cat. 3544). Only a small corner is left of the inscribed bottom mark in red characters, insufficient for transcription.

Tea bowls and tea bowl lids. *Tea bowl* (cat. 69*). White porcelain tea bowl base fragment, glazed orange on the outside with "CHINA" in Roman letters stamped on the base. This was an export item, probably shipped after 1890.

Tea bowl (cat. 126*). Porcelain tea bowl base, walls painted with Double Happiness symbols. The hand drawn mark on the base reads "ANIHD" in Roman letters. This is possibly the painter's version of the word "CHINA"—a mirror image with a minor error. The N on the base is reversed. Most likely an export item.

Tea bowl (cat. 626). Small white porcelain fragments, undoubtedly of a tea bowl, featuring an overglaze polychrome painted representation of a garden scene with three women in conversation. Two of the women are labeled with two-character inscriptions: *Tanchun* 探春 and *Yingchun* 迎春. These are the names of two major female characters from the great eighteenth-century novel *Hongloumeng* 紅樓夢 (translated variously as *The Dream of the Red Chamber* and *A Dream of Red Mansions*), a.k.a. *Shitouji* 石頭記 (*The Story of the Stone*), by Cao Xueqin 曹雪芹 (d. 1763 or 1764). (There are many Chinese editions; the best English translation is Hawkes 1973-1977.)

This bowl depicts the scenery of Prospect Garden (*Daguan yuan* 大觀園, where the novel is set. Too little remains of the composition to allow any inferences as to which episode of the novel is depicted.

Tea bowl lid (cat. 1744). White porcelain tea bowl lid with fine polychrome overglaze painted decoration representing a garden scene with three women flanked by explanatory inscriptions, now fragmentarily preserved: [*Li*] *wan* ' [*Li*] *wan* ' [李] 婉 and

Miao yu 妙玉. This once again refers to the *Hongloumeng* (see cat. 626), where Miao Yu is the name of a preternaturally intelligent young Buddhist nun; Li Wan is the protagonist's sister-in-law.

Tea bowl lid (cat. 3300*). Porcelain tea bowl lid with fine-line drawing of three women and two Chinese characters: "Ladies are playing games (Chinese chess?)" (read by Prof. Hung-Hsiang Chou). Since the other characters are missing, a full translation cannot be made. This may be another *Hongloumeng* scene.

Tea bowl (cat. 3755*). Rim fragment of a white porcelain tea bowl with a painted figure and three Chinese characters. The figure resembles various Buddhas or fairy-tale figures. The characters are the name of the Buddha but cannot be read (Prof. Hung-Hsiang Chou).

Tea bowl (cat. 4080*). White porcelain tea bowl decorated with the figure of a Buddhist saint (Arhat; in Chinese *Luohan* 羅漢) in polychrome enamel painting. On the vessel bottom, a painted "seal" indicating reign mark.

TRANSCRIPTION

Da Qing ' *Qianlong* ' *nian zhi* 大清乾隆年製

TRANSLATION

Made in the years of Qianlong of the great Qing Dynasty

The Qianlong reign, one of the most prosperous periods in the history of Imperial China, lasted from 1736 to 1795. It is by no means certain whether this vessel really dates back to that time since many later porcelain manufacturers also inscribed their vessels with a Qianlong reign mark.

Tea bowl (cat. 4542). White porcelain tea bowl with pink glaze on the outside (in fragile state of preservation), decorated with orchids in imitation of scholarly brush-painting style and accompanied by a four-character inscription in cursive script (*caoshu* 草書). As on cat. 3399, decoration and inscription are rendered in the negative, that is, as gaps that reveal the uncolored white porcelain body contrasting with the applied surface color. The text, perhaps in a metaphoric reference to the tea to be consumed from this vessel, alludes to the highly-valued fragrance of orchids, traditionally symbols of the pure and refined scholar.

TRANSCRIPTION

you gu lan xiang 幽谷蘭香

TRANSLATION

Orchid fragrance in a recondite valley

The "recondite valley" evokes the poetic image of the recluse meditating in a mountain abode; there is no reason to assume that the text refers to any specific place.

Tea bowl (cat. 5121). White porcelain tea bowl, orange-glazed exterior with polychrome painted design, probably of the Eight Treasures (*babao* 八寶).

TRANSCRIPTION

Guanyao ' nei zao 官窯內造

TRANSLATION

Made for internal use at the official kilns

"Internal use" implies that the object was made for use at the Imperial court. It is unlikely that this is a genuine *guanyao* ware; during the Qing dynasty, this mark was widely appropriated by folk potters.

Tea bowl (cat. 7273). White porcelain tea bowl with painted decoration on the outside, featuring geometric pattern bands and roundels. Painted seal on bottom: *Guanyao ' nei zao* (see cat. 5121).

Miscellaneous bowls. *Condiment bowl* (cat. 189). Small white porcelain bowl for soy or condiment, with polychrome Four Seasons design painted on orange glaze. A four-character inscription was written on the base; the two characters in the right vertical row are illegible: [] [] ' wei ji 為吉, "[...] is auspicious."

Presentation dish (cat. 2865). High-footed base of a white porcelain oval serving dish with a green wave pattern painted on the footring. The interior shows polychrome painted decoration of a bearded male figure in a long gown standing next to a large boulder, with a fragmentary inscription explaining the scene.

TRANSCRIPTION

[...] zao Qin [] [] [] shu ' di wang dian mo tian di ' yi shi fei hai li zhong. ' Fu Sheng

[...] 遭秦 [] [] [] [] 書帝王典謨天地又石飛海立終。伏生

Too little is left to hazard a complete translation but the text names the depicted figure as Fu Sheng (also written as 伏勝 [fl. mid-third to early second century BC]). Fu Sheng was a Confucian scholar who survived the persecutions of the First Emperor of Qin 秦始皇 (r. 221–209 BC), who had allegedly ordered the burning of the Confucian classics and a massacre of all those who were learned about them. (The historicity of this event has been put in doubt by modern scholarship.) After the founding of the Han dynasty, Fu Sheng, then a very old man, dictated to his niece the Confucian *Classic of Documents* (*Shu jing* 書經 a.k.a. *Shang shu* 尚書), which he had committed to memory, thus assuring the transmission of this text to future generations. The inscription alludes to his "suffering under the Qin dynasty" and to the various kinds of documents in the *Classic of Documents*—the "Statutes and Plans (*dianmo* 典謨) of the Emperors and Kings." It is unclear whether the text is a poem or a prose passage. Extolling the praise of Fu Sheng, it may come from a popular drama or opera in which he appears as a hero, though our research has failed to uncover a specific source.

Presentation dish (cat. 3250). Part of a footed oval white porcelain presentation dish with lobed rim, featuring

polychrome painted flower decoration around rim, with characters inscribed posteriorly.

TRANSCRIPTION

Li Qinglian 李青蓮

Below, in smaller characters:

gao [...] ' gei [...] ' zou [...] ' gong [...] ' wei [...] ' [高 [...] 給 [...] 走 [...] 公 [...] 為 [...]]

Li Qinglian is the name of a person, presumably the vessel's owner. Besides his name, only the uppermost characters in a text of five lines are preserved, giving too little context to guess at the nature or meaning of the inscription; possibly it recorded the gift of this vessel to Li. The use of unorthodox, simplified character forms is remarkable, indicating usage within a context where the level of literacy was low. (Similar simplified characters [*jiantizi* 簡體字] were officially promulgated in Mainland China after the Communist takeover in 1949.)

Plates. *Plate* (cats. 5912 and 6284). White porcelain plate with enamel-painted design over glaze depicting a rooster and chrysanthemums. Chinese inscription in black with artist's name in red, followed by a painted ornamental seal (impossible to decipher).

TRANSCRIPTION

qiu se qing hua. ' Yi mao zuo 秋色清華。義茂作

TRANSLATION

Pure flowers of autumn colors

Made by Yimao

The main inscription gives the title of the painted picture. As in the case of Pan Zhinan (see cats. 3042 and 3400/4286), Yimao is undoubtedly the artist who painted the decoration motif and wrote the inscription. His family name is not given, making it well-nigh impossible to locate additional information.

The base of the vessel features a red Tongzhi reign period seal (*Tongzhi ' nian zhi*; see cat. 3042 and 3400/4286).

Plate (cat. 7157*). Fragment of porcelain plate with polychrome painted Four Seasons decoration, inscribed with three parallel pecked punctate lines that resemble the character *san* 三, "three." This might render part of the name of an individual (perhaps the owner) or of the name of a boarding house. Another possibility is that this is an incomplete rendering of the character *yu* "jade," seen on several other items with pecked inscriptions (compare cat. 3544 and 7258). Prof. Chou thought that this did not represent a name but that the object may have been a practice piece for porcelain-pecking.

Cylindrical vessels and lids. *Cylindrical jar or box* (cat. 7207). Rim fragment of a cylindrical jar or box, originally featuring polychrome painted decoration. Part of the inscription explaining the scene once depicted on this object survives.

TRANSCRIPTION

xiang wang [...] *gai xia zhi* [...] *ke tuo* [...]

項王 [...] 垓下之 [...] 可脫

TRANSLATION

Xiang wang [...] at Gaixia [...] could escape [...]

The preserved text is fragmentary, but enough is left to reconstruct the context. “Xiang Wang” refers to general Xiang Yu 項羽 (232–202 BC), one of the pretenders to the Imperial throne after the fall of the Qin 秦 dynasty in 209 BC. Gaixia is the place of Xiang Yu’s last encampment before his army was crushingly defeated by Liu Bang 劉邦 (256 of 246–195 BC), the founder of the Han 漢 dynasty (206 BC–AD 220). As the Han troops closed in on Xiang Yu, barring all possibilities of escape (the inscription probably lacks a negative particle here), he committed suicide after a tearful farewell, much-elaborated in later storytelling and historical romance, from his favorite concubine. (For an English rendering of the classic historical account in Sima Qian’s 司馬遷 [ca. 140–81 BC] *Shi ji* 史記—the first of the twenty-five Dynastic Histories of China—see Watson 1993:17–49.) The Peking Opera *Bawang bieji* 霸王別姬 (“The Despot King bids farewell to his concubine”), which treats these events, has recently been made famous in the West through Zhang Yimou’s 張藝謀 homonymous film, entitled in English “Farewell My Concubine.” It was probably this very scene that was represented in the now-lost pictorial decoration of the excavated vessel.

Jar or box lid (cat. 415). White porcelain lid of a jar or box (fig. A.2) featuring polychrome overglaze painted decoration representing a male figure in flowing official robes, with two pairs of characters inscribed on either side.

TRANSCRIPTION

Zhuge Wu Hou 諸葛武侯

TRANSLATION

Martial Marquis Zhuge

Wu Hou is the official title of Zhuge Liang 諸葛亮 (AD 181–234), the chief minister of Liu Bei 劉備 (AD 161–223), emperor of Shu 蜀 during the Three Kingdoms period (AD 221–265). This shrewd strategic thinker and statesman later became one of the most popular figures in Chinese historical fiction, known especially through the Ming dynasty (1368–1644) novel, *Sanguozhi yanyi* 三國志演義 (There are many Chinese editions; the best English translation is Roberts 1991.).

Stoneware

Opium pipe bowls. All opium pipe bowls that were found are made of fine, unglazed, brown biscuit stoneware characteristic of the Yixing 宜興 kilns in southern Jiangsu province. The decoration on some pieces (compare cat. 1476) is

likewise stylistically related to that of Qing dynasty Yixing teapots. Similar teapots are still made at Yixing today; they are highly esteemed for their ability to bring out the flavor of green tea and play a major role in the ceremonial consumption of tea all over southern China. One may assume that opium smokers, as well, favored the flavor-enhancing properties of Yixing stoneware.

The inscriptions on the opium pipe bowls are often enigmatic; one suspects that some of them refer to states of mind that opium smokers sought to attain, in which they experienced an enhanced and sometimes scurrilous vision of the world.

Opium pipe bowl (cat. 813). Fragment of an opium pipe bowl with one impressed character (chop seal) rendering a family name, probably the maker’s: *Pan* 潘

Opium pipe bowl (cat. 1227). Fragment of an opium pipe bowl with three ornamental round seal impressions, one of them with a much-reduced form of the character *shou* 壽, “longevity.”

Opium pipe bowl (cat. 1476). Whole opium pipe bowl with intricate engraving infilled with light-colored pigment (fig. 5.3). Lotus petals form a band of ornamentation around the bottom. The symbols include dragon and phoenix, crane, and fish—omens for fecundity, power, good luck, and longevity—seen also on other genres of Chinese folk art; in this representation, they are all curiously enshrouded in clouds or billowing smoke. An inscription of two small characters indicates the year number in the Cycle of Sixty: *jiashen* 甲申. *jiashen* is the twenty-first year of the Cycle of Sixty; it could be 1884, 1824, and so on.

Opium pipe bowl (cat. 1680). Fragment of an opium pipe bowl with three-character inscription.

TRANSCRIPTION

chan situ 蟬司徒

TRANSLATION

cicada, Intendant of the Multitude

Situ (“Intendant of the Multitude”) is an official title that goes back to the Zhou 周 dynasty (ca. 1050–221 BC). What it signifies here in connection with “cicada” was an enigma to all those to whom the inscription was shown. Possibly this pertains to a set of hermetic images through which opium smokers expressed their drug-induced visualizations.

Opium pipe bowl (cat. 2350). Fragment of an opium pipe bowl with impressions of tiny chop seals; three characters are legible: *Huang; hong; ji* 黃、洪、記. The significance of these characters (literally, “yellow;” “grand, overflowing;” “record” or “brand”) in the present context is unclear; they could be read jointly as the name of a company.

Opium pipe bowl (cat. 3089). Fragment of opium pipe bowl decorated with a stamp showing a lion in a roundel as well as two other ornamental stamps showing flower motifs. The inscription, well-nigh illegible, doubles one character, possibly

part of a quotation from a poem: *sheng sheng* (?) 聲聲, (very doubtful) “sound” (or “tone”). Prof. Chou suggests that the preserved part of the text may render repeated sounds or noises like the singing of birds such as orioles. Again, the frame of reference may be the altered reality of the opium.

Opium pipe bowl (cat. 3090). Fragment of opium pipe bowl inscribed with the last two characters of a line of a poem: [...] *you xiang* 有香, “... there is fragrance.”

Opium pipe bowl (cat. 3179). Fragment of opium pipe bowl with two impressed characters: *ji xiang* 吉祥, “auspicious omina.” This was probably combined with the expression *ru yi* 如意 “[things proceed] according to [your] intentions.”

Opium pipe bowl (cat. 6310). Fragmentary opium pipe bowl decorated with a symmetrical arrangement of six tiny stamps, only two of which are complete.

TRANSCRIPTION

zheng yi xin (?); *gui; quan; zhen* 正, 一, 昕, 貴, 全, 真

TRANSLATION

“correct” “one [day at] sunrise” (?) “honorable” “whole” “true”

It is uncertain whether these visually disconnected auspicious words were meant to be read in sequence and what the result could possibly mean.

Opium pipe bowl (cat. 6343). Fragmentary opium pipe bowl decorated with a symmetrical arrangement of tiny stamps. The inscriptions cannot be deciphered due to the poor quality of the impressions, but they seem to have a configuration similar to cat. 6449. One character seems to read *qing* 清, “clear.”

Opium pipe bowl (cat. 6368). Fragment of opium pipe bowl decorated with a symmetrical arrangement of tiny stamps. The inscriptions cannot be deciphered due to the poor quality of the impressions, but they seem to have a configuration similar to cat. 6449.

Opium pipe bowl (cat. 6449). Fragment of opium pipe bowl decorated with a symmetrical arrangement of tiny stamps as on cat. 6310, enhanced by flower ornaments. Some are legible: a pair of stamps reading *ji* 吉, “auspiciousness;” others, *qing*, “clear” (see cat. 6343), and *zheng* 正, “correct.”

Opium pipe bowl (cat. 6561). Fragment of opium pipe bowl with seven incised Chinese characters in calligraphic execution; beginning of a poem.

TRANSCRIPTION

yi ri zheng leng zheng bai e [...] 一日正冷掙白鵝

TRANSLATION

One day, when it happened to be cold, [he] seized the white goose [...]

Prof. Chou related this to the well-known story of the famous calligrapher Wang Xizhi 王羲之 (AD 303–379), who loved geese

and once copied the Taoist text *Laozi* 老子 in exchange for a goose (according to one version, a white goose); but this seems far-fetched. Like the “cicada, Master of the Multitude” in cat. 1680, the reference may be to a hermetic set of images current among opium smokers.

Opium pipe bowl (cat. 6628). Fragment of octagonal opium pipe bowl featuring an impressed regular seal with two characters: *shuang ji* 雙吉, “paired auspiciousness.”

Opium pipe bowl (cat. 6777). Two fragments of an opium pipe bowl with a symmetrical arrangement of tiny stamps in a configuration similar to cat. 6449. Most characters could not be deciphered due to the poor quality of the impressions, but the following are legible: On fragment 1, *yuan* 元, “original”; on fragment 2, *shuang* 雙, “pair.”

Opium pipe bowl (cat. 6965). Fragmentary opium pipe bowl decorated with a symmetrical arrangement of nine tiny stamps. The two biggest ones are blurred, and the top three are ornamental, showing flowers. Of the lower four, two represent symbolic animals, such as the turtle, and the two middle ones each feature the character *ji*, “auspiciousness” (see cat. 6449).

Opium pipe bowl (cat. 6966). Fragment of opium pipe bowl with four stamped Chinese characters plus a tiny seal impression (illegible).

TRANSCRIPTION

tong jun wan yue 同君玩月

TRANSLATION

play by moonlight with you

This sentence may have somewhat salacious overtones.

Storage jars and lids. *Shipping jar* (cat. 475). Fragment of a large, light-brown-glazed stoneware shipping jar (originally some 47 cm high) with restricted neck, shoulder seam, and three characters impressed on the shoulder: *cheng ji liu* 誠記六. Chengjiliu (literally, “Honest Accounting Six”) is probably the name of a company. (Identical to a Great Basin Foundation specimen 1987:243.) The jar may have contained preserved fish paste. Bean cakes, and so on, were stored in smaller jars.

Jar (cat. 5791). Neck and shoulder of large, brown-glazed jar of porous stoneware, with a tiny, non-functional appliqué handle on the shoulder. The inscription consists of a single character in white paint, brushwritten onto the glaze before firing. The writing is too cursive to be deciphered; it probably denotes the name of the company or of the product inside.

Jar with cover (cat. 713). Brown-glazed porous stoneware jar base and cover fragment, probably from the same vessel; on the unglazed inside of the cover is a single brushwritten character: *nan* 南, “south.” The inscription may be incomplete. The jar probably contained seasoning or herbal medicine.

Jar (cat. 2886 and 4838). Fragments of two brown-glazed stoneware jars with three-character inscriptions in a fan-shaped

panel on the shoulder; the characters are written in brown glaze on the panel, which was left unglazed: *chang chun yuan* (if Japanese: Chōshun'en) 長春園. (The first character is missing on cat. 4838.) Changchunyuan (literally, "Garden of Eternal Spring") is the name of a company that produced the contents of the vessels. Mr. Toy and Mr. Tam thought the vessels were for preserved vegetables, while Prof. Chou thought that they were used to ship wine or soy sauce. The use, in the inscription, of simplified graph forms now in usage in Japan, suggested to Prof. Chou that the company may be Japanese; but the same graphs have long been used in non-official Chinese contexts as well.

Food jar (cat. 3423). Base of a medium-sized, brown-glazed stoneware food jar with two Chinese characters brushwritten on the base indicating the contents: *xian jie* 蜆芥, "freshwater clams, mustard (or mustard greens)." This combination of ingredients seems counterintuitive. None of our informants knew whether a special process of preserving freshwater clams in mustard existed in Guangdong around the turn of the century.

Jar lids (cat. 3451 and 5378*). Unglazed stoneware lids to fit small, round-sided jars, with traces of a label inscribed with brushwritten characters now totally illegible (nothing seems to remain of the paper). The lids had clearly been used, even though their shape was grossly distorted due to misfiring.

Jar lids (cat. 3461). Brown-glazed stoneware lid to fit a jar with recessed rim. The lid top has a woodblock-printed paper label with Chinese writing that is badly faded (fig. A.3). The top part of the label gives the brand name.

TRANSCRIPTION

xiang yi hao 詳益號

TRANSLATION

Auspiciousness and Profit Brand

On the left-hand side is the address of the company: *Yong'an shangjie* 永安上街 ("Upper Yong'an Street," presumably in Guangzhou). The characters in the center describe the contents of the jar.

TRANSCRIPTION

Zi zhi yuan [] [] [] [] *xian jinju* [] [] *xia ' qi, xian shanju* [] *weng' Tianjin xian shan*[zha] [] *zhu gan* [] [] *huang*(?) [...] 自製遠 [] [] [] 鹹金橘 [] [] 下氣鹹山桔 [] 翁天津鹹山楂 [] 珠甘 [] [] 黃 []

TRANSLATION

Made by ourselves: X from afar, salted kumquat [] [] [] lower the vital spirits (?), salted hill haw from Tianjin [...] pearls, sweet [...] yellow(?) [...]

All these are preserved fruits thought to possess tonic properties.

Jar (cat. 3803*). Stoneware jar with green glaze. Six characters are impressed on the base, translatable as "dry sweet fruit, such as raisins" (read by Prof. Tong Enzheng).

Jar lid (cat. 4069). Small jar lid with light greenish-yellow glaze and a fragmentary brushwritten inscription on the inside.

TRANSCRIPTION

pi (followed by two abbreviated notations read by Mr. Toy and Mr. Tam as "1 oz. 4 gr."), *liang, ling ga'*
[...] 皮 [] [] 刃另蓋

TRANSLATION

skin; 1 oz. 4 gr. in weight; cover separate

The inscription makes very little sense in its fragmentary state. Mr. Toy and Mr. Tam speculated that this could be an opium container.

Jar lid (cat. 4101*). Stoneware fitted lid with characters in black. Three characters are not legible; part of the inscription translates to "eyeglasses" (read by Prof. Chou).

Jar lid (cat. 4144). Brown stoneware fitted lid for medium-sized, straight-walled jar. Seven characters are brushwritten on the inside with black ink (fig. A.4). The central three characters indicate the name of a family group. The surrounding four characters would seem to relate to geographical features, possibly the name of the place where this family resided, although the indications are so generic as to preclude the possibility of locating a place of that name.

TRANSCRIPTION

Shu Lin fang
wan ' xi ' shui ' chi
叔林房。灣。溪。水。池

TRANSLATION

junior branch of Lin family
bay; stream; water; pond

The inscription gives no clue as to the vessel's function. Mr. Tam and Mr. Toy thought that it contained liquid substances, and Prof. Tong suggested a perfumed facial cream.

Medicine jarlets. These small, yet carefully glazed jars form a distinct subgroup among the inscribed ceramics from these excavations. The impressed characters on the vessel bottoms, always in standard script, often seem to render wishes for the well-being of those who ingest the contents.

Jarlets (cat. 3447 and 4435). Small brown-glazed stoneware jarlets with raised-line stamp-impressed characters: *tong li* 同利, "common advantage."

Jarlet (cat. 5171). A slightly larger vessel with stamp inscription identical to those of cat. 3447 and 4435.

Jarlet (cat. 2881). Two largish stoneware jarlets (outside glazed greenish, inside brown) with stamp-impressed characters; identical inscriptions are seen on both vessels.

TRANSCRIPTION

ju xiang zhai ' zhi chen pi 橘香齋製陳皮

drug that could be used for upset stomach, nausea, motion sickness, pregnancy, and fevers. The pills were very small—25–40 pills per vial—and were used in different amounts for different ailments.

Medicine vial (cat. 6859). Clear glass medicine vial with six embossed characters on the neck of the bottle, three on either side. This contained a liquid remedy for common ailments that could be taken orally or by nasal application.

TRANSCRIPTION

Shi de zhi ' ji zhong shui 施德之濟眾水

TRANSLATION

Shi Dezhi; decongestion liquid

The right side probably indicates the name of the company (derived from the name of its owner); the left side, the name of the medication.

Medicine vial (cat. 7270). Clear glass medicine vial of Japanese manufacture with characters embossed on both sides of the body.

TRANSCRIPTION

Tōkyō Ozawa sei " zenjisui 東京尾澤製全治水

TRANSLATION

All-healing liquid (Theriac), made by Ozawa [Company], Tōkyō

Medicine bottles. *Medicinal bottles* (cat. 5848 and 5849). Two small glass bottles with brushwritten gold inscriptions in the center of the face (less well-preserved on cat. 5849 than on cat. 5848). An inscription to the side in black brushwritten characters is partly illegible.

TRANSCRIPTION

Center: *Guangdong ' wan chun [yuan]* 廣東萬春 [園

Side: *Long dan [] [] wan* 龍誕 [] [] 丸

TRANSLATION

Center: "Garden of Ten Thousandfold Spring" in Guangdong

Side: Arising-dragon [] [] pills

The inscription in the center refers to a medicine manufacturer also named on cat. 2392. The lateral inscription names the product.

Medicine bottle (cat. 5949). Small greenish clear glass medicine bottle with embossed characters.

TRANSCRIPTION

Guangzhou Anlanjie ' Hengchun'ge jian zhi

廣州安瀾街恆春閣監製

TRANSLATION

Made under the supervision of the "Pavillion of Persevering Spring" [company] in Guangzhou, Anlan Street

Medicine bottle (cat. 269*). Aqua glass medicine bottle wall panel fragment with embossed inscription in Roman letters: "S. Watson—Hong Kong." Watson Co. remains the largest drugstore chain in Hong Kong.

Bottles. *Bottle* (cat. 15). Clear glass bottle of diamond-shaped cross section, formerly closed with a cork. Two panels feature embossed inscriptions. One gives the name of the medicine in Roman letters, followed by the phonetic transcription into Chinese characters; the other gives the name of the medicine.

TRANSCRIPTION

ANTICONOL ' Yandiganlu baizhuowan 晏地干路白涿丸

TRANSLATION

Anticonol, pills [to heal] whitish and turgid urine

Prof. Chou identified the product as pills for men having involuntary ejaculation problems; Mr. Toy and Mr. Tam confirmed that these pills were used for sexual diseases. Medical dictionaries, however, identify *baizhuo* 白涿 as an urinary ailment.

Bottle (cat. 77). Clear glass wall fragment with a largely illegible embossed inscription: [] *he zhai* (?) [] [] 合齋 [...]. The two preserved characters seem to form part of the name of a company. There was a parallel row of Roman letters, now too fragmentary to be readable.

Bottle (cat. 92). Clear glass bottle fragment with embossed Roman letters: *YUEN*.

Bottle (cat. 101). Clear glass bottle fragment with embossed Roman letters: *UONG*.

Bottles (cat. 245 and 271). Greenish clear glass fragments of two aqua bottles, each inscribed with a single embossed Chinese character: *xiang* 香, "fragrant" (also first character in "Hong Kong").

Bottle (cat. 266 and 268). Clear glass bottle fragments with embossed Chinese characters; although not of the same object, these two fragments seem to come from bottles of the same kind. Cat. 266 preserves parts of two characters: *hua yuan* [] [] 華源, "flower source (?)." Only the character *yuan*, "spring, source," is preserved on cat. 268. The preserved characters probably form part of the name of a manufacturing company; it would not make any sense to guess at a translation. The bottle most likely held vinegar, although glass bottles were used also for barbecue and soy sauce.

Bottle (cat. 267). Clear glass, partial wall fragment with only one complete Chinese character: [] *shan* [] [] 山 [], " [...] mountain [...]"

Bottle (cat. 270). Partial base of a common square bottle of greenish clear glass with a fragmentary embossed inscription of Chinese characters: *gong run* 公閩, "public profit." Given the fragmentary context, the translation must remain highly tentative.

Beer bottle (cat. 315). Base of beer bottle of green glass with embossed inscription running around the lower part of the vessel walls.

TRANSCRIPTION

Dai Nippon boku[shū][][][] *kaisha seisō*
大日本麥[酒][][][]會社製造

TRANSLATION

Manufactured by Great Japan Beer [...] Company

Separating the beginning and end of the name is a circle with a dot inside. In the center of the base is a monogram in Roman letters: M-K-O (the letter M encloses the two others).

Bottle (cat. 330). Part of bottom of a greenish clear glass bottle with adjacent wall portions; a single character remains from a longer inscription: *guang* 光, "brightness."

Bottle (cat. 672). Wall and base fragment of common green bottle with two rows of three Chinese characters each: *Gakuyōdō* ' *Hirao-shi* 岳陽堂平尾氏. The first line, literally translatable as "Yueyang-Hall," seems to be the name of a Japanese medical company (Yueyang is the name of a city in Hunan, China, with rich associations in classical literature that would have been familiar to the educated public in Japan as well as in China). The second line renders a Japanese family name.

Bottle (cat. 3548). Glass bottle with embossed Chinese characters.

TRANSCRIPTION

Tōkyō Yamazaki Teikokudō 東京山崎帝國堂

TRANSLATION

Imperial Hall, Yamazaki, Tōkyō

According to Prof. Chou, the bottle contained a cheap aphrodisiac, cheaper than Chinese ingredients that used such costly products as rhinoceros horn.

Bottle (cat. 4442). Olive blob top bottle with paper label in Chinese writing; the label is badly preserved and cannot be read in its entirety, but it is clear that the bottle contained some kind of medicinal wine or tonic. The label is executed in the traditional woodblock technique and hence looks somewhat like a Taoist charm; in the center is an illustration, now unrecognizable except for some parts of plants and buildings (note character *wéi* 為, probably part of a longer text).

TRANSCRIPTION

In Roman letters on the upper left: "CHI." The letters continued on the right side of the label, now lost. The rest of the inscription is in Chinese characters. In large characters underneath "CHI" is *ji* (see cat. 6449), "auspiciousness" (probably part of the name of the medicine; "chi" is the Wade-Giles transcription for *ji*). A row of large characters down the right side may be transcribed as follows: *bu jiu* [] *wu tu* 補酒 [] 烏吐, "restoring wine [...]."

Further below, one finds five lines of text written in script: *ci jiu* [][][][][] *chang rou' yi* [] *jing ban shen'* [] *qi xiu*(?)

xue ruo' yin zhi [] *chu* [].

此酒 [][][][][][][][][] 長肉一 [] 精寒腎
[] 氣虛血弱
飲之 [] 出 []

Not enough is left of the text to allow a translation. The concluding part of the inscription seems to be a ditty, possibly in rhymed verse, describing the efficacy of the bottle's content in curing the ailments of various human organs.

Glass fragments (cat. 26 and 96). Small fragments of clear glass with partial characters that could not be read.

Bottle cover (cat. 6943). Fragment of milky white glass base with embossed inscription.

TRANSCRIPTION

xian shi jian zhi 先施監製

TRANSLATION

Made under supervision by Xianshi [Company].

Miscellaneous

Stove (cat. 2776). Fragment of a Chinese fired-clay stove (fig. 7.1) has two impressed stamps on the rim. The first stamp has a hexagonal frame with frilly borders:

TRANSCRIPTION

Li Yongshun zao (Chinese characters) 李永順造

L. W. T. (Roman letters)

TRANSLATION

Made by Li Yongshun.

L. W. T. are the initials for the name Li Yongshun when pronounced in the Cantonese dialect. The second is rectangular with rounded corners:

TRANSCRIPTION

lu bu er jia' ru jia bao huan 爐不二價如假保換,

TRANSLATION

There are no two prices for a stove (= no bargaining). If it is a fake, exchange is guaranteed.

Plate (cat. 4346). Porcelaneous stoneware plate filled with plaster; the plate was probably used secondarily as construction material. Illegible brushwritten characters on the plaster.

Brush handle (cat. 6864). Bamboo brush handle with four carved Chinese characters, giving a picturesque description of the object's function.

TRANSCRIPTION

sao jing xie e 掃淨耶惡

TRANSLATION

Sweep away all evil things

Newspaper scraps

The excavations brought to light a surprising number of Chinese language newspaper fragments that had survived discard,

demolition, fire, and burial. These were pressed and dried. Fragments from one group that had been stuck together were selected for examination, and the translations below are from this single source.

Fragment with Chinese characters (cat. 6755*). It is not a news story but a fictional series that appears to be a love story, according to Prof. Chou.

Book of lyrics of Christian hymn (cat. 6842*). The text is a rendering of the New Testament into Chinese, according to Eric Chau.

Small scraps (cat. 7187*). From feature 44, unit 2, level 3, these scraps were identified by Eric Chau as relating to these topics.

Chinese medicine, pill, powders, ointment for revitalization. Ginseng root and powdered deer antler are precious and expensive.

Fresh fruit, garden or farm.

League of Nations. Proposed by President Wilson in 1918, it was established in 1920.

Chinese politics. China in turmoil because of Japanese aggression (a recurrent theme in Chinese politics throughout the early twentieth century). Donations requested for self-strengthening efforts "to save our country." An article, entitled "To praise the donations of up to \$50," lists names of individuals.

Advertisements. These included:

- ☞ Medicine by an advertiser from Hong Kong;
- ☞ Southern Manchurian Railroad (built in China and run by a Japanese company);
- ☞ Chinese medicine with prices—for example, three grades of ginseng root with prices (in US currency) for grades A (\$8/lb), B (\$7/lb), and C (\$6/lb) with loose pieces priced at \$3.50/lb);
- ☞ Goose liver from Canton, as well as other foodstuffs preserved in oil, by a food trading company;
- ☞ Chinese opera
- ☞ Jewelry and jade ornaments.

Chinese school organization. Announcements from the board of directors.

General Chiang Kai-shek (Jiang Jieshi 蔣介石). A very negative article on the general, who is likened to a hooligan. The article especially criticizes his stance towards the Japanese (indicating a date before 1936, when the General was forced to abandon his politics of appeasement).

Death announcement. The deceased person's relatives are named and their positions in the family are indicated.

One of the scraps gives a date as 2481 years after the birth of Confucius (traditionally given as 552/51–479 BC), corresponding to 1929 or 1930. In the early twentieth century, some nationalist intellectual circles attempted to replace use of the Western calendar with a Confucian one, but this was never widely

followed; one may surmise that the editorial stance of this newspaper was at least culturally conservative. As all addresses given in advertisements are in San Francisco, the paper was probably published there.

Decorated Items

The items listed below are of interest because their ornamentation makes it possible to date them or because they feature significant iconography. All datings given are by David Kamansky.

Porcelain

Bowl (cat. 49*). Elegant eight-sided footed porcelain bowl (*bajiaowan* 八角碗). The panels are decorated with two roosters on two adjoining panels; the rest consists of floral polychrome decoration. Enameling is seen on both the inside and on the base of the bowl.

Teacup stand (cat. 300*). White porcelain teacup stand, 1860s–1880s.

Rim sherd (cat. 406/304*). Rim sherd decorated by transfer print. Could be either Japanese or Chinese, circa 1900+.

Plate (cat. 2846*). Porcelain plate with 1000 butterfly design, dating from 1875 to 1915.

Plate (cat. 2864*). Porcelain plate with dragon motif. Even though it shows the imperial dragon with five claws, this was probably not a dynastic piece. It seems to date instead to the late years of the Qing (between 1840 and 1911), when the central government had become so corrupt and powerless that potters all over the country used this formerly restricted symbol with impunity.

Rice bowl (cat. 3159*). Porcelain rice bowl with polychrome decoration of dragons on yellow background. This is a more expensive ceramic type than most of the others excavated. Both dragons and yellow color are imperial symbols.

Tea bowl (cat. 5917*). White porcelain tea bowl with overglaze floral design and gilding. Based on its shape and flared rim, Prof. Chou thought the vessel must be of Chinese origin.

Lid (cat. 5993 and 6024). Handpainted blue-on-white porcelain lid with knob handle. The decoration features a stylized bat (*fu* 蝠), a rebus signifying happiness (*fu* 福).

Teapots (various cat. nos.*). Blue and white teapots depicting a sage collecting magic herbs with his assistants—an allusion to the longevity-conveying power of tea.

Stoneware

Candleholder (cats. 301 and 7018*). Candleholder for ancestor worship (pl. 14). Prof. Tong reported seeing similar objects as late as 1940 in mainland China. The context of this and the other candleholders presumes an earlier date.

Incense holder (cat. 4302*). Incense holder of glazed stoneware (pl. 14). This particular glaze is very common in

China. Wealthy households would use a container of similar form but made of bronze or silver.

Jar or bottle (cat. 406-139). Small brown stoneware jar or bottle, thin and finely made. Could be peasant ware and used as oil or unguent bottle. Probably sealed with a cork or a piece of wood covered with cloth.

Plate (cat. 940). Small stoneware plate. Unornamented center surrounded by unglazed (biscuit) ring on the interior, stamped blue design on cavetto. Southeast Asian type, also made in China for sale throughout Asia. Pattern hand painted, representing an unending knot with fillet. Dates to the nineteenth century.

Lid (cat. 6234). Stoneware rectangular lid with hand-painted brown abstract design elements; no inscription. Prof. Chou thought the shape was Japanese.

Figurines

Figurine (cat. 2835*). Soapstone figurine (pl. 10) of God of Longevity (*Lao Shou* 老壽), also known as the deity of the Longevity Star (*Showxing* 壽星) or the "Old Man Immortal of the Southern Extremity" (*Nanji Xianweng* 南極仙翁). He holds a large peach (symbol of immortality, longevity). The figurine had been painted; traces of cinnabar are still visible in the folds of the robe. A hole on the bottom suggests that this was one of a group attached to the rim of a vessel or decorative base. A name is inscribed on the bottom. This piece may be dated to the turn of the twentieth century. As regards the religious imagery in Chinese homes, Taoist symbols are often used to obtain good things in the present life, but Buddhist figures are relied upon for better life in the hereafter.

Figurine (cat. 1289). Clay sculpture of a donkey with rider seated on a bundle of sticks possibly representing one of the Eight Immortals (*ba xian* 八仙), for instance, the maverick holyman Lü Dongbin 呂洞賓. Folk art from Guangdong or Fujian, possibly Chaozhou City, Guangdong. According to Mr. Kamansky's estimate, this piece probably dates from the 1820s to the 1850s.

Other informants suggests that the animal is a water buffalo, particularly because the rider is positioned over the rump. Prof. Tong interprets the figure as Wang Meng 王蒙 (1308-1385) of the Yuan 元 dynasty, a poor farm boy who was sent daily to take care of his family's water buffalo, during which time he would write and study books, eventually becoming a famous painter. It is, however, questionable whether Wang was popular enough to be represented as a figurine.

Figurine (cat. 1754). Head of a Qing dynasty figurine representing a woman with Manchu headdress. Unusually, this specimen is neither painted nor glazed. It can be dated to the second half of the nineteenth century.

Figurine (cat. 2372). Soapstone figurine of a monkey leaning over a small dish (pl. 13). The monkey is the cleverest of the

beasts; little monkey figures were sometimes given to students as a good luck token.

Miscellaneous

Clay fragments (cat. 62*). These fragments depict structures from brick or stone and a city gate and wall. This item may be a toy.

Stand (cat. 1342*). Red clay stand. This is a low, round object with three feet; the outer rim is elaborately molded, while the upper surface is flat, plain, unglazed, and perforated in the center. Everyone who has seen this is convinced that it is a stand for something. The remnants of clay on the feet could be for attachment of felt to protect furniture.

Oil lamp (cat. 1826*). Small dish used as an oil lamp or even for cooking (fig. 7.8). Any kind of oil could be used; the wick would be immersed in the oil with the end resting at the edge. With oil and a wick, any dish could be transformed into a lamp. Prof. Tong had never seen dishes of this shape and suggested that they were leftovers from manufacture.

Scale bar (cat. 5311*). Cylindrical bar of bone or ivory with a series of punctate marks at specific intervals. This is a scale bar with one *liang* 兩 per notch. No inscriptions are seen. Weight measures in Late Qing dynasty China varied greatly from city to city. In Guangzhou, one Chinese pound (*shijin* 市斤) amounted to 1,200 grams (metric); one *liang* is a sixteenth of a pound (75 grams according to Guangzhou measurement).

Serving bowl (cat. 5654*). Four Seasons serving bowl with its hollow base filled with cement. It could have been used for playing the Chinese dice game, since a die bounces differently when thrown into a bowl with a hollow base or one with a solid, filled base.

Oval tube (cat. 6502*). Carved oval tube with recessed end for lid or attachment. Prof. Chou thought that the material was either horn or teakwood. He could not identify it but suggested a part of a musical instrument or a water pipe. Perhaps it is a socketed handle.

Wooden object (cat. 6885*). Wooden object with holes and one peg in place (fig. 7.5). None of our informants recognized this item.

Bone object (cat. 7129*). Well-formed bone object with pointed end. Seems to be polished. Prof. Chou did not recognize it but suggested that it might be an acupuncture tool. Mr. Tam suggested it was a toothpick.

Bookpins (various cat. nos.*). Bone book-closing pins. Books were printed with wooden blocks that had the characters carved onto them, one block for each double page. Editions of the Confucian classics or of medicine works could run to ten to twelve volumes in length. They were then enclosed in a box covered with blue cloth. Bone pieces were used to hold the book box closed. The same boxes are still in use for books printed in the traditional manner or other presentations, although the pins are now usually made of plastic.

Comments

The items treated in this appendix, both inscribed and uninscribed, pertain to a surprisingly wide range of experience in the life of Los Angeles Chinatown residents. Although by no means comprehensive, these materials are instructive because they reflect traditional Chinese cultural knowledge that one would assume was shared, widely if not universally, among members of the community. Such an assumption should perhaps not be made too hastily, however. In trying to make sense of the evidence at hand, we must consider a variety of factors: the place of manufacture of each inscribed object, its history of use, and its context of deposition as well as the meaning of iconographic motifs and/or inscribed texts, their history, and their significance in relation to the object on which they appear. In the following brief comments, we can only touch on some of these issues.

For the most part, imported items found in the Los Angeles Chinatown excavations probably come from areas far from the political centers of China, notably from Guangdong, the home of most early Chinese immigrants to California. Guangdong (cats. 47275, 5499, 5848, AND 5849), Guangzhou (cat. 5949), and Hong Kong (cat. 269 and possibly cats. 245 and 271) are the only Chinese place names mentioned in the inscriptions. The overwhelming majority of objects under discussion were mass-produced, either industrially (glass objects) or in semi-industrialized vernacular workshops (ceramics). Many of the porcelain vessels bear reign period marks in imitation of those on products of the imperial kilns in Jingdezhen 景德镇 (Jiangxi province). Some are explicitly marked as products of the official kilns (cats. 5121 and 7273), but—in spite of the occasional occurrence of imperial iconography (as on cats. 2864 and 3159)—it can be virtually excluded that they were made there. Neither can the dating suggested by the reign marks necessarily be trusted, especially in the case of the Qianlong marks. Virtually none of the objects found appears to predate the second half of the nineteenth century, and the newspaper scraps (which must date to the time immediately before the site ceased to be occupied by immigrant Chinese) point to a *terminus ante quem* of ca. 1930 for the vast majority of the finds.

A badly distorted picture would undoubtedly result were one to reconstruct the daily life of the Los Angeles overseas Chinese community solely from the surviving inscribed and decorated material remains. Aside from a few incidental items for daily use, such as liquid ink, brushes, scales, and ceremonial items, most of the finds were either household crockery or container-vessels that had been imported from East Asia (mostly from China, but in some cases from Japan) not for their own sake but for their contents. The range of such products is virtually limited to preserved foodstuffs, medicines, tonics, and narcotics. In some cases, bilingual inscriptions (cats. 15, 77, 315, 4441, and 2776) or inscriptions in Roman letters alone (cats. 92, 101, 269, 69, and

126)—with a telling slip of the brush in the last-mentioned instance reminding us that the manufacturers were not always fully literate in the Roman alphabet—may indicate that the products had been made for export. One should also consider alternative explanations such as the use of “progressive”-looking Western writing as an advertising device in East Asian marketplaces. Be that as it may, in the majority of the examples discussed, inscriptions are exclusively in Chinese characters. One possible implication of this is that there were few if any US customs controls for which information would have had to be provided in English, as is the case today.

It stands to reason that most of the products documented by the excavated finds were imported because they fulfilled specific community needs that local production could not satisfy. An assessment of their relative rôle in the Chinatown economy—an interesting topic for sustained further research—will have to consider them in connection with the totality of excavated finds, as well as surviving written documentation.

None of the objects listed—not even those with relatively elaborate painted ornamentation—would appear to be a likely candidate for appreciation from an aesthetic or artistic viewpoint. It is, however, extremely noteworthy that even within the limited sample under analysis, the themes reflected in decorations and inscriptions are informed by the full breadth of the millennial Chinese cultural tradition. In our tentative explanations, we have encountered figures and events from most of the major imperial dynasties and have ventured into highly diverse subfields of culturally-specific activity. Some inscriptions and iconographic motifs touch directly on dynastic history, representing such diverse subjects as the Confucian scholar Fu Sheng (cat. 2865), the tragic, gallant military hero Xiang Yu (cat. 7207), and that epitome of strategic cleverness, Zhuge Liang (cat. 415). Other representations relate to religious traditions, ranging from (possibly) the Buddha (cat. 3755) and Buddhist arhats (cat. 4080) to Taoist deities (cat. 2835) and immortals (cat. 1289). The ubiquitous theme of auspiciousness—expressed both through design motifs and through the written word (for example, on cats. 589, 3179, 6628 and 4838, 3447, 4435, 5171, 2881, 6167, 7185, 2392, 5848, 5849, 5949, and 4441)—similarly harks back to age-old popular religious beliefs, superstitions, and rituals.

Furthermore, the materials evince connections to famous works of literature—sometimes directly, as when a portion of a Tang dynasty classical prose essay is quoted on the outside of a rice bowl (cat. 6523/6341) and other times indirectly, as in the depictions of scenes from some of the major works of vernacular fiction with identifying inscriptions (*Hongloumeng* on cats. 626, 1724, and possibly also on cats. 3257, 3259, and 3300; *Sanguozhi yanyi* on cat. 415). Other inscribed items feature literary attempts that seem to originate in the workshop milieu, such as the anonymous landscape poem inscribed on cat. 3138 and, possibly, Pan Zhinan's ditties on cats. 3042 and 3400/4286. And there is

also the emulation, albeit imperfect, of elite visual art styles on some of the painted objects—in particular, the orchid representations with accompanying calligraphy on cats. 3399 and 4542, representations undoubtedly meant to convey the notion of great refinement, and also, at a slightly more vernacular level, to objects decorated with paintings by Pan Zhinan (cats. 3042 and 3400/4286) and other similar objects (cats. 5933 and 5912/6284). The opium pipe bowls, as well, seem to display some pretense to elite modes of visual expression.

The study of such topics and their articulation in folk-level cultural production in China is a field open to further research that should, ideally, precede the study of the above-mentioned items in their Chinatown context. However, as shown by our simultaneous listing of Pan Zhinan's works under both the "literature" and the "painting" rubrics and of cat. 415 under both "history" and "literature" rubrics, such categories should not be considered mutually exclusive. In fact, in Late Imperial China, awareness both of history and of literary fiction (as well as quite possibly of many aspects of religion) was largely mediated to the general population through operatic performance and storytelling. To what degree such performance events may have been built into the life of the Chinatown inhabitants is still unclear, although there was at least one Chinese theater on Alameda Street in the 1880s. This might be a fertile topic for future inquiry, which could help explain the meaning decorated ceramics might have held for their owners and users.

The question whether Chinatown residents took much note of the cultural information conveyed by inscribed or decorated objects in their possession is crucial for the archaeological interpretation of their significance. Would they ever have stopped to read the inscriptions and the iconography? Would they have known what was referred to? Who might have known? How would they have learned about, and why might they have appreciated, such things as Liu Yuxi's "Inscription of the Humble Dwelling" (cat. 6523/6341) or the great classical novels? And how was such knowledge kept alive in the overseas community—if it was? Such questions, posed in the Chinatown context, are extremely difficult to answer at the present state of research but they must be pursued if the archaeological study of the excavated remains under discussion is to carry any significance.

Inasmuch as the inscribed ceramics are concerned, there is one crucial difference from the calligraphy scrolls discussed in appendix D. There is some indication that the calligraphy was generated in a local, overseas Chinese context; its significance can be interpreted against this background, quite apart from the original meaning of the text itself. In contrast, the inscribed ceramic objects, in almost all cases, were imported from China already decorated and inscribed. (Exceptions include cat. 3250, a secondarily-inscribed presentation plate; objects with brushwritten inscriptions such as cats. 3423, 3451, 5378, 4069, and

4144; and objects with pecked inscriptions, such as cats. 3544, 7258, 7157, and 3539.) They would have been purchased for a specific household function, with little if any regard for iconography, especially if they were purchased in the US, where the consumers' choice was no doubt restricted to available supply. This consideration applies especially to objects used in everyday life, such as rice bowls and serving bowls. The decoration or inscription may have been of slightly greater consequence for objects intended for display (for example, presentation bowls such as cats. 2865 and 3250), and perhaps also some tea bowls, which were associated with ceremonial forms of consumption.

Perhaps not surprisingly, therefore, we may observe a certain correlation between the amount and nature of the cultural information conveyed through written or iconographic means of communication and the type of object on which the inscriptions and decorations appear. The opium pipe bowls, made of prestige-conveying Yixing stoneware, were probably the most expensive of the inscribed and decorated objects; their decoration and inscriptions are at least in part *sui generis*, probably relating to their specific function within the subculture of opium smokers, and for this reason perhaps deliberately cryptic to the non-initiate. Virtually all inscriptions and representations relating to historical and literary subjects occur on objects made of white porcelain, the most prestigious of the materials used for everyday household items (although it was probably still not exceedingly costly). By contrast, very little such information is seen on the much coarser Four Seasons bowls, and even less on utilitarian stoneware vessels or glass containers.

However, even on these relatively humble objects, made for immediate use and never intended to last, the inscription with Chinese characters imposes certain cultural standards; this is true regardless of whether an object was manufactured in China or another character-using country such as Japan. Aspects of classical Chinese civilization remain alive even today in the realm of naming, be it of a human being, a product, or a company; and the names we find inscribed on objects from the Los Angeles Chinatown—even on Four Seasons bowls (cats. 5549 and 5615, 5891, 5816, 5822) and medicine containers (cats. 2392, 5848 and 5849, 5949, and 672)—are derived from a well-nigh inexhaustible pool of poetic concepts, phrases, and clichés, coming from the classical literary idiom that was very far removed from the dialects spoken by the Chinatown immigrants. Those acquainted with Chinese culture may not find it astonishing that the label of a medicine bottle such as cat. 4441 should advertise its product in a rhymed (?) passage written in literary Chinese; but the fact is nevertheless remarkable as it illustrates one aspect in which the culture reflected in these finds differed hugely from Western modernity. The everyday life of the early Chinese immigrants to California was permeated by surviving elements of the classical tradition, which, even when

they were not fully understood, were taken for granted and helped to define the community's distinctive identity. It is our contention that, in order to understand the culture of this community in its full richness, one must familiarize oneself thoroughly with all aspects of the ancient yet extraordinarily vigorous traditions that the Chinese immigrants carried with themselves from their areas of origin. Research on these dimensions of the early overseas Chinese experience is still in its very beginning stages.

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Marks on Ceramics

<i>Maker</i>	<i>Catalog no.</i>	<i>Provenience</i>	<i>Date(s)</i>		<i>Item</i>	<i>Reference</i>
Alcock	UPT-99	Auger BF	1839	1846	Base sherd	Godden 1964:27
Charles Allerton & Sons	UPT-183	Obs. well	1859	1942	Base sherd	Godden 1964:30
Baker & Co.	406-91	Locus D	1839	1893	Bowl	Godden 1964:51
Xavier Baxin	UPT-402	Sold. pile			Lid	Pastron et al. II, Fig 10:14
Frank Beardmore & Co.	UPT-5655	Slurry wall	1903	1914	Mugs (3)	Godden 1964:64
Joseph Bourne & Son	UPT-430	Surface	1850		Ink bottles	Godden 1964:90
Joseph Bourne & Son	UPT-5658	Slurry wall	1850		Ink bottle	Godden 1964:90
T. & R. Boote, Ltd.	UPT-2039	Feature 12	1890	1906	Plates	Godden 1964:84
T. & R. Boote, Ltd.	UPT-3246	Feature 29	1890	1906	Plate	Godden 1964:84
T. & R. Boote, Ltd.	UPT-3427	Feature 29	1890	1906	Bowl sherd	Godden 1964:84
T. & R. Boote, Ltd.	UPT-2186	N25/E3	1890	1906	Plate	Godden 1964:84
Sampson Bridgwood & Son, Ltd.	406-76	Locus A	1805	1887	Plate	Godden 1964:101
Buffalo China	WW-13	W/W	1928		Plate	Altman & Altman 1969:30
Burford Brothers	UPT-5926	Feature 39	1881	1904	Plate sherd	Gates & Ormerod 1982:29a
Henry Burgess	UPT-365	AU-1	1864	1892	Plate sherd	Godden 1964:116
Henry Burgess	UPT-3052	Feature 29	1864	1892	Bowl	Godden 1964:116
Carr China Co.	WW-12	W/W	1916	1952	Mug	Lehner 1988:82
E. & C. Challinor	UPT-3105	Feature 29	1862	1891	Plate sherd	Godden 1964:137; Cushion 1983:136; Praetzelis et al. 1983:18
E. & C. Challinor Praetzelis et al. 1983:18	UPT-3194	Feature 29	1862	1891	Plate sherd	Godden 1964:137; Cushion 1983:136;
E. & C. Challinor Praetzelis et al. 1983:18	UPT-431	Surface	1862	1891	Salad plate	Godden 1964:137; Cushion 1983:136;
Edward Clarke	UPT-6219	Feature 41A	1880	1887	Small plate	Praetzelis 1982:21
Robert Cochran & Co.	UPT-399	Sold. pile	1846	1918	Soup bowl	Godden 1964:158
Robert Cochran & Co.	UPT-1325	Feature 2	1846	1918	Base sherd	Godden 1964:158
The Colonial Co.	UPT-5924	Feature 39	1903	1929	Saucer	Gates & Ormerod 1982:35a
Cockson & Seddon	UPT-6744	Feature 52	1875	1877	Ale bottle	Godden 1964:159
W. & E. Corn	UPT-1830	Feature 2	1864	1904	Base sherd	Godden 1964:175

<i>Maker</i>	<i>Catalog no.</i>	<i>Provenience</i>	<i>Date(s)</i>	<i>Item</i>	<i>Reference</i>
Davenport	406-296	Yard & shops	1793 1887	Plate	Godden 1964:189
Maison Doran	UPT-1118	AU-1	1882	Jar and lid	Morrison & Plummer 1882:425-427
Maison Doran, 27 R. Grenier St Lazare, Paris	UPT-1611	Feature 2	1882	Lid	Morrison & Plummer 1882:425-427
Dresden	UPT-995	Slurry wall	1890 ca 1900	Plate sherd	Kovel & Kovel 1986:63a
Dresden	UPT-996	Slurry wall	1890 ca 1900	Plate sherd	Kovel & Kovel 1986:63a
Dresden	UPT-997	Slurry wall	ca 1897	Plate sherd	Gates & Ormerod 1982:215d
Dunn, Bennett & Co. (Ltd.)	UPT-6778	Feature 54	1875 1907	Small plate	Kovel & Kovel 1986:134b
East End Pottery	UPT-1618	Feature 2	1894 1907	Saucer	Gates & Ormerod 1982:41d
East End Pottery	UPT-4148	Feature 23	1894 1907	Saucer	Gates & Ormerod 1982:41d
Edwards & Brown	UPT-794	AU-1	1882 1910	Jar	Godden 1964:232
John Edwards (& Co.)	UPT-7091	Feature 51	ca 1880 1900	Plate	Godden 1964:231
John Edwards (& Co.)	UPT-6780	Feature 54	1847 1900	Plate	Godden 1964:231
Elverson, Sherwood and Baker Pottery	UPT-230	A-135	1879	Crock	Lehner 1988:138
Francis J. Emery	UPT-3106	Feature 29	1878 1893	Plate	Godden 1964:237
S. Fielding & Co., Ltd.	UPT-3249	Feature 29	1880 1917	Plates (2)	Godden 1964:247
Thomas Furnival & Sons	UPT-2263	Bag, Bsmt.	1818 1890	Soup bowl	Godden 1964:263
Thomas Furnival & Sons	UPT-3880	Feature 17A	1818 1890	Base sherd	Godden 1964:263
Thomas Furnival & Sons	UPT-3910	Feature 17A	1818 1890	Soup bowl	Godden 1964:263
Thomas Furnival & Sons	UPT-376	Yard & shops	1818 1890	Plate sherd	Godden 1964:263
Thomas Furnival & Sons	UPT-6468	Feature 51	1878 1890	Plate	Godden 1964:263
Gelle, Freres	UPT-2183	AU-1	1890 1912	Jar	Devner 1970:54
George Jones & Sons	UPT-822	Track area	1864 1917	Bowl	Godden 1964:359
Glasgow Port Dundas	UPT-526	Yard & shops	1850 1932	Ale bottle	Cushion 1983:266
Glasgow Pottery	UPT-528	AU-1	1863 1900	Base sherd	Lehner 1988:172
Goodwin Pottery Co.	UPT-3154	Feature 29	1893 1906	Oval bowl	Gates & Ormerod 1982:54d
Goodwin Pottery Co.	UPT-558	Slurry wall	1893 1906	Plates (3)	Gates & Ormerod 1982:54d
Goodwin Pottery Co.	UPT-3143	Feature 29	1893 1906	Plate	Gates & Ormerod 1982:54d
Goodwin Pottery Co.	UPT-1000	Slurry wall	1893 1906	Saucer	Gates & Ormerod 1982:54d
Greenwood Pottery	UPT-382	Yard & shops	ca 1904	Oval bowl	Kovel & Kovel 1986:177m
Greenwood Pottery	UPT-383	Yard & shops	ca 1904	Oval bowl	Kovel & Kovel 1986:177m
Greenwood Pottery	UPT-5495	Spoil dirt	ca 1904	Oval bowl	Kovel & Kovel 1986:177m
Greenwood Pottery	UPT-375	Yard & shops	ca 1904	Plate	Kovel & Kovel 1986:177m
Greenwood Pottery	UPT-3425	Feature 29	ca 1904	Plate	Kovel & Kovel 1986:177m
Greenwood Pottery	UPT-3913	Feature 17A	ca 1904	Plate	Kovel & Kovel 1986:177m
Greenwood Pottery	UPT-5494	Spoil dirt	ca 1904	Plate	Kovel & Kovel 1986:177m
Greenwood Pottery	UPT-1972	Feature 11	ca 1904	Small plate	Kovel & Kovel 1986:177m
Greenwood Pottery	UPT-3334	Feature 29	ca 1904	Small bowls (2)	Kovel & Kovel 1986:177m
Greenwood Pottery	UPT-3696	Feature 20	ca 1904	Small dish	Kovel & Kovel 1986:177m
Greenwood Pottery	UPT-3989	Feature 17A	ca 1904	Base sherd	Kovel & Kovel 1986:177m
Greenwood Pottery	UPT-5972	Feature 39	ca 1904	Plate sherd	Kovel & Kovel 1986:177m
Griffen, Smith & Hill	UPT-4515	Feature 34	1880	Saucer	Barber 1904:28
W. H. Grindley & Co.	UPT-5	Auger backfill	1880 1960	Plate	Godden 1964:294
W. H. Grindley & Co.	UPT-6	Auger backfill	1880 1960	Plate	Godden 1964:294
W. H. Grindley & Co.	UPT-215	Auger backfill	1880 1960	Plates (2)	Godden 1964:294
W. H. Grindley & Co.	UPT-825	Track area	1880	Base sherd	Godden 1964:294
W. H. Grindley & Co.	UPT-227	Auger backfill	1880	Serving dish	Godden 1964:294
Grosvenor, Glasgow	SF-1	Locus A	1869 1926	Ale bottle	Godden 1964:295
Iarker Pottery Co.	UPT-832	Track Area	1890 1910	Base sherd (2)	Gates & Ormerod 1982:82
Iarker Pottery Co.	UPT-757	AU-1	1890 1910	Base sherd	Gates & Ormerod 1982:82

<i>Maker</i>	<i>Catalog no.</i>	<i>Provenience</i>	<i>Date(s)</i>	<i>Item</i>	<i>Reference</i>
W. P. Hartley	UPT-3809	Feature 17A	1875	Base sherd	Cushion 1963:33
Haviland & Co.	UPT-3244	Feature 29	1864	Cup	Kovel & Kovel 1986:79
"HOLLENBECK HOTEL"	UPT-5984	Feature 39	ca 1911	Rim	Los Angeles City Directory
Thomas Hughes	UPT-1251	Trench N-23	1860 1894	Plate	Godden 1964:319
Thomas Hughes	UPT-7092	Feature 51	1860 1894	Plate	Godden 1964:319
Keller & Guerin	UPT-3632	Surface	1788 1800s	Jar	Cushion 1965:46
Henry Kennedy & Sons (Ltd.)	UPT-5493	Spoil dirt	1866 1929	Ale bottle	Godden 1964:369
Knowles, Taylor and Knowles	UPT-5070	Feature 23	1890 1910	Saucer	Gates & Ormerod 1982:125d
Knowles, Taylor and Knowles	UPT-5820	AU-1	1905 1929	Plate	Gates & Ormerod 1982:126a
Knowles, Taylor and Knowles	UPT-3546	Guidewall tr	1890 1910	Plates (2)	Gates & Ormerod 1982:127b
Knowles, Taylor and Knowles	UPT-377	Yard & shops	1890 1910	Plate	Gates & Ormerod 1982:125d
Knowles, Taylor and Knowles	UPT-3135	Feature 29	1890 1910	Plates (2)	Gates & Ormerod 1982:125d
Knowles, Taylor and Knowles	UPT-3912	Feature 17A	1890 1910	Plate	Gates & Ormerod 1982:125d
Knowles, Taylor and Knowles	UPT-4733	Guidewall tr	1890 1910	Plate	Gates & Ormerod 1982:125d
Knowles, Taylor and Knowles	UPT-3992	Feature 17A	1890 1907	Plate	Gates & Ormerod 1982:119c
Knowles, Taylor and Knowles	UPT-546	Slurry wall	1890 1910	Plates (2)	Gates & Ormerod 1982:119c
Knowles, Taylor and Knowles	UPT-561	Slurry wall	1890 1910	Plate	Gates & Ormerod 1982:119c
Knowles, Taylor and Knowles	UPT-297	MY & shops	1890 1910	Plate	Gates & Ormerod 1982:119c
Knowles, Taylor and Knowles	UPT-3145	Feature 29	ca 1904	Plate	Gates & Ormerod 1982:127b
Knowles, Taylor and Knowles	UPT-3976	Feature 17A	1900 1920	Plate	Gates & Ormerod 1982:125c
Knowles, Taylor and Knowles	UPT-4379	Main pass tun	ca 1904	Butter pat	Gates & Ormerod 1982:125b
Knowles, Taylor and Knowles	UPT-1869	Feature 3	1890 1910	Butter pat	Gates & Ormerod 1982:125d
Knowles, Taylor and Knowles	UPT-4924	Sidewall tr	1885 1895	Chamber pot	Gates & Ormerod 1982:122a
Knowles, Taylor and Knowles	UPT-1126	Baggage hand.	1887 1895	Bowl	Gates & Ormerod 1982:122d
Knowles, Taylor and Knowles	UPT-4006	Feature 26	1885 1895	Base sherd	Gates & Ormerod 1982:122b
Knowles, Taylor and Knowles	UPT-559	Slurry wall	1900 1920	Small bowl	Gates & Ormerod 1982:125c
Knowles, Taylor and Knowles	UPT-4715	Guidewall tr	1890 1920	Small bowl	Gates & Ormerod 1982:125d
Knowles, Taylor and Knowles	UPT-853	Track area	1890 1910	Serving dish	Gates & Ormerod 1982:125d
Knowles, Taylor and Knowles	UPT-994	Slurry wall	1900 1920	Soup bowl	Gates & Ormerod 1982:125c
Knowles, Taylor and Knowles	UPT-998	Slurry wall	1900 1920	Soup bowls (2)	Gates & Ormerod 1982:125c
Knowles, Taylor and Knowles	UPT-3189	Feature 29	1905 1906	Bowl	Gates & Ormerod 1982:123b
Knowles, Taylor and Knowles	UPT-3070	Feature 29	1880 1890	Footed plate	Gates & Ormerod 1982:120c
Knowles, Taylor and Knowles	UPT-2665	Surface	1890 1910	Creamer	Gates & Ormerod 1982:125d
Knowles, Taylor and Knowles	UPT-1784	N24/E3	1890 1910	Base sherds	Gates & Ormerod 1982:125d
Knowles, Taylor and Knowles	UPT-2534	N22/E2	1890 1910	Base sherd	Gates & Ormerod 1982:125d
Knowles, Taylor and Knowles	UPT-1220	Trench N23	1890 1910	Oval plate(5)	Gates & Ormerod 1982:125d
Knowles, Taylor and Knowles	UPT-3337	Feature 29	1890 1910	Oval plate	Gates & Ormerod 1982:125d
Knowles, Taylor and Knowles	UPT-1622	Feature 2	1890 1910	Oyster bowl	Gates & Ormerod 1982:125d
Knowles, Taylor and Knowles	UPT-3243	Feature 29	1900 1920	Base sherd	Gates & Ormerod 1982:125c
Knowles, Taylor and Knowles	UPT-378	AU-1	1890 1910	Condiment	Gates & Ormerod 1982:125d
Knowles, Taylor and Knowles	UPT-6123	Feature 42	1905 1928	Plate	Gates & Ormerod 1982:126a
Knowles, Taylor and Knowles	UPT-6426	Feature 42	1890 1910	Base sherd	Gates & Ormerod 1982:125d
Knowles, Taylor and Knowles	UPT-5925	Feature 39	1900 1920	Base sherd	Gates & Ormerod 1982:125c
Homer Laughlin China Co.	UPT-3454	Feature 29	1901 1915	Plate	Gates & Ormerod 1982:135a
Homer Laughlin China Co.	UPT-3136	Feature 29	1877 1900	Plate	Gates & Ormerod 1982:135c
Homer Laughlin China Co.	UPT-3248	Feature 29	1877 1900	Plates (2)	Gates & Ormerod 1982:132b
Homer Laughlin China Co.	UPT-3166	Feature 29	1877 1900	Plate	Gates & Ormerod 1982:132
Homer Laughlin China Co.	UPT-1574	Feature 18	1901 1915	Oval plate	Gates & Ormerod 1982:135
Homer Laughlin China Co.	UPT-3911	Feature 17A	1877 1900	Small plate	Gates & Ormerod 1982:132

<i>Maker</i>	<i>Catalog no.</i>	<i>Provenience</i>	<i>Date(s)</i>	<i>Item</i>	<i>Reference</i>
Homer Laughlin China Co.	UPT-6437	Feature 41A	1901 1915	Oval serving	Gates & Ormerod 1982:135a
Lewis Straus & Sons	UPT-1917	Yard & shops	1895 1917	Base sherd	Kovel & Kovel 1986:49p
Los Angeles Stoneware Co.	UPT-800	Panel 43W	1900 1903	Jug	Stewart & Cosentino 1977:124
Los Angeles Stoneware Co.	UPT-5113	Feature 26	1900 1903	Crock	Stewart & Cosentino 1977:124
Keller & Guerin, Lunéville	UPT-3632	Surface	ca 1879 1889	Jar	Cushion 1965:46; Anonymous 1974
J. MacIntyre & Co.	UPT-3537	Baggage hand.	1867 1894	Ale bottle	Godden 1964:457
J. MacIntyre & Co.	UPT-6729	Feature 47 fill	1867 1894	Ale bottle	Godden 1964:457
Maddock & Co.	UPT-1256	Trench N23	ca 1906	Base sherd	Praetzelis et al. 1983:51
John Maddock & Sons	UPT-3146	Feature 29	ca 1896	Ornamental bowl	Godden 1964:406
John Maddock & Sons	UPT-557	AU-1	ca 1896	Vase	Godden 1964:406
John Maddock & Sons	UPT-4308	Feature 38	ca 1896	Small bowl	Godden 1964:406
John Maddock & Sons	UPT-5656	Slurry wall	ca 1896	Vase?	Godden 1964:406
John Maddock & Sons (Ltd.)	UPT-6229	Feature 41	1880 1896	Small bowl	Godden 1964:406
Maling	UPT-3435	Feature 29	1800 1890	Jar	Godden 1964:408-409
Maling & Sons, Ltd.	UPT-1255	AU-1	1875 1908	Jar	Cushion 1983:67
Maw & Co. (Ltd.)	UPT-534	Yard & shops	ca 1850	Jar	Godden 1964:421
Maw & Co. (Ltd.)	UPT-4171	Feature 28	ca 1850	Jar	Godden 1964:421
D. E. McNicol Pottery Co.	UPT-3125	Feature 29	ca 1900	Bowl sherd	Gates & Ormerod 1982:186
D. E. McNicol Pottery Co.	UPT-6025	Feature 40	1892 1910	Saucer	Gates & Ormerod 1982:186a
Alfred Meakin (Ltd.)	UPT-1619	Feature 2	ca 1897	Plate	Godden 1964:425
J. & G. Meakin	UPT-517	Slurry wall	ca 1890	Plate	Godden 1964:427
J. & G. Meakin	UPT-993	Slurry wall	ca 1890	Plate	Godden 1964:427
J. & G. Meakin	UPT-3245	Feature 29	ca 1890	Plate	Godden 1964:427
J. & G. Meakin	UPT-5128	Feature 30	ca 1890	Plate	Godden 1964:427
J. & G. Meakin	UPT-3424	Feature 29	1851 1891	Small bowl	Praetzelis et al. 1983:56
J. & G. Meakin	UPT-3120	Feature 29	1851 1891	Base sherd	Praetzelis et al. 1983:56
J. & G. Meakin	UPT-1970	Feature 11	1875 1883	Base sherd	Praetzelis et al. 1983:57
J. & G. Meakin	UPT-2037	Feature 12	ca 1890	Bowl	Godden 1964:427
J. & G. Meakin	UPT-1117	Slurry wall	ca 1890	Saucer	Godden 1964:427
J. & G. Meakin	UPT-6529	Feature 51	ca 1890	Bowl? sherd	Godden 1964:427
Charles Meakin	UPT-3247	Feature 29	1883 1889	Bowl	Godden 1964:426
Charles Meakin	UPT-1252	Trench N23	1883 1889	Saucer	Godden 1964:426
Charles Meakin	UPT-1915	Feature 3	1883 1889	Saucer	Godden 1964:426
Charles Meakin	UPT-4511	Feature 35	>1891	Bowl	Godden 1964:11, 426
Charles Meakin	UPT-6828	Feature 44	1883 1889	Plate	Godden 1964:426
Charles Meakin	UPT-7008	Feature 57	1883 1889	Saucer	Godden 1964:426
Mellor, Taylor & Co.	UPT-1001	Slurry wall	1880 1904	Oval bowl	Godden 1964:432
E. Merrill Co.	UPT-1034	A-112	1833 1900	Master ink	Stewart & Cosentino 1977:124
Murray & Co., Glasgow	UPT-4876	A-130	1870 1898	Ale bottle	Godden 1964:455
New Wharf Pottery Co.	UPT-3909	Feature 17A	1878 1894	Base sherd	Godden 1964:467
Peoria Pottery	UPT-6754	General	1873 1902	Crock	Lehner 1988:341
Peoria Pottery	UPT-7077	Feature 51	1867 1887	Wax sealer fruit jar	Barber 1904:161; Toulouse 1969:339
Petrus Regout	UPT-3390	Feature 29	1836 1931+	Plate	Kovel & Kovel 1986:127c
Petrus Regout	UPT-2369	Sewer trench	1836 1931+	Saucer	Kovel & Kovel 1986:127c
Petrus Regout	UPT-676	Sewer trench	1836 1931+	Bowl	Kovel & Kovel 1986:127c
Petrus Regout	UPT-5973	Feature 39	1836 1931+	Cup	Kovel & Kovel 1986:127c
Pioneer Pottery	UPT-3073	Feature 29	1884 1891	Plate	Gates & Ormerod 1982:201
Pioneer Pottery	UPT-4378	Main Pas. Tunnel	1884 1891	Plate	Gates & Ormerod 1982:201
Pioneer Pottery	UPT-1114	Slurry Wall	1884 1891	Chamber pot	Gates & Ormerod 1982:201
Pioneer Pottery	UPT-6470	Feature 51	1884 1891	Plate	Gates & Ormerod 1982:201a

<i>Maker</i>	<i>Catalog no.</i>	<i>Provenience</i>	<i>Date(s)</i>	<i>Item</i>	<i>Reference</i>
Port Dundas Pottery Co., Ltd.	UPT-370	Yard & shops	ca 1850 1932	Ale bottle	Godden 1964:504
Port Dundas Pottery Co., Ltd.	UPT-526	Surface	ca 1850 1932	Ale bottle	Godden 1964:504
Powell & Bishop	UPT-438	Slurry wall	1867 1878	Base sherd	Praetzelis et al. 1983:69
Sarreguemines	UPT-4262	Feature 32	1770	Jar	Cushion 1965:90; Jervis 1897:46
Sarreguemines	UPT-4285	Feature 32	1770	Jar	Cushion 1965:90; Jervis 1897:46
Arthur Schiller & Son (Dist. for Weiden)	UPT-429	Surface A-115	1929	Cup	Information from base mark
Smith, Ford & Jones (Rd. No. 142383)	UPT-3121	Feature 29	1890 1891	Plate	Godden 1964:528, 581
Smith, Ford & Jones (Rd. No. 142383)	UPT-7260	A-136	1890 1891	Plates (2)	Godden 1964:528, 581
Syracuse China Co.	406-291	Yard & shops	>1885	Serving plate	Lehner 1988:455
Thomas Shirley Clyde Pottery Co. (?)	UPT-6469	Feature 51	ca 1850 1860	Bowl	Godden 1964:574, 154
C. C. Thompson Pottery	UPT-3703	Feature 20	1890 1908	Base sherd	Gates & Ormerod 1982:289d
C. C. Thompson Pottery	UPT-1115	AU-1	1890 1910	Saucer	Gates & Ormerod 1982:288
C. C. Thompson Pottery	UPT-6645	Feature 51	1883 1890	Base sherd	Gates & Ormerod 1982:288
J. B. Thorn, Chemist, London. The Tarrant Co. Sole Owners, New York, USA	UPT-6387	Feature 43	1906 1925	Jar	Fike 1987:48
Vennard & Co.	UPT-2973	Feature 29	1887 1895	Jar	Fike 1987:245
Wallace China Co.	UPT-3722	Feature 16	1931 1954	Bowl	Lehner 1988:498
Waterloo Pottery	UPT-1763	Feature 12	1890 1906	Plate	Godden 1964:84
J. H. Weatherby & Sons	UPT-6640	Feature 49	>1891	Saucer	Godden 1964:653
Weiden (Distributed by Schiller)	UPT-429	A-115	1881+	Cup	Cushion 1962:158
A. J. Wilkinson, Ltd.	UPT-1859	Feature 3	ca 1896	Bowl	Godden 1964:672
A. J. Wilkinson, Ltd.	UPT-3104	Feature 29	ca 1896	Bowl	Godden 1964:672
A. J. Wilkinson, Ltd.	UPT-3108	Feature 29	ca 1896	Plate	Godden 1964:672
A. J. Wilkinson, Ltd.	406-295	Yard & shops	1885 1896	Saucer	Godden 1964:672
A. J. Wilkinson, Ltd.	406-326	Obs. well	1896+	Base sherd	Godden 1964:672
Willets Manufacturing Co.	UPT-6126	Feature 42	1879 1909	Plate sherd	Lehner 1988:522
F. Winkle & Co.	UPT-3285	Feature 29	1890 1910	Bowl	Godden 1964:678
F. Winkle & Co. (Rd. No. 102018)	UPT-3122	Feature 29	1888 1889	Base sherd	Godden 1964:528, 678
Wood & Hawthorne	UPT-1991	N21/Er	1882 1887	Base sherd	Godden 1964:687
Wood & Son	UPT-3058	Feature 29	1891 1907	Bowl	Godden 1964:689
Wood & Son	UPT-3119	Feature 29	1891 1907	Bowl	Godden 1964:689
John Wyllie & Son	UPT-3386	Feature 29	1875 1888	Base sherd	Gates & Ormerod 1982:319b
John Wyllie & Son Rd. No. 8749	UPT-941	Baggage base.	1875 1888	Plate	Gates & Ormerod 1982:319b
Rd. No. 8749	406-298	Yard & shops	1884 1885	Server	Godden 1964:527
Rd. No. 1058	UPT-2842	Feature 36	1884 1885	Butter pat	Godden 1964:527

Marks on Glass

Key to Proveniences

AU = Analytical unit, a combination of specific proveniences for analytical purposes. The analytical units for the purposes of this report include:

AU-1 = A-112, A-115, A-130, A-135, A-136, A-141, A-145, A-146, F-17, F-17A, surface, trenches, Auger/ramp, Auger 8K-9C, backhoe trench, baggage handling, guidewall (trench), MPT (Metro Rail Passenger Terminal), all N*/E* units, observation well, trench TP3, trench area, track area, sidewall trench, drop shaft, retaining wall, no location

AU-2 = F-4, F-6, F-8, F-10, F-15

AU-3 = F-26, F-28, F-34, F-35, F-36, F-37

AU-4 = F-19, F-20, F-21, F-23, F-24

AU-5 = F-44, F-45, F-46, F-50

AU-6 = F-51, F-55

AU-7 = F-2, F-7A

Specific proveniences (Fea=Feature) are listed below; the designation or abbreviation under which they are referenced is indicated in boldface type.

Feature 1		Feature 31		A-115	AU-1
Feature 2	AU-7	Feature 32		A-130	AU-1
Feature 3		Feature 33		A-135	AU-1
Feature 4	AU-2	Feature 34	AU-3	A-136	AU-1
Feature 5		Feature 35	AU-3	A-141	AU-1
Feature 6	AU-2	Feature 36	AU-3	A-145	AU-1
Feature 7	AU-7	Feature 37	AU-3	A-146	AU-1
Feature 8	AU-2	Feature 38		Auger 8K-9C	AU-1
Feature 9		Feature 39		Auger/ramp	AU-1
Feature 10	AU-2	Feature 40		Backhoe trench	AU-1
Feature 11		Feature 41		Baggage handling	AU-1
Feature 12		Feature 42		Drop shaft	AU-1
Feature 13		Feature 43		Guidewall trench	AU-1
Feature 14		Feature 44	AU-5	Locus A	SSF

Feature 15	AU-2	Feature 45	AU-5	MPT	AU-1
Feature 16		Feature 46	AU-5	Controlled units	AU-1
Feature 17	AU-1	Feature 47		No location	AU-1
Feature 18		Feature 48		Observation well	AU-1
Feature 19	AU-4	Feature 49		Retaining wall	AU-1
Feature 20	AU-4	Feature 50	AU-5	Sidewall trench	AU-1
Feature 21	AU-4	Feature 51	AU-6	South Santa Fe	SSF
Feature 22		Feature 52		Track area	AU-1
Feature 23	AU-4	Feature 53		Trench area	AU-1
Feature 24	AU-4	Feature 54		Trench TP3	AU-1
Feature 25		Feature 55	AU-6	402 (Fifth/Hill)	FH
Feature 26	AU-3	Feature 56		404 (Wilshire/Alvarado)	WA
Feature 27		Feature 57		406 (MRT)	AU-1
Feature 28	AU-3	Feature 58		West end trenches	WET
Feature 29		Feature 59		Water works (Macy/Vignes)	MV
Feature 30		A-112	AU-1	Emergency staircase #10	ESC#10

Category	Item	Provenance	Qty	Maker	Date(s)	Dist(s)	Tech.	Tech. date(s)	Reference
Medical	A	Fea 39	1	Probably Adams & Co., Pittsburgh	1861-1891	1861-1891	HT	ca 1880-1920	Toulouse 197121
Beer	A B CO	A-130	1	American Bottle Co.	1905-1916	1905-1916			Toulouse 197130
Beer	ABGMCo	Auger 8K-9C	2	Adolphus Busch Glass Manufacturing Co.	1886-1928	1886-1928	Post		Toulouse 197126
Beer	ABGMCo	A-130	1	Adolphus Busch Glass Manufacturing Co.	1886-1928	1886-1928	Post		Toulouse 197126
Beer	A.B.G.M.CO./F.	Fea 44	1	Adolphus Busch Glass Manufacturing Co.	1886-1928	1886-1928	Cup		Toulouse 197126
Medical	ABEL'S WHITE PINE/BALSAM/LOS ANGELES	Fea 29	1		1890-1897	1890-1897	HT, cup	ca 1870-1920	Toynton 197720; Fike 198772; Sternad pc 1092; Kusner pc 1992
Medical	ABSORBINE JR. 4# OUNCES//W. F. YOUNG SPRINGFIELD/MASS/USA.	Auger 8K-9C	1	Owens Illinois Glass Co., Bridgeton NJ	1910-1910s	1910	ABM	>1903	Toulouse 1971595; 403; Devner 196864; Fike 1987151
Medical	ABSORBINE JR. 4# OUNCES//W. F. YOUNG SPRINGFIELD/MASS/USA.	WWF-1	2	Anchor Hocking Glass Co.	1910-1910s	>1918	ABM	>1903	Toulouse 197146-48
Food	HF: PT./ARDEN DAIRY/CERTIFIED/EL MONTE//WASH AND RETURN//DELAVAL	A-130	1		1881-1882		ABM	>1903	LAD
Food	ARAKELIAN INC./US PAT 123,505/159/LM/651//...ERA, CAL.	WW	1	Larchford Marble Glass Co.	1912->1940	1919-1957	Cup		Toulouse 1971532
Toiletry	ARMOUR & CO./PACKERS/CHICAGO (small milk glass jar)	Fea 39	1		>1880		Cup		Devner 196859; Fike 198751; Zumwalt 198029-31
Toiletry	J & E ATKINSON/LONDON	Fea 29	1				Cup		
Medical	AYER (prob. hair vigor)	A-130	1		>1867-1918		Post		Fike 198794; W&W 197118-105; Devner 196880
Medical	AYER'S//...//LOWELL/MASS. U.S.A.	A-130	1		>1847		Post		Fike 198794; 199; 214; 223; W&W 197119
Medical	AYER'S//...//SARSAPARILLA	Fea 1	1		1912-1942				Fike 1987124; W&W 197118; 101; Devner 196880
B	B	Auger 8K-9C	1	Brockway		>1925			Toulouse 197159
B	B	A-145	1	Brockway		>1925			Toulouse 197159
Toiletry	SAMPLE/Bal's/PERFUME	A-130	1				HT, cup	ca 1870-1920	
Food	Bell (canning jar)	Fea 29	1		1888-1912				Toulouse 1969240
Food	Bell/PERFECT/MASON (canning jar)	Fea 44	1		1915		ABM	>1903	Toulouse 196928
Soda	BAY.../WORKS/SEATTLE/WASH (on ten face base) H	Fea 19	2	prob Holt Glass Works, Berkeley, CA		1893-1906	Cup		Toulouse 1971231
Food	BELLE-VERNON/FARMS CO./316 EAST 8TH ST/LOS ANGELES (1/2 pint, cream)	Fea 29	1		1890?		ABM	>1903	LAD
Food	BELLE-VERNON/FARMS CO./316 EAST 8TH ST/LOS ANGELES (1/2 pint, cream)	A-130	1		1890?		ABM	>1903	LAD
Spirit	BENEDICTINE (cognac)	A-130	2		1882-1917		3-PC, molded pushup		W&W 196831
Medical	BENTON HOLLADAY & CO/CHICAGO	Fea 18	1		n.d.				Fike 198732
Medical	BENTON HOLLADAY & CO/CHICAGO	ESC #10	1		n.d.				Fike 198732
Food	BEST FOODS/REGISTERED	A-130surface	1						
Food	BEST FOODS/REGISTERED	Fea 44	1						
Food	BEST FOODS/REG.	Fea 44	1						
Medical	DR. BIRNEY'S/CATARHAL POWDER	A-135	1		1895-1905				Fike 1987154; Devner 196814
Food	BISHOP & COMPANY	Fea 29	3		prob >1904		Cup		Zumwalt 198048
Ink	BIXBY (base)	Fea 21	1				HT, cup	ca 1870-1920	Nelson & Hurley 196712 (similar mark)
Ink	BIXBY (base)	Fea 29	1				HT, cup	ca 1870-1920	Nelson & Hurley 196712 (similar mark)
Ink	BIXBY (base)	Fea 49	1				HT, cup	ca 1870-1920	Nelson & Hurley 196712 (similar mark)
Ink	BIXBY (base) PATENTED MCH. 6 83.	Fea 32	1		>1883		HT, cup	ca 1870-1920	Nelson & Hurley 196712 (similar mark)
Ink	BIXBY (base) PATENTED MCH. 6 83.	Fea 57	1		>1883		HT, cup	ca 1870-1920	Nelson & Hurley 196712 (similar mark)
Ink	BLACKSTONE'S/INKS USA.	AU 1	1				HT, post	ca 1870-1920	
Medical	JOHN U. BODENMANN/BROADWAY & TEMPLE/LOS ANGELES	Auger 8K-9C	1		1900		HT, cup	ca 1870-1920	Toynton 197720
Medical	JOHN U. BODENMANN/BROADWAY & TEMPLE/LOS ANGELES	Surface	1		1900		HT, cup	ca 1870-1920	Toynton 197720
Medical	JOHN U. BODENMANN/BROADWAY & TEMPLE/LOS ANGELES	Fea 26	1		1900		HT, cup	ca 1870-1920	Toynton 197720
Medical	JOHN U. BODENMANN/BROADWAY & TEMPLE/LOS ANGELES	Guidewell Ti.	3		1900		HT, cup	ca 1870-1920	Toynton 197720
Medical	JOHN U. BODENMANN/BROADWAY & TEMPLE/LOS ANGELES//W.B.M.C.CO.	Fea 44	1	Unident. mfg.	1900	1880-1910	HT	ca 1870-1920	Toynton 197720; Toulouse 1971535

HA=hand applied, HT=hand tooled, ABM=automatic bottle machine, (S)ABM=possible or confirmed semi-automatic bottle machine, SC Amp=clear sun-colored amethyst glass, 4-1g=4 lug, crn=crown finish, gr stop=ground stopper, mark in italics=script, / =separate line, // =different side of bottle, LAD=Los Angeles Directories, pc=personal communication, W&W=Wilson & Wilson, WW= Waste Water

Category	Mark	Date(s)	Provenience	Qty	Maker	Date(s)	Itch.	Itch. later(s)	Reference
Medicinal	BODENMANN/ <i>Pharmacia</i> /BROADWAY & TEMPLE/LOS ANGELES	1900	Fca 39	1					Toynton 1977:20
Ink	VITREOUS STONE BOTTLE/J. BOURNE & SON/PATENTEE/DENBY POTTERY/ NEAR DENBY/P & J. ARNOLD/LONDON		Surface	1	J. Bourne & Son	>1850			Nelson & Huntley 1967:1 (#5, same mark); Goddin 1964:90
Food	ONE PINT/BORR/LOS ANGELES (milk or cream)		A-135	1			ABM	>1903	
Medicinal	D* A. BOSCHEE'S/GERMAN SYRUP//L. M. GREEN//PROPRIETER	1872-1941	Fca 29	1			Cup		Fike 1987:244; W&W 1971:24, 107; Derner 1968:15
Medicinal	BOSWELL & NOYES DRUG CO./PRESCRIPTION DRUGGISTS/LOS ANG....	1896	Fca 29	3			HT, cup	ca 1870-1920	Toynton 1977:25
Medicinal	BOSWELL & NOYES DRUG CO./PRESCRIPTION DRUGGISTS/LOS ANG....	1896	Unit 180-80	1			HT, cup	ca 1870-1920	Toynton 1977:25
Food	...ENUINE BOYD CAP (canning jar lid liner)	>1869	Fca 49	1					Toulouse 1966:499
Wine	MARIE BRIZARD & ROGER/MB R/(symbol)/BORDEAUX		A-130 19ff3	2					
Medicinal	BROMO-SELTZER/EMERSON/DRUG CO./BALTIMORE, MD (1.5 and 4 oz.)	1889-1907	Fca 2	1			HT, cup	ca 1870-1920	Fike 1987:111; W&W 1971:24, 107; Derner 1968:17
Medicinal	BROMO-SELTZER/EMERSON/DRUG CO./BALTIMORE, MD (1.5 and 4 oz.)	1889-1907	Fca 21b	1					Fike 1987:111; W&W 1971:24, 107; Derner 1968:17
Medicinal	BROMO-SELTZER/EMERSON/DRUG CO./BALTIMORE, MD (1.5 and 4 oz.)	1889-1907	Guidewall Tr.	1					Fike 1987:111; W&W 1971:24, 107; Derner 1968:17
Medicinal	BROMO-SELTZER/EMERSON/DRUG CO./BALTIMORE, MD (1.5 and 4 oz.)	1889-1907	Fca 24	1					Fike 1987:111; W&W 1971:24, 107; Derner 1968:17
Medicinal	BROMO-SELTZER/EMERSON/DRUG CO./BALTIMORE, MD (4 oz.)	>1907	Obs. Well	1			ABM	>1903	Fike 1987:111; W&W 1971:24, 107; Derner 1968:17
Medicinal	BROMO-SELTZER/EMERSON DRUG CO. (around base, 4 oz.)		Surface	1	Maryland Glass Corp.	>1916	4-1/2 ABM		>1928 Fike 1987:111; Toulouse 1971:39-341
Medicinal	BROMO-SELTZER (around shoulder, 6 oz.)		A-130	1	Maryland Glass Corp.	>1916	4-1/2 ABM		>1928 Fike 1987:111; Toulouse 1971:39-341
Bitters	H. E. BUCKLIN/CHICAGO (prob. ELECTRIC [BRAND] BITTERS)	>1880	Fca 18	1					Fike 1987:33; W&W 1971:32, 113
Medicinal	BURNETT/BOSTON	1845-1937+	A-135	1			(S)ABM	>1892	W&W 1971:26, 109; Derner 1968:18
Beer	Adolphus Busch		Fca 18	2	Adolphus Busch Glass Manufacturing Co.	1904-1907	Post		Toulouse 1971:26
Beer	Adolphus Busch		Fca 29	1	Adolphus Busch Glass Manufacturing Co.	1904-1907	Post		Toulouse 1971:26
Spirit	C.E. W&CO (not identified)		Fca 18	1			Post		
	C.H.C. & S (not identified)		Backhor tr.	1					
	CL (monogram mark)		Auger 8K-9C	1	Carr-Lowrey Glass Co., Baltimore	1920-1963			Toulouse 1971:34-135
Medicinal	C. L. G. Co.		Fca 47	1	Carr-Lowrey Glass Co., Baltimore	1900-1920	Cup		Toulouse 1971:34
	C.R.P. Co (not identified)		Fca 29	1	Cannington Shaw & Co.	1875-1913	HT, cup	ca 1870-1920	Toulouse 1971:147
	C.S.&CPL ²		Fca 17A	1					
	C.S.&CPL ²		A-130	1					
Beer	CW & Co		A-130	1					Toulouse 1971:152 (found on Guinness bottles)
Beer	CW & Co		Loctus A	1					Toulouse 1971:152 (found on Guinness bottles)
Medicinal	CALIFORNIA/FIG/BITTERS (partial, probable ident.)	1897-1905	Fca 41A	1					W&W 1966:18-19; Watson 1965:77
Medicinal	CALIFORNIA//FIG SYRUP...//LOUISVILLE, KY	1899	Fca 41	1	California Fig Syrup Co., Louisville, KY				Derner 1968:19
Medicinal	CALIFORNIA FIG SYRUP Co/SAN FRANCISCO CAL//SYRUP OF FIGS	>1880f	Fca 17A	1			HT, cup	ca 1870-1920	Fike 1987:225; Derner 1968:19; Baldwin 1971:97
Medicinal	CALIFORNIA FIG SYRUP Co/SAN FRANCISCO CAL//SYRUP OF FIGS	>1880f	Fca 18	1			HT, cup	ca 1870-1920	Fike 1987:225; Derner 1968:19; Baldwin 1971:97
Medicinal	CALIFORNIA FIG SYRUP Co/SAN FRANCISCO CAL//SYRUP OF FIGS	>1880f	Fca 34	1			HT, cup	ca 1870-1920	Fike 1987:225; Derner 1968:19; Baldwin 1971:97

HA=hand applied, HT=hand tooled, ABM=automatic bottle machine, (S)ABM=possible or confirmed semi-automatic bottle machine, SC Any=clear sun-colored amethyst glass, 4-1/2=4 lug, crn=crown finish, gr stop=ground stopper, mark in Italics=script, / =separate line, // =different side of bottle, LAD=Los Angeles Directories, pc=personal communication, W&W=Wilson & Wilson, W.W.=Waste Water

Category	Mark	Manufacturer	Qty	Maker	Date(s)	Tech.	Arch. Mark(s)	Reference
Medicinal	CALIFORNIA FIG SYRUP Co./SAN FRANCISCO CAL./SYRUP OF FIGS							
Ink	CARTERS (cap)	A-35	1			HT, cup	ca 1870-1920	Fike 1987:25; Denver 1968:9; Baldwin 1971:97
Ink	CARTER S'/CARTER'S (cap)	Fea 32	1					Nelson & Hurley 1967:72
Ink	CARTER S'/INK (cap)	Fea 33B	1					Nelson & Hurley 1967:72
Ink	CARTER S' (on base)	Fea 29	1					Nelson & Hurley 1967:72
Ink	CARTER S' (on base)	Fea 18	1			HT, cup	ca 1870-1920	Nelson & Hurley 1967:72
Ink	CARTER S' (on base)	Fea 27	1					Nelson & Hurley 1967:72
Ink	CARTER S' (on base)	Unit 250-20	1					Nelson & Hurley 1967:72
Ink	CARTER S'/U.S.A. (on base)	Fea 16	1			(S)ABM	>:892	Nelson & Hurley 1967:72
Ink	CARTER S'/U.S.A. (on base)	Fea 34	1					Nelson & Hurley 1967:72
Ink	CARTER S'/U.S.A. (on base)	Fea 40	1			(S)ABM	>:892	Nelson & Hurley 1967:72
Ink	CARTER S'/MADE IN/U.S.A.	Fea 2	1			Cup		Nelson & Hurley 1967:72
Ink	CARTER S'/MADE IN/U.S.A.	Fea 17A	1					Nelson & Hurley 1967:72
Ink	CARTER S'/MADE IN/U.S.A.	Fea 29	1					Nelson & Hurley 1967:72
Ink	CARTER S'/MADE IN/U.S.A.	Fea 29	1					Nelson & Hurley 1967:72
Ink	CARTER S'/MADE IN/U.S.A./7	Track area	1			(S)ABM	>:892	Nelson & Hurley 1967:72
Ink	CARTER S'/MADE IN/U.S.A./7	Fea 29	1					Nelson & Hurley 1967:72
Ink	CARTER S'/85/MADE IN/U.S.A. (on base)	Fea 29	1			HT, cup	ca 1870-1920	Nelson & Hurley 1967:72
Ink	CARTER S'/897/MADE IN U.S.A.	Fea 18	1			(S)ABM	>:892	Nelson & Hurley 1967:72
Ink	CARTER S'/897/MADE IN U.S.A.	A-35	1					Nelson & Hurley 1967:72
Ink	CARTER S'/897/MADE IN U.S.A.	Fea 39	1			HT, Cup	ca 1870-1920	Nelson & Hurley 1967:72
Ink	CARTER S'/897/MADE IN U.S.A.	Trench TP#3	1					Nelson & Hurley 1967:72
Ink	CARTER S' INKS (around base, master ink, ceramic)	A-39	1	J. Stiff & Sons, London, England	1865-1911			Gooden 1964:599
Ink	CARTER S' INKS // STIFF & SONS/LONDON/ENGLAND (on base, master ink, ceramic)	A-39	1			HT, post, ca	1860-1892	Kinsie pc 1992
Soda	CASCADE BOT. KKS./PEVERLY/BROS. PROPS./LOS ANGELES	Fea 40A	1			Hutchinson		>:879 Riley 1972
Adhesive	CAULK'S/DIAMOND/CEMENT	A-35	1			HT, cup	ca 1870-1920	Fike 1987:158
Adhesive	CAULK'S/PETROID CEMENT/IMPROVED	Fea 41A	1					Fike 1987:158
Medicinal	CAULY'S/CROWN & BRIDGE/(monogram)/CEMENT	Fea 17A	1					
Medicinal	CHAMBERLAIN'S/COUGH REMEDY//CHAMBERLAIN MED. CO./DES MOINES	Fea 29	1			HT, cup	ca 1870-1920	Fike 1987:203-206; W&W 1971:28,100; Demer 1968:21
Medicinal	CHESEBROUGH MFG CO/VASELINE	Fea 16/17	1			(S)ABM	>:892	Fike 1987:56; W&W 1971:28,110
Medicinal	CHESEBROUGH MFG CO/VASELINE	Fea 17A	2			(S)ABM	>:892	Fike 1987:56; W&W 1971:28,110
Medicinal	CHESEBROUGH MFG CO/VASELINE	Fea 29	2			(S)ABM	>:892	Fike 1987:56; W&W 1971:28,110
Medicinal	CHESEBROUGH MFG CO/VASELINE	Fea 36	1			(S)ABM	>:892	Fike 1987:56; W&W 1971:28,110
Medicinal	CHESEBROUGH MFG CO/VASELINE	Fea 37	1			(S)ABM	>:892	Fike 1987:56; W&W 1971:28,110
Medicinal	CHESEBROUGH MFG CO/VASELINE	Fea 38	1			(S)ABM, >:892		Fike 1987:56; W&W 1971:28,110
Medicinal	CHESEBROUGH/VASELINE/MANUFACTG CO.	Fea 16	1			SC Army	ca 1880-1916	Fike 1987:56; W&W 1971:28,110
Medicinal	CHESEBROUGH/VASELINE/MANUFACTG CO.	Fea 16/17	2			(S)ABM	>:892	Fike 1987:56; W&W 1971:28,110
Medicinal	"VASELINE"/CHESEBROUGH/NEW-YORK	Fea 29	3			(S)ABM, >:892		Fike 1987:56; W&W 1971:28,110
Medicinal	"VASELINE"/CHESEBROUGH/NEW-YORK	A-35	2			SC Army	ca 1880-1916	Fike 1987:56; W&W 1971:28,110
Medicinal	"VASELINE"/CHESEBROUGH/NEW-YORK	Bag, Hand.	1			(S)ABM	>:892	Fike 1987:56; W&W 1971:28,110

HA=hand applied, HT=hand tumbled, ABM=automatic bottle machine, (S)ABM=possible or confirmed semi-automatic bottle machine, SC Army=clear sun-colored amethyst glass, 4-16=4 lug, crn=crown finish, gr stop=ground stopper, mark in *italics*=reprint, / =separate line, // =different side of bottle, LAD=Los Angeles Directories, W&W=Wilson & Wilson, WW=Waste Water

Category	Mark	Date(s)	Prevalence	Qty	Maker	Date(s)	Typ.	Typ. date(s)	Reference
Medicinal	"VASELINE"/CHESEBROUGH/NEW-YORK	>1908	Fea 39	2			HT, post	ca 1870-1920	Fike 1987:95, W&W 1971:28,110
Medicinal	CITRATE/OF/MAGNESIA (generic bottle)		A-130	1			Cup		Fike 1987:40
Soda	Coca Cola Los Angeles, (on base) A.B.CO.	>1894-1915	Fea 16	1	American Bottle Co.				Toulouse 1971:91, Riley 1972:236, 262
Soda	Coca Cola Los Angeles, (on base) A.B.CO.	>1894-1915	Fea 20	1	American Bottle Co.				Toulouse 1971:91, Riley 1972:236, 262
Soda	Coca-Cola/TRADEMARK REGISTERED/MIN. CONTENTS 6 FL. OZS./BOTTLE PAID-103529/(base) LOS ANGELES/CALIF.		A-115/A-130	1	Owens Illinois Glass Co., Atlanta		ABM	>1903	Toulouse 1971:92, 403
Toiletry	COLGATE & CO/PERFUMERS/NEW YORK		Fea 29	1			HT, cup	ca 1870-1920	Fike 1987:56 (no date associated)
Toiletry	COLGATE & CO/PERFUMERS/NEW YORK		A-135	1			HT, cup	ca 1870-1920	Fike 1987:56 (no date associated)
Toiletry	COLGATE & CO/PERFUMERS/NEW YORK		406	1			HT, cup	ca 1870-1920	Fike 1987:56 (no date associated)
Canning	CONSOLIDATED FRUIT CAP CO./NEW YORK (canning lid and liner)	>1867-1908	Fea 51	1			HT, cup	ca 1870-1920	Toulouse 1971:113-115
Food	(crest)/PURE/CURRY POWDER/Made from original.../CROSSE & BLACKWELL		Fea 16	1			Zumwalt	1980:96 (no specific dates)	
Food	(crest)/PURE/CURRY POWDER/Made from original.../CROSSE & BLACKWELL		Fea 23	5			HT, cup	ca 1870-1920	Zumwalt 1980:96 (no specific dates)
Food	(crest)/PURE/CURRY POWDER/Made from original.../CROSSE & BLACKWELL		Fea 29	1			HT, cup	ca 1870-1920	Zumwalt 1980:96 (no specific dates)
Food	(crest)/PURE/CURRY POWDER/Made from original.../CROSSE & BLACKWELL		A-135	1			HT, cup	ca 1870-1920	Zumwalt 1980:96 (no specific dates)
Food	(crest)/PURE/CURRY POWDER/Made from original.../CROSSE & BLACKWELL		A-141	1			HT, cup	ca 1870-1920	Zumwalt 1980:96 (no specific dates)
Soda	CRYSTAL BOTTLING CO. LOS ANGELES, CAL./THIS BOTTLE MUST NOT BE...	1905-1912	Fea 29	1			HT, cup	ca 1870-1920	Zumwalt 1980:96 (no specific dates)
Soda	CRYSTAL BOTTLING CO. LOS ANGELES, CAL./THIS BOTTLE MUST NOT BE...	1905-1912	Fea 39	1			HT crown		>1897-1920 Kuskie pc 1992
CUDAHY SPECIAL/L-D			Fea 39	1			HT crown		>1897-1920 Kuskie pc 1992
THE CUDAHY PACKING CO./U.S.A. (small milk glass jar)		>1890	Fea 57	1	The Cudahy Packing Co.		Zumwalt	1980:100	
THE CUDAHY PACKING CO./U.S.A./PAT JULY 11 1893 (small milk glass jar)		>1890	Fea 39	1	The Cudahy Packing Co.		Zumwalt	1980:100	
THE CUDAHY PACKING CO./OMAHA (small milk glass jar)		>1893	Fea 29	1	The Cudahy Packing Co.		Zumwalt	1980:100	
CURTIS & BROWN/MFG CO./LIMITED/NEW YORK		>1890	Fea 17	1	The Cudahy Packing Co.		Zumwalt	1980:100	
D. O. C.			Fea 57	1			HT, Cup	ca 1870-1920	
DAVIDS' RED INK/(paper label)... DAVIDS CO. NEW YORK			A-130	1	D. O. Cunningham Glass Co.		Post		Toulouse 1971:65-164
THAD DAVIDS CO./N.Y. (on base)			Fea 31	1			HT, cup	ca 1870-1920	Nelson & Hurley 1967:16 (#103 similar)
DEAN'S/DELIGHTFUL/DENTIFRICE/LOS ANGELES//W.T. & Co./U.S.A.		1902-1905	Fea 17	1	Whittal-Tatum Co.		HT, cup	ca 1870-1920	Nelson & Hurley 1967:16-17 (#104 similar)
...			Fea 26	1			Cup, ground		Kuskie pc 1992; Toulouse 1971:544
...			Fea 31	1			HT, cup	ca 1870-1920	
DEPOSE (S is backwards, not identified))			Fea 29	1			Cup		
Diamond Glass Co. mark			A-135	1	Diamond Glass Co.				Toulouse 1971:95
THE DUFFY MALT WHISKEY COMPANY/(monogram)/ROCHESTER N.Y. U.S.A.		1888-1917	Fea 29	2			ABM	>1903	W&W 1988:63
Dangles		>1940	WWF-1	1	Owens Illinois Glass Co		ABM	>1903	Toulouse 1971:70
A. DURAND & FILS/HOILE D'SALAD/BORDEAU (oil)			Fea 32	1					Zumwalt 1980:126 (no specific date)
ER.DURKKEE & CO./TRADE/(granite)/MARK/NEW YORK (prob. salad dressing)		1871-1939	MPT	1			Cup		Zumwalt 1980:128-129; Toulouse 1971:183-184
ER.DURKKEE/SALAD DRESSING/NEW YORK//BOTTLE PAT.../APRIL 17, 1877		>1877	Fea 29	1			SC Amy	ca 1880-1916	Zumwalt 1980:128-129
ER.DURKKEE/SALAD DRESSING/NEW YORK//BOTTLE PAT.../APRIL 17, 1877		>1877	Guidewall Tc	1			HT	ca 1870-1920	Toniton 1977:4
J. S. DURY/BAKERSFIELD/CAL.		1884	Sidewall Tc	1			HT, cup	ca 1870-1920	Toulouse 1971:73
EB & Co			A-130	1	Edgar F. Brehf & Co.		ground stopper		
EASTMAN'S/NILE/C.NATION/Andrew Jergens Co./NEW YORK AND CINCINNATI			Fea 34	1			Cup		Drener 1968:32
ESPEY'S/FRAGRANT CREAM		1885-1912	Fea 29	1			HT, cup	ca 1870-1920	Fike 1987:58
THE EVANS/CHEMICAL/COMPANY/PROPRIETORS/G/CINCINNATI/O.U.S.A.		1885->1948	Fea 29	1			Post, HT	bleb	ca 1870-1920 Markota & Markota 1972:307
EXCELSIOR/SODA/R/MINERAL WATER FACTORY		1875-1876	A-115/A-130	1					Forbes pc 1990

HA=hand applied, HT=hand toolled, ABM=automatic bottle machine, (S)ABM=possible or confirmed semi-automatic bottle machine, SC Amy=dear sun-colored amethyst glass, 4-1/2=4 lug, crn=crown finish, gr stop=ground stopper, mark in Italic=script, / =separate line, // =different side of bottle, LAD=Los Angeles Directories, pc=personal communication, W&W=Wilson & Wilson, WW= Waste Water

Category	Mark	Date(s)	Preventive	Qty	Maker	Date(s)	Tech.	Tech. date(s)	Referent
Soda	EXCELSIOR/SODA &/MINERAL WATER FACTORY	1875-1876	A-130	5			Post, HT blob		ca 1870-1920 Markota & Markota 1972:90;
Soda	EXCELSIOR/SODA WORKS/LOS/ANGELES, CAL. (C.B.S. on base)	1886-1890+	A-135	2			Cup, HT blob		Forbes pt 1990
Soda	EXCELSIOR/SODA WORKS/LOS/ANGELES, CAL. (C.B.S. on base)	1886-1890+	Fca 29	6			Cup, HT blob		ca 1870-1920 LAD
Soda	EXCELSIOR/SODA WORKS/LOS/ANGELES, CAL. (C.B.S. on base)	1886-1890+	Fca 32	1			Cup, HT blob		ca 1870-1920 LAD
Soda	EXCELSIOR/SODA WORKS/LOS/ANGELES, CAL. (C.B.S. on base)	1886-1890+	Fca 3	1			Cup, HT blob		ca 1870-1920 LAD
Beer	F H G W	prob >1900	A-130	1	Frederick Hampson Glass Works, England	1880-1900	Post		Toulouse 1972:202
Medicinal	FARMERS/HORSE MEDICINE/S. F. CAL./XXXX (poss. related to Farmers Healing Linctament, in Lodi; silent partner (Fish) in S.F.)		Fca 26	1			Cup		Fike 1987:146; W&W 1975:53, 114
Spirit	FEDERAL LAW FORBIDS SALE OR REUSE OF THIS BOTTLE/HALF PINT		WWF-1	1	Federal Glass Co.	>1944	ABM	>1903	Toulouse 1971:92
Medicinal	FELLOWS & CO/CHEMISTS/ST JOHN, N.B. (mark for Y G Co)	>1849	A-130	1	Owens Illinois Glass Co.	>1914	ABM scar	>1903	Toulouse 1972:20
Medicinal	FELLOWS/SYRUP OF/HYPOPHOSPHITES	>1872	No loc.	1			Post		Fike 1987:46
Medicinal	(James or Joseph) ... P. FITLER'S/... REMEDY (diff. from ex. in refs.)	1850s-1910	A-130	1			HT, post	>1903	W&W 1971:114; Dewner 1968:54; Baldwin 1974:75
Medicinal	Chas. H. Flanders/CASTORIA	>1890	Unit 20-20	1			ABM	>1903	Fike 1987:82 W&W 1972:132; Dewner 1968:53; Baldwin 1974:84
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK	>1854	Fca 2	2			HT, post	ca 1870-1920	Fike 1987:244
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK	>1854	Fca 17A	1			HT, post	ca 1870-1920	Fike 1987:244
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK	>1854	Fca 21	1			HT, post	ca 1870-1920	Fike 1987:244
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK (2 sizes)	>1854	Fca 29	7			HT, post	ca 1870-1920	Fike 1987:244
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK	>1854	Fca 51	1			HT, post	ca 1870-1920	Fike 1987:244
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK	>1854	Fca 54	1			HT, post	ca 1870-1920	Fike 1987:244
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK	>1854	ESC #10	1			HT, post	ca 1870-1920	Fike 1987:244
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK	>1854	Unit 260-80	1			HT, post	ca 1870-1920	Fike 1987:244
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK	>1854	A-135	1			HT, post	ca 1870-1920	Fike 1987:244
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK	>1854	A-136	1			HT, post	ca 1870-1920	Fike 1987:244
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK	>1854	Guidewall Tr.	1			HT, post	ca 1870-1920	Fike 1987:244
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK	>1854	MPT	1			HT, post	ca 1870-1920	Fike 1987:244
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK	>1854	MPT	2			Cap		Fike 1987:244
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK	>1854	Fca 49	1			HT, post	ca 1870-1920	Fike 1987:244
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK	>1854	Fca 43	1			HT, post	ca 1870-1920	Fike 1987:244
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK	>1842	AU-1	1			HT, post	ca 1870-1920	Fike 1987:244
Toiletry	FLORIDA WATER/MURRAY & LANMAN/DRUGGISTS/NEW YORK	1913-1942	Fca 45	1			HT, post	ca 1870-1920	Fike 1987:244
Bitters	FRATELLI BRANCA/(symbol)/MILANO (shoulder seal-Ferrari-Branca Bitters)	1890s-1910	Trench #1	1	William Franzen & Son	1900-1929	HT, Cap	ca 1870-1920	Toulouse 1971:556
	(mark)		A-135	1	Frattelli Branca, Milan	>1845			Greenwood 1975:237; Schulz et al. 1980:55
	(mark)		A-146	1	Glass Containers Corp	>1945	ABM	>1903	Toulouse 1972:220
	(mark)		#402	1	Glass Containers Corp	>1945	ABM	>1903	Toulouse 1972:220
			WWF-1	3	Glass Containers Corp	>1945	ABM	>1903	Toulouse 1972:220
Medicinal	FULTON'S/RADICAL REMEDY//SURE KIDNEY LIVER, DYSPEPSIA CURE	1857-1905	Fca 55	1					Fike 1987:98; Dewner 1968:36
Medicinal	GODFREY & MOORE/PHARMACISTS/108 S. SPRING ST/LOS ANGELES//WT&Co	1850-1911+	Fca 57	1	Whitall-Tatum & Co.	1857-1918	(S)ABM	>1802	Toulouse 1971:544; LAD
Toiletry	Gle-95 (not identified)		Auger 8K-9C	1					Fike 1987:63; Dewner 1968:38
Medicinal	GLYCO-/THYMOLINE/KRESS & OWENS (New York)	1890s-1948	Fca 29	1			HT, cup	ca 1870-1920	Toynton 1977:5; LAD
Medicinal	GODFREY & MOORE/SW COR FIRST & SPRING/LOS ANGELES, CAL.	1890-1931	Fca 29	2					

HA=hand applied, HT=hand tooled, ABM=automatic bottle machine, (S)ABM=possible or confirmed semi-automatic bottle machine, SC Amy=clear sun-colored amethyst glass, 4-lg=4 lg. crn=crown finish, gr stop=ground stopper, mark in *italics*=*script* / =separate line, // =different side of bottle, LAD=Los Angeles Directories, pc=personal communication, W&W=Wilson & Wilson, WW= Waste Water

Category	Mark	Date(s)	Prevalence	Qty	Maker	Date(s)	Tab.	Tab. date(s)	Reference
Medicinal	GODFREY & MOORE/SW COR FIRST & SPRING/ LOS ANGELES, CAL.	1890-1931	A-135	1			HT, cup	ca 1870-1920	Toynton 1977:23; LAD
Soda	GOLDEN STATE BOTTLING CO. L.A. CAL./QUALITY BEVERAGES (base G.S.)		AU-1						
Medicinal	GOURLAUDS'/ORIENTAL/CREAM//NEW YORK	1888-1925	Fca 23	1			ABM, crown		Fike 1987:91; Devner 1968:39
Soda	GRAPE DELL BOTTLING CO./LOS ANGELES, CAL.	1919-1920	Auger 8K-96	1			HT, cup	ca 1870-1920	>1903 Riley 1971; Kuskie pc 1992
Medicinal	L. M. GRHEN, PROP./WOODBURY, N.J.	1872-1874+	Fca 32	1			HT, cup	ca 1870-1920	Fike 1987:164, 224; W&W 1972:23, 37, 107
Food	G & L (prob. Gullen and Leckser; green flared mustard)	1867-1875	A-115	1			HT, cup	ca 1870-1920	Zumwalt 1980:62, 188
Food	SELECTED/QUEEN/OLIVES/JAMES HALL & SONS CO./LOS ANGELES, CAL.	1895-1912	Fca 29	1			HT, cup	ca 1870-1920	W&W 1971:43, 119
Medicinal	HHH HORSE/MEDICINE	1858-1858	A-135	1			HT, cup	ca 1870-1920	W&W 1971:44, 18; Devner 1968:41
Medicinal	HAMLIN'S/WIZARD OIL//CHICAGO ILL./U.S.A.	>mid 1860s	Fca 29	1			HT, cup	ca 1870-1920	Baldwin 1973:22
Medicinal	HAMLIN'S/WIZARD OIL//CHICAGO ILL./U.S.A.	>mid 1860s	Fca 34	1			HT, cup	ca 1870-1920	W&W 1971:44, 18; Devner 1968:41
Spirit	HANCE BROTHERS & WHITE PHILADELPHIA U.S.A. (around shoulder)		AU 1	1			HT, flask	ca 1870-1920	Baldwin 1973:22
	HA (monogram)		Auger 8K-9C	1	Hazel-Atlas Glass Co.	1920-1964			Toulouse 1971:239
	HA (monogram)		WW:FF-1	3					
Food	HAZARD'S/SHREN MANOR, RELISH//... ISH//... BURY (E. C. Hazard & Co.)	>1885	Fca 29	1			Cup		Zumwalt 1980:198-199
	(mark)		Fca 41A	1	Hazel-Atlas Glass Co.	1920-1964	Cup		Toulouse 1971:239; Devner 1968:198-199
Beer	F. A. HEIM/LOS ANGELES/BOTTLING WORKS//H.B.W. (base: 1834/56 N. Main St.)	1901-1903	Fca 21B	1			Cup		Zumwalt 1980:198-199; Bull et al. 1984:23
Beer	F. A. HEIM/LOS ANGELES/BOTTLING WORKS//H.B.W. (base: 1834/56 N. Main St.)	1901-1903	Fca 29	1			Cup		Kuskie pc 1992
Beer	F. A. HEIM/LOS ANGELES/BOTTLING WORKS//H.B.W. (base: 1834/56 N. Main St.)	1901-1903	Fca 31B	1			Cup		Zumwalt 1980:198-199; Bull et al. 1984:23
Beer	F. A. HEIM/LOS ANGELES/BOTTLING WORKS//H.B.W. (base: 1834/56 N. Main St.)	1901-1903	A-130	1			Cup		Kuskie pc 1992
Beer	HEIM'S (on base: 1834/56 N. Main St., L. A.)	1901-1903	Fca 29	1			HT, post	ca 1870-1920	Zumwalt 1980:198-199; Bull et al. 1984:23
Beer	HEIM'S (on base: 1834/56 N. Main St., L. A.)	1901-1903	A-130	1			Cup		Kuskie pc 1992
Medicinal	CEHEINZEMAN/PHARMACIST/122 N., MAIN ST./LOS ANG., CAL.	1884-1860	Fca 12	1	Whitall-Tatum & Co.	1857-1935	HT, cup	ca 1870-1920	Bull et al. 1984:23; Kuskie pc 1992
Medicinal	CEHEINZEMAN/PHARMACIST/122 N., MAIN ST./LOS ANG., CAL.	1884-1860	Fca 16	1	Whitall-Tatum & Co.	1857-1935	HT, cup	ca 1870-1920	Toulouse 1971:544-547; Toynton 1977:27; LAD
Medicinal	CEHEINZEMAN/PHARMACIST/122 N., MAIN ST./LOS ANG., CAL.	1884-1860	Fca 17A	1	Whitall-Tatum & Co.	1857-1935	HT, cup	ca 1870-1920	Toulouse 1971:544-547; Toynton 1977:27; LAD
Medicinal	CEHEINZEMAN/PHARMACIST/122 N., MAIN ST./LOS ANG., CAL.	1884-1860	Fca 29	1	Whitall-Tatum & Co.	1857-1935	HT, cup	ca 1870-1920	Toulouse 1971:544-547; Toynton 1977:27; LAD
Medicinal	CEHEINZEMAN/PHARMACIST/122 N., MAIN ST./LOS ANG., CAL.	1884-1860	Fca 32	1	Whitall-Tatum & Co.	1857-1935	HT, cup	ca 1870-1920	Toulouse 1971:544-547; Toynton 1977:27; LAD
Medicinal	CEHEINZEMAN/PHARMACIST/122 N., MAIN ST./LOS ANG., CAL.	1884-1860	A-130	1	Whitall-Tatum & Co.	1857-1935	HT, cup	ca 1870-1920	Toulouse 1971:544-547; Toynton 1977:27; LAD
Medicinal	CEHEINZEMAN/PHARMACIST/122 N., MAIN ST./LOS ANG., CAL.	1884-1860	A-135	1	Whitall-Tatum & Co.	1857-1935	HT, cup	ca 1870-1920	Toulouse 1971:544-547; Toynton 1977:27; LAD
Medicinal	CEHEINZEMAN/PHARMACIST/122 N., MAIN ST./LOS ANG., CAL.	1884-1860	Fca 43	1	Whitall-Tatum & Co.	1857-1935	HT, cup	ca 1870-1920	Toulouse 1971:544-547; Toynton 1977:27; LAD
Food	H. J. HEINZ CO./PITTSBURG...	>1850	Fca 42	1			HT, cup	ca 1870-1920	Toynton 1977:27; LAD
Food	H. J. HEINZ CO./PATD	>1850	A-130	1					Zumwalt 1980:200-236
Food	H. J. HEINZ CO./PATENTED	>1850	A-136	1					Zumwalt 1980:200-236
Food	H. J. HEINZ CO./PATD//11-15-04 (on base)	>1904	Fca 29	1	Hermann Heye Glasfabrik/Bremen, Ger.		Cup		Zumwalt 1980:200-236
Food	H. HEYE/GLASFABRIK NEINBURG	1880-1916	Fca 27	1	Hermann Heye Glasfabrik/Bremen, Ger.				Toulouse 1971:238
	H. HEYE/GLASFABRIK NEINBURG	1880-1916	Fca 29	1	Hermann Heye Glasfabrik/Bremen, Ger.				Toulouse 1971:238
Ink	HIGGINS/INK/BROOKLYN/N.Y. (on base)	>1893	Fca 18	1			HT, cup	ca 1870-1920	Nelson & Hurley 1967:21 (#44 similar)
Soda	HIRS/REGISTERED/ALL RIGHTS RESERVED//PAT. APPD FOR	>1893	A-130	1			HT crown		ca 1870-1920 Riley 1971:17, 238
Soda	Hirs (on base)	>1893	Guidewall nr.	1			Cup		Riley 1971:17, 238
Spirit	AVAN HOBOKEN/ROTTERDAM	1897-1912	Fca 54	2			HA		Toulouse 1971:290-291; Schulz et al. 1980:39

HA=hand applied, HT=hand tooled, ABM=automatic bottle machine, SC Amy=clear sun-colored amethyst glass, 4-g=4 lug, crn=crown finish, gt_stop=ground stopper, mark in *italic*=script, /==separate line, //==different side of bottle, LAD=Los Angeles Directorate, P=personal communication, W&W=Wilson & Wilson, WW=Waste-Weiter

Category	Mark	Date(s)	Prevalence	Qty	Maker	Date(s)	Tch.	Tech. date(s)	Reference
Food	HOLBROOK & Co./1 (includes stopper, club sauce)	>:1872	Fea 29	1		>:1895-1906	HT, cup	ca. 1870-1920	Zimmwalf 1982:245-247 Toulouse 1971:231
	H		A-41	1	Holt Glass Works				
Medicinal	HOOD'S/SARSA/PARILLA//C. I. HOOD & Co./LOWELL, MASS.	>:1876-1918	Fea 21	1					Fike 1987:277; W&W 1971:44,120; Denver 1968:46
Medicinal	HOOD'S/SARSA/PARILLA//C. I. HOOD & Co./LOWELL, MASS.	>:1876-1918	Fea 39	1			HT, Post	ca. 1870-1920	Fike 1987:277; W&W 1971:44, 120; Denver 1968:46
Medicinal	HOOD'S/SARSA/PARILLA//C. I. HOOD & Co./LOWELL, MASS. (partial)	>:1876-1918	Fea 39	1					Fike 1987:277; W&W 1971:44, 120; Denver 1968:46
Food	HORLICKS/MALTED MILK (plus partial paper label)	>:1883	MPT	1			ABM	>:1903	Zimmwalf 1982:149
Food	HORLICKS/MALTED MILK/RACINE, WIS./U.S.A./LONDON, ENG.	>:1883	Fea 29	1	Ihmsen Glass Co.	1870-1895	(S)ABM	>:1892	Zimmwalf 1982:149; Toulouse 1971:262
Food	HORLICKS/MALTED MILK/RACINE, WIS./U.S.A./LONDON, ENG.	>:1883	A-130	1	Ihmsen Glass Co.	1870-1895	(S)ABM	>:1892	Zimmwalf 1982:149; Toulouse 1971:262
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 1	1					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 1:3	4					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 2	2					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 3	1					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 4	1					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 6	2					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 8	1					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		N14E4:3	1					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		N14E2	1					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 11	2					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 12	2					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		A-135	5					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 26	1					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 27	2					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 29	4					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 30	5					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 32	2					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 34	2					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 35	1					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 36	1					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 38	1					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS		Fea 39	2					W&W 1969:34-41
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS//AGW (on base)	prob. >:1894	Fea 1B	2	American Glass Works	1895-1905	HT, post	ca. 1870-1920	W&W 1969:34-41; Toulouse 1971:43; Switzer 1974:30-33
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS//AGW (on base)	prob. >:1894	Fea 3	2	American Glass Works	1895-1905	HT, post	ca. 1870-1920	W&W 1969:34-41; Toulouse 1971:43; Switzer 1974:30-33
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS//AGW (on base)	prob. >:1894	Fea 11	1	American Glass Works	1895-1905	HT, post	ca. 1870-1920	W&W 1969:34-41; Toulouse 1971:43; Switzer 1974:30-33
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS//AGW (on base)	prob. >:1894	Fea 29	2	American Glass Works	1895-1905	HT, post	ca. 1870-1920	W&W 1969:34-41; Toulouse 1971:43; Switzer 1974:30-33
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS//AGW (on base)	prob. >:1894	A-135	1	American Glass Works	1895-1905	HT, post	ca. 1870-1920	W&W 1969:34-41; Toulouse 1971:43; Switzer 1974:30-33
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS//AGW (on base)	prob. >:1894	Fea 31	1	Ihmsen Glass Works	1870-1895	Post		W&W 1969:34-41; Toulouse 1971:43; Switzer 1974:30-33
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS//AGW (on base)	1870-1895	Fea 51	3	Ihmsen Glass Works	1870-1895	HA, Post	ca. 1870-1920	W&W 1969:34-41; Toulouse 1971:43; Switzer 1974:30-33

HA=hand applied, HT=hand tooled, ABM=automatic bottle machine, (S)ABM=possible or confirmed semi-automatic bottle machine, SC Amy=clear sun-colored amethyst glass, 4 lg=4 lug, crn=crown finish, gr stop=ground stopper, mark in italics=script, / =separate line, // =different side of bottle, LAD=Los Angeles Directories, pr=personal communication, W&W=Wilson & Wilson, WW=Waste Water

Category	Mark	Date(s)	Provenience	Qty	Maker	Date(s)	Inch.	Inch. date(s)	Reference
Bitters	D. J. HOSTETTER'S/STOMACH BITTERS	1870-1883	Fca 51	1			HT, post	ca 1870-1920	197430-33 W&W 196934-41; Toulouse 197143; Switzer 197430-33
Bitters	D ⁵ J. HOSTETTER'S/STOMACH BITTERS	prob >1894	Fca 29	2			HT, post	ca 1870-1920	W&W 196934-41; Toulouse 197143; Switzer 197430-33
Bitters	D ⁶ J. HOSTETTER'S/STOMACH BITTERS	prob >1894	A-135	7			HT, post	ca 1870-1920	W&W 196934-41; Toulouse 197143; Switzer 197430-33
Bitters	D ⁸ J. HOSTETTER'S/STOMACH BITTERS	prob >1894	Fca 54	1			HT, post	ca 1870-1920	W&W 196934-41; Toulouse 197143; Switzer 197430-33
Bitters	D ⁹ J. HOSTETTER'S/STOMACH BITTERS	prob >1894	Fca 38	1			HT, post	ca 1870-1920	W&W 196934-41; Toulouse 197143; Switzer 197430-33
Toiletry	HOYT'S ¹⁰ /COLOGNE	1897±	Fca 29	1			HT, cup	ca 1870-1920	Fike 198764; Sears, Roebuck, 1897
Toiletry	RICHARD HUDNUT/CHEMIST/935 BROADWAY/(ONLY)/NEW YORK (partial paper)	1888-?	Fca 32	1			HT, cup	ca 1870-1920	Fike 1987167
Soda	HYGEIA/MINERAL WATER/CO./LOS ANGELES/CAL. (HYGEIA on base)	1900-1905	Fca 29	1			HT blob,	ca 1870-1920	Kuskie PC 1992
	I (in diamond)		A-135	1	Illinois Glass Co.	1916-1919	Hutchinson		>1879 Riley 197252
	I (in diamond)		WWF-1	1	Illinois Glass Co.	1916-1919			Toulouse 1971264
	I (in diamond)/1/4 OZ//MADE IN U. S. A.		Fca 44	1	Illinois Glass Co.	1916-1919			Toulouse 1971264
	IGCo (in diamond)		Fca 2	1	Illinois Glass Co.	1900-1916			Toulouse 1971264
	IGCo (in diamond)		Fca 29	2	Illinois Glass Co.	1900-1916			Toulouse 1971264
	IPG Co (in diamond)		A-130	1	Illinois Pacific Glass Co.	1902-1910			Toulouse 1971266-270
Food	JK & S/W/1936		WWF#2	1	John Kilner & Sons, England	1844-1857	HA	<1920	Toulouse 1971279
Medicinal	DR. D. JAYNES/EXPECTORANT/PHILADELPHIA//HALF SIZE//HALF DOLLAR	1895-1900±	A-135	1			Cup		Fike 1987118; W&W 197147
Food	JERSEY MAID DAIRY/GUARANTEED PURE/AND TO/CONTAIN 15% CREAM/ GEO. E. PLATT/PO STATION B./...		Fca 19	1					
Ink	JONES (on base)		Unit 12	1			HT, cup	ca 1870-1920	W&W 196885-89 #7
Spirit	PAUL JONES/BOURBON/LOUISVILLE KY. (on seal)	1889-1903	Fca 29	1					Toulouse 1971279
Beer	JK/W		Fca 29	1	John Kilner & Sons, England	1844-1919			Fike 198746; W&W 197149, 123
Medicinal	KEASBEY & MATTISON Co// (base) KEASBEY/S/MATTISON Co//z/AMBLER PA	1882-1910±	Fca 29	1			HT, cup	ca 1870-1920	
Medicinal	THE KILLS CO/NEWBURGH, N.Y. (not identified)		Fca 29	1			Cup		
Medicinal	D ⁴ KENNEDY'S//RHEUMATISM/LINIMENT//ROXBURY, MASS.	1882-1900±	Fca 20	1					W&W 1971446; Fike 1987335
Medicinal	DR KILMER'S SWAMP ROOT/KIDNEY LIVER/AND BLADDER CURE/BING., N.Y.	>1881-1918±	Fca 29	1			Cup		Fike 1987207 #22; W&W 197153; 124; Deoner 1968733
Food	KNOWLTON VACUUM/PATD MAY 1903 (Bail type canning lid)	1903-1910	Fca 43	1					Toulouse 1971339
	L (not identified)		A-130	1			Post		
Food	L. A. C./L. A. CREAMERY CO.		Augst./tramp	1			ABM	>1903	
Bitters	LASH'S KIDNEY AND/LIVER BITTERS//THE BEST CATHARTIC/AND BLOOD..	1884-1905	Fca 17	1					W&W 196944; Fike 198737
Bitters	LASH'S KIDNEY AND/LIVER BITTERS//THE BEST CATHARTIC/AND BLOOD..	1884-1905	Fca 29	1					W&W 196944; Fike 198737
Bitters	LASH'S KIDNEY AND/LIVER BITTERS//THE BEST CATHARTIC/AND BLOOD..	1884-1905	Fca 39	2					W&W 196944; Fike 198737
Bitters	LASH'S KIDNEY AND/LIVER BITTERS//THE BEST CATHARTIC/AND BLOOD..	1884-1905	Fca 40	1					W&W 196944; Fike 198737
Bitters	LASH'S KIDNEY AND/LIVER BITTERS//THE BEST CATHARTIC/AND BLOOD..	1884-1905	Fca 41	1					W&W 196944; Fike 198737
Bitters	LASH'S KIDNEY AND/LIVER BITTERS//THE BEST CATHARTIC/AND BLOOD..	1884-1905	Fca 42	1					W&W 196944; Fike 198737
	(mark)		A-146	1	Latchford-Marble Glass	1939-1957	ABM	>1905	Toulouse 1972332
	(mark)		WWF-1	1	Latchford-Marble Glass	1939-1957	ABM	>1903	Toulouse 1972332
Food	LEA & PERKINS (glass stopper)	1849-1957	Fca 17A	1					Zumwalt 1980:268-271

HA=hand applied, HT=hand toolled, ABM=automatic bottle machine, (S)ABM=possible or confirmed semi-automatic bottle machine, SC Amy=clear sun-colored amethyst glass, 4 1/2=4 lug, crn=crown finish, gr stop=ground stopper, mark in Italic=trip, = on base, /.../ = different side of bottle, LAD=Los Angeles Directories, pc=personal communication, W&W=Wilson & Wilson, WW= Waste Water

Category	Mark	Date(s)	Provenient	Qty	Maker	Date(s)	Tech.	Tech. date(s)	Referent
Food	LEA &/PERRINS (glass stopper)	1849-1937	Fea 24	1					Zumwalt 1980:268-271
Food	LEA &/PERRINS (glass stopper)	1849-1937	Fea 29	1					Zumwalt 1980:268-271
Food	LEA &/PERRINS (glass stopper)	1849-1937	A-35	1					Zumwalt 1980:268-271
Food	LEA &/PERRINS (partial)	1849-1937	Fea 42	1					Zumwalt 1980:268-271
Food	WORCESTERSHIRE SAUCE//LEA & PERRINS//JFD/S (also J44D/S and J49D/S)	1849-1921	Fea 1	1	J. Duncan & Sons by Salem Glass Works	1877-1921	HT, cup	ca 1870-1920	Zumwalt 1980:268-271; Toulouse 1971:449
Food	WORCESTERSHIRE SAUCE//LEA & PERRINS//JFD/S (also J44D/S and J49D/S)	1849-1921	Fea 18	1	J. Duncan & Sons by Salem Glass Works	1877-1921	HT, cup	ca 1870-1920	Zumwalt 1980:268-271; Toulouse 1971:449
Food	WORCESTERSHIRE SAUCE//LEA & PERRINS//JFD/S (also J44D/S and J49D/S)	1849-1921	Fea 29	2	J. Duncan & Sons by Salem Glass Works	1877-1921	HT, cup	ca 1870-1920	Zumwalt 1980:268-271; Toulouse 1971:449
Food	WORCESTERSHIRE SAUCE//LEA & PERRINS//JFD/S (also J44D/S and J49D/S)	1849-1921	484	1	J. Duncan & Sons by Salem Glass Works	1877-1921	HT, cup	ca 1870-1920	Zumwalt 1980:268-271; Toulouse 1971:449
Food	WORCESTERSHIRE SAUCE//LEA & PERRINS//A GB Co	1849-1921	Fea 39	1	Albion Glass Bottle Co.	1880-1920	HA	<1920	Zumwalt 1980:268-271; Toulouse 1971:449
Food	J&SD/S (John Duncan & Sons, NY - Lea & Perrins Worcestershire Sauce)	1849-1921	Fea 55	1	J. Duncan & Sons by Salem Glass Works	1877-1920	Cup		Zumwalt 1980:268-271; Toulouse 1971:449
Food	LB (monogram)		A-130	1	Long Beach Glass Co.	1920-1933			Toulouse 1971:348
Food	LB (monogram)		N26EdB	1	Long Beach Glass Co.	1920-1933			Toulouse 1971:348
Food	LONGS/CALIFORNIA/PRESERVES (on base)	>1896	Fea 17A	1			Cup		Zumwalt 1980:268-271
Food	LONGS/CALIFORNIA/PRESERVES (on base)	>1896	Fea 20	1			Cup		Zumwalt 1980:268-271
Food	LONGS/CALIFORNIA/PRESERVES (on base)	>1896	Fea 29	1			Cup		Zumwalt 1980:268-271
Food	LONGS/CALIFORNIA/PRESERVES (on base)	>1896	A-135	1			Cup		Zumwalt 1980:268-271
Soda	Los Angeles Beer-Cola//A. B. CO		A-130	1	American Bottle Co.	1905-1916			Toulouse 1971:350
Soda	LOS ANGELES ICE AND COLD STORAGE CO./LOS ANGELES CAL. BOTTLE		???	1			HT, Cup	ca 1870-1920	
Soda	IS NOT SOLD//PURITAS			1					
Soda	H.W. STOLL/LOS ANGELES/SODA WORKS (sic)	1872-1884	A-130	1			HT, bleb	ca 1870-1920	Markota & Markota 1972:52; Forbes jr 1990: LAD
Soda	LOS ANGELES/SODA WORKS (incomplete)	>1875-1921+	WE T-2	1					Markota & Markota 1972:52; LAD
Soda	LOS ANGELES/(star)/SODA WORKS/THIS BOTTLE/IS REG./NOT...SOLD/(star)	>1884-1921+	A-130	4			HT, Hurch.		>1879-1920 Markota & Markota 1972:52; Riley 1972: LAD
Soda	LOS ANGELES/(star)/SODA WORKS/THIS BOTTLE/IS REG./NOT...SOLD/(star)	>1894-1921+	A-130	6			Cup		Markota & Markota 1972:52; LAD
Soda	LOS ANGELES/(star)/SODA WORKS/THIS BOTTLE/IS REG./NOT...SOLD/(star)	>1884-1921+	N19/E3B	1			HT, Hurch.		>1879-1920 Markota & Markota 1972:52; Riley 1972: LAD
Soda	LOS ANGELES/(star)/SODA WORKS/THIS BOTTLE/IS REG./NOT...SOLD/(star)	>1884-1921+	A-135	1			HT, Hurch.		>1879-1920 Markota & Markota 1972:52; Riley 1972: LAD
Soda	LOS ANGELES/(star)/SODA WORKS/THIS BOTTLE/IS REG./NOT...SOLD/(star)	>1884-1921+	Fea 39	1			HT, crown		>1867-1920 Markota & Markota 1972:52; Riley 1972: LAD
Soda	LOS ANGELES/(star)/SODA WORKS/THIS BOTTLE/IS REG./NOT...SOLD/(star)	>1884-1921+	Fea 40	2					Markota & Markota 1972:52; Riley 1972: LAD
Soda	LOS ANGELES/(star)/SODA WORKS/THIS BOTTLE/IS REG./NOT...SOLD/(star)	>1884-1921+	Fea 41A	1					Markota & Markota 1972:52; Riley 1972: LAD
Soda	LOS ANGELES/SODA &/MINERAL/WATER/FACTORY//H.W. STOLL	1876-1878	A-130	2			HT, Hurch.		>1879-1920 Markota & Markota 1972:52; Riley 1972: Forbes jr 1990
Soda	LOS ANGELES/(star)/SODA WORKS (star on base)	prob >1884	Drop shaft	1			HT, Hurch.		>1879-1920 Markota & Markota 1972:52; Riley 1972
Soda	LOS ANGELES/(star)/SODA WORKS (star on base)	prob >1884	A-130	4			HT, Hurch.		>1879-1920 Markota & Markota 1972:52; Riley 1972
Toiletry	LOBIN/PARFUMEUR/PARIS	1899±	Fea 17	1			HT, ground		ca 1870-1920 Denver 1970:56
	M		A-130	1	Maryland Glass Corp.	1907-1916			Toulouse 1971:339
	M		N22E2	1	Maryland Glass Corp.	1907-1916			Toulouse 1971:339
Beer	M B & CO (base)		Fea 29	1	Massillon Bottle & Glass Co., OH	1900-1904	HT, post	ca 1870-1920	Toulouse 1971:348
	MB&GCc		Fea 46	2	Massillon Bottle & Glass Co.	1900-1904	Post		Toulouse 1971:348
	MB&GCc		Fea 17A	1	Massillon Bottle & Glass Co.	1900-1904	Post		Toulouse 1971:348

HA=hand applied, HT=hand tool, ABM=automatic bottle machine, SC=Automatic bottle machine, (S)ABM=possible or confirmed semi-automatic bottle machine, 4-fig=4 fig, crn=crown finish, gr stop=ground stopper, mark in *Italics*=script, / =separate line, // =different side of bottle, LAD=Los Angeles Directories, W&W=Wilson & Wilson, WW=Waste Water

Category	Mark	Date(s)	Prevalence	Qty	Maker	Date(s)	Tech.	Inc. date(s)	Reference
	MB&G Co				Massillon Bottle & Glass Co.				Toulouse 1971546
Spirit	MAGIC/INTRODUCTION/CO/NEW YORK (not identified)		Fca 27	1		1900-1904	Post		
	MAIR & DOUGALL (around base)		Fca 34	1			Cup		
Beer	MAIER & ZOBELIN/BREWERY/LOS ANGELES, CAL.	1882-1910	A-130	1			Molded pushup		Markota & Markota 1972177; Bull et al. 1984231
Food	MASON FRUIT JAR COMPANY PHILADELPHIA, PA (on canning lid liner)	1887-1900	Fca 43	1			HT, cup ca 1870-1920		LAD
Food	MASON IMPROVED/PAT' MAY to 1870 (Canning, glass lid top seal)	>1870	A-135	1			Pressed		Toulouse 1969200
	(mark)		WW&F-4	1	Maywood Glass Co.	1918	ABM >1903		Toulouse 1972337
	MFC (on base)		Fca 29	3	Wm. McCully, Pittsburgh	1832-1886			Toulouse 1971351
	MFC (on base)		Fca 30	1	Wm. McCully, Pittsburgh	1832-1886			Toulouse 1971351
	MFC (on base)		No loc.	1	Wm. McCully, Pittsburgh	1832-1886			Toulouse 1971351
	WMFC CO (square bottle)		406	2	Wm. McCully & Co.	1841-1886	Post		Toulouse 1971351
Medicinal	M'Clain & Glason/DRUGGISTS COR TEMPLE AND SPRING STS/LOS ANG...	1902	Fca 16	2			HT, cup ca 1870-1920		Toynton 197725
Medicinal	M'Clain & Glason/DRUGGISTS COR TEMPLE AND SPRING STS/LOS ANG...	1902	A-135	1			HT, cup ca 1870-1920		Toynton 197725
Medicinal	M'Clain & Glason/DRUGGISTS COR TEMPLE AND SPRING STS/LOS ANG...	1902	Unit 146-60	1			HT, cup ca 1870-1920		Toynton 197725
Medicinal	M'Clain & Glason/DRUGGISTS COR TEMPLE AND SPRING STS/LOS ANG...	1904	Fca 16	1			HT, cup ca 1870-1920		Toynton 197725
Medicinal	M'Clain & Glason/DRUGGISTS COR TEMPLE AND SPRING STS/LOS ANG...	1904	Fca 29	1			HT, cup ca 1870-1920		Toynton 197725
Medicinal	M'Clain & Glason/DRUGGISTS COR TEMPLE AND SPRING STS/LOS ANG...	1904	Fca 3	4			HT, cup ca 1870-1920		Fike 1987149, 172; Denver 197039
Medicinal	M'Kesson & Robbins/New York/Medical Solution of Pyrene/3% H ₂ O ₂	>1895-1918	Fca 29	1			HT, cup ca 1870-1920		Fike 1987149, 172; Denver 197039
Medicinal	M'Kesson & Robbins/New York/Medical Solution of Pyrene/3% H ₂ O ₂	>1895-1918	A-139	1			HT, cup ca 1870-1920		Zumwalt 1980300; Sears, Roebuck 1897; W&W 197159, 127
Food	MELLINS FOOD FREE SAMPLE (probably infant food)	>1870s		1					
Food	MERIT FLAVORING EXTRACTS/R. L. CRAIG & CO./LOS ANGELES		A-135	1			HT, cup ca 1870-1920		Stewart & Cosentino 1977124
Ink	E. H. MERRILL CO. AKRON, OHIO (on base, master ink)	1835-1900	A-112	1					Fike 1987135; W&W 197159, 171; Denver 196864
Medicinal	MEXICAN/MUSTANG/LINIMENT/LYON MFG CO/NEW YORK	>1871-1908	Fca 29	2			HT, cup ca 1870-1920		LAD
Medicinal	FRANK MILLER (may be Frank W. Miller, eye, ear, nose & throat specialist, 731 H. W. Hellman Bldg., 356 S. Spring, Los Angeles - 1912)		Fca 6	1					
	MONARCH		Fca 40A	1	Prob. Monarch Glass Co.		HT	ca 1870-1920	Noted as in business during 1925 by Toulouse 1971457
Spirit	JESSE MOORE-HUNT CO./SAN FRANCISCO	1897-1905	Fca 29	1					W&W 196867 #4, 38
Medicinal	MURINE EYE REMEDY/CO CHICAGO	1892-1906	Fca 29	1			HT, cup ca 1870-1920		Fike 19871209; W&W 197153, 128; Denver 196867
Medicinal	MURINE EYE REMEDY/CO CHICAGO	>1892	Fca 49	1					Fike 19871209; W&W 197153, 128; Denver 196867
Medicinal	MURINE EYE REMEDY (partial paper label)	>1906	Surface	1			HT, cup ca 1870-1920		Denver 196867; W&W 197159, 141; Fike 19871209
Beer	NBSG CO		A-130	1	North Baltimore Bottle Glass Co.	1835-1930	HT, cup ca 1870-1920		Toulouse 1971379
Beer	424 FULTON STREET/NATIONAL BOTTLING WORKS/(eagle)/SAN FRANCISCO, CAL./THIS BOTTLE NOT TO BE SOLD	1898-1902	Fca 18	1					W&W 1968174; Bull et al. 198532
Medicinal	4 fl oz/NEWBROW'S/HERPICIIDE/FOR THE SCALP//CONTAINER MADE IN USA	1890s-1916	Backhoe Tr.	1			ABM, cup		>1903 Fike 1987105; W&W 197103, 129; Denver 196868
	N & Co		A-135	1	Nattall & Co., Eng.	1872-1915			Toulouse 1971380
	N (in circle)		Fca 11	1	Obeart Nestor	1894-1915	HT, cup ca 1870-1920		Toulouse 1971373
	N (in circle)		Fca 29	1	Obeart Nestor	1894-1915	HT, cup ca 1870-1920		Toulouse 1971373
	N (in circle)		Fca 34	1	Obeart Nestor	1894-1915	HT, cup ca 1870-1920		Toulouse 1971373
	N (in circle)		A-135	2	Obeart Nestor	1894-1915	HT, cup ca 1870-1920		Toulouse 1971373

FA=hand applied, HT=hand toolled, ABM=automatic bottle machine, (S)ABM=possible or confirmed semi-automatic bottle machine, SC Amy=clear sun-colored amethyst glass, 4-1g=4 lug, str.=crown finish, gr stop=ground stopper, mark in italics=scrips, / =separate line, // =different side of bottle, LAD=Los Angeles Directories, pe=personal communication, W&W=Wilson & Wilson, WTW=Waste Water

Category	Mark	Date(s)	Provenance	Qty	Maker	Date(s)	Tech.	Lab. date(s)	Reference
	N (in circle)		Auger 8K-9C	1	Obeur Nestor	1894-1915	HT, cup	ca 1870-1920	Toulouse 1971373
	NR/12		A-135	1	North British Bottle Mfg. Co., LTD	1903-1937	HA	<1920	Toulouse 1971377
Beer	N & C C ² /3475		ESC #10	1	Nuttall and Co.	1872-1913	HA	<1920	Toulouse 1971380
Soda	N.Y.B.D. (not identified)		Fea 29	2			Cup		Fike 1937-46
Medicinal	THE OAKLAND CHEMICAL COMP ² /H ₁ /(monogram)/O (press. hydrogen peroxide)	>1907-1948	Fea 29	1			HT, cup	ca 1870-1920	Fike 1937-46
Spirit	O'BRYAN BROS. DISTILLERS/LOUISVILLE, KY/FULL PINT		A-130	1			HT, cup		
Medicinal	OFF & VAUGHN/DRUG CO/LOS ANGELES, CAL// ¹⁸⁸⁸ /A/U.S.A./PAT JAN 5, 1892	>1892	Surface	2			Cup		
Soda	ORIGINA/ ¹⁸⁹⁰ /GINGER CHAMPAGNE/TL. MARK REG./MANITOU/COL....		A-115	1			Post		Tsyricon 1977135; LAD
	O (in square)		Auger 8K-9C	1	Owens Bottle Co.	1911-1929	Post		Schmeiser 1970875 (no date given)
	O (in square)		A-135	1	Owens Bottle Co.	1911-1929	ABM	scar>1903	Toulouse 1971393
Medicinal	OWENS (w/graduations)		Antrak bldg.	1	Owens Bottle Co.	1911-1929	ABM	scar>1903	Toulouse 1971393
Medicinal	OWENS mark (w/graduations)		WW	1	Owens Bottle Co.	1911-1929	ABM	scar>1903	Toulouse 1971393
Medicinal	OWENS/(diamond in circle)		UPT	1	Owens Illinois Glass Co.	1929-1954	ABM	scar>1903	Toulouse 1971395; 493
Medicinal	OWENS/(diamond in circle)		WW	1	Owens Illinois Glass Co.	1929-1954	ABM	scar>1903	Toulouse 1971395; 493
Medicinal	OWENS/(diamond in circle)		Fea 44	1	Owens Illinois Glass Co., Newark, OH	1929-1938	ABM	>1932	Toulouse 1971395; 493
	(mark)		WWFE-1	3	Owens Illinois (L.A.)	>1932	ABM	>1903	Toulouse 1971395; 493
	OI (monogram in diamond)		Auger 8K-9C	3	Owens Illinois Glass Co.	1929-1954			Toulouse 1971395; 493
	OI (monogram in diamond)		WWFE-1	8	Owens Illinois Glass Co.	1929-1954			Toulouse 1971395; 493
Medicinal	The Owl (sic) Drug Co. (error in mark noted by JS), but no date given)	prob 1892-1908	Fea 21	1			HT	ca 1870-1920	Jensen & Jensen 19683; Fike 198772
Medicinal	The Owl (sic) Drug... (error in mark noted by JS), but no date given)	prob 1892-1908	Fea 42	1			HT, cup	ca 1870-1920	Jensen & Jensen 19683; Fike 198772
Medicinal	(owl on mortar)/TRADEMARK (with monogram, The Owl Drug Co.)	1892-1908	Fea 21	1			HT, cup	ca 1870-1920	Jensen & Jensen 19683; Fike 198772
Medicinal	(owl on mortar)/TRADEMARK (with monogram, The Owl Drug Co.)	1892-1908	Fea 29	1			HT, cup	ca 1870-1920	Jensen & Jensen 19683; Fike 198772
Medicinal	(owl on mortar)/TRADEMARK (with monogram, The Owl Drug Co.)	1892-1908	Fea 32	1			HT, cup	ca 1870-1920	Jensen & Jensen 19683; Fike 198772
Beer	PC (inside triangle)		A-135	1	Pacific Coast Glass Co.	1923-1930			Toulouse 1971444
Link	PC (in triangle on base)		Auger 8K-9C	1	Pacific Coast Glass Co.	1923-1930	Post		Toulouse 1971444
Medicinal	P C C W		A-130	1	Pacific Coast Glass Works	1902-1904	(S)ABM	>1892	Toulouse 1971446
Medicinal	P.D. & Co.		Fea A-135	1	Parke, Davis & Co.	1875	HT	ca 1870-1920	Toulouse 1971447
Medicinal	P.D. & Co.		Fea 39	2	Parke, Davis & Co.	1875	Post		Toulouse 1971447
Medicinal	P.D. & CO/375		Fea 39	1	Parke, Davis & Co.	1875	HT, Post	ca 1870-1920	Toulouse 1971447
Medicinal	P-D&C		Fea 29	5	Parke, Davis & Co.	1875	Post		Toulouse 1971447
Soda	PACIFIC/(anchor)/SODA WORKS/L.A., CAL.//THIS BOTTLE IS NEVER SOLD	1890	UPT	1			Cup		LAD
Food	PACIFIC VINEGAR & PICKLE WORKS (on base)	1880-1912	A-135	1			SC Any	ca 1880-1916	Zumwalt 1980345
Bitters	PAINES//CELERY COMPOUND	prob>1885-1906	WW	1			HT, post	ca 1870-1920	W&W 197186, 191; Denver 196852
Bitters	PAINES//CELERY COMPOUND	1885-1906	Fea 21	1			W&W	197186, 191; Denver 196852	W&W 197186, 191; Denver 196852
	THE PALISADE/MEG. CO./YONKERS, N.Y.		Fea 42	1			Fike	1987145 (1929-1942 ref. for Borohypoc)	Fike 1987145
Toiletry	Balner		Fea 1	1			HT, post	ca 1870-1920	Fike 1987185
Toiletry	Balner		Fea 29	1			HT, post	ca 1870-1920	Fike 1987185
Toiletry	PALMER'S/Fleisch Warner/NY	1871-1970	Fea 39	1			(S)ABM	>1892	Fike 1987211
Link	PAULUS SAFETY BOTTLE & INK CO. NY	>1867	Fea 44	1			Post		Nelsen & Hurley 196754 #207
	PAT NOV 26 67	>1873	Locus A	1			Post		
Food	PAT NOV 26 67/PAT FEB 4 75/A 15	>1873	Auger 8K-9C	1			Post		
Food	PAT NOV 26 67/PAT FEB 4 71/A 20	>1873	A-135	1			Ground, post		Toulouse 1969402-404
Food	(pat D2-840 Rawley, all Hero line, basic shape, pat 135-440 Hawson, Hero Crystal all glass lid)	>1873	Fea 29	1			Pressed		Toulouse 1969402-404

HA=hand applied, HT=hand tooled, ABM=automatic bottle machine, (S)ABM=possible or confirmed semi-automatic bottle machine, SC Any=clear sun-colored amethyst glass, 4-16=4 hgt, crni=crown finish, gr stop=ground stopper, mark in *italic*=script, / =separate line, // =different side of bottle, LAD=Los Angeles Directories, pc=personal communication, W&W=Wilson & Wilson, WW=Waste Water

Category	Mark	Date(s)	Prevalence	Qty	Maker	Date(s)	Arch.	Inch.	Inch. date(s)	Reference
Medicinal	POND'S EXTRACT // 1846	>1878	Gaidewall Tr.	1			HT, post	ca 1870-1920		Fike 1987:120; W&W 1971:73, 133; Denver 1968:76, 1970:61
Medicinal	POND'S EXTRACT/OINTMENT	>1878	A-130	1			HT, post	ca 1870-1920		Fike 1987:120; W&W 1971:73, 133; Denver 1968:76, 1970:61
	PURITAS (on base) LOS ANGELES CAL...SOLD (around base)		Fea 29	2			Cup			Toulouse 1969:230
Food	PURITAS (on base) LOS ANGELES CAL...SOLD (around base)	1882-1890	A-130	1			Post			Toulouse 1969:230
Food	PUTNAM	1882-1890	Fea 29	4			Post			Toulouse 1969:230
Food	PUTNAM	1882-1890	Fea 47	4			Post			Toulouse 1969:230
Food	TRADE MARK/LIGHTNING/PUTNAM	1882-1890	406	1			Cup			
Beer	PAT 85/R & CO./14 (base) (not identified, not considered to be Roth & Co.)		A-130	2			HT, post	ca 1870-1920		Toulouse 1971:438-439
Beer	PAT 85/R & CO./14 (base) (not identified, not considered to be Roth & Co.)		Retain Wall	1			Post			Toulouse 1971:438-439
Beer	R & C ...		Fea 29	1	Prob. export beer, may be Roth & Co.		Post			Toulouse 1971:438-439
Beer	R & C ...		Fea 38	1	Prob. export beer, may be Roth & Co.		Post			Toulouse 1971:438-439
Beer	R & Co		A-130	4	Roth & Company		Post			Toulouse 1971:438
Beer	R & Co		Fea 21	1	Roth & Company		Post			Toulouse 1971:438
Beer	R & Co		Fea 27	1	Roth & Company		Post			Toulouse 1971:438
Beer	R & Co		Fea 29	1	Roth & Company		Post			Toulouse 1971:438
Food	THE ... PACKING CO/PAT JULY 11 th /1893/USA	>1893	Fea 29	1	poss. Roth Packing Co., >1891		Cup			Zurwald 1980:345
Medicinal	RADWAYS//SARSAPARILLIAN/RESOLVENT//ENTR ACCORP//TO ACT OF/CONG...	prob >1875	A-130	1						Fike 1987:218; W&W 1971:74, 75, 134; Denver 1968:79
Soda	RAMONA/BOTTLING/WORKS/LOS ANGELES, CAL. (PS, on base)	1905-1908	A-130	3			HT crn	>1897-1920		Riley 1972:52; Kinskie pc 1992
Soda	RAMONA/BOTTLING/WORKS/LOS ANGELES, CAL. (PS, on base)	1905-1908	A-135	1			HT crn	>1897-1920		Riley 1972:52; Kinskie pc 1992
Soda	RAMONA/BOTTLING/WORKS/LOS ANGELES, CAL. (PS, on base)	1905-1908	Fea 36	1			HT crn	>1897-1920		Riley 1972:52; Kinskie pc 1992
Soda	RAMONA/BOTTLING/WORKS/LOS ANGELES, CAL.	1905-1908	Fea 39	1			HT crn	>1897-1920		Riley 1972:52; Kinskie pc 1992
Soda	REDDINGTON & Co./S. E	1877-1893	Fea 42	1						W&W 1969:90, 91
Soda	C. A. REINERS & CO./7-3 TURK ST./S.F. (partial)	1875-1882	Bag, park lot	1						Schmiser 1970:61; Markota & Markota 1972:81
Medicinal	RESINOL/BALTO ^{ME} /CHEMICAL CO.	>1897	Fea 39	1						Fike 1987:75; Denver 1968:80
Medicinal	RIO CHEMICAL C. NEW YORK N.Y.	>1902	Gaidewall Tr.	1			HT, cup	ca 1870-1920		Fike 1987:226
	ROOT		A-135	1	Root Glass Co.		HT	ca 1870-1920		Toulouse 1971:445
Medicinal	ROLYFAM/FOR THE TEETH/PUT UP BY/E.W. HOYT & Co./LOWELL, MASS.	1889-1923	Fea 54	1						Denver 1968:81; Fike 1987:65
Beer	S (inside star)		Auger 8K-9C	3	Southern Glass Co.					Toulouse 1971:457
Beer	S (inside star)		A-135	1	Southern Glass Co.					Toulouse 1971:457
Beer	SB&CCo		Fea 7A	1	Streator Bottle and Glass Co.		Post			Toulouse 1971:461
Beer	SB&CCo		A-130	2	Streator Bottle and Glass Co.		Post			Toulouse 1971:461
Beer	SB&CCo		Fea 24	1	Streator Bottle and Glass Co.		Post			Toulouse 1971:461
Beer	SB&CCo		Fea 29	9	Streator Bottle and Glass Co.		Post			Toulouse 1971:461
Beer	SB&CCo		Fea 30	1	Streator Bottle and Glass Co.		Post			Toulouse 1971:461
Beer	SB&CCo		Fea 35	1	Streator Bottle and Glass Co.		Post			Toulouse 1971:461
Beer	SB&CCo		Fea 42	1	Streator Bottle and Glass Co.		Post			Toulouse 1971:461
Medicinal	DR. S.B.H.&CO./D/PR. (not identified)		A-130	1			Post			
Medicinal	S. B. W. CO. (not identified)		A-130	1			HT	ca 1870-1920		
Personal	SAFETY NURSING BOTTLE (guaranteed)	1887	Fea 42	1	Howard M. Sate, Los Angeles ?		HT	ca 1870-1920		LAD
Medicinal	Safe & Sw/DRUG CO		ESC #10	1			(S)ABM	>1892		Denver 1968:16
Medicinal	SALVA-CEA/THE BRANDRETH CO. N.Y.	1892-1899	Nig/E3B	1						

HA=hand applied, HT=hand tooled, ABM=automatic bottle machine, (S)ABM=possible or confirmed semi-automatic bottle machine, SC Amy=clear sun-colored amethyst glass, 4-lg=4 lug, crn=crown finish, gr stop=ground stopper, mark in *italics*=scrips, / =separate line, // =different side of bottle, LAD=Los Angeles Directories, pc=personal communication, W&W=Wilson & Wilson, WW=Waste Water

Category	Mark	Date(s)	Provenience	Qty	Maker	Date(s)	Itch.	Tch. dat(s)	Reference
Medicinal	SALVA-CEA/THE BRANDRETH CO. N.Y.	1895->1899	Fea 42	2			(S)ABM >1892	Devner 1968:66	
Ink	SANFORD (on base, square)		Surface	1			(S)ABM >1892		
Ink	SANFORD		Fea 29	1					
Ink	SANFORD (on base)		A-135	1			HT, cup ca 1870-1920	Nelson & Hurley 1967:39 (#2,30 similar)	
Ink	SANFORD (on base)		Fea 29	1			(S)ABM >1892	Nelson & Hurley 1967:39 (#2,30 similar)	
Ink	SANFORD/PATENT/APPLIED/FOR (on base)		Fea 29	1			Cup		
Ink	SANFORD MFG. CO./PATENTED MAY 25, 1899		Guidewall/Tt.	1			(S)ABM >1892		
Ink	SANFORD'S (on base)	>1899	Fea 32	1			HT, cup ca 1870-1920	Nelson & Hurley 1967:39 (#2,30 similar)	
Ink	SANFORD'S (on base)		Unit 124	1			HT, cup ca 1870-1920	Nelson & Hurley 1967:39 (#2,30 similar)	
Ink	SANFORD'S (on base)		406	1			HT, cup ca 1870-1920	Nelson & Hurley 1967:39 (#2,30 similar)	
Ink	SANFORD'S (on base)		Track area	1			HT, cup ca 1870-1920	Nelson & Hurley 1967:39 (#2,30 similar)	
Ink	SANFORD'S/1 (on base)		Fea 49	1			ABM >1903	Nelson & Hurley 1967:39 (#2,30 similar)	
Ink	SANFORD'S/1 (on base)		Fea 44	1			(S)ABM >1892	Nelson & Hurley 1967:39 (#2,30 similar)	
Ink	SANFORD'S/27 (on base)		Fea 42	1			HT ca 1870-1920	Nelson & Hurley 1967:39 (#2,30 similar)	
Ink	SANFORD'S (on base) (partial paper label)		Fea 34	1			HT, cup ca 1870-1920		
Ink	SANFORD'S (on base) SECOND SECOND (on shoulder)		Fea 32	1			HT, cup ca 1870-1920		
Ink	SANFORD'S INK (on base)		?	1			HT ca 1870-1920		
Ink	SANFORD'S/INKS (cap)		Fea 23/A	1					
Medicinal	SAXLEHINERS/HUNYADI/WANOS/BITTERQUELLE	1863-1923	A-130	7	(in CA by 1879)			Toulouse 1971:57-258; Devner 1968:47; Fike 1987:41; Schulz et al. 1986:42-144	
Medicinal	SCHLOTTERBECK & FOSSCO/PORTLAND, ME	>1887	Fea 49	1			HT, post ca 1870-1920	Fike 1987:6	
Medicinal	SCOTT'S/EMULSION//COD LIVER OIL//WITH LIME & SODA	1876-1890	Fea 32	1				Fike 1987:196; W&W 1971:32, 137; Devner 1968:85	
Food	SEVILLE PACKING CO/(crest)/NEW YORK (on base)	1867-1906+	A-130	1			HT, cup ca 1870-1920	Zumwalt 1968:371	
Food	(crest)/TRADEMARK//SEVILLE PACKING CO/(crest)/NEW YORK (probably olives)	1867-1906+	A-130	1				Zumwalt 1968:371	
Soda	S G Co (outland in boxes)		Surface	1		197-191		Toulouse 1971:55, 32, 357, 457	
Medicinal	SHILOH'S/CONSUMPTION/CURE//S. C. WELLS & CO./LEROY, N.Y.	1873-1909	A-130	1				Fike 1987:105, 106; W&W 1971:85, 88	
Medicinal	SLOAN'S SURE/COLIC CURE//S		ESC #10	1			HT ca 1870-1920	Fike 1987:106; Devner 1968:87	
Wine	SOUTH.../CAL. WINE CO/220 W. 4 th ST./LOS ANGELES/CAL.	1895-1916	Fea 29	1				W&W 1968:153	
	SE.../SEWING/MACHINE/BICYCLE/OIL/... (paper label)	1900-1916	Fea 29	1			Cup		
Wine	FULL 1/2 GALLON/STAR WINE CO./WHOLESALE .../WINE .../LOS ANGELES, CAL. (Star Wine Co., Wholesale Wine and Liquors, Los Angeles, CA)		Fea 29	1			Cup	W&W 1968:64, 135-136	
Soda	STEINKE & WEINLIG/SCHUTZ MARKE (on base)-GLASFABR/	prob 1880	Fea 1	1			HA blob ca 1870-1920	Toulouse 1971:238	
Soda	STEINKE & WEINLIG/SCHUTZ MARKE (on base)-GLASFABR/	prob 1880	Fea 24	1			HA blob ca 1870-1920	Toulouse 1971:238	
Soda	STEINKE & WEINLIG/SCHUTZ MARKE (on base)-GLASFABR/	prob 1880	Fea 29	2			HA blob ca 1870-1920	Toulouse 1971:238	
Medicinal	H. HEYE/NIENBURG ² /w (reverse) Selters	1902	AL-1	1				Toynon 1977:27	
Medicinal	SUN DRUG CO.		Auger 8K-9C	1			Cup		
Soda	NET CONTENTS 6 FL. OZ REGISTERED (star)//SUNRISE/18/SODA/WATER/LA		Fea 29	2			Cup		
Soda	A K CO/SUNRISE/SODA WATER//...OR SOLD		Fea 17/A	1			HT, gr stop	ca 1870-1920	
Toiletry	T (on base, not identified)			1					

HA=hand applied; HT=hand tooled; ABM=automatic bottle machine; (S)ABM=possible or confirmed semi-automatic bottle machine; SC Army=clear sun-colored amethyst; glass; 4-13=4 lug, crn=crown finish, gr stop= ground stopper, mark in *italics*=script; /...=separate base; //...=different side of bottle; LAD=Los Angeles; Director's; pc=personal communication; W&W=Wilson & Wilson; WW= Waste Water

Category	Mark	Date(s)	Prevalence	Qty	Maker	Date(s)	Arch	Arch date(s)	Reference
Toiletry	T.C.W. CO./U.S.A. (jar)		Fea 6	1	T. C. Wharton Co.	1888-	(S)ABM	>1892	Toulouse 1971492; 527 (poss>1938)
Medicinal	G. C. THAXTER (mortar)/DRUGGIST/CARSON//WT & CO/S	1878-1903	406-171	1	Whitall-Tatum & Co.	1877-1938	Cup		Holabird & Haddock 198647; Toulouse 1971544
Ink	(George C. Thaxter, Carson City, NV) THOMAS/INKS (on base)		Fea 3	1			(S)ABM	>1892	
Ink	THOMAS/INKS (on base)		Surface	1			(S)ABM	>1892	
Ink	THOMAS/INKS (on base)		Fea 21	1			HT, cup	ca 1870-1920	
Ink	L. H. THOMAS CO./CHICAGO (on base)		Fea 29	1			(S)ABM	>1892	Nelson & Hurley 196745 (similar mark)
Ink	L. H. THOMAS CO./CHICAGO (on base)		Trench TP3	1			(S)ABM	>1892	Nelson & Hurley 196745 (similar mark)
Ink	L. H. THOMAS CO./CHICAGO (on base)		Surface	1			(S)ABM	>1892	Nelson & Hurley 196745 (similar mark)
Ink	L. H. THOMAS CO./CHICAGO (on base and partial paper label)		Unit nec-80	1			HT, cup	ca 1870-1920	Nelson & Hurley 196745
Ink	L. H. THOMAS CO./57/CHICAGO (on base)		A-136	1			(S)ABM	>1892	Nelson & Hurley 196745 (similar mark)
Ink	THOMAS/RED INK/CHICAGO (paper label)		Fea 39	1			HT, cup	ca 1870-1920	Nelson & Hurley 196745
Medicinal	THOMAS DRUG CO.// ¹⁸⁸⁸ /H/USA	1893	MPT-Tinspitt	1	Holt-Glass Works, Berkeley	1893-1906	HT, cup	ca 1870-1920	Fike 198779; Toulouse 1971231; Toynton 197727
Medicinal	D ^S THOMPSON'S/EYE WATER/NEW LONDON/CONN ^Z	1795-1942+	Fea 39	1			HT, cup	ca 1870-1920	Fike 198722.45; W&W 197190. 141; Devner 198892
Food	TOBACCO/M ¹⁸⁸⁸ PHENNY/SAUCE	>1888	Fea 29	1			Cup		Zunwalt 1986392
Medicinal	TROY/PHARMACAL COMPANY/SAN FRANCISCO and NEW YORK A (on base - partial paper label - mentions liver, laxative)		Fea 32	1			HT, cup	ca 1870-1920	
Medicinal	TURNER'S/ESS OF/JAMAICA GINGER/NEW YORK	1840s-1885 or 1875	A-130	1			Cup		Fike 1987129; 130; W&W 197193; 127; 143
Soda	UNION/SODA WORKS (not the same as S.F. in ref.)		A-115	2			Cup		
Soda	UNION/SODA WORKS (not the same as S.F. in ref.)		A-130	1			Cup		
Water?	VICHY/ETAT (on base)		Auger 8K-9C	1			Cup		
Medicinal	<i>Fole & Lepizich</i> /PHARMACIE-FRANCAISE//427 N. MAIN ST./LOS ANGELES, CAL.	1891-1912	Fea 16/17	1			HT, cup	ca 1870-1920	Toynton 197727
Medicinal	<i>Fole & Lepizich</i> /PHARMACIE-FRANCAISE//427 N. MAIN ST./LOS ANGELES, CAL.	1891-1912	Fea 26	1			HT, cup	ca 1870-1920	Toynton 197727
Medicinal	<i>Fole & Lepizich</i> /PHARMACIE-FRANCAISE//427 N. MAIN ST./LOS ANGELES, CAL.	1891-1912	A-135B	1			HT, cup	ca 1870-1920	Toynton 197727
Medicinal	<i>Fole & Lepizich</i> /PHARMACIE-FRANCAISE//427 N. MAIN ST./LOS ANGELES, CAL.	1891-1912	Fea 39	1			HT	ca 1870-1920	Toynton 197727
Medicinal	<i>Fole & Lepizich</i> /PHARMACIE-FRANCAISE//427 N. MAIN ST./LOS ANGELES, CAL.	1891-1912	Fea 44	1			HT, cup	ca 1870-1920	Toynton 197727
Medicinal	VIOLE & LOPZICH//427 N. MAIN ST./LOS ANGELES, CAL.	1891-1912	Fea 18	1			HT, cup	ca 1870-1920	Toynton 197727
Medicinal	VIOLE & LOPZICH//427 N. MAIN ST./LOS ANGELES, CAL.	1891-1912	Guidewall T1	1			HT, cup	ca 1870-1920	Toynton 197727
Toiletry	VIOLET/PARIS (Not Identified)		Fea 37	1			HT, cup	ca 1870-1920	Toynton 197727
	WF & S/MIL		A-136	1	William Franzen & Son	1900-1929	Post		Toulouse 1971536
	WMLS.CO./SAN FRANCISCO		Surface	1	possibly Whiting M. S. & Co.	1869-1874			McClure 196738
Bitters	WAIT'S WILD CHERRY TONIC//THE GREAT TONIC	prob >1875	Fea 16	1					Fike 1987237; Toynton 197742
Bitters	WAIT'S WILD CHERRY TONIC//THE GREAT TONIC WICKSON (not identified)	prob >1875	Fea 26	1					Fike 1987237; Toynton 197742
Bitters	WAIT'S WILD CHERRY TONIC//THE GREAT TONIC WICKSON (not identified)	prob >1875	Fea 32	1			Cup		Fike 1987237; Toynton 197742
	WT (mongram in triangle)		A-130	1	Whitall-Tatum & Co.	1935-1938			Toulouse 1971544
	WT&Co		Fea 21	1	Whitall-Tatum & Co.	1877-1935	Cup		Toulouse 1971544
	WT&Co		Fea 24	1	Whitall-Tatum & Co.	1877-1935	Cup		Toulouse 1971544
	WT&Co		Fea 29	2	Whitall-Tatum & Co.	1877-1935	Cup		Toulouse 1971544
	WT&Co		Fea 32	1	Whitall-Tatum & Co.	1877-1935	Cup		Toulouse 1971544
	WT&Co		496	2	Whitall-Tatum & Co.	1877-1935	Cup		Toulouse 1971544
	WT&Co		A-135	1	Whitall-Tatum & Co.	1877-1935	Cup		Toulouse 1971544

HA=hand applied, HT=hand tooled, ABM=automatic bottle machine, SC Amp=possible or confirmed semi-automatic bottle machine, 4-lg=4 lug, crn=crown finish, gr stop=ground stopper, mark in *italics*=scrip, / =separate line, // =different side of bottle, LAD=Los Angeles Directories, pe=personal communication, W&W=Wilson & Wilson, WW=Wase Water

Category	Mark	Date(s)	Prevalence	Qty	Maker	Date(s)	Tch.	Tech. date(s)	Referenc
	WT&Co		Surface	1	Whitall-Tatum & Co.	187-1935	Cup		Toulouse 1971544
	W.T. & Co./U.S. A.		Fea 42	1	Whitall-Tatum & Co.	187-1935			Toulouse 1971544
	W. T. Co./1212/PAT. JUNE 23 rd , 1892 (milk glass jar)	>1852	Fea 39	1	Whitall-Tatum & Co.	187-1935			Toulouse 1971544
Medicinal	(monogram on base)		Fea 39	1	S. S. White Co. (dental supplies)	1900-1910	HT	ca 1870-1920	Toulouse 1971544
Medicinal	(monogram on base)		AU-1	1	S. S. White Co. (dental supplies)	1900-1910			Toulouse 1971544
	WHITEMORE/BOSTON/U.S. A.		WET-1	1					Fike 1987223; has a Whitmore in Essex, CT 1854-1910
	LOANED BY/AR.WINARICK//A.R. WINARICK/N.Y. (on top)	1929-1930	Auger 8K-9C	1			ABM	>1903	Fike 1987286
Medicinal	D ⁵ WISTARS/BALSAM OF WILD CHERRY/PHILAD./1B.	1843-1900	ESC #10	1			HT	ca 1870-1920	Fike 1987228; W&W 1971599, 146
	WOODBURY GLASS WORKS/WOODBURY NJ.		Fea 39	1	Woodbury Glass Works, Woodbury, NJ	1892-1896+			Toulouse 1971539
	WOOSTER		A-130	1	Wooster Glass Co.	1900-1904	Post		Toulouse 1971543
Medicinal	WYETH (on base)	>1870s	Fea 29	1			HT, cup	ca 1870-1920	Fike 1987449, 121, 187, 197; Denver 1970023
Medicinal	WYETH (on base)	>1870s	A-135	1			SC Amy	ca 1880-1916	Toulouse 1971548
Medicinal	JOHN WYETH (and Bros?) (partial)	1860s-1907	Fea 25	1					Fike 1987449, 121, 187, 197; Denver 1970023
Medicinal	JOHN WYETH & BRO//PAT MAY 16 th 1859	>1899-<1907	Fea 19	1			Cup		Toulouse 1971548
Medicinal	JOHN WYETH & BRO//TAKE NEXT DOSE AT//PAT. APPLD FOR	:1890s-1899	Fea 29	1			HT, cup	ca 1870-1920	Fike 1987212, 187; W&W 1971161, 146;
Bitters	YERBA BUENA//BITTERS, S.F. CAL.	1870-1917	A-130	1			HA, post	<1920	Denver 1968102
Toiletry	(monogram on partial paper label, not identified)		Fea 16	1			Cup		W&W 1969564-66
Toiletry	(monogram on partial paper label, not identified)		Fea 29	1					Denver 1968102
Beer	... BREWING.../SAN DIEGO, CAL//... NOT SOLD		Fea 29	1			Pear		
Medicinal	... PHARMACY/N. MAIN ST. LOS ANGELES (partial paper label)		Fea 33	1			HT, cup	ca 1870-1920	
Medicinal	...YS/...THIC/(horse head)/TRADE MARK/VETERINARY/SPECIFICS (not identified)		A-135	1			Cup		
Medicinal	.../ROSES & ...RY/...WAKELEE & Co SOLE AGENTS	1868-1917	Fea 32	1			Cup		W&W 1971994, 108, 129, 138, 143;
Medicinal	.../421 N. MAIN/LOS ANGELES		A-135B	1					Fike 1987214, 146, 185
Medicinal	... PHARMACY/N. MAIN ST LOS ANGELES (partial paper label)		Fea 23	1			HT, cup	ca 1870-1920	
Spirit	R-22 (on base)...PINT (includes design)		Surface	1			ABM	scar>1903	

HA=hand applied, HT=hand tool/d., ABM=automatic bottle machine, (S)ABM=possible or confirmed semi-automatic bottle machine, 4-ls=4 lug, crn=crewn finish, gr stop= ground stopper, mark in *italics*=errata, / = separate line, // = different side of bottle. LAD=Los Angeles Directories, pc=personal communication, W&W=Wilson & Wilson, WW=Waste Water

Notes on Calligraphy Displayed in a Physician's Office

Lothar von Falkenhausen and Ronald C. Egan

The hanging scrolls with brushwritten Chinese calligraphy displayed on the walls of the office and dispensary of a medical practitioner in Los Angeles Chinatown (fig. 6.2) are of interest in connection with this excavation report because they encapsulate some of the cultural values of an educated member of the overseas Chinese community in Los Angeles around the turn of the twentieth century. In their context of display, the inscribed mottoes and text passages, inherited from the millennial cultural tradition of China and transplanted, somewhat imperfectly, into the immigrants' new environment, take on a meaning subtly distinct from what it would have been in China. A fully rounded interpretation would require a study of some length and is outside the range of this monograph; we present here merely transcriptions, translations, and brief comments on the calligraphic texts visible in the photograph.

Reading the inscriptions from the photograph presents added challenges because of the partly blurred rendering, the fact that some characters are covered by other objects in the room, and problems with the execution of the calligraphy.

Authorship and Writing Style

The writer of all scrolls on the rear wall (fig. 6.2) except for the central item (the one that is partially covered by the mirror and the lamp) identifies himself as Li X 李 [] (the character of his personal name is illegible in the photo). The central item, as well as the scroll on the left wall, was written by a certain Li

Shengyou 李聖佑. The central item is dedicated to the occupant of the premises, referred to in the inscription by his style-name (*zi* 字; also sometimes rendered as "courtesy-name") Xiushi 繡石, who was a relative of Li Shengyou's in the same generation, probably a cousin. Li X, the writer of the surrounding scrolls, may have been the occupant of the premises himself; if so, he would be identical with Xiushi, and one might refer to him politely as Li Xiushi 李繡石—a name that he would not, however, have used with reference to himself. The possession of a *zi* indicates a certain pretension to status and learning in traditional Chinese society.

Li X apparently had no formal training in brushwriting. He had probably learned the technique by copying printed model calligraphies on his own; he shows unfamiliarity with the standard sequences of brushstrokes, something a teacher trained in the mainstream tradition would surely have taught him. Thus, rather than in China, Li X could have acquired the skill of writing with a brush when he was already living in an overseas community lacking traditional scholar-teachers.

Unfortunately, Li chose to write in the running-cursive style (*xingcao* 行草), where legibility crucially depends on the characters' strokes being written according to a specific, conventionally agreed-upon sequence. As a result, several characters cannot be deciphered. Fortunately, for the longest inscribed item, printed versions of the text copied by Li X could be located.

Li Shengyou's calligraphy is not much better than Li X's. In fact, their writing styles are somewhat similar, perhaps because they learned from the same models.

Description of the Scrolls

Li X's calligraphies comprise six scrolls:

1. A matching pair of scrolls (*duilian* 對聯), the first part of which is the scroll on the far right of the rear wall, matched by the scroll abutting the entrance to the consultation room.
2. A set of four scrolls containing an essay called "Qin Shaoyou zhenzan" 秦少游真贊 (Appreciation on a Portrait of Qin Shaoyou), written in AD 1084 by the celebrated poet and essayist Su Shi 蘇軾 (*zi*: Dongpo 東坡, AD 1036–1101) and inscribed on a portrait of his junior friend, the poet Qin Guan 秦觀 (*zi*: Shaoyou 少游, AD 1049–1101). The text begins on the second scroll from the right on the rear wall, continues on the next two scrolls to the left, and ends on the scroll to the left of the mirror. Comparison with the text as printed in Su Shi's Collected Writings reveals that the four scrolls are hung in the wrong order: the second and third scrolls are reversed. This highlights the fact that the calligraphy on the scrolls was not primarily meant to be read as a text but to be appreciated as a standard item of decoration in a space occupied by an educated person.

Li Shengyou's calligraphies comprise two scrolls:

3. A single scroll on the left wall, probably part of a matching pair of scrolls, with the other member on the opposite wall, not visible in the photograph.
4. A scroll only partly visible above the mirror; the calligraphy visible in the photograph may be the inscription of a painting (to judge by the text, perhaps a landscape painting) that is covered by the mirror. Because of the placement of the calligrapher's dedication and signature near the upper left corner of that scroll, it is unlikely that any additional writing is hidden underneath the mirror.

Inscribed Texts

In the transcriptions, these characters are used as follows:

- ' line break
- " change of scrolls
- X an illegible character
- (?) problematic transcription
- [] place where a character is not visible (with a likely interpolation sometimes included)
- // obviously missing characters

Punctuation marks indicate the phrasing of the text. Boldface type is used for the main text, with supplementary text in normal type.

In the translations, added words are indicated in square brackets.

1. Two matching *duilian* scrolls on rear wall (framing the Su Shi essay):

TRANSCRIPTION

Shiren suo yong tuo yu gu, "Jingzhe zhi huai he ruo [Tian]. ' Guiwei Li [] [](?). (Two seals affixed.)

詩人所詠托於古。靜者之懷和若 [天]
癸未李 [] []

TRANSLATION

[Just as] that of which the Poets sing is that which is taken from antiquity, that with which the Quiet Ones are concerned is Heaven-like harmony.

[Written in the year] *gui wei* by Li X [one or possibly two illegible characters].

As always in matching scrolls, each character in the left (second) scroll refers back to the one in a corresponding position on the right (first) scroll. In such compositions, the concern for strict parallelism overrides that for semantic consistency, to say nothing of philosophical profundity; the text is lofty-sounding but rather banal. The term "Quiet Ones" may take up one of the themes in Su Shi's essay (see below); besides alluding to those who have disengaged themselves from the world, it may also refer to the practice of yoga-like techniques of meditation.

The date *gui wei* (20 in the Cycle of Sixty) indicates a year probably corresponding to 1883 (the cycle repeats every sixty years; 1823 seems too early and 1943 would surely be too late, to judge from the photograph.)

2. Essay by Su Shi on four scrolls, with the calligrapher's own dedication following the end of the essay on the fourth scroll.

TRANSCRIPTION

Following the order of the scrolls as hung in the room; the transposed text is underlined, and the place where it should go indicated by a %.

Yi jun wei jiang shi ye, qi fu ye, qi ' xing fang. Yi jun wei jiang yin ye, qi ci ' % [jiang] yin zhe, jie bu zhi jun zhe ye. [Gai] ' jiang qie suo you er cheng suo yu yi you yu shi, ' ' wen, qi shen chang. Zhi er bu qiu, jun bu ' ji. /li/ er qiu zhi, jun bu cang. Yi wei jiang shi ' er zhong fan yu xiang zhe hu! Jielu "Qin Shao ' you zhenzan" yu Jingwuxuan. Gui wei Li [] [](?). (Two seals affixed.)

以君為將仕也。其服野，其行方。以君為將隱也。其辭／
 [將] 隱者，皆不知君者也。[蓋] 將挈所有而乘所遇以游世，
 ／文，其神昌。置而不求，君不即。即而求之，君不藏。
 以為將仕／而終返於鄉者乎。揭錄秦少游真贊於警吾軒。
 癸未李 [] []

The Chinese text as it appears in printed editions has some characters written differently from the calligraphic text (such divergences are marked in double underline in the transcription above); probably, Li X copied a model calligraphy that someone had written from memory with some inaccuracies. None of the variants make for any serious distortions of meaning. The following is Su Shi's text as printed in his collected works (*Su Shi wenji* 蘇軾文集 1986).

TRANSCRIPTION

Yi jun wei jiang shi ye, qi fu ye, qi xing fang. Yi jun wei
 jiang yin ye, qi yan wen, qi shen chang. Zhi er bu qiu, jun
 bu ji. Ji er qiu zhi, jun bu cang. Yi wei jiang shi jiang yin
 zhe, jie bu zhi jun zhe ye. Gai jiang qie suo you er bing suo
 yu yi you yu shi, er zu fan yu xiang hu!

以君為將仕也。其服野，其行方。以君為將隱也。其言文，
 其神昌。置而不求，君不即。即而求之，君不藏。以為將仕
 將隱者，皆不知君者也。蓋將挈所有而乘所 以游世，
 而卒返於其鄉乎。

TRANSLATION

Those who expect this gentleman to serve in office wonder at his rustic clothes and straightforward conduct. Those who expect him to become a recluse puzzle over the elegance of his words and the effusiveness of his spirit. He does not seek out those who disregard him, yet he does not hide himself from anyone who seeks him out. Actually, neither those who expect this gentleman to be an official nor those who expect him to be a recluse really understand him. Is he not one who holds fast to his natural endowment and rides along on whatever he encounters? Thus for now he "roams" about in the world but will finally return to his hometown.

Zhenzan 真贊 is a type of colophon on a portrait; a woodblock print of an alleged line drawing of Qin Guan, with Su Shi's essay inscribed on it, appears as the frontispiece page of Qin Guan's collected works (*Huaihaji* 淮海集, Sibei Beiyao edition, j. 1: ii b). The final sentence of the essay combines a pun on Qin Guan's *zi*, Shaoyou ("The little roaming one"), with an allusion to Ma Shaoyou 馬少游 (fl. first century AD), from whose name Qin took his *zi*. Ma Shaoyou had laughed at his cousin, the Eastern Han dynasty general Ma Yuan 馬援 (14 BC-AD 49), for being too ambitious. Why shouldn't one be a low-

ranking functionary in one's hometown, Ma Shaoyou asked, where one can remain with the clan and tend the ancestors' graves? (The anecdote comes from the Official History of the Eastern Han dynasty; see *Hou Han shu* 後漢書 1965:24.838)

Li X's dedication on the fourth scroll of his calligraphy of Su Shi's essay may be translated as follows:

[Herewith] I have recorded [Su Shi's] Appreciation of a Portrait of Qin Shaoyou [i.e. Qin Guan] in the Jingwuxuan [studio]. [Written in the year] *gui wei* by Li X [one or possibly two illegible characters].

For the *gui wei* date, see the comment on the previous item. Jingwuxuan (loosely translatable as "The Gallery of Warning Myself," the intended allusion possibly being to the Confucian adage "always to be mindful of not losing it") is probably the name of Li X's studio—conceivably, a florid and somewhat pretentious name for the very room depicted in the photograph.

3. Single scroll on right wall, probably part of a *duilian*:

TRANSCRIPTION

Ren [yi] [wei] you, dao de wei shi. ' [] [] Li Shengyou jin(?) shu.
 (Seal affixed.)

仁 [義為] 友。道德為師
 [] [] 李聖佑今書

TRANSLATION

Make the kind and just your friends, take the morally virtuous as your teachers.

[Illegible characters: probably indicating the date], written in modern script (?) by Li Shengyou.

A commonplace Confucian motto. The cyclical date cannot be deciphered.

4. Central scroll on rear wall, above mirror:

TRANSCRIPTION

Man chi feng ' [yu] wu ' [] long(?). ' Xiushi renxiang zongdaren
 zheng. ' Di Li Shengyou. (Seal affixed.)

滿池風 [雨] 舞 [] 龍
 繡石仁兄宗大人正 弟李聖佑

TRANSLATION

Filling the pond are wind and rain and dancing [] dragons (?). For presentation to my kind elder brother and senior kinsman Xiushi, by the younger brother Li Shengyou.

The translation of the main text is tentative as several characters are concealed.

In the dedication, the calligrapher styles the relationship to the dedicatee as that of elder and younger brother (himself

politely taking the position of the younger brother), but this is merely a convention of courtesy. While the term "senior kinsman" (*zongdaren*) does indicate that the two individuals were related, the age relationship may have been the reverse of what the text indicates; this seems, in fact, somewhat likely given that the dedicatee displays these scrolls in a place of honor, indicating that the person who presented them was a person of some prestige.

Comments

Except for item 4, the texts are clear enough; they represent a confluence of different strains of thinking about a person's place in society and of ideas developed over the course of many centuries of Chinese intellectual history. A blunt exhortation to practice Confucian virtues (in item 3) appears side by side with poetic praise of detachment from the world (both in item 1 and in Su Shi's essay), reflecting an attitude that may be, with some reservations, characterized as Taoist. One should note, however, that Su Shi's essay—following a classical *topos* that had been expressed by many authors since the early centuries AD—strives to reconcile the attitude of hermit-like nonchalance with the practice of service in a Confucian-dominated government. Revelling in an exalted natural world inhabited by powerful divine creatures such as dragons (item 4) may also be taken as a

generically Taoist element.

These calligraphies may bear interpretation in view of the fact that they were written in a Chinatown setting. The Confucian motto in item 3 might be understood as a maxim for community solidarity in the overseas diaspora although such a reading should not be pushed too far in view of the vagueness of the wording. Su Shi's essay, on the other hand, has a specific and poignant character in the Chinatown context. One may presume that the calligrapher and the dedicatee empathized and identified with the idealistically portrayed figure of Qin Guan, who remains free and autonomous even when choosing to engage himself with the constricting pressures of government service. The experience of immigration may have been daunting, even traumatic, to these Chinatown intellectuals, for whom Qin Guan could be a rôle model for preserving themselves even as they adapted to the manifold challenges of life in the New World. And the essay's final prediction that the "little roamer" would live out his days in the surrounding of his ancestral home may well have spoken to the deep-seated desires of most of the early immigrants.

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Bibliography

- Akin, M.
1988 The coins from Diyaguna'Et, Lost River Village, Yakutat. Report on file, USDA Forest Service, Chatham Area, Tongass National Forest, Sitka, Alaska.
1990 Possibilities and pitfalls: Site dating using Asian coins. Paper presented at Annual Meeting of the Society for American Archaeology, Las Vegas.
1993 Dong, Wen, and Mon: Asian coins recovered from the Los Angeles Chinatown. Appendix II in *Cultural Resources Impact Mitigation Program, Los Angeles Metro Red Line Segment One (Chinatown)*, edited by Roberta S. Greenwood, 305-317. Submitted to Metropolitan Transportation Authority, Los Angeles.
- Akin, M., and K. Akin
1987 Asian and American coins from Riverside's Chinatown. In *Wong Ho Luen: An American Chinatown*, ed. by C. Brott, 415-432. Great Basin Foundation, San Diego, California.
- Altman, V., and S. Altman
1969 *The book of buffalo pottery*. New York: Bonanza Books.
Ancien Catalogue de Ventre des Faienceries de Sarreguemines.
1920 Excerpt on file, Greenwood and Associates, Pacific Palisades, California.
- Anderson, E.N.
1988 *The food of China*. New Haven: Yale University Press.
- Apablaza, Carlos, great-great grandson of Juan Apablaza
1991 Telephone conversations, submission of archival material, and interview with Lynn Kronzek, 4 May, Alhambra.
- Arkush, R.D., and L.O. Lee, trans. and eds.
1989 *Land without ghosts*. Berkeley, Los Angeles, and London: University of California Press.
- Armentrout-Ma, E.
1984 *Chinese popular religion*. Booklet to accompany exhibit of the same name. C. E. Smith Anthropology Museum, California State University, Hayward, January 17 to February 13, 1984. Chinese/ Chinese American History Project.
- Armstrong, J.
1979 The Lovelock bottles. In *Archaeological and historical studies at Ninth and Anberst, Lovelock, Nevada*, edited by E.M. Hattori, M.K. Rusco, and D.R. Tuohy, 199-250. Nevada State Museum Archaeological Services Reports 1.
- Bach, J.
1985 *The Main Street dictionary of doll marks*. Pittstown, New Jersey: Main Street Press.
- Baist, G.W.
1910 *Baist's real estate atlas: Survey of Los Angeles, California*. Philadelphia.
- Baldwin, J.K.
1973 *A collector's guide to patent and proprietary medicine bottles of the nineteenth century*. New York: Thomas Nelson.
- Barber, E.A.
1904 *Marks of American potters*. Philadelphia. Facsimile reprint, *Ars Ceramica*, 1976.
- Barer-Stein, T.
1979 Chinese. In *You eat what you are*, 99-120. Toronto: McClelland and Stewart Ltd.
- Barlow, J., and C. Richardson
1979 *China doctor of John Day*. Portland, Oregon: Thomas Binford.
- Barnes, F.C.
1989 *Cartridges of the world*, 6th edition. Northbrook, Ill.: DBI.

- Bates, R.W.
1967 Recollections of the Chinese and Chinatown. *Noticias* 13(4). Santa Barbara Historical Society.
- Baxter, E.
1893 Leaves from the history of the last decade - 1880-'90. *Annual Publication of the Historical Society of Southern California*, 74-79.
- Beals, H.K.
1980 Chinese coins in six northwestern aboriginal sites. *Historical Archaeology* 14:58-72.
- Beers, B.F.
1978 *China in old photographs 1860-1910*. New York: Scribners.
- Bell, P.L., and H.B. Mackenzie
1923 *Mexican west coastal and Lower California, A commercial survey*. Dept. of Commerce, Bureau of Foreign and Domestic Commerce, Special Agents Series 20. Government Printing Office, Washington, DC.
- Berger, L., and Associates
1987 *Zanja no. 3: Brick culvert historic American engineering record documentation at the proposed Federal Center complex, Los Angeles, California*. HAER Record CA-50. On file, Library of Congress, Washington, DC.
- Bingham, E.R.
1942 *The saga of the Los Angeles Chinese*. Unpublished Master's thesis, Department of History and Government, Occidental College, Los Angeles.
- Bowen, W.M.
1994 Early Chinese medicine in Southern California. *Gum Saan Journal* 17(1):1-11. Los Angeles: Chinese Historical Society of Southern California.
- Brinckerhoff, S.B.
1972 *Metal uniform insignia of the frontier U.S. Army 1846-1902*. Museum Monograph 3 (revised), Arizona Historical Society, Tucson, Arizona.
- Brittain, J.S.
1898 *Illustrated catalogue, Fall 1898*. Jolin S. Brittain Dry Goods Co., St. Joseph, Missouri.
- Brock, J., ed.
1985 *Excavations in Early Santa Ana: The OCID Terminal Site*. ECOS and Archaeological Research Group. Submitted to Orange County Transit District, Orange Grove, California.
- Brook, H.E.
1893 *The land of sunshine: Southern California*. World's Fair Association and Bureau of Information Print, Los Angeles.
- Butler Brothers
1907 *Our drummer, Catalogue number 633*. Minneapolis.
- Bull, D., M. Friedrich, and R. Gottschalk [BFG]
1984 *American breweries*. Trumbull, Connecticut: D. Bull.
- California Commission of Immigration and Housing
1914 Report on unemployment to His Excellency Governor Hiram W. Johnson. California State Printing Office, Sacramento.
- Carpenter, E.H.
1973 *Early cemeteries of the City of Los Angeles*. Los Angeles: Dawson's Book Shop.
- Carr, H.
1935 *Los Angeles: City of dreams*. New York and London: D. Appleton-Century Company, Inc.
- Chace, P.G.
1986 Southern Mexican croaker (*Micropogonias ectenes*): An archaeological contribution to the Chinese marketing network and the historic fisheries at Mazatlan, Mexico. Paper presented at the Annual Meeting of the Southern California Academy of Sciences, San Bernardino.
- Chan, S., ed.
1991 *Entry denied: Exclusion and the Chinese community in America, 1882-1943*. Philadelphia: Temple University Press.
- Chang, K.C., ed.
1977 *Food in Chinese culture*. New Haven and London: Yale Univ. Press.
- Chen, J.
1980 *The Chinese of America*. San Francisco: Harper and Row.
- Chen, W.C.
1940 A study of Chinese family life in Los Angeles as compared with the traditional family life in China. Unpublished Master's thesis, Department of Sociology, University of Southern California, Los Angeles.
- Cheng, Suellen, Director, Chinese Historical Museum, Los Angeles
1991 Telephone conversations and interview with Lynn Kronzek, 30 January.
- Cherny, R.W.
1994 Patterns of tolerance and discrimination in San Francisco, The Civil War to World War I. *California History* 73(2):130-141.
- Chew, N.P.
1994 The Chinese in Los Angeles: *Land of Sunshine* (October): 102-103
- Chew, R., ed.
1994 *Reflections of Seattle's Chinese Americans: The first 100 years*. Seattle: Univ. of Washington Press and Wing Luke Asian Museum.
- Chinese Historical Society of Southern California.
1984 *Linking our lives*. Joint project with the Asian American Studies Center, University of California, Los Angeles.
- Ching, D.K.E.
1987 Chinese cash coins: A follow-up on the Riverside, California find. *World Coin News* 14(14):24-26.

- Chinn, T.
1969 *A history of the Chinese in California: A syllabus*. Chinese Historical Society, San Francisco.
- Chiu, P.
1967 *Chinese labor in California, 1850-1880*. State Historical Society of Wisconsin and Department of History, University of Wisconsin, Madison.
- Christie's Amsterdam
1986 *The Nanking cargo Chinese export porcelain and gold European glass and stoneware*. Illustrated catalog. Amsterdam.
- Chou, Hung-hsiang, Associate Professor, Department of East Asian Languages and Cultures, University of California, Los Angeles.
1990 Personal communication.
1991 Personal communication.
- Chung, N.
1979 Transcript of interview, eight tapes. Southern California Chinese American Oral History Project, jointly sponsored by the Chinese Historical Society of Southern California and Asian American Studies Center, University of California, Los Angeles.
- Cleary, Thomas, San Clemente, descendant of Matthew Keller
1991 Written communications and loan of archival material to Roberta S. Greenwood, 6 August.
- Coleman, D.S.
1968 *The collector's encyclopedia of dolls*. New York: Crown.
- Collins, D.
1987 Tradition and network: Interpreting the fish remains from Riverside's Chinatown. In *Wong Ilo Leun: An American Chinatown*, Vol. 2: *Archaeology*, 121-132. Great Basin Foundation, San Diego.
- Collins, J.W.
1892 Report of the fisheries of the Pacific Coast of the United States. In *Report to the Commissioner for 1888*, 3-269. US Commission of Fish and Fisheries, Government Printing Office, Washington, DC.
- Commission of Immigration and Housing of California
1914 *Report on unemployment* (supplement to first annual report). State Printing Office.
- Coole, A.
1937 *Coins in China's history*. Privately published by Shih Hsiang-Tsai, Ningpo, Chekiang, China.
- Corbett, Donald, D. D. S.
1991 Personal communication
- Costello, J.G., and M.L. Maniery
1988 *Rice bowls in the delta*. Occasional Papers 16. Los Angeles: UCLA Institute of Archaeology.
- Culin, S.
1891 *The gambling and games of the Chinese in America*. Series in Philology, Literature, and Archaeology 1(6). Philadelphia: University of Pennsylvania.
- 1893 Chinese games with dice and dominoes. Extract from Smithsonian Institute (sic) Report. Facsimile reproduction, Seattle: Shorey Book Store, 1972.
- 1896 The origin of fan tan. *Overland Monthly* 28:153-155.
- Cushion, J.P.
1962 *Pocket book of German ceramic marks and those of other Central European countries*. Boston Book & Art Shop, Boston.
1965 *Pocket book of French & Italian ceramic marks*. London: Faber & Faber.
1983 *Pocket book of British ceramic marks*. London and Boston: Faber & Faber.
- Dakin
Map, 1888-1893, 1889
- De Falla, P.M.
1960 *Lantern in the western sky*. *Historical Society of Southern California Quarterly*, March (1):57-88 and June (2):161-185.
- Deiss, R.W.
1981 *The development and application of a chronology for American glass*. Midwestern Archaeological Research Center, Norman, Illinois.
- Desmonde, K.
1974 *All color book of dolls*. London: Octopus Books.
- Devner, K.
1968 Patent medicine picture. *Tombstone Epitaph*, Tombstone, Arizona.
1970 At the sign of the mortar. *Tombstone Epitaph*, Tombstone, Arizona.
- Dietz, R.F.
1980 Letter from Remington Arms Company, June 3.
- Dobie, C.C., and E.H. Suydam
1936 *San Francisco's Chinatown*. New York and London: D. Appleton-Century.
- Duke, J.A.
1989 *CRC handbook of nuts*. Boca Raton, Florida: CRC Press.
- Elton, C.
1909 List of Chinese firms conducting opium joints, lottery, and gambling games in Los Angeles, California. Ms. by Chief of Police, August 7. On file, National Archives, Record Group 85-INS, Chinese Partnership Cases and Related Records, Box 53, Folder 13524/1. San Bruno, California.
- Engh, Michael E., S.J.
1991 Letter to author, February 26.
1992 *Frontier faiths: Church, temple, and synagogue in Los Angeles 1846-1888*. Albuquerque: University of New Mexico Press.
- Evans, S.M., and H.C. Boyte
1986 *Free spaces: The sources of democratic change in America*. New York: Harper & Row.
- Falkenhausen, Lothar von, Dept. of Art History, University of

- California, Los Angeles.
 1995 Personal communication
- Felton, D.L., F. Lortie, and P.D. Schulz
 1984 *The Chinese laundry on Second Street: Papers on archeology at the Woodland Opera House site*. Archeological Reports 24. Department of Parks and Recreation, Sacramento.
- Fike, R.E.
 1987 *The bottle book: A comprehensive guide to historic, embossed medicine bottles*. Salt Lake City: Peregrine Smith.
- Fitch, J.E.
 1980 Personal communication to Mark A. Roeder
 1967 Fish remains recovered from a Corona del Mar, California, Indian midden. *California Fish and Game* 53(3):185-191.
- Forbes, Michael, Los Angeles Historical Bottle Club
- Fogelson, R.M.
 1993 *The fragmented metropolis: Los Angeles, 1850-1930*. Berkeley, Los Angeles, and London: Univ. of California Press.
- Fong, T.P.
 1994 *The first suburban Chinatown, The remaking of Monterey Park, California*. Philadelphia: Temple University Press.
- Foster, J.M., and R.S. Greenwood
 1991 *Bricks, bottles, and bamboo: Cultural resources below the Peirano-Wilson Building*. Greenwood and Associates, Pacific Palisades. Submitted to the Redevelopment Agency, City of San Buenaventura, California.
- Francis, Marian, granddaughter of Matthew Keller
 1991 Interview with Lynn Kronzek, 12 June.
- Franklin, L.
 1991 Social organization of Los Angeles Chinatown (ca. 1900-1910). Ms. on file, Greenwood and Associates, Pacific Palisades, California.
- Frierman, J.D.
 1983 Chinese ceramics in the New Melones area. In *Final report of the New Melones Archeological Project, California*. Vol. 7: *Review and synthesis of research at historical sites*, by Roberta S. Greenwood and Laurence H. Shoup, 175-200. Salinas, California: Coyote Press.
- Fung Ping Shan Museum
 1979 *Exhibition of Shiwan wares*. University of Hong Kong.
- Gates, W.C., and D.E. Ormerod
 1982 The East Liverpool, Ohio, pottery district. *Historical Archaeology* 16(1-2).
- Glassow, M.
 1965 An analysis of faunal remains from the site of Malibu (LAN-264), Los Angeles County, California. Ms. on file, Institute of Archaeology Report L-738, University of California, Los Angeles.
- Godden, G.A.
 1964 *Encyclopaedia of British pottery and porcelain marks*. New York: Bonanza Books.
- Godden, G.A., ed.
 1878 *Jewitt's ceramic art of Great Britain 1800-1900*. Revised and expanded, London: Barrie & Jenkins, 1972.
- Gordon, S.
 1933 Farewell to Old Los Angeles. *Los Angeles Times Sunday Magazine*, October 22:11,18.
- Gorham, H.H.
 1971 *Japanese & oriental ceramics*. Rutland, Vermont, and Tokyo: Charles E. Tuttle.
- Great Basin Foundation
 1987 *Wong Ho Leun, An American Chinatown*. 2 vols. San Diego.
- Greenwood, R.S.
 1976 *The changing faces of Main Street*. Ventura Mission Plaza Archaeological Project. Redevelopment Agency, City of San Buenaventura, California.
 1987 Administrative and operational procedures for archaeological and paleontological services, Metro Rail Project. Greenwood and Associates, Pacific Palisades, California. Submitted to Southern California Rapid Transit District.
 1993a Old approaches and new directions: Implications for future research. In *Hidden heritage: Historical archaeology of the overseas Chinese*, edited by P. Wegars, 375-403. Amityville, New York: Baywood.
 1993b Cultural Resources Impact Mitigation Program: Los Angeles Metro Red Line Segment (Chinatown). Greenwood and Associates, Pacific Palisades, California. Submitted to Metropolitan Transportation Authority, Los Angeles.
- Greenwood, R.S., and J.M. Foster
 1992 Test excavation at the Soo Hoo property, City of San Buenaventura. Greenwood and Associates, Pacific Palisades. Submitted to the Redevelopment Agency, City of San Buenaventura, California.
- Greenwood, R.S., J.M. Foster, and A.Q. Duffield
 1989 The first historical settlement in Los Angeles County: Investigations at Whittier Narrows. Greenwood and Associates, Pacific Palisades, California. Submitted to the US Army Corps of Engineers, Los Angeles District.
- Greenwood, R.S., J.M. Foster, and J.R. Rasson
 1992 Historical and archaeological assessment of the Southern California Rapid Transit District (SCRTD) Union Station Headquarters Project. Greenwood and Associates, Pacific Palisades, California. Submitted to Converse Environmental West.
- Greenwood, R.S., J.D. Frierman, M.J. McIntyre, J.M. Foster, S.A. Guedon, and S. Gust
 1980 *Warm Springs cultural resources study, Historic archaeological sites investigation, phase III*. Greenwood and Associates, Pacific Palisades, California. Submitted to the US Army

- Corps of Engineers, San Francisco. Contract No. DACW07-78-0043.
- Greff, M.G.
1991 Letter to author from Charge de l'animation, Musée de Sarreguemines.
- Grzimek, H.C.B.
1972 *Grzimek's animal life encyclopedia*. New York: Van Nordstrand Reinhold.
- Gurcke, K.
1987 *Bricks and brickmaking*. Moscow: Univ. of Idaho Press.
- Guwen guanzhi
1958 Beijing: Zhonghua shuju.
- Hager, E.G., G.E. Kinney, and A.F. Kroll
1982 *An eighteen eighty-six (1886) Chinese labor boycott in Los Angeles*. Prepared as a keepsake for the Roxburghe Club and Zamorano Club. Los Angeles: Castle Press.
- Hammond, M.
1989 New light on Old Salem. *Archaeology* 42(6):36-41.
- Hampson, R.P.
1988 *Almaden Tower Project: Archaeological mitigation of the southeast corner*. Salinas, California: Coyote Press.
- Hampson, R.P., and R.S. Greenwood
1989 *Cultural resource investigation at China Point Park, Napa*. Greenwood and Associates, Pacific Palisades, California. Submitted to Public Works Department, City of Napa, California.
- Harvey, S.
1991-1995 Only in L.A. Column in *Los Angeles Times*, Part II, passim.
- Hattori, E.
1979 The Lovelock coins: Analysis of coins from the Lovelock "Chinatown" site. In *Archaeological and historical studies at Ninth and Amherst, Lovelock, Nevada*, edited by E.M. Hattori, M.K. Rusco, and D.R. Tuohy. Nevada State Museum Archaeological Services Reports 2.
- Hawkes, David
1973-1977 *The Story of the Stone*. 5 vols. Harmondsworth: Penguin.
- Henderson, G.E., and M.S. Cohen
1984 *The Chinese hospital*. New Haven and London: Yale University Press.
- Henstell, B.
1984 *Sunshine and wealth: Los Angeles in the twenties and thirties*. San Francisco: Chronicle Books.
- Ho, P. T.
1955 The introduction of American food plants into China. *American Anthropologist* 57:191-201.
- Hobson, R.L.
1915 *Chinese pottery and porcelain*. Reissue, New York: Dover, 1915.
- Holabird, F., and J. Haddock
1981 *Nevada bottle book*. Reno, Nevada: R.S. Smith Press.
- Hommel, R.P.
1937 *China at work*. New York: John Day. Reprint. Cambridge and London: M.I.T. Press, 1969.
- Hou Han shu
1965 Beijing: Zhonghua. 24.838.
- Howard, D.S.
1984 *New York and the China trade*. Frenchtown, New Jersey: New York Historical Society and Columbia Publishing.
- Huang, K.
1984 *I Ching, the oracle*. Singapore: World Scientific Publishing Company.
- International Photographic Salon of Japan
1957 *Pictures* (exhibition catalogue). Tokyo.
- Jankowiak, W.R.
1993 *Sex, death, and hierarchy in a Chinese city*. New York: Columbia University Press.
- Jarel, Michael, Director, Southern Pacific Historical and Technical Society, Sylmar, California
1991 Various telephone conversations and letters to Lynn Kronzek, 1 October.
- Jensen, A., and M. Jensen
1968 *Old Owl drug bottles & others*. Mountain View, California: Peninsula Press.
- Jervis, W.P.
1897 *A book of pottery marks*. Philadelphia: Hayes Brothers.
- Kamansky, David, Director, Pacific Asia Museum, Pasadena.
1992 Personal communication.
- Keddie, G.
1978 The reliability of dating archaeological and ethnographic materials associated with Chinese coins. *Datum* 3(2). Archaeology Division, British Columbia Provincial Museum, Vancouver.
- Kerr, A., and J. Bugslag
1978 Some basic observations concerning the architecture of the Chinese in B.C. *Datum* 3(2) Ministry of Recreation and Conservation, British Columbia.
- Kibler, Robert L., Professor of Art, Glendale College, Glendale, California.
1991 Personal communication.
- Kielty, Ed
1991 Personal communication.
- Kimball, Bernice B.
1981 Historical guide to the Old Pueblo of Los Angeles (based on Ord's Survey of 1849 and Lecouvreur's Grading Map of 1870).
- King, A.J., and A. Waite
1872 *The first Los Angeles City and County Directory*. Facsimile reprint, Los Angeles: Ward Ritchie, 1963.
- Kirk, M.A.
1975 Buttons from the San Buenaventura Mission site. In

- 3500 years on one city block, edited by R.S. Greenwood, 295-363. Redevelopment Agency, City of San Buenaventura, California.
- Kleeb, G.N.
1976 Analysis of the coins from a Chinese trash pit. In *The changing faces of Main Street*, edited by R.S. Greenwood, 497-508. Redevelopment Agency, City of San Buenaventura, California.
- Kong, W.
1967 The shrine. *Noticias* 13(4). Santa Barbara Historical Society.
- Kovel, R.M., and I.H. Kovel
1961 *A directory of American silver, pewter and silver plate*. New York: Crown Publishers, Inc.
1986 *Kovels' new dictionary of marks*. New York: Crown Publishers
- Krause, C.L., and C. Mishler
1985 *Standard catalogue of world coins*. 12th ed. Iola, Wisconsin: Krause Publications.
- Kwok, M.
1995 *The Feng Shui kit: The Chinese way to health, wealth and happiness, at home and at work*. Boston, Rutland, Vermont, and Tokyo: Charles E. Tuttle.
- Kwok, V., and D. Lam
1979 *Rural architecture in Hong Kong*. Hong Kong Tourist Association and Government Information Services.
- L'Allemand, G.
1933 Chinatown passes. *Los Angeles Times Sunday Magazine*, March 11:12-13.
- Langenwalter, Paul E.
1987 Mammals and reptiles as food and medicine in Riverside's Chinatown. In *Wong Ho Leun, An American Chinatown*. Vol. 2: *Archaeology*, 53-106. Great Basin Foundation, San Diego.
- Langenwalter, P.E., II
1980 The archaeology of 19th century Chinese subsistence at the Lower China Store, Madera County, California. In *Archaeological perspectives on ethnicity in America: Afro-American and Asian American culture history*, edited by R.F. Schuyler, 102-112. Farmingdale, New York: Baywood.
- Larson, L.L.
1990 *Sweet bamboo: A saga of a Chinese American family*. Chinese Historical Society of Southern California, Los Angeles.
- Lauer, C.F.
1883 *Descriptive catalogue, 1883, Notions, fancy goods, toys...* New York.
- Lehner, L.
1988 *Lehner's encyclopedia of U.S. marks on pottery, porcelain and clay*. Paducah, Kentucky: Collector Books.
- Lister, F.C., and R.H. Lister
1989a *The Chinese of early Tucson: Historic archaeology from the Tucson Urban Renewal Project*. University of Arizona, Tucson.
1989b Chinese sojourners in territorial Prescott. *Journal of the Southwest* 31(1):1-111.
- Loakes, Ken
1991 Personal communication
- Loh, S.T.
1991 Home Front. *Los Angeles Times Sunday Magazine*, June 23.
- Los Angeles Board of Fire Commissioners
1900 *Annual report*.
- Los Angeles Board of Water Commissioners
1903 *First and second annual reports*. Out West Company, Los Angeles
1906 *Fifth annual report*. Kingsley, Moles & Collins Company, Los Angeles.
1907 *Sixth annual report*. Los Angeles: Reality Publishing Company.
- Los Angeles City and County Directories
1872 *The first Los Angeles City and County Directory*. Facsimile reprint, Los Angeles: Ward Ritchie, 1963.
1884-1885 *Los Angeles City and County Directory*. Atwood & Ernst, Los Angeles.
1886-1887 *Los Angeles City and County Directory*. A.A. Bynon, Los Angeles.
1891 *Business Directory of Los Angeles*. Foster Directory Co., Los Angeles.
1897 *Maxwell's Los Angeles City Directory*. Los Angeles Directory Co., Los Angeles.
1900-1901 *Los Angeles City Directory*. Los Angeles Modern Directory Co., Los Angeles.
1901 *Los Angeles City Directory*. Los Angeles City Directory Co., Los Angeles.
1912 *Business Directory of Los Angeles*. Foster Directory Co., Los Angeles.
- Los Angeles City Council
1901 Minutes, 4 November.
1913 Minutes, 1 July, 29 July.
- Los Angeles Daily Evening Express*
1878 Lee Pai - The imposing ceremonies attending the internment of the dead Chinese poet - Chinatown moved from center to circumference. 30 August. Reprinted 1978 in *Gum Saan Journal* 2(1):3-4. Los Angeles: Chinese Historical Society of Southern California.
- Los Angeles Department of Public Works, Bureau of Engineering
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- 1914 Drainage Districts, map #5025.
Los Angeles Examiner
- 1915 Old records oddly worded: "Brandy Annuity" paid for city garden. Retyped clipping (no date), collection of Carlos Apablaza.
- Los Angeles Express*
- 1881 Obituary of Matthew Keller. 11 April Retyped, collection of Tom Cleary.
- 1922 Funeral rites 50 centuries old bury boy. 1 October.
- Los Angeles Herald*
- 1875a Local brevities. 12 November.
- 1875b Common Council proceedings. 12 November.
- Los Angeles Herald Express*
- 1959 Earlier days in Los Angeles. Clipping (no date).
- Los Angeles Star*
- 1861 May, no date.
- Los Angeles Times*
- 1887a A Chinese wedding and bridal tour. July 22:1.
- 1887b Removing Chinatown. August 10:4.
- 1888 Feeding Ghosts. Aug. 20.
- 1902 Indecencies in cemetery. December 11:1.
- 1933a New Chinatown proposed. October 18(2):3.
- 1933b Wrecking crews begin clearing depot site. December 23(2):1,9.
- 1934a Chinatown area plans approved. January 9(2):7.
- 1934b Farewell fete on today. September 22(2):1.
- 1934c Passing of Chinatown observed in pageant. September 23(1):3.
- 1937 Chinese bones loaded on ship. July 31.
- 1988 Founders' feast: Four 'New Chinatown' creators honored on 50th anniversary. June 6(2):1-2.
- Lou, R.
- 1984 Community resistance of Los Angeles Chinese Americans, 1870-1900: A case study of gambling. In *The Chinese American experience*, edited by G. Lim, 160-169. Chinese Historical Society of America, San Francisco.
- Louie, Emma, Los Angeles, Chinese Historical Society of Southern California
- 1991 Interview with Lynn Kronzek, 25 April.
- Louis, K.K.
- 1931 *A study of American-born and American-reared Chinese in Los Angeles*. Unpublished Master's thesis, Department of Sociology, University of Southern California, Los Angeles.
- Lui, Garding
- 1948 *Inside Los Angeles Chinatown*. Los Angeles.
- Lydton, Sandy
- 1985 *Chinese gold, The Chinese in the Monterey Bay region*. Capitola, California: Capitola Book Co.
- Markota, P., and A. Markota
- 1972 *Western Blob Top soda and mineral water bottles*. Revised ed. Privately published, North Highlands, California.
- Martin, N.R.
- 1923 Letter from Department of Charities to Chinese Chamber of Commerce.
- Margouliès, Georges
- 1926 *Le kou-wen chinois*, 166. Paris: Geuthner
- Mason, W.
- 1967 The Chinese in Los Angeles. *Museum Alliance Quarterly* 6(2):15-20. Los Angeles County Museum of Natural History.
- McDannold, T.A.
- 1973 *Development of the Los Angeles Chinatown: 1850-1970*. Unpublished Master's thesis, Department of Geography, California State University, Northridge, California.
- McEwan, B.G.
- 1985 Appendix B: Faunal analysis. In *Beneath the border city*, by E. Staski, 262-282. University Museum Occasional Papers 13. Las Cruces: New Mexico State University.
- McGuire, E.
- 1967 *The Old San Francisco directory of liquors, wholesale and retail 1865-1919*. Privately published, Mill Valley, California.
- Medley, M.
- 1976 *The Chinese potter*. Ithaca: Cornell University Press.
- Miller, G.C., and C. Sullivan
- 1981 *Machine-made containers and the end of production for mouth-blown bottles*. Research Bulletin 171. Parks Canada, Ottawa, Canada.
- Miller, S.M.
- 1955 Changing faces of the Central Valley: The ethnic presence. *California History* 74(2):175-189.
- Miller, D.J., and R.N. Lea
- 1972 *Guide to the coastal marine fishes of California*. Fish Bulletin 157. Division of Agricultural Sciences, University of California Publications 4065. Berkeley.
- Miller, J.J., II, and L.M. Stone
- 1970 *Eighteenth-century ceramics from Fort Michilimackinac: A study in historical archeology*. Washington, DC: Smithsonian Institution Press.
- Minnick, S. Sun
- 1988 *Sanfow: The San Joaquin Chinese legacy*. Fresno, California: Panorama West.
- Montgomery Ward & Co.
- 1895 *Catalogue 57, Spring & Summer 1895*. Unabridged facsimile. New York: Dover, 1969.
- Morrison, Plummer & Co.
- 1882 *The druggists ready reference*. Chicago.
- Musée de Sarreguemines
- N.D. *De la révolution a Nos Jours: Les Faïenceries de Sarreguemines, bref histoire*. Excerpt on file, Greenwood and Associates, Pacific Palisades, California.

- Nash, R.A.
1973 *The Chinese shrimp fishery in California*. Ph.D dissertation, Department of Geography, University of California, Los Angeles.
- Nelson, J.S.
1984 *Fishes of the world*. 2nd ed. New York: John Wiley and Sons.
- Nelson, L., and M. Hurley
1967 *Old inks*. Nashua, New Hampshire: Cole Printing.
- Newmark, H.
1930 *Sixty years in Southern California 1853-1913*, edited by M.H. Newmark and M.R. Newmark. 3rd ed. Boston and New York: Houghton Mifflin.
- Olsen, J.W.
1976 A study of Chinese ceramics excavated in Tucson. Unpublished ms. prepared for Anthropology and Oriental Studies, University of Arizona, Tucson.
1983 An analysis of east Asian coins excavated in Tucson, Arizona. *Historical Archaeology* 17(2):41-55.
- Ong, P.
1983 Chinese laundries as an urban occupation in nineteenth century California. In *The annals of the Chinese Historical Society of the Pacific Northwest*, edited by D.W. Lee, 68-84. Seattle.
- Osgood, Cornelius
1975 *The Chinese: A study of a Hong Kong community*. 3 vols. Tucson: University of Arizona Press.
- Pallen, A.
1925 Los Angeles Chinatown offers wealth of romance, mystery and quaint customs. *Los Angeles Times*, March 1(2-a):2.
- Pastron, A.G., J. Prichett, and M. Ziebarth, eds.
1981 *Behind the seawall: Historical archaeology along the San Francisco waterfront*. 3 vols. Archeo-Tec. Submitted to the San Francisco Clean Water Program.
- Paule, M.
1926 Chinese mission thrives amid squalor. *Los Angeles Times*, January 24 (3):20.
- Percival, O.
1899 An afternoon in Chinatown. *Land of Sunshine*, June:50-52.
- Plume and Atwood Manufacturing Company
1906 *Illustrated catalogue of kerosene oil burners, gas and oil lamp trimmings, lamps, oil heaters, etc.* Facsimile reprint, Simpson, Illinois: J.W. Courter Enterprises, N.D.
- Poteries et Emailleries Françaises
1974 Partie première. Edition TARDY. Excerpt on file, Greenwood and Associates, Pacific Palisades, California.
- Praetzellis, M., B. Rivers, and J. K. Schulz
1983 *Ceramic marks from Old Sacramento*. California Archeological Reports 22. Department of State Parks and Recreation, Sacramento.
- Putnam, H.E.
1965 *Bottle identification*. Privately published by author. Jamestown, California.
- Railway Age*
1939 Union Passenger Terminal at Los Angeles, California 106:768-778.
- Randall, M.E., and D. Webb
1988 *Greenberg's guide to marbles*. Greenberg, Sykesville, Maryland.
- Rasmussen, C.
1995 L.A. scene: The city then and now. *Los Angeles Times* November 6:B3.
- Reid, D.P.
1948 *Chinese herbal medicine*. Boston: Shambala. 2nd printing, New York: Random House, 1990.
- Riley, J.J.
1972 *A history of the American soft drink industry 1807-1957*. New York: Arno Press.
- Ring, M.E.
1985 *Dentistry: An illustrated history*. New York: Abrams.
- Ritchie, N.A.
1986 Archaeology and history of the Chinese in southern New Zealand during the nineteenth century: A study of acculturation, adaptation, and change. Ph.D. dissertation, Anthropology Department, University of Otago, Dunedin, New Zealand.
- Roberts, J.R.
1988 Beware: Vietnamese coin rubbing. In *Annals of Emergency Medicine* 17(4):143.
- Roberts, Moss, trans.
1991 *Three Kingdoms: A Historical Novel*. Berkeley and Los Angeles: University of California Press with Beijing: Foreign Languages Press.
- Robinson, E.
1902 Chinese journalism in California. *Out West* January:33-41.
- Robinson, W.W.
1964 *Tarnished angels*. Printed for the Roxburghe Club and Zamorano Club. Ward Ritchie, Los Angeles.
1981 *Los Angeles from the days of the pueblo*. California Historical Society, San Francisco.
- Roeder, Mark, Paleo Environmental Associates.
Year personal communication
- Ross, L.A.
1991 Personal communication
1989 Bohemian glass beadmaking: Translation and discussion of a 1913 German technical article. *Beads* 1:81-94.
- Salls, R.A.
1988 Prehistoric fisheries of the California bight. Ph. D.

- dissertation, Department of Anthropology, University of California, Los Angeles.
- Salvator, L.L., Archduke of Austria
 1929 *Los Angeles in the sunny seventies: A flower from the golden land.* Translated by Marguerite Eyer Wilbur. Los Angeles: Bruce McCallister, Jake Zeitlin. Originally published 1878, Prague.
- Sanborn Fire Insurance Co.
 Maps, 1887, 1888, 1889, 1906, 1925, 1933
- Sando, R.A., and D.L. Felton
 1993 Inventory records of ceramics and opium from a nineteenth century store in California. In *Hidden heritage: Historical archaeology of the overseas Chinese*, edited by P. Wegars, 151–176. Amityville, New York: Baywood.
- Schojth, F.
 1965 *Chinese currency*, revised and edited by V. Hancock. Iola, Wisconsin: Krause Publications.
- Schmeiser, A.
 1970 *More pop.* Dixon, California: Michalan Press.
- Schulz, P.D.
 1982 Fish, reptiles, and cephalopod remains. In *Archaeological and historical studies of the H56 block, Sacramento, California: An early Chinese community*, by M. Praetzelis and A. Praetzelis, 74–86. Anthropological Studies Center, Sonoma State University, Rohnert Park, California.
 1984 Nineteenth-century fish remains from Woodland, California. In *The Chinese laundry on Second Street, Papers on archeology at the Woodland Opera House site*, by D.L. Felton, F. Lortie, and P.D. Schulz, 158–166. California Archeological Reports 24, Department of Parks and Recreation, Sacramento.
- Schulz, P.D., B.J. Rivers, M.M. Hales, C.A. Litzinger, and E.A. McKee
 1980 *The bottles of Old Sacramento: A study of nineteenth-century glass and ceramic retail containers.* California Archeological Reports 20. Department of Parks and Recreation, Sacramento.
- Sears, Roebuck & Co.
 1897 *Catalogue.* Facsimile, New York: Chelsea House Publishers, 1968.
 1908 *Catalogue no. 117.* Reprint, Northfield, Illinois: Digest Books, 1971.
 1935 *Catalog no. 170, Spring and Summer 1935.* Chicago.
- See, L.
 1995 *On Gold Mountain.* New York: St. Martin's Press.
- Southern Pacific Railroad Company
 1884 *Annual report of the Board of Directors.* San Francisco.
- Spier, R.F.G.
 1958 Food habits of nineteenth-century California Chinese. *California Historical Society Quarterly* 37(1):79–84 and 37(2):129–136.
- Sprague, R.
 1983 Tile bead manufacturing. *Proceedings of the 1982 Glass Trade Bead Conference*, 167–172. Research Records 16, Rochester Museum and Science Center.
 1985 Glass trade beads: A report. *Historical Archaeology* 19(2):87–105.
- Staski, E.
 1985 *Beneath the Border City.* Vol. 2: *The Overseas Chinese in El Paso* University Museum Occasional Papers 13. Las Cruces: New Mexico State University.
- Stenger, A.
 1991 Letter to author
 1993 Sourcing and dating of Asian porcelains by elemental analysis. In *Hidden heritage: Historical archaeology of the overseas Chinese*, edited by P. Wegars, 315–331. Amityville, New York: Baywood.
- Stern, N.B., and W.M. Kramer
 1973 Emil Harris: Los Angeles Jewish Police Chief. *Southern California Quarterly* Summer:161–190.
- Sterry, N.
 1922 Housing conditions in Chinatown Los Angeles. *Journal of Applied Sociology* November-December:70–75.
 1923 Social attitudes of Chinese immigrants. *Journal of Applied Sociology* July-August:325–333.
- Sternad, Frank, Los Angeles Historical Bottle Club.
 1992 Personal communication
- Steward, R., and G. Cosentino
 1977 *Stoneware, A guide for the beginning collector.* New York: Golden Press.
- Story, Ralph
 1966 Chinatown script, one segment of a television series, "Ralph Story's Los Angeles." June 12 and June 18 (air dates). Video cassette for on-site viewing at Powell Library, University of California, Los Angeles.
- Suchey, J.M.
 1993 Analysis of human skeletal remains uncovered at Metro Rail Project A-135. In *Cultural Resources Impact Mitigation Program, Los Angeles Metro Red Line Segment One (Chinatown)*, by R.S. Greenwood, 319–322. Greenwood and Associates, Pacific Palisades, California. Prepared for Metropolitan Transportation Authority, Los Angeles.
- Su Shi
 1986 *Su Shi wenji.* 6 vols., with an original translation by Ronald C. Egan. Beijing: Zhonghua shuju, 21.605.
- Switzer, R.R.
 1974 *The Bertrand bottles.* National Park Service, Department of the Interior, Washington, DC.
- Takaki, R.
 1989 *Strangers from a different shore, A history of Asian Americans.* New York: Penguin Books.

- Tam, Wai Kin
 1991 Personal communication
 1992 Personal communication
- Thompson [T.H.], and [A.A.] West
 1880 *History of Los Angeles County, California*. Oakland: Thompson and West. Facsimile edition, Berkeley, California: Howell-North, 1959.
- Tod, Jack H.
 1976 *Porcelain insulators guide book for collectors*. Privately printed, Phoenix.
 1977 *A history of the electrical porcelain industry in the United States*. Phoenix: Privately printed.
- Tom, K.F.
 1944 *Participation of the Chinese in the community life of Los Angeles*. Master's thesis, University of Southern California, Los Angeles. Reprint, San Francisco and Saratoga: R and E Research Associates, 1974.
- Tong, Enzheng, Professor, University of Chengdu, China.
 1991 Personal communication
- Tong, B.R.
 1984 Chinatown popular culture: Notes toward a critical psychological anthropology. In *The Chinese American experience*. Papers of the Second National Conference on Chinese American Studies (1980), 233-342. Chinese Historical Society of America and the Chinese Culture Foundation of San Francisco, San Francisco.
- Toulouse, J.H.
 1969 *Fruit jars*. Camden, New Jersey: Nelson.
 1971 *Bottle makers and their marks*. New York: Thomas Nelson.
- Toy, Wai Kai
 1991 Personal communication
- Toynton, B.
 1977 *California drug stores and pharmacists*. Santee, California: Privately printed.
- Tsai, S.H.
 1983 *China and the overseas Chinese in the United States, 1868-1911*. Fayetteville, Arkansas: University of Arkansas Press.
- U.S. Department of Transportation and Southern California Rapid Transit District
 1983 Final environmental impact statement: Los Angeles Rail Rapid Transit Project/Metro Rail. Urban Mass Transportation Administration, Regional Administrator, San Francisco.
- Ventura (California) Free Press
 1891 June 12.
- Vinson, C.
 1968 Collecting shotshells. *Gun Digest*, 2nd ed., 91-97.
- Voss, F.C.
 N.D. Letter from caretaker to Mrs. Gertrude Schuckert, Deputy Superintendent of Charities. After 1937.
- Wall, D. diZerega
 1985 The separation of the home and workplace in early nineteenth-century New York City. *American Archaeology* 5(3):185-189.
- Walterspiel, J.N., and J.R. Rogers
 1987 Coin rubbing and acute phase reactants. *Australian Paediatric Journal* 23:310.
- Warner, Col. J.J., Judge B. Hayes, and Dr. J.P. Widney
 1876 *An historical sketch of Los Angeles County, California*. Los Angeles: Louis Lewin & Co. Reprint, Los Angeles: O.W. Smith, 1936.
- Watson, Burton, trans.
 1993 *Records of the Grand Historian, Han I*. New York: Columbia University Press.
- Watson, R.
 1965 *Bitters bottles*. New York: Thomas Nelson and Sons.
 1968 *Supplement to bitters bottles*. New York: Thomas Nelson and Sons.
- Wegars, P.
 1995 *The Ab Hee diggings: Final report of archaeological investigations at OR-GR-16, the Granite, Oregon "Chinese Walls" site, 1992 through 1994*. Anthropological Reports 97. University of Idaho, Moscow.
 1994 Personal communication.
- Wey, N.
 1984 Occupation and settlement patterns in early Chinese American history. In *The Chinese American experience*. Papers of the Second National Conference on Chinese American Studies (1980), 319-320. Chinese Historical Society of America, San Francisco.
- Whitall, Tatum & Co.
 1880 *Illustrated catalog and historical introduction*. Facsimile reproduction, Princeton, New Jersey: Pyne Press, 1971.
- Willets, W., and L.S. Poh
 1981 *Nonya ware and kitchen Ch'ing*. Southeast Asian Ceramic Society, West Malaysia Chapter, Malaysia.
- Williams, A. Alvarez de
 1991 Cocopa beadwork. *Pacific Coast Archaeological Society Quarterly* 27(4):39-46.
- Williams, C.A.S.
 1976 *Outlines of Chinese symbolism and art motives*. New York: Dover.
- Wilson, B., and B. Wilson
 1968 *Spirits bottles of the Old West*. Wolfe City, Texas: Hemington Publishing.
 1969 *Western bitters*. Santa Rosa, California: B & B Enterprises.
 1971 *19th century medicine in glass*. Amador City, California: 19th Century Hobby and Publishing Co.
- Wylie, J., and R.E. Fike
 1988 Chinese opium smoking techniques and paraphernalia.

- 4th review draft. Ms. on file, U.S. Forest Service/
Bureau of Land Management.
- 1990 The smoking kit. Hand-out at Workshop on Opium
Smoking, in conjunction with Annual Meeting of
Society for Historical Archaeology, Tucson, Arizona.
- 1993 Chinese opium smoking. In *Hidden heritage: Historical
archaeology of the overseas Chinese*, edited by P. Wegars, 255–
303. Amityville, New York: Baywood.
- Wu, C.C.
1928 *Chinatowns: A study of symbiosis and assimilation*. Ph. D.
dissertation, Department of Sociology and Anthropol-
ogy, University of Chicago.
- Wu, S. (J.S.)
1934 *Merchandising Chinese products on the Los Angeles market*.
Unpublished Master's thesis, School of Merchandis-
ing, College of Commerce, University of Southern
California, Los Angeles.
- Yang, M.C.
1945 *A Chinese village: Taitou, Shantung Province*. New York:
Columbia University Press.
- Yee, G., and E. Yee
1986 The Chinese and the Los Angeles produce market.
Gum Saan Journal 9(2):4–17. Los Angeles: Chinese
Historical Society of Southern California.
- Yip, C.L.
1984 The impact of the social-historical context on Chinese
American settlement. In *The Chinese American experience*,
edited by G. Lim, 139–142. Chinese Historical Society
of America, San Francisco.
- Zumwalt, B.
1980 *Ketchup, pickles, sauces: 19th century food in glass*. Fulton,
California: Mark West.

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