

**Reconstructing Context and Assessing Research Potential**  
Feature 20 from the San José Market Street Chinatown

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## **ABSTRACT**

As a part of the larger Market Street Chinatown Archaeological Project, this thesis presents the analysis and interpretations of an assemblage from a pit feature in San José's Market Street Chinatown. Ceramic, glass, metal, faunal, botanical and other materials are discussed. The project explores the future research potential of the entire Market Street assemblage, using stratigraphic analysis, economic scaling, and comparative research (based on the Feature 20 assemblage) as a gauge for the integrity and quality of contextual information that accompanies the collection.

This research was conducted as part of the Market Street Chinatown Archaeology Project at Stanford University. This project is funded in part by History San José and the City of San José Redevelopment Agency in cooperation with the Chinese Historical and Cultural Project and Past Forward, Inc.



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## **INTRODUCTION**

This paper discusses the results of a holistic analysis of artifacts from a single pit feature from the 19<sup>th</sup> century Market Street Chinatown site in San José, California.

Excavated nearly twenty years ago during redevelopment of San José's city center, the artifact assemblage from Market Street was never fully processed and has been minimally studied. This project explores the existing research potential of the entire collection by undertaking a detailed study of all materials from a single feature and grappling with the technical issues involved in reconstructing context 20 years post-excavation.

The introductory sections of this paper present a brief history of Chinese immigration to the United States, focusing on the Santa Clara Valley, the city of San José, and the Market Street Chinatown; background information about the archaeological collection, including the history of the twenty years between excavation and current research; and a discussion of the scope and goals of this master's thesis project. Following this are sections that present primary data and analysis of the various types of artifacts in the assemblage. Next are a number of interpretations drawn from the preceding analysis; these deal with economic scaling, stratigraphy, and comparative research. In concluding the paper, I discuss further research directions and the significance of my findings in light of the future research potential of the entire Market Street collection.

## **HISTORICAL BACKGROUND**

### ***Chinese Immigrants in California***

Chinese emigrants entered the western United States by the thousands during the second half of the 19<sup>th</sup> century. In 1852, the Chinese population in California numbered about 25,000; by 1880, it had reached 75,218 (Young Yu 2001:5). A number of factors – political, economic, social, and natural – in both China and in the western United States facilitated this massive immigration of Chinese into California. In China, the success of the British in the Opium War (1839-42) and the subsequent weakening of the Manchu Dynasty triggered a period of economic hardship and social unrest (Young Yu 2001:3). Floods, drought and famine brought further hardship, particularly in the southern province of Kwangtung (Baxter and Allen 2003:1). At the same time these pressures were mounting in China, the western United States was undergoing a period of rapid growth and expansion. The explosion of gold mining, and the later growth of railroad, agriculture, and other industries created economies that required large numbers of laborers (Young Yu 2001:7-8). Fueled by dreams of a California that was a “Gum Sam” (“Golden Mountain”) where gold and wealth were rumored to be readily available, tens of thousands of (mostly poor, male) Chinese made the journey across the Pacific to California (Young Yu 2001:1-2, Allen et al. 2002:12).

Competition for the best sources of gold, combined with anti-Chinese racism, kept most Chinese immigrants from realizing their dreams of profit via the gold mining industry (Young Yu 2001: 7, Allen et al. 2002:12). However, agricultural and other industrial ventures were springing up around California, and white business owners looked to the Chinese population as a source of cheap, expendable labor (Allen et al.

2002: 12). Nearly 12,000 Chinese workers were employed by the Central Pacific Railroad in the construction of the western portions of the Transcontinental Railroad (Young Yu 2001:7). Chinese workers were also employed in the construction of the San José (1860) and Santa Cruz-Monterey (1877-79) railroad lines (Allen et al. 2002:12). In addition to their well known labor roles in the gold mining and railroad industries, Chinese immigrants were employed in a number of other fields, including farming, canning, fishing, quicksilver mining, and other manufacturing and labor industries that served the general public (Young Yu 2001:7-9; Allen et al. 2002:9-12). In addition, Chinese immigrants owned and operated stores, laundries, markets, theaters, restaurants and other businesses in Chinatowns throughout California.

Racist, anti-Chinese sentiment and actions had existed from the time of the earliest immigrants' arrivals in California, but these feelings strengthened and solidified when the United States suffered an economic depression in the early 1870s (Young Yu 2001:12). A number of laws and court decisions formalized discriminatory practices against Chinese, most notably by restricting immigration into the United States. These measures included the Foreign Miners Tax (1850), the Burlingame Treaty (1868), the Scott Act (1888), and the Geary Act (1892). Anti-Chinese legal actions are epitomized by the Chinese Exclusion Act (1882), the "only federal legislation in U.S. history to restrict immigration of a people by name on the basis of race" (Young Yu 2001:17).

Historians typically point out that the Chinese response to such discrimination and prejudice came in two forms: district associations and Chinatowns (Young Yu 2001; Allen et al. 2002). District associations ("hui guin") were groups of immigrants that formed in California, reflecting their district of origin in China (mainly the Sze Yup,

Heungsan, and Sam Yup regions of Kwangtung) (Baxter and Allen 2003:2). These associations provided a protective social and economic network for new immigrants, providing them with temporary housing and employment. They also provided legal aid, eventually coalescing to form the Chinese Consolidated Benevolent Association, or Chinese Six Companies, whose most famous action was challenging the Geary Act in the United States Supreme Court (Young Yu 2001:18, Baxter and Allen 2003:3). While the district associations were social and economic organizations, Chinatowns are interpreted as the physical, material manifestations of Chinese solidarity and self-protection (Baxter and Allen 2003:3). In addition to the usual benefits of an ethnic enclave (socializing, cultural promulgation, livelihood), Chinatowns often incorporated physical barriers such as walls and fences to provide safety from anti-Chinese acts (Young Yu 2001:41; Baxter and Allen 2003:3).

### ***Chinese Immigrants in San José and the Santa Clara Valley***

It is within this larger context of economic opportunity, political discrimination, and tense race relations surrounding Chinese immigration that the Chinese population of the Santa Clara Valley, and their histories and experiences, are best studied. The Chinese agricultural workers in Santa Clara held a variety of positions, from contracted day-laborers paid an average rate of one dollar per day to sharecroppers who leased land from white owners but cultivated and tended their own crops (Young Yu 2001:9). Connie Young Yu posits that these agricultural workers shared a uniquely benevolent relationship with white agriculturalists, stating that “there was an understanding and a common language. There was the same worry over the weather, the exchange of information about horticulture, the sharing of tools, labor and land. On the farm Chinese

and whites worked the land, tended the crops and built cabins and barns together” (2001:9).

The same was largely not true, however, in the urban setting of San José. The city’s successive Chinatowns provided an urban gathering point for the numerous agricultural laborers working on the farms and orchards in the Santa Clara Valley hinterlands, in addition to supporting a large urban population that ranged from 532 people in 1870 (Young Yu 2001:19) to possibly as many as 1400 people by 1876 (Laffey 1993:23), although the official census records for 1880 list only 614 Chinese residents in San José (Baxter and Allen 2003:3-4). These urban Chinatowns supported a variety of establishments that itinerant workers and community members patronized, including tenement houses, stores, laundries, temples, theaters, restaurants, and gambling houses: in short, San José’s Chinatowns were the hub of social congregation, cultural events, religious activities, and the activities of local district associations and tongs for the Chinese population of the entire Santa Clara Valley.

San José’s Chinese community came under attack as early as 1869, when a Methodist church that welcomed local Chinese was attacked by anti-Chinese arsonists and burned to the ground (Young Yu 2001:21). By late 1860s, San José’s first Chinatown – at Market and San Fernando Streets – had sprung up, although it was destroyed by fire in January of 1870. The “Vine Street” Chinatown, a temporary settlement, was occupied from 1870 until 1872, when a third Chinatown was rebuilt on the site of the original Market Street Chinatown. The second Market Street Chinatown had “at least a dozen grocery stores, a fish market, a temple, three restaurants, numerous barber stands, clothing shops and general merchandising stores,” a theater, gambling

rooms, and tenement houses (Young Yu 2001:22). In 1886 and 1887, anti-Chinese sentiment in San José gained momentum following a series of anti-Chinese conventions, public demonstrations, and government orders, and in May of 1887 the Market Street Chinatown was destroyed by an arson fire (Young Yu 2001:28-9, Baxter and Allen 2003:4). The Chinese population was then split between the Woolen Mills Chinatown and Heinlenville, which was to be San José's last Chinatown.

### ***Market Street Chinatown***

The Market Street Chinatown was the third of San José's five Chinatowns. It was built on the site of an earlier Chinatown bordering Market and San Fernando Streets in what is now downtown San José, near to the Guadalupe River (Figure 1). (Today, Cesar Chavez Park and the San José Art Museum border the location of old site, and the Fairmont Hotel and Plaza occupy most of the original site.) This second Market Street Chinatown was built in the early 1870s and was destroyed by an arson fire in 1887.

The community was a mix of families and more typical "bachelor" worker populations; the number of women and children in the community, though low in comparison to contemporary Euro-American populations, was high compared to many Chinese communities throughout the West. In addition to sustaining a stable, urban population, Market Street served as a focal point for the larger population of Chinese agricultural laborers in the Santa Clara Valley. From historical documentation, including a Sanborn Fire Insurance Map (Figure 2), we know that there were a number of restaurants, stores, and tenement houses in the settlement; there was also a joss house/temple, a Chinese theater, at least one washhouse, and outdoor pork roasting furnaces (Young Yu 2001:22).



After being destroyed by arson, Market Street was abandoned and its Chinese residents moved to other locations in San José. The central, highly coveted location was subsumed by urban development and readily incorporated into San José's evolving downtown. One hundred years later, during redevelopment of the city center in the 1980s, the remains of the Market Street Chinatown were unearthed. The documentation and recovery of the Market Street site was the focus of archaeological excavations in 1985, 1986, and 1988.

## **THE ARCHAEOLOGY OF MARKET STREET**

### ***Excavations at Market Street***

The Market Street Chinatown site was excavated by a cultural resource management firm, Archaeological Resource Services (ARS), in two major episodes during 1985 and 1986 and also on a limited scale in 1988 (Figure 3). The excavations were conducted during redevelopment of San José's city center. The site had been rediscovered in the early 1980s during environmental assessments for the construction of the Fairmont Hotel and the Silicon Valley Financial Center (Theodoratus 1981). When construction began, ARS was contracted by the City of San José Redevelopment Agency to monitor construction activity and perform rapid recovery excavation of discovered features.

Excavation conditions were challenging. The archaeological team worked alongside construction crews, flagging features as they were uncovered by bulldozers (Figure 4). At the end of the construction work day, ARS archaeologists rapidly

excavated any features uncovered during the day. Unfortunately, a number of features<sup>1</sup> appear to have been destroyed by construction activities beyond the control of the archaeologists (K. Flynn and W. Roop, personal communication). In order to expedite the excavation process and decrease on-site delays, ARS excavators filled burlap bags with unsorted soil matrix, and trucked them to the ARS off-site lab for screening.

Following excavation, the bags of matrix that had been removed from site were processed by ARS at their lab in Novato, California. In addition to washing and sorting artifacts, some preliminary cataloging and analysis were completed for parts of the collection. However, no thorough, systematic analysis of the entire assemblage was ever completed before the collection went into storage.

ARS referred to these projects as 85-31, 86-36, and 88-91, where the first two digits stand for the year and the last two are the ARS project number for that calendar year. Thus, 85-31 was the 31<sup>st</sup> project conducted by ARS in 1985. Features were numbered sequentially (starting at 1) upon order of their discovery. Artifacts from each feature were numbered sequentially (starting at 1), according to the order in which they were processed. A double binomial is used to number individual artifacts, such that each has a unique number. Thus the notation 85-31:20-1 refers to the first artifact processed from Feature 20, from project number 31 in 1985; this is distinct from the first artifact processed from Feature 1 (85-35:1-1), or the first artifact from Feature 20 of the 1986 excavation (86-36:20-1). The conventions of this numbering system are incorporated into the current research protocol.

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<sup>1</sup> Project 85-31, features 3-9.

### ***History of the Collection***

In 1989, ARS transferred the collection to the City of San José Redevelopment Agency, which subsequently put the collection in storage in a warehouse. During the 1990s, the City of San José Redevelopment Agency contracted ARS, Basin Research Associates, Inc., and Archaeological Resource Management (ARM) for additional work to assess the collections. This work included an inventory of the contents of the storage boxes, preliminary reports stemming from the excavation, and a number of other reports based on historical and documentary research (ARS 1985, ARS 1986, Roop 1986, ARM 1991, ARS 1991, Basin Research Associates 1992, ARS 1993, Laffey 1993, Parsons 1993, Archives and Architecture 1994). In 2000, the City of San José Redevelopment Agency transferred the collection to History San José, a local, non-profit historical museum.<sup>2</sup>

### ***The Market Street Chinatown Archaeological Project***

The Market Street Chinatown Archaeological Project (MSCAP) is a joint educational/research venture between History San José, the Chinese Historical and Cultural Project, Past Forward, Inc., Stanford University, and the City of San José Redevelopment Agency. Conceived of by Alida Bray of History San José and Rebecca Allen of Past Forward, Inc., the goal of the project is to “catalog and analyze the collection and curate the materials in a way that they can once again be used for research and educational programs” (Voss et al. 2003:1).<sup>3</sup>

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<sup>2</sup> At this point, the collection included not only the assemblage of artifacts, but records and contextual information from these early stages of excavation and processing. These included notes and photographs from the field site, a handwritten catalog, preliminary reports, and personal and business correspondence.

<sup>3</sup> More detailed information on the history of the excavation, collection, and Market Street Chinatown Archaeological Project can be found in *Market Street Chinatown Archaeological Project: 2002-2003 Progress Report* (Voss et al. 2003) and on the project’s website, [www.stanford.edu/~cengel/SJCT/](http://www.stanford.edu/~cengel/SJCT/).

The 2002-2003 academic year was the pilot year of Stanford's participation in the project. Work focused on cataloging and analysis of selected materials from the 1985 collection and on contextual research. Artifact processing (focusing on ceramics and small finds) occurred primarily in conjunction with Dr. Barbara Voss's course, Laboratory Methods in Historical Archaeology; the process included digitization of the hand-written lab catalog generated by ARS in the 1980s. A second, equally important part of MSCAP research undertaken last year was the gathering of information (in the form of documents, photos, and personal interviews) that will augment the contextual information available. The first year of Stanford's participation was a success, and research has been extended until 2008. During the 2003-2004 academic year, analysis and cataloging of materials from the 1986 collection commenced, and contextual research and cataloging of the 1985 collection have continued.

## **PROJECT SCOPE**

### ***Choosing the Project***

The Market Street Chinatown Archaeological Project was an attractive choice for my thesis project because of the academic novelty of many of its themes, the complexity of the collection and its history, and the focus on collaborative effort upon which the entire project rests. I could have undertaken any number of potential projects; to date, the collection has inspired a wide range of research projects that involved analysis of specific artifact types, including analysis of opium paraphernalia (Williams 2003), peck-marked ceramics (Michaels 2003), food related vessels (Clevenger 2004, Simmons 2004), medicinal practices (Ishimaru 2003), gaming and gambling (Camp 2004, Chang 2004),

and evidence of acculturation (Selover 2003). I could have chosen a similar project based on a site-wide analysis of a single artifact category, but Dr. Voss suggested another potential project: attempting a holistic analysis of all of the artifacts from a single feature. Such a project would have the important contribution of grappling with the question of context: twenty years post-excavation, what meaningfulness is there to the idea of “context,” so central to archaeologists’ practice of analysis and interpretation? From the vantage point of one small part of the collection, I could hope to speak to the entirety on issues such as extent and reliability of provenience and what bearing the existing contextual information has on the research potential of future, larger-scale projects undertaken with this collection.

With this in mind, I began the process of defining the assemblage I would analyze. By focusing on materials from and information about a single feature, I have been able to appropriately scale the scope of the research for my thesis but retain an analytically useful and archaeologically meaningful data set. Based on the number of artifacts, as well as the breadth of materials represented, I chose Feature 20 from the 85-31 project as the focus of my thesis (Figure 5).

Feature 20 was a wood-lined pit measuring 2.6 by 1.8 meters, with historic cultural deposits extending about 0.9 meters below the modern asphalt and gravel surface layer, underlain by a deposit of culturally sterile sand and gleys (ARS 1993:13). Based on spatial analysis using Sanborn maps and ARS field maps, Feature 20 seems to have been located near a known store structure (Michaels 2003; see also Figure 6). However, it was also in the vicinity of the community’s temple and a number of tenement houses, so ascribing a single context to this feature is somewhat untenable. The hand-written

catalog from Feature 20 contains 257 catalog entries representing individual or batches of artifacts, making up about 5% of the 85-31 collection (based on relative number of catalog entries) (ARS 1993:22-23). Artifacts in the assemblage represent a cross-section of the entire collection, and include ceramics, glass, metal, faunal remains, organics (botanicals, leather, and textiles) and small finds (such as gaming pieces, opium paraphernalia, and figurines).

Although working with materials from a feature would seem to indicate a relatively bounded collection, it is not as straightforward a distinction as it first appears. Provenience problems plague a number of artifacts which have been mistakenly identified as coming from either Feature 19 or Feature 20, a recordation error which occurred some time during the excavation or early laboratory processing of the artifacts by ARS. For the purposes of my thesis, I chose not to include these artifacts in my analysis of Feature 20.

### ***Research Questions***

The driving question behind this research project is one of exploring the future research potential of the Market Street collection through an assessment of existing contextual information combined with laboratory analysis of artifacts. A myriad of specific questions fall under this general topic of contextual reconstruction and research potential. Many of these are of a very practical and methodological nature, but the theoretical implications of working with this sort of collection cannot be overlooked.

Methodological questions include such problems as how to resolve inconsistencies in provenience information, how to (re)interpret records from the field and earlier laboratory processing in the 1980s, what types and quality of contextual

information are available to those researching this collection, and what type of analyses will maximize the pertinence of the contextual data we have available.

The theoretical implications of this project, while abstractly related to determining the research potential of the collection, are significant in their own right. To pursue an academic research project on an assemblage that you did not excavate is both difficult and risky. In an academic context, tight control over field and laboratory methodologies, sampling and recovery methods, and recording is privileged; it is assumed to be the norm. Furthermore, recent theoretical trends in academic archaeology have called for a more fully integrated archaeology where all members of a research team are involved at multiple levels of knowledge production (Shanks and McGuire 1996, Hodder 1997, Andrews et al. 2000, Berggren and Hodder 2003). This ideally means that lab specialists like archaeobotanists and zooarchaeologists are out in the field, and “dig bums” participate in interpreting and writing about a site. In light of these accepted and desired standards, what knowledge can one hope to produce with an assemblage like that from the Market Street site, where you are the archaeologist but not the excavator?

Does the data have integrity? Can I understand and appropriately interpret the recovery context? Will I be able to say anything meaningful?

Although I largely agree with the model of “interpretation at the trowel’s edge” (Berggren and Hodder 2003:8), there is also the overwhelming fact that multitudes of orphaned collections (admittedly in various conditions) sit unexplored in warehouses, their research potential unknown. It is for this reason that I think MSCAP and endeavors like it are important. Methodological difficulties and academic bias aside, the generation of primary data and the formulation of complex, well-informed interpretations – in short,

rigorous knowledge production – is possible even when your hand is not that which held the trowel.

A secondary set of research questions revolve around the food practices of members of the Market Street Chinatown community. This research topic was developed in a project I completed in a laboratory methods class taught by Dr. Voss in the Winter of 2004. Questions relating to food preparation, presentation, consumption, and discard are four main avenues for analysis and interpretation of food-related artifacts. I am interested in questions of diet composition (including identifiable Chinese and Anglo-American foods or preparations, and utilization of local resources such as freshwater fish from the Guadalupe River), meal dynamics (for example, extrapolating from the ceramic assemblage to presentation and consumption practices), and consumer choice (how ceramic, glass and faunal data might reflect socio-economic, ethnic and cultural preferences). Although a focus on reconstructing context is the main objective of this project, the research on food practices actually furthers this goal, providing a helpful glimpse of how extant contextual information enhances or detracts from the interpretive potential of a case study.

### ***General Methodology***

This project began by physically aggregating all of the artifacts from Feature 20. This entailed sorting through approximately 80 storage boxes which house the entire (unsorted) collection from 85-31, to find materials from Feature 20. Added to these were artifacts cataloged last year by a laboratory methods class – ceramics and small finds such as gaming pieces and toothbrushes.



Faunal remains were then sent to specialists for analysis. A soil sample that had been saved during excavation was processed in a flotation tank to recover botanicals. These botanical remains were then sent to specialists for analysis as well.

All remaining artifacts that had not been cataloged during the 2003 laboratory class were then cataloged and analyzed, following the protocol designed for MSCAP, as outlined in the project's laboratory manual (Voss et al. 2003:Appendix B). Where there was insufficient information or protocol for analysis of specific material types, a number of other sources were drawn upon to develop appropriate methodologies: original research designs as outlined in the 1990s (ARM 1991, Basin Research Associates 1992), the knowledge and particular methods of specialist analysts (see especially faunal and floral analysis), and a number of general laboratory and research handbooks (e.g. Rice 1987, Jones and Sullivan 1989, Sinopli 1991, Noël Hume 1969, Sutton and Arkush 2002). The detailed methodologies used for processing and analysis of specific artifact categories are presented below where appropriate.

In addition, all materials that had been cataloged by the 2003 class were reassessed so that records could be checked for consistency and accuracy, and more detailed analysis could be performed.

One significant methodological deviation from the MSCAP protocol was employed: the method for calculating the minimum number of vessels (MNV) and minimum number of individuals (MNI). Using MSCAP protocol, artifacts (in groups, individually, or in fragments thereof, as they were stored by ARS) are given single catalog numbers and MNIs are assigned at this time. This does not allow the researcher to observe or calculate the MNI for an entire class of artifacts, thus the resulting catalog

MNI number is inflated.<sup>4</sup> Two specific causes of inflation are the counting of non-diagnostic sherds as MNIs<sup>5</sup> and cross mending pieces.<sup>6</sup> As a result, MNIs and MNVs were recalculated for all artifact types after the entire Feature 20 assemblage had been cataloged.

Another major methodological issue was how to assess and manage existing contextual information. The two major concerns were provenience problems and stratigraphic notations. Provenience problems came in two forms: the specific Feature 19/Feature 20 recordation error mentioned above, and miscellaneous other situations where provenience was unclear, confusing, or only partially complete. I chose to exclude all artifacts from this study that did not clearly come from Feature 20. Those that clearly came from Feature 20 but had no other information (missing stratigraphic information, for instance) have been included, although they were necessarily excluded from the section on stratigraphic analysis (below, “Stratigraphic Analysis”).

The ARS excavation and lab records for Feature 20 included a variety of information on vertical and horizontal dispersal of artifacts, including distinctions between “surface”, “upper level”, and “lower level” vertically, and “E 1/2” (East half) and “W 1/2” (West half) horizontally. However, these distinctions were not used in a consistent fashion throughout the records for Feature 20, thus requiring clarification before any meaningful analysis or interpretation occurred.

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<sup>4</sup> Please note that the MNI figures represented in Appendix B are incorrect (inflated) for this reason.

<sup>5</sup> For example, X number of body sherds would count as 1 MNI, as would X number of nail shaft fragments, whereas these would likely not count in a holistic MNI count for ceramic vessels or for nails.

<sup>6</sup> Cross mends are not easily accounted for in the MSCAP cataloging scheme. Thus cross-mending pieces may be cataloged separately and hence given a count of 2 or more MNI, when they in fact represent only 1 MNI, as would be discovered upon a holistic MNI calculation

In a conversation with Katherine Flynn on January 16, 2004, it was determined that the “E 1/2” and “W 1/2” distinctions were the result of an arbitrary separation created in the field in order to expedite excavation. The upper/lower level distinction, in contrast, was likely based on some empirical stratigraphic characteristics of the deposit, where the upper layer was probably either the area disturbed during 1985 development activities, or was the area corresponding to the 1878 fire and subsequent demolition of the Market Street Chinatown. The lower layer was an undisturbed portion of the feature underlying the disturbed area.

Given this information, I chose to retain the distinction between upper layer and lower layer, but disregard the east/west distinction, combining some previously uncataloged samples (mainly fauna) with the same vertical provenience but different horizontal provenience. The irregular, arbitrary east/west separation seemed likely to unnecessarily complicate the analysis and interpretation of materials from Feature 20, without generating any additional useful contextual information. In contrast, the upper/lower distinction can at the very least be taken as an indication of relative date of deposition of the contents of each layer following the general laws of stratigraphic deposition; additionally, further laboratory analysis of artifacts or archival research into the excavation notes could potentially clarify whether the upper layer represents the burn layer, which in turn would enhance interpretations of the deposit. The designations upper layer and surface were sometimes combined in the ARS recordation, but where they are used individually this distinction is kept, as it appears to indicate a difference in

contextual integrity (where surface artifacts have been disturbed from their depositional context but upper layer artifacts have not).<sup>7</sup>

### ***Limits of the Project***

Due to the size and relative circumscription of the assemblage that this project engages with, the data resulting from analysis have some statistical and comparative validity. With over 300 catalog entries, I feel confident that the quantitative data presented in this paper have statistical merit. At the same time, Feature 20 is only a moderately sized feature, and the extant collection probably underrepresents the diversity of artifacts from the Market Street site. The comparative potential has been demonstrated below in the section “Describing the Assemblage – A Comparative Look,” and yet comparing the assemblage from a single deposit with that of an entire site is problematic, at best.

Furthermore, some of the analysis was highly exploratory, and therefore limited in scope. For example, the botanical remains were only given a brief, qualitative analysis. While this qualitative data is useful within the scope of this thesis, the lack of quantitative data makes anything more than qualitative comparisons to other sites impossible.

Finally, this project is at once impeded and enabled by its main focus – the contextual problems it addresses. While fully aware that there are limits which a project of recontextualization will reach, it was nonetheless frustrating when such boundaries were encountered during analysis and interpretation. Inconsistencies and contradictions in original records, poor conservation practices leading to loss or confusion of provenience

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<sup>7</sup> More information about the stratigraphy of the Feature 20 deposit can be found below in the section titled “Stratigraphic Analysis.”

information, and the fallibility of people's memories are all limitations faced in the efforts to reconstruct and manage the contextual information for Feature 20.

## **ANALYSIS AND FINDINGS**

The following sections present the data from laboratory analysis undertaken in 2003 and 2004. Sections include food-related artifacts; faunal and floral artifacts; structural artifacts; clothing-, opium- and health-related artifacts; and other material culture remains.

### **Food-Related Artifacts**

Artifacts associated with food practices include ceramic tableware, ceramic storage vessels, and glass bottles. These food-related artifacts are the single largest category in the Feature 20 assemblage, accounting for 52% of the assemblage by weight, 30% by sherd count, and 48% by number of catalog entries.

#### ***Food-Related Ceramics***

Food-related ceramic vessels make up almost the entire ceramic assemblage from Feature 20: over 90% by both sherd count and weight. These can be subdivided into tableware and storage vessels by function, and Asian and Euro-American wares by origin. Data for the food-related ceramics is summarized below in Table 2.

#### ***Asian Stoneware Storage Vessels***

Asian stoneware storage vessels comprise 18% of the food-related ceramics from Feature 20 based on MNV counts. The 10 MNV represented include 4 spouted jars, 3 wide-mouthed jars, 2 hollowwares of indeterminate form, and 1 large lid (Figure 7).

*Spouted Jars.* Artifacts were classified as spouted jars based on direct evidence of

a spout, or inferred by the diameter of the vessel rim (4-5 cm), which is about half that of wide-mouthed jars. Rim percentage, base percentage and number of spouts were counted during MNV calculations and the largest number was used to represent the minimum vessels present in the collection; in this case, the MNV figure (4) returned by the number of spouts.

*Wide-mouthed Jars and Lids.* The wide-mouth jar category included the jars themselves and also the plain, unglazed lids which would have been used to cover them and seal their contents. Wide-mouthed jars are similar in body form to spouted jars, but are distinguishable by the size of their opening, which is approximately 9 cm. Lids are also 9 cm in diameter, and several of the examples in the Feature 20 assemblage have fragments of plaster (used to seal them) still adhered. Rim and base percentages of the vessels and rim percentages of the lids were recorded during the MNV count. A maximum count of 3 MNV was calculated, based on the lids. Included in this count are at least two slightly different vessel body forms, based on the vessel profiles from rim to shoulder. One large sherd has a noticeably straight, vertical neck and sharp inflection at the shoulder, in contrast to others which have a more sloping neck and gradual transition from rim to body.

*Large Barrel Jar Lid.* One large lid of the type known to have covered huge stoneware “barrel jars” is represented by two robust lid sherds. This MNV is listed separately here (as opposed to the wide-mouthed jar lids which were figured in with their vessel form) because no stoneware body sherds in the assemblage could be clearly classified as large barrel jar fragments. The literature repeatedly cites these large lids being reused as cooking vessels by inverting them over a heat source, or as serving dishes

for prepared food (cf. Greenwood et al. 2002:148). These particular sherds show no evidence of burning, although they could have been reused as a serving dish. This type of reuse is one potential explanation for why these fragments may have been deposited separately from any large barrel jars.

*Non-diagnostic and Unidentified Storage Vessel Sherds.* The remaining storage vessel sherds are rim, body and base sherds that could not be classified by specific vessel form. These non-diagnostic sherds have a total count of 89 and a weight of 1255 grams. The MNV was calculated by examining the morphology of the two rim sherds in this group, which returned the same result (2 MNV). They are noticeably different from each other and from other rim forms in the assemblage, and therefore must represent at least two vessels. The base sherds in this group are not diagnostic to a specific vessel form; it can merely be said they are similar to those exhibited on smaller storage jars (like spouted or wide-mouthed jars). The body fragments display a relatively continuous range of thickness, from 2.7 to 12.6 mm, although they probably came from at least one small and one large storage jar.

### ***Asian Porcelain Tableware***

Porcelain tablewares of Asian origin make up 66% of the food-related ceramics from Feature 20, based on recalculated MNV counts. Decorative styles include Bamboo, Celadon, Four Seasons and related floral styles, Sweet Pea, and a hand-painted blue floral motif. Vessel forms include large bowls (probably serving vessels), medium bowls (probably used by individuals), small bowls (handleless cups), tiny cups (for liquor consumption), medium plates, and small plates (probably used for condiments) (Table 1). Greenwood et al. describe the typical Chinese table setting thus: “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” (1996:69).

Table 1. Vessel dimensions for Feature 20 tableware.<sup>8</sup>

Vessel Size	Diameter (cm)
Cup, Tiny	< 5 cm
Bowl, Small	8- < 10 cm
Bowl, Medium	10-15 cm
Bowl, Large	15-25 cm
Plate, Small	< 10 cm
Plate, Medium	10-15 cm
Plate, Large	> 15 cm

*Bamboo.* Vessels decorated with the Bamboo pattern make up 13% of the total tableware assemblage from Feature 20, representing 7 vessels. MNV counts were determined by base percentage; resulting counts correspond with other diagnostic features such as vessel profile and decoration. Five of these vessels are medium bowls, with diameters of 14-15 centimeters. The other two are indeterminate size bowls (maximum diameter uncalculatable). Based on the similarities in between these bases and those of known medium bowls, and on evidence that the Bamboo pattern is only found on this size bowl (Sando and Felton 1993:155, table 25; Greenwood et al. 1996:70), I am confident in inferring that these two indefinite vessels are probably also medium bowls. With the exception of these latter vessels, the Bamboo bowls are all over 50% complete, though broken into multiple fragments.

*Celadon.* Celadon vessels make up 14% of the tableware assemblage with a total of 8 vessels. The vessel forms cluster in two groups: small bowls of approximately 8 cm

<sup>8</sup> These conventions follow the MSCAP protocol, and are used for both Asian and Euro-American tablewares.



diameter, and medium bowls of about 14-15 cm diameter (Figure 8). There are 4 small bowls, based on rim percentage. There are 4 medium bowls, based on a combination of rim percentage and vessel form. One sherd has a drastically different profile and a slightly smaller diameter (11-12 cm) than the rest and was therefore counted as a separate vessel; the remaining three share basically identical profiles and diameters. Most of the bases have underglaze hand-painted marks in blue pigment. The Celadon vessels are more fragmented than the Bamboo. As a result, 9 sherds (34.9 g) were non-diagnostic to vessel form and not included in the MNV data.

*Four Flowers.* Four Flowers vessels are the most diverse of the tableware collection, with a great variety of vessel forms (Figure 9). Four Flowers and related floral designs make up 30% of the tableware – the highest of any single grouping – with 17 vessels. Two of these are spoons, represented by two handles and a fragment of the spoon well. One small plate and two medium plates are present. The MNV for the small plate was calculated by rim percentage. The MNV for the medium plates is qualitative, based on observable, marked differences in decorative style. There is one small bowl and one medium bowl, based on rim percentages. Five large bowls are present, based on base percentage. Two additional bowls of indeterminate size are likely large bowls based on vessel profile; since their maximum diameter could not be calculated and there are no other lines of evidence as with the Bamboo bowls, I am not confident in lumping them with the positively identified large bowls. Finally, there are three tiny cups which have either Four Flowers or a similar floral design. Further research may indicate that these represent distinct decorative styles, but for the purposes of this paper they were categorized under the Four Flowers category.

*Sweet Pea.* One sherd from a decanter has the pattern known as “Sweet Pea.” This piece compares favorably with those illustrated in Sando and Felton (1993:158, figure 30) and Greenwood et al. (1996:70, figure 4.1).

*Other Asian Tableware.* Other Asian tablewares fall into two vessel groups: a single, octagonal small bowl, and three teapot lids. The octagonal bowl is separated out because of its distinct form; it compares favorably with examples from Praetzelis and Praetzelis (1997:176, figure 44).

Although they resemble small plates, the teapot lids are different in form and compare favorably with those identified by Greenwood et al. (1996: plate 4). Two of these are undecorated and one (missing its rim) has a hand-painted blue flower in the center of the lid (Figure 10). Interestingly, there are no identified teapots in the Feature 20 assemblage, although at least one undecorated teapot exists elsewhere in the collection. This begs the question of reuse – could these have, in fact, been used as small plates or some function not intended in their manufacture?

### ***Euro-American Ceramic Tableware***

Euro-American ceramic artifacts comprise 16% of the food-related ceramics based on recalculated MNV counts. There is one vessel each of creamware, redware, and porcelain, 3 whiteware vessels and 3 improved whiteware vessels. A noticeable aspect of the Euro-American assemblage is that very few sherds exist (17 sherds, only 5% of the total food-related ceramic assemblage by sherd count); additionally, many vessels are represented by only one or two sherds. This might seem to imply that these sherds were intrusions into the deposit in the pit feature, except that most of the sherds came from the lower level of the feature.

*Creamware.* The creamware vessel is represented by only one non-diagnostic body sherd weighing 2.1 grams; vessel form is impossible to determine.

*Redware.* The redware vessel is a flatware, represented by one rim piece weighing 0.9 grams. The rim is slightly lipped, and its interior edge is painted with a blue stripe. This vessel's paste is distinctly pink in comparison with the other Euro-American vessels in the assemblage.

*Porcelain.* The porcelain vessel is a fluted hollowware represented by one rim fragment weighing 3.6 grams. The sherd has an unusual, metallic purple appliqué on the exterior surface (Figure 11).

MNVs for the preceding three waretypes were calculated by sherd number; each represents 11% of the total Euro-American assemblage.

*Whiteware.* The whiteware MNV count was the most difficult and most qualitative of all MNV calculations for Euro-American ceramics, as the decorative styles of the sherds were used as the diagnostic feature. Three of the sherds are undecorated, and five are decorated; it was determined that the undecorated sherds could not be validly separated from any of the decorated vessels, thus they were not considered in MNV calculations. Of the decorated sherds, three are blue transfer print, one is black transfer print and one is hand painted (Figure 12). The latter two categories each represent one MNV. The three blue transfer print pieces were more difficult. Each has a significantly different design – a floral motif, a scenic motif, and stippling – yet each sherd is so small that it could easily be a part of a large vessel with a complex design incorporating a number of different decorative elements. Thus I felt that the common denominator – the appropriate measure when calculating MNVs – was the general decorative style of blue

transfer print, for a total of one MNV. Whitewares make up 33% of the Euro-American assemblage, by MNV count.

*Improved Whiteware.* There are a minimum of three improved whiteware vessels in the assemblage: a black transfer print, handled cup (1 sherd, 6.1 g), an undecorated hollowware (1 sherd, 10.9 g), and a large edgeware plate. There are four undecorated sherds in the collection (125.7 g) that come from plates or other flatware; all of these could be associated with this large edgeware plate. One of these sherds, which should by no means necessarily be associated with the blue edgeware plate, has a maker's mark.<sup>9</sup> The mark, which is a lion with a crest over the manufacturer's information, attributes the sherd to the British company James Edwards and Son, of Dale Hall, Burslem, Staffordshire Potteries (Godden 1991:230-231). The dates of this mark run from 1851 to 1882, but no other information is available (for example, what waretypes, vessel forms, or decorative styles the company used) (Godden 1991:230-231). Because the occupation of the Market Street community was so brief, and falls well within the dates provided by this maker's mark, the information gleaned from it adds little to our interpretation of the Feature 20 deposit. Improved whitewares make up 33% of the Euro-American assemblage by MNV count.

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<sup>9</sup> It is important that although the edgeware sherd and maker's mark sherd are attributed to one MNV based on vessel form, they should not necessarily be associated with each other (i.e. actually from the same vessel). This is particularly important because extra information gleaned from these two diagnostic features do not clarify the sherds' relationship at all.

Table 2. Food-related ceramics from Feature 20.

Vessel Classification	Material or Decorative Style	Vessel Form	MNV
Asian Storage Vessel	Stoneware	spouted jar	4
	Stoneware	wide-mouthed jar and lid	3
	Stoneware	hollowware	2
	Stoneware	large lid	1
Asian Porcelain Tableware	Bamboo	medium bowl	7
	Celadon	small bowl	4
	Celadon	medium bowl	4
	Four Flowers	spoon	2
	Four Flowers	small plate	1
	Four Flowers	medium plate	2
	Four Flowers	small bowl	1
	Four Flowers	medium bowl	1
	Four Flowers	large bowl	5
	Four Flowers	indeterminate bowl	2
	Four Flowers	tiny cup	3
	Sweet Pea	decanter	1
	Other	small, octagonal bowl	1
	Other	teapot lid	3
Euro-American Tableware	Creamware, Plain	indeterminate	1
	Redware	flatware	1
	Porcelain	hollowware	1
	Transfer Print, Blue	indeterminate	1
	Transfer Print, Black	indeterminate	1
	Hand Painted, Floral	hollowware	1
	Transfer Print, Black	cup	1
	Whiteware, Plain	hollowware	1
	Edgeware	plate	1
<b>TOTAL</b>			<b>56</b>

### *Food-Related Glass*

Unlike the food-related ceramic artifacts, food-related glass artifacts make up less than half of the total glass assemblage (38% by sherd count and 53% by sherd weight).

Most of these food-related artifacts are alcoholic beverage bottles; there is also one fragment of a tumbler. Table 3 presents a summary of this information.

### *Glass Tumbler*

One sherd of a tumbler with molded fluting on the exterior of the vessel body was recovered from Feature 20 (cf. Jones and Sullivan 1989:143, figure 119). This sherd

represents a very small portion of the entire tumbler (less than 25%), and no other glassware in the assemblage has recognizable fluting that would link it to this vessel. This tumbler accounts for 14% of the food-related glass.

### ***Alcoholic Beverage Bottles***

Euro-American glass bottles which contained alcohol make up 86% of the food-related glass artifacts by MNV count. There are six vessels: one black glass bottle, one amber colored bottle, and four green bottles (Figure 13). (Color analysis focused only on very basic distinctions between colorless, amber, aqua, green, and black glass distinctions.) The black glass bottle is represented only by a fragment of its finish. Portions of the neck and body remain from the amber bottle. The four green bottles are of varying degrees of fragmentation, with a total 32 sherds weighing 578 g. Since they were the most numerous element, the number of necks was used to determine the MNV for the green glass bottles.

Table 3. Food-related glass artifacts from Feature 20.

<b>Vessel Form</b>	<b>MNV</b>
Alcoholic Beverage Bottle	6
Tumbler	1
<b>TOTAL</b>	<b>7</b>

### ***A note on the nature of alcohol consumption***

One interesting question that arose while analyzing the food-related ceramics and glass is what exactly we mean by “food.” In particular, is the consumption of alcohol an event that should be subsumed under the general category of food practices, or is it somewhere outside of this, a social or illicit pastime to be examined separately? The answer, of course, probably lies somewhere between either extreme. We know Asian

liquors and wines were consumed as a part of the meal (Greenwood et al. 1996:69), but the stereotype of alcohol as a “social drug” is equally prevalent (cf. Allen et al. 2002).

MSCAP’s cataloging scheme, which was adapted to be compatible with those used on other Chinese overseas assemblages in California, actually mirrors this paradox, placing Euro-American alcoholic beverage bottles in a category relating to personal effects and social drug use, but placing tiny (“wine”) cups used to consume Asian liquor in a completely different domestic-tableware category. Without venturing into the biases that created this cataloging disparity, I would like to problematize the assignation of alcohol to a drug-related, non-food practice. I purposefully chose to circumvent this stigma by including alcoholic beverage bottles in the food-related glass assemblage and in doing so arrived at some conclusions I might not have otherwise realized.

Of particular note is that no Asian stoneware liquor bottles exist in the Feature 20 assemblage, despite the fact that the tiny cups used to consume such alcohol are present (making up 7% of the food-related ceramic assemblage). The only alcohol containers in the Feature 20 assemblage are the six Euro-American glass bottles discussed above. In contrast, at other sites 14-30% of the alcohol containers were Asian stoneware liquor bottles (Allen et al. 2002:181).

The contrast in the Feature 20 assemblage between Euro-American storage containers and Asian consumption vessel leads to an interesting speculation about cultural substitutions. If the liquor in the bottles was in fact of American or European origin, could it have been consumed in place of traditional Asian alcohols in traditional Chinese liquor cups? Another possibility is bottle reuse, where the original contents of the glass bottles (Euro-American alcohol) may have been replaced by other substances

(Asian liquor being only one of many possibilities). And finally, we must consider the context of these artifacts' deposition: Feature 20 is a trash pit, and it is possible that such refuse pits could have been used by any member of the community passing by. As such, Chinese liquor bottles used to fill the liquor cups from Feature 20 could have been deposited in any of the other nearby trash pits. This is an issue that could be further explored by spatial patterning of artifacts throughout the entire Market Street site.

## **Fauna**

### ***Methodology***

Analysis of the faunal remains from Feature 20 began by aggregating all of the specimens and roughly sorting the fish and non-fish vertebrate remains in preparation for a consultation visit by zooarchaeologist Nancy Valente on December 1, 2003. During this meeting, she reviewed and adjusted the fish/non-fish categorizations as necessary and provided some preliminary species and element identification. We also discussed potential analyses for the collection, as well as possible research questions that might arise from or be addressed by the assemblage. Following this meeting, Nancy Valente and Dr. Kenneth Gobalet agreed to undertake analysis on the non-fish vertebrate and fish remains, respectively.

In order to facilitate analysis, it was necessary to examine the provenience of the faunal remains prior to sending them to the specialists, as the information contained in the provenience records was rather unclear. Following the protocol for all artifact materials established in the "General Methodology" section above, upper and lower vertical distinctions were maintained with the potential goal of reconstructing



depositional history, but horizontal distinctions were collapsed. Of note is that the designations of “upper layer” (presumably undisturbed) and “surface” (presumably disturbed) were conflated in the original recordation for the faunal samples. I have shortened the notation here to “upper layer” for simplicity’s sake, but all “upper layer” data for the faunal analysis should be interpreted as including possibly disturbed materials.

### ***Fish***

Dr. Kenneth Gobalet agreed to provide a list of species and elements present in the fish assemblage. This analysis was done, in part, as an exercise for a vertebrate morphology class under Dr. Gobalet’s instruction.

Two discrete sets of bones from Feature 20 were analyzed by Dr. Gobalet, catalog numbers 85-31:20-307 and 85-31:20-309. 85-31:20-307 is from the upper level of the pit feature, and 85-31:20-309 is from the lower level and "floor" surface of the feature.

Analysis indicates the presence of local and northern Californian anadromous, freshwater and marine species, along with a few non-local specimens (Table 4). Among the marine fish are rockfishes, silversides, cabezon, and surf perch. Freshwater species include minnows, Sacramento blackfish, Sacramento pikeminnow, and Sacramento perch. Anadromous species are represented by sturgeon and steelhead specimens.

The upper level sample was quite small and yielded only one local genus. In contrast, the lower level sample included a variety of local anadromous, freshwater and marine fish, and also non-local ray-finned fishes (Actinoptergii). Although this last group of fish, the non-local ray-finned fishes, is outside of Dr. Gobalet’s area of

expertise, he mentioned that they may possibly represent “exotic” Asian species (K. Gobalet, personal communication).

Some of the anadromous and freshwater fish may have still been available locally in the San José area in the Guadalupe River or in Coyote Creek in the late 1800s; otherwise these fish are found in the larger San Francisco Bay delta region. Marine fish like the longjaw mudsucker and the silversides may have come from the southern mudflats of San Francisco Bay, but the rockfishes, cabezon and surf perch would have only been found in rocky, kelpy habitats on the coast or possibly in the northern bay (K. Gobalet, personal communication). Nancy Valente points out that the fish assemblage is similar to that found at the site of El Presidio de San Francisco,<sup>10</sup> in that the remains predominately represent small-sized, near-shore and estuary species rather than deep sea species.

These observations are helpful in shedding light on historic fishing practices in the San Francisco Bay Area, which are but one small element in the entire process of how Market Street residents were getting their fish. Were they buying fish from markets or fishing themselves? Was fish bought fresh (local) or preserved (local or imported)? It is intriguing that freshwater and anadromous fish could have been present in local estuaries and streams around San José during the occupation of Market Street, possibly indicating fishing activity amongst the Chinese and other local residents. However, no fishing-related artifacts have been found yet on the Market Street site, so I am hesitant to make any further claims about this possibility. Chinese immigrants were known to fish elsewhere in the Bay Area and throughout California, and a “vast commercial fish

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<sup>10</sup> El Presidio de San Francisco was a Spanish military fort and outpost; dates of occupation ran from the late 18<sup>th</sup> century Spanish period through the 20<sup>th</sup> century American Army occupation.

distribution system” existed (Collins 1987:122-3, 131). Detailed documentary research could indicate the degree to which such fishing communities catered to specifically Chinese immigrants in California, supplying communities such as Market Street with fish.

A common observation in historiographies and in archaeological reports is that Chinese immigrants imported preserved meats, including fish, into California for consumption (Collins 1987:130, Roeder 1996:131, Schulz 2000:26). Because the Actinopterygii are not clearly identified as Asian species, it is difficult to say at this point whether the Market Street site shows a similar pattern of consumption. This would be a good topic for future research.

Table 4. Categorization of fish remains from the Feature 20 assemblage.

Habitat	Taxon	Common Name	Element(s)
Anadromous	<i>Acipenser sp.</i>	sturgeon	cleithrum, branchial element
	<i>Acipenser transmontanus</i>	white sturgeon	scutes
	<i>Oncorhynchus mykiss</i>	steelhead	vertebrae
Freshwater	<i>Archoplites interruptus</i>	Sacramento perch	quadrate, anguloarticular, postcleithrum, vertebrae
	Cyprinidae	minnows	vertebra
	<i>Orthodon microlepidotus</i>	Sacramento blackfish	pharyngeal fragment
	<i>Ptychocheilus grandis</i>	Sacramento pikeminnow	quadrate
Marine	<i>Sebastes sp.</i>	rockfishes	maxilla, premaxilla, opercle, vertebrae, ceratohyal, palatine
	Atherinopsidae	silversides	vertebrae, coracoid
	<i>Scorpaenichthys marmoratus</i>	cabezon	vertebrae
	<i>Amphistichus sp.</i>	surfperch	supraoccipital
	Actinopterygii	ray-finned fishes	vertebrae, supracleithrum, skull fragment, preopercle, numerous other fragments
Other (exotic?)			

### ***Other Vertebrate Remains***

The non-fish faunal analysis is still underway; it is scheduled to be completed in the summer of 2004. A few preliminary observations from Nancy Valente are available, and are summarized below.

To date, analysis has yielded evidence of pig, sheep, chicken, duck, and cat remains in the Feature 20 faunal assemblage. There are at least two individuals represented by the pig remains, including one young individual represented by small and unfused bones. At least one sheep can be positively identified as such, rather than just as a member of the Bovidae family. At least one domestic cat is represented by a mandible. Nancy Valente finds this specimen the most interesting in the assemblage, and has speculated that it could either represent a pet or could have possibly been eaten. There are no cultural modifications to the bone to suggest the latter possibility, but it cannot necessarily be assumed that this means the animal was either a pet or other, non-food animal. Cat remains from the Los Angeles and Riverside Chinatowns demonstrate evidence of cleaver and knife cuts, so there is contemporaneous evidence for the consumption, however minor, of cat in overseas Chinese communities (Langenwelter 1987:73, 87; Greenwood et al. 1996:129).

Butchering marks are present on some of the bones, and are consistent with cleaving. In particular, a number of small pig vertebrae appear to have been separated by cleaver chops, indicating to Valente that this represents small pigs being roasted whole and the butchered post-cooking.

In sum, Nancy Valente has remarked that her findings, to date, are consistent with her expectations for a faunal assemblage from an overseas Chinese site (N. Valente, personal communication).

## **Botanical Remains**

### ***Methodology***

Botanical artifacts from Feature 20, including wood, charcoal, and plant remains, were recovered via two different methods: some were recovered and recorded during excavation in 1985 and others during flotation of soil samples in 2004. In the following section, I will use the designation “macro-botanical” to refer to seeds, pits, and other plant remains only; it will not include the charcoal and wood artifacts.

All of the charcoal, wood, and a few macro-botanicals were recovered in the field or during laboratory processing done by ARS in the 1980s. I cataloged the charcoal and wood, but the macro-botanicals were sent for external specialist analysis.

The majority of the macro-botanical remains from Feature 20 were recovered from a soil sample that had been saved during the 1985 excavation. I processed this 2.5 liter soil sample in a flotation tank in January 2004. Using equipment borrowed from the Presidio Archaeology Lab, this soil sample was processed in a barrel type flotation tank with 1/16” mesh to catch the heavy fraction with a 1/64” mesh-lined bucket beneath the overflow spout to catch the light fraction. After the recovered samples were thoroughly air-dried, faunal remains were removed from the heavy fraction and sent to specialists for analysis. The remaining heavy fraction and the light fraction were then sent to Eric Wohlgemuth and Liz Honeysett of Far Western Anthropological Research Group, Inc.,

for botanical analysis, along with macro-botanicals recovered during the excavation itself.

I also processed one 8 liter soil sample from 85-31 Feature 18; the light and heavy fractions from this sample were also sent to Wohlgemuth and Honeysett for analysis. This additional sample was processed with the intention of generating comparative data for the Feature 20 botanicals; the results from the Feature 18 sample are included in the discussion below.

Given the limitations of funding and time, and the preliminary, exploratory nature of this botanical analysis, I opted to have qualitative ordinal rankings of the macro-botanical samples done instead of full quantitative analysis. This method entailed identification of the remains, but only ordinal ranking of their relative abundance instead of quantitative counts, weights, and other measurements. As a result, the data presented below is largely qualitative, intended to illustrate the types of taxa represented; quantitative data for the macro-botanical remains is not presented. It is also important to note that this method necessarily underrepresents rare taxa and, more generally, underrepresents the diversity of a sample (E. Wohlgemuth, personal communication). Also, because of the lack of numerical data, the results generated by qualitative analysis can be difficult to compare with other data sets (*ibid*). Regardless, this method furnished a data set that was useable within the scope of this project: I have been able to do some intrasite comparison between Feature 20 and Feature 18, and rough intersite comparisons by examining the general characteristics of botanical remains from other Chinese sites in light of the data from Feature 20 botanical remains.

## ***Wood***

One piece of wood in the Feature 20 assemblage is milled lumber attached to hinge fragments; it is discussed in the section below that deals with structural artifacts. All other unburned wood from Feature 20 was generally so fragmented as to not be identifiable as milled lumber or some otherwise altered or processed artifact. As a result, these wood remnants have been classified as botanical artifacts. Ten fragments weighing a total of 1 gram represent the unburned wood in the Feature 20 assemblage (Table 5).

## ***Charcoal***

There are 38 fragments of charcoal weighing a total of 8.2 grams. All burned wood from Feature 20 has been classified as charcoal, regardless of its original use or the process through which it burned. It is important to note that some of this charcoal may not have been intended or used as fuel by the Market Street residents, but may have been an incidental effect of the arson fire that destroyed the Market Street community in 1887.

Table 5. Wood and charcoal from Feature 20.

Artifact Type	Count (fragments)	Weight (g)
Charcoal	38	8.2
Wood, unburned	10	1
<b>Total</b>	<b>48</b>	<b>9.2</b>

## ***Macro-botanicals***

Macro-botanical remains from Feature 20 represent a wide number of taxa, including native and non-native California plants, and both Asian and Euro-American foodstuffs (Table 6). Identified remains include lychee, melon (bitter or winter), walnut, plum, blackberry, fig, watermelon, and grape. Also included in the assemblage are several unidentifiable remains, including one non-native nutshell and one bulb possibly similar to a common native Californian Indian food plant (*Brodiaea*). Blackberry and fig

seeds are the most common remains, both present in the hundreds. However, as individual fruits of these plants may have around 100 seeds each, this does not necessarily signify that significantly more blackberry and fig fruits in this assemblage. The pattern of burning does not seem significant, and as with the charcoal, may be related as much to the arson fire of 1887 or episodes of trash burning as to the cooking or processing of these foods. For example, the burning of the lychee, walnut, plum and watermelon specimens is unlikely to be related to their processing for consumption.

Table 6. Categorization of macro-botanical remains from Feature 20.

Taxon	Common Name	Element(s)	Burnt?	Relative Qty.
<i>Citrullus colocynthis</i>	watermelon	seed fragments	burnt	several
<i>Ficus carica</i>	fig	seeds	unburnt	hundreds
<i>Litchi chinensis</i>	lychee	kernel (whole and fragments), seed coat fragment	burnt	several
<i>Prunus</i> sp.	plum	pit, pit fragments	burnt	2
<i>Rubus</i> sp.	blackberry	seeds	unburnt	hundreds
<i>Vitis vinifera</i>	grape	pits	unburnt	a few
<i>Juglans hindsii</i>	black walnut	shell fragment	burnt	2
<i>Momordica charantia</i>	bitter melon	seed	unburnt	2
Unidentifiable, possible native Californian		bulb or tuber	burnt	several
Unidentifiable, not native Californian		nutshell	burnt	1
Unidentifiable		seed fragments	burnt	2
Unidentifiable		nut kernel	burnt	3

The macro-botanical assemblage from Feature 18 (Table 7) has some commonalities with that of Feature 20. Large numbers of blackberry seeds, and the presence of walnut, grape, and watermelon are common to both assemblages. However, Feature 18 does not have melon, plum, or fig remains. It has instead olive, rice, wheat, beans, gingko, Sunflower family, and Fabaceae family resented. The pattern of burning is more easily related to food processing, especially with regard to the bean, rice, and



wheat remains. However, some burning may be incidental and unrelated to food consumption, as is likely the case with the watermelon seed, and possibly with the olive and gingko as well. The Feature 18 data enlarges our knowledge of Chinese foodstuffs and botanicals used in the Market Street community (gingko and rice, along with lychee and bittermelon), and also demonstrates the need for a more complete processing and analysis of macro-botanical materials from the site in order to further flesh out the picture of food consumption in the Market Street community.

Table 7. Categorization of macro-botanical remains from Feature 18.

Taxon	Common Name	Element(s)	Burnt?	Relative Qty.
<i>Citrullus</i>	watermelon	seed fragments	burnt	3
<i>colocynthis</i>			unburnt	1
<i>Gingko biloba</i>	gingko	kernel	burnt	1
		nutshell	burnt	3
<i>Juglans regia</i>	walnut	shell	unburnt	a few
<i>Olea europaea</i>	olive	pit	burnt	1
<i>Oryza sativa</i>	rice	grain	burnt	a few
<i>Rubus sp.</i>	blackberry	seeds	unburnt	hundreds
<i>Triticum aestivum</i>	wheat	grain	burnt	1
<i>Vitis vinifera</i>	grape	pit	unburnt	1
Asteraceae	sunflower family	achene (seed) fragment	unburnt	1
unidentified Fabaceae	bean, possibly edible	bean	burnt	3
unidentified Fabaceae	inedible, probable weed	seeds	burnt	a few

The analysis of macro-botanical remains presented here enhances our understanding of food practices and food consumption in the Market Street community, complementing the knowledge gained from faunal analysis and other food-related interpretation presented in this paper. Equally importantly, however, it demonstrates that flotation and processing of the remaining soil samples from the excavation is a productive endeavor capable of generating large amounts of useful data, which bolster

the assemblage and foster an expanded interpretation of the practices and choices of the Market Street community.

### **Structural Artifacts**

A small number of the artifacts from Feature 20 are building materials from architectural structures or furnishings. Unfortunately, due to the fragmented, poorly preserved nature of these artifacts, few substantial interpretations can be made from their analysis. Metal artifacts in particular are badly preserved, even the most robust pieces; all metal artifacts are highly fragmented and corroded. Heavy seasonal rains in the Bay Area and the proximity of the site to a permanent source of water (the Guadalupe River) contributed to post-depositional wetting of these materials with the effect that many are rusted or patinated beyond identification. In addition to metal, there are structural artifacts composed of ceramic, glass, and plaster. The data are summarized below in Table 8.

### ***Nails***

A number of nail fragments are present in the assemblage, and although all are heavily corroded, the manufacturing method can be determined for some (Figure 14). There are at least eight cut nails, and at least five additional nails of indeterminate manufacture, for a total MNI of 13 nails. This MNI calculation is based on the number of identifiable nail heads, but is quite likely much lower than the actual number of nails represented in the assemblage. Unfortunately, due to the poor preservation of metals as mentioned above, the extant nail pieces are too fragmented to establish accurate counts.

Nail shaft lengths range from 3.3 cm (the smallest nearly whole [over 75% complete] specimen) to 4.5 cm (the longest) in length.

### ***Washers***

Two metal washers are present, one made of copper alloy and one made of lead. The copper alloy washer measures just 1.3 cm in diameter, with a round hole in the center. The lead washer measures 2.3 cm in diameter. The original shape of the center hole is difficult to determine because it has been damaged by an identification tag looped through the hole during earlier laboratory processing. Both washers are still nearly whole, with at least 75% of the original object remaining.

### ***Hinge***

Fragments of one copper or copper-alloy hinge are present, still attached to parts of a wooden beam (Figure 15). The largest intact portions of the hinge measure 3.9 by 3.3 cm; a number of other fragments have broken off of the artifact (probably post-excavation). The pieces of lumber to which the hinge is attached are the only substantial wood artifact in the Feature 20 assemblage<sup>11</sup>, and measure between 5 and 8 cm long, and as much as 3.6 cm wide and 2.2 cm deep.

### ***Window Glass***

Window glass from at least one window is represented by 18 sherds of clear, flat glass weighing 69 grams total.

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<sup>11</sup> Other pieces of wood exist in the Feature 20 assemblage, but these have been categorized under botanical remains because they are not positively identifiable as lumber or otherwise processed wood.

### ***Brick***

There is one fragment of a brick, measuring approximately 10 cm long by 5.8 cm wide by 4.5 cm high. Approximately fifty percent of the brick is present, and none of the remaining surfaces indicate any embossing or other marks.

### ***Structural Ceramics***

*Earthenware.* Three coarse, curved earthenware sherds have been tentatively identified as either roof tile or sewer pipe fragments. Their surfaces have eroded, and it is difficult to determine the nature and extent of their original surface treatment. They represent at least one artifact.

*Porcelain.* One piece of industrial porcelain was recovered from Feature 20. It is a circular object approximately 2.8 cm in diameter with a 1.3 cm hole in the center, tentatively identified as a socket or insulator.

### ***Plaster***

A tiny fragment of plaster measuring 1.1 cm by 0.8 cm was recovered from Feature 20. It is either unpainted or the decoration has disintegrated.

Table 8. Structural artifacts from Feature 20.

Artifact Type	MNI	Count (fragments)	Weight (grams)
Cut Nail	8	22	33.3
Nail	5	12	20.4
Washer	2	2	3.1
Hinge	1	57	48
Window Glass	1	18	69
Brick	1	1	275
Earthenware	1	3	132.2
Porcelain	1	1	4.9
Plaster	1	1	0.2
<b>Total</b>	<b>21</b>	<b>117</b>	<b>586.1</b>

## **Clothing-Related Artifacts**

In photographs contemporary with the occupation of Market Street, Chinese immigrants in the Bay Area can be seen wearing both Western and traditional Chinese garments (i.e. Young Yu 2001:26, 40, 65, 67). Hence, it is likely that occupants of the Market Street Chinatown also wore a variety of Chinese and Euro-American dress, a fact which seems to be supported by the material remains from Feature 20. Clothing-related artifacts include buttons, shoes, and textile fragments (Table 9).

### ***Buttons***

Two types of buttons are found in the assemblage (Figure 16). More common are porcelain buttons of Euro-American origin, of which there are twelve whole specimens in the Feature 20 assemblage. These range in size from 0.9 cm to 1.7 cm in diameter. Eleven buttons have four holes, and one button has two holes. All twelve buttons are white colored with smooth surfaces.

The other type of button found in Feature 20 is of Chinese origin. There is one whole specimen in the assemblage. As opposed to the flat, multi-holed Euro-American buttons, this type of button is comprised of a round ball (approximately 1 cm in diameter) with a small loop affixed to it. This loop would have been used to attach the button to the garment. The example in the Feature 20 assemblage is made of copper or a copper-alloy, and is heavily patinated. This button compares favorably with the “Chinese-style” buttons found at the Woolen Mills Chinatown (Allen et al. 2002:175) and the Riverside Chinatown (Noah 1987:400).

### ***Footwear***

Sixty-seven footwear fragments were recovered from Feature 20; they are all leather shoes or boots with wooden soles and either copper alloy and/or ferrous hardware (nails, etc.) (Figure 17). The shoes are in varying states of preservation, from whole soles with partially intact leather uppers to highly disintegrated, corroded and burned fragments. At least four shoes are represented in the assemblage by four complete (intact or reconstructable) soles, including the wooden outsole and leather insole. These range in length from 20.5cm to 23cm, although most of the soles are warped, resulting in an inaccurate (shorter than original) length. The shoes range from 7cm to 9cm in maximum width (across the instep). Additional shoe fragments, including heavily burned and fragmented pieces, may belong to one of the identifiable MNIs.

### ***Textiles***

There are four surviving remnants of black cloth in the Feature 20 assemblage. The largest of these measures approximately 8.7 cm by 4.8 cm. While there are variations in the coarseness of the preserved fabrics, the specimens are too disintegrated to discern much about the garments they came from. One can simply say that they represent at minimum one article of clothing. In support of this analysis, the original ARS catalog for one of the fragments mentions that the more finely woven fabric may be a lining for coarsely woven fabric. Essentially, while a difference in fabric coarseness could indicate multiple garments, the fabrics might simply have been component parts of one original garment. With the poor state of preservation of the textiles in Feature 20, it is impossible to make finer distinctions.

Table 9. Clothing-related artifacts from Feature 20.

Artifact Type	MNI	Count (fragments)	Weight (g)
Button – Euro-American	12	12	7.7
Button – Chinese	1	1	0.5
Shoe/Boot	4	67	609.9
Textiles	1	4	4.6
<b>Total</b>	<b>18</b>	<b>84</b>	<b>622.7</b>

Although the clothing remains from Feature 20 are highly fragmented and poorly preserved, it seems probable that they represent both traditional Chinese clothing (the copper button) and Euro-American clothing (the ceramic buttons and the footwear). Unfortunately, the lack of actual preserved garments prevents us from saying more about clothing from an archaeological perspective. Historical photographs continue to be a better source for examining the clothing styles and choices of Chinese immigrants in the late 19<sup>th</sup> century.

### Opium-Related Artifacts

Ingested in a variety of forms, opium was a relatively common substance in the United States during the late 19<sup>th</sup> century. The stereotype of opium use is the opium den where opium was smoked, but less well-known is that opium was a common element in patent medicines of the time. This section deals with artifacts related to the practice of opium smoking.

There are many prejudices involved in writing about historic drug use, whether it is opium, alcohol, or any number of other substances. Opium use, in particular, tends to be highly stigmatized, partly because stereotypes are caught up in the larger problem of ethnical and racial stereotyping of Chinese immigrants (Williams 2003:3). I have tried to present this analysis of opium-related artifacts in as factual and clear a manner as possible

to avoid the prejudices that often characterize studies of Chinese opium consumption. Findings are summarized below in Table 10.

### ***Pipe Bowls***

Pipe bowls were one part of the complex opium paraphernalia that also included a bamboo or wooden pipe, an opium lamp or other heat source, and opium needles (for holding and heating the opium). Heated opium would be placed on the pipe bowl once warm, and from there would be heated further, allowing the opium smoke to escape and be channeled up the wooden or bamboo pipe into the smoker's mouth.

Pipe bowls were generally identified as such in the original lab catalog from ARS. They include a number of earthenware and stoneware fragments and several different styles (Figure 18). At least five individual pipe bowls are present in the collection. This figure was calculated by considering vessel material and morphology.

### ***Opium Lamps***

Glass opium lamps, used to heat opium until it smoked, consist of a lamp base, oil reservoir, reservoir cover, wick, and lamp cover. All artifacts but the wick have been recovered archaeologically (Greenwood et al. 1996, Allen et al. 2002). Materials in the Feature 20 assemblage include one partial oil reservoir, one partial oil reservoir cover, and three partial opium lamp covers, for a total MNV of three opium lamps (Figure 19). The oil reservoir and cover are represented by only one piece each of clear glass. Four sherds of clear glass have been positively identified as opium lamp covers by examining specimens from the Los Angeles and Riverside Chinatowns (Wylie and Higgins 1987:331, Greenwood et al. 1996:98, Chinese Historical Society of Southern California Digital Archive). The MNI for opium lamp covers was calculated by examining artifact



form/morphology: two sherds share the same diameter and thickness and are distinct from the remaining two sherds, which are of two distinctly different styles.

### ***Opium Tins***

Six copper fragments from the Feature 20 assemblage have been identified as belonging to one opium tin (Figure 20). The tin is highly fragmented and not reconstructable, but must have measured at least 3.5 by 2.5 cm, by 1.4 cm thick based on measurements of extant pieces.

Table 10. Opium-related artifacts from Feature 20.

Artifact Type	MNI	Count (fragments)	Weight (g)
Pipe bowls	5	13	130.8
Opium lamps	3	6	58.1
Opium tin	1	6	13
<b>Total</b>	<b>9</b>	<b>25</b>	<b>201.9</b>

The opium tin and lamp fragments discovered during cataloging and analysis of the Feature 20 materials are the first to be noted in the site, although others certainly exist (Williams 2003:7). To date, no opium lamp bases or wooden or bamboo pipes have been recovered from the Market Street site.

### **Health-Related Artifacts**

Health-related artifacts from the Feature 20 assemblage include medicine bottles and vials and toothbrushes. A mix of Chinese and Euro-American bottles and toothbrushes were found, indicating that Market Street residents likely mixed traditional and new health practices. The data are summarized in Table 11.

### ***Medicine Bottles***

One complete bottle and four bottle fragments from Feature 20 have been identified as medicine bottles (Figure 21). One bottle is whole, two other fragments are over 90% complete with only the upper neck and finish broken off, and the two remaining fragments likely represent the neck, shoulder and base of a single bottle. Of these four identified vessels, one is a patent medicine bottle, two are Chinese medicine vials, and one is of indeterminate form.

The patent medicine bottle is complete, with a cork and wax seal still extant. Made of transparent aqua glass, it measures 12.8 cm high. The octagonal, paneled body measures 4.3 by 2.7 cm. There is no engraving, embossing or other marking on the bottle, so unfortunately nothing can be discerned about the original manufacturer or pharmaceutical company.

The two Chinese medicine vials are of the same form. They are both made of translucent aqua glass, and taper gently from the shoulder to the base. They have thick sides and interior cavities which follow the contour of the exterior form (albeit irregularly). This is in marked difference to some Chinese vials wherein the exterior form of the bottle is simply shaped around a tubular core (cf. Greenwood 1996:111). The more complete specimen, which is broken at the upper neck, measures 4.2 cm high, with a body that measures 1.7 by 1.3 cm at the widest point (the shoulder).

The indeterminate bottle is somewhere between the patent medicine bottle and the small medicine vials in terms of morphology. It is octagonal in cross-section like the patent medicine bottle, but does not have clearly paneled sides. Also, its manufacture is less refined than the patent bottle and more similar to the medicine vials: thick-walled

with a rounded, irregular interior cavity, and less sharply defined elements and inflection points. This bottle measures 2.8 cm wide by 1.9 cm deep across the body, and 6.7 cm high. The finish and upper portion of the neck have been snapped off. The bottle contains a solid, dark-colored substance, although it would require further testing to determine what this material is.

### ***Toothbrushes***

Toothbrushes and toothbrush fragments were among the health and hygiene-related artifacts recovered from Feature 20 (Figure 22). Toothbrushes of modern design have been in use in China for over 500 years, although in Europe they were not adopted until the mid 18<sup>th</sup> century (Greenwood 1996:115). Eight bone toothbrush fragments were recovered from Feature 20, representing at least five individual toothbrushes. This MNI figure was based on the handles, and considered completeness (3 whole handles) and artifact morphology (shape and size). Three of the total 8 fragments are burned; however, this burning was not considered in establishing the MNI, as it is a post-depositional effect which could have differentially affected portions of the a single, fragmented artifact.

Following Roberta Greenwood's classification of toothbrushes by ethnic origin, one specimen from Feature 20 is of a European or Euro-American style, three are of a Chinese style, and one is of indeterminate origin (1996:115-16). It is unclear where these artifacts were actually manufactured however, and, although I have used it as a guide for identification, the origin of these artifacts is not necessarily the most important facet of their significance.

The single Euro-American toothbrush exhibits four rows of bristle holes, which do not penetrate to the reverse side of the head. This coincides with Greenwood's description of European toothbrushes (1996:116). The nearly complete artifact, composed of two reconstructable fragments, measures about 16 cm long.

The three Chinese toothbrush examples are characterized by bristle holes which penetrate through to the reverse side of the head, where they are marked over by incised lines running the length of the brush (Greenwood et al. 1996:115). Greenwood points out that this feature would have allowed the bristles to be replaced as necessary (ibid: 115). Where the full width of the head is present, all examples have five rows of bristles and lines. The one fully intact Chinese toothbrush measures 14.4 cm long. Two of the Chinese handles are engraved with the same pattern of three small circles with a dot in the center, found at the top of the handle, just beneath the head of the brush. All three of the handles also have holes at the end.

The final toothbrush is the end of a handle of an unidentified style, and is unusual in that it is semi-ovoid in cross section with one curved side and one flat. This is in stark contrast to the other handles found in Feature 20, all of which are fully ovoid in cross-section. However, toothbrushes recovered from other 19<sup>th</sup> century urban sites exhibit a wider degree of variation in morphology than the examples from Feature 20 (Greenwood et al. 1996:115-16), thus it is not altogether eventful that one of the handle cross-sections is so different from the others.

Table 11. Health-related artifacts from Feature 20.

Artifact Type	MNI	Count	Weight
Toothbrush, European	1	2	13.5
Toothbrush, Chinese	3	5	28.5
Toothbrush	1	1	4.7
Patent Medicine Bottle	1	1	90.3
Medicine Vial, Chinese	2	3	27.2
Medicine Bottle	1	1	24.7
<b>Total</b>	<b>9</b>	<b>13</b>	<b>188.9</b>

## Material Culture

The following section contains descriptions of a variety of artifacts including writing and gaming implements, furniture fixtures and figurines, basketry and machinery: in short, various remnants of the material culture of the Market Street Chinatown community.

### *Writing Implements*

Two artifacts related to writing were recovered from Feature 20 (Figure 23). A small (4.5 mm diameter, 4.2 cm long) slate rod weighing 1.6 grams was a part of a pencil or other writing tool. Fragments of a shallow stoneware dish with a black stain in its center have been interpreted as a possible ink grinder.

### *Gaming*

There is one game piece in the Feature 20 assemblage: a dark ceramic disk measuring 1.2 cm in diameter (Figure 24). This piece, a Chinese zhu, would have been used as a counter for fan tan and other gambling games. Similar pieces are common to Chinatowns and overseas Chinese sites throughout the West (see Mueller 1987:387, Greenwood et al. 1996:94, and Allen et al. 2002:133), and are found in at least eight other features in the Market Street assemblage (Camp 2004:19).

### ***Pendants***

There are two pendants in the Feature 20 assemblage (Figure 25); whether these were jewelry or some other type of decorative element is unknown. One piece is diamond-shaped, measuring 2.9 cm by 3.0 cm with a hole at one end; it is made of bone and weighs 4.3 grams. The other piece is an oval measuring 1.9 cm by 3.2 cm, with a hole in one of its short ends; it is made of cupric metal and weighs 3 grams. Both pieces are complete except for breakage where the material between the hole and the edge of the artifact has worn thin.

### ***Figurine***

A ceramic sherd in the form of a crab claw is all that remains of what was presumably a crab-shaped figurine (Figure 26). The piece measures 4.9 cm long, and weighs 19.1 grams. It was manufactured by piece-molding, and its surface was treated with a dark green glaze. It is unknown whether the original artifact this sherd came from was purely decorative in nature, or if it was some sort of decorated vessel which had a functional use.

### ***Fixtures***

A small porcelain object has been identified as a drawer or door pull, and was probably affixed to a cabinet or household fixture (Figure 27). It measures 2.7 cm in diameter and 1.8 cm high; a circular hole runs through its center.

### ***Basketry and related artifacts***

There are a number of basketry fragments and related objects (handles and other hardware) in the Feature 20 assemblage (Figure 28). Two groups of fragments contain metal handles and circular metal loops (possibly ornaments, handle attachments, or

functional handles in their own right) and also some fibrous, woven material easily identifiable as basket remnants. Two other groups of copper hardware have visible remnants of organic remains on their surface; these are assumed to be traces of basketry. A third handle so similar to those directly associate with basketry and/or organic remains as to be included here. This last example includes a handle that measures 17 cm long and two circular attachments (where the handle would have attached to the vessel) or ornaments, measuring 2.1 cm and 2.9 cm in diameter. The form and function of these baskets is difficult to determine because so little of the original objects remain. However, they were probably functional (as opposed to purely decorative), because the associated metal handles and hardware appear robust enough to have borne weight.

### ***Bottles***

Sixteen sherds of glass were identifiable as bottles which were neither alcohol nor medicine related. At least five individual bottles are represented by these sherds; this count was based on glass color and bottle morphology (Figure 29).

One robust specimen is represented by two aqua colored sherds weighing 115 grams total. One is the complete one part finish (flattened side-lip); the other is a fragment of the base with a portion of the push-up present. The vessel opening at the finish is 2.7 cm in diameter, and the glass is 1 cm thick its thickest point. Two other complete finishes are present: a clear, flattened side-lip finish, and a clear, straight finish with a fire-polished lip. Two aqua body sherds are present: a fragment of a rectangular, paneled bottle, and from a different vessel, a curved body sherd (bottle form unidentifiable) with a seam running the length of the sherd. With the exception of the

large bottle, whose original function is unknown, the bottles are most likely condiment bottles, although they could also be cosmetics bottles.

### ***Glass Vessels and Objects***

Fragments of at least five other glass objects were recovered from Feature 20, although the original objects are so minimally represented by extant sherds that it is difficult to determine their form (Figure 30).

One dark blue fragment appears to be the base of a large vessel – possibly a food-related vessel, but more likely a decorative item such as a vase. This sherd weighs 51 grams, and measures 2.5 cm high and 9 cm in diameter.

Two different vessels with scalloped edges are represented by a few rim sherd fragments. In both vessels, the scallop effect was created by pinching the edge of the rim inwards while the vessel was still hot. Both vessels appear to be hollow rather than flat objects, but it is difficult if these are hollow tablewares or perhaps related to electrical or lighting devices. However, similarly scalloped edges are seen on a variety of 19<sup>th</sup> century tableware, although these usually appear to be molded rather than pinched scallops (cf. with vessels in Van Tassel 1950, Kovel and Kovel 1990). I was unable to track down a specific reference to vessels manufactured in this latter way, and the sherds in the Feature 20 do not represent enough of the original vessels to be more specific in their description.

Three other fragments appear to represent two different glass tubes or bottle necks. All three sherds are plain and uniformly circular. Two measure 1.7 cm in diameter, and one measures 0.8 cm in diameter. Both objects are made of clear glass.



### ***Dowel***

Fragments of a 6.5 mm diameter dowel were recovered from Feature 20. These pieces may represent a chopstick, a personal adornment such as a hair stick, or some other object. Unfortunately, the six extant pieces are so small and heavily burned that it is difficult to make out their original function.

### ***Metal Strapping***

Thirteen pieces of metal strapping in various widths (0.7 cm to 1.9 cm) were recovered from Feature 20. Strapping is made of both ferrous and cupric metals; the ferrous examples tend to be thicker (3.7 mm thick) than the cupric pieces (1.9 mm thick). Original uses for this strapping could have varied from functional (i.e. as a lashing for furniture or for objects such as barrels) to decorative. One piece of thin copper strapping in particular appears to have been decorative; it is so thin (measuring only 3 mm thick and 1 cm wide) as to have had little tensile strength. One diminutive tack (1.2 cm long) piercing this strapping is preserved. The other strapping has no indication of how it was attached to other objects.

### ***Machinery***

One large iron artifact has been identified as a piece of machinery, although its original function is unknown (Figure 31). A long shaft extends approximately 35 cm from the body of the artifact, which is comprised of two identical pieces approximately 25 cm in width. These two pieces would have originally been rotating or otherwise moving implements. The original ARS catalog inventory of this artifact suggested that it was either an “iron valve assembly” or “steam engine part,” neither of which appears to be correct or meaningful interpretations. Unfortunately, the artifact is heavily rusted and

likely incomplete; attempts at identification have been fruitless thus far. This piece could have come from any type of machinery: a wagon or carriage, farm equipment, or other industrial machinery.

### **Non-Diagnostic Artifacts**

Some artifacts from Feature 20 were either non-diagnostic or were otherwise unidentifiable. Common examples of possibly diagnostic but unidentifiable artifacts include metal objects so heavily corroded little could be told of their original form. A number of these artifacts are possibly identifiable given the correct equipment (i.e. X-ray or electrolytic tank). Unfortunately, these types of analysis were outside the scope of my thesis project. A total of 93 fragments weighing 2343.1 grams make up this non-diagnostic category.

The bulk of that weight is a large ferrous object that is currently unidentified; it weighs 1900 grams, or 81% percent (by weight) of the non-diagnostic material. The original ARS catalog identified it as an “iron bowl,” yet this seems incorrect upon current inspection of the artifact. Upon attempting to remove this artifact from its packaging (plastic bags), it became apparent that the bags would have to be cut open around the artifact to prevent damage to it. With the artifact laying on a tray and the bags cut open, it became obvious that the artifact was in a very unstable state of preservation; the plastic bags had essentially been holding the artifact together for twenty years. Consulting with Dr. Voss, I decided to remove the wrapping completely, and to disassemble and lay out the fragments of the artifact. This process is shown in Figures 32-36. There was, in fact, not one artifact but many: corrosion from the large ferrous object had incorporated a

number of other artifacts, including nails, earthenware sherds, a seed, and non-diagnostic ferrous scrap. (These artifacts were removed and cataloged separately, and are discussed elsewhere in this paper as appropriate.) The large ferrous object was found to be in nine pieces (Figure 36). While it was seemingly once a hollow object, to go as far as calling it a bowl seems unsupported; some of the surfaces have depressions and other elements that appear more related to machinery or equipment, although this identification is also tentative.

The other non-diagnostic artifacts include small fragments of ceramics, ferrous and cupric metals, glass, and unidentifiable material.

Three stoneware and two earthenware sherds, weighing a total of 9.8 grams, are non-diagnostic, identifiable only to waretype.

Non-diagnostic ferrous and cupric scrap metal (including some composite where corrosion engulfed other materials) accounts for 348.8 grams (15%) of the non-diagnostic material. Most of this scrap is in small fragments, and could be candidates for discard should MSCAP ever decide to record and discard some materials. A few fragments retain some evidence of their original form, but are small and highly corroded, effectively disabling their identification.

Two metal artifacts are unidentifiable given their current state of preservation, but are possibly diagnostic with appropriate analysis. One ferrous object is completely covered in corrosion, and might be identifiable using X-ray technology. It weighs 37 grams. A cupric object, also heavily corroded, might be identifiable if the patination could be removed. It is hollow and measures 4.7 cm high by 2.7 wide by 1.9 cm deep,

with a hole in one end and on one face; it weighs 31 grams. These two objects together make up 3% (by weight) of the non-diagnostic/unidentifiable artifacts.

Glass fragments make up less than 1% of the non-diagnostic artifacts (by weight). Two small, clear, curved sherds are non-diagnostic, although they could be a part of an opium lamp. They weigh 0.9 grams combined. A larger curved sherd with molded ribbing on its exterior surface exhibits no diagnostic features that would help identify the original object it came from or its original function. This sherd weighs 13 grams.

One tiny fragment of leather (weighing less than 0.1 gram) could possibly have come from a piece of footwear, although this cannot be determined by contextual information.

One fragment weighing 2.5 grams is of an unidentified material and is non-diagnostic. The original ARS catalog refers to it as “plaster,” but this is incorrect – the material is actually much harder than plaster.

### **Missing Artifacts**

Unfortunately, eleven artifacts that had been recorded in the original ARS catalog could not be located during lab processing in 2003 and 2004. Summaries of the original descriptions are given below, however these artifacts have not been taken into consideration in the current research, given the inconsistencies between the results of current cataloging and the original cataloging in the 1980s.

One Chinese coin, one opium pipe bowl, one “Chinese plate,” two gaming pieces (presumably zhu disks, one “light” and one “dark”), one bullet casing measuring 7/16” in diameter, one hollow metal fragment (“handle?”), one celadon fragment, one batch of

“China button” fragments, tin fragments, and one batch of burned “wood (bamboo) chopstick” fragments are missing.

I can only speculate as to the reasons these artifacts are missing. Some may not have been found when aggregating all of the Feature 20 materials, and may be located as cataloging of the total collection is completed. Another possibility is that some of the artifacts may be on display at the Ng Shing Gung museum exhibit in History Park, San José. Some artifacts, unfortunately, may simply be missing from the collection. For example, another researcher writing on the gaming pieces from the Market Street Chinatown was also unable to find the some zhu disks from other features in the collection (Camp 2004:28). Fortunately, 11 artifacts out of a total of 316 cataloged artifacts means that only 3.5 % of the assemblage is missing.

## **INTERPRETATIONS**

The following section presents a number of interpretations based on the findings from laboratory analysis of the Feature 20 assemblage. These interpretations enhance our understanding of the Market Street community – in particular their material culture and food practices – but also give insight to the archaeological process and its effects on this particular assemblage. Four sections are presented below: economic scaling, stratigraphic interpretation, comparative research, and future research direction.

The section on economic scaling explores the historic value of ceramics from the Feature 20 assemblage, with the intent of investigating the economic profile of the Market Street community, insofar as it is ascertainable in the archaeological record.

The section on stratigraphic information examines the vertical arrangement of

artifacts within Feature 20 with two goals in mind. The first is to see whether any depositional patterning or particular relationships between artifacts are visible given the nature of data recorded. The second goal is to shed some light on ARS's methodology and on the quality and applicability of extant provenience information.

Comparative research on other urban Chinatown sites was undertaken with the goal of comparing and contrasting the Feature 20 assemblage with data from published archaeological reports. This allowed me to make a number of generalizations about the overall character of the Feature 20 assemblage, and also shed light on the ways in which the post-depositional history of this feature affected the recovery and condition of artifacts from it.

Finally, the section about future research directions pinpoints areas of research that would generate fruitful results, as well as those which would clarify some of the topics and interpretations that have been preliminarily explored in this paper.

### **Economic Scaling**

The socioeconomic status of the Market Street residents is an interesting question, as it has often been inferred that this urban Chinese population was more well-to-do than the rural, agricultural population (e.g. Young Yu 2001:22-24). Investigating the value of the food-related ceramics from Feature 20 provides a way to interpret the buying power of the Market Street community. This study of economic scaling looks at both Asian and Euro-American ceramics in the collection, although the available pricing information for each group is very different, leading to several interpretive problems which I explain in more detail below. This investigation makes use of data, classificatory schemes and arguments presented in Sando and Felton's article *Inventory Records of Ceramics and*

*Opium from a Nineteenth Century Chinese Store in California* (1993), and also in George Miller's articles *Classification and Economic Scaling of 19<sup>th</sup> Century Ceramics* (1980) and *A Revised Set of CC Index Values for Classification and Economic Scaling of English Ceramics from 1787 to 1880* (1991).

Sando and Felton discuss ceramic inventories from the Kwong Tai Wo Company, a general store in northern California; these inventories date from the period between 1871 and 1896 (Sando and Felton 1993:152). Pertinent data for this study includes the relative amounts of different waretypes and vessel forms that were being sold in addition to the price of such objects. Based on the average annual wholesale value per vessel for “rice bowls,”<sup>12</sup> they argue that Four Flowers and true Celadon (“winter green”) were expensive wares, costing between 6.5 and 8.7 cents per bowl, and Bamboo bowls were cheap, costing between 2 and 5 cents per vessel (Sando and Felton 1993:163). The authors also make a generalization about the distribution of decorative types by site, mentioning that, “the cheaper Bamboo bowls constitute up to 80 percent of the Chinese tableware on a 1880s railroad camp and other... rural construction and mining sites (e.g., Briggs, 1974), while the Winter Green (Celadon) vessels are more common on many... village and urban sites” (Sando and Felton 1993:165).

One would therefore expect that the Market Street Chinatown assemblage would contain a predominance of Celadon and Four Flowers vessels because of the relative affluence of its residents. By total tableware MNV count, Four Flowers and Celadon make up 43% of the tableware from Feature 20, but Bamboo makes up just 12%. Thus the ratio of expensive to inexpensive Asian ceramics is 3.6 to 1. This is in marked

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<sup>12</sup> Sando and Felton's “rice bowls” are the equivalent of MSCAP's “medium bowl” category.

contrast to the pattern that Sando and Felton give for rural sites, where over 80% of the total tableware was of the cheaper Bamboo pattern.

However, when one analyzes just the ratios amongst medium bowls, a different picture appears. In the Feature 20 assemblage, medium bowls in the Bamboo style account for 58% percent of the total MNI of medium bowls; together, Celadon and Four Flowers make up the remainder. This is similar to the pattern found by Allen et al. at the Woolen Mills Chinatown site, and they reach the conclusion that this finding “produced the reverse of what one would expect from a permanent, urban settlement” (2002:136).

This begs of the question of which of these figures are significant and which comparisons are the important ones to make. While some would argue that you must compare like with like (i.e. only medium bowls with medium bowls), this is complicated by the fact that Bamboo ware was only produced in a single vessel form. I would argue against the conclusions that Allen et al. draw, and argue that it is instead important to examine all of the Asian ceramic tableware together. In this way, we see that cheap Asian wares account for only 19% of the total Asian tableware, and only 12% of the total tableware. This last figure is indicative of a vastly different economic situation than the 80-plus percent of cheap Asian tableware that Sando and Felton describe for rural sites.

Turning to the Euro-American ceramics was potentially a way to clarify the economic scaling of the Feature 20 assemblage. However, problems including a very small (only 9 MNV), highly fragmented assemblage and the ensuing incompatibility between the assemblage and Miller’s data resulted in a study that was only able to provide a few qualitative notes about relative pricing. It did not, unfortunately, clarify the economic scaling of this deposit.



The nine vessels of Euro-American tableware include two undecorated vessels, one edgeware vessel, one hand painted vessel with a floral design, three transfer prints (one blue and two black), a decorated redware and a decorated porcelain vessel. These last two vessels are left out of the following analysis, since they do not easily fit within Miller's rubric of ceramic indices. To summarize Miller's findings very generally, he demonstrates that 19<sup>th</sup> century ceramic prices fell along a spectrum where undecorated creamwares (often identified as whitewares archaeologically) were the cheapest and transfer printed vessels were the most expensive (other than porcelain and a few other waretypes not included in the Feature 20 assemblage). Simple hand painted vessels were more expensive than undecorated vessels, and skilled hand painted vessels were more expensive than simple hand painted vessels, but less expensive than transfer print vessels (Miller 1980:3-4, Miller 1991:5-9).

Unfortunately, actually employing Miller's ceramic indices and his formula requires knowledge of the vessel form. The Feature 20 Euro-American tableware assemblage is so fragmented that it is impossible in all except two cases to identify the exact vessel form beyond flat- or hollow-ware. For three vessels, identification to this stage is not even possible. Despite this, I believe one can use the general knowledge of the value of different waretypes to flesh out a highly qualitative description of the value of the Euro-American tableware assemblage. Four of the vessels fall into expensive categories (transfer prints and skilled hand painted vessels), and three of the pieces fall into inexpensive categories (undecorated white- or creamware and edgeware).

Based on the economic scaling of both Euro-American and Asian tablewares, the following picture appears: 46 individual vessels are identifiable as tableware in the

Feature 20 assemblage. Of these 46, 29 vessels (63%) can be classified as relatively expensive wares, 10 vessels (22%) can be classified as relatively inexpensive wares, and 7 vessels (15%) do not contribute to our economic scaling at this point in time. This appears to indicate a high value for the tableware assemblage, and can be interpreted as a marker of the relative affluence of the Market Street community compared with other overseas Chinese communities.

However, the interpretation is not this simple. The Market Street population was sizeable and diverse, including both unskilled laborers such as cooks and laundrymen and more affluent store owners and merchants (Young Yu 2001:24), some of whom may have accrued enough wealth to travel back and forth to China, or to bring their wives and families to California. Also, recall that in addition to supporting this large resident population, Market Street was a gathering place for the thousands of Chinese agricultural workers in the Santa Clara Valley. This population was also economically diverse, ranging from laborers to sharecroppers. Therefore, although the average value of the ceramic assemblage is higher than that of rural overseas Chinese sites, this is not due to a homogenously affluent population but rather a mix of wealthy and less wealthy individuals.

Bamboo and other medium bowls were probably owned by individuals such as unskilled laborers and agricultural workers. In contrast, more expensive vessels, including whole tableware sets (Figure 9), were probably owned by more affluent individuals or households. A mix of differently priced vessels could have ended up in the Feature 20 deposit a number of ways. Stores were known gathering places where many people of varied economic backgrounds might have come to eat (Young Yu 2001:22, 63);

Feature 20 was located near several known historic stores. Furthermore, given the nature of urban environments, it is likely that artifacts could have been deposited in Feature 20 by many different individuals.

In the future, doing similar exercises for other features within the site will allow some intra-site interpretation of economic patterning to be developed, and will expand and bolster the interpretations presented here. Particular attention should be paid to assemblages with highly intact Euro-American ceramics, as these would allow Miller's ceramic indices to be applied in a quantitative rather than merely qualitative fashion. The data are too limited at this point to make more concrete observations about the consumer profile of the Market Street residents; the interpretations presented must be qualified by the small size of the assemblage and on the unknown relationship of the assemblage to the entire site.

### **Stratigraphic Analysis**

The following section presents the findings of a stratigraphic analysis of the Feature 20 assemblage. Most artifacts from the assemblage had some provenience information in addition to their association with Feature 20, although such notations followed no standardized pattern and the information contained in them was minimal at best. As such, the main goal in undertaking this analysis was to explore the meaning of these notations and whether incorporating them into artifact analysis contributes anything significant to our understanding of the collection. Stratigraphic interpretation of artifacts from the Market Street collection has not been included in any previous reports done under the auspices of MSCAP, so this study and the results presented below are the first exploration of stratigraphy at the site.

Unfortunately, the recordation of provenience information during ARS excavations was not standardized, resulting in a number of different notations about stratigraphy. While many of these notations are similar, one finding of this study is that it is rather difficult to make sense of the original significance of these notes. The entire list of original provenience notations for Feature 20 is shown in Table 12.

Table 12. Provenience notations for the Feature 20 assemblage.

E wall <sup>13</sup>
Lower Level
Lower Level, from E section of Feature
Lower Level, from W section of Feature
NE corner
NE corner of Feature
SE corner of Feature
Surface and Upper Level
Upper Level
Upper Level, disturbed
West ½
Off Floor
Surface/Upper Level
Top Layer – disturbed
Top Layer

In this analysis, I focus solely on vertical stratigraphic notations for a few reasons. In a 2004 conversation with Kathryn Flynn, it became apparent that most horizontal information, in particular the East and West notations, is archaeologically meaningless. According to Flynn, the East/West division in Feature 20 (and some other features) is a result of excavators choosing to divide the feature in half to facilitate rapid excavation. While this information helps us understand a bit about ARS’s field methodology, it does not contribute to our understanding of the feature’s deposition. As a result, this analysis pays no attention to East/West distinctions. In addition, a few artifacts had only horizontal notations. These artifacts were excluded from stratigraphic analysis because

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<sup>13</sup> “E” and “W” are taken to mean East and West, respectively.

they could not be incorporated with the artifacts exhibiting vertical data. As a group, they represent a much smaller portion of the assemblage (38 out of 316 catalog records, or 12%) than artifacts with vertical provenience information or both vertical and horizontal provenience information (88%). In sum, artifacts considered in this study were only those with notations about their vertical provenience. Where artifacts within this group had horizontal provenience information as well, this additional information was ignored.

The exact stratigraphy of Feature 20 still eludes me. In conversations with Flynn and Roop in 2003 and 2004, they seemed unclear about the stratigraphic depositions in Feature 20, probably due in part to the twenty years which have passed since the excavation took place and the fallibility of human memory. They mentioned several layers that were present in pit features like Feature 20: a lower “cess” layer, often wet and with a noticeable odor; an upper layer that was dry; and a top layer that was disturbed (whether this was a portion of the dry upper layer that was disturbed by 1985 construction activities, or a distinctly different deposit with earlier (pre-1985) post-depositional disturbance is unclear) (K. Flynn and W. Roop, personal communication). Unfortunately, I was unable to ascertain whether or not this was the exact characterization of the deposition in Feature 20. In addition, the different vertical notations (surface, top, upper, lower, floor) recorded for Feature 20 do not seem to directly correspond to Flynn and Roop’s description of the pit feature stratigraphy; it is unclear whether they actually correspond to archaeologically observed stratigraphy or are arbitrary notations.

At best, one can recognize a generalized upper/lower divide in stratigraphy, where “upper” encompasses notations including top, surface, and upper layers, both disturbed and undisturbed, and where “lower” corresponds to all notations of lower and floor layers (undisturbed). It is with these definitions that the terms “upper” and “lower” are deployed throughout the remainder of this section. While it is regrettable that these notations represent a gross oversimplification of the actual stratigraphy within the feature, I would argue that they are not so abstracted as to be meaningless. If nothing else, and even if they are arbitrary levels, they can give us a relative sense of the depositional history of Feature 20.

The methodology for this stratigraphic analysis was simple. Using the Feature 20 artifact catalog Excel worksheet (with data imported from the main project catalog in MS Access), I sorted the assemblage by upper and lower provenience and examined the results for any indication of spatial patterning. My findings centered around three issues: a general presence/absence of materials in the levels, cross-mends between the levels, and the significance of the “disturbed” notation.

There were a few noticeable patterns of deposition, mostly where artifact types found in abundance in one level were absent or minimally present in the other level. In the lower level, copper alloy cans, a zhu game piece, and nails were found, but these artifact types were absent from the upper level entirely. With the exception of one bone and one seed, all of the faunal and floral artifacts from the feature were recovered from the lower level. In addition, most of the Euro-American ceramics and most of the opium-related artifacts were found in the lower level. In contrast, most of the alcoholic beverage bottles were found in the upper level. Also, small and medium plates of Four Flowers

decoration occur only in the upper level. All other types of artifacts including tableware and storage jars, bottles, structural artifacts, writing implements, accoutrements, and clothing were found in both levels in similar amounts. Of these observations, I think that most significant are the patterning of faunal and floral remains, and possibly the patterning of opium- and alcohol- related remains. Also significant is that most of the Euro-American ceramics were found in the lower level, indicating that they are not later, intrusive deposits post-dating the Chinese community at Market Street. With the exception of this last observation, however, these conclusions hinge upon the assumption that the lower and upper levels correspond to temporally distinct deposition episodes.

Of the 92 artifacts recovered from the upper level, 52 come from “disturbed” contexts. However, given the fact that at least two artifacts from this disturbed context cross-mend with artifacts from the lower level,<sup>14</sup> it seems like the notation “disturbed” likely references ground disturbances created by the construction activities onsite in 1985. This interpretation is further bolstered by Flynn and Roop’s statement that features were discovered when a bulldozer or backhoe would expose them during the course of construction (K. Flynn and W. Roop, personal communication). Thus it is likely that the notation “disturbed” indicates materials in the very upper portions of the feature that were dislodged or otherwise disturbed in September 1985, and not during a separate period of historic deposition or post-depositional disturbance.

The stratigraphic analysis of the Feature 20 assemblage has yielded several useful results. Firstly, it necessitated a working definition of stratigraphic notations. Secondly, it demonstrated some spatial patterning of artifacts within the feature, as noted above.

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<sup>14</sup> It should be noted that cross-mends are not systematically or routinely recorded in the project catalog. However, a number of cross-mends were discovered during analysis for this project and have been recorded.

Unfortunately, it has not clarified the depositional history of the feature. Several possibilities exist: the pit could have been filled slowly over an extended period, with a few artifacts discarded each time deposition occurred, a process that would probably leave little archaeological evidence. Alternatively, several discrete dumping events might have filled the pit, potentially leaving archaeological evidence of layering. Finally, the deposit could have been created in a single, massive dumping event (potentially indistinguishable from the first example, archaeologically). Or, a combination of any of these processes could have filled the pit with refuse. Anything from daily practice (i.e. routine disposal of garbage) to a single, unique event (i.e. dumping things before moving, or after an individual's death) could have produced the deposit in Feature 20.

In addition, various post-depositional events may have affected the deposit. Intentional waste management, including trampling or tamping down the deposit, refuse burning, or capping the waste may have affected the deposit in some way. Given the urban context, scavenging by both humans and animals is likely to have disturbed the deposit. Also, if the pit had not been sealed by the time of the 1887 fire, this might also have affected the deposit. Environmental effects could potentially have altered the Feature 20 deposit as well. Later post depositional disturbances might include the effects of urban development and scavenging of artifacts, and certainly includes construction activity in the 1980s.

Undertaking this stratigraphic analysis and considering the various depositional and post-depositional processes that could have formed the Feature 20 deposit was one time during this laboratory analysis that I wish I had been present during the excavations. Unfortunately, because the excavators never wrote down specific observations of the



stratigraphy of the deposits, and because twenty years have now passed since the excavation, pinpointing the depositional processes that created the Feature 20 deposit may be nearly impossible. With further exploration of stratigraphy in other features, however, depositional patterning may be visible. Additionally, archival research might uncover information about historic refuse practices at Market Street. Oral history could bring to light specific cultural practices relating to refuse disposal or other traditions within the overseas Chinese community that would have lead to artifact discard and deposition. I would also generally suggest that some effort towards stratigraphic analysis should be included in future projects, in hopes of better understanding the depositional history of individual features and depositional patterns and practices within the community.

### **Describing the Assemblage – A Comparative Look**

Part of my research for this project entailed reading site reports and historiographies in order to compare the Market Street collection (insofar as it is represented by the Feature 20 assemblage) with descriptions of overseas Chinese material culture and with other existing archaeological reports. I have focused mainly on excavations of urban Chinatowns in California, as these sites are likely to have been most similar to the Market Street site and the community that created it. I chose to focus on potentially similar sites because the quality and integrity of the Market Street collection is unknown. Although a very distant research direction for MSCAP could be examining the differences between urban Chinatowns and other overseas Chinese sites, there are more pressing concerns that must be addressed before this latter type of comparative research can be meaningful. In the following section, I have focused largely on the collections

recovered from the Woolen Mills, San José site (Allen et al. 2002), the Los Angeles Chinatown (Greenwood et al. 1996), and the Riverside Chinatown (Great Basin 1987).

Qualitative comparative research indicates that the general nature of the assemblage from Feature 20 is quite similar to those of other Chinatown sites. Simply put, nothing extraordinary or greatly unprecedented was found in the assemblage. The types and quantities of artifacts in the Feature 20 assemblage are generally similar to those at the Woolen Mills, Los Angeles, and Riverside Chinatowns.

The Feature 20 assemblage exhibits less diversity than and fewer or none of the uncommon artifacts from other sites, such as cooking equipment, children's toys, and certain personal toiletries and grooming articles. This observation is insignificant, in my opinion, and is likely a function of sample size, but worth mentioning as it highlights one of the difficulties in comparing a single feature with entire sites. In short, Feature 20 necessarily underrepresents the diversity and extent of the entire Market Street collection. From a very cursory examination of the artifacts from Market Street that are currently in storage, there is a great deal of diversity and a number of uncommon or unique artifacts that have simply not been processed yet.

Most importantly, the Feature 20 assemblage demonstrates patterns of material culture and other archaeological remains that are very similar to other Chinese sites. For example, knowing that Four Flowers, Celadon, and Bamboo ware types make up the majority of Asian tablewares in the Feature 20 assemblage means it follows a pattern which is extant in the remains from Woolen Mills, Los Angeles, and Riverside, in addition to being found in contemporaneous historic documents such as the Kwong Tai Wo inventory. Brown-glazed stoneware storage vessels are ubiquitous on urban sites, as

are Euro-American ceramics, although they typically – as in Feature 20 – form a very small portion of the assemblage. Similarly, results from the botanical and faunal analysis suggest that diet composition and other food practices were similar to those in other Chinatowns: the use of cleavers in butchery, a preference for pig, and evidence of the exploitation of local and imported foodstuffs.

However, essentializing these similarities becomes a dangerous possibility. I do not wish to imply that similarities in material culture – as recovered archaeologically and known historically – mean that the experiences, the histories, and the daily lives of the Market Street residents were the same as those of people in other overseas Chinese communities. Nor is it appropriate to assume that the community structures and patterns were the same from Chinatown to Chinatown. The Market Street Chinatown, its residents, and their material culture and daily practices fit into the unique trajectory of the overseas Chinese population of San José; factors such as proximity to San Francisco and to the largest Chinatown in the United States, and the unique working relationship between Chinese and white agriculturalists in the Santa Clara Valley, must be considered. At the same time, certain noticeable similarities necessitate that the cultural continuities between different eras and different locales be explained, or at least explored. There are several factors which probably contributed to some similarity: almost all Chinese immigrants to California, whether they settled north, south, central, or in the Sierras, were from the Kwangtung region of China, from the Sze Yup, Heungsan, and Sam Yup districts (Baxter and Allen 2003:2). Thus they came from, and brought with them, certain related cultural traditions: dialects, daily practices, material culture, religion. Furthermore, Chinese immigrants throughout California were affected by discrimination,

persecution, and segregation (forced and self-imposed). Interpreting these commonalities to mean a shared, identical experience of immigration or process of acculturation is still inappropriate. However, at a time when a larger percentage of the Market Street assemblage is analyzed research on this topic could be a very fruitful and informative project, and a novel contribution to overseas Chinese research.

In addition to exploring the similarities and differences of material culture and daily practice amongst Chinatowns, the comparative research also shed light on the condition of artifacts in the Feature 20 assemblage. Preservation of certain materials seems better at the Market Street site, and significantly worse for others. As I have mentioned, the metal in particular is highly corroded, probably due to environmental factors such as seasonal wetness and proximity to a permanent water source. Other materials, especially organics, have fared better. This could be a result of the arson fire and the environment it created including possible sealing effects (of the features); it may also be due to pure luck. We know, for example, that the footwear from Woolen Mills was so poorly preserved that Allen et al. were not even able to calculate an MNI (2002:169); in contrast, footwear recovered from the Market Street site is in a moderate state of preservation, where calculations such as the number and dimension of shoes were possible.

Despite some small differences between the Feature 20 assemblage and the data from published site reports and store inventories, this qualitative comparison allows us to say one important thing: artifacts in the Market Street Chinatown are more or less similar to those in other urban overseas Chinese sites. Although this seems like a relatively unexciting conclusion, it allows us to make some important inferences about the impact

of the excavation and earlier processing on artifact recovery: namely that recovery practices, despite the problems the plagued excavation and processing, did not greatly alter or skew the general profile of the assemblage. This conclusion, in turn, helps us assess the integrity and research potential of this collection.

### **Further Research Directions**

Because this study was confined to an analysis and interpretation of a single feature from the Market Street site, it is necessarily limited and has therefore generated a number of future research questions and potential projects.

Some projects are simple in scope, and are directed less at answering research questions and more at stabilizing the collection and aiding cataloging and initial analysis. Specific projects might include better identification of artifacts through electrolytic cleaning or X-rays, and stabilizing and conserving objects made of decomposing, corroding, or otherwise deteriorating materials.

The main research direction that I would suggest is further holistic studies of feature assemblages. Whether these are on small features or large features (such as 85-31 Feature 18 or 86-36 Feature 5), they will further our understanding of the material culture of the Market Street community, the depositional history of the site and post-depositional processes, including excavation, that have affected the assemblages we are presented with today.

After other features have been completely cataloged and analyzed, the research questions asked here (economic scaling, stratigraphic analysis, and comparative research) can be revisited, and the interpretations revised and expanded as necessary. In particular, I hope that economic scaling can be revisited within a feature that has a less fragmentary

assemblage of Euro-American wares such that quantitative economic scaling using Miller's indices can be done.

Particularly pertinent will be research that devotes attention to understanding patterns within the site. As this is the first feature to be holistically analyzed, such research was not the focus of this project, nor was it even possible. From this point onwards, however, beginning to explore the spatial patterning of multiple classes of artifacts is a necessary step in our understanding of the Market Street community and of the larger history of this site, including modern excavation.

## **CONCLUSION**

In concluding this paper, it is important to reexamine the underlying goal which has driven the data collection, analysis, and interpretations during this project. Evaluating the research potential of the Feature 20 assemblage and extrapolating that to the entire collection has been subsumed by other questions in the course of this research. However, a few concluding remarks specifically addressing the research potential demonstrated during this project are necessary.

This project involved the complete cataloging of artifacts from Feature 20. Typical concerns including artifact preservation, conservation, and identification were encountered during laboratory processing. Data management and the interpretation of previous documentation proved to be critical tasks during this processing. Standardizing recordation and incorporating observations into the existing project database proved to be a massive effort, especially since a portion of the ceramic artifacts from Feature 20 had

been cataloged during the 2002-2003 academic year by students learning to identify historical artifacts.

Provenience problems also needed to be managed and identified during lab processing. Provenience problems plague a number of artifacts which have been mistakenly identified as coming from either Feature 19 or Feature 20, a recordation error which occurred some time during the excavation or pre-MSCAP laboratory processing. This type of error may be present in other parts of the collection as well. Such artifacts are not totally useless, but it will depend on individual research designs and each investigator's choice as to whether or not they are used in future research. For the purposes of my thesis, I decided not to include such artifacts except to mention them in passing here, as their incorporation would have created a highly complex data management situation and made drawing meaningful interpretations from the data too complicated an endeavor given the scope of my project.

On a positive note, a number of concerns about the condition of the collection have been answered: artifact preservation is generally quite good; artifacts are numerous, identifiable, and represent a wide variety of objects. Not only does documentation that links artifacts to specific features exist (this was unknown at the start of the MSCAP project), but as previously discussed, stratigraphic information within features is also extant, increasing our potential for understanding the depositional history of the site. These factors will allow meaningful questions to be asked and answered of the entire collection or any subsets thereof.

While specific analysis proved somewhat awkward given the nature, size, and quality of the Feature 20 assemblage, this is likely to be remedied with a larger data set.

The biggest drawback has been the difficulty of making quantitative interpretations about the assemblage. While qualitative interpretations are certainly important (in my view, equally if not more important than overly-quantitative results), I find it necessary to caution future researchers to avoid falling into interpretations that rely too heavily on qualitative assessments. When working with a collection which you did not excavate, I think that relying too heavily on purely qualitative interpretations can be a crutch and a way to avoid fully engaging and grappling with quantitative, standardized data problems that are common to such collections.

The comparative research done in this paper demonstrates that the artifact assemblages in the Market Street collection are fairly typical of urban Chinese sites in California. This is reassuring in assessing the impact that excavation and previous processing had on the collection; the integrity of data is higher than was previously thought. Overall, the research potential for the collection appears to be good. Certain specific problems aside, the condition and quality of artifacts and contextual information is such that significant data may be generated for both intra- and inter-site research designs. Feature 20 is but a small window into the entire Market Street collection, but I believe that the data and interpretations presented in this paper establish that upon fuller processing and analysis the Market Street Chinatown collection is as potentially informative as those from other major urban Chinatowns in the western United States.



## BIBLIOGRAPHY

- Allen, Rebecca and Mark Hylkema (2002) *Life along the Guadalupe River – an Archaeological and Historical Journey*. Friends of Guadalupe River Parks and Gardens: San José, California.
- Allen, Rebecca, R. Scott Baxter, Anmarie Medin, Julia G. Costello, and Connie Young Yu (2002) *Excavation of the Woolen Mills Chinatown (CA-SCL-807H), San José*. Report prepared for the California Department of Transportation, District 4, Oakland. Past Forward, Inc.: San José, California.
- Allen, Rebecca and R. Scott Baxter (2003) “The Overseas Chinese Experience and San José’s Chinatowns.” In *Market Street Chinatown Archaeological Project: 2002-2003 Progress Report*. Barbara L. Voss, with contributions by Rebecca Allen, R. Scott Baxter, R. Ezra Erb, Lysie Ishimaru, Gina Michaels, Stephanie Selover, and Bryn Williams. Stanford, California: Stanford Archaeology Center and Department of Cultural and Social Anthropology.
- Andrews, Gill, John C. Barrett, and John S. C. Lewis (2000) “Interpretation not record: the practice of archaeology.” *Antiquity* **74**(285):525.
- Archaeological Resource Management (1991) *Assessment of the ARS Archaeological Collection at the Stockton-Julian Street Warehouse*. August 14, 1991. Report prepared for the City of San José Redevelopment Agency.
- ARS (1985) *Field notes from ARS excavations*. Observations from the field excavations in San José in 1985. San José, California.
- ARS (1986) *A Proposal to Analyze Historic Artifact Collections Gathered During Redevelopment Agency Sponsored or Associated Projects in Downtown San José By Archaeological Resource Service in the Period Between Spring 1984-Spring 1986*. August 1986.
- ARS (1991) (Proposal for) *Analysis of Artifact Collections from San José’s First Chinatown*. November 1991.
- ARS (1993) *Archaeological Features in the Fairmont Hotel Parcel, San José, California*. November 09, 1993. Report prepared for Basin Research Associates.
- Basin Research Associates (1992) *Redevelopment Agency of the City of San José Archaeological Collections – Scope of Service*. April 14, 1992. Proposal prepared for the Redevelopment Agency.
- Berggren, Asa and Ian Hodder (2003) “Social practice, method, and some problems of field archaeology.” *American Antiquity* **68**(3):421-435.

- Busch, Jane (1987) "Second Time Around: A Look at Bottle Reuse." *Historical Archaeology* **21**(1):67-80
- Camp, Stacey (2004) *An Examination of Gaming Pieces in the Market Street Chinatown Archaeological Assemblage*. Retrieved April 30, 2004, from <http://www.stanford.edu/~cengel/SJCT/archives/StaceyCamp.pdf>
- Chang, Beverly (2004) *Gambling and Gaming Pieces in the Market Street Chinatown Community*. Retrieved April 30, 2004, from <http://www.stanford.edu/~cengel/SJCT/archives/BeverlyChang.pdf>
- Chinese Historical Society of Southern California Digital Archive. Last accessed May 16, 2004, from <http://library.usc.edu/uhtbin/cgisirsi/0/0/55/32/X>
- Clevenger, Liz (2004) *Market Street Chinatown Feature 20 Ceramics and Glass*. Retrieved April 30, 2004, from <http://www.stanford.edu/~cengel/SJCT/archives/LizClevenger.pdf>
- Collins, Donna (1987) "Tradition and Network: Interpreting the Fish Remains from Riverside's Chinatown" in (The) Great Basin Foundation, eds. (1987) *Wong Ho Leun: An American Chinatown*. The Great Basin Foundation: San Diego, California.
- Godden, Geoffrey A. (1991) *Encyclopaedia of British Pottery and Porcelain Marks*. Barrie and Jenkins: London.
- (The) Great Basin Foundation, eds. (1987) *Wong Ho Leun: An American Chinatown*. The Great Basin Foundation: San Diego, California.
- Greenwood, Roberta S., with contributions by Margie Akin, Ronald C. Egan, Lothar von Falkenhausen, Lynn C. Kronzek, and Mark A. Roeder (1996) *Down by the Station: Los Angeles Chinatown, 1880-1933*. Monumenta Archaeologica 18. Institute of Archaeology, University of California, Los Angeles: Los Angeles, California.
- Hamilton, Donny L. (2000) *File 10A: Iron Conservation Part I: Introduction and Equipment*. Conservation Research Laboratory, Texas A&M: College Station, TX. Accessed on May 2, 2003, from <http://nautarch.tamu.edu/class/anth605/File10a.htm>
- Hodder, Ian (1997) "'Always momentary, fluid and flexible': towards a reflexive excavation methodology." *Antiquity* **71**(273):691-701.
- Ishimaru, Lysie (2003) "Medicine and Meaning: A Look at Medicine Practices in the Market Street Chinatown" in Voss et al. (2003) *Market Street Chinatown Archaeological Project: 2002-2003 Progress Report*. Stanford Archaeology

- Center and Department of Cultural and Social Anthropology: Stanford, California.
- Jones, Olive R. and Catherine Sullivan (1989) *The Parks Canada Glass Glossary for the Description of Containers, Tableware, Flat Glass, and Closures*. Canadian Parks Service: Quebec.
- Kovel, Ralph and Terry Kovel (1990) *Kovels' Know Your Antiques*. Crown Publishers, Inc.: New York.
- Laffey, Glory Anne (1993) *The Early Chinatowns of San José, California*. November 30, 1993. Prepared by Archives and Architecture for Basin Research Associates.
- Laffey, Glory Anne (1994) *Lot Histories for the Block 1 Chinatown San José, California*. December 1994. Prepared by Archives and Architecture for Basin Research Associates.
- Langenwelter, Paul E., II (1987) "Mammals and Reptiles as Food and Medicine in Riverside's Chinatown" in Great Basin 1997.
- Lorrain, Dessamae (1968) "An Archaeologist's Guide to Nineteenth Century American Glass." *Historical Archaeology* 2(1):35-44.
- Michaels, Gina (2003) "A Mark of Meaning: Archaeological Interpretations of Peck Marked Vessels from a 19<sup>th</sup> Century Chinatown" in Voss et al. (2003) *Market Street Chinatown Archaeological Project: 2002-2003 Progress Report*. Stanford Archaeology Center and Department of Cultural and Social Anthropology: Stanford, California.
- Miller, George (1980) "Classification and Economic Scaling of 19<sup>th</sup> Century Ceramics." *Historical Archaeology* 14:1-40.
- Miller, George (1991) "A Revised Set of CC Index Values for Classification and Economic Scaling of English Ceramics from 1787 to 1880." *Historical Archaeology* 25(1):1-25
- Noah, Anna C. (1987) *Brass, Glass, Stone and Bone: Items of Adornment from Riverside Chinatown* in (The) Great Basin Foundation, eds. (1987) *Wong Ho Leun: An American Chinatown*. The Great Basin Foundation: San Diego, California.
- Noël Hume, Ivor (1969) *A Guide to Artifacts of Colonial America*. University of Pennsylvania: Philadelphia.
- Nowak, Ronald M. (1997) *Walker's Mammals of the World, Online 5.1*. Copyright: Johns Hopkins University Press. Retrieved April 18, 2004, from

[http://www.press.jhu.edu/books/walkers\\_mammals\\_of\\_the\\_world/artiodactyla/artiodactyla.bovidae.html](http://www.press.jhu.edu/books/walkers_mammals_of_the_world/artiodactyla/artiodactyla.bovidae.html)

Parsons, Jeff (1993) *Summary of Observations on Soils and Cultural Features Recovered in Downtown San José*. June 1993.

Praetzelis, Mary and Adrian Praetzelis (1997) *Historical Archaeology of an Overseas Chinese Community in Sacramento, California*. Anthropological Studies Center, Sonoma State University Academic Foundation, Inc.: Rohnert Park, California.

Rice, Prudence M. (1987) *Pottery Analysis: A Sourcebook*. The University of Chicago Press: Chicago and London.

Roeder, Mark A. (1996) "Selected Fish Remains" in Greenwood, Roberta S. et al. (1996) *Down by the Station: Los Angeles Chinatown, 1880-1933*. Monumenta Archaeologica 18. Institute of Archaeology, University of California, Los Angeles: Los Angeles, California.

Roop, William (1986) Letter to Gary Reiners dated November 13, 1986.

Ross, Alice (1993) "Health and Diet in 19<sup>th</sup>-Century America: A Food Historian's Point of View." *Historical archaeology* 27(2):42-56.

Sando, Ruth Ann and David L. Felton (1993) "Inventory Records of Ceramics and Opium from a Nineteenth Century Chinese Store in California" in Wegars, Priscilla, ed. (1993) *Hidden Heritage: Historical Archaeology of the Overseas Chinese*. Baywood Publishing Company, Inc.: Amityville, New York.

Schulz, Peter D. (2000) *Fish Remains from the Woolen Mills Chinatown Site, San José, California*. April 2000. Included as Appendix E in Allen, Rebecca, R. Scott Baxter, Anmarie Medin, Julia G. Costello, and Connie Young Yu (2002) *Excavation of the Woolen Mills Chinatown (CA-SCL-807H), San José*. Report prepared for the California Department of Transportation, District 4, Oakland. Past Forward, Inc.: San José, California.

Selover, Stephanie (2003) "Immigration, Acculturation, and Quality of Life: A Study of the Chinatowns of San José, California," in Voss et al. (2003) *Market Street Chinatown Archaeological Project: 2002-2003 Progress Report*. Stanford Archaeology Center and Department of Cultural and Social Anthropology: Stanford, California.

Simmons, Erica (2004) *Drinking Practices in San José's Market Street Chinatown: A Study of Cups*. Retrieved April 30, 2004, from <http://www.stanford.edu/~cengel/SJCT/archives/EricaSimmons.pdf>

- Sinopli, Carla M. (1991) *Approaches to Archaeological Ceramics*. Plenum Press: New York.
- Shanks, Michael and Randall H. McGuire (1996) "The craft of archaeology." *American Antiquity* **61**(1):75-89.
- Spier, Robert F. G. (1958) "Food Habits of Nineteenth-Century California Chinese." *California Historical Society Quarterly* **XXXVII**(1):79-84.
- Sutton, Mark Q. and Brook S. Arkush et al. (2002) *Archaeological Laboratory Methods: An Introduction*. Kendall/Hunt Publishing Company: Dubuque, Iowa.
- Theodoratus, Dorothea et al. (1981) *The Location of Cultural Resources on Block 1, San Antonio Plaza Project, San José, California: Verification and Clarification of the Location of Cultural Resources on Block 1 According to the Documentary Historical Record*. Theodoratus Cultural Research: September 1, 1981.
- Van Tassel, Valentine (1950) *American Glass*. Gramercy Publishing Company: New York.
- Voss, Barbara L., with contributions by Rebecca Allen, R. Scott Baxter, R. Ezra Erb, Lysie Ishimaru, Gina Michaels, Stephanie Selover, and Bryn Williams (2003) *Market Street Chinatown Archaeological Project: 2002-2003 Progress Report*. Stanford Archaeology Center and Department of Cultural and Social Anthropology: Stanford, California.
- Williams, Bryn (2003) "Opium Pipe Tops at the Market Street Chinese Community in San José" in Voss et al. (2003) *Market Street Chinatown Archaeological Project: 2002-2003 Progress Report*. Stanford Archaeology Center and Department of Cultural and Social Anthropology: Stanford, California.
- Wylie, Jerry and Pamela Higgins (1987) *Opium Paraphernalia and the Role of Opium at Riverside's Chinatown* in (The) Great Basin Foundation, eds. (1987) *Wong Ho Leun: An American Chinatown*. The Great Basin Foundation: San Diego, California.
- Young Yu, Connie (2001) *Chinatown, San José, USA*. History San José: San José, California.

## APPENDIX A: Figures



Figure 1 Map showing the location of the Market Street Chinatown

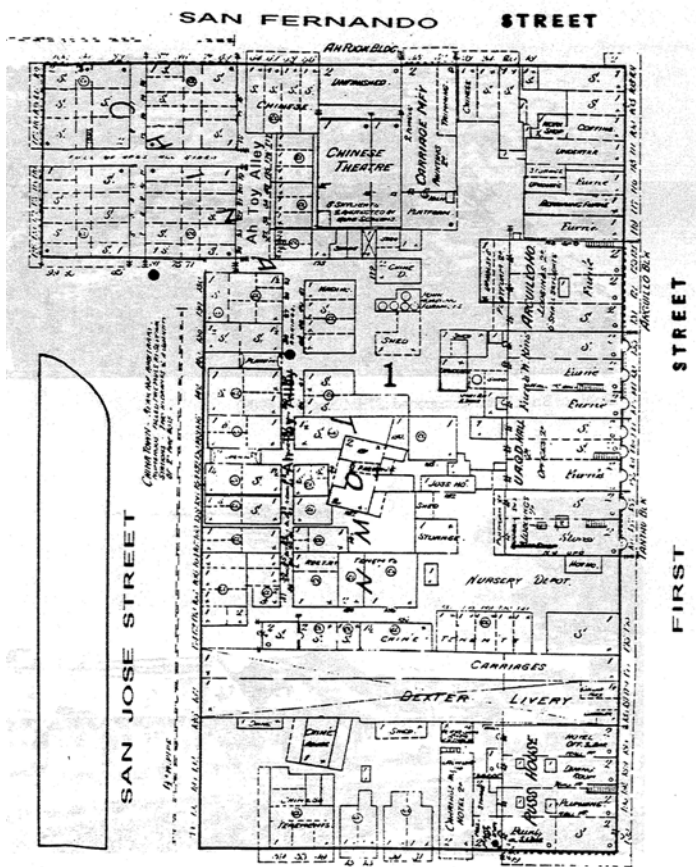


Figure 2 1884 Sanborn Fire Insurance Map

## APPENDIX A: Figures

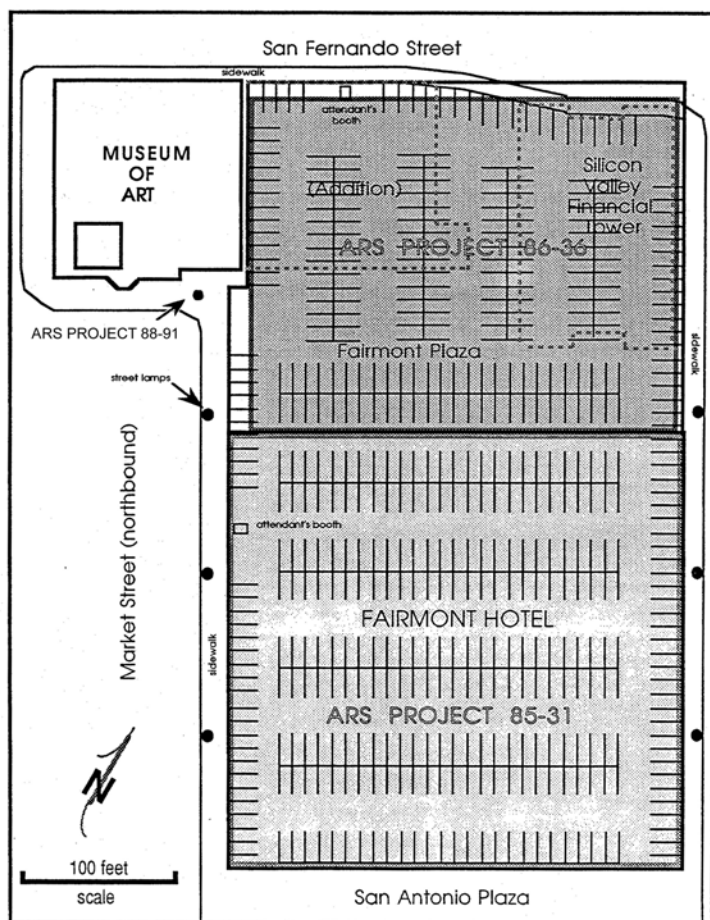


Figure 3 Map showing locations of project areas 85-31, 86-36, and 88-91, after Parsons 1993



Figure 4 Excavation and construction at the Market Street site



## APPENDIX A: Figures

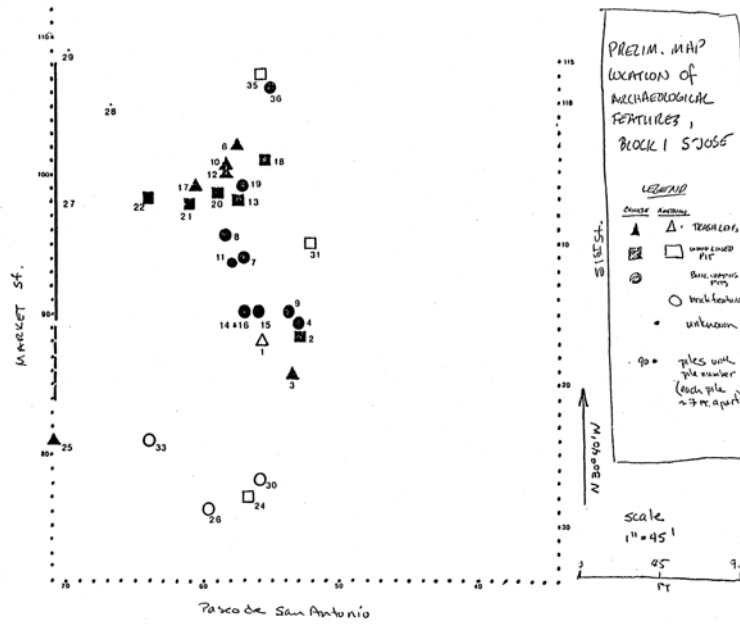


Figure 5 ARS map showing location of features in 85-31

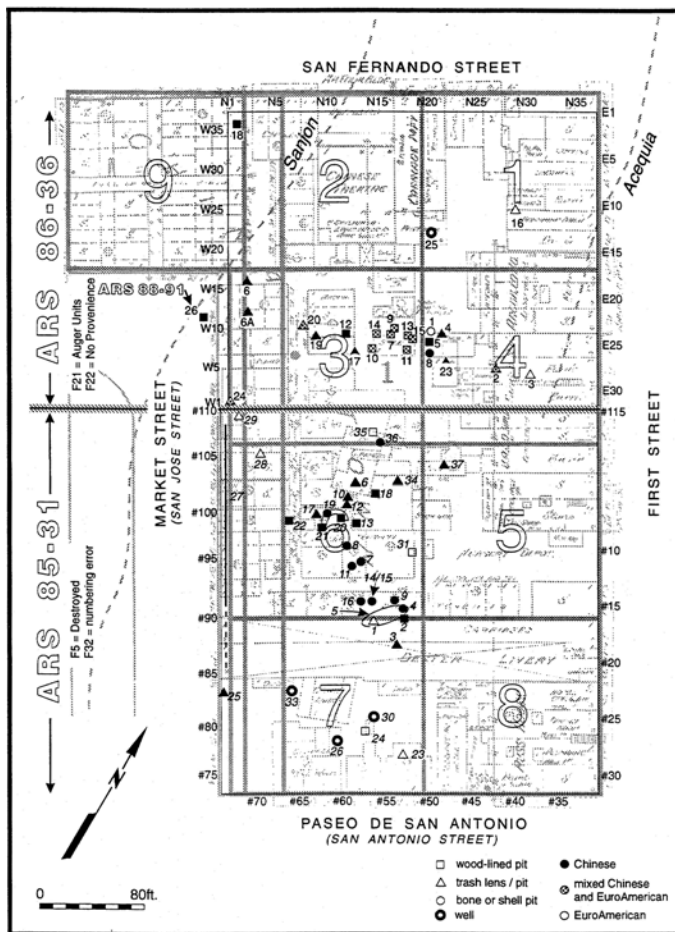


Figure 6 Overlay of Figs. 2 and 4 (Laffey 1994: figure 5)



## APPENDIX A: Figures



Figure 7 Representative brown-glazed, stoneware Asian storage vessels from Feature 20



Figure 8 Representative Celadon vessel forms from Feature 20 showing blue underglaze marks on bases



## APPENDIX A: Figures



Figure 9 Representative Four Flowers tableware vessel forms from Feature 20



Figure 10 Teapot lids from Feature 20; the artifact on the left is flipped upside down to show glaze and unglazed surfaces

## APPENDIX A: Figures



Figure 11 Euro-American porcelain with purple-colored appliqué from Feature 20



Figure 12 Transfer print ceramics from Feature 20



Figure 13 Alcoholic beverage bottle necks and finishes from Feature 20



## APPENDIX A: Figures



Figure 14 Representative nails from Feature 20



Figure 15 Pieces of a hinge and lumber from Feature 20

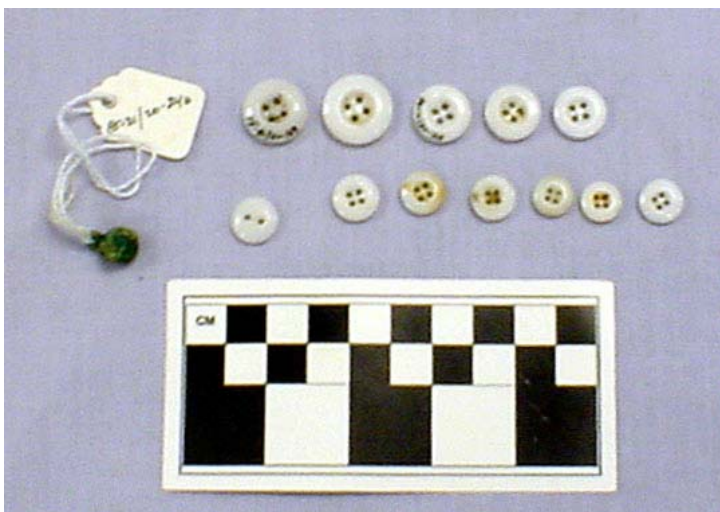


Figure 16 Euro-American and Chinese buttons from Feature 20

## APPENDIX A: Figures



Figure 17 Footwear from Feature 20



Figure 18 Opium pipe bowl fragments from Feature 20



## APPENDIX A: Figures



Figure 19 Opium pipe lamp parts from Feature 20



Figure 20 Opium tin fragments from Feature 20

## APPENDIX A: Figures



Figure 21 Medicine bottles from Feature 20



Figure 22 Euro-American and Chinese toothbrushes from Feature 20

## APPENDIX A: Figures



Figure 23 Possible writing implements from Feature 20

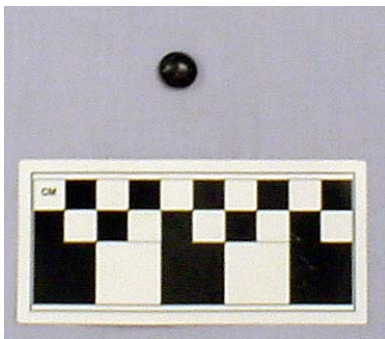


Figure 24 Zhu disk from Feature 20



Figure 25 Pendants from Feature 20



## APPENDIX A: Figures



Figure 26 Crab claw figurine fragment from Feature 20

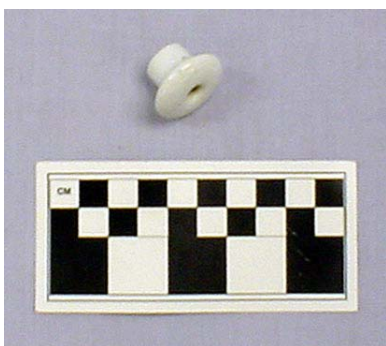


Figure 27 Fixture (knob) from Feature 20



Figure 28 Basketry and related handle fragments from Feature 20

## APPENDIX A: Figures



Figure 29 Glass bottle fragments from Feature 20



Figure 30 Glass vessel fragments from Feature 20

## APPENDIX A: Figures



Figure 31 Machinery from Feature 20



Figure 32 Cutting bags away from an unknown ferrous object (85-31:20-118)



Figure 33 Artifact 85-31:20-118 is revealed



## APPENDIX A: Figures



Figure 34 The first layer is removed (85-31:20-118)



Figure 35 The second layer is removed (85-31:20-118)



Figure 36 Unidentified ferrous artifact (85-31:20-118)

## **APPENDIX B: Full Catalog of 85-31 Feature 20**

The following table is adapted from the MSCAP catalog database, and includes all cataloged data for the Feature 20 assemblage. Catalog numbers represent individual artifacts or batches of related fragments. Data presented below include the artifact's categorization according to the MSCAP cataloging scheme, the artifact's description, condition, weight, count, decoration, and other remarks. The remarks field contains comments on conservation, cross-mends, citations of similar artifacts, notes on manufacturing technique, and so forth.

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		ARS Assoc	Excav Level	Artifact Group	Material	Artifact Category	Artifact Type	Description
85-31	20	1 Upper Level		Domestic	Stoneware-Asian	Food Storage	Container	Spouted Jar
85-31	20	2 Upper Level						
85-31	20	3 Upper Level						
85-31	20	4 Lower Level	lower level	Indefinite	Lead	Indefinite	Indefinite	Indefinite
85-31	20	5 SE corner of feature		Personal	Bone	Health		Toothbrush
85-31	20	6 SE corner of feature		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Plate
85-31	20	7 SE corner of feature						
85-31	20	8 E wall		Domestic	Porcelain-Asian	Food Container	Tableware	Large Bowl
85-31	20	9 E wall						
85-31	20	10 Surface and upper level		Domestic	Ceramic	Furnishings	Decorative Item	Figurine
85-31	20	11 Upper level		Personal	Ceramic	Social Drugs - Opium		Pipe
85-31	20	12 Upper level		Personal	Glass-colorless	Social Drugs - Opium		Opium Lamp Oil Reservoir
85-31	20	13 Upper level		Personal	Glass-colorless	Social Drugs - Opium		Opium Lamp Oil Reservoir Cover
85-31	20	14 Upper level		Domestic	Porcelain-Asian	Indefinite	Tableware	Teapot Lid
85-31	20	15 Lower level						
85-31	20	16		Personal	Glass-aqua	Health	Container	Medicine Bottle
85-31	20	17 Upper level	Upper Level	Indefinite	Composite	Misc. Containers	Container	basket
85-31	20	18 Lower level	Lower Level E	Indefinite	Composite	Misc. Containers	Container	basket
85-31	20	19 Surface and upper level	Surface and upper level	Domestic	Textile	Textile	Textile	Cloth
85-31	20	20 Lower level	Lower Level	Domestic	Textile	Textile	Textile	Cloth
85-31	20	21 Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Large Bowl
85-31	20	22 Upper level, disturbed		Domestic	Porcelain-Asian	Tableware	Tableware	Small Plate
85-31	20	23 Upper level, disturbed		Domestic	Porcelain-Asian	Drinking Vessel	Tableware	Tiny Cup
85-31	20	24 Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Straight-sided cup

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number			ARS Assoc	Excav Level	Artifact Group	Material	Artifact Category	Artifact Type	Description
85-31	20	25	Upper level, disturbed		Domestic	Porcelain-Asian	Tableware	Tableware	Spoon
85-31	20	26	Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Plate
85-31	20	27	Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	28	Upper level, disturbed		Structural	Earthenware	Building Material	Building Material	Tile
85-31	20	29	Upper level, disturbed		Personal	Glass-aqua	Health	Container	Medicine Bottle
85-31	20	30	Upper level, disturbed		Personal	Glass-aqua	Health	Container	Medicine Bottle
85-31	20	31	Upper level, disturbed		Personal	Ceramic	Social Drugs - Opium		Pipe
85-31	20	32	Upper level, disturbed		Personal	Ceramic	Social Drugs - Opium		Pipe
85-31	20	33	Upper level, disturbed		Personal	Ceramic	Social Drugs - Opium		Pipe
85-31	20	34	Upper level, disturbed		Personal	Bone	Health		Toothbrush
85-31	20	35	Upper level, disturbed		Personal	Bone	Health		Handle
85-31	20	36	Upper level, disturbed		Personal	Bone	Health		Toothbrush
85-31	20	37	Upper level, disturbed		Personal	Glass-colorless	Social Drugs - Opium		Opium Lamp Cover
85-31	20	38	Upper level, disturbed		Domestic	Ceramic	Clothing	Clothing	Button
85-31	20	39	Upper level, disturbed		Domestic	Ceramic	Clothing	clothing	Button
85-31	20	40	Upper level, disturbed						
85-31	20	41	Upper level, disturbed						
85-31	20	42	Upper level, disturbed		Personal	Copper Alloy	Accoutrement		Pendant
85-31	20	43	Upper level, disturbed		Floral	Seed	Botanicals	Botanicals	Botanicals
85-31	20	44	Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Small Bowl
85-31	20	45	Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Small Bowl
85-31	20	46	Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	47	Upper level, disturbed		Domestic	Porcelain-Asian	Indefinite	Tableware	Hollowware
85-31	20	48	Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Small Bowl
85-31	20	49	Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	50	Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	51	Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	52	Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Bowl
85-31	20	53	Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Bowl
85-31	20	54	Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	55	Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	56	Upper level, disturbed		Domestic	Whiteware	Food Container	Tableware	Bowl
85-31	20	57	Upper level, disturbed		Domestic	Stoneware-Asian	Food Storage	Container	Lid
85-31	20	58	Upper level, disturbed		Domestic	Stoneware-Asian	Food Storage	Container	Lid

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		ARS Assoc		Excav Level	Artifact Group	Material	Artifact Category	Artifact Type	Description
85-31	20	59	Upper level, disturbed		Indefinite	Ferrous	Indefinite	Indefinite	Metal Strapping
85-31	20	60	Upper level, disturbed		Indefinite	Ferrous	Indefinite	Indefinite	Metal Strapping
85-31	20	61	Upper level, disturbed		Structural	Ferrous	Hardware	Indefinite	Indefinite
85-31	20	62	SE corner of feature		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	63	SE corner of feature		Domestic	Porcelain-Asian	Drinking Vessel	Tableware	Tiny Cup
85-31	20	64	SE corner of feature		Domestic	Porcelain-Asian	Food Container	Tableware	Teapot Lid
85-31	20	65	SE corner of feature		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Plate
85-31	20	66	SE corner of feature		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	67	SE corner of feature		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	68	SE corner of feature		Domestic	Porcelain-Asian	Food Container	Tableware	Small Plate
85-31	20	69	SE corner of feature		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	70	SE corner of feature		Domestic	Stoneware	Food Storage	Container	Hollowware
85-31	20	71	SE corner of feature		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	72	SE corner of feature		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	73	SE corner of feature		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	74	SE corner of feature						
85-31	20	75	SE corner of feature		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	76	SE corner of feature						
85-31	20	77	SE corner of feature		Domestic	Porcelain-Asian	Food Container	Tableware	Small Bowl
85-31	20	78	SE corner of feature		Domestic	Stoneware-Asian	Food Storage	Container	Spouted Jar
85-31	20	79	SE corner of feature		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	80	SE corner of feature		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	81	SE corner of feature		Domestic	Stoneware-Asian	Food Storage	Container	Wide-mouthed Jar
85-31	20	82	SE corner of feature		Domestic	Stoneware-Asian	Food Storage	Container	Spouted Jar
85-31	20	83	Upper level, disturbed	Upper Level	Personal	Glass-green	Social Drugs - Alcohol	Container	Alcoholic-beverage Bottle
85-31	20	84	Upper level, disturbed	Upper Level	Indefinite	Glass-blue	Indefinite	Indefinite	Indefinite



## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		ARS Assoc	Excav Level	Artifact Group	Material	Artifact Category	Artifact Type	Description	
85-31	20	85	Upper level, disturbed	Top Level	Personal	Glass-amber	Social Drugs - Alcohol	Container	Alcoholic-beverage Bottle
85-31	20	86	Upper level, disturbed	Upper Level	Personal	Glass-amber	Social Drugs - Alcohol	Container	Alcoholic-beverage Bottle
85-31	20	87	Upper level, disturbed		Indefinite	Glass-aqua	Misc. Containers	Container	Bottle
85-31	20	88	Upper level, disturbed	Upper Level	Indefinite	Glass-aqua	Misc. Containers	Container	Bottle
85-31	20	89	Upper level, disturbed	Upper Level	Indefinite	Glass-aqua	Misc. Containers	Container	Bottle
85-31	20	90	Upper level, disturbed	Upper Level	Indefinite	Glass-colorless	Indefinite	Indefinite	Indefinite
85-31	20	91	Upper level, disturbed	Upper Level	Indefinite	Glass-green	Misc. Containers	Container	Bottle
85-31	20	92	Upper level, disturbed	Upper Level	Personal	Glass-green	Social Drugs - Alcohol	Container	Alcoholic-beverage Bottle
85-31	20	93	Upper level, disturbed		Activities	Stone	Writing	Tool	Pencil
85-31	20	94	Upper level, disturbed		Domestic	Composite	Footwear	Footwear	Shoe/Boot
85-31	20	95	Surface and upper level		Domestic	Ceramic	Clothing	clothing	Button
85-31	20	96	Surface and upper level		Domestic	Porcelain	Food Container	Tableware	Indefinite
85-31	20	97	Surface and upper level		Domestic	Whiteware	Food Container	Tableware	Hollowware
85-31	20	98	Surface and upper level		Domestic	Porcelain-Asian	Indefinite	Tableware	Teapot Lid
85-31	20	99	Surface and upper level		Domestic	Whiteware	Food Container	Tableware	Indefinite
85-31	20	100	Surface and upper level		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	101	Surface and upper level		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	102	Surface and upper level		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	103	Surface and upper level		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	104	Surface and upper level						

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		ARS Assoc	Excav Level	Artifact Group	Material	Artifact Category	Artifact Type	Description	
85-31	20	105	Surface and upper level		Domestic	Copper Alloy	Furnishings	Furnishings	Handle
85-31	20	106	Surface and upper level		Indefinite	Glass-colorless	Indefinite	Indefinite	Indefinite
85-31	20	107	Surface and upper level		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	108	NE corner of feature		Domestic	Porcelain-Asian	Food Container	Tableware	Hollowware
85-31	20	109	NE corner of feature		Domestic	Porcelain-Asian	Food Container	Tableware	Teapot Lid
85-31	20	110	NE corner of feature		Domestic	Creamware	Food Container	Tableware	Indefinite
85-31	20	111	NE corner of feature		Domestic	Whiteware-Improved	Food Container	Tableware	Plate
85-31	20	112	NE corner of feature		Domestic	Stoneware-Asian	Food Storage	Container	Lid
85-31	20	113	NE corner of feature		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	114	NE corner of feature		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	115	NE corner of feature		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	116	NE corner of feature						
85-31	20	117	NE corner of feature		Domestic	Copper Alloy	Furnishings	Furnishings	Handle
85-31	20	118	NE corner of feature		Indefinite	Ferrous	Indefinite	Indefinite	Indefinite
85-31	20	119	Surface and upper level		Domestic	Stoneware-Asian	Food Storage	Container	Lid
85-31	20	120	Upper level		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	121	Upper level		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	122	Upper level		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	123	Upper level		Domestic	Stoneware-Asian	Food Storage	Container	Lid
85-31	20	124	Upper level		Domestic	Stoneware-Asian	Food Storage	Container	Lid
85-31	20	125	Upper level		Domestic	Stoneware-Asian	Food Storage	Container	Spouted Jar

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		ARS Assoc		Excav Level	Artifact Group Material		Artifact Category	Artifact Type	Description
85-31	20	126	Upper level		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	127	Upper level		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	128	Upper level		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	129	Upper level		Domestic	Stoneware-Asian	Food Storage	Container	Wide-mouthed Jar
85-31	20	130	Upper level		Domestic	Porcelain-Asian	Food Container	Tableware	Large Bowl
85-31	20	131	Upper level		Domestic	Ceramic	Clothing	Clothing	Button
85-31	20	132	Upper level		Domestic	Ceramic	Clothing	Clothing	Button
85-31	20	133	Upper level		Domestic	Whiteware-Improved	Food Container	Tableware	Large Plate
85-31	20	134	Upper level		Domestic	Porcelain-Asian	Food Container	Tableware	Bowl
85-31	20	135	Upper level		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Plate
85-31	20	136	Upper level		Domestic	Porcelain-Asian	Tableware	Tableware	Spoon
85-31	20	137	Upper level		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	138	Upper level		Domestic	Porcelain-Asian	Food Container	Tableware	Small Bowl
85-31	20	139	Upper level		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	140	Upper level		Domestic	Textile	Textile	Textile	Cloth
85-31	20	141	Upper level		Personal	Glass-aqua	Health	Container	Medicine Bottle
85-31	20	142	Upper level		Personal	Bone	Health		Handle
85-31	20	143	Upper level		Personal	Glass-green	Social Drugs - Alcohol	Container	Alcoholic-beverage Bottle
85-31	20	144	Upper level		Personal	Glass-green	Social Drugs - Alcohol	Container	Alcoholic-beverage Bottle
85-31	20	145	Upper level		Personal	Glass-green	Social Drugs - Alcohol	Container	Alcoholic-beverage Bottle
85-31	20	146	Upper level		Personal	Glass-green	Social Drugs - Alcohol	Container	Alcoholic-beverage Bottle
85-31	20	147	Upper level		Personal	Glass-green	Social Drugs - Alcohol	Container	Alcoholic-beverage Bottle
85-31	20	148	Upper level		Personal	Glass-green	Social Drugs - Alcohol	Container	Alcoholic-beverage Bottle
85-31	20	149	Upper level	Upper Level	Indefinite	Copper Alloy	Indefinite	Indefinite	Metal Strapping
85-31	20	150	Upper level		Domestic	Composite	Footwear	Footwear	Shoe/Boot
85-31	20	151	Lower level		Industrial	Ferrous	Machinery	Machinery	Machinery

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		ARS Assoc	Excav Level	Artifact Group	Material	Artifact Category	Artifact Type	Description	
85-31	20	152	Lower level		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	153	Lower level		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	154	Lower level		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	155	Lower level		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	156	Lower level		Domestic	Porcelain-Asian	Food Container	Tableware	Bowl
85-31	20	157	Lower level		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	158	Lower level		Domestic	Porcelain-Asian	Drinking Vessel	Tableware	Small Bowl
85-31	20	159	Lower level		Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	160	Lower level		Domestic	Porcelain-Asian	Drinking Vessel	Tableware	Small Bowl
85-31	20	161	Lower level		Domestic	Porcelain-Asian	Food Container	Tableware	Hollowware
85-31	20	162	Lower level		Domestic	Stoneware-Asian	Food Storage	Container	Lid
85-31	20	163	Lower level		Domestic	Stoneware-Asian	Food Storage	Container	Lid
85-31	20	164	Lower level		Domestic	Stoneware	Food Storage	Container	Hollowware
85-31	20	165	Lower level		Indefinite	Stoneware	Indefinite		Hollowware
85-31	20	166	Lower level		Domestic	Porcelaneous Stoneware	Food Container	Tableware	Teapot lid
85-31	20	167	Lower level		Domestic	Ceramic	Clothing	Clothing	Button
85-31	20	168	Lower level		Domestic	Ceramic	Clothing	Clothing	Button
85-31	20	169	Lower level		Domestic	Ceramic	Clothing	Clothing	Button
85-31	20	170	Lower level		Domestic	Ceramic	Clothing	Clothing	Button
85-31	20	171	Lower level		Domestic	Ceramic	Clothing	Clothing	Button
85-31	20	172	Lower level		Domestic	Ceramic	Clothing	Clothing	Button
85-31	20	173	Lower level		Indefinite	Glass-aqua	Indefinite	Indefinite	Indefinite
85-31	20	174	Lower level		Indefinite	Glass-aqua	Misc. Containers	Container	Bottle
85-31	20	175	Lower level		Indefinite	Glass-colorless	Indefinite	Indefinite	Indefinite
85-31	20	176	Lower level		Personal	Glass-colorless	Social Drugs - Opium		Opium Lamp Cover
85-31	20	177	Lower level	Lower Level	Indefinite	Glass-colorless	Misc. Containers	Container	Bottle
85-31	20	178	Lower level	Lower Level	Personal	Glass-colorless	Social Drugs - Opium		Opium Lamp Cover

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		ARS Assoc		Excav Level	Artifact Group Material		Artifact Category	Artifact Type	Description
85-31	20	179	Lower level	Lower Level	Domestic	Glass-colorless	Drinking Vessel	Drinking Vessel	Tumbler
85-31	20	180	Lower level	Lower Level	Personal	Glass-green	Social Drugs - Alcohol	Container	Alcoholic-beverage Bottle
85-31	20	181	Lower level		Indefinite	Copper Alloy	Indefinite	Indefinite	Indefinite
85-31	20	182	Lower level						
85-31	20	183	Lower level		Personal	Composite	Footwear	Footwear	Shoe/Boot
85-31	20	184	Lower level		Domestic	Copper Alloy	Food Storage	Container	Can
85-31	20	185	Lower level	Lower Level	Personal	Glass-green	Social Drugs - Alcohol	Container	Alcoholic-beverage Bottle
85-31	20	186	Lower level						
85-31	20	187	Lower level, from E section of feature		Domestic	Composite	Footwear	Footwear	Shoe/Boot
85-31	20	188	Lower level, from E section of feature		Domestic	Composite	Footwear	Footwear	Shoe/Boot
85-31	20	189	Lower level, from E section of feature	Lower Level	Domestic	Composite	Footwear	Footwear	Shoe/Boot
85-31	20	190	Lower level, from E section of feature		Domestic	Composite	Footwear	Footwear	Shoe/Boot
85-31	20	191	Lower level, from E section of feature		Personal	Ceramic	Social Drugs - Opium		Pipe
85-31	20	192	Lower level, from E section of feature		Personal	Ceramic	Social Drugs - Opium		Pipe
85-31	20	193	Lower level, from E section of feature		Personal	Bone	Health		Toothbrush
85-31	20	194	Lower level, from E section of feature		Personal	Ceramic	Social Drugs - Opium		Pipe
85-31	20	195	Lower level, from E section of feature		Domestic	Porcelain-Asian	Food Container	Tableware	Bowl
85-31	20	196	Lower level, from E section of feature		Domestic	Porcelain-Asian	Food Container	Tableware	Small Bowl
85-31	20	197	Lower level, from E section of feature		Domestic	Porcelain-Asian	Food Container	Tableware	Hollowware
85-31	20	198	Lower level, from E section of feature		Domestic	Porcelain-Asian	Indefinite	Tableware	Medium Bowl
85-31	20	199	Lower level, from E section of feature		Domestic	Porcelain-Asian	Indefinite	Tableware	Hollowware

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		ARS Assoc	Excav Level	Artifact Group	Material	Artifact Category	Artifact Type	Description	
85-31	20	200	Lower level, from E section of feature		Domestic	Whiteware	Food Container	Tableware	Large Plate
85-31	20	201	Lower level, from E section of feature		Domestic	Whiteware	Food Container	Tableware	Indefinite
85-31	20	202	Lower level, from E section of feature		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	203	Lower level, from E section of feature	Lower Level	Personal	Glass-colorless	Social Drugs - Opium		Opium Lamp Cover
85-31	20	204	Lower level, from E section of feature		Domestic	Ceramic	Furnishings	Furnishings	Fixture
85-31	20	205	Lower level, from E section of feature		Indefinite	Glass-aqua	Misc. Containers	Container	Bottle
85-31	20	206	Lower level		Domestic	Stoneware-Asian	Food Storage	Container	Spouted Jar
85-31	20	207	Lower level		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	208	Lower level		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	209	Lower level		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	210	Lower level		Domestic	Stoneware-Asian	Food Storage	Container	Wide-mouthed Jar
85-31	20	211	Lower level		Indefinite	Stoneware	Indefinite		Hollowware
85-31	20	212	Lower level		Personal	Bone	Health		Toothbrush
85-31	20	213	Lower level		Domestic	Ceramic	Food Container	Tableware	Teapot Lid
85-31	20	214	Lower level		Personal	Bone	Accoutrement		Pendant
85-31	20	215	Lower level		Personal	Ceramic	Social Drugs - Opium		Pipe
85-31	20	216	Lower level		Personal	Ceramic	Social Drugs - Opium		Pipe
85-31	20	217	Lower level		Personal	Ceramic	Social Drugs - Opium		Pipe
85-31	20	218	Lower level		Personal	Ceramic	Social Drugs - Opium		Pipe
85-31	20	219	Lower level		Domestic	Porcelain-Asian	Food Container	Container	Decanter
85-31	20	220	Lower level		Personal	Glass-aqua	Health	Container	Medicine Bottle
85-31	20	221	Lower level		Activities	Ceramic	Games		Game Piece
85-31	20	222	Lower level		Structural	Ceramic	Indefinite	Indefinite	Indefinite
85-31	20	223	Lower level		Domestic	Whiteware-Improved	Drinking Vessel	Tableware	Cup
85-31	20	224	Lower level		Domestic	Whiteware-Improved	Food Container	Tableware	Plate
85-31	20	225	Lower level		Domestic	Whiteware	Food Container	Tableware	Indefinite

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		ARS Assoc	Excav Level	Artifact Group	Material	Artifact Category	Artifact Type	Description	
85-31	20	226	Lower level		Domestic	Whiteware-Improved	Food Container	Tableware	Hollowware
85-31	20	227	Lower level		Domestic	Whiteware-Improved	Food Container	Tableware	Plate
85-31	20	228	Lower level		Domestic	Whiteware	Food Container	Tableware	Indefinite
85-31	20	229	Lower level		Domestic	Whiteware	Food Container	Tableware	Indefinite
85-31	20	230	Lower level		Domestic	Porcelain-Asian	Food Container	Tableware	Hollowware
85-31	20	231	Lower level		Structural	Earthenware	Building Material	Building Material	Tile
85-31	20	232	Lower level		Domestic	Textile	Textile	Textile	Cloth
85-31	20	233	Lower level		Floral	Seed	Botanicals	Botanicals	botanicals
85-31	20	234	Lower level from W section of feature	Lower Level	Personal	Glass-black	Social Drugs - Alcohol	Container	Alcoholic-beverage Bottle
85-31	20	235	Lower level from W section of feature		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	236	Lower level from W section of feature		Domestic	Stoneware-Asian	Food Storage	Container	Hollowware
85-31	20	237	Lower level from W section of feature		Domestic	Porcelain-Asian	Indefinite	Tableware	Hollowware
85-31	20	238	Lower level from W section of feature						
85-31	20	239	Lower level from W section of feature		Domestic	Stoneware-Asian	Food Storage	Container	Lid
85-31	20	240	Lower level from W section of feature		Personal	Ceramic	Social Drugs - Opium		Pipe
85-31	20	241	Lower level from W section of feature		Personal	Ceramic	Social Drugs - Opium		Pipe
85-31	20	242	Lower level from W section of feature		Domestic	Redware	Food Container	Tableware	Indefinite
85-31	20	243	Lower level from W section of feature		Domestic	Ceramic	Clothing	Clothing	Button
85-31	20	244	Lower level from W section of feature	Lower Level	Indefinite	Glass-colorless	Indefinite	Indefinite	Indefinite
85-31	20	245	Lower level from W section of feature						

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		ARS Assoc	Excav Level	Artifact Group	Material	Artifact Category	Artifact Type	Description	
85-31	20	246	Lower level from W section of feature		Personal	copper-alloy	Clothing	Clothing	Button
85-31	20	247	Lower level from W section of feature		Floral	Seed	Botanicals	Botanicals	botanicals
85-31	20	248	Lower level from W section of feature		Structural	Copper Alloy	Hardware	Indefinite	Washer
85-31	20	249	Lower level from W section of feature		Domestic	Copper Alloy	Food Storage	Container	Can
85-31	20	250	Lower level		Domestic	Porcelain-Asian	Food Container	Tableware	Bowl
85-31	20	251	Lower level		Domestic	Porcelain-Asian	Drinking Vessel	Tableware	Tiny Cup
85-31	20	252	Lower level		Domestic	Porcelain-Asian	Food Container	Tableware	Hollowware
85-31	20	253	Lower level		Domestic	Porcelain-Asian	Tableware	Tableware	Spoon
85-31	20	254	Lower level		Domestic	Porcelain-Asian	Food Container	Tableware	Large Bowl
85-31	20	255	Lower level		Domestic	Porcelain-Asian	Food Container	Tableware	Large Bowl
85-31	20	256	Lower level		Domestic	Porcelain-Asian	Food Container	Tableware	Large Bowl
85-31	20	257	Lower level, from W section of feature						
85-31	20	301			Domestic	Porcelain-Asian	Food Container	Tableware	Medium Bowl
85-31	20	325	Lower level		Floral	Charcoal	Botanicals	Botanicals	Charcoal
85-31	20	328	West 1/2	Lower Level	Faunal	Bone	Bone	Animal	bone
85-31	20	332	West 1/2	Lower Level	Indefinite	Ferrous	Indefinite	Indefinite	Ferrous metal non-diagnostic scrap
85-31	20	327	West 1/2	Lower Level	Indefinite	Ferrous Metal	Indefinite	Indefinite	Indefinite
85-31	20	330	West 1/2	Lower Level	Structural	Ferrous	Misc. Fasteners	Fastener	Cut Nail
85-31	20	331	West 1/2	Lower Level	Structural	Ferrous	Misc. Fasteners	Fastener	Cut Nail
85-31	20	313	Upper Level	Upper Level	Personal	Glass-green	Social Drugs - Alcohol	Container	Alcoholic-beverage Bottle
85-31	20	310		Upper Level	Structural	Glass-colorless	Building Material	Building Material	Window
85-31	20	324		Lower Level	Indefinite	Glass-colorless	Indefinite	Indefinite	Indefinite
85-31	20	311		Lower Level	Structural	Glass-colorless	Building Material	Building Material	Window
85-31	20	345		Lower Level	Indefinite	Glass-colorless	Indefinite	Indefinite	Indefinite
85-31	20	346	Upper Level		Domestic	Porcelain-Asian	Food Container	Tableware	Small Bowl
85-31	20	348	Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Large Bowl
85-31	20	347	Upper level, disturbed		Domestic	Porcelain-Asian	Food Container	Tableware	Small Bowl



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Catalog Number			ARS Assoc	Excav Level	Artifact Group	Material	Artifact Category	Artifact Type	Description
85-31	20	349		Top Layer - disturbed	Structural	Brick	building material	building material	Brick
85-31	20	350		Lower Level	Indefinite	Unidentified	Indefinite	Indefinite	Indefinite
85-31	20	351		Lower Level	Floral	Wood	Botanicals	Botanicals	Charcoal
85-31	20	352		Lower Level	Personal	Glass-green	Social Drugs - Alcohol		Bottle
85-31	20	353		Lower level	Indefinite	Earthenware	Indefinite	Indefinite	Indefinite
85-31	20	354		Lower Level	Indefinite	Stoneware	Indefinite	Indefinite	Indefinite
85-31	20	356		Lower Level E	Floral	Wood	Botanicals	Botanicals	Charcoal
85-31	20	358		Lower Level E	Floral	Seed	Seed	Seed	botanicals
85-31	20	359		Lower Level E	Structural	Composite	building material	building material	Hinge
85-31	20	360		Lower Level	Floral	Wood	Botanicals	Botanicals	Botanicals
85-31	20	361		lower level	Structural	Plaster	building material	building material	Plaster
85-31	20	362			Indefinite	Leather	Indefinite	Indefinite	Indefinite
85-31	20	363		lower level	Structural	ferrous metal	Misc. Fasteners	Fastener	Nail
85-31	20	366			Indefinite	Composite	Indefinite	Indefinite	Indefinite
85-31	20	367			Floral	Wood	Botanicals	Botanicals	Wood
85-31	20	306		surface/upper level	Faunal	Bone	Bone	Bone	Animal bone
85-31	20	307		surface/upper level	Faunal	Bone	Bone	Bone	Fish bone
85-31	20	308		lower level	Faunal	Bone	Bone	Bone	Animal bone
85-31	20	309		Lower level	Faunal	Bone	Bone	Bone	Fish bone
85-31	20	320		off floor					
85-31	20	321		off floor					
85-31	20	322		off floor	Faunal	Bone	Bone	Bone	Animal bone
85-31	20	323		off floor	Faunal	Bone	Bone	Bone	Fish Bone
85-31	20	378	Upper Level	Upper Level	Faunal	Bone	Bone	Animal	Bone
85-31	20	374	Lower Level	Lower Level	Faunal	Bone	Bone	Animal	Bone
85-31	20	368			Faunal	Bone	Bone	Animal	Animal Tooth
85-31	20	376	Lower Level	Lower Level	Domestic	Copper Alloy	Furnishings	Decorative Item	Strip - Metal
85-31	20	357		Lower Level E	Indefinite	Wood	Indefinite	Indefinite	Dowel

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Catalog Number			ARS Assoc	Excav Level	Artifact Group	Material	Artifact Category	Artifact Type	Description
85-31	20	373	Lower Level	Lower Level	Domestic	Copper Alloy	Furnishings	Furnishings	Handle
85-31	20	364		Lower Level	Floral	Charcoal	Botanicals	Botanicals	Charcoal
85-31	20	370		Lower Level	Structural	Ferrous	Misc. Fasteners	Fastener	Nail
85-31	20	371		Lower Level	Structural	Ferrous	Misc. Fasteners	Fastener	Nail/Tack
85-31	20	377		Lower Level	Structural	Ferrous	Misc. Fasteners	Fastener	Cut Nail
85-31	20	355	Lower Level	Lower Level	Personal	Copper Alloy	Social Drugs - Opium		Opium Tin
85-31	20	369	Lower Level	Lower Level	Personal	Composite	Footwear	Footwear	Shoe/Boot
85-31	20	365		Lower Level	Indefinite	Stoneware	Indefinite	Indefinite	Indefinite
85-31	20	372			Indefinite	Ferrous	Indefinite	Indefinite	Indefinite
85-31	20	375	Lower Level	Lower Level	Indefinite	Copper Alloy	Indefinite	Indefinite	Indefinite
85-31	20	379	NE Corner of Feature		Indefinite	Composite	Indefinite	Indefinite	Non-diagnostic scrap
85-31	20	380	NE Corner of feature		Indefinite	Ceramic	Indefinite	Indefinite	Indefinite
85-31	20	380	NE Corner of feature		Floral	Wood	Botanicals	Botanicals	Wood
85-31	20	382	NE Corner		Floral	Seed	Botanicals	Botanicals	Seed
85-31	20	383	NE Corner of feature		Structural	Ferrous	Misc. Fasteners	Fastener	Cut Nail
85-31	20	384	NE corner of feature		Structural	Ferrous	Misc. Fasteners	Fastener	Nail

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Catalog Number		Condition	% complete	Whole ct	Frag ct	MNI	Weight	Remarks	Decoration
85-31	20	1 Whole	Complete	1	0	1	653.00	ARS cat: contents of soy pot 85-31/20-1.	Brown glaze
85-31	20	2		0	0	0	0.00		
85-31	20	3		0	0	0	0.00		
85-31	20	4 Fragment	Over 75%	0	1	1	3.00	washer or token or coin?; irregular hole in center - may have been square; original tag removed and bagged w/item - was contributing to degradation of object	
85-31	20	5 Whole	Complete	1	0	1	15.70	Chinese toothbrush, see Greenwood 1996 (p.115); 14.4 cm long	3 red circles on handle
85-31	20	6 Fragment	Over 75%	0	1	1	125.40	03/2004 - cross-mends with 85-31:20-65 as a complete vessel	Four Flowers
85-31	20	7		0	0	0	0.00		
85-31	20	8 Fragment	50-75%	0	3	1	202.00	Two smaller fragments taped to the larger fragment.	Four Flowers
85-31	20	9		0	0	0	0.00		
85-31	20	10 Fragment	< 25%	0	1	1	19.10	Crab claw (from figurine).	Reddish surface with a green glaze
85-31	20	11 Fragment	25-50%	0	1	1	34.20		
85-31	20	12 Fragment	< 25%	0	1	1	20.90	cf. with items in LA Chinatown online database ("Down by the Station")	
85-31	20	13 Fragment	25-50%	0	1	1	5.20	Round disc with hole in middle. Diameter 3 cm. ARS catalog suggests it may be associated with opium use. Cf. "Down by the Station" online database	
85-31	20	14 Fragment	< 25%	0	1	1	30.60	ARS cat: recorded as 85-31/20-15.1 through 15.3 (two records). 03/2004 - cf to plate 4 in Greenwood, "Down by the Station"	Blue on white floral
85-31	20	15		0	0	0	0.00		
85-31	20	16 Whole	Complete	1	0	1	90.30	Whole: includes bottle and its stopper. Cup-bottom mold. 4/25: glass-aqua, wax, cork	
85-31	20	17 Fragment	< 25%	0	0	1	53.90	Fragile; needs new packing material and possibly conservation. Basketry with metal ornamentation or hardware.	
85-31	20	18 Fragment	< 25%	0	0	1	0.60	Fragile; needs new packing material and possibly conservation. Basketry with metal ornamentation or hardware.	
85-31	20	19 Fragment	< 25%	0	1	1	0.50		
85-31	20	20 Fragment	< 25%	0	1	1	3.50		
85-31	20	21 Fragment	50-75%	0	1	1	299.00		Four Flowers
85-31	20	22 Fragment	Over 75%	0	1	1	34.30	peck mark	Four Flowers
85-31	20	23 Fragment	50-75%	0	1	1	10.70		Four Flowers (cf)
85-31	20	24 Fragment	< 25%	0	1	1	5.10	octagonal shape; see Praetzelis and Praetzelis pp.176 for mention of an octagonal cup	polychrome red and green enameled overglaze

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		Condition	% complete	Whole ct	Frag ct	MNI	Weight	Remarks	Decoration	
85-31	20	25	Fragment	< 25%	0	1	1	3.30		Four Flowers (cf)
85-31	20	26	Fragment	< 25%	0	1	1	7.10	Rim fragment.	Four Flowers
85-31	20	27	Fragment	< 25%	0	1	1	1.80	Item(s) from this cat. No. reassigned to 85-31:20-347 and 85-31:20-348	Four Flowers
85-31	20	28	Fragment	< 25%	0	1	1	42.40	sewer pipe or roof tile?	
85-31	20	29	Fragment	25-50%	0	1	1	8.40	Upper half of bottle.	
85-31	20	30	Fragment	Over 75%	0	1	1	27.20	6.5 cm height. 1.5 diameter neck, top snapped off of bottle. 4/25: dark-colored contents still inside	
85-31	20	31	Fragment	25-50%	0	1	1	15.40		
85-31	20	32	Fragment	< 25%	0	1	1	12.00		
85-31	20	33	Fragment	< 25%	0	1	1	1.80		
85-31	20	34	Reconstructable/Frag	Over 75%	0	2	1	13.50	Tape on one fragment. 4/25: European style, see Greenwood 1996 (p115); approx. 16 cm long	
85-31	20	35	Fragment	< 25%	0	1	1	4.70	Part of a toothbrush? Burnt. 4/25: toothbrush handle, burned.	
85-31	20	36	Fragment	25-50%	0	1	1	4.40	Chinese-style toothbrush (see Greenwood 1996 p.115); head only	
85-31	20	37	Fragment	< 25%	0	1	1	14.00	cf. with items in LA Chinatown online database ("Down by the Station")	
85-31	20	38	Whole	Over 75%	1	0	1	0.60		
85-31	20	39	Whole	Over 75%	1	0	1	0.50		
85-31	20	40			0	0	0	0.00		
85-31	20	41			0	0	0	0.00		
85-31	20	42	Fragment	Over 75%	0	1	1	3.00	Oval disc; green patina	
85-31	20	43			0	0	0	0.00		
85-31	20	44	Fragment	< 25%	0	2	1	24.40		Celadon
85-31	20	45	Fragment	25-50%	0	3	1	21.80	reconstructed - 03/2004	Celadon
85-31	20	46	Fragment	< 25%	0	1	1	9.10		Celadon
85-31	20	47	Fragment	< 25%	0	1	1	6.20		Celadon
85-31	20	48	Fragment	25-50%	0	10	2	17.30	MNI based on rim decoration.	Celadon
85-31	20	49	Fragment	< 25%	0	4	1	20.70	Includes rim fragment.	Bamboo
85-31	20	50	Fragment	< 25%	0	1	1	29.00	Rim fragment.	Bamboo
85-31	20	51	Fragment	< 25%	0	1	1	15.90	Rim fragment.	Bamboo
85-31	20	52	Fragment	< 25%	0	1	1	25.70	Base fragment.	Bamboo
85-31	20	53	Fragment	< 25%	0	1	1	55.20	Base fragment	Bamboo
85-31	20	54	Fragment	50-75%	0	1	1	185.10		Bamboo
85-31	20	55	Reconstructable/Frag	Over 75%	0	7	1	212.30	Tape on fragments. Includes base and rim fragments.	Bamboo
85-31	20	56	Fragment	< 25%	0	1	1	25.80		Hand painted leaf motif
85-31	20	57	Fragment	< 25%	0	1	1	4.60	small lid	
85-31	20	58	Fragment	25-50%	0	4	1	11.70	small lid; cross-mends with 85-31:20-162 to nearly complete specimen	

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		Condition	% complete	Whole ct	Frag ct	MNI	Weight	Remarks	Decoration	
85-31	20	59	Fragment	< 25%	0	1	1	14.00	strapping	
85-31	20	60	Fragment	< 25%	0	1	1	29.00	strapping	
85-31	20	61	Fragment	< 25%	0	1	1	6.00		
85-31	20	62	Reconstructable/Frag	Over 75%	0	3	1	228.00	Reconstructed with glue.	Bamboo
85-31	20	63	Reconstructable/Frag	Over 75%	0	2	1	17.70	Reconstructed with glue.	Four Flowers (cf?)
85-31	20	64	Fragment	50-75%	0	3	1	34.80	cf to plate 4 in Greenwood, "Down by the Station"	Undecorated
85-31	20	65	Fragment	< 25%	0	2	1	7.80	03/2004 - cross-mends with 85-31:20-6 as a complete vessel	Four Flowers
85-31	20	66	Fragment	< 25%	0	3	1	6.20		Four Flowers
85-31	20	67	Fragment	< 25%	0	1	1	15.00	Neck fragment; cf to fig 15, p.241 Wong Ho Leun: American Chinatown - The Great Basin Foundation, eds (1987) - "small, thin-walled globular jar"; same vessel as 85-31:20-103?	
85-31	20	68	Fragment	< 25%	0	7	4	5.80	MNI from differences in glaze color and thickness of body and rim.	Four Flowers
85-31	20	69	Fragment	< 25%	0	3	1	100.20	03/2004 - small jar; Base fragments.	
85-31	20	70	Fragment	< 25%	0	2	1	93.80	03/2004 - small jar	Brown glaze
85-31	20	71	Fragment	< 25%	0	1	1	29.70	03/2004 - large jar	
85-31	20	72	Fragment	< 25%	0	2	1	18.70	03/2004 - small jar	
85-31	20	73	Fragment	< 25%	0	2	1	49.70	03/2004 - large jar	
85-31	20	74			0	0	0	0.00		
85-31	20	75	Reconstructable/Frag	Complete	0	3	1	247.00	Mended with tape. 03/2004 - tape removed, reconstructed with elmer's glue	Celadon
85-31	20	76			0	0	0	0.00		
85-31	20	77	Fragment	< 25%	0	1	1	6.50		Celadon
85-31	20	78	Fragment	< 25%	0	5	1	37.80	Spout included.	
85-31	20	79	Fragment	< 25%	0	10	3	295.00	03/2004 - large jar	Brown glaze
85-31	20	80	Fragment	< 25%	0	25	1	126.00	03/2004 - small jar	
85-31	20	81	Fragment	< 25%	0	10	1	107.70	Rim, base and body fragments.	
85-31	20	82	Fragment	< 25%	0	9	1	58.10	Body, spout and rim fragments.	
85-31	20	83	Fragment	50-75%	0	6	1	290.00	3 part dip mold	
85-31	20	84	Fragment	< 25%	0	1	1	51.00	base fragment - flared base	

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		Condition	% complete	Whole ct	Frag ct	MNI	Weight	Remarks	Decoration
85-31	20	85 Fragment	< 25%	0	1	1	39.00	shoulder and neck; 2 seams running up opposite sides of bottle	
85-31	20	86 Fragment	< 25%	0	1	1	12.00	body fragment	
85-31	20	87 Fragment	< 25%	0	1	1	36.00	bottle base; likely same bottle as 85-31:20-174; very robust!	
85-31	20	88 Fragment	< 25%	0	1	1	8.00	fragment has impressed panel (square or rectangular shape)	
85-31	20	89 Fragment	< 25%	0	1	1	8.00	1 part finish; flattened side lip	
85-31	20	90 Fragment	< 25%	0	1	1	7.00	scalloped lip - formed by pinching edge of rim while vessel was still partially soft; tableware or electrical device?	
85-31	20	91 Fragment	< 25%	0	10	1	90.00	provenience problem: tag inside bag labeled 85-31/20-91, but bag containing sherds labeled F 19(20), but this inside another bag and tag labeled F.20	
85-31	20	92 Fragment	< 25%	0	4	2	8.00	one sherd, of a slightly different color and texture, has a score mark or seam running down center	
85-31	20	93 Fragment	25-50%	0	1	1	1.60	Slate.	
85-31	20	94 Fragment	< 25%	0	2	1	0.00		
85-31	20	95 Whole	Over 75%	1	0	1	1.50		
85-31	20	96 Fragment	< 25%	0	1	1	3.60		Purple design
85-31	20	97 Fragment	< 25%	0	1	1	3.80	miscataloged in 2003 as 85-31:20-87 -- corrected 04/25/2004	blue underglaze transfer print, stippled pattern
85-31	20	98 Fragment	< 25%	0	1	1	7.20	cf to plate 4 in Greenwood, "Down by the Station"	Undecorated
85-31	20	99 Fragment	< 25%	0	1	1	1.50	probably hollowware	Blue underglaze transfer print; floral motif
85-31	20	100 Fragment	< 25%	0	1	1	21.30	03/2004 - large jar	Brown glaze
85-31	20	101 Fragment	< 25%	0	1	1	23.10	03/2004 - large jar	
85-31	20	102 Fragment	< 25%	0	1	1	2.50	03/2004 - small jar	
85-31	20	103 Fragment	< 25%	0	1	1	4.70	Neck fragment; cf to fig 15, p.241 Wong Ho Leun: American Chinatown - The Great Basin Foundation, eds (1987) - "small, thin-walled globular jar"; same vessel as 85-31:20-67?	
85-31	20	104		0	0	0	0.00		

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		Condition	% complete	Whole ct	Frag ct	MNI	Weight	Remarks	Decoration	
85-31	20	105	Fragment	< 25%	0	1	1	2.70	copper alloy - cf. with basketry loops in 85-31:20-17 and 85-31:20-18. Remnants of organic materials present. Circular attachment piece only, approx 1.5 cm diameter	
85-31	20	106	Fragment	< 25%	0	5	1	9.00	flared, scalloped rim	
85-31	20	107	Fragment	< 25%	0	3	1	9.80	diameter 11-12 cm	Celadon
85-31	20	108	Fragment	< 25%	0	1	1	0.31	non-diagnostic rim sherds (too small to determine radius)	Celadon
85-31	20	109	Fragment	< 25%	0	1	1	2.60	cf to plate 4 in Greenwood, "Down by the Station"	Undecorated
85-31	20	110	Fragment	< 25%	0	1	1	2.10		
85-31	20	111	Fragment	< 25%	0	1	1	6.00	makers mark probably read (in full): Stone China/James Edwards & Son/Dale Hall; mark is a lion with crest (?)	
85-31	20	112	Fragment	< 25%	0	1	1	9.50	small lid; some plaster on underside	
85-31	20	113	Fragment	< 25%	0	2	1	23.30	03/2004 - large jar	
85-31	20	114	Fragment	< 25%	0	3	1	26.80	03/2004 - small jar; Interior glazed, exterior unglazed.	
85-31	20	115	Fragment	< 25%	0	2	1	14.80	03/2004 - small jar	
85-31	20	116			0	0	0	0.00		
85-31	20	117	Fragment	< 25%	0	7	1	36.00	handle frags cf. to those with known basketry. 17 cm long handle + 2 circular attachments. Original cat says "possibly ornamental". See paper sheet for provenience note.	
85-31	20	118	Fragment	< 25%	0	9	1	1900.00	Items from this cat no have been reassigned to 85-31:20-379, 20-380, 20-381, 20-382, 20-383, and 20-384. Large number of composites with bowl-shaped artifact including nails, wood, seeds, charcoal, ceramic.	
85-31	20	119	Fragment	50-75%	0	1	1	23.00	small lid; some plaster remnants	
85-31	20	120	Fragment	< 25%	0	1	1	77.40	Rim fragment.; compare with large globular jars?	
85-31	20	121	Fragment	< 25%	0	1	1	6.90	03/2004 - small jar	
85-31	20	122	Fragment	< 25%	0	1	1	56.00	03/2004 - large jar	
85-31	20	123	Fragment	< 25%	0	1	1	341.00	Rim fragment from a lid to a barrel jar. 03/2004 - large lid	
85-31	20	124	Fragment	< 25%	0	1	1	408.00	Rim Fragments for a lid to a barrel jar. 03/2004 - large lid	
85-31	20	125	Fragment	< 25%	0	3	1	85.00	Rim and body fragments.	

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		Condition	% complete	Whole ct	Frag ct	MNI	Weight	Remarks	Decoration	
85-31	20	126	Fragment	< 25%	0	2	1	31.40	03/2004 - small jar	
85-31	20	127	Fragment	< 25%	0	1	1	8.70	03/2004 - small jar; Base fragment.	
85-31	20	128	Fragment	< 25%	0	4	1	66.80	03/2004 - small jar; Rim and body fragments.	
85-31	20	129	Fragment	< 25%	0	5	1	41.50	Rim and body fragments.	
85-31	20	130	Fragment	< 25%	0	4	1	43.00	03/2004 - possibly same vessel as 85-31:20-348	Four Flowers
85-31	20	131	Whole	Over 75%	1	0	1	0.40		
85-31	20	132	Whole	Over 75%	1	0	1	0.40		
85-31	20	133	Fragment	< 25%	0	1	1	93.40	base is almost 15 cm diameter, overall diameter > 15 cm; blued ironstone	
85-31	20	134	Fragment	< 25%	0	1	1	21.40		Four Flowers
85-31	20	135	Fragment	< 25%	0	1	1	35.00	Rim and base fragment.	Four Flowers
85-31	20	136	Fragment	< 25%	0	1	1	1.90		Four Flowers (cf)
85-31	20	137	Fragment	< 25%	0	1	1	10.90	Item(s) from this cat. No. recataloged as 85-31:20-346.	Celadon
85-31	20	138	Fragment	< 25%	0	6	1	23.20	3/2004 - cross-mended with 85-31:20-158	Celadon
85-31	20	139	Fragment	< 25%	0	2	1	3.80	Includes rim fragment.	Bamboo
85-31	20	140	Fragment	< 25%	0	1	1	0.50		
85-31	20	141	Fragment	< 25%	0	1	1	3.30	Base.	
85-31	20	142	Fragment	< 25%	0	1	1	2.20	toothbrush handle; burned; hole at end; likely Chinese style	
85-31	20	143	Fragment	25-50%	0	1	1	89.00	rounded string rim partially present (but lip missing)	
85-31	20	144	Fragment	< 25%	0	1	1	30.00		
85-31	20	145	Fragment	< 25%	0	1	1	9.00	flattened side lip; v-shaped string rim; 2 part finish	
85-31	20	146	Fragment	< 25%	0	2	1	61.00	can be mended; rounded lip; flattened string rim; 2 part finish	
85-31	20	147	Fragment	< 25%	0	2	1	38.00	can be mended; body, shoulder and neck represented	
85-31	20	148	Fragment	< 25%	0	10	1	5.00	item(s) from this cat. No. have been reassigned to #85-31:20-313	
85-31	20	149	Fragment	< 25%	0	10	1	6.00	strapping in 2 widths; some Fe corrosion attached to artifact. Item(s) from this cat no were reassigned to 85-31:20-378.	
85-31	20	150	Fragment	< 25%	0	8	1	130.90	wood, leather, metal	
85-31	20	151	Fragment	< 25%	0	1	1	2300.00	machinery; rotating parts with shaft. Unable to ID to specific machine or function	



## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		Condition	% complete	Whole ct	Frag ct	MNI	Weight	Remarks	Decoration
85-31	20	152 Reconstructable/Frag	25-50%	0	3	1	150.40		Bamboo
85-31	20	153 Fragment	25-50%	0	3	1	73.80		Bamboo
85-31	20	154 Fragment	< 25%	0	4	1	59.50		Bamboo
85-31	20	155 Fragment	< 25%	0	1	1	9.10	Rim fragment.	Bamboo
85-31	20	156 Fragment	< 25%	0	1	1	7.00	Body fragment, probably from near the base of the vessel.	Bamboo
85-31	20	157 Reconstructable/Frag	Over 75%	0	9	1	197.80	ARS: "SE Corner."	Celadon
85-31	20	158 Fragment	< 25%	0	1	1	8.40	ARS: "SE Corner."; 3/2004 - cross-mended with 85-31:20-138	Celadon
85-31	20	159 Fragment	< 25%	0	1	1	32.80	ARS: "SE Corner."	Celadon
85-31	20	160 Fragment	< 25%	0	6	4	29.30	ARS: "SE corner." Due to differences in thickness, glaze and flaring, there are multiple vessels represented.	Celadon
85-31	20	161 Fragment	< 25%	0	3	2	5.80	ARS: "SE corner." Due to differences in thickness more than one vessel is represented.	Celadon
85-31	20	162 Fragment	25-50%	0	1	1	6.80	small lid; cross-mends with 85-31:20-58 to nearly complete specimen	
85-31	20	163 Fragment	Over 75%	0	1	1	37.00	small lid; nearly complete; has plaster on underside	
85-31	20	164 Fragment	< 25%	0	2	1	18.00	03/2004 - small jar; Wheel-thrown. May represent 2 vessels.	Brown glaze
85-31	20	165 Fragment	25-50%	0	2	1	22.20	Possible ink grinder.	Green glaze
85-31	20	166 Fragment	< 25%	0	1	1	1.50	cf. Greenwood 1996 plate 4; miscataloged in 2003 as 85-31:20-116, corrected 4/25/2004	undecorated
85-31	20	167 Whole	Over 75%	1	0	1	0.40		
85-31	20	168 Whole	Over 75%	1	0	1	0.80		
85-31	20	169 Whole	Over 75%	1	0	1	1.30		
85-31	20	170 Whole	Over 75%	1	0	1	0.70		
85-31	20	171 Whole	Over 75%	1	0	1	0.30		
85-31	20	172 Whole	Over 75%	1	0	1	0.30		
85-31	20	173 Fragment	< 25%	0	2	1	3.00	glass tube or neck of vessel?	
85-31	20	174 Fragment	< 25%	0	1	1	79.00	flattened side lip - 1 part finish. Very robust - glass is 1.1 cm thick at base of finish. Likely same vessel as 85-31:20-87.	
85-31	20	175 Fragment	< 25%	0	1	1	13.00	molded	molded ribs
85-31	20	176 Fragment	< 25%	0	1	1	9.00	flanged lip. Cf. with online LA Chinatown database ("Down by the Station")	
85-31	20	177 Fragment	< 25%	0	1	1	4.00	straight finish, fire-polished lip	
85-31	20	178 Fragment	< 25%	0	1	1	6.00	frag includes finished rim along one side; could be drinking vessel or lamp part. 4/25: cf. with items in online LA Chinatown database ("Down by the Station")	

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		Condition	% complete	Whole ct	Frag ct	MNI	Weight	Remarks	Decoration	
85-31	20	179	Fragment	< 25%	0	1	1	9.00	sherd includes portion of plain rim; molded fluting on body	fluting-pressed panels
85-31	20	180	Fragment	< 25%	0	2	1	22.00	includes body and shoulder sherds	
85-31	20	181	Fragment	< 25%	0	8	1	14.00	Possibly identifiable copper frags. As yet unID'd. Items from this cat no wer reassigned to 85-31:20-355, 85-31:20-369, 85-31:20-373, 85-31:20-374, 85-31:20-375, 85-31:20-376.	
85-31	20	182			0	0	0	0.00		
85-31	20	183	Fragment	< 25%	0	90	1	21.00	Materials include: leather, brass nails, wood, textile, copper corrosion.	
85-31	20	184	Fragment	< 25%	0	33	1	3.90		
85-31	20	185	Fragment	< 25%	0	1	1	10.00	glass bottle body sherd	
85-31	20	186			0	0	0	0.00		
85-31	20	187	Fragment	25-50%	0	2	1	243.00		
85-31	20	188	Fragment	< 25%	0	1	1	150.00	leather, wood, metal (ferrous and copper alloy)	
85-31	20	189	Fragment	< 25%	0	40	1	56.00		
85-31	20	190	Fragment	< 25%	0	8	1	26.00	burned heavily	
85-31	20	191	Fragment	25-50%	0	1	1	15.30		
85-31	20	192	Fragment	< 25%	0	1	1	5.00	4/25/2004: in 2003, 85-31:20-240 was cataloged with this item. Separate cat. Sheet filled out today 4/25/04 - 20-240 and 20-192 crossmend. Original note by Bryn Williams "1 fragment with cat number 85-31/20-240, ARS: back dirt."	
85-31	20	193	Fragment	50-75%	0	1	1	5.70	Chinese style (see Greenwood 1996: 115). Engraved design on front: three circles with dots in center.	
85-31	20	194	Fragment	< 25%	0	1	1	3.70	ARS: back dirt.	
85-31	20	195	Fragment	< 25%	0	1	1	20.70	03/2004 - probably large bowl	Celadon
85-31	20	196	Fragment	50-75%	0	1	1	32.90		Celadon
85-31	20	197	Fragment	< 25%	0	1	1	0.61	Probably a cup due to rim width.; 03/2004 - non-diagnostic rim sherds (too small to determine radius)	Celadon
85-31	20	198	Fragment	< 25%	0	1	1	6.60		Bamboo
85-31	20	199	Fragment	< 25%	0	1	1	13.30	bowl?	Bamboo

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		Condition	% complete	Whole ct	Frag ct	MNI	Weight	Remarks	Decoration	
85-31	20	200	Fragment	< 25%	0	1	1	12.60		
85-31	20	201	Fragment	< 25%	0	1	1	1.70		
85-31	20	202	Fragment	< 25%	0	4	1	27.70	03/2004 - small jar	
85-31	20	203	Fragment	< 25%	0	1	1	3.00	cf. with items in the LA Chinatown online database ("Down by the Station")	
85-31	20	204	Whole	Complete	1	0	1	11.40	Small cabinet or other door/drawer pull.	
85-31	20	205	Fragment	< 25%	0	1	1	3.00	seam visible along center length of sherd; indeterminate bottle form	
85-31	20	206	Fragment	25-50%	0	25	1	249.00	Spout, body and base fragments.	
85-31	20	207	Fragment	< 25%	0	1	1	19.80	03/2004 - small jar; Rim fragment.	
85-31	20	208	Fragment	< 25%	0	3	1	51.30	03/2004 - small jar; Base fragments.	
85-31	20	209	Fragment	< 25%	0	5	1	38.10	03/2004 - small jar; Base and body fragments.	
85-31	20	210	Fragment	< 25%	0	9	1	99.70	Rim and body fragments.	
85-31	20	211	Fragment	< 25%	0	1	1	2.90		Exterior white glaze
85-31	20	212	Fragment	< 25%	0	1	1	0.50	burned; Chinese style (see Greenwood 1996: 115).	
85-31	20	213	Whole	Complete	1	0	1	32.40	cf to plate 4 in Greenwood, "Down by the Station"	Lead glaze?
85-31	20	214	Fragment	Over 75%	0	1	1	4.30	Diamond shaped, nearly intact. Broken at hole drilled for suspension.	
85-31	20	215	Fragment	< 25%	0	1	1	9.40	miscataloged as 85-31:20-205 in 2003. Corrected 4/25/2004	
85-31	20	216	Fragment	< 25%	0	1	1	3.50		
85-31	20	217	Fragment	< 25%	0	1	1	2.00		
85-31	20	218	Fragment	25-50%	0	1	1	18.70		
85-31	20	219	Fragment	< 25%	0	1	1	3.80	"decanter" (cf Greenwood) or "spouted urn" (cf Wegars vol.2)	Sweet Pea
85-31	20	220	Fragment	Over 75%	0	1	1	13.00	Neck is snapped off.	
85-31	20	221	Whole	Complete	1	0	1	1.40		
85-31	20	222	Fragment	< 25%	0	1	1	4.90	Industrial Porcelain. Unglazed white "socket", small and round with a hole through the center. Perhaps part of an insulator or fuse?	
85-31	20	223	Fragment	< 25%	0	1	1	6.10		Black underglaze transfer print
85-31	20	224	Fragment	< 25%	0	1	1	12.50	blue "edgeware"; blued ironstone	Blue rim
85-31	20	225	Fragment	< 25%	0	1	1	2.50		

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		Condition	% complete	Whole ct	Frag ct	MNI	Weight	Remarks	Decoration	
85-31	20	226	Fragment	< 25%	0	1	1	10.90		
85-31	20	227	Fragment	< 25%	0	1	1	13.80		
85-31	20	228	Fragment	< 25%	0	1	1	1.20	rim fragment	Black underglaze transfer print; floral motif on border
85-31	20	229	Fragment	< 25%	0	1	1	2.40		Blue underglaze transfer print; scenic motif
85-31	20	230	Fragment	< 25%	0	2	1	1.30	non-diagnostic rim sherds (too small to determine radius)	Celadon
85-31	20	231	Fragment	< 25%	0	2	1	89.80	sewer pipe or roof tile?	1 fragment is painted red on both interior and exterior
85-31	20	232	Fragment	< 25%	0	1	1	0.10		
85-31	20	233			0	0	0	0.00		
85-31	20	234	Fragment	< 25%	0	1	1	8.00	rounded lip; 1 part finish	
85-31	20	235	Fragment	< 25%	0	3	1	2.20	03/2004 - small jar	
85-31	20	236	Fragment	< 25%	0	4	1	6.10	03/2004 - small jar	
85-31	20	237	Fragment	< 25%	0	1	1	1.70		Bamboo
85-31	20	238			0	0	0	0.00		
85-31	20	239	Fragment	< 25%	0	1	1	0.80	small lid	
85-31	20	240	Fragment	< 25%	0	1	1	7.00	crossmends with 85-31:20-192; original note by Bryn Williams: "1 frag cat #20-240 backdirt" -- significance of "backdirt" unknown as of 4/25/2004	
85-31	20	241	Fragment	< 25%	0	1	1	2.80		
85-31	20	242	Fragment	< 25%	0	1	1	0.90		Blue rim
85-31	20	243	Whole	Over 75%	1	0	1	0.50		
85-31	20	244	Fragment	< 25%	0	1	1	0.40	tube or vessel neck?	
85-31	20	245			0	0	0	0.00		

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		Condition	% complete	Whole ct	Frag ct	MNI	Weight	Remarks	Decoration
85-31	20	246 Whole	100%	1	0	1	0.50	Chinese-style button. See Allen, R. et al. (2003) for reference.	
85-31	20	247		0	0	0	0.00		
85-31	20	248 Fragment	50-75%	0	1	1	0.10		
85-31	20	249 Fragment	< 25%	0	29	1	4.30	see original sheet for provenience note.	
85-31	20	250 Fragment	< 25%	0	1	1	36.10		Four Flowers
85-31	20	251 Fragment	< 25%	0	1	1	1.60		Four Flowers (cf)
85-31	20	252 Fragment	< 25%	0	1	1	3.10		Four Flowers
85-31	20	253 Fragment	< 25%	0	1	1	1.10		Four Flowers (cf)
85-31	20	254 Fragment	< 25%	0	2	1	10.80	03/2004 - cross-mends with 85-31:20-255	Four Flowers
85-31	20	255 Reconstructable/Frag	50-75%	0	5	1	359.00	Poorly mended. Pecked character translates "together". 03/2004 - cross-mends with 85-31:20-254	Four Flowers
85-31	20	256 Reconstructable/Frag	Over 75%	0	6	1	426.00	Originally labeled 85-31/20-256.3. See ARS catalog. Did not mend with artifact 85-31/20-256.	Four Flowers
85-31	20	257		0	0	0	0.00		
85-31	20	301 Fragment	< 25%	0	1	1	9.10	Originally cataloged as 85-31/20-256.3. Did not mend with 20-256, so a new catalog number was assigned.	Four Flowers
85-31	20	325 Fragment	< 25%	0	7	1	0.10		
85-31	20	328 Whole	Over 75%	0	1	1	0.50		
85-31	20	332 Fragment	< 25%	0	44	1	2.00		
85-31	20	327 Fragment	< 25%	0	1	1	37.00	heavily corroded, unidentified object; possibly identifiable via xray or other analysis	
85-31	20	330 Fragment	Over 75%	0	1	1	1.30	cut nail - bent - distinct specimen from others in f.20, nearly whole; impression of wood in corrosion	
85-31	20	331 Fragment	< 25%	0	10	1	14.00	cut nails	
85-31	20	313 Fragment	< 25%	0	2	1	16.00	originally cataloged as part of #85-31:20-148	
85-31	20	310 Fragment	< 25%	0	4	1	14.00		
85-31	20	324 Fragment	< 25%	0	2	1	0.30		
85-31	20	311 Fragment	< 25%	0	14	1	55.00	item(s) from this cat. No. have been reassigned to #85-31:20-345	
85-31	20	345 Fragment	< 25%	0	2	1	0.60	originally part of #85-31:20-311; maybe parts of an opium lamp?	
85-31	20	346 Fragment	< 25%	0	1	1	6.80	Originally cataloged as part of 85-31:20-137	
85-31	20	348 Fragment	< 25%	0	1	1	4.90	Originally cataloged with 85-31:20-27; possibly same vessel as 85-31:20-130	Four Flowers
85-31	20	347 Fragment	< 25%	0	2	1	2.10	Originally cataloged with 85-31:20-27.	Four Flowers

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		Condition	% complete	Whole ct	Frag ct	MNI	Weight	Remarks	Decoration	
85-31	20	349	Fragment	25-50%	0	1	1	275.00	original label in bag	
85-31	20	350	Fragment	< 25%	0	1	1	2.50	original tag says "plaster" but is incorrect. Non-diagnostic, unidentifiable	
85-31	20	351	Fragment	< 25%	0	6	1	4.00		
85-31	20	352	Fragment	< 25%	0	1	1	0.60	originally bagged with faunal remains (uncataloged)	
85-31	20	353	Fragment	< 25%	0	1	1	0.30		
85-31	20	354	Fragment	< 25%	0	1	1	2.00		
85-31	20	356	Fragment	< 25%	0	24	1	4.00		
85-31	20	358	Fragment	< 25%	0	0	0	0.00		
85-31	20	359	Fragment	< 25%	0	57	1	48.00	copper alloy hinge with wood attached; also, pieces of burned wood	
85-31	20	360	Fragment	< 25%	0	1	1	0.10	wood frag; possibly lumber, but not positively identifiable as such	
85-31	20	361	Fragment	< 25%	0	1	1	0.20		
85-31	20	362	Fragment	< 25%	0	1	1	0.10	leather fragment; possibly from shoe/boot, but difficult to determine	
85-31	20	363	Fragment	< 25%	0	2	1	0.40		
85-31	20	366	Fragment	< 25%	0	2	1	3.80	ferrous metal and plaster; maybe building material?	
85-31	20	367	Fragment	< 25%	0	7	1	0.70	wood frags; possibly lumber, though not positively identifiable as such	
85-31	20	306			0	29	0	127.70	Item(s) from this cat. No. were reassigned to 85-31:20-307.	
85-31	20	307			0	3	0	1.50	Originally part of 85-31:20-306.	
85-31	20	308			0	410	0	437.00	Item(s) from this cat. No. were reassigned to 85-31:20-309.	
85-31	20	309			0	62	0	9.60	Originally part of 85-31:20-308.	
85-31	20	320			0	0	0	0.00	Flot sample, light and heavy fractions. Items from this cat no have been reassigned to 85-31:20-321 (soil sample), 85-31:20-322 (fauna), and 85-31:20-323 (fauna-fish)	
85-31	20	321			0	0	0	0.00	250 mL soil sample saved during flotation; originally part of 85-31:20-320.	
85-31	20	322			0	0	0	0.00	fauna-general, from flot; originally part of 85-31:20-320; with Nancy Valente for analysis.	
85-31	20	323			0	0	0	0.00	Fauna-fish; from flotation; originally part of 85-31:20-320.	
85-31	20	378	Fragment	< 25%	0	1	1	0.10	Bone. Originally cataloged with 85-31:20-149.	
85-31	20	374	Fragment	25-50%	0	1	1	0.40	patella; green patina - was bagged with copper artifacts. Originally part of 85-31:20-181.	
85-31	20	368	Fragment	< 25%	0	1	1	0.90		
85-31	20	376	Fragment	< 25%	0	1	1	3.00	thin copper strip with one small tack (1.2 cm long) in it; strip is 1 cm wide and 3.7 cm long; probably decorative. Originally part of 85-31:20-181.	
85-31	20	357	Fragment	< 25%	0	6	1	1.00	possible chopstick	

## APPENDIX B: Full Catalog of 85-31 Feature 20

Catalog Number		Condition	% complete	Whole ct	Frag ct	MNI	Weight	Remarks	Decoration	
85-31	20	373	Fragment	50-75%	0	1	1	12.00	basket handle? Copper alloy with some remnants of organic material attached. Originally part of 85-31:20-181. Handle approx. 6.2 cm long, 0.5 cm diameter	
85-31	20	364	Fragment	< 25%	0	1	1	0.10		
85-31	20	370	Fragment	Over 75%	0	1	1	2.00	Item(s) from this cat no were reassigned to 85-31:20-371 and 85-31:20-377.	
85-31	20	371	Fragment	25-50%	0	3	1	5.00	Nail or tack. Originally part of 85-31:20-370. 2.3 cm long with round head 2 cm in diameter	
85-31	20	377	Fragment	50-75%	0	5	1	5.00	Originally part of 85-31:20-370.	
85-31	20	355	Fragment	< 25%	0	6	1	13.00	Probable opium tin remnants - 3.5 cm by 2.5 cm by 1.4 cm high (not full measurements, artifact is in frags). Originally part of 85-31:20-181.	
85-31	20	369	Fragment	< 25%	0	6	1	4.00	heavily burned and corroded (with patina). Originally part of 85-31:20-181.	
85-31	20	365	Fragment	< 25%	0	1	1	2.20	non-diagnostic stoneware frag.	
85-31	20	372	Fragment	< 25%	0	10	1	142.00	badly corroded Fe frags w/some composite material. Unidentifiable at this time. Future ID possible for at least one frag.	
85-31	20	375	Fragment	< 25%	0	1	1	31.00	unidentifiable artifact. Measures 4.7 cm high by 2.7 cm wide by 1.9 cm deep, with hole in one end and on one face (2.5x1.4 cm wide). Originally part of 85-31:20-181.	
85-31	20	379	Fragment	< 25%	0	0	1	187.00	Scraps from 85-31:20-118.	
85-31	20	380	Fragment	< 25%	0	7	1	2.40	Originally part of 85-31:20-118.	
85-31	20	380	Fragment	< 25%	0	2	1	0.20	Originally part of 85-31:20-118	
85-31	20	382	Fragment	Over 75%	0	1	1	0.10	melon seed? Originally part of 85-31:20-118.	
85-31	20	383	Fragment	25-50%	0	6	5	13.00	MNI based on nail heads. Originally part of 85-31:20-118.	
85-31	20	384	Fragment	25-50%	0	6	2	13.00	MNI based on nail heads. Originally part of 85-31:20-118.	