Brewing Behind Barbed Wire: An Archaeology of Saké at Amache

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Brewing Behind Barbed Wire: An Archaeology of Saké at Amache

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Abstract

After the Japanese attack at Pearl Harbor on December 7, 1941, approximately 120,000 people of Japanese ancestry living on the west coast of the United States were forcibly removed from their home communities. These people were designated as "evacuees" by the U.S. Government and were incarcerated within a network of federal government facilities the largest of which were internment centers operated by the War Relocation Authority that held mostly U.S. citizens. The Granada Relocation Center (Amache) was the smallest of these internment centers. The presence of saké at Amache indicates that Japanese Americans continued important practices of daily life despite restrictions under confinement. This thesis investigates the practices of saké production and consumption at Amache and examines the importance of these practices in Japanese American daily life. In order to understand these practices, this research draws on multiple lines of evidence. This includes investigations of an assemblage of the material culture associated with saké, research into the history and methods of production and consumption, collection of oral histories, review of archival data, and the application of practice theory. These data provide insight into practices that are not well understood by researchers of Japanese American internment due to their illicit nature. This research endeavors to characterize how saké was produced and used at Amache and provides a way to understand how cultural practices maintain aspects of everyday life in ways that may have little to do with intentional resistance.
Acknowledgements

To my wife Jessi. My everything everything and the originator of clever titles.
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Chapter One: Introduction

On December 7, 1941, The United States suffered a surprise attack at Pearl Harbor, Hawaii perpetrated by Japanese forces. The attack was meant to impair the ability of the United States to respond to forthcoming aggressive military action on the part of Japan in Southeast Asia. The attack on Pearl Harbor was a surprise to the people and government of the United States which responded by entering WWII on December 8, 1941.

As a result of the attack, anti-Asian sentiment (already pervasive in American society) grew and the removal of people of Japanese ancestry from the West Coast was inaugurated with the signing of Executive Order 9066 on February 19, 1942. The policy of exclusion eventually resulted in the incarceration of approximately 120,000 people of Japanese ancestry at government internment centers administrated by the War Relocation Authority, an agency specifically formed to facilitate the incarceration of Japanese Americans. The smallest of these facilities was the Granada Relocation Center (Amache), located in Prowers County, Colorado.

The policies of internment were a direct result of anti-Asian sentiment on the part of the United States general population as expressed by federal government policy. As such, racist ideas about what constituted an “enemy alien” were directly related to Caucasian prejudices about Japanese practices. Japanese immigrants to the United States,
many of whom were from rural areas of Japan, had brought traditional practices with them that they continued to perform in a new cultural context. These practices included many traditional activities such as Japanese festivals, ritual, and ways of life. Arguably, such practices played a role in the internment of Japanese Americans by identifying them as a distinct minority. Within the internment centers however, many internees continued these same practices despite the circumstances. Although these practices had been used to identify so-called “enemy aliens”, they were not prohibited by the War Relocation Authority within the centers, and in some cases were actively encouraged by administrators.

Center regulations were not generally permissive, however. A number of activities, such as the consumption of alcohol, were specifically forbidden. The prohibition on alcohol in particular, did have an impact on traditional practice in that it by default prohibited the use of saké in traditional ways. Initially introduced with the birth of rice agriculture in Japan, saké eventually became one of the most important products of the feudal period and was highly integrated into Japanese daily life. The drink was used in religious practices, traditional cuisine, and was a part of many social aspects of daily life. This importance continued into the modern period, and saké, in addition to other traditional practices was imported by Japanese migrants to the United States, where it continued to be utilized as a part of daily life, even during times of restriction such as the prohibition period.

Although prohibited by the War Relocation Authority, archaeological and interview evidence has firmly established the presence of saké and other types of alcohol
at many of the internment centers, including Amache. The evidence suggests that *saké* was widely available, and was used in the contexts of daily life as a part of many traditional practices that were permitted by facility administrators.

*Saké* and other alcoholic products were obtained by internees primarily through smuggling and home production. Although these activities were prohibited and known by administrators and community government officials to be taking place, no concerted effort was made to completely eliminate them. Instead of being viewed as social problems on the level of other issues such as juvenile delinquency, alcohol acquisition, production, and consumption appears to have been tolerated by those in positions of authority as long as it was not related to antisocial activities such as disturbances or sale at extremely high prices.

Previous work at Amache concerning *saké* has established its use in traditional activities, and speculates on the sources of *saké* and other alcoholic beverages. This research, like that of other Amache researchers, has focused on the role of resistance to the conditions of internment, and interprets to continuance of traditional practice as an expression of such resistance.

In contrast to a resistance perspective, this work applies the concepts of practice theory, specifically the aspects of doxa and residence to approach the production and consumption of *saké* in a different way. Instead of viewing *saké* as representing active resistance by the internee population, this research focuses on its role in the daily life and routines of individuals who were attempting to retain a sense of normal life within the confines of the Granada Relocation Center.
In order to assess the place of *saké* in the daily life of interred individuals, it was necessary to understand several aspects of the product and its manifestation within the environment of the facility. What is the significance of *saké* in Japanese and Japanese American culture? How was *saké* used by practitioners in Japan and the United States prior to the internment period? How did internees manage to continue the practices of production and consumption within the confines of Amache and other internment centers? And, does the continuance of such practices constitute an expression of resistance to the conditions of internment or one of residence where internees were simply continuing to practice in ways that they always had? These aspects are addressed in the following chapters through an application of archaeological research, archival research, and anthropological theory. This method serves to interpret the accumulated data in a fashion that both presents the most logical characterization of *saké* production and consumption at Amache while acknowledging the dignity of those who endured the internment experience.

The following chapter presents the history of *saké* in the contexts of Japan and the United States, in addition to technical details on how it is produced. The chapter also addresses the general history of the internment period and Amache itself.

Chapter Three addresses the theoretical framework of doxa and residence that will be applied to the collected data in order to interpret *saké* within the context of the internment center. Chapter Four identifies the methods of oral histories, archival research, and archaeological and geophysical fieldwork applied to acquire the data.
Chapter Five details the results of the data obtained from investigations of the various data sources described in Chapter Three at both Amache and other facilities used for comparison purposes. The chapter also synthesizes these results and applies the information from disparate sources as a cohesive whole in order to better characterize the ways in which saké was used and understood in various context in an effort to better understand its production and consumption at Amache. Furthermore, this chapter includes details about site formation processes that have influenced the distribution of material objects across the site of Amache.

Chapter six takes the synthesis of data detailed in Chapter Five and integrates it with the historical data presented in Chapter Two and the theoretical perspective detailed in Chapter Three. By doing so, this chapter serves as the linchpin for the entire work by endeavoring to show that the production and consumption of saké represents unaltered doxic practices in the context of Granada Relocation Center. Lastly, Chapter Six represents the conclusion in which the findings of this research are summarized.
Chapter Two: Background

Environment and Current Conditions

The Granada Relocation Center, also known as Amache is located in Prowers County, Colorado southwest of the town of Granada, Colorado (Figures 1 and 2). This area of southeast Colorado is located within the piedmont plains and tablelands ecoregion characterized by high altitude shortgrass prairie and plains (Chapman et al. 2006, Rosiere 2013). The climate of the area is semi-arid with hot, dry summers and cold, dry winters (Lillquist 2007:27-28; USDA NRCS 2014). Weather conditions at Amache are highly variable and include phenomena such as high winds, thunderstorms, periodic episodes of drought, and sporadically large amounts of precipitation (Lillquist 2007:27-29).
Figure 1: General Location map of Amache, Image courtesy of the National Park Service.
Figure 2: Topographic map of Amache.
The soils in the vicinity of the site are Entisols composed mostly of Tivoli sand. Entisols are relatively young soils with shallow horizons. The Tivoli sand subgroup is characterized by eolian deposition that forms deep and excessively drained soils that reflect the semi-arid climate conditions of the area and are highly susceptible to erosion (Lillquist 2007:29; Marín-Spiotta et al. 2015:3-4). These types of soils are often subject to eolian forces and are stabilized by vegetation in undisturbed contexts.

Prior to its use as an internment center, the 10,500 acres that formed Amache were portions of 18 privately held farms and cattle ranches (Burton et al. 2002:101). One of the largest parcels acquired by the WRA was formerly part of the XY ranch that had been impacted by cattle grazing. During the construction of the facility, vegetation was stripped off during grading activities, resulting in complete disturbance of the surface (Limerick 1992). Without vegetation to keep it in place, the topsoil was exposed to eolian forces that constantly disturbed and redeposited sediment. Blowing sediment was a constant condition endured by internees during their incarceration (Harvey 2003:74).

Undisturbed shortgrass prairie and plains typically have a vegetation community that consists almost exclusively of blue grama (Bouteloua gracilis) and buffalo grass (Bouteloua dactyloides) (Rosiere 2013). In areas that have experienced long-term drought and extensive grazing, these vegetation communities can degrade, resulting in a marked decrease in blue grama in favor of the more drought resistant buffalo grass (Rosiere 2013). Disturbance of topsoil also provides an opportunity for the expansion of weedy and hardier plants such as sage, Russian thistle, prickly pear cactus, snakeweed, and
Yucca (Barbour and Billings 2000:31). Since the abandonment of Amache, these species have grown unchecked and now cover large areas of the site surface.

The current vegetation community at Amache also includes Chinese elm, a cottonwood-like tree that was planted by internees (Shew 2010:31-32). The trees provided both physical and aesthetic relief from the harsh conditions of the plains and were planted for shade, windbreaks, and decoration.

The integrity of archaeological resources at Amache has been described as very good due to the presence of intact building foundations, artifacts, and landscaping (Burton et al. 2002). The site is currently owned by the Town of Granada which continues to maintain the roads but has left much of the site unaltered. As a result, the internment center has not experienced impacts associated with private land development such as improvements that would have damaged archaeological features.

The environment of Amache is especially dynamic, and current conditions result in both positive and negative impacts to the integrity of archaeological resources. Sediments are constantly destabilized by eolian forces resulting in erosion and exposure of features and artifacts. However, these same eolian forces protect the site by reburying artifacts and features under a protective layer of sand.

Until recently, the Town of Granada leased the site of Amache to a local rancher for the purposes of grazing. The cattle negatively impacted the site surface by exposing and trampling objects and features (Clark et al. 2012:5). In 2012, the Town of Granada
chose not to renew the grazing lease and cattle have since been removed from the site (DU Amache Project 2012).

Since the end of grazing activities on site, the distribution of plant species such as sage, yucca, and Russian thistle that are commonly associated with ground disturbance has increased as there are no longer any cattle to check the growth of these species within the site boundary. The extensive groundcover occludes small, fragmentary objects such as ceramic sherds and marbles which can make identification of artifacts and features difficult.

**Historical Background: Saké**

In order to understand the presence of saké at Amache, the product must be placed within its historical context. Saké has a long history of development and use in Japan where it has taken on deep cultural meaning. In the late nineteenth and early twentieth centuries, immigrants brought saké with them to the United States, where it continued to play an important role in the lives of Japanese Americans. Because of its importance in Japanese culture, it is impossible to separate the history of saké from the history of Japan and the history of agriculture in relation to the Japanese state.

Wet rice farming was introduced from China and Korea at the start of the Yayoi period in 400 B.C.E. (Ishige 2001:4,22) and during this time, rice-based alcoholic beverages were being produced using a variety of methods in mainland Asia, and it is likely that alcohol was introduced to Japan at the same time (Ishige 2001:34).
Fermentation requires sugars that are produced by the processing of starches that are converted into alcohol. Many foods used to make alcohol, such as many grains and fruits, already contain the enzymes that convert starches to sugars, and are easily fermented (Gauntner 2002:10). Other foods such as soy and rice contain no natural enzymes, and in order to ferment these foods it is necessary to introduce an agent that can process starch. Some of these materials include yeast, human saliva, or particular types of fungus, all of which have been used to make alcohol around the world at one time or another (Gauntner 2002:10; NPCS 2011; Shurtleff and Aoyagi 2012:5).

By the time agriculture had been introduced to Japan in 400 B.C.E, brewers in mainland China were using a variety of fungi to produce rice-based alcohols (Ishige 2001:34; Kanauchi 2013:40). One such fungus is *Aspergillus oryzae* (known in Japanese as “kōji–jin” or “kōji”) (Gaunter 2000:10; Iino 2014). The fungus is naturally airborne and was likely discovered by leaving a rice mash exposed to air (Gauntner 2000:11; Shurtleff and Aoyagi 2012). *Aspergillus oryzae* is the fermenting agent used in the production of products such as *shoyu* (soy sauce), *miso*, rice vinegar, and *saké* due to its ability to break down long starch chains (Gaunter 2000:10; Iino 2014).

In Japanese, the words “*saké*” and “*nihonshu*” are used interchangeably to refer to any alcoholic beverage (Urbansake.com 2015). The earliest alcohol in Japan was chewed mash liquor that was created by human masticated rice that was then spit into vats and left to ferment (Ishige 2001:33-34). These liquors were consumed in religious setting.
including funerals (Lublin 2010:127). The production techniques of such liquor are known to have been maintained until relatively recently in Okinawa (Ishige 2001:33-34).

Chewed mash liquor was the primary form of alcohol consumed in Japan until 500 B.C.E when an immigrant from Korea named Susukori reportedly served a rice liquor produced using kōji to the emperor (Ishige 2001:33). This initial product was likely low in alcohol content and similar in composition to the chewed mash liquor consumed in Japan at the time (Gauntner 2000:11-12). The use of kōji was enthusiastically adopted in Japan and a brewery (kura) was established at the court (Gauntner 2000:12).

In the initial period of its use in Japan, saké production and consumption was restricted to the upper class. Saké produced in the Heian period between 794 B.C.E. and 1192 C.E. was reportedly too expensive for even the minor aristocracy to consume (Kanauchi 2013:41). Over time, saké became more common and was integrated into elite religious ceremonies, likely supplanting the use of chewed mash liquor (Bouzdine-Chameeva and Ninomiya 2009:3; Gauntner 2000; Ishige 2001; Lublin 2010:127; Morris 1994).

Many rituals associated with the Japanese religion of Shinto involve alcohol. These rituals include offerings of saké to spirits (kami) (Inoue et al. 2003). Special festival days (hare) included the consumption of large quantities of alcohol to reach transcendent states and build community bonds (Gauntner 2000:12). Inebriation was
expected in this setting, so much so that an etiquette of feigning drunkenness became common (Ishige 2001:63).

By the Nara period, _saké_ was transitioning into an aspect of everyday upper class life. With a wide array of types to choose from, _saké_ was consumed recreationally and was used as a cooking ingredient by those who could afford it (Lublin 2010:127).

The use of _saké_ in religious ceremony was eventually expanded to include the lower classes although consumption was likely limited to festival days and special life events such as engagements, births, and weddings (Ichihashi 1997; Inoue et al. 2003; Lublin 2010:128). Festivals were such an important part of Japanese life that special allowance was made for them even during food shortages (Ishige 2001:18). Knowledge of the methods to produce _kōji_ was restricted to religious specialists and community members involved in the production of the starter mash (Yamamura and Hall 1990).

In approximately 250 B.C.E., Japan was first united under a national government controlled by an imperial dynasty (Ishige 2001:4, 45). Direct rule by the imperial family lasted until 1192 C.E. when it was displaced by a decentralized feudal system known as the shogunate or _bakufu_ (Ishige 2001:45). The new system retained the Imperial family, but true power lay with the shogun, a hereditary military governor to whom allegiance was owed by local lords (_daimyo_ ) (Ishige 2001:45). The _daimyo_ were in turn supported by their vassals the samurai warrior class (Ishige 2001:45). The feudal system was initially unstable; however, the early period saw economic growth and urban
development with the establishment of the first towns around castles of local daimyo (Ishige 2001:81-85).

The establishment of urban centers was one of the key events in the development of the Japanese feudal economy. The entire basis of the economic system was rice and government funding was heavily dependant on the commodity. In this system, the value of land (and therefore wealth) was directly related to its potential for agricultural productivity in terms of rice production (Nagata 2008:130). Rice also served as a type of currency in rural areas. Rice was exchanged for goods by peasants and samurai alike, and was paid as tribute to local lords and the bakufu government (Nagata 2008:106).

In contrast, residents of urban areas lacked land, and therefore, the ability to derive wealth from rice. As a result, a true currency economy was established. The advent of the new system disrupted the social order and a new urban class arose that included moneylenders, craftsmen, and artisans (Ishige 2001:106; Maria Gay 2001; Nagata 2008:106; Yamamura and Hall 1990).

Because of the importance of rice, the bakufu sought to control its price and availability by regulating its production and utilization (Lublin 2010:129). The government also took an interest in the regulation of saké in order to deal with things such as bouts of famine, or the negative social issues caused by drinking (Lublin 2010:129).

During the early feudal period, all substantial economic activity was controlled by guilds or brotherhoods known as “za”. The za held monopoly rights and, in exchange for
those rights, paid a portion of their profits to shrines, temples, and the bakufu
government. The za were the economic engines of urban life, and their existence
disrupted the social order by establishing a proto-industrial elite (Ishige 2001:81-85;
Nagata 2008; Pratt 1999).

Just prior to the advent of the feudal period, saké had been removed from a solely
religious context (Kanauchi 2013:41). By the 10th century, up to 15 types of rice liquor
were being produced by specialist brewers at the Japanese court in Kyoto and between
the 10th and 11th centuries, saké first became available in towns for recreational
consumption. In the feudal period, drinking parties commonly included the recreational
use of saké (Ishige 2001:34; Lublin 2010:129). Saké was initially obtained at temples or
at a small number of private kura operating with the blessing of a temple or za (Kanauchi

Demand for saké increased and soon the government allowed the establishment of
independent kura (Yoshizawa and Ishikawa 2004:152). In Kyoto, the largest saké
producing area at the time, brewers were still dependent on a supply of kōji provided by
the Kitano saké-malt za which was affiliated with the powerful Kitano shrine (Kanauchi
2013:41; Marie Gay 2001:41; Yamamura and Hall 1990:389). Despite a limited supply of
kōji, numerous establishments and merchants that sold the drink proliferated as the
secular use of saké continued (Lublin 2010:129).

The bakufu government also continued the tradition of rice use and production
regulation (Pratt 1999:175). Rice, and any industries that relied on the crop, was subject
to tight control meant to ensure an adequate supply of food and provide income for the
government (Bouzdine-Chameeva and Ninomiya 2009:3; Hauser 1974). The regulatory
framework however was highly variable. The government would often increase or
decrease the rice allotments or limit the amount of saké that could be produced, resulting
in especially violent swings in the fortunes of those who made rice-based goods (Pratt

In the saké industry, power gradually began to shift away from the older more
established za and the new independent brewers began to assert themselves. In Kyoto
between 1444 and 1445, brewers ceased buying kōji from the Kitano shrine and made
their own. When the za petitioned the government for the protection of its monopoly
rights, the shogunate instead sided with the brewers. During a military incursion of the
Kitano Shrine, bakufu soldiers killed 40 za members, and survivors set fires that burned a
large portion of the city (Bunting 2014:34; Yamamura and Hall 1990:390-391)

The incident made clear that the government was willing to liberalize the
production of saké for economic benefit. By allowing the brewers to produce their own
kōji, the bakufu signaled that its relationships to once powerful shrines and temples was
no longer as important as the economic opportunities offered by revenue from increased
production of saké (Yamamura and Hall 1990).

By 1599, the foundational principles of modern saké brewing had been
established with the introduction of a multi-stage process that allowed for the production
of saké on a large scale to meet rising demand (Gaunter 2000:13; Kanauchi 2013:41;
Yoshizawa and Ishikawa 2004:152). As a commercial product, saké needed to be stored for longer periods in order to be sold and brewers in the mid-16th century invented a process much like pasteurization. Newly produced saké was heated before being bottled in order to stop the fermentation process and allow the saké to retain its clarity, therefore extending its storage life. (Yoshizawa and Ishikawa 2004:152).

Although saké was no longer a solely ceremonial item, it continued to be used in ceremony and religious ritual among practitioners of Shinto and Buddhism (Inoue et al. 2003). The use of saké continued for the celebration of life events and a suite of etiquette around the drink and its traditional use was developed (Lublin 2010:128). The importance of saké for ceremony is highlighted by the fact that although almost exclusively available in cities, saké was also brewed in rural homes for traditional uses (Marie Gay 2001:41; Ishige 2001:63).

In 1600, the instability of early shogunate rule came to an end when the powerful Tokugawa Clan took over the Government. The Edo Period was inaugurated by the movement of the capital from Kyoto to Edo (Tokyo) from which the epoch derives its name. During this time (1600 to 1868) exceptional stability was achieved by government moves to centralize power within the feudal system. The result of political cohesion was economic growth (Van Steenburgh 2006). The za were abolished and a new “brotherhood” system was established where key industries were subject to regulation that allowed for greater government control of economy (Nagata 2008:131).
The Tokugawa government also undertook a policy of isolationism. Japanese nationals were forbidden to leave the country, effectively cutting off the nation from the rest of the world (Ng 2002:2). In addition, almost all European traders were expelled, and the remainder were confined to enclaves in coastal cities controlled by the Tokugawa clan (Ishige 2001:141-142). By turning its back on global trade, the government maintained the economic importance of rice which continued to be the foundation of wealth for the country and intensive regulation of industries related to rice (including saké brewing) continued (Ishige 2001).

During the Edo period, saké became a key commodity in the Japanese economy. In 1600 C.E., saké was still produced in towns for local consumption and was a year-round industry that utilized surplus rice (Marie Gay 2001:41; Pratt 1999:59). However, by the mid-17th century, the government became concerned that the saké industry was diverting labor from rice production, and initiated the kan-zukuri system that limited saké production to the period between October and March (Morris-Suzuki 1994:50).

*Kan-zukuri* was based on seasonal employment and relied on two classes of workers. *Toji* were *kura* managers, and were responsible in large part for the craft of brewing. *Toji* in turn hired workers called *kurabito* who staffed the brewery and worked under the direction of the *toji* (Francks 2006:40; Bouzdine-Chameeva and Ninomiya 2009:4). Workers at both the *toji* or *kurabito* levels were sourced from agricultural populations during the winter and many lived in provinces far from the *kura* in which they worked during the winter brewing season (Bouzdine-Chameeva and Ninomiya...
2009:4). Each year, these workers returned to rural communities with extensive knowledge concerning the production of saké. Home brewing of saké in rural areas is known to have been common at this time and was likely enhanced by the presence of toji and kurabito and the presence of extensive home brewing may account for the lack of rural commercial brewing operations before the mid-18th century (Marie Gay 2001:41; Pratt 1999:158).

Although the policy of winter production was motivated primarily by economic issues, limiting production to colder month had the additional benefit of suppressing the growth of other fungi that would compete with Aspergillus oryzae during kōji production (Morris-Suzuki 1994:50). Another technical achievement in brewing made during the Edo period included the use carbon filters (Morris-Suzuki 1994:50; Scheurer 2015). These techniques were used to clarify and refine the product and came to define what would be generally be recognized as commercial-grade saké, or seishu (Gauntner 2002:19-22).

In the mid-18th century, the demand for saké had further increased, and production expanded from the towns into the countryside (Francks 2006; Hauser 1974:52-53). There was a drastic increase in kura of all sizes as many landowners established brewing operations (Pratt 1999). As a result, commercial saké was available in rural areas for the first time and its presence stimulated a market for commercial products; however, home production of saké continued. During this time, consumption of
saké in secular contexts was common and the drink was an established part of Japanese cuisine (Francks 2006:40; Ishige 2001; Pratt 1999:158,202).

Although bakufu policies were meant to control the price of rice, the value of it and other commodities often fluctuated wildly (Hauser 1974). As a result, prices for commercially produced saké could be volatile. Large price increases often resulted in consumers reverting to home production when commercial saké became too expensive (Francks 2006:40).

The growth of urban centers and the movement of industries outside of the towns had destabilizing effects in rural areas. Labor opportunities in other industries such as saké brewing could incentivize people to stop producing rice (Ishige 2001:109; Morris-Suzuki 1994:50). Rice production was also impacted by the introduction of commercial saké brewing operations that diverted large amounts of the crop. Merchants would buy rice in villages with hard currency to sell it to the brewers, therefore diverting a large amount away from food production (Hauser 1974:42). This expansion of the currency economy allowed landowners to fall into debt for which they would sell their lands, further decreasing the amount of rice available for food (Ishige 2001:106; Hauser 1974:42).

In response to the destabilizing effects of rural economic growth, many local daimyo imposed decrees that severely restricted the lives of the peasant class (Ishige 2001:107). These restrictions were meant to ensure that the peasants remained subject to the rice tax system and forbade even basic luxuries, including saké (Ishige 2001:107). For
many village dwellers, the *kan-zukuri* system would have offered some of the only opportunity for acquiring currency.

Commodore Matthew Perry’s “Opening of Japan” in 1853 paved the way for the end of the feudal system and the beginning of the Meiji Restoration in 1868 (Ng 2002:2). Although the Edo period had been exceptionally stable, the shogunate’s policies of isolation eventually backfired. By monopolizing trade at Tokugawa clan ports, the Tokugawa had earned the ire of the other powerful clans. The monopolization of contact with Europeans allowed opponents of the Tokugawa to characterize the government as influenced by foreign interests and a faction arose that demanded the restoration of imperial rule and the expulsion of foreigners. After several military engagements, the *Bakufu* realized that it had lost its mandate to rule and restored the governing powers of the emperor (Ishige 2001:142).

Meiji-era reforms opened Japanese society to the wider world by ending the isolationist policies of the Edo Period. The government was modeled on modern western parliamentary state, as the government abolished the feudal system and undertook a mission of modernization, military expansion, and economic growth (Ishige 2001:142). This was achieved primarily through the creation of a modern military force and the introduction of higher taxes. The government inaugurated a conscripted force in 1873, essentially eliminating the samurai warrior class (Komicki 1998:235; Kreiner et al 2004). As many samurai were landowners, this led to instability that eventually included the assassination of key figures in the Meiji Government (Nouët 1990:205). In a bid to
maintain control, the government determined that further increasing taxes on landowners may result in political destabilization (Kreiner et al 2004:31; Pratt 1999:29, 31). As a result, Meiji policy favored increased taxation of industry including commercial saké production (Pratt 1999).

By the end of the Edo period, saké was the second-most important commodity produced in the country (Francks 2006:39). The new government maintained the brotherhood system established by the shogunate until 1871 when it abolished monopolies. Regulations for the saké industry established new licensing requirements and eliminated things like as caps on the number of kura and limits on production. In addition, anyone with the necessary capital was allowed to establish a brewery (Bouzdine-Chameeva and Ninomiya 2009:3; Pratt 1999:31).

Initially, the liberalization of saké production greatly expanded the number of kura, and by 1872, the number of breweries in Japan had grown to 30,000 (Bouzdine-Chameeva and Ninomiya 2009:3). However, increased taxation of saké producers negatively impacted the industry. Between 1876 and 1900, the share of Meiji government income accounted for by taxes on saké rose from 3.7% to 34.4% as saké became the most important manufactured good in the country, however the increased tax burden soon resulted in a decline in the number of breweries; by 1900 the number of breweries had decreased to 10,804, and by 1920 there were only 9,552 Kura in Japan (Bouzdine-Chameeva and Ninomiya 2009:3; Pratt 1999:31, 75, 158). Furthermore, the high taxes disproportionally affected small and medium sized operations because they favored
large producers that were able to modernize and exploit economies of scale (Pratt 1999:178).

Because of the importance the *saké* tax, the Meiji government sought to stimulate demand for the product by eliminating competition from home brewing. Laws were passed limiting home production of *saké* to one koku (approximately ⅓ of a cubic meter) per household in 1880. Home production of refined *saké* (seishu) was banned in 1886, and all home brewing was banned in 1899, although the practice continued illegally (Kreiner et al 2004:75).

For many Japanese, the combination of high taxes, loss of land, and the prospect of military conscription motivated them to exercise their new rights to leave the country (Blocker, Fahey, and Tyrell 2003:16; Kreiner et al. 2004:525; Ng 2002:2). Beginning in 1868, many immigrants sought opportunities in Hawaii to work on the sugarcane plantations, while others made their way to the mainland United States (Shurtleff and Ayogi 2011:17; Blocker, Fahey, and Tyrell 2003:16).

The first Japanese Immigrants to the mainland United States arrived in 1869 and established the Wakamatsu tea and silk colony northeast of Sacramento. The colony dissolved a few years later and its members dispersed, most of them settling in California (Ehrgott 2009; Ng 2002:2).

While there is no evidence concerning the attitudes that the Wakamatsu immigrants had towards alcohol, they and the vast majority of Japanese immigrants were from rural areas where home production of *saké* was common. In addition, the majority
originated from the southwestern prefectures, where commercial saké was traditionally produced and it is likely that many of these immigrants worked as toji or kurabito. In effect, the economic stresses of the Meiji restoration displaced a large number of people with a tradition of producing saké in household settings despite of government imposed restrictions (Blocker, Fahey, and Tyrell 2003:15-17; Kreiner et al 2004; Pratt 1999:72).

A worsening economic situation in Japan during the 1880’s and the annexation by the United States of Hawaii in 1898 (Shurtleff and Aoyagi 2011:5) encouraged further immigration to the United States (Toro-Morn and Alicea 2004:24). Immigrants often found work in low skilled positions in the agricultural, manufacturing, and service industries in Hawaii and on the west coast (Kreiner et al 2004:526; Ng 2002:2).

A ban on Hawaiian plantation contract labor in 1900 increased immigration to the mainland, and by 1900, approximately 30,000 Japanese were living in California (Ng 2002:2; Powell 2009:161). Although the early Wakamatsu immigrants had been well received by Californians, the growing population of Japanese created a backlash. coastal states passed a number of racially discriminatory laws similar to those that had targeted the Chinese immigrant community (Ehrgott 2009; Toro-Morn and Alicea 2004:24). Legislation that prevented Japanese immigrants from becoming United States citizens, owning land, and occupying certain professions, and limitations on the number of Japanese who could immigrate to the United States enshrined bigoted principles within a legal code reflective of wider anti-Asian sentiment on the part of the Caucasian population (Burton et al. 2002:26; Ng.2002).
Despite legal restrictions, Japanese immigrants experienced great success in the United States, especially in agriculture. Many first generation immigrants were able to circumnavigate restrictions on Japanese land ownership by listing the names of their American born children on titles. This allowed families to retain, and in many cases expand their land holdings (Burton et al. 2002:26). By 1900 more than 10% of agricultural products in the state of California were produced by Japanese immigrants (Ehrgott 2009). Other immigrants settled in urban areas where many started successful businesses.

Unfortunately, the economic successes of the Japanese American community engendered further discrimination and racism. As a result of racist legislative actions prohibiting the residency of Japanese people, ethnic enclaves in both urban and rural settings were formed (Kamp-Whittaker 2010:12). Such enclaves helped their residents avoid anti-Asian sentiment and provided ethnicity focused services and social structures. These communities maintained Japanese identity by providing a space for the continuation of Japanese cultural practices and a fusion of Japanese and American cultures (Kamp-Whittaker 2010:12-13). For example, Boy Scout troops made up of exclusively Japanese American members were present in these areas, and other institutions such as sporting teams, Christian and Buddhist churches and temples, Japanese language schools, the YMCA, and kendo clubs were also present.

By the early twentieth century, the Japanese community in America was characterized by a generational divide. Those of the first generation who had emigrated
from Japan were referred to as *Issei* and those of the second generation who had been born in America were referred to as *Nisei* (Burton et al. 2002:26). Many *Issei* continued the practices of traditional Japanese culture, while *Nisei* were effectively straddling two cultures, that of their parents and the American culture into which they were born. The effect of navigating two identities at once allowed for the formation of a unique *Nisei* identity that blended both; and one that was enhanced by participation in a mixture of both Japanese and American social institutions (Shew 2010:14).

From the beginning, *saké* production and consumption in the new contexts of Hawaii and the mainland United States largely mirrored that of Japan with a tradition of home-brewed alcohol existing side-by-side with commercial products (Niiya 1993:166). In Hawaii, *saké* was first introduced by the earliest plantation workers who were also known to make alcohol from a variety of materials that included rice and even pineapple (Greenhous 2014; Niiya 1993:166; Odo 2011:43). Commercially bottled *saké* was available as an imported product in local tea houses and other drinking establishments that served the immigrant community (Schmitt and Ronck 1995:229; Odo 2011:43).

In 1897, the Hawaiian government imposed an excise tax of $1.00 per gallon of imported *saké* as part of a package of discriminatory laws aimed at the Japanese population (Niiya 1993:302). As a result, many poor workers were unable to afford what had been one of the only respites from their harsh lives. In response, the immigrant community responded to the pressures on *saké* availability by expanding the practice of

The excise tax on saké was reduced by the federal government after its annexation of Hawaii; however, the incident set the stage for domestic saké brewing in the United States (Niiya 1993:166, 302). Beginning in 1900, Japanese American breweries were established in Hawaii and on the mainland. For example, between 1908 and 1909, Tajiro Sumida, an immigrant from Hiroshima established the Honolulu Saké Brewing Company that is generally recognized as one of the first and most successful saké breweries outside of Japan (American Brewer’s Review 1909:111; Greenhous 2014; Niiya 1993:166; Schmitt and Ronck 1995:229).

Although the tropical climate of Hawaii was not favorable for producing saké, the Honolulu Saké Brewery was able to thrive by using refrigeration technology to reduce the temperatures in its factory in order to replicate the conditions of winter in Japan. By artificially lowering the temperature, the brewery was able to produce kōji without the interference of other airborne fungi. Refrigeration also allowed the brewing process to be carried out at any time. As a result, for the first time since the Edo period, saké was produced year-round (Shurtleff and Aoyagi 2014:2016). The use of refrigeration was soon adopted by other commercial brewers in both Hawaii and on the mainland which also undertook year-round production (Ice and Refrigeration Illustrated 1913b:373; Niiya 1993:166).
The information concerning early saké brewing outside of Japan is extremely limited. According to most sources, there were approximately 15 to 20 saké breweries operating in Hawaii and the mainland United States by the beginning of prohibition in 1920 (Auffrey 2011; Greenhous 2014; Kita Sangyo Co., LTD. 2015; Oldbreweries.com 2015).

The advent of prohibition in 1920 halted the production of all commercial alcohol in the United States, including saké (Odo 2013:207). While most saké breweries simply shut down, the Honolulu Saké Brewery converted its refrigeration units to produce ice and remained in business. After switching to ice production, the company was renamed the Honolulu Sake Brewing and Ice Company LTD. (Niiya 1993:166).

Prohibition also had an effect on establishments that sold alcohol. In Hawaii, Japanese tea houses were not considered bars, yet they were known as a place where one could obtain saké and were likely counted among the 130 “liquor establishments” by temperance advocates in 1916 (Missionary Review of the World 1916:541-542). The drastic reduction in Hawaiian tea houses during prohibition is likely due to the loss of income from alcohol and highlights the importance of saké within the immigrant community (Odo 2013:207).

Prohibition resulted in a drastic increase in crime and violence throughout the United States related to the sale and distribution of illicit alcohol (Thornton 1991). The Japanese community was not immune to these phenomena nor to the actions undertaken by federal agents in enforcement of the Volstead Act. During prohibition, the source of
saké appears to have been restricted to home production, or illegal operations that produced large amounts of saké for sale on the black market (Kiyama 1998:122-123; Funderburg 2014:289; Izumi 1994; Nishizu 1982). There does not appear to be any evidence of smuggling operations that imported saké from Japan.

Although home production of saké was a common practice, prohibition effectively expanded the practice of home brewing to meet the demand for alcohol on the household and community levels. Saké was widely available in Japanese American communities, and was consumed in a variety of social and private contexts such as traditional celebrations, visiting with friends, and drinking with dinner (Izumi 1994; Kiyama 1998:122-123; Nishizu 1982:52, 71, 74-76). Many people were aware of home brewed saké which was viewed by contemporaries as widely available, relatively simple to make, and unjustly restricted by law (Kiyama 1998:122-123).

The criminalization of alcohol resulted in changes to saké production necessary to conceal its manufacture from the authorities. In rural areas of Terminal Island and Orange County, residents commonly produced saké using subfloor pits which could be easily disguised and provided spaces that could be kept at lower temperatures to facilitate brewing. Evidence of this brewing was often disposed of during police visits to Japanese American neighborhoods (Izumi 1994; Nishizu 1982:74-76).

Despite the need for discrete manufacture, Japanese Americans still used traditional methods and tools to make saké. As a necessary component in the production of fermented foods, kōji was available for purchase in Hawaii in 1891 and in California
by 1908 and was being used in the production of commercial fermented foods in both Hawaii and California before that time (Shurtleff and Aoyagi 2011:17-18; Shurtleff and Aoyagi 2012). Once they had acquired kōji, home brewers would often make their saké in ceramic pots and would use a traditional device called a fune to press out the liquid (Nishizu 1982:75).

Interviews with people who lived during the prohibition period in Terminal Island and Orange County provide some of the earliest evidence of some of the social problems that were associated with drinking within the Japanese American community. Issues such as fighting, health problems, low productivity, and drunk driving were evidently of concern to some Nisei whose parents consumed alcohol (Nishizu 1982:52, 71, 74-76).

The end of Prohibition in 1933 allowed for the resumption of commercial brewing at companies such as the Honolulu Sake Brewing and Ice Company (Greenhous 2014; Kita Sangyo Co., LTD. 2014). In addition, new saké breweries were established in Hawaii and western coastal states, several within the first few years after the repeal of the 18th Amendment (Appendix A). Just as before prohibition, many of the new breweries were short-lived but a few were successful and survived until WWII and beyond. One such brewery was Nichi-Bei-Shuzo (Nichibei Shuzo Kabushiki Kaisha Ltd.) which survived until the mid-twentieth century (Appendix A).
**Historical Background: Saké Production**

Traditionally, the production of saké is a long process lasting many weeks, broken up into a series of stages performed at a kura (Gauntner 2002:14). In the first stage (Senmai), brown rice is polished manually in a bowl, mortar and pestle, or in a machine. The purpose of the rice polishing is to enhance the absorption of the rice by removing the outer husk and 35 to 80 percent of the rice grain (Gauntner 2002:11-12). Senmai must be performed gently as heat from friction can negatively affect the ability of the rice to absorb water (Gauntner 2002:12).

After senmai, the polished rice is washed to remove the pulverized husk and rice grain (nuka). Leftover nuka is sometimes used for livestock feed, pickling foods, and in the production of other low-quality alcoholic beverages (Gauntner 2002:11-12).

In the third stage (shinseki) the rice is soaked in water to prepare it for steaming. The water content of the rice must be strictly managed as the polished rice can easily absorb too much and the amount of time the rice spends in the water is precisely measured to ensure that the amount of absorption is appropriate (Gauntner 2002:13).

In the fourth stage (mushimai), the washed rice is steamed in a vat known as a koshiki. The koshiki separates the rice from the water below so that steam is distributed evenly throughout the rice (Gauntner 2002:14). After steaming, the rice is then spread onto large pieces of cloth on a tray. The clumps of rice are broken up and the tray is left in a cool area (Gauntner 2002:14).
After cooling, a portion of the rice is reserved for the cultivation of the kōji during the complex kōji-zukkuri stage (Gauntner 2002:14). The rice that will be made into kōji is put into a vessel with Aspergillus oryzae spores, moved to a humid room, and left to cultivate for a period of between four and sixty hours (Gauntner 2002:15).

After the kōji is complete, the moto is started. The moto is responsible for all subsequent fermentation and consists of a mixture of a portion of the kōji, water, additional steamed rice, and yeast starter to initiate the fermentation process (Gauntner 2002:16-17). Over two to three weeks, the kōji breaks down the starches to provide a food source for the yeast cells. The yeast multiplies rapidly requiring close monitoring to ensure the proper balance. Adjustments to the moto are made with the addition of more water and rice (Gauntner 2002:17).

Traditionally, the production of the moto involved mashing that was meant to effectively puree the rice moto; this is known as the kimoto method (Gauntner 2014:77). The mashing is very labor intensive and requires a high level of coordination among workers. The kimoto method is synonymous with the traditional worker songs that were used to keep rhythm and pass the time (Hornsey 2012:229).

The mashing allows for the propagation of lactic bacteria that would in turn produce lactic acid. The lactic acid kills other bacteria and yeasts but does not harm the desirable yeasts which then reproduce and begin fermenting (Gauntner 2014:77). In the kimoto method, mashing is accomplished with a tool consisting of a long pole with a perpendicularly oriented flat head called a kaburagai (Figure 3). Stirring with such a tool
allowed *kurabito* to more thoroughly mix the *moto* because the flat head was used to both grind the *moto* against the bottom of the vat and circulate the mash between the bottom and the surface (Auld 2009; Bunting 2014:41; Wineterroirs.com 2012).

![Museum display of traditional sake brewing tools](image)

**Figure 3:** Photo of a museum display showing traditional tools for sake brewing including a kaburagai and a kai. Courtesy of Virtualtourist.com.

In 1909, *saké* researchers in Japan discovered that the labor intensive mashing could be eliminated from the production process entirely by adjusting the components of the *moto* and using warmer temperatures; a method is known as yamahai (Bunting 2014:41; Gauntner 2014:77). In 1911, researchers discovered the presence and beneficial effects of lactic acid, and the sokujo method of adding pure lactic acid to the *moto* was introduced (Auld 2009). The addition of pure lactic acid sped up the fermentation.
process and provided a method of more reliable moto production (Bunting 2014:41; Gauntner 2014:77). This method has been commonly applied in commercial saké production since its inception and is currently used by most breweries. In the modern period, the kimoto and yamahai methods have been reintroduced in artisanal saké production because of the distinctive flavors that the older processes create (Gauntner 2014:77-78).

In the next stage, the moromi mash is produced. The moto is transferred to a larger vat, and more rice and kōji is added over a four day period (Gauntner 2002:17). The resulting mash is fermented for eighteen to thirty days during which the mash is stirred (Kai-ire) with a paddle tool known as a kai (Auld 2009). During this stage, precise temperature control is needed to produce the desired flavor profile (Gauntner 2002:17-18). The majority of the alcohol in saké is created during the creation of the moromi and the concentration of alcohol can reach up to 20 percent, the highest alcohol concentration of any naturally fermented beverage (Gauntner 2002:17-18).

After the moromi is finished, the pressing phase (jōsō) begins. During jōsō, the liquid saké is separated from the remaining solids (kasu) (Gauntner 2002:18). The mash is put into mesh, cotton, or canvas bags, that are either hung, or pressed in a traditional wooden apparatus called a fune to extract the liquid saké (Gauntner 2002:18).

After Jōsō, the liquid saké is typically left to sit for another ten days. While the saké sits, sediment settles to the bottom and the fermentation cycle is to allowed to complete (Gauntner 2002:19). After the saké has rested, carbon is added and the liquid is
filtered during the *roka* stage. Filtering can affect the color and taste of the *saké*, and during *roka*, the final adjustments are made (Gauntner 2002:19). The *roka* phase is not mandatory, and different breweries may adjust the level of filtration or choose not to filter the *saké* at all (Gauntner 2002:19).

Another optional step is the pasteurization of the *saké* known as *hi-ire* (Gauntner 2002:22). The liquid is heated to a temperature of approximately 65 degrees Celcius/150 degrees Fahrenheit by pumping the liquid through metal tubing that passes through a vat of hot water (Gauntner 2002:19). The momentary exposure to heat deactivates the enzymes produced by the *kōji* and arrests any further fermentation. It is during *hi-ire* that water is added in order to dilute the *saké* and reduce its alcohol content (Gauntner 2002:22). *Saké* that is pasteurized in this way is referred to as seishu.

If unpasteurized *saké* is not kept cool, the continuation of fermentation processes result in the liquid becoming cloudy and yeasty, impacting taste and scent (Gauntner 2002:22). Just as with the *jōsō* stage, some brewers elect not to pasteurize *saké*, and the resulting product is referred to as *namezaké* (Gauntner 2002:19-22).

Throughout the brewing process, the regulation of temperature and are the most important aspects. Different stages require heating or cooling, and some require that particular temperatures or humidity levels be maintained for long periods (Gauntner 2002:19). Traditionally, such regulation is facilitated through the use of separate spaces in the brewery that are climate controlled (Gauntner 2000:17).
Following the attack on Pearl Harbor on December 7, 1941, some federal government officials began considering the removal of persons with Japanese ancestry from the western coastal states under the guise of national security. On February 19, 1942, President Franklin Roosevelt signed Executive Order 9066 (EO9066) which was a precursor to the eventual relocation (Harvey 2004:23). EO9066 was fueled by the growing surge of racism and distrust directed towards Japanese Americans which manifested itself in a fear that people of Japanese descent were liable to conduct sabotage ("fifth column") activities on the behalf of the Japanese military (Harvey 2004:12-13). EO9066 allowed the military to exclude from any area any persons that they determined represented a threat to national security. Though the order did not mention people of Japanese ancestry by name, the order was a clear response by President Roosevelt to calls from influential members of government and the military who demanded the removal of people of Japanese heritage from the west coast.

The man in charge of the exclusion zones as determined by EO9066 was the military’s Western Defense Command headed by Lieutenant General John L. DeWitt (Harvey 2004:12-13). Early on DeWitt had advocated for the removal of people with Japanese ancestry from the West Coast, culminating in a report submitted to the president on February 14, 1942 in which the action was formally recommended (Harvey 2004:22). EO9066 however did not remove people from the west coast, but it did give DeWitt a large amount of leeway in regards to determining and managing the exclusion zones.
DeWitt’s Public Proclamation No. 1 was given on March 2, 1942. The proclamation divided the west coast into two military strategic areas. Military Area No. 1 was made up of the western portions of Washington, Oregon, and California and the southern portion of Arizona which DeWitt felt were most threatened by the potential for fifth column activity. The second area comprised eastern and northern portions of those states, and while DeWitt determined them to still be vulnerable to attack, the risk was perceived as less of a threat than in Area No. 1 (Harvey 2004:25). The order also implied that the military may undertake forced evacuations, and DeWitt suggested that “enemy aliens” consider “voluntary evacuation to areas beyond the military zones (Harvey 2004:25). Further proclamations included No. 3 which established a curfew that targeted people of Japanese, German, and Italian heritage and targeted Japanese Americans by restricting their movements to within five miles of their homes, and prohibited the ownership of firearms and radio equipment (Harvey 2004:25).

Throughout the period following EO9066, the government continued to advocate for the voluntary relocation of people of Japanese ancestry from Area No. 1 as had happened in Hawaii where similar zones were defined (Harvey 2004:29). However, on the mainland, voluntary relocations were hampered by economic conditions and additional restrictions such as the need for sponsors in areas where relocating families wanted to relocate. As a result, few were able to relocate voluntarily (Harvey 2004:30-32).
In order to speed the relocation efforts, the President signed EO9102 on March 18, 1942, which created the WRA. The WRA was a civilian agency tasked with developing a program that would assist in the relocation of Japanese Americans by providing financial aid and housing (Harvey 2004:32). The purpose of the WRA soon shifted however with the announcement of DeWitt’s Proclamation No. 4 on March 27, 1942, which prohibited the movement of Japanese Americans from Military Area No. 1, effectively putting an end to voluntary migration. The order also authorized the military to forcibly evacuate the exclusion zone (Harvey 2004:35).

DeWitt’s order forced the WRA to quickly establish a program for the removal of people of Japanese descent from the Exclusion zone. Eventually, more than 120,000 innocent people of Japanese ancestry were removed from Pacific coastal areas to ten isolated internment centers (Burton et al. 2002). Of those interned, over two thirds were U.S. citizens. The “camps,” as the President referred to them, were placed in remote locations in mostly western states (Figure 4). Over 10,000 of those removed were interned at the Granada Relocation Center, (Amache), from August 1942 until October 1945. The sheer number of people made the camp the tenth largest town in Colorado at the time, even though it was the smallest of all the internment centers (Burton et al. 2002).
The internment of Japanese Americans affected the saké brewing industry in two distinct ways. Unlike the prohibition era, there was no legal prohibition of alcohol. Instead, saké was available within the United States as an ethnic cuisine item, but consumption was restricted to the Japanese immigrant population and the drink was generally not consumed by EuroAmericans (Slaughter 2006:145-146). Saké breweries in the United States were Japanese American owned businesses that were based in the same areas as the customers they served, namely the west coast (Greenhous 2014). The forced removal of Japanese Americans from the west coast simultaneously interned the owners and employees of companies that produced saké, and the entire market for the product.
Once again, only a few breweries survived. In Hawaii, where a relatively small number of Japanese Americans were interned, the Honolulu Saké Brewery and Ice Company survived by producing *shoyu* (Niiya 1993:166-167).

The removal of the market for *saké* meant that a large amount of inventory was left in shops and warehouses with no one left to consume it. At least some of that inventory is documented to have been brought into the internment centers. At Amache, residents would have been hard pressed to smuggle *saké* into the facility when they arrived, however, bottles from several breweries have been documented on site and there is evidence that supports the existence of a supply of *saké* that was purchased by a local business man in Granada and was sold to internees (Harvey 2004:68; Slaughter 2006:142-143). These people acquired stocks of *saké* (likely at steep discount) and resold it to internees at Amache and likely other internment centers (Greenhous 2014; Slaughter 2006).

Life under internment was oppressive. Armed guards and barbed wire surrounded the internment center boundary. Allowed to bring only what they could carry with them to Amache, Japanese Americans were introduced to a military style setting with few amenities. The unpredictable weather was a shock especially for those who were accustomed to more mild climates.

Those at Amache were from the assembly centers of Santa Anita, and Merced (Harvey 2004:41) which primarily drew internees from the urban and suburban communities of Los Angeles, Sacramento, and Walnut Grove, and the rural communities
of Merced and Sonoma Counties. The first group of internees arrived in Granada on August 27, 1942 from the Merced Assembly Center (Harvey 2004:48). The group from Merced was made up of internees who had volunteered or been selected to leave the assembly centers earlier and assist in finishing construction of the internment centers (Harvey 2004:71, 74).

Two sections make up the facility: one section reserved for the military police and administration, and the other section for internees (Figure 5). The internee area was divided into blocks comprised of 12 barracks, a mess hall, a recreation building and a communal bathroom/laundry building. The facilities were erected by the WRA using a design intended for military personnel. In addition to residential buildings there was a high school, a hospital, and a cooperative store.

In an effort to alleviate the Spartan conditions of the facility, internees repurposed materials procured from around the center to create gardens in traditional Japanese forms, as well as planting trees, some of which remain today. The gardens often consisted of features constructed from tin cans, concrete, river rocks, scrap lumber and repurposed pipe. The materials were used to create planters or other more decorative features (Clark and Driver 2015; Clark et al. 2012).
The living spaces were also very basic. The barracks buildings in the residential blocks were based on military designs, which were sufficient for groups of male soldiers but were grossly inadequate for families that included women and young children. The barracks were wooden framed modular buildings constructed over a poured concrete foundation, with rolled asphalt used for siding and roofs. Most of the flooring consisted of dry-laid brick simply pressed into the ground. The barracks also lacked insulation of
any sort, and were plagued by numerous cracks and gaps which served as entry points for
dust and sand.

The barracks building measured 20'x120' and were divided into six rooms
(referred to by the WRA as apartments) of three different sizes; 20'x20', 24'x20', and
16'x20' (CPI 2011). Commonly only one room was assigned per family regardless of
how many members that family had. Though there were six rooms per barrack, only
three doors were present on one side of the building, and residents shared a doorway with
their adjacent neighbors.

A lack of privacy was a pervasive fact of barrack life. Each unit was separated
from the other by only a thin wooden wall, through which sound passed easily. Privacy
within each unit was also of concern, and internees often strung up blankets to section off
parts of their living space.
While lacking in privacy, the barracks did provide a space where internees could be free from the surveillance of guards and camp administration. The minimal concealment provided for a number of activities, from more private expressions of Japanese culture to outright defiance of camp regulations. One almost universally disobeyed regulation was the ban on cooking in the barracks. Women throughout the camp defied the ban in an effort to provide for their families and reclaim their identities as caretakers (Shew 2010). Other illicit activities have also been documented as taking advantage of interior spaces throughout the camp, including the brewing of homemade
saké. At Amache, the consumption of alcohol was forbidden by rules imposed by the WRA (DU Amache Project 2009; Slaughter 2006). Despite these regulations, interviews conducted with former internees reveal that a culture of alcohol production and consumption existed at Amache (Slaughter 2006). The participants in these activities (mostly *Issei* men) are reported to have utilized many interior spaces for production and consumption of *saké* including boiler rooms, barrack interiors, and recreation halls.

Ironically, the WRA intended that the internment centers be governed at least somewhat democratically (Harvey 2006:92-93; WRA 1946a). The community government framework originally put forward by the WRA called for the election of a community council that would advise the project administrator. It was the intention of community government that the Project Director, while retaining final say on all matters, would work closely with community elected representatives in order to govern fairly (War Relocation Authority 1946a:12-13).

A key provision of the early community government framework was that while all internees of age were eligible to vote, only *Nisei* could hold office (War Relocation Authority 1946a:7). This policy was the source of much contention between internees and the WRA and came to have a large role in determining the course of community government within the facilities (Johnson 1945).

As the community council was to be an elected body, elections for positions could only be held once the Relocation centers were established. In the period between when internees first began arriving at the facilities and the time that the first elections were
held, the WRA administrators relied heavily on Block Managers that were appointed by the Project Directors (War Relocation Authority 1946:24). At Amache, the Block Managers were perceived by Project Director Lindley as representing the opinions of the residents of their blocks. As a result, there was a high level of cooperation between the administration and the Block Managers Assembly.

The reliance on the Block Managers was further enhanced by the WRA policy of limiting elected positions to those who were American born only. At Amache, Lindley himself recognized the need to work with the Issei community and submitted a proposal for a two tier generational system which was denied by the WRA (War Relocation Authority 1946:28). After the rejection of the plan an agreement was worked out at Amache that consisted of the mass resignation of all Nisei Block Managers. The open seats in the Assembly were then filled with Issei appointees by Director Lindley, effectively creating the two tiered system he had proposed (War Relocation Authority 1946:28).

The policy of maintaining an Issei appointed body was fertile ground for disagreements between the WRA officials and the Community Council. By absorbing the elders of the community who were traditionally respected as authority figures (WRA 1946a), Lindley, whether wittingly or unwittingly, had created a parallel government within the center that he effectively controlled through the power of appointment. In the WRA’s assessment, many camps with similar community government policies sometimes created systems where an agreeable relationship between the Community
Council and the WRA administrators could be suspected by residents, whereas a combative relationship would be perceived as obstructive (War Relocation Authority 1946:24). Meanwhile, the Block Managers who were responsible for more day-to-day concerns were often perceived as more effective due to their ability to influence the material conditions of the facilities (War Relocation Authority 1946:24).

According to Lindley, the working relationship between himself and the first two community councils through the end of 1943 was very productive. However, in his opinion, the influx of those who had been previously interned at Tule Lake beginning in September 1943 soon derailed the good relationship between him and the council (Johnson 1945:4-11). From the perspective of Lindley, it was the election of a Tulean council member that changed the relationship between him and the council by taking oppositional stances (Johnson 1945:11-15). In contrast, records kept by the community council during this period tell a different story. According to meeting minutes, the council felt the administration frequently overruled them or did not properly consult the council in decision making (Amache Community Council n.d.).

Regardless of who was at fault, the combative relationship between the council and the WRA further encouraged the administration to favor the Block Managers Assembly when it came time to make decisions. It must also be noted that although the relationship between the WRA and community government was contentious, this relationship was not the same as that between the WRA and the majority of the internee community often mediated through the Block Manager’s assembly. This generally
positive relationship is likely responsible for the low rates of crime and disturbances at the center (Foster 1945).

In October 1945, the relocation center was closed and buildings dismantled. Most of the buildings at the facility were torn down or removed, the materials sold for reuse or simply discarded. The nearby town of Granada purchased the land that the central core of Amache occupied to obtain the deep water wells that were drilled by the WRA (Burton et al. 2002). Amache was largely forgotten until the 1970s, when groups of former internees from various internment centers began to make pilgrimages to the Amache cemetery. In the 1990s, the camp gained several local advocates who contributed to making Amache a memorial (Otto 2010).

The camp was designated a National Historic Landmark on February 10, 2006. Of all of the internment facilities, the Granada Relocation Center is one of the best preserved sites that retains visible evidence of the military-style regimentation which characterized the internment experience of Japanese Americans during World War II (Simmons et al 2004). Amache’s distinctive attributes, including the well-documented history of internees and the story told by the landscape make the camp a significant part of American history.
Chapter Three: Theoretical Framework

In order to evaluate the presence and use of saké at Amache, this work applies some of the central concepts of anthropological practice theory as defined by Pierre Bourdieu in his *Outline of a Theory of Practice* (Bourdieu 1977; Ortner 2001). Practice theory is concerned with the relation of individuals (actors) to culture or society (structures). These ideas have their roots in the works of Karl Marx and Max Weber, and theories of structuralism pioneered by A.R. Radcliffe Brown and Claude Levi Strauss (Dornan 2002; Leach 2001). The combination of structuralism with the more individually focused work of Marx and Weber resolves a key problem of structuralism; that of the relation of individual actors and their actions to larger cultural systems (Dornan 2002; Giddens 1984). In addition to relating individuals to structures, a theory of practice is inexorably tied to concepts related to dominance and subordination the maintenance of social inequality through the reproduction of cultural structures (Dornan 2002:305).

According to Bourdieu, the individual exists as a participant within a culture and the individual’s actions (practices) recreate social structures. These structures act as limiting forces that appear to individuals to constrain the kinds practices available to them. As a result, Bourdieu's formulation is often conceived of as a feedback loop, wherein the actions of the individual are influenced by structures that in turn encourage
the recreation of the very same structures (Bourdieu 1976:118; Ortner 2001; Stevens 1998:58).

The mechanisms responsible for the reproduction of social structures are the habitus and bodily hexis (Bourdieu 1977, 1984). Bourdieu argues that much of practice is unintentional and is shaped by doxa. Doxa is the condition where “the natural and social world appear self evident” (Bourdieu 1977:164). Within the framework of doxa, the social conditions in which the actor exists are unquestioned because they are perceived as the natural order and deviation from these conditions is unimaginable (Stevens 1998:56-57). Doxa is arbitrary in the sense that any practice classified as such could easily be other than what it is. Until arbitrariness is exposed, only those that are not members of the social order in question are capable of perceiving doxic practices as unnatural (Stevens 1998:57).

The unquestioned nature of doxa results from misrecognition. This concept is defined by the fact that individuals within a society interact with and reproduce the very structures that constrain their practices precisely because actors do not realize that their practices are being constrained at all (Bourdieu 1977:164, 167). Misrecognition is the mechanism that makes social relations seem natural, self-evident, and unquestionable; resulting in doxic states (Bourdieu 1977).

Doxic states are created and maintained by Bourdieu’s central mechanism of the habitus. Habitus is defined by Bourdieu as: “…systems of durable transposable dispositions, structured structures, being predisposed to function as structuring
structures…” (Bourdieu 1977:72). Habitus creates doxa because it is a set of internal dispositions that incline people to act in particular ways that reproduce existing social structures. Habitus is a highly effective mechanism because of its interaction with the physical bodies of individuals through daily routines. By providing embodied experiences, habitus creates a corresponding physical sensation that the subject often unconsciously associates with existing social structures creating “body hexis”; a powerful way of normalizing perceived limits on practices (Bourdieu 1977:87).

Understandably, the issue of social change can be perceived as problematic within Bourdieu’s theory of practice. A system of physically integrated durable structure appears to lend itself to rigid reproduction resulting in stable societies (Cobb and King 2005:171; Smith 2001). Bourdieu however, recognized social and cultural change. Rather than a static concept, the habitus is a dynamic system that allows for change through the “generative principle of regulated improvisations” that can adjust practices on a case-by-case basis to different or challenging circumstances (Bourdieu 1977:78; Dietler and Herbich 1998:247).

Changing circumstances that allow for the questioning of doxa can either evolve gradually or occur suddenly (Cobb and King 2005:171). In these situations, practices are removed from doxic experience by an exposure of their arbitrariness, such as when doxic states come into contact with novel circumstances or within a class society where the “definition of the social world is at stake” (Bourdieu 1977:169). In these situations of contestation practitioners are exposed to a different way of thinking or way of life that
may result in a “mismapping” of habitus onto social conditions for which the established
doxa may be inappropriate (Bourdieu 1977:164; Sahlin 1985). It is in these contexts that
a self-conscious assessment or rationalization of doxa is made and practices are divided
into orthodoxy and heterodoxy (Silliman 2001:194; Dietler and Herbich 1998:247). In
orthodoxy, those with a vested interest in the established system may attempt to reinstate
or create a new doxa by explicitly rejecting heresy (heterodoxy) by defining proper and
acceptable practices (Bourdieu 1977:169; Silliman 2001:194). Practices may change
because of the contestation that surrounds them, but these changes may be within
acceptable limits that allow for the reassertion of a silence of discourse. However,
Bourdieu notes that orthodoxy does not fully reconstitute a doxa as it is an imperfect
approximation of doxa that only exists in relation to heterodoxy (Bourdieu 1977:169). In
heterodoxy, practices are exposed as arbitrary or obsolete and become nodes of social
conflict. Heterodoxy may result in the cessation of doxic practices and/or the formation
of a new and altered doxa (Bourdieu 1977:169; Joyce and Lopiparo 2005:371; Silliman

The choice between orthodoxy and heterodoxy constitutes the basis for social
change in a way that emphasizes the adaptability of doxa through practical politics
(Silliman 2001). Although Bourdieu emphasized that neither orthodox nor heterodox
responses to contestation are able to fully reconstitute contested doxa, the cultural
practices that emerge out of contestation constitute new doxas (Bourdieu 1977:169;
1991:128-129). The mechanism of the habitus is not arrested by altered doxas or
circumstances, instead, the habitus indiscriminately integrates new or altered practices and these practices become the basis of new doxas that appear to be just as natural and unquestionable as any other (Bourdieu 1991:128-129).

An existing doxa may be well suited for the challenges of contestation. Marshall Sahlins (1985) defined what are essentially doxas with his dichotomy of prescriptive and performative structures that deal with contestation differently. A prescriptive structure is one that is based on conformity with tradition and is therefore more orthodox in its orientation. In contrast, more performative structures/doxas are “open to history” in regards to contestation (Sahlins 1985: xii). These doxas are viewed as responding to contestation in more heterodox ways that are more able to integrate new realities into existing doxa (Bourdieu 1977:169; Thomas 1996:106-107; Sahlins 1985; Silliman 2001:193-194).

Despite the use of heterodoxy and orthodoxy and the ability of the habitus to adjust to new circumstances, valid objections to Bourdieu’s theory of practice have been raised. Many of these criticisms concern the decidedly structurally deterministic aspects of habitus and doxa, as well as the fact that the ways in which the habitus and doxa make room for social change are not sufficiently sketched out by Bourdieu (Church 2001; Cobb and King 2005; Dornan 2002). Despite these limitations however, archaeologists especially have found the concepts of habitus and doxa to be helpful interpretive tools for the interpretation of material culture, social change, and the maintenance of cultural practices. Many of these authors adopt the concepts of habitus and doxa with care to
avoid taking on the baggage of structural determinism, often by considering the concepts almost in isolation (Banning 2010; Dietler and Herbich 1998; Silliman 2001, 2009).

One such author is Stephen Silliman, who adopts Bourdieu’s doxa along with the concepts of orthodoxy and heterodoxy in his construction of a theoretical framework called “practical politics” within which he considers the role of politics in relation to daily practice. According to Silliman, politics is always an aspect of practice however these politics are not always “...explicit, consequential, or even contested in the world of everyday conduct” (Silliman 2001:194). In order to address these aspects in relation to practices, Silliman expands the concept of doxa to include significant practices “...with intentional or unintentional political implications” (Ortner 2001:470).

Instead of existing solely in a non-discursive context, some doxic practices are also defined as those that reflect intentionality. These more intentional practices are characterized as those that are the result of the shared “motivations and life-histories” of social groups. Such practices are defined by an intentional silence of discourse based on decentralized personal interests, creating a situation where they are indistinguishable from those of solely doxic origin (Silliman 2001:193). In contrast to Bourdieu’s original definition of doxa, these practices are characterized by “...a quality of particular circumstances, materials or social relations rather than to a general state of existence or societal level” (Silliman 2001:193). In essence, even unintentional practices can exhibit “doxic qualities”, resulting in varying levels and multiple doxas that are dependent on characteristics of identity such as age, class status, and gender (Silliman 2001:193).
The intentional aspect of practical politics is also apparent in its definition of orthodoxy and heterodoxy. By viewing some cultural practices as exhibiting “doxic qualities” rather than representing unquestioned dispositions, Silliman assigns practitioners a higher level of agency and the choice between orthodoxy and heterodoxy is viewed as a decision with expanded political dimensions (Silliman 2001:193). Heterodoxy is still defined by its exposure of arbitrariness, however the arbitrary nature of practices is considered as deliberately accentuated for social or political gain. Orthodoxy also takes on an expanded political role where practitioners try to reinstate a contested doxa or create a new one because of their vested interests and the accompanying silence of discourse that surrounds the old order (Silliman 2001:194).

By acknowledging the role of social relationships and identity in daily practice, both are recognized as nodes in political maneuvering that impact practices. Within a theory of practice, politicization implies contestation, which, in turn, implies conscious intent outside of the framework of a doxa as conceived by Bourdieu. In this context, agents can choose one of two equally valid paths, acts of resistance or acts of residence (Silliman 2001:194-195).

The concept of everyday resistance as articulated by James C. Scott (1985, 1986) focuses on acts of resistance that consist of “...ordinary weapons of relatively powerless groups: foot-dragging, dissimulation, false-compliance, pilfering, feigned ignorance, slander, arson, sabotage, and so forth” (Scott 1986:6), rather than the outright rebellion and class struggle that many would associate with the term resistance. Because of its
focus on everyday acts this concept of resistance has become a popular theoretical orientation in anthropology and archaeology (Casella 2005, 2007; McDonald et al. 1991; Sivaramakrishnan 2005). In general, research on internment has focused on a perspective of everyday resistance, including at Amache (Branton 2004; Kamp-Whittaker 2010; Shew 2010, Skiles 2008).

In addition to acts of resistance are acts or residence (Silliman 2001:194-195; Silliman 2015:64). Acts of residence are practices undertaken by the subordinated that have very little or nothing at all to do with active contestation. Instead, individuals practice in order to “stake out a claim in their social worlds, even under contexts of oppression and domination” (Silliman 2001:194-195). Acts of residence define those tasks that individuals without power undertake to stake out a claim and “make do” within the constraints of the system (i.e. structures) that they find themselves living in (Silliman 2001:195). Rather than seeking to usurp power, individuals instead put most of their energy into simply living their daily lives and residing in a space. Practices of this sort are not intended to be used to enhance social position or pursue outright advantage; instead they are the everyday practices that can make life feel “normal” even under duress.

A concept of residence co-exists with those of resistance and doxa by recognizing that not all activities that are considered “traditional” were meant to resist oppressive circumstances. Instead, practices were mobilized to continue daily practice and even adapt those daily practices to present circumstances in order to enhance the survival of
practices (Silliman 2015:62, 64). In certain situations these processes take place alongside or even regardless of outright resistance (Silliman 2015:62). The concept of residence does not ignore that of resistance by allowing for the analysis of how people lived rather than being simply concerned with what they were resisting through their actions. This perspective returns agency to individuals in the past by refocusing the unit of analysis on the outcomes of domination rather than the supposed intentions of those in power (Silliman 2015:63). In this context, residence is a strategy enacted by those in situations of unequal power relations that reflects a dialectic relationship of both domination and resistance that it operates within (Silliman 2015:64).

Although the divining of intention is an important aspect of archaeological research, the analysis of outcomes is a better starting position for the inquiry of acts of residence and resistance because it can be more objectively defined. In making choices about how to practice, individuals respond to the outcomes of oppressive policies rather than the intentions of those who imposed them, reframing focus to take into account the way those who had to live with the consequences of domination perceived the objective reality of domination and/or control (Silliman 2015:63).

By definition, acts of residence with their focus on the maintenance of daily life should represent a higher level of ubiquity within the archaeological record than acts of resistance (Silliman 2015:63). Even in situations of explicit domination and resistance, the activities of daily life are more concerned with the mundane aspects of living such as subsistence, economic transactions, and intra-group social activities (Wiek 1997:88).
Even though they do not originate as political practices, acts of residence are still subject to a decision between orthodoxy and heterodoxy. By definition, the practices of normal life have their roots in a certain doxa, and are initially defined by it. However, these practices may be just as visible as others and are not shielded from contestation just because practitioners do not intend to engage in contestation. If these practices are questioned, individuals will have to choose between orthodoxy and heterodoxy, a process which may politicize the very practice that was not meant to be political in the first place (Silliman 2001).

The choice to continue or abandon practices can express a range of political positions. Continuance can signal resistance, continued residence, or compliance with social rules. Likewise, non-practice can express these same political positions, in addition to signaling that a practice is no longer important, or is de-politicized. Both traditional and new practices can be used to reformulate identities, a situation that can be expressed and observed through changes in material culture that represent the daily lived experiences of individuals and groups (Silliman 2001:195).
Chapter Four: Methods

In order to assess the significance of saké as a part of internee daily life, a wide variety of multidisciplinary methods were used to collect and analyze data. By utilizing these methods, a more complete picture of life at Amache is evident. This work is highly dependant on previous research performed at Amache by researchers from the University of Denver and others. Previous research is integrated throughout this paper where appropriate.

Work at Amache has been ongoing since the 1990s, when an advocate group, the Amache Preservation Society (APS), consisting mostly of high school students led by their social studies teacher who took an active role in the preservation of Amache. APS is currently responsible for the majority of site maintenance, as well as public outreach.

In 2003, the site was surveyed to determine archaeological significance and integrity (Carrillo et al. 2004). Based on similar surveys performed at other internment camps, it was determined that Amache was among those with the greatest archaeological integrity, due to its building foundations, trash dumps and a diverse array of artifacts. In 2005, the University of Denver (DU) became involved with the site, and since then, subsequent work has focused on both the camp and the museum. Dr. Bonnie Clark, a historical archaeologist and professor at the university, has been the principal investigator of the project, while Brooke Rohde, Anne Amati, and Dr. Christina Kreps have headed...
the museum component. The project also provides preservation and management expertise to site advocates and training to students studying anthropology at the university through an archaeology and museum field school.

Since 2008, four surveys associated with the field school have been conducted at the site as a part of the DU Amache Project in 2008, 2010, 2012, and most recently 2014\(^1\) (Clark et al 2008; Clark et al 2012; Clark and Driver 2015). The field schools have been associated with research performed by University of Denver anthropology and archaeology graduate students who have employed field school data in the formulation of master’s theses (Kamp-Whittaker 2010; Shew 2010; Skiles 2008; Swader 2015). In addition to research performed by University of Denver researchers, this work is extensively informed by the thesis of Michelle Slaughter (2006) who completed the first master’s thesis pertaining to Amache. Slaughter researched *saké* use in relation to Japanese identity while pursuing an Anthropology Master’s degree at University of Colorado Denver.

**Oral Histories**

The reality that former internees are still alive is an obvious advantage to work at Amache that most archaeological investigations lack. Since the beginning of preservation and research in the 1990’s, numerous interviews have been conducted. Interviews have

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\(^1\) Only data from the 2008, 2010, and 2012 field seasons is considered for this work.
been facilitated by the involvement of researchers with the Japanese American community through active participation in Japanese American community groups and cultural events. This interaction has enabled researchers to build a rapport with the community that facilitates the discussion of a difficult period in its past.

The majority of survivors were children during the internment period, most of whom were second generation (Nisei) or third generation (Sansei) Japanese Americans. Today, many of those same survivors provide engaging and often detailed accounts of their lives at Amache during the internment period. While the accounts of those who were children or young adults at Amache are extremely helpful, they only provide one perspective on the lives of the internee population. Many interviewees discuss the experiences of the older generation; however their knowledge is grounded in recollections or stories rather than direct experience. Due to the effects of trauma and cultural norms that discouraged discussion of the hardships of internment, many Issei passed without communicating their experiences to subsequent generations.

Amache researchers have engaged in formal and informal interviews with community members in a variety of settings including in person, over the phone, via letter or email correspondence, and in private and public sessions during community and cultural events. When possible these interviews are recorded with audio devices and a written transcript produced so that a record of the interview can be utilized by current and future researchers. Interview questions are guided by current research interests on the part
of those conducting the interview. In many cases, interview subjects were informed ahead of time of interview topics to give them time to collect their memories and/or conduct personal research.

Oral history data for this project consists of a number of relevant interviews conducted by DU researchers between 2008 and 2011. In spring 2011, the author accompanied Dr. Bonnie Clark and fellow graduate student researcher David Garrison on a trip to Los Angeles, during which the author was involved in a number of group and one-on-one interviews. The author’s questions focused on the production and consumption of saké and these oral histories comprise a large amount of the cited interviews within this work.

Archival Research

Although oral histories are an important source of information through which data to interpret archaeological objects and features at Amache are acquired, they are not the only means that primary source data are obtained. Archival sources consisting of documents generated at the internment center also represent the daily lived experiences of the Japanese American community. These documents provide insight on the daily lives of residents, members of community government, and WRA administrators. The documents reviewed for this project include copies of the internment center newspaper, the Granada Pioneer, minutes of meetings held by the Block Manager’s Assembly and Community
Council, and various reports and other documents generated by WRA administration officials.

WRA documents include those authored or overseen by the head of Internal Security, Harlow Tomlinson, and the center director, James Lindley and offer an especially frank representation of WRA attitudes regarding the administration of the facility.

Aside from records specifically related to Amache, it was necessary to obtain additional documents regarding other internment facilities in order to provide appropriate and contemporary contexts for the production and consumption of saké at Amache. Documents such as other facility newspapers were investigated to discern the attitudes of the larger American community. Newspapers and internal WRA documents from other internment facilities that addressed the consumption and production of alcohol were investigated to establish their presence at other locations, and to provide analogous information of activities for which definitive evidence was lacking at Amache.

The primary documents reviewed were in a variety of formats and include scanned documents maintained online by Densho: The Japanese American Legacy Project, the Bancroft Library at the University of California at Berkeley, and the Colorado College Tutt Library. In addition to digital records, National Archives and Records Administration (NARA) microfilm reel reproductions housed at the University of Denver were also reviewed.
Fieldwork

Archaeological data for this project is also in large part based on the results of survey and excavation undertaken at Amache between 2008 and 2012 by DU Amache Project researchers. Information from between 2008 and 2010 is based on technical reports, research papers, and master’s theses. In addition to utilizing previous work, the author served as a field supervisor for the 2012 field season, during which the most recent field data related to this project were obtained. The author also prepared a technical report for the results of the 2012 field season in consultation with Dr. Bonnie Clark, and information from that report is integrated throughout this work where relevant (Clark and Driver 2015).

Surface Survey

Methodology employed for surface survey in 2012 was based on protocol used at Amache in 2008 and 2010 (Clark et al. 2010). During these surveys, transects within the surveyed blocks were walked with approximately 2m spacing between surveyors to obtain detailed data regarding archaeological resources on the surface. All non-architectural artifacts encountered were tallied according to project protocol to provide information on overall artifact distribution (Clark 2010). Temporally diagnostic objects and those of special interest as defined by the current research design were photographed and intensively documented in the field according to established protocol. Documentation consisted of flagging the object and assigning it a Field Artifact (FA) number after which its location was recorded with a sub-meter accurate GPS unit (Trimble Geoexplorer
6000). The objects were then recorded in the field using forms developed based on the material type of each artifact.

Some FA items were selected for temporary collection using the “catch and release” method (Silliman 2008), based on their ability to provide additional data. These objects had their exact locations recorded and were removed from the site to be analyzed. The objects were photographed and evaluated in the field lab after which they were returned to their original locations on-site.

A small number of objects were selected for inclusion in the permanent collection based on criteria such as rarity, risk of damage or theft, special analyses, or their potential to offer educational benefits. These objects are currently housed at the University of Denver. Once the DU Amache Project has been completed, the objects will be transferred to the Amache Preservation Society museum in Granada where they will be permanently curated.

*Ground Penetrating Radar*

In addition to traditional archaeological survey methods, ground penetrating radar (GPR) survey was conducted by the author and GPR specialist Daniel Shereff in the fall of 2010. Based on information from several interviews (Derek Okubo 2008, pers. comm.; Uragami 2009), four barrack interiors were investigated for the presence of subsurface features.

GPR is an active survey method that utilizes antennas to direct high frequency radar waves consisting of electromagnetic energy pulses into the ground (Conyers
During GPR survey, the antenna is moved along the surface of the ground in transects arranged in a grid. The radar waves travel through the ground until they encounter subsurface objects, features, or stratigraphic interfaces with a different chemical and physical makeup than the surrounding soil and sediment matrix. When these objects and features are encountered by the radar energy, a portion of the energy is reflected back towards the surface and is received by the radar unit (Conyers 2013:47). A series of multiple waves reflected from a single point is known as a reflection trace (Conyers 2013:27).

The ability of GPR systems to gather information about the size, position, and types of subsurface materials is dependent on a number of variables. The types of soils and sediments and the amount of moisture present in the study area are related to relative dielectric permittivity (RDP). RDP is a measure of the electrical conductivity and magnetic permeability of materials (Conyers 2013:47-48). The amount of two-way travel time it takes for the energy to reach subsurface materials and return to the antenna is calculated in nanoseconds (ns) as velocity (Conyers 2013:14, 35). Generally, electrically conductive materials such as soils or sediments with a higher water or clay content (and therefore a higher RDP value) reduce the velocity of radar waves (Conyers 2004:45; Conyers 2013:48). If the RDP of the surrounding matrix is known, its effects on velocity can be taken into account and the approximate depth of objects, features, and interfaces can be determined by a conversion of two-way travel time (Conyers 2013:21, 59-62). In addition, the difference in RDP between the surrounding matrix and the object of study
determines the strength of the reflection (Conyers 2013:49). The greater the difference between the subsurface material and the surrounding matrix in terms of electrical, and magnetic properties, the stronger the reflected waves will be in terms of amplitude, whereas materials with a similar RDP to that of the surrounding matrix may be less apparent in GPR data (Conyers 2004; Conyers 2013:27, 51-52).

Depth of penetration and reflection resolution is influenced by the type of antenna used. Antennas transmit radar energy at different frequencies measured in megahertz (MHz). Commonly, antennas for use in GPR vary in frequency between 10 and 1500 MHz (Conyers 2013:26). The differences in frequency produce radar waves of varying wavelengths, with lower frequencies creating longer wavelengths and higher frequencies creating shorter wavelengths (Conyers 2013:24-25). Radar energy of lower frequencies can penetrate deeper into the ground, but result in lower resolution reflections that can only resolve very large features. In contrast, higher frequencies will not penetrate as deeply as higher frequencies are more easily attenuated, but the resolution of the generated images is much finer, allowing for the detection of smaller objects (Conyers 2013:62).

Prior to the beginning of survey, the frequency number of traces per meter and the maximum depth from which reflections will be recorded (time window) is input into the on-board computer(Conyers 2013:92). The resolution of the recorded profiles is dependent on the number of reflection traces recorded by the system in addition to the number of samples per reflection trace; both of which are predetermined by the operator.
The number of recorded traces per unit of measurement (such as a meter) determines the amount of data collected. The greater the number of samples collected combined with smaller intervals between transects results in less interpolation between samples during processing (Conyers 2013:98).

During data collection, the distance that the GPR unit moves is recorded by a survey wheel which allows for the accurate location of reflections along each transect (Conyers 2012:28; Conyers 2013:88). The radar data collected along each transect is processed by the computer and radar profiles are produced that consist of two dimensional representations of the collected data that are visible on the display of the GPR unit. The profiles are created from stacked reflection traces and depict the amplitude, position, and vertical depth of reflections along each transect (Conyers 2013:13).

Within a GPR profile, the types of reflections generated provide some indication of the physical characteristics of buried materials. Subsurface interfaces such as walls, floors, stratigraphic horizons, and other horizontal features produce planar reflections that appear in profiles as horizontal lines (Conyers 2013:59). Smaller objects and features such as stones or pieces of metal appear as hyperbolas that are referred to as point-source reflections (Conyers 2013:59). Metal objects often create multiple reflections in profiles that are a result of radar waves reflecting back and forth between the object and the ground surface (Conyers 2013:57).
After collection, profiles for detailed analysis are generated using the program \textit{GPR Process} and displayed as two-dimensional images in \textit{GPR Viewer}. Data can also be visualized in three dimensions using a combination of \textit{GPR Process} and the raster mapping program \textit{Surfer 9}. During processing, profiles within the grid are aligned and the reflections are resampled across all of the selected profiles. Two-way travel time is converted to depth and horizontal “slices” are created between defined nanosecond values that determine the thickness of each slice (Conyers 2012:50). The data are rasterized by \textit{Surfer 9} which assigns a set of arbitrary colors on an ordinal scale to represent variations in amplitude (Conyers 2012:42; Conyers 2013:176). As in the case of profile sampling, the resolution of the resulting maps is dependent on the amount of data collected, and collection of more closely spaced transects allows for less interpolation in areas between profiles.

Prior to GPR survey, larger vegetation was removed from the surface of the study areas to produce as level a surface as possible for the radar units to travel over. Within each of the four barracks surveyed, 12 transects were collected parallel with the longest wall of the foundation at 50 centimeter spacing. The Barracks interiors assessed included 9L-6, 11G-7, 12G-5, and 12H-5. All data was collected using a GSSIR-3000 collection system with a 900 MHz antenna connected to a survey wheel.

\textit{Excavation}

In order to conduct unit excavations, a Cartesian coordinate grid system was established in 2008. In 2012, the placement of an excavation unit within barrack 6 of
Block 9L was determined by results of a GPR survey conducted in the fall of 2010 (Clark and Driver 2015:44). Both the GPR and excavation grids were keyed into the location of barrack foundations.

Excavation was performed with the placement of a 1x2 meter unit and an adjacent 1x1 meter unit. Both units were located within the coordinate grid with their southwest corners designated as the unit reference point. The units were defined by placing four nails and stringing the unit boundary between them, after which the surface vegetation was cleared.

Both units were hand excavated using trowels and shovels. Soil was placed in buckets and carried to adjacent screening stations consisting of 1/8” mesh screens over tarps. The excavated soil was passed through the screen and was carefully investigated for artifacts. Any objects found within the screen were recorded and collected for further analysis.

Excavation of the units took place according to the Harris Matrix excavation method which is useful for associating stratigraphic levels across multiple units (Harris 1989). Excavations using the Harris Matrix method assign context designations to stratigraphic levels, cultural features, and the interfaces between them. The units were excavated in stratigraphic levels delineated by changes in soil and/or sediment deposition. Artifacts from each context were bagged together and received the same field survey (FS) number.
During excavation, samples were obtained from several contexts for macro-
botanical analysis. Samples of varying size were extracted, bagged, and assigned soil
sample numbers. Samples were taken back to the field lab to undergo flotation to extract
botanical remains from the soil matrix.

Macrobotanical samples were given additional flotation number designations
prior to flotation tank processing. Samples were processed in a SMAP-style small
flotation machine, using standardized methodology (Pearsall 2000). The resulting
material was divided into light and heavy fractions and were dried and bagged separately
before being shipped to Seattle, Washington to be analyzed.

At the laboratory, light fractions were passed through nested geological sieves,
with apertures of 2mm, 1mm, and 0.5mm; and each size fraction was bagged separately.
The samples were sorted using a binocular dissecting microscope, at magnifications
between 7 and 60X. Sorting identified both whole and partial seeds that were removed
and counted. Typically a minimum number of individuals count was generated by only
counting seeds that appeared to be 50% or more complete, however, in a few cases where
only small amounts of material were present, seeds that were less than 50% complete
were included in seed counts (Archer 2015).

All separated seeds were stored in 1.5- 2ml nalgene cryo-tube vials and labeled
with provenience and size fraction information. Identifications were based on a reference
collection, as well as standard identification resources (Archer 2015) Identifications of
seeds were generally made conservatively to the genus and family levels in the absence of definitive evidence at the species level (Archer 2015).
Chapter Five: Results

The results of this project are the application of a multidisciplinary approach to characterize the role of alcohol in internee life. What follows is a discussion of the results of archaeological investigations and analysis, followed by a synthesis of archaeological data with information from interviews and archival records.

Site Formation

As described above, the archaeological component of the site includes a large artifact scatter that is distributed across the surface. This artifact scatter consists of a diverse array of artifacts associated with daily life at Amache. However, due to the types of deposition that have created the artifact scatter, the locations of individual artifacts are not likely to represent the areas where activities like the consumption or production of alcohol was taking place.

Primary deposition accounts for a limited amount of the objects found on the site surface. Those artifacts that were primarily deposited are of smaller sizes, and were lost in the course of daily life (Kamp-Whittaker 2010:33). The exposed sandy surface of Amache is well suited for this type of primary deposition. Small objects dropped onto the surface would have been quickly covered up by the soft sand.
The majority of artifacts identified on the site surface likely represent secondary deposition (Kamp-Whittaker 2010:32-36). As a municipality of sorts, the internment center had a trash collection service, reflecting both American and traditional Japanese norms of trash disposal (Kamp-Whittaker 2010:34). The majority of this material was deposited in a large dump to the west of the residential blocks (Kamp-Whittaker 2010:34; Slaughter 2006:68-67). However, informal dumps are regularly located during field survey and are often found next to roads or adjacent to edge blocks (Clark et al. 2012; Clark and Driver 2015; Swader 2015). These informal dumps are likely the result of several cleaning episodes including some that culminated in the closing and eventual dismantlement of the facility.

At least three large scale cleaning episodes are documented at Amache, consisting of WRA and community efforts to clean up the center in 1943 and 1945 (Lindley 1945a). These episodes were referred to as “Clean-up Weeks” or “Clean-up Campaigns” in the camp newspaper which heavily promoted them (Granada Pioneer 1943:1). During these events, discarded material was moved out of indoor contexts and likely stockpiled temporarily prior to it being hauled away. Stockpile areas were likely located adjacent to roads to facilitate the removal of the refuse. In these types of features, small objects or debris would have easily been deposited in the soft sand.

The last documented cleanup took place in April of 1945, as the center was seeing increasing numbers of internees relocating outside of the facility (Lindley 1945a). As internees moved out of Amache, they left behind substantial amount of material such as
domestic objects and furniture, some of which may have been discarded outdoors. The shrinking population of the facility resulted in the end of trash service in August of 1945, two months before the close of the center (Harvey 2004).

After the last of the internees had left, the final dismantling of the center began. The buildings and land were declared US Government surplus and the buildings were made available for sale. Eventually, 99 of the 556 buildings were sold off and the rest were demolished (CPI 2011:6).

All of the items left behind had to be removed by teams of workers to enable the buildings to be sold. Workers who were dismantling the facility may have used the areas in front of barracks, adjacent to roads, or outside block edges to deposit discarded material.

A photograph from the end of the internment period shows a large amount of discarded material in the front yard of some unknown barracks (Figure 6). It is unclear what date the photo was taken and therefore it could represent either internee disposal or the removal of materials from the barracks by WRA workers. The photo however does establish that large amounts of material were deposited on the site surface as a result of the closing and the release of internees (Figure 6).
There is some evidence at Amache that discarded material was bulldozed, likely in order to expedite its removal (Carillo et al. 2004). Bulldozing would have further fragmented discarded material, and likely enhanced the deposition of small domestic artifacts on the site surface. The bulldozing of domestic material could also be the source of some of the large trash features observed to the east of edge blocks such as 7K, 8K, 9L, 11K, and 12K (Swader 2015:80-81).

On the other hand bulldozing would have likely crushed and fragmented many objects as it removed them from the surface of the internee living areas in addition to
destroying many of the garden features found in front of barracks. The edge features contain many large and complete objects, and combined with the amount of material and the number of intact garden features located in the internee living areas, it is likely that bulldozing was not used in all blocks during the dismantling of the facility (Clark et al. 2012; Clark and Driver 2015). In these cases, trash deposition was likely the result of manual dumping associated with the dismantling of Amache.

Based on this information, it is likely that the vast majority of artifacts were secondarily deposited during clean-ups and in the final months of the center closing process. Because of this process, objects that were primarily used indoors, such as saké bottles were removed from the interiors of the barracks and relocated to outdoor contexts.

Survey Results: Artifacts

Since 2003, surface surveys representative of two separate projects have been conducted at Amache. The 2003 survey consisted of surface survey in transects with 15 meter spacing of the entire site from which tallies of artifacts were generated (Carrillo et al. 2004a; 2004b). In contrast, the surface survey conducted by the DU Amache Project has proceeded block by block over a number of years and has applied more focused analysis of certain artifacts. Because of the two distinct methodologies, there is a strong possibility that some artifacts and features observed during the 2003 survey may have been documented by the subsequent DU Amache Project surveys. Because of this, only surface data from the DU Amache Project are considered here except for areas not yet
surveyed by DU researchers. In those cases, surface artifacts are associated with only the 2003 survey.

Physical evidence of alcohol at Amache is fairly limited. Previous research focusing on *saké* (Slaughter 2006) concentrated more on questions of identity and the ways in which alcohol was used in social contexts. Surveys conducted between 2008 and 2012 have documented a total of 14 artifacts that are definitively associated with alcohol (Table 1). An additional 4 objects were verified to have been documented only in 2003 and bring the total number of identified artifacts to 18 (Table 1). Of these objects, all are associated with *saké* consumption. No artifacts have been located that are thought to be definitively associated with the production of *saké* at Amache.

<table>
<thead>
<tr>
<th>Block</th>
<th>FA#</th>
<th>Lot</th>
<th>Year Identified</th>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12k</td>
<td>33</td>
<td>N/A</td>
<td>2010</td>
<td>N/A</td>
<td>Complete aqua liquor bottle/flask; 18mm mouth, 85x47mm base; embossing reads: “500 ml” “d-230 1183”.</td>
</tr>
<tr>
<td>11k</td>
<td>190</td>
<td>N/A</td>
<td>2012</td>
<td>9</td>
<td>Complete green wine bottle; blob top; left unexcavated in field, partially buried.</td>
</tr>
<tr>
<td>11k</td>
<td>252</td>
<td>N/A</td>
<td>2012</td>
<td>10</td>
<td>Complete aqua <em>saké</em> jug base fragment; 6.5in base dia. Embossing reads: &quot;Nichibei Shuzo Kabushiki Kaisha LTD. Hilo, Hawaii&quot;; Owens plant code 20 (Backinridge, Pennsylvania-1932-1940) date code 0 (1930).</td>
</tr>
<tr>
<td>11k</td>
<td>255</td>
<td>N/A</td>
<td>2012</td>
<td>N/A</td>
<td>Clear <em>saké</em> jug base fragment; Embossing reads: &quot;shuzo kabushik&quot;; Owens plant code 20 (Backinridge, Pennsylvania-1932-1940) date code 8 (1938).</td>
</tr>
<tr>
<td>11k</td>
<td>256</td>
<td>N/A</td>
<td>2012</td>
<td>N/A</td>
<td>Colorless (straw-colored) shot glass fragment; 18mm base.</td>
</tr>
<tr>
<td>11H</td>
<td>40</td>
<td>N/A</td>
<td>2012</td>
<td>N/A</td>
<td>Clear <em>saké</em> jug base fragment; Embossing reads: &quot;...huzo&quot;; Owens plant code 20 (Backinridge, Pennsylvania-1932-1940) date code 8 (1938).</td>
</tr>
</tbody>
</table>

Table 1: Artifacts associated with Alcohol at Amache
<table>
<thead>
<tr>
<th>Location</th>
<th>Number</th>
<th>Date Code</th>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9L</td>
<td>80</td>
<td>N/A</td>
<td>2012</td>
<td>Aqua saké jug base fragment; embossing reads: &quot;U SA&quot;; fragment of a Honolulu Sake Brewery and Ice Company jug; 6 inch diameter.</td>
</tr>
<tr>
<td>?</td>
<td>APS</td>
<td>N/A</td>
<td>2003</td>
<td>Complete aqua saké jug base fragment; embossing reads: &quot;Honolulu Sake Brewery &amp; Ice Company LTD, Honolulu, Hawaii&quot;; Owens plant code 20 (Backinridge, Pennsylvania-1932-1940) date code 1 (1931)</td>
</tr>
<tr>
<td>7K</td>
<td>18</td>
<td>N/A</td>
<td>2012</td>
<td>Complete aqua saké jug base fragment; embossing reads: &quot;Honolulu Sake Brewery &amp; Ice Company LTD, Honolulu, Hawaii&quot;; Owens plant code 7 (Alton, Illinois-1930-present) date code 0 (1930, 1940, 1950).</td>
</tr>
<tr>
<td>9L</td>
<td>5</td>
<td>9L.37</td>
<td>2008</td>
<td>Aqua saké jug base fragment; embossing reads: &quot;...wing co LTD Honolulu&quot;; Owens plant code 20 (Backinridge, Pennsylvania-1932-1940) date code 1 (1931)</td>
</tr>
<tr>
<td>Dump</td>
<td>6</td>
<td>N/A</td>
<td>2010</td>
<td>Colorless liquor bottle body, shoulder and neck; embossing reads: &quot;dubouchett/Many Blanc&quot;; 38mm neck.</td>
</tr>
<tr>
<td>12K</td>
<td>11</td>
<td>12K.16</td>
<td>2010</td>
<td>Celadon ceramic ochoko fragment; Makers mark reads: &quot;Made in Japan&quot;; TPQ 1921.</td>
</tr>
<tr>
<td>Dump</td>
<td>?</td>
<td>N/A</td>
<td>2008</td>
<td>Tokkuri neck fragment.</td>
</tr>
<tr>
<td>?</td>
<td>N/A</td>
<td>N/A</td>
<td>2003</td>
<td>Color unknown complete jug base fragment; embossing reads: &quot;Honolulu Sake Brewery and Ice Company LTD, Honolulu, Hawaii&quot;; Owens plant code 20 (Backinridge, Pennsylvania-1932-1940) date code 1 (1931).</td>
</tr>
<tr>
<td>?</td>
<td>N/A</td>
<td>N/A</td>
<td>2003</td>
<td>Color unknown complete jug base fragment; embossing reads: &quot;Fuji Sake Brewery Co. LTD&quot;; Additional markings cannot be read.</td>
</tr>
<tr>
<td>?</td>
<td>N/A</td>
<td>N/A</td>
<td>2003</td>
<td>Handpainted porcelain tokkuri neck and shoulder fragment.</td>
</tr>
<tr>
<td>?</td>
<td>N/A</td>
<td>N/A</td>
<td>2003</td>
<td>Handpainted porcelain tokkuri neck and shoulder fragment.</td>
</tr>
</tbody>
</table>

The largest proportion of objects associated with saké at Amache are fragments of aqua and colorless glass jugs representing commercial saké brands (n=8). Since 2008, embossed jug fragments representing six vessels have been identified at Amache and have been included in this analysis (Table 1). Also included are five items discovered in the 2003 survey--an additional four jug fragments and one whole jug that is currently on
display at the APS museum in Granada (Figure 7). The 2 bases recovered in 2003 were verified to have not been re-analyzed by the DU Amache Project survey.

Figure 8: Complete saké jug recovered in 2003, APS museum object No. 29.

Based on complete examples that have been previously identified, the saké jugs are machine made gallon sized bottles with a finish that includes a loop handle and a metal screw-cap closure (Figure 7). These jugs typically have base dimensions of between 5 ½ and 6 inches, and mouth diameters of 1 inch. By the internment period, 81
machine made jugs of this type and form were common in the United States and were used for a variety of products such as wine, cider, and bleach (SHA 2015a).

Association of jug fragments with saké has been based primarily on embossing that clearly associates the artifacts with certain commercial breweries. However, a large number of clear and aqua glass jug fragments consisting of unmarked base fragments, body fragments, and finishes have also been identified at Amache. Because of a lack of diagnostic traits such as embossing, an attempt has been made to use other traits such as glass color to differentiate between saké jugs and jugs that were used for other products.

The saké jug bases identified between 2008 and 2012 consist of four aqua bases and two clear glass bases (Table 1). Of the four aqua bases, three were associated with the Honolulu Sake Brewery and Ice Company (Figure 8), and one was associated with the Nichi-bei Shuzo brewery in Hilo, Hawaii (Figure 9). The clear bases are very similar in form and therefore may represent two fragments of the same type of bottle. One of the fragments includes the script “shuzo kabushik…” Two companies identified by this project as Nichi-Bei-Shuzo and Fuji Shuzo often included the words “shuzo” and “kabushiki” in their names (Table 1).
Figure 9: FA-5/9L.37, saké jug base fragment

Figure 10: 11K FA-252, saké jug base fragments.
The 2003 assessment of the entire surface assemblage of the site identified a total of 18 saké jugs, and the majority of the vessels were made of clear glass (Slaughter 2006:134). The fragments represented several breweries such as the Honolulu Saké Brewery and Ice Company, Hilo Brewing LTD, Fuji Saké Brewing Company, and Nichi-Bei-Shuzo (Slaughter 2006:134).

Based on this information, it appears that a substantial number of both aqua and clear machine made jugs were used by different saké breweries. The differences in glass color between the two surveys may be the result of different sample sizes and/or field methodologies, but could also reflect the variability in the type of glass used for saké jugs. Furthermore, unmarked fragments may represent products other than saké that came in similar containers, many of which were clear glass by the internment period (SHA 2015b). Numerous clear and aqua jug fragments are distributed across the site of Amache. These fragments represent bottles that are similar in capacity and form to jugs used for saké. At this point, a generalization about the color of saké jugs cannot be made, and identifications of saké jugs based on other fragments is currently not possible given a lack of patterning; therefore, it may be unwise to identify body, lip, and neck fragments as portions of saké jugs by either color or form (Slaughter 2006:134).

Ceramic artifacts associated with saké consumption have also been located at Amache. The initial 2003 survey identified several tokkuri and ochoko fragments across the site (Slaughter 2006:111-112). Subsequent survey since 2008 has identified two
additional artifacts consisting of single fragments of a porcelain tokuri and a celadon ochoko (Table 1).

The tokuri and ochoko are traditional Japanese vessels used for the preparation and drinking of saké. A tokuri is a small glazed earthenware vessel that saké is transferred to from a larger vessels for serving. If the saké is of the type that is meant to be consumed warm, the tokuri is heated in a hot water bath before serving (Gauntner 2000:51). The saké is then poured from the tokuri into small ochoko drinking cups to be consumed by drinkers (Gauntner 2000:51).

The presence of these vessels at Amache indicates that they were considered essential enough to transport to the center and may imply that saké was an important part of practice for the original owners. Furthermore, these vessel forms are highly integrated into a uniquely Japanese system of social drinking practices where one person pours for another, and drinking alone (hitorizake) is not considered acceptable (Kondō 1984:91; Tierney and Tierney 2012:121).

Artifacts representing consumption of EuroAmerican alcohol at Amache have been previously approached with skepticism. Countless brown beer bottle fragments are present on the site surface and most are likely related to post internment drinking (often by teenage residents of nearby Granada) and illegal trash dumping. These activities are most evident at the edge and ends of facility roads where modern trash is easily dumped and evidence of outdoor parties are apparent.
Because of these considerations, EuroAmerican alcohol containers have not been associated with the internment use of the site (Slaughter 2006). However, review of field data between 2008 and 2012 identified several artifacts related to EuroAmerican alcohol in contexts that appear to be associated with the site’s occupation and suggest that consumption of these products was taking place at Amache.

FA-256/11K.17 (Table 1) was recovered from the north-central portion of the block, approximately 13m west of Barrack 11K-6 (Figure 10). The object consists of the bottom half of a small clear glass vessel with decagonal paneling near the base. The artifact is a machine made cup with a pronounced kick up and thick base. Because of its small size and form, FA-256/11K.17 was determined to represent a fragment of a shot glass, a form that is typically associated with EuroAmerican drinking practices.
Figure 11: FA-256/11K.17, shot glass.

The vessel is manufactured of straw-tinted colorless glass that dates the object’s manufacture to the early portion of the twentieth century (SHA 2015b). Based on the age of the glass, it is likely associated with the internment period. Furthermore, the object was recovered from the block interior near the end of Barrack 6, away from the areas where modern trash dumping and post-occupational underage drinking appear to take place.
Another object found near the interior of the block center was a wine jug base. FA-18 is a clear glass vessel base with a stippled surface treatment, a diameter of 5 7/8 inches, and embossing which reads “WINE” (Figure 11). An Owens Illinois date code implies that the bottle was manufactured in 1930, 1940, or 1950. The stippled portion of the jug base is similar to a large number of other clear jug bases recorded at Amache that are clearly associated with the occupation of the site.

![Figure 12: 11K FA-90, wine jug base.](image)

A standard sized wine bottle (FA-190) was encountered in 11K during pedestrian survey within Feature 9. FA-190 was identified as a whole green glass wine bottle, and was found eroding from the surface of the feature, similar to other internment age
artifacts in the surrounding area. The bottle appeared to be intact, but was not removed from the surrounding matrix for full inspection.

Feature 9 is a large, amorphous feature measuring approximately 1500 square meters located at the eastern edge of the block. The feature includes a high diversity of artifacts including complete glass bottles, metal basins, ceramics, milled lumber, and a large number of modified metal objects. The artifacts are moderately dispersed and are often found eroding out of the ground, indicating that the feature may have a subsurface extent. The diversity of the artifacts within the feature indicates that it is an informal trash dump at the edge of Block 11K, and is likely related to the final occupation period or the dismantling of the center (Clark and Driver 2015; Swader 2015:80). The presence of objects associated with alcohol within the feature likely indicates that alcohol was consumed in interior contexts.

Two additional objects associated with EuroAmerican alcohol lacked the definite context of the other artifacts; FA-6, a liqueur bottle from the dump, and FA-33, a liquor flask from Block 12K. However, both objects are made of aqua glass, which fell out of wide spread use by the WWII period (SHA 2015b). Given that the area of Amache was unoccupied prior to the internment period, the aqua glass bottles are most likely associated with the occupation of the facility.
Survey Results: Features

Despite the fact most of the artifact scatter consists of objects in secondary depositional contexts, there are many intact features at Amache. These features represent aspects of daily life such as facility infrastructure or public and private gardens. Although some of these features were likely destroyed by bulldozing, features such as these contribute to the recognition of Amache as one of the most archaeologically intact internment centers (Burton et al. 2002). Surface survey in 2012 identified two feature types that may have an association with the production or consumption of saké.

9L: Feature 23

Feature 23 is a single tree on the north end of the bath house that is noteworthy because of the extensive glass scatter around it (Figure 12). The fragments that were found underneath the tree consist of a large amount of vessel glass consistent with beverage containers. The feature is also the location where a saké jug fragments (FA-5) was recovered in 2008 (Table 1). In addition to the vessel glass are many shards of light bulb glass.
11G: Feature 2

Feature 2 is located within the foundation of barrack 11G-12 inside of Living Unit B. Feature 2 consists of a rectangular vault constructed against the north foundation wall just east of the doorway (Figure 13). The vault is formed by rectangular slabs of concrete and measured approximately 78 by 50 centimeters and was approximately 30 centimeters deep. The vault is filled in with Aeolian deposited sand which probing determined to be between 10 and 20 cm deep. Probing also established that the vault did not have a slab bottom; the floor is likely composed of packed sand.
Survey Results: GPR

In fall 2011, GPR survey of Barrack 6 of Block 9L (9L-6) was conducted by Christian Driver and Daniel Shereff. During the survey barrack interiors in Blocks 6H, 9L, 11H, 11G, and 12H were selected based on interview data and proximity to a particular guard tower (Clark and Driver 2015; Uragami 2009). Of the five barracks evaluated only 9L-6 produced a reflection that indicated the presence of a possible subsurface feature.
Barack 9L-6 was selected as a candidate for GPR survey because of its presence in a block known for alcohol consumption and because of its location adjacent to a public garden feature where it is likely that such activities took place (Slaughter 2006; DU Amache Project 2009; Clark 2009). The GPR survey collected 12 profiles at 50cm spacing within a 36.4x5.5-meter rectangular grid laid out inside the barrack foundation. A high amplitude reflection was evident in profiles 40 and 41 and the 2-4ns slice map. The reflection consisted of a high amplitude planar reflection between 16.8 and 19.6 meters east-west along the profile and a high amplitude point-source reflection at 18.1 meters below the planar reflection (Figure 14). Because of the strength of the reflection, the area was selected for the placement of an excavation unit.
Figure 15: GPR profile and amplitude slice map results from 9L-6.
Excavation Results

On July 3, 2012, excavation unit 298N/318E was opened in Barrack 9L-6. The excavation unit measured 1x2-meters and was placed with its center over the reflection located by the GPR survey (Figure 14). The first context level, Context 001, consisted of loose aeolian sand and the root mat formed by the grass on the surface. Context 001 began at 23 centimeters below datum (cmbd) and extended to 42-cmbd. During the removal of Context 001, both soil chemistry and flotation samples were obtained. Midway through the context, near the western edge of the unit, large amount of red brick fragments were encountered that increased in frequency with depth. As excavation proceeded, the brick fragments were found throughout the entirety of 9L-001. At approximately 31-cmbd near the southeast corner of the unit, a concentration of intact brick was revealed. The bricks were fitted together and appeared to form a distinct surface. As excavation of the context progressed, the brick feature was revealed across the majority of the unit and designated as Context 003 (Figure 15).
The brick feature was composed of approximately 42 dry laid bricks in varying condition forming a surface which extended from the western edge of the unit to the east. The brick surface area occupied approximately 49% of the unit area but did not extend to the southern and eastern unit edges. The tops of many of the bricks were highly deteriorated, and the locations of some bricks were approximations based on dense concentrations of brick fragments.
Near the eastern margins of Context 003, a small feature was located which appeared to be a hole cut into the brick (Figure 16). The feature was roughly circular with a diameter of 18-20cm. This feature was assigned the Context numbers 004 (the cut into the brick) and 005 (the feature fill).

![Image of Contexts 004 and 005 in 298N/318E.](image)

**Figure 17: Contexts 004 and 005 in 298N/318E.**

Context 005 was bisected into northern and southern halves and excavation of the feature began at a depth of 42 cmbd in the north half. All soil from the north half of Context 005 was removed as a flotation sample. The northern margin of the feature was apparent with clear delineation provided by an in-place brick that had been modified to accommodate the feature (Figure 17). Soil in the excavated portion contained a high
percentage of brick fragment inclusions which continued to a depth of approximately 55 cmbd after which the declining density of brick fragments and a change in soil texture marked the termination of the feature in the north half.

![Image of a excavation site](image)

**Figure 18: Base and north profile of Context 005 showing modified brick margin in 298N/318E.**

After the excavation of the north half of Context 005, excavation of the south half was undertaken. Excavation began at a depth of 42 cmbd and all excavated soil was collected as a flotation sample. Delineation of the southern margin of 9L-005 was more problematic due to the advanced state of brick degradation. The bricks that had been altered by the creation of the feature were highly friable and the margin was indistinct.
The poor condition of the southern margin was further exacerbated by the placement of the cut modification so close to the edge of the brick. Because of the poor condition of the brick, the southern margin of Context 005 was primarily determined by a higher relative density of decayed brick fragments and a darker soil interface between the feature and the surrounding soil matrix that was visible when the soil was hydrated. During excavation of the south half, the two brick fragments (9L.50.1) previously left in-place on the profile wall were recovered. Soil within the southern half of the feature was also found to contain a high density of brick fragments, and the base of the feature was again found to be located at 55 cmbd based on a decrease in brick fragment density and the soil texture change.

The feature in the brick flooring represented by contexts 9L-004 and 9L-005 is a circular hole created by cutting or grinding into the bricks and the margins of the feature were defined by bricks that had portions removed. The modification was especially evident in the north half of the context where a brick in good condition displayed a well defined cut. The margins of Context 005 were further defined by the extent of decayed brick fragments within the fill matrix. The brick fragments were recovered during the excavation of the feature and their extent terminated at a uniform depth across the feature.

Based on historic documentation of the construction of the internment center, Context 003 was at first determined to represent an example of the brick flooring that had been installed in the majority of the internee barracks. The floors were constructed of
dry-laid brick set on a graded surface after the concrete foundations had been poured, likely prior to erection of the barrack superstructures (Simmons and Simmons 1994). According to standardized interior barrack measurements, the portion of flooring evaluated in 2012 would have partially spanned the partition between living units 9L-6C and 9L-6D.

During the course of the DU Amache project, the vast majority of bricks found across the site have been determined to be structural dry pressed bricks, characterized by a deep red homogeneous clay paste (Gurcke 1987). The structural bricks are highly regular in shape and size, indicative of industrial production on a large scale. In contrast, the two brick fragments recovered from 9L-005 consists of a tan paste with numerous inclusions. The two brick fragments were found to refit and the shared edge is characterized by a concave bevel, a design feature inconsistent with other bricks typically found on the surface (Figure 18).
The fragments from Context 5 reflect a different kind of brick than those used for the barrack floors, and their presence within the feature can not be attributed to the decay of the *in situ* floor. Instead, the presence of a different kind of brick within 9L-005 verifies that an open hole was present in the brick flooring. Combined with the evidence of the cut bricks, the feature represents a subfloor pit which was likely excavated by internees prior to the abandonment of the center. This hole would likely have been
exposed after the removal of the barracks, after which it would have been filled in by natural or other processes.

Macrobotanical remains from Context 001 contained the normal taxa associated with the natural environment and the post occupational period. However samples taken from Context 005 contained both natural taxa and seeds associated with food consumption. One seed was identified to the family level as a gourd or melon seed and another was identified as a Solanaceae and may represent a chili pepper. Another object associated with food consumption, a fish scale, was also recovered from the soil sample (Archer 2015).

The presence of food remains in the matrix from Context 005 provides further evidence that the feature was open during the occupation of Amache. A void in the floor, whether covered or not would have provided an easy route for the introduction of food remains. The inclusion of these food remains represent consumption of food in the barracks and supporting evidence for the existence of sub floor features within barracks.

The original purpose of Context 005 cannot be determined based on the data provided by the excavation. It is unclear if the small pit represents a cooler or perhaps a storage feature, much less one for the curation of illicit materials such as alcohol. What the presence of the subfloor pit does indicate however, is the willingness of internees to modify their personal spaces inside of the barracks.
Results: Synthesis

Although there is a limited amount of material culture associated with the production and consumption of alcohol at Amache, archival and interview evidence firmly establishes the presence of alcohol at the internment center (DU Amache Project 2011; Slaughter 2006). These sources also provide the only evidence of how alcohol was used at the facility. When combined with material evidence, interviews and archival records associated with the relocation center offer evidence of where saké was used at the facility, sources of saké and other alcohol, subfloor pits, sources of the materials needed to make saké, indications of where saké was used, and the presence of saké at other facilities.

How Saké was Used and Perceived

According to interviews conducted by Michelle Slaughter (2006), consumption of saké was mostly limited to special events such as holidays or rituals associated with significant life events such as marriage or on the occasion of entertaining guests and accompanying the consumption of food (Omori n.d.:41; Slaughter 2006:127-129). Traditional festivals such as Japanese New Year (Shogatsu) and the Buddhist festival of Obon were held at Amache and many interviewees agree that saké was often consumed by adults on these occasions (DU Amache Project 2011). Interviewees also agreed that saké was only associated with the Issei population and incidents of drinking among teens...
were unknown (Slaughter 2006:128). In the context of Slaughter’s research, saké consumption of this type was generally accepted by many in the community as an aspect of daily life related to culturally significant practices (Slaughter 2006).

Although Slaughter's interviewees presented most saké consumption as used only by adults in culturally appropriate contexts, there is information regarding types of consumption that were not generally approved of. An anonymous interviewee described encounters with his grandfather under the influence of alcohol as “embarrassing” and quantified the consumption level of his grandfather and associates as a daily occurrence (Slaughter 2006:141).

Other interviewees have also mentioned the negative aspects of daily or private saké consumption since the beginning of the DU Amache Project in 2008 (Hirano 2011). Interviewees since 2008 have also continued to state that consumption of saké was limited to older Issei (DU Amache Project 2011; Tonai 2011). Community government meeting minutes, newspaper accounts and Internal Security reports did not include the names or general affiliations of offenders and were therefore not well suited to identifying which groups were most likely to be associated with saké production or consumption. One newspaper item however revealed that consumption was not limited to older Issei. In at least one case, a “youth” from block 10H was arrested for disturbing the peace at a hospital dance. The article states that he was under the influence of alcohol at the time of the offense (Table 2: Item 8).
Table 2: Documented Incidents Involving Alcohol at Amache

<table>
<thead>
<tr>
<th>Item #</th>
<th>Date</th>
<th>Incident Description</th>
<th>Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12/3/1942</td>
<td>Law and Order committee instructed to investigate sale of liquor at Amache.</td>
<td>Amache Community Council n.d.</td>
</tr>
<tr>
<td>2</td>
<td>12/18/1942</td>
<td>Man arrested for liquor violation, referred to judicial commission.</td>
<td>Lindley 1942</td>
</tr>
<tr>
<td>3</td>
<td>2/16/1943</td>
<td>Licenses of 3 truck drivers suspended for liquor possession.</td>
<td>Short Takes; <em>Granada Pioneer</em> Vol.1 No.18 Pg. 2</td>
</tr>
<tr>
<td>4</td>
<td>2/20/1943</td>
<td>Announcement of passes to town reduced, applicants specifically advised against purchasing liquor.</td>
<td>Passes to Granada &amp; Lamar Limited to 25; <em>Granada Pioneer</em> Vol. 1 No. 40 Pg. 4</td>
</tr>
<tr>
<td>5</td>
<td>4/3/1943</td>
<td>Man arrested for liquor violation, may not have been prosecuted.</td>
<td>Lindley 1943a</td>
</tr>
<tr>
<td>6</td>
<td>4/14/1943</td>
<td>Issei Resident of 6G sentenced to 45 days in jail and fined $50 for selling liquor without a license. Two other unnamed 7G residents implicated in smuggling liquor into facility. Cases prosecuted in Lamar.</td>
<td>Resident Fined for Liquor Sales; <em>Granada Pioneer</em> Vol. 1 No. 66 Pg. 2</td>
</tr>
<tr>
<td>7</td>
<td>4/17/1943</td>
<td>Liquor sales in facility to be investigated by State Liquor Department.</td>
<td>Illegal Liquor Sale to be Investigated; <em>Granada Pioneer</em> Vol. 1 No. 57 Pg. 2</td>
</tr>
<tr>
<td>8</td>
<td>4/21/1943</td>
<td>10H &quot;youth&quot; arrested for disturbing the peace at hospital dance while under the influence of liquor. Had been warned previously.</td>
<td>Sentence 10H Youth to Jail; <em>Granada Pioneer</em> Vol. 1 No. 58 Pg. 6</td>
</tr>
<tr>
<td>9</td>
<td>6/9/1943</td>
<td>Inebriated individual arrested.</td>
<td>Lindley 1943b</td>
</tr>
<tr>
<td>10</td>
<td>6/15/1943</td>
<td>Internal Security reports on recent complaints of intoxicated persons in Granada. Request that Block Managers warn people &quot;to not get intoxicated on streets&quot;.</td>
<td>Yoshizawa n.d.</td>
</tr>
<tr>
<td>11</td>
<td>6/15/1943</td>
<td>Discussion with Assistant Project Director W. Ray Johnson in regards to an apparent proposal to sell beer in the Co-Op. Johnson reports that the Blue Star Mothers Club and Women's Federation had protested the proposal. Beer should not be sold &quot;for the welfare of the many&quot;.</td>
<td>Yoshizawa n.d.</td>
</tr>
<tr>
<td>12</td>
<td>6/19/1943</td>
<td>One liquor law violation reported.</td>
<td>Lindley 1943c</td>
</tr>
</tbody>
</table>
Archival evidence provides information that characterizes the different types of alcohol consumption at Amache and how it was perceived by WRA administrators. A review of reports prepared by Harlow Tomlinson, the head of Internal Security at Amache, provides evidence of enforcement of center regulations regarding alcohol. Out of a total number of 208 crimes documented by Internal Security between the opening of the center in 1942 and its closing in 1945, only 26 (12.5%) were associated with alcohol (Foster 1945; Amache Internal Security Section n.d.). The types of offenses that were related to alcohol included things such as drunkenness, fights, smuggling, and bootlegging (Table 2) (Foster 1945; Amache Internal Security Section n.d.; Yoshizawa n.d.).

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/22/1943</td>
<td>Law and Order Committee: &quot;Granada sheriff is working hard and doing a good job for evacuees, especially in cases of drunkenness. During night any Japanese arrives at the station he phones center police and such that he is aiding us in many ways. Suggested that some sort of appreciation be expressed by the center residents. Collecting $1 from each blk. and with this fund could we all give token of appreciation.&quot;</td>
<td>Yoshizawa n.d.</td>
</tr>
<tr>
<td>Dec-43</td>
<td>Three arrests for drunkenness.</td>
<td>Amache Internal Security Section n.d.</td>
</tr>
<tr>
<td>Jan-44</td>
<td>Three arrests for drunkenness.</td>
<td>Amache Internal Security Section n.d.</td>
</tr>
<tr>
<td>10/25/1944</td>
<td>Lindley interviewed for report. Quoted as saying &quot;liquor situation is well in hand&quot;, &quot;state liquor law is in force&quot;, and says &quot;no trouble in this particular field&quot;.</td>
<td>Amache Internal Security Section n.d.</td>
</tr>
<tr>
<td>1/6/1945</td>
<td>New Year's fight between two men attributed to &quot;saki&quot; consumption.</td>
<td>Lindley 1945b</td>
</tr>
</tbody>
</table>

*Newspaper references are not provided in the References section.
As documented by the Internal Security monthly reports, the amount of crime associated with drinking at Amache was low (Amache Internal Security Section n.d.). In fact, the impression from many WRA and Internal Security documents is that administrators did not seem especially concerned about the use of alcohol by internees. In an interview that became part of a 1944 Internal Security report, Project Director James Lindley was dismissive of the idea that alcohol was a problem of any concern (Table 2: Item 17).

In interviews, rates of saké consumption are often described as low, and usually only associated with festivals and parties (Slaughter 2006:127; DU Amache Project 2011), a characterization that Internal Security records and newspaper accounts seem to support (Foster 1945; Amache Internal Security Section n.d.). Other interviews however seem to contradict this idea, and refer to things like widespread saké manufacturing, parties, and daily drinking (DU Amache Project 2011; Shigekuni 2011; Tonai 2011; Uragami 2011). In late 1942 and early 1943 there was documentation of bootlegging activities at Amache (Table 2: Item 1), and in April of 1944 three men were sentenced for selling alcohol in the center (Table 2: Item 6). The existence of a market for alcohol at the camp, combined with suggestions that alcohol consumption was higher than previously thought offers a more nuanced picture of the rate of alcohol consumption at Amache.

It would be incorrect to characterize WRA attitudes as permissive in regards to alcohol regulations. The records of citation and prosecution found in WRA documents, newspapers, and other accounts show that regulations were being enforced (Table 2).
fact, the WRA administration had significant friction with the elected Community Council over numerous issues, one of which was the perception of leniency of the internee judicial commission. WRA officials eventually started referring cases to courts in Lamar to obtain what they felt were more favorable judgments (Amache Internal Security Section n.d.). One such case involved a man alleged to have sold liquor in the center in violation of state liquor law and one that was prosecuted by the State Liquor Department (Table 2: Item 6).

Although the community government was effectively the source of the alcohol prohibition regulation through the urging of the WRA, at no time did either the Block Managers Assembly or the Community Council have a substantial discussion of policy positions regarding alcohol (Yoshizawa n.d.; Amache Community Council n.d.; WRA 1946a). Recorded minutes identified only four occasions where alcohol use was discussed by the Temporary Community Council and Block Managers Assembly (Table 2: Items 1, 10, 11, and 13). Each of these issues were only raised once and never discussed again, even after the arrest and prosecution of the individuals involved in the bootlegging incident (Table 2: Item 6). Combined with the WRA Administration’s similar lack of interest in a policy of ending the production and consumption of alcohol, the result was that those activities continued at Amache.

When the low rate of documented alcohol violations is compared to interview data that establishes the widespread presence of saké or other liquor, the implications of the positions that community government and the WRA took is apparent. Alcohol use
and production (if they were even aware of it) was not problem of any significance on its own. Of the incidents documented, several involved citations for additional violations such as assault or disturbing the peace (Table 2). In this environment, it seems that those who were conducting, more “anti-social” acts such as assault, drunkenness, or bootlegging were the ones more likely to be associated with alcohol citations (Table 2). To put it simply, it seems that alcohol was tolerated as long as it did not create disturbances.

In contrast, the issues that the community government and WRA officials were concerned with at Amache were juvenile delinquency and managing the perceptions of Caucasian Americans. The Block Managers and Community Council meeting minutes contain many references to juvenile delinquency and the formulation of policies and strategies to reduce it (Amache Community Council n.d. Yoshizawa n.d.).

The issue of juvenile delinquency represents an example of an anti-social behavior that the WRA and community government felt it could not ignore. To the internees, already in a position where much of their traditional hierarchies had broken down due to the effects of internment (Kamp-Whittaker 2010), the anti-social aspects of these behaviors were perceived by both community government and the WRA as extremely damaging to the case for relocation. In several admonishments delivered to the Block Managers Assembly, Ray Johnson cautioned community government representatives about behaviors that could attract attention from outside of the center that could reflect badly on all relocated Japanese. In Johnson’s mind, and the minds of some
in community government, antisocial behaviors were one of the main barriers to acceptance of resettled Japanese by Caucasians (Amache Community Council n.d.; Yoshizawa n.d.).

The issue of juvenile delinquency quickly became a politicized and contentious topic between the Community Council and the WRA administration. Although by the closing of the center, there were only 25 total cases involving juveniles (Foster 1945), the WRA and community government confronted the problem head on, but in different ways. A common complaint among WRA administrators was that the Judicial Commission was far too lenient with delinquents and other offenders, an issue which eventually led to the prosecution of cases in Lamar (Amache Internal Security Section n.d.). Community government representatives on the other hand took a different approach to the issue and were successful in eventually establishing a system that involved consultation between Internal Security and the parents of delinquents. This strategy relied on traditional family structure and attitudes to hold offenders accountable through a form of probation that was imposed by the Internal Security Section or Judicial Commission (Foster 1945:7). The central aspect of this policy was the maintenance of harmony within the community that involved strategies of conflict avoidance (Fugita and Fernandez 2004:17). To facilitate these more discreet forms of censure, the Block Manager’s Assembly even asked the 

*Pioneer* not to publish the names of offenders in the Japanese language section (Yoshizawa n.d.). Such requests may be the source of the *Granada Pioneer*’s apparent reluctance to print the names of any who broke the law at the center.
Sources of Saké and Other Alcohol

The sources of saké was a consideration of Slaughter’s research which suggested that primary source at Amache was thought to be illegal production by small groups and acquisition of commercial saké in Granada (Slaughter 2006:139-144). The commercial saké in Granada was attributed to the Newman drug store which appears to have acquired a stock from the west coast. The saké was stored in a warehouse behind the back of the drugstore and was sold to internees (Harvey 2004:68; Slaughter 2006:142-143). Other sources of saké included Hawaiian internees possibly connected to an outside distribution network, and gifts from sympathetic friends outside of the internment centers (Slaughter 2006:138-139, 144-146).

During an interview in Cortez, California, Hiro Asai recounted a story related to the acquisition of alcohol during a day trip to town. According to Mr. Asai, the practice of smuggling alcohol was known to the military police at the gates who during a period of tightened enforcement instituted a policy of holding the drivers of vehicles responsible. When Mr. Asai realized that the vehicle he was driving had alcohol in it, he insisted that the offender, rather than he, drive (Asai 2009).

In most cases involving the violation of alcohol regulations, the Granada Pioneer and Internal Security documents, do not refer specifically to saké, but instead focus on other aspects of the incident, such as if the subject was inebriated. When alcohol is referred to specifically in these documents, the term used is typically no more descriptive
than “liquor” (Table 2). The only incident that specifically mentions saké is a fight between two men that is assumed to have been caused by drinking “saki” [sic] (Table 2: Item 18). The omission of the term saké could represent a number of different things. The use of the term “liquor” may be strictly procedural when referring to any violation of the alcohol prohibition policy, or could suggest that those cited for violations actually were not in possession of saké at the time of their arrest, but were instead found with other types of alcohol. Another, possibility is that Internal Security personnel may not have been aware of what saké looked like; however this explanation is not likely given that the force was staffed by internees who would have known what saké was.

Several items in Table 2 reference the sale of liquor in the internment center and the purchase of liquor outside of Amache. Newman’s Drug was likely the only place in the region in which an internee would have been able to purchase saké (Harvey 2004:68; Slaughter 2006:142-143). Those that purchased liquor in places other than Newman’s Drug were likely purchasing EuroAmerican alcohol.

According to many internees, the illicit production of saké was known to take place throughout the facility and may have been quite common (DU Amache Project 2011; Shigekuni 2011; Slaughter 2006). At a group interview in 2011, several former internees recalled the name of “Mr. Sasaki” who was rumored to have been in charge of one of the boiler rooms and utilized it to make saké (DU Amache Project 2011). Unfortunately, a review of directories and WRA documents were unable to establish the
existence of a man by that name at Amache. It is unclear if the name is false, or if it is a clever bilingual pseudonym used by adults when referring to a man that made saké.

While Mr. Sasaki may not have been a real person that made homebrewed saké at Amache, the detail of the use of the boiler room implies aspects of production that may indicate the essential truth of the anecdote. In order to make saké, the kōji must be prepared by introducing Aspergillus oryzae spores to make a starter in a warm and humid environment. The boiler room of the bathroom and laundry facility would have been ideal for the cultivation of kōji with its access to sources of water and heat that could be used to grow the spores (Gauntner 2002:15; Shurtleff and Aoyagi 2012:70). Furthermore, the humidity and warm temperatures needed to make kōji are not appropriate for other stages of saké production; therefore implying that other specialized localities may have been utilized to make the finished product (Shurtleff and Aoyagi 2012:77).

This kind of multiple locality production strategy appears to have been facilitated by social groups that were organized to produce saké. The anonymous informant interviewed by Slaughter (2006:141) mentioned that his grandfather acquired saké through involvement with a group of men that he believed were making it themselves (Slaughter 2006:141). A subsequent interview in 2011 revealed a similar story. The informant recalled that his stepfather drank daily and often alone, however he was involved with a group of men that made saké at Amache. The informant emphasized that his stepfather’s group only associated for the purposes of making saké and that members did not socialize in other contexts (Hirano 2011).
Having multiple people involved in the manufacture of *saké* would presumably have enabled the production of larger quantities. Multiple locality production would have expanded the amount of available production space to include the personal apartments of group members and some of these group members would likely have been responsible for stages of production that involved the storage of *saké* that was either fermenting or aging. An interview conducted in 2011 documented the use of personal apartments for such uses; Shigeko Tanaka (2011) recalled that her father would make *saké* in a ceramic vessel inside their living quarters and would keep it in the closet. The use of ceramic vessels in home production was well established prior to the beginning of the internment period in the United States (Nishizu 1982:75).

**Subfloor Pits**

One reason that subfloor pits were a focus of research was because of the role that such features could have played in the concealment and production of *saké* at Amache. As has been previously established, home production of *saké* was regularly practiced by *Issei* community members prior to the internment period, even during national prohibition (Izumi 1994; Kiyama 1998:122-123; Nishizu 1982:74-76).

Although there is a lack of direct physical evidence for the storage or production of *saké* in subfloor pits at Amache, these features would have been ideal for such use. Subfloor pits such as those located in 9L and 11G would have provided the lower temperatures necessary for certain phases of the brewing process. These pits would also
have been cool enough (approximately 50 degrees Fahrenheit) for the storage of unpasteurized namazake, which would have spoiled without refrigeration (Will Auld, 11/4/2014, elec. comm.).

A group interview in 2011 discussed the existence of subfloor pits at Amache (DU Amache Project 2011). Construction of these features necessitated the removal of the dry-laid brick flooring and the excavation of sand to create a void that could be used for a variety of purposes. According to interviews, the most common subfloor features were related to the storage of produce and dairy products in the barracks (DU Amache Project 2011). At Amache, where hot summer temperatures would have spoiled food, pits excavated into the cool sand underneath the barracks would have provided a rudimentary form of refrigeration (DU Amache Project 2011).

The subfloor features described in interviews seem to be relatively small. The size of these features may be related to the loose soils of the site, which may have impeded the construction of larger spaces. However, larger features are known to have been constructed at other camps despite the risk of collapse, such as the large subfloor “cellars” known to have been present at the Manzanar War Relocation Center (Manzanar Free Press 1944:3).

At least one large subfloor feature is known to have been constructed at Amache. The feature was a darkroom constructed by internee Jack Muro. During the early internment period, cameras were one of items banned by center regulations such as shortwave radios and alcohol (WCCA 1942:3). According to Mr. Muro, he was able to
obtain a camera, film, chemicals, and parts necessary to construct an enlarger from mail-order catalogs (Jack Muro 5/24/2011, pers. comm.). Mr. Muro then removed a portion of the brick flooring from underneath his bunk and constructed a space large enough that he and the associated equipment and chemicals could fit. Muro was a prolific photographer and captured many moments representing daily life at Amache with his camera. His stated reasoning for risking punishment was that he felt was his duty to accurately represent what was happening at Amache (Jack Muro 5/24/2011, pers. comm.). This project was greatly facilitated by his subfloor darkroom, without which many important images would not have been produced.

The identification of two features in 2012 is the first physical evidence of subfloor pits constructed by internees. The pits located are relatively small, but would have had the capacity to store items illegal or otherwise.

9L: Context 005

The small hole in 9L-6 represents a subfloor pit of simple construction. The pit is located in an area that spanned the adjacent living units C and D, both of which shared an entrance and a wall.

According to a 1943 camp directory, 6C was inhabited by the Sakakura family from Los Angeles, while 6D was apparently vacant. Prior to interment, the Sakakura head of household was a gardener in Los Angeles (DU Amache Project 2014).
By 1945, both units were occupied by the Kohaya family from Sacramento. The family was made up of 13 individuals, eight of whom were children. The family was headed by Seiichi and Masayo Kohaya who were born in Japan in 1898 and 1901 respectively. Both arrived in the United States in 1914 and were married by at least 1921 when their son Jimi was born. Before the war, the family lived in Sacramento, and had a total of 11 children (Japanese relocation.org 2015). In 1920, Seiichi and Masayo were married with no children, and Seiichi worked as a laborer (U.S. Bureau of the Census 1920a). However, by 1930, both were working as farm laborers on a ranch and they had five children (U.S. Bureau of the Census 1930a). The shift to both parents working as ranch laborers reflects their identities as one of the rural families that were interred at Amache.

The family assembled at the Marysville (Arboga) center (Burton et al. 2002) and was sent to Tule Lake on June 25, 1942 (WRA 1946b). The family lived at Tule Lake until September 19, 1943, when they were likely transferred to Amache during the period of upheaval surrounding the government’s demand that internees sign a loyalty oath. During this period, the government issued a questionnaire to all internees that included items related to willingness to serve in the armed forces (Question 27), pledging loyalty to the United States, and forswearing allegiance to the Japanese government (Question 28) (Harvey 2004:159-163).

After the issue of the loyalty questionnaire, the government decided to shift internees who had answered no to either question to Tule Lake, which it designated as a
segregation center (Densho.org 2015a) and transferred prior Tule Lake residents who had answered yes to the questions to other internment centers in the system. The members of the Kohaya family likely answered the loyalty questions in the affirmative and were therefore sent to Amache.

The family’s occupation of two adjacent living units is likely due its size and their later arrival at Amache. Space may have been available because of the high number of internees residing outside of the center on temporary or permanent work permits. No documentation of the subfloor feature was located, and its original purpose is unknown.

11G: Feature 2

Currently, Feature 2 in 11G represents the best evidence at Amache of the intentional modification of a barrack interior to create a subfloor pit. Much like Contexts 9L-004 and 9L-005 evaluated above, it is unclear exactly what purpose the vault may have served. Interviews with internees have established the possible existence of subfloor features such as coolers used for food storage and Feature 2 may represent such a feature (2011 interview transcript). The difference in construction may be reflective of a different purpose for which the vault was constructed. Because of time constraints and the limited deposits as determined by probing, the vault feature in 11G-12 was not excavated in 2012.

Feature 2 is located within the foundation of 11G-12 unit B, and was the residence of the Sakurai family consisting of Hidechi and his wife Torano, their four
children, and another person named Isuke Shigeta (DU Amache Project 2014). Hidechi Sakurai immigrated to the United States in 1906, and was soon followed by his wife Torano in 1907 (U.S. Bureau of the Census 1920b). Hidechi appears to have started out as fruit salesman in Washington state but then shifted for a time to work as a laborer at a Washington sawmill (U.S. Bureau of the Census 1930b). Between 1930 and 1940 the couple moved to Los Angeles where they established a produce business (U.S. Bureau of the Census 1940). The other man, Tokochi (Isuke) Shigeta, was a farm laborer from the Merced Assembly Center (U.S. Bureau of the Census 1930c). Prior to being relocated, Tokochi was living in Isleton, California (Japaneserelocation.org 2015).

The presence of the subfloor pit may indicate verification of these types of features being used as coolers. As operators of a produce business, Hidechi and Torano were likely familiar with the principles of refrigeration and perhaps applied those principles to create a cooler in their own residence.

Sources of Materials for Saké Production

In order to produce saké, internees would have had to assemble a large amount of components to make it from scratch. Numerous interviews have established that when confronted with the inadequate facilities provided for them, internees often pilfered WRA stocks of materials in order to build furniture, or otherwise augment their living spaces (Harvey 2004). Research has also established that internees often reused and repurposed discarded items to serve functional purposes (Swader 2015). In such an environment, the
physical equipment necessary for *saké* production would have easily been obtained or made from available materials.

Another source of materials includes mail order service that was available through the facility Co-op. Mail order was another way in which internees obtained goods and items that were necessary yet not provided by the WRA (Harvey 2004:89). These services could also have played a role in the acquisition of the materials necessary for *saké* production.

It is likely that the large quantities of rice needed for *saké* production were also easily obtained. The main staple of the internee diet was rice, which was provided by the WRA. In a discussion of home brewing, Slaughter interviewed two individuals that suggested that rice was likely stolen from the mess halls (Slaughter 2006:141). An interview conducted in 2009 again confirmed that rice was obtained from the mess halls to make *saké* (Shigeko Tanaka 2009).

Regardless of the availability of rice and the necessary equipment, the most important ingredient for the production of *saké* is *kōji*. Although *Aspergillus oryzae* is naturally occurring, it would have been highly impractical and unlikely for internees to cultivate the fungus from scratch at Amache. Commercial *kōji* has been available as a food item in the United States since at least 1908 (Shurtleff and Aoyagi 2012:156). By the 1930s, there were many companies that produced commercial *kōji* in places like Los Angeles, Seattle, Hawaii, San Francisco, and Vancouver, Canada (Shurtleff and Aoyagi 2012). Many Japanese foods businesses likely experienced economic difficulties due to
the internment of Japanese Americans; however, Amache internees still had access to kōji. On December 24, 1942, The Granada Pioneer announced the arrival of tofu merchant George T. Nagamoto from Swink, Colorado and gives the following description:

George T. Nagamoto of Swink, Colorado, arrived here to renew his contract with this center to supply tofu for the next three months. Nagamoto, a pioneer seed merchant, has been doing business in Swink for many years. At present his business is limited to wholesale and retail distribution of kōji, miso, shoyu, age, and tofu. (Granada Pioneer 1942:3)

The visit of Mr. Nagamoto establishes that not all Japanese food distributors were closed due to the effects of internment. Those businesses that were not located within the exclusion zone on the west coast would not have been as drastically affected by the internment of their employees and the majority of their market. Other distributors serving communities elsewhere in the country continued to operate and presumably continued to manufacture kōji. These distributors would have been accessible to internees through visits by merchants like Mr. Nagamoto or perhaps by mail order. Furthermore, kōji could have been mailed to internees by sympathetic friends who had access to commercial kōji outside of Amache.

Where Alcohol Was Used

Although evidence for the use of alcohol within the internment center is recorded from the surface of the site, there is currently little evidence that distributions of these objects mark activity areas associated with alcohol use. In 2012, Feature 23 in Block 9L
was identified as a possible activity area and currently represents the feature with the best potential thus far for being associated with alcohol consumption.

The shards of light bulb glass associated with Feature 23 in Block 9L may indicate the placement of lights in the tree. Based on the proximity of Feature 23 near two previously recorded public gardens, it is possible that the tree may have provided a source of illumination for the garden beds as well. These artifacts and features may be associated with the stories of parties which were reportedly held in Block 9L and the tree may represent a locus of such activities, including alcohol consumption as documented by the proximity of several possible sōké jug fragments (DU Amache Project 2009; Slaughter 2006; Uragami 2011).

Aside from features like public gardens or Feature 23 in Block 9L, no particular places outside of interior spaces are mentioned in association with sōké by interviewees, which is understandable given that the environmental conditions of Amache were such that many activities were restricted to interior spaces to avoid blowing sediment or extreme temperatures (Nishizaki 2011). Furthermore, regardless of the lack of an assertive alcohol policy on the part of Internal Security, most sōké consumption was apparently discreet and likely took place inside to avoid citation.

Saké and Alcohol at Other Internment Centers

Material, archival, and interview evidence firmly establishes the presence, use, and production of sōké at Amache. However, this information can also benefit from
comparison to data associated with other internment facilities. If carefully reviewed, comparative data from other centers has the ability to confirm or enhance much of what is known about *saké* at Amache. These data can also be used to form inferences about activities at Amache that are not as well documented.

Firstly, data from other facilities appears to corroborate much of the evidence from Amache. Although all Internal Security records for other facilities were not formally reviewed for this project, an analysis of newspaper articles from other internment centers (Table 3) reveals similar patterns of use and consumption. Several articles from various facilities give the impression that drinking was quite common and often associated with holidays or parties (Table 3: Item 23) (Tsuchiyama n.d.). According to these sources, *saké* was subject to active restriction in other facilities, just like at Amache. People under the influence of alcohol were arrested by Internal Security, and several instances of the sale of alcohol at the centers were prosecuted (Table 3).
<table>
<thead>
<tr>
<th>Item #</th>
<th>Date</th>
<th>Location</th>
<th>Incident Description</th>
<th>Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10/31/1942</td>
<td>Gila River</td>
<td>Liquor is a vice but has not been a big problem to-date.</td>
<td>Vice Problems Listed by Warden Chief; <em>Gila News Courier</em> Vol. 1 No. 15 Pg. 2</td>
</tr>
<tr>
<td>2</td>
<td>11/7/1942</td>
<td>Gila River</td>
<td>Liquor is a problem, but the number of arrests has not approached those of gambling. Liquor has been smuggled into facility in a number of ways including by black porters on evacuee trains, construction workers, garbage collectors, and visiting friends. Liquor is often sold at high prices. Emphasis on Indian reservation aspect of liquor law.</td>
<td>Editorial: Warden Chief Discusses Liquor; <em>Gila News Courier</em> Vol. 1 No. 17 Pg. 2</td>
</tr>
<tr>
<td>3</td>
<td>11/25/1942</td>
<td>Gila River</td>
<td>Internal Security dealing with liquor problems in addition to gambling and prostitution.</td>
<td><em>Round Up; Heart Mountain Sentinel</em> Vol. 1 No. 5 Pg. 5</td>
</tr>
<tr>
<td>4</td>
<td>12/2/1942</td>
<td>Minidoka</td>
<td>Noboro attacks D.H.16 mess workers with knife while drunk.</td>
<td><em>Knife-Wielder Threatens D.H. 16 Cooks; The Minidoka Irrigator</em> Vol. 1, No. 23 Pg. 2</td>
</tr>
<tr>
<td>5</td>
<td>12/5/1942</td>
<td>Manzanar</td>
<td>Returning beet workers had liquor confiscated. Liquor was turned over to medical staff and &quot;inferior&quot; liquor was dumped.</td>
<td><em>Round Up; Heart Mountain Sentinel</em> Vol. 1 No. 7 Pg. 5</td>
</tr>
<tr>
<td>6</td>
<td>12/12/1942</td>
<td>Poston</td>
<td>Article stating that it is illegal to ship liquor to camp. Two quarts of wine were discovered in the Unit II mail the previous week. &quot;This first offense serves as a prospective warning to all smugglers&quot;.</td>
<td><em>Shipping of Liquor Prohibited Here; Poston Press Bulletin</em> Vol. 3 No. 3 Pg. 2</td>
</tr>
<tr>
<td>7</td>
<td>3/27/1943</td>
<td>Manzanar</td>
<td>&quot;Y.&quot; pleads guilty to disturbing the peace under the influence</td>
<td><em>Four Minor Cases Before Director; Manzanar Free Press</em> Vol. 3 No. 23 Pg. 1</td>
</tr>
<tr>
<td>8</td>
<td>6/15/1943</td>
<td>Jerome</td>
<td>Three men arrested on June 7 for attempting to smuggle large quantities of liquor into facility, turned over to state authorities</td>
<td><em>Nine Arrested During Week; Denson Tribune</em> Vol. 1 No. 31 Pg. 8</td>
</tr>
<tr>
<td>9</td>
<td>6/27/1943</td>
<td>Gila River</td>
<td>Four residents arraigned by project director. Shizukichi and Yoshimi sentenced to jail terms (7 and 90 days respectively) for providing liquor.</td>
<td>Guilty Residents Arraigned; <em>Gila News Courier</em> Vol. 2 No. 89 Pg. 3</td>
</tr>
<tr>
<td>Date</td>
<td>Location</td>
<td>Action</td>
<td>Reference</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>-------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>10/7/1943</td>
<td>Gila River</td>
<td>Three residents tried on liquor charges. The first pleads guilty to furnishing liquor to those that were arrested for possession and received a suspended 90-day sentence. Two others charged with disorderly conduct and liquor manufacture.</td>
<td>Culprits Found Guilty of Charges; <em>Gila News Courier</em> Vol. 3 No. 20 Pg. 5</td>
<td></td>
</tr>
<tr>
<td>11/3/1943</td>
<td>Manzanar</td>
<td>Residents warned about liquor possession. One is in independence jail for drunk and disorderly conduct, another is soon to go.</td>
<td>Warn About Liquor; <em>Manzanar Free Press</em> Vol. 3 No. 23 Pg. 3</td>
<td></td>
</tr>
<tr>
<td>11/20/1943</td>
<td>Los Angeles</td>
<td>Publication of offer from unknown party to buy large quantities of domestic or home-brewed saké in LA.</td>
<td>Market Established to Dispose of Sake; <em>The Rohwer Outpost</em> Vol. 3 No. 41 Pg. 2</td>
<td></td>
</tr>
<tr>
<td>11/30/1943</td>
<td>Los Angeles (?)</td>
<td>Publication of offer from unknown party to buy large quantities of commercial or home-brewed saké.</td>
<td>Idle Farm Machinery; <em>Denson Tribune</em> Vol. 1 No. 79 Pg. 1</td>
<td></td>
</tr>
<tr>
<td>12/16/1943</td>
<td>Poston</td>
<td>Three arrested (Shoichi, Masao, Sakae) trying to smuggle in 30 cases of saké. The saké was reportedly brought to facility by a Caucasian from Phoenix.</td>
<td>Three Nabbed with Sake; <em>Poston Chronicle</em> Vol. 17 No. 1 Pg. 1</td>
<td></td>
</tr>
<tr>
<td>1/29/1944</td>
<td>Manzanar</td>
<td>Warrants issued for three men producing &quot;rice gin&quot;. Iso and two others were found to be making small amounts in their quarters. Liquor was confiscated. Residents warned against manufacturing liquor.</td>
<td>Arrest Three Men for Making Rice Gin; <em>Manzanar Free Press</em> Vol. 5 No. 9 Pg. 1</td>
<td></td>
</tr>
<tr>
<td>2/16/1944</td>
<td>Tule Lake</td>
<td>Five internees indicted on liquor possession (4) and stealing government foodstuffs (1). All had answered &quot;no&quot; on the loyalty questionnaire. Mr. Sasaki was caught in possession of a five gallon still. Asa-ichi charged with stealing food. Three others charged with possession of saké and other spirits (Masayoshi, Yosisuki, and Hungiro).</td>
<td>Grand Jury Indicts Five Tule Internees; <em>Manzanar Free Press</em> Vol. 5 No. 14 Pg. 1</td>
<td></td>
</tr>
<tr>
<td>2/19/1944</td>
<td>Minidoka</td>
<td>Evacuee property officer received request to purchase Washington state liquor licenses. Offer publicized in paper.</td>
<td>Washington Liquor Licenses Wanted; <em>The Minidoka Irrigator</em> Vol. 3 No. 52 Pg. 1</td>
<td></td>
</tr>
<tr>
<td>2/26/1944</td>
<td>Tule Lake</td>
<td>Sasaki sentenced to 1 year imprisonment and $600 fine for possession of “still” and saké mash. Asaichi pleads not guilty to theft of government foodstuffs. Three other individuals received a one year sentences the previous week for possession of untaxed liquor. Military complaint states that “Tule Lake Japanese were consuming Liquor in large quantities”</td>
<td>Tule Lake Evacuee Arrested on Liquor Charge; <em>The Minidoka Irrigator</em> Vol. 4 No. 1 Pg. 1</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Location</td>
<td>Event Description</td>
<td>Source</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>----------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>3/18/1944</td>
<td>Heart Mountain</td>
<td>Denzo arrested last Monday. Internal security seized and impounded a &quot;large quantity of liquor&quot;.</td>
<td>Resident Faces Liquor Charge; Heart Mountain Sentinel Vol. 3 No. 12 Pg. 8</td>
<td></td>
</tr>
<tr>
<td>4/14/1944</td>
<td>Heart Mountain</td>
<td>Five residents charged with maintaining a public nuisance by manufacturing liquor were given 15-day suspended sentences the previous week. Offenders include: Mrs. Hatsuki, Kiyosumi, Yasutaro Tokuhei, and Toraichi.</td>
<td>2 Residents Fined On Liquor Charge; Heart Mountain Sentinel Vol. 3 No. 12 Pg. 8</td>
<td></td>
</tr>
<tr>
<td>4/25/1944</td>
<td>Manzanar</td>
<td>Iso arrested for making saké hidden in &quot;basement&quot;. Saké, mash, and jugs seized.</td>
<td>Arrest Man for Making Sake; Manzanar Free Press Vol. 5 No. 34 Pg. 3</td>
<td></td>
</tr>
<tr>
<td>6/10/1944</td>
<td>Tule Lake</td>
<td>Assault on MP officer. Perpetrator confessed to being drunk on &quot;homemade sake&quot;.</td>
<td>Tulean Assaults MP with Knife; Gila News Courier Vol. 3 No. 126 Pg. 5</td>
<td></td>
</tr>
<tr>
<td>7/3/1944</td>
<td>Tule Lake</td>
<td>Article mentions that center carnival had attracted thousands and there were reports of considerable saké drinking by Japanese men</td>
<td>Tule Lake Coop head murdered; The Minidoka Irrigator Vol. 4 No. 21 Pg. 1</td>
<td></td>
</tr>
<tr>
<td>12/9/1944</td>
<td>Poston</td>
<td>Eight cases dealing with liquor possession were delayed until December 16.</td>
<td>Evacuee Sentenced for Taking Lumber; Poston Chronicle Vol. 21 No. 26 Pg. 2</td>
<td></td>
</tr>
<tr>
<td>12/25/1944</td>
<td>Poston</td>
<td>Eight cases dealing with the introduction of liquor to the center were dismissed by the Judicial Commission on the previous Tuesday.</td>
<td>Judicial Commission Dismisses Cases; Poston Chronicle Vol. 22 No. 1 Pg. 13</td>
<td></td>
</tr>
<tr>
<td>2/10/1945</td>
<td>Poston</td>
<td>Internal Security report of 100 gallons of saké and raisin wine recovered in Unit II. Liquor was disposed of and equipment was destroyed.</td>
<td>Inter-unit News: Internal Security; Poston Chronicle Vol. 22 No.12 Pg. 2</td>
<td></td>
</tr>
</tbody>
</table>

*Newspaper references are not provided in the References section.

One interesting difference between newspaper evidence of alcohol related offenses between Amache and other internment centers was the publishing of the names of offenders. The Granada Pioneer seemed to refrain from printing the names of offenders, choosing instead to use general terms such as “person” to refer to an arrested
or prosecuted individual (Table 2). In contrast, the newspapers at other facilities seemed to be much less restrained, and regularly printed the names of offenders, and sometimes even including the facility address of the individual. For presentation here, the surnames and facility addresses of individuals have been redacted out of respect for the families of offenders (Table 3).

At other facilities, approximately 22 named individuals were associated with alcohol related violations in facility newspapers (Table 4). These violations included the entire range of alcohol related activities, including possession, smuggling, manufacture, inebriation, and the sale of alcohol. Of the 22 offenders documented by newspaper articles at other centers (Table 4), about half (n=11) were Issei, about a quarter (n=7) were Nisei, and the generational affiliation of a few (n=4) was indeterminate. According to these records, it seems that Issei were indeed more likely to be associated with alcohol. Furthermore, the inclusion of Nisei clearly shows that alcohol was not solely restricted to Issei (Table 4).
Table 4: Demographic Profiles of Offenders at Other Facilities

<table>
<thead>
<tr>
<th>Redacted Name</th>
<th>Issei(I)/Nisei(N)</th>
<th>Issei Birth Year</th>
<th>Issei Immigration Year</th>
<th>Issei Immigrant Age</th>
<th>Rural Background (Y/N)</th>
<th>Type of Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iso</td>
<td>I</td>
<td>1887</td>
<td>1907</td>
<td>20</td>
<td>Y</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Masao</td>
<td>I</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Smuggling</td>
</tr>
<tr>
<td>Yoshimi</td>
<td>?</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Providing</td>
</tr>
<tr>
<td>Toraichi</td>
<td>I</td>
<td>1899</td>
<td>1914</td>
<td>15</td>
<td>Y</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Tokuhei</td>
<td>I</td>
<td>1881</td>
<td>1902</td>
<td>21</td>
<td>Y</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Yasutaro</td>
<td>I</td>
<td>1883</td>
<td>1903</td>
<td>20</td>
<td>Y</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Hatsuki</td>
<td>I</td>
<td>1901</td>
<td>1922</td>
<td>21</td>
<td>Y</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Saskai</td>
<td>I</td>
<td>1907</td>
<td>1922</td>
<td>15</td>
<td>Y</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Denzo</td>
<td>I</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Possession</td>
</tr>
<tr>
<td>Noboro</td>
<td>N</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Intoxication</td>
</tr>
<tr>
<td>Kiyosumi</td>
<td>I</td>
<td>1890</td>
<td>1922</td>
<td>32</td>
<td>Y</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Shizukichi</td>
<td>I</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Providing</td>
</tr>
<tr>
<td>Shoichi</td>
<td>N</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Smuggling</td>
</tr>
<tr>
<td>Masao</td>
<td>N</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N</td>
<td>Smuggling</td>
</tr>
<tr>
<td>Asa-ichi</td>
<td>N</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Possibly</td>
<td>Stealing food</td>
</tr>
<tr>
<td>Masayoshi</td>
<td>?</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>?</td>
<td>Possession</td>
</tr>
<tr>
<td>Yosisuki</td>
<td>I</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Possibly</td>
<td>Possession</td>
</tr>
<tr>
<td>Hungiro</td>
<td>I</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Possession</td>
</tr>
<tr>
<td>Kiyoshi</td>
<td>N</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Rumored to sell liquor</td>
</tr>
<tr>
<td>George</td>
<td>N</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Rumored to sell liquor</td>
</tr>
<tr>
<td>Sakaes</td>
<td>N</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>?</td>
<td>Smuggling</td>
</tr>
</tbody>
</table>

*Information for this table compiled from Japaneserelocation.org and Ancestry.com, surnames have been redacted.
Interview evidence has previously established that prior to the internment period, the manufacture and consumption of saké was a common aspect of daily life in rural communities in both Japan and the United States (Blocker, Fahey, and Tyrell 2003:15-17; Izumi 1994; Kreiner et al 2004; Nishizu 1982:74-76; Pratt 1999:72). Interestingly, the majority of cited alcohol cases included in this analysis (n=15) were perpetrated by individuals affiliated with rural communities in Japan or the United States and rural Issei were involved in all of the cases (n=7) that involved the manufacture of saké or other types of liquor (Table 4). These data should not be interpreted as suggesting that brewing activities were not taking place in urban communities; however, the implication is that some practices such as the home production of saké are more commonly associated with rural areas. In rural areas of the United States, access to commercial saké may have been limited, similar to parts of rural Japan prior to the mid-18th century (Marie Gay 2001:41; Pratt 1999:158).

No definitive physical evidence of saké manufacture has yet been located at Amache, and interview evidence concerning manufacture comes from interviewees who were children at the time. As such, interviewees would not have been involved in home production of saké which explains why data from interviews is often vague and generalized. Currently, no incidents involving the production of alcohol is believed to have been documented at Amache and only one incident of bootlegging was recorded (Table 2: Items 1 and 6). Data from other centers provides information regarding saké bootlegging and manufacture that, if applied carefully, may be able to characterize
aspects of these operations not evident from physical remains, interviews, and archival evidence by the application of analogy.

Data from other facilities are much more robust regarding the production of saké. Evidence of saké production was documented by Internal Security and newspaper accounts at Heart Mountain, Tule Lake, Manzanar, and Poston (Table 3: Items 15, 16, 20, 21, 22, and 26) and in several of these cases it is apparent that the operations were capable of producing large amounts of saké. When disrupting some of these operations, Internal Security documented the presence of all stages of saké production.

There is also evidence of the communal nature of saké brewing in other facilities. One story told by the niece of a woman who was interred at one of the Japanese internment facilities in Canada (Densho.org 2015b) was found on an online storytelling site and documents group production of homemade saké:

...Apparently people were covertly brewing sake [sic] in their own places. My aunt spoke briefly of the process, for it was complicated, and required some communal effort with the transferring of rice back and forth between people’s shacks. “We had to hide it from the RCMP,” she said with an impish grin. (Izumi 2014)

This story gives validity to the ideas that brewing saké was a group effort and often took place in multiple localities. According to this story, internees used their own living spaces in a coordinated form of group production. The internees also recognized the illegal nature of making saké and were likely using multiple localities in order to minimize the exposure of the operation.
The existence of subfloor features utilized for *saké* production was substantiated by a newspaper article from Manzanar that documented a *saké* producing operation discovered in a “basement” behind a false wall (Table 3: Item 21). This is the only definitive evidence thus far of a subfloor *saké* production area at any internment facility, and suggests that the existence of such features may have been plausible at Amache. The size of the operation is not indicated by the article, and either one stage or multiple stages of production may have occurred there depending on the size of the space and the available equipment.

As shown in Tables 2 and 3, there were relatively few incidents of citations related to alcohol per facility. These low numbers however may not be representative of the true scale of homemade production at the centers. One account written by a woman who worked for the WRA at Tule Lake, documents widespread manufacturing of *saké* uncovered by a sweep of internee living areas for contraband of all types:

> Much sake [sic] was found in all stages of fermentation. A family, or several families, would save a portion of their rice, which was served in the mess halls three times a day and ferment it in their barracks. There have been no cases of Drunkenness among the colonists, but many take a nip when the can get it. [11/28/1943] (Lowery 2004:68).

When the evidence for widespread manufacture and consumption of *saké* is combined with the fact that there had been no cases of drunkenness at Tule Lake prior to the day of the sweep, the picture that emerges is of a population of people that mostly consumed alcohol without incident. With no disturbances reported, these operations were able to manufacture *saké* in secret until the general contraband sweep (Lowery 2004:68).
Furthermore, the scale of manufacturing was apparently evident to those who worked for the WRA at Tule Lake. An internal document by an unknown person states:

...The security police chief reports to the project manager, and with the population there is a minimum of misdemeanor....In various places in the camp sake [sic] is being brewed. But the police blotter for the day shows only the failure of employees to close and lock warehouse doors. (Japanese American Evacuation and Resettlement Study n.d.)

These accounts show that the practices of brewing and drinking saké were known to the WRA, yet no concerted effort was made to stamp them out. Instead, much like at Amache, the attitude towards saké seems to be casual, and while center regulations against alcohol were enforced, it seems that enforcement took place as Internal Security encountered saké in the course of normal operations.

As detailed in Table 3, there was at least one incident of a confirmed saké manufacturing operation at Tule Lake documented in The Minidoka Irrigator center newspaper (Table 3: Items 16 and 18). The incident involved a man named Sasaki who was arrested for running a liquor making operation in addition to four other individuals for liquor possession and theft (Table 3: Item 16). This record seems indicate the presence of a group-based alcohol production of the type documented by interviews and archival evidence (Lowery 2004:68; Slaughter 2006:141; Tonai 2011).

Additional documentation of saké production was attested to by photographs of a saké manufacturing operation that was interrupted by Internal Security at an indeterminate time (Figures 19-21). The photographs depict what appears to be a large scale saké brewing operation in a room with wooden walls and flooring. The equipment
within the room consists of large sacks of rice, wood and cloth trays with piles of rice, several barrels, bottles of various types, funnels, metal pots, traditional hand tools, and what appears to be a traditional fune.

One of the most striking things about the photographs is the different types of bottles that are being used for saké brewing. Based on the photographs, a large variety of bottles was employed that included jugs, food bottles, and soda bottles. One photograph (Figure 19) depicts a large jug with portions of a label reading “salad oil”. The use of a variety of bottles was also documented at Amache by interviewees who stated that saké was often stored in “any bottle with a lid” (DU Amache Project 2011).
Figure 20: Bottles of homebrewed saké found at Tule Lake. Courtesy of Densho Digital Archive.

A unique bottle is the barrel shaped jug in Figure 20. The vessel appears to be quite large and likely held several gallons. Internet research identified a number of bottles with very similar forms on online auctions sites. The design seems to have been common and bottles of that type were manufactured by at least three companies that include Owens Illinois, Duraglass, and Anchor Hocking, all of which were in operation during the internment period (Appendix B). One online auction for a bottle made by the Owens Illinois company was dated to 1937 based on the makers mark type and date code, establishing that bottles of this form would have been available during the internment
period (Lockhart 2004). According to a variety of sellers, the bottles may have had metal or Bakelite screw-top lids and were used by food companies as jars for pickles or for medication storage by the pharmaceutical company Merck (Appendix B).

Figure 21: Barrel shaped jug, fune, and kaburagai found by Internal Security at Tule Lake. Courtesy of Densho Digital Archive.
Other objects in the photos indicate the stages of *saké* production that were underway when the operation was disrupted (Figure 21). The large cloth covered trays of rice are likely associated with the *mushimai* phase in which the rice that is finished steaming is left on cloth to cool. The large barrels meanwhile are conceivably related to the production of the *moromi* mash which is traditionally created in large open containers to facilitate frequent stirring and an oxygen supply for fermentation (Kanauchi 2013:54-55). The cloth and wooden barrel covers allowed the *moromi* to continue fermenting while still providing oxygen and were easily removed for stirring with the *kai* pictured in Figure 21. Lastly, the presence of the *fune* indicates that the pressing phase of Jōsō was underway.
Figure 22: Photo of saké brewing operation found at Tule Lake. Courtesy of Densho Digital Archive.

The hand tools depicted also indicate the type of saké production that was taking place. Figure 21 clearly shows a Kaburagai. The presence of this tool indicates that the internees were using the kimoto method which requires the processing of the moto with the implement (Bunting 2014:41; Hornsey 2012:229; Wineterroirs.com 2012).

The use of the kimoto method at Tule Lake may be related to a number of factors. Internees may have been aware of the yamahai method, but may not have been able to produce the finely measured temperatures because of technical limitations. Alternatively, those that knew the sokujo method may not have been able to procure pure lactic acid.
Another possibility is that those brewing saké in the centers were not aware of the yamahai or sokujo methods; however, a review of the birth and immigration years of those cited for manufacturing saké (n=7) found that only three individuals had immigrated prior to 1909 when the yamahai method was introduced. The remaining individuals (n=4) were old enough to have been employed at a kura prior to leaving Japan, or could have learned from family members who worked at kura after the introduction of both the yamahai and sokujo methods.

The benefit that kimoto has over the others is that despite its labor intensity, it was the most simple way to manufacture saké given the restricted environment of the internment centers. The use of kimoto at Tule Lake may therefore demonstrate a range of options available to practitioners that may have included a conscious decision to use a simple method, a family tradition of practicing kimoto, lack of knowledge of other methods, or various combinations of these and other factors.

These issues are also relevant in relation to the fune depicted in Figures 20 and 21. Traditionally a fune is constructed as a wooden box and a weight or crank is applied to squeeze the saké out of the cloth bags. The fune was in use for commercial production until the early 1900s when the first pressing machines were introduced (Gauntner 2015). Once again, use of the fune may signal traditional methods of production, but also may be a result of access to more basic materials that demanded more simple methods.

The large pickle jar and sack of rice depicted in Figures 20 and 21 may be documented evidence of mess hall theft as has been alluded to in previous interviews.
(Shigeko Tanaka 2009). Although internees may have been able to purchase a large sack of rice and several gallons worth of pickles outside of the center, it is not likely that items of this quantity would have been purchased for consumption in residential areas. Food was only allowed to be consumed in mess halls, a policy that was extensively disregarded by internees (Shew 2010); however, cooking in the barracks was facilitated easily enough with leftovers from the mess halls and there would have been no need to for an individual to purchase such quantities of food on their own (Shew 2010:118, 122-123, 127). Instead, the sack of rice was likely stolen from the mess halls by one of the people involved in the operation. One of the other four people cited by Internal Security with Mr. Sasaki was arrested for stealing food and it is likely that this individual stole the food in order to provide raw materials for alcohol production (Table 3: Item 16).

In other camps, raw kōji was likely available from outside of the centers, similar to Amache. At Poston, Internal Security was aware of the role that kōji played in the production of saké and that it was being brought into the center for food production (Tsuchiyama n.d.:12/13/1943). At the Manzanar, Poston, Rohwer, and Jerome internment centers kōji was also available at miso production facilities that were opened in the camps to provide the food to the residents of the facilities (Shurtleff and Aoyagi 2011:146-147, 151-152). At Manzanar, the equipment for the production of shoyu and miso was installed in laundry room, likely to access sources of water and heat needed for kōji production (Shurtleff and Aoyagi 2011:146). Such use of the laundry facilities (likely the
boiler rooms) could lend evidence for the suitability of those rooms for the production of *kōji* or during other stages of the brewing process (DU Amache Project 2011).

Documents from other centers also provide more detailed information relevant to the practices of smuggling and an underground economy based on illicit alcohol. At other centers, it appears that alcohol was easily acquired outside the confines of the facilities, just like at Amache (Table 3). The alcohol that was obtained was not limited to just *saké*; whiskey and wine are also noted in newspapers and WRA documents (Table 3: Items 6 and 26) (Tsuchiyama n.d.:9/29/1943, 10/1/1943, 12/16/1943).

At Gila River, liquor smuggling was known to be happening as early as late-1942 (Table 3: Item 2). It was alleged that liquor was introduced to the center by a number of individuals such as railroad porters, construction workers, garbage collectors, and visiting friends. At Poston, the first incident of smuggling was discovered in late 1942 when two jugs of wine were recovered from the mail (Table 3: Item 6). The reprimand delivered in the paper as a warning to other residents is phrased however as a friendly reminder that liquor cannot be sent through the mail rather than a condemnation.

At Jerome in mid 1943, several people were arrested trying to smuggle a large amount of liquor into the center (Table 3: Item 8). A similar incident was documented at Poston in late-1943 when three individuals were arrested trying to smuggle in 30 cases of *saké* they had received from a Caucasian confidant (Table 3: Item 14). The Jerome incident is currently the only case of *saké* being smuggled into any of the internment centers that is documented outside of interviews. The incident also further confirms that
large stocks of saké were available for purchase during a time when most American saké breweries had closed or ceased production.

Smuggling of liquor into the centers, especially large amounts, may have been primarily motivated by prospects of monetary gain. Evidence from Gila River suggests that smuggled liquor was often sold for very high prices (Table 3: Item 2). The best evidence for the bootlegging of liquor within the facilities comes from Law and Order Committee documents associated with the Poston Relocation Center (Tsuchiyama n.d.). According to these documents, there were several large operations in the facility, and at least two were run by members of the internee police force (Tsuchiyama n.d.:12/21/1943, 9/29/1943). These individuals apparently abused their positions in the police department to smuggle in large amounts of alcohol that they then resold at a markup.

The practice of selling illicit alcohol at Poston was very profitable. According to Law and Order Committee documents, liquor of all types was initially sold for 6 dollars a quart (the equivalent of $83 adjusted for inflation). The price at Poston steadily increased and at various times it was known to have been sold for between 9 and 14 dollars a quart ($125-$194) (Tsuchiyama n.d.:9/29/1943; 12/16/1943).

It is interesting to note that of those specifically cited for manufacturing saké, none were charged with offenses related to the sale of liquor (Table 3). Although commercial saké appears to have been sold by individuals involved in smuggling and bootlegging rings, based on the documents reviewed for this project, there is currently no documentation that suggests that saké manufactured within the internment centers was
sold. Although this is not a reliable way of determining that homemade saké was not available for sale, the absence of citations for bootlegging associated with it may indicate that it was not a highly monetized product. The status of homebrewed saké as a non-monetized product may also account for the lack of a concerted enforcement effort to eliminate the practice.

Another reason that homebrewed sake may not have been targeted for enforcement may be its role in the doxa of the traditional Japanese concept of giri. Giri is a system of Japanese social obligation and moral duty that prescribes for a system equal exchange (Davies and Ikeno 2011). The practices of giri were introduced in pre-feudal rural Japan and were often used to return something of value in exchange for goodwill. These practices included gift giving as the distribution of gifts created social obligation (Davies and Ikeno 2011). Giri continued to be practiced in the United States, and homebrewed saké was one of many gifts exchanged among participants (Morihio 2005).

If homemade saké was distributed or used in such a way inside of the internment centers, charging money for the product would have been highly inappropriate. As gift giving would have been an integral part of many of the traditional practices and festivals documented within the internment centers, homebrewed saké would have made an appropriately doxic exchange item. The practice of giri may account for the lack of evidence that homemade saké was a monetized product, however more research is needed to move beyond mere hypothesis.
Similar to Amache, administrators, community leaders, and Internal Security seemed to be more concerned with issues like gambling and juvenile delinquency for which explicit policies meant to curtail them were often discussed (Amache Community Council n.d; Tsuchiyama n.d.:5/5/19430, 7/20/1943; 7/21/1943; Yoshizawa n.d.). In contrast to policies relating to juvenile delinquency and gambling, WRA and community government officials did not seem to perceive the violation of alcohol regulations as a matter requiring urgent attention or enforcement.

Similar to Amache, it often seemed that other issues were more important in cases of enforcement. When discussing bootlegging activities, Poston Internal Security officials appear to be more concerned with the high cost of liquor to the internee population rather than the fact that a demand exists for alcohol within the center (Tsuchiyama n.d.). This is despite the fact that in one report, the flow of alcohol into Poston was described as “steady” (Tsuchiyama n.d.:10/1/1943). Based on research conducted for this study, two instances of tightened enforcement at Amache and Poston are the only examples of policies applied specifically meant to enforce the prohibition of alcohol at the internment centers (Asai 2009; Tsuchiyama n.d).

In terms of the approach to alcohol, it appears that Internal Security only dealt with it on a case-by-case basis, similar to Amache. This may account for the low number of incidents per center that involved alcohol. Without an explicit policy that required proactive enforcement, Internal Security was only likely to encounter alcohol in situations that involved some sort of disturbance. Most incidents at other centers often
involved infractions such as drunkenness, disturbing the peace, assault, and disorderly conduct similar to the situation at Amache (Tables 2 and 3).

Incidents where individuals were cited for smuggling or manufacturing offenses were fairly rare, and are limited to one or two per center (Table 3), similar to Amache where only three internees were cited for bootlegging in the same incident (Table 2: Item 6). The exception to this seems to be Poston where three separate incidents of smuggling were documented which may indicate a unique situation at Poston in terms of the existence of official corruption (Tsuchiyama n.d.). It is possible that knowledge of corruption on the part of other members of Internal Security may have resulted in a heightened awareness of bootlegging, resulting in more enforcement.
Chapter Six: Analysis and Interpretation

This research indicates that the use and production of *saké* consists of a group of practices that exhibit doxic qualities in several important ways (Silliman 2001:193). These practices are not solely unintentional; however they do represent aspects of daily life at Amache that persisted despite regulations that forbade alcohol or its consumption in any of the internment facilities (WCCA 1942).

*Saké* was a part of daily life for many Japanese Americans within the internment center. The consumption of the drink was a part of important traditional activities that were practiced at Amache such as the Festivals of Obon and Shogatsu, and was an important part of social interactions (DU Amache Project 2011; Izumi 1994; Kiyama 1998:122-123; Nishizu 1982:52, 71, 74-76; Slaughter 2006:127-129). To some, the consumption of *saké* was a daily occurrence, perhaps enjoyed with a meal or even consumed habitually (Slaughter 2006:141; Tonai 2011).

In rural communities prior to interment, the production of *saké* was an important daily practice. Rural populations in Japan were integrated into the *kan-zukuri* system that consisted of a seasonal structure of commercial *saké* brewing in other provinces for much of the year (Ishige 2001:107). For generations, *toji* and *kurabito* returned to their home communities with the knowledge of how to make *saké*, and the beverage was widely produced in rural homes (Marie Gay 2001:41; Pratt 1999:158). Meiji-era reforms
displaced a large number of rural people who immigrated to the United States and
brought the knowledge of saké brewing with them (Blocker, Fahey, and Tyrell 2003:15-
17; Kreiner et al 2004; Pratt 1999:72). Many of these immigrants settled in rural areas
where they continued the practices of home production and consumption of saké (Izumi
residents of these same communities were imprisoned at the internment centers where the
production of saké continued despite regulations that forbade its presence (DU Amache
Project 2011; Slaughter 2006; WCCA 1942).

In both Japan and the United States, the home production of alcohol was subject
to varying levels of restriction throughout history. In Japan, Tokugawa-era laws
controlled the price and availability of saké and at times restricted the rights of rural
peasants to consume the product (Hauser 1974; Ishige 2001:107). The successive Meiji
government encouraged commercial saké production in order to increase tax revenue at
the expense of home brewing which it eventually banned (Kreiner et al 2004:75). Saké
was also effectively restricted in the United States at times as well. In Hawaii, high tariffs
on imported saké severely reduced the availability of the beverage, and contributed to the
establishment of expanded home brewing and eventually a domestic saké industry
(Greenhous 2014; Niiya 1993:166). This was followed by the implementation of the
Volstead Act in 1920 that restricted all alcohol production, commercial and otherwise,
until its repeal in 1933. Despite all these restrictions, home production of saké continued
unabated and the practice of home brewing actually expanded in response to declines in

For many of the Issei who lived within the exclusions zones, the restrictions on alcohol imposed by the WRA were yet another in a long history of restrictions on saké. Those Issei that had grown up in rural areas in Japan were likely familiar with home-brewed saké and many of them knew how to brew it themselves. The restrictions on alcohol in America could be viewed as maintaining the culture of home production by removing access to commercial saké and therefore encouraging individuals to make their own (Franks 2006:40; Kiyama 1998:122-123; Niiya 1993:166; Odo 2011:43).

It is precisely in the context of restriction that the production of saké at Amache embodies doxic qualities (Silliman 2001:193). To those that were interred, the production of saké in the internment facilities was nothing out of the ordinary, but instead a routine response to curtailment in order to continue an important practice of daily life. Saké was highly integrated into many aspects of rural Japanese life which necessitated a supply of the drink for many to practice traditionally. Evidence of the continued traditional nature of saké consumption at Amache is indicated by the presence of traditional ceramic vessels that imply the presence of long established drinking and serving practices that were specific to Japanese American daily life (Gauntner 2000:51; Kondō 1984:91; Tierney and Tierney 2012:121).

Doxa through tradition is also expressed by documented methods of producing saké at Tule Lake. A series of photos that document an illicit saké operation (Figures 19-
21) depicts a number of recognizable objects that imply the use of the *kimoto* method to produce *saké* (Gauntner 2014:77). The use of *kimoto* may be related to a number of factors including a consideration for simplicity; however the very presence of distinctly Japanese tools and methods indicates that individuals who had been trained in that style of production were interred at the facility. To date, the production of *saké* has not been verified at Amache with physical evidence, much less a particular way of brewing it at the internment center; however, the documentation of *kimoto* at Tule Lake makes clear that such methods that were known to many internees and were likely applied to make *saké* at other centers.

*Saké* at Amache also displays doxic qualities through the interaction with the bodily hexis (Bourdieu 1977, 1984). On a very basic level, the intoxicating effects of *saké* constitute an embodied experience that reinforced traditional cultural practices such as important festivals or life events that included the consumption of *saké* (Gauntner 2000:12; Ishige 2001:63). Embodiment is also an aspect of the production of homemade *saké* which requires the performance of specific physical tasks at the appropriate time in order to produce a successful product (Gauntner 2000, 2002). The *kimoto* method is especially related to embodied activities due to the rhythmic nature of *moto* and *moromi* production (Hornsey 2012:229).

The presence of traditional production, consumption, and embodied experiences at Amache provides evidence of the doxic quality of those practices. Regardless of his linguistic footwork, what Bourdieu sought to explain through his concepts of habitus and
doxa were things like traditional practices that he characterized as appearing natural and self-evident to those that undertake them, yet within such a framework they are considered to be completely arbitrary (Bourdieu 1977:164; Ortner 2001:469; Stevens 1998:57). To many at Amache, the celebration of festivals or the entertaining of guests would have been unthinkable without the inclusion of saké, and it is evident that some internees went to great lengths to ensure its availability.

Although the performance of these everyday practices associated with saké occurred within the framework of institutional confinement, they do not necessarily constitute everyday resistance simply by association with the system of domination that was internment (Casella 2007; Scott 1985, 1986; Silliman 2015). Instead, these practices can be viewed as the outcome of an environment where the doxic practices related to the production and consumption of saké appeared not to be questioned in any substantial manner and therefore retained their status as doxa (Bourdieu 1977:164, 167; Silliman 2001:193, 195).

The enforcement of alcohol regulations at Amache and other centers appears to be associated with discovery of it in the course of normal routines or anti-social behaviors rather than a strategy to eliminate it from the facilities (Foster 1945; Amache Internal Security Section n.d.; Yoshizawa n.d.). In such a context, the production and consumption of saké and other alcohol by internees could have been tolerated as long as it was not obvious, and therefore was never questioned enough to rise to the level of contestation (Silliman 2001). By not perceiving alcohol consumption at Amache as a
problem of any particular urgency, both the community government and WRA administrators refrained from politicizing the daily practices of *saké* production and consumption. These practices were not discussed within a framework that was capable of suggesting that they were arbitrary and therefore did not create a situation where a decision between orthodoxy and heterodoxy on the part of internees was necessary (Bourdieu 1977:169; Silliman 2001:194).

At the point where a doxa is questioned and a choice between orthodoxy and heterodoxy must be made, practices can be politicized by becoming indicative of particular identities (Silliman 2001:194-195). Practices become politicized in environments of social contestation, where individuals and social groups seek to either expose doxa as arbitrary or reassert silences of discourse for personal or political gain. Doxa in essence becomes a tool in contestations as opposing entities jockey for power (Silliman 2001:194-195).

The tensions between the administration, Block Managers Assembly, and Community Council are strikingly obvious based on primary documents generated by each organization (Johnson 1945; Amache Community Council n.d.). Within this oppositional framework, the WRA and the Community Council maneuvered to assert themselves as authorities by employing accusation and innuendo to discredit the other (Johnson 1945; Amache Community Council n.d.). The Block Managers played a more neutral role, but tended to accept the position of the administration likely because they served at the pleasure of the center director (Yoshizawa n.d.; WRA 1946a).
In the context of these tense relationships, WRA administrators could have easily cracked down on alcohol production and consumption in an effort to project their authority. Likewise, the Community Council could have sought to burnish its image among various interest groups within the internee population by doing the same or pushing for repeal of restrictions. These are just a few examples of the many ways in which doxa could have been politicized and employed by actors who were trying to project their authority.

Non-contestation of alcohol should not imply that doxas were not contested at Amache. In the struggle over juvenile delinquency, the WRA effectively politicized doxa when it questioned the role of the family in the punishment of young people (Amache Internal Security Section n.d.; Silliman 2001). The community government responded to this contestation with heterodox strategies that asserted traditional roles for parents within the new framework of internment by mandating an extensive consultative process with the police department to curtail further delinquency (Foster 1946).

In various WRA documents, the internment centers are generally described as peaceful with exceptionally low crime rates compared to other communities of the same size (Amache Internal Security Section n.d.; WRA 1946a;). A small proportion of those few crimes were related to alcohol, and many of those were associated with other offenses such as assault or creating a public disturbance (Tables 2 and 3). Combined with the knowledge that WRA administrators had of extensive consumption among the internee population, their choice not to promote an aggressive enforcement policy was
likely related to concerns about security. By 1942, the United States was separated from the end of national prohibition by only nine years (Philips 2014:279-282). The legacy of that unenforceable policy likely influenced WRA administrators to be politically realistic in that they were unlikely to enact any policies that might give the Community Council leverage in challenging their authority; especially if the outcomes of those policies were dubious. Additionally, a large proportion of the internee population at Amache and other centers was engaged with saké production and consumption, and an aggressive program of prohibition would likely have sanctioned numerous individuals which could have resulted in widespread unrest.

The outcomes of the WRA choosing not to advocate for aggressive enforcement was that the doxic practices of saké production and consumption were never politicized and were therefore never challenged to the point that choices between orthodoxy and heterodoxy had to be made. In this environment, the existing doxa was already well suited to deal with situations where saké was nominally forbidden but tacitly tolerated if the practices associated with it were not flagrant or created disturbances. In addition, practices consisting of the illicit manufacture of saké and concealment of the product in subfloor pits were well established by the 1930s and were documented at other centers (Table 3: Item 21). Such strategies were also likely used at Amache in order to avoid detection and to continue daily practice. Internees were so accustomed to making saké in such contexts, that by the beginning of the internment period, the prohibition of alcohol
was likely of little concern because existing doxa already took such situations into account.

Previous work on sake at Amache has associated the performance of traditional practices as representative of everyday resistance through an assertion of Japanese American identity through practices. Within this framework, Japanese Americans were choosing to practice traditionally, and were therefore expressing their Japanese identities in the face of injustice (Slaughter 2006). To Slaughter, this identity was politicized as it expressed the very essence of Caucasian stereotypes of Japanese identity that implied that such practices were strange and un-American. In response Japanese Americans projected their cultural practices as a way of reclaiming their identities.

This project offers another perspective of the presence of sake at the facility. Instead of taking a perspective of resistance, this study instead focuses on the role that sake played in the daily life of internees and how that daily experience constituted maintenance of traditional practices through a continuance of doxic practices.

According to interviews, the use of sake was a significant component in the performance of important practices such as traditional celebrations, the consumption of food, and entertaining guests within the internment centers (Slaughter 2006:127-129). In this way, the practices of sake production and consumption serve as acts of residence that also represent uncontested doxa because of how the doxa was already well adapted to deal with the situation of restrictions on alcohol.
Among the peasant populations of both Tokugawa and Meiji-era Japan, *saké* was initially contested through the imposition of restrictive laws that governed commercial and household production in addition to its very consumption by the peasant class (Ishige 2001:107; Pratt 1999:175). The inauguration of restrictions on those practices in feudal Japan resulted in heterodoxy such as the transition to concealed production and consumption as individuals transitioned to less visible practices that allowed them to continue practice, which then became established as a new doxa. Although restrictions varied over time, by the early twentieth century consumption and commercial production were nominally legal but home production in any form was banned (Kreiner et al 2004:75).

Those *Issei* that immigrated to the United States encountered similar laws for which the established doxa of illicit home production was well suited as a performative structure (Blocker, Fayhe, and Tyrell 2003:609-611; Sahlins 1985). The doxa of consumption however, would not have been well adapted to conditions in the United States that included contestations over *saké* related to its status as a stereotyped product related to Japanese identity. Furthermore, the advent of national prohibition in 1920 introduced restrictions on consumption which many *Issei* had never experienced. These contestations also would have required an application of heterodoxy in order to continue the practices of both production and consumption which would have again constituted a new doxa that was adopted in response to these new circumstances.
By the beginning of the internment period, those Issei that produced and consumed saké had experienced contestation of their practices on a number of different levels and had adapted doxa to fit them. Although national prohibition had been repealed in 1933, it was only nine years until restrictions on the consumption of alcohol by Japanese Americans were asserted again with the beginning of the internment period. Having lived within the framework of at least two highly variable regulatory regimes, adaptation to restrictions on both production and consumption was the normal state of affairs, even with intervening years of little regulation and Issei who made and consumed saké would have been intimately familiar with the need to practice discreetly. Based on the continuation of home production even after commercial saké was once again legal, I contend that the resumption of restrictions constituted a situation where a choice between orthodoxy and heterodoxy was not even necessary. Instead, many in the Japanese American community were already intimately familiar with such restrictions and the conditions of the internment centers would have offered no further contestation of these practices especially when the outcomes of WRA alcohol policy are considered (Silliman 2015:63).

In a context of non-contestation, saké production and consumption constitute acts of residence because of their ubiquity in the daily practice of some internees despite the conditions of internment. The presence of saké at Amache represents efforts by internees to stake a claim in their material and social worlds by recreating and continuing important practices within the confines of the internment center (Silliman 2001:203). Internees
could have easily chosen to abstain or exclusively procure EuroAmerican alcohol which was readily available; instead, residents continued to practice traditionally and to produce their own alcohol because of the particular importance of saké to daily life.

The ways of acquiring and consuming saké in the internment centers reflects the persistence and survival of practice through a variety of means. Internees went to great lengths to procure the product whether through purchase at possibly exorbitant rates or the application of labor-intensive brewing practices (Tsuchiyama n.d.). Internees ensured that saké was available to be served to guests in their own barracks or for use in traditional festivities. These practices took place in a regulatory environment that did not reflect contestation and may even have signaled tacit approval of the use of alcohol as long as the peace of the centers was not impacted. In such a context, the investment of large amounts of time and/or money to use saké as a form of resistance would have been out of scale when compared to the apparent WRA attitudes about alcohol. Simply put, resistance to the conditions of internment through the use of saké would likely have accomplished little to influence WRA personnel who had already signaled their disregard of it as a problem of any concern.
Chapter Seven: Conclusion

The results of this research establish that the production and consumption of saké at Amache and other facilities continued in much the same fashion that it had prior to the internment period. Internees manufactured and consumed saké in traditional ways despite official restrictions on alcohol. Production was primarily performed by individuals from rural areas in Japan and the United States where the practices of home production were common despite overbearing controls and various types of prohibition. These individuals did not find the constraints on these practices imposed by the WRA to constitute any sort of undue burden distinct from the conditions in which they had previously operated as they employed strategies of production that were well suited as doxic practices optimized for environments of restriction. Because of the appropriateness of these doxic practices, the production of saké continued unabated.

Likewise, for those that consumed saké at Amache, the product was simply a part of daily life that continued within the facility. Internees utilized saké in traditional ways such as during community celebrations, to mark significant life events, and as a part of cuisine. Saké was widely available through the sources of home production and smuggling which served to facilitate the performance of traditional consumption practices on a large scale.
It is also apparent that production and consumption in ways that did not result in additional disturbances was not perceived by members of community government or WRA administrators as constituting a threat to the stability of the center. Because of this lack of concern, a wide ranging program of enforcement was never undertaken. Instead, community government and WRA officials were focused on what they perceived as more pressing issues such as juvenile delinquency. Alcohol policy, while actively enforced, was not a priority for internal security which encountered illegal production and consumption only on a case by case basis.

The production and consumption of saké at Amache constitutes acts of residence rather than acts of resistance. Instead of applying practice to intentionally assert their identities as Japanese Americans, I contend that internees were instead simply trying to recreate an approximation of normal life at Amache. In order to do this, many Internes continued doxic practices that involved the production and consumption of saké. These practices were already well adapted to conditions of restriction and therefore of confinement at the WRA centers. The performance of these practices was never contested on any substantial level and saké production and consumption at Amache was expressed much like such practices were prior to the beginning of the internment period.

Due to a lack of contestation, the choice between orthodoxy and heterodoxy which would have removed practices from doxic circumstances never took place. As a result, these practices retained their doxic qualities and remained unquestioned parts of daily life. The continued performance of doxa within the context of the internment center
served to recreate the circumstances of every day life even in a situation of extreme
duress. This recreation of normalcy was at least partially achieved by utilizing saké in
traditional ways.

Even though they do not represent the assertion of Japanese American identity
through resistance to injustice, acts of residence speak to the dignity of a population
forced to submit to incarceration as a result of a grave injustice. Acts of residence provide
examples of the resilience of the Internee population to continue to make the best of a bad
situation. In this context the phrase “shikata ga nai” (it can’t be helped) is not an
admission of defeat, it is instead a realistic assessment of the situation in which Japanese
Americans found themselves. What these people did as evidenced by their actions as
expressed in the material remains, archival documents, and the stories of survivors was
actually to not admit defeat. Instead, internees did the best they could to make their lives
as meaningful as possible given the circumstances, and that very those actions constitute
an assertion of their dignity as human beings.
Notes

References

Note: Newspaper references for incidents regarding alcohol at Amache and other facilities are included within Tables 2 and 3

Amache Community Council

Amache Internal Security Section

American Brewer’s Review

Archer, Steven

2015  Amache Test Excavations – 2012 Field Season Archaeobotanical Analysis. Report for the DU Amache Project, University of Denver, Department of Anthropology.

Auffrey, Richard

2011  Rant: U.S. Sake Vs Japan Sake--Context is Everything.  

Asai, Hiro

2009  Interview by Dr. Bonnie Clark, Cortez, California, November 7. University of Denver, Department of Anthropology.

Auld, Will

Barbour, Michael G. and William Dwight Billings (editors)


Blocker, Jack S, David M. Fahey, and Ian R. Tyrell


Bourdieu, Pierre


Bouzdine-Chameeva and Mari Ninomiya


Branton, Nicole L.


Bunting, Chris


Burton, Jeffery F., Mary M Farrell, Florence B. Lord, and Richard W. Lord


Carrillo, R., D. Killam, W. Broadhead, and M. Slaughter

2004 Camp Amache (5PW48): A Class III Cultural Resources Intensive Field Survey

Casella, Eleanor E.


Casella, Eleanor Conlin and Chris Fowler


Clark, Bonnie J.

Clark, Bonnie J., April Kamp-Whittaker and Dana Ogo Shew


Clark, Bonnie J. and Christian Driver


Clark, Bonnie J., David Garrison, and Paul Swader

2012  Archaeological Investigations at the Granada Relocation Center (Amache), National Historic Landmark, Prowers County, Colorado: Report of on the

Cobb, Charles R. and Adam King


Colorado Preservation Inc. (CPI)


Conyers, Lawrence B.

2012 *Interpreting Ground-penetrating Radar for Archaeology*. Left Coast Press, Walnut Creek, California.

2013 *Ground-Penetrating Radar for Archaeology*. AltaMira Press, Plymouth, United Kingdom.

Davies, Roger and Osamu Ikeno

Densho.org


Dietler, Michael and Ingrid Herbich

Dornan, Jennifer L.

DU Amache Project
2009  Group interviews with former Amache internees, Amache reunion. University of Denver, Department of Anthropology.

2011  Group interview with former Amache internees, Los Angeles, California, May 22. University of Denver, Department of Anthropology.


2014  Block Resident Database. Compiled by Jessica Gebhard from 1943 and 1945 Amache resident directories. University of Denver, Department of Anthropology.

Ehrgott, Alan

2009  History of the Wakamatsu Tea and Silk Colony Farm: Resurrecting the Wakamatsu Farm Colony. American River Conservancy, Coloma, California


Foster, Forrest G (compiler)
1945  Internal Security Final Report. Internal Security Section, Community
Management Division, Granada Relocation Center, Amache, Colorado. Records
of the War Relocation Authority, 1942-1946 (National Archives Microfilm
Publication Reel 54 Folder 15 of 28); Record Group 210; National Archives
Building, Washington, DC

Francks, Penelope

2006  *Rural Economic Development in Japan: From the nineteenth Century to the

Fugita, Stephen and Marilyn Fernandez

2014  *Altered Lives, Enduring communities: Japanese Americans Remember Their

Funderberg, J. Anne

2014  *Bootleggers and Beer Barons in the Prohibition Era*. McFarland and Company,

Gauntner, John

Pennsylvania.

2013  Nara Prefecture: The Birthplace of Sake It’s true! John Gauntner’s Sake World  


2015  Sake Brewing Process. Electronic Document, John Gauntner’s Sake World  

Giddens, Anthony


Granada Pioneer

Granada War Relocation Center, Colorado.

Greenhous, Anna
2014    Anna Greenhous on America’s growing love affair with sake. Harpers.co.uk

Gurcke, Karl
1987    Bricks and Brickmaking: A handbook for Historical Archaeology. University of
Idaho Press, Moscow, Idaho.

Harris, Edward C.

Harvey, Robert
2003    Amache: The Story of Japanese Internment in Colorado During World War II.

Hauser, William B.

Hirano, George

2001  Interview by Dr. Bonnie Clark and Christian Driver, Los Angeles, California, April 24. University of Denver, Department of Anthropology.

Hornsey, Ian S.


Honolulu Chamber of Commerce


Ice and Refrigeration Illustrated

1913a  New Incorporations. *Ice and Refrigeration Illustrated.* June 1913. Chicago, Illinois and New York, N.Y.

1913b  Brewery Items. *Ice and Refrigeration Illustrated.* December 1913. Chicago, Illinois and New York, N.Y.
Ichihashi, Yamoto


Iino, Hisakazu

2014  Fermented Foods of Japan: Sake, Mirin and Rice Vinegar. Kikkoman Global


Inoue, Nobutaka, Endo Jun, Mori Mizue, and Ito Satoshi (editors)

2003  Shinto: A Short History. Mark Teeuwen and John Breen, translators.


Ishige, Naomichi


Izumi, Kuichi

2001  Interview for the Terminal Island Life History Project. Japanese American National Museum, Los Angeles, California
Japanese American Evacuation and Resettlement Study (compiler)


Japaneserelocation.org

2015  WW2 Japanese Relocation Camp Internee Records. Online database


Johnson, Ray (compiler)

1945  Community Government Final Report Prepared According to Handbook Release #199, Section 140.10.1B, Exhibit XXVI. Records of the War Relocation Authority, 1942-1946 (National Archives Microfilm Publication Reels 53-55 Folder 12 of 28); Record Group 210; National Archives Building, Washington, DC.

Joyce, Rosemary A. and Jeanne Lopiparo

2005  Postscript: Doing Agency in Archaeology. Journal of Archaeological Method and
Kamp-Whittaker, April


Kanauchi, Makoto


Kita Sangyo Co. LTD.

2014 Sake manufacturers in North America & a glimpse into the 100 year history.

Kita Sangyo Co. LTD


Kiyama, Henry (Yoshitaka)

Kreiner, Josef, Ulrich Mèohwald, and Hans Dieter Ölschleger (editors)


Komicki, Peter Francis (editor)


Kondō, H.


Leach, Edmund


Lendler, Ian

176
2005 Alcoholica Esoterica: A Collection of Useful and Useless Information as it
Relates to the History and Consumption of All Manner of Booze. Penguin Group,
New York, NY.

Lillquist, Karl
2007 Imprisoned in the Desert: The Geography of World War II-Era, Japanese
American Relocation Centers in the Western United States.
<http://www.cwu.edu/geography/geography-Japanese-American-relocation-

Limerick, Patricia
1992 Disorientation and Reorientation: The American Landscape Discovered in the

Lindley, James G.
1942 Project Administrator Weekly Report 12/18/1942. Weekly narrative reports 1942-
1945, Granada Relocation Center, Amache, Colorado. Japanese American
Evacuation and Resettlement Records, BANC MSS 67/14 c (National Archives
Microfilm Publication reel 288, frame :0188, folder L1.15); The Bancroft Library,
University of California, Berkeley.


1945a  Appendix No. IV. Chronology (Daily clippings from The Pioneer , the project newspaper) War Relocation Authority Granada Project Chronological History. The Bancroft Library. University of California, Berkeley. Berkeley, California.
Lockhart, Bill
2004  The Dating Game: Owens Illinois Glass Co. SHA.org

Lowery, Margeret

Lublin, Elizabeth Dorn
Manzanar Free Press

1944 Two Residents Under Arrest. *Manzanar Free Press* 26 April, (5):34. Manzanar War Relocation Center, California

Marie Gay, Suzanne


Marín-Spiotta, Erika, Emily Eggleston and Laura Szymanski

2015 *Camp Amache Soil Chemistry Report*. Department of Geography, University of Wisconsin - Madison. Report for the DU Amache Project, University of Denver, Department of Anthropology

McDonald, J.D., L.J. Zimmerman, A.L. McDonald, W. Tall Bull, and T. Rising Sun


Missionary Review of the World

Morris, Ivan


Morihiro, George


Densho.org


Accessed May 9, 2015.

Morris-Suzuki, Tessa


Nagata, Mary Louise

Ng, Wendy


Niiya, Brian (editor)


Nishizaki, Fumie

2009  Interview by Dr. Bonnie Clark, David Garrison, and Christian Driver, Los Angeles, California, April 23 University of Denver, Department of Anthropology.

Nishizu, Clarence Iwao


Nouët, Noël

NPCS Board of Consultants & Engineers


Odo, Franklin

2013  *Voices from the Canefields: Folksongs from Japanese Immigrant Workers in Hawai‘i*. Oxford University Press, New York. N.Y.

OldBreweries.com


Omori, Thomas Takashi

n.d.  Unfinished memoir. Courtesy of Kirsten Leong

Ortner, Sherry B.


Otto, Jennifer

183
2010  Communities Negotiating Preservation. Master’s thesis, Department of
Anthropology, University of Denver.

Pearsall, Deborah
San Diego, California.

Philips, Rod

Powell, John
NY.

Pratt, Edward E.
University Asia Center/Harvard University Press, Cambridge, Massachusetts.

Rosiere, R.E.
2013  Range Types of North America. Electronic book,
Sahlins, Marshall D.

Scheurer, Franz
2015 Sake. Classic Communications

Schmitt, Robert C. and Ronn Ronck

Scott, James C.


Sivaramakrishnan, K.
Shew, Dana Ogo


Shigekuni, Tom

2011 Interview by Dr. Bonnie Clark and Christian Driver, Los Angeles, California, April 24. University of Denver, Department of Anthropology.

Shurtleff, William and Akiko Aoyagi


2012  *History of Kōji - Grains and/or Soybeans Enrobed With a Mold Culture (300 BCE To 2012): Extensively Annotated Bibliography and Sourcebook*. Soyinfo Center, Lafayette, California.


Silliman, Steven W.


Simmons, T.H. and L. Simmons

Skiles, Stephanie

Slaughter, Michelle A.

Smith, Adam Thomas
Society for Historical Archaeology (SHA)


   April 17, 2015

Stevens, Gary

   Massachusetts: The Massachusetts institute of Technology.

Suisan Company Limited (SCL)

2015 A History of Suisan Company, LTD. Suisan Company,  
   February 15, 2015.

Swader, Paul

2015 An Analysis of Modified Material Culture from Amache: Investigating the 
   Landscape of Japanese American Internment. Master's thesis, Department of 
   Anthropology, University of Denver.
Tanaka, Shigeko

2009  Interview by Dr. Bonnie Clark, Sacramento, California, November 13. University of Denver, Department of Anthropology.

Thomas, Nicholas


Thornton, Mark


Teirney R. Kenji, and Emiko Ohnuki-Tierney


Toro-Morn, Maura Isabel and Marixsa Alicea (editors)

Tsuchiyama, Tamie (compiler)

n.d. Law and Order Committee Notes (Poston). Japanese Americans--Evacuation and relocation, 1942-1945 (Scanned Images BANC MSS 67/14 c, folder J6.27 (14/27)) The Bancroft Library University of California, Berkeley.

*Note: this collection is organized by date and topic rather than page number. All in text citations are organized by date and are contained within the “Liquor Smuggling” section of the document.*

U.S. Bureau of the Census


1930a Fifteenth Census of the United States, 1930. Census Place: Brighton,


United States Department of Agriculture Natural Resources Conservation Service
(USDA-NRCS)

United States Department of the Treasury


Uragami, Bob

2009  Interview by Dr. Bonnie Clark, David Garrison, and Christian Driver, Los Angeles, California, April 22. University of Denver, Department of Anthropology.

Urbansake.com


VanSteenburgh, Meg


Van Wieren, Dale P.

Wartime Civil Control Administration (WCCA)
1942  *Center Regulations*. Western Defense Command and Fourth Army.


War Relocation Authority (WRA)

Weik, Terry


Wineterroirs.com

2012  Kenbishi Shuzo, Kobe (Japan).


Accessed April 19, 2015.

Yamamura, Kozo and John Whitney Hall (editors)


Yoshizawa, Kiyoshi and Takeaki Ishikawa


Yoshizawa, Yatsutoshi (compiler)
n.d Block Managers Meeting Minutes, Granada Relocation Center, Amache, Colorado. Block Managers Assembly Records (Minutes MS0295 Box 1 Folders 4-34); Special Collections, Tutt Library, Colorado College, Colorado Springs, Colorado.
Appendix A: Listing of Japanese American Breweries Operating prior to WWII
<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Established</th>
<th>Active</th>
<th>Closed</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honolulu Brewing Co.</td>
<td>Honolulu, Oahu, Hawaii</td>
<td>1898</td>
<td></td>
<td>1900</td>
<td>May be related to Honolulu Brewing and Malting Co.</td>
</tr>
<tr>
<td>Honolulu Brewing and Malting Co.</td>
<td>Honolulu, Oahu, Hawaii</td>
<td>1900</td>
<td>1917</td>
<td>1920</td>
<td>Alternate name or may be related to Honolulu Brewing Co.</td>
</tr>
<tr>
<td>Honolulu Japanese Sake Brewing Company</td>
<td>Honolulu, Oahu, Hawaii</td>
<td>1908</td>
<td>1920</td>
<td>1992</td>
<td>Also known as Honolulu Sake Brewery; Made ice during prohibition, after which the company was known as Honolulu Sake brewery and Ice Company LTD.; The company made soy-sauce during WWII.</td>
</tr>
<tr>
<td>Hawaii Shuzo</td>
<td></td>
<td>1911</td>
<td></td>
<td>1917</td>
<td></td>
</tr>
<tr>
<td>Hilo Sake Brewery LTD.</td>
<td>Hilo, Hawaii</td>
<td>1913</td>
<td></td>
<td>1920</td>
<td></td>
</tr>
<tr>
<td>Hilo Shusei</td>
<td>Hilo, Hawaii</td>
<td>1913</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawaii Seisko Kwaisha LTD.</td>
<td></td>
<td>1915</td>
<td></td>
<td>1915</td>
<td></td>
</tr>
<tr>
<td>Hiro Shusei</td>
<td></td>
<td>1917</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawaii</td>
<td>Honolulu, Oahu, Hawaii</td>
<td>1913</td>
<td></td>
<td>1917</td>
<td></td>
</tr>
<tr>
<td>Brewery Name</td>
<td>Address</td>
<td>Established</td>
<td>Operational Period</td>
<td>Additional Information</td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------------------------------------</td>
<td>-------------</td>
<td>-------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Seishu Kwaisha LTD.</td>
<td>539 Cooke Street, Honolulu, Oahu, Hawaii</td>
<td>1920</td>
<td>&quot;late 1930s&quot; to 1968</td>
<td>Stopped production during WWII from approximately 1939-1948; Company made <em>miso</em> from 1941-1954; &quot;K.K.&quot; may stand for &quot;KABUSHIKI KAISHA&quot;; There is also a Japanese company named Fuji Shuzo that was established in 1778.</td>
<td></td>
</tr>
<tr>
<td>Fuji Shuzo (Sometimes with &quot;K.K.&quot;)</td>
<td>432 Clay Street, San Francisco, California</td>
<td>1934</td>
<td>1935</td>
<td>May be related to Nippon Sake Brewery.</td>
<td></td>
</tr>
<tr>
<td>California Sake Brewery Co. (A)</td>
<td>Los Angeles California</td>
<td>1947</td>
<td>1949</td>
<td>NOT PRE-WAR My be successor to John J. DiMarco Brewery (10706/08 Burbank Blvd North Hollywood).</td>
<td></td>
</tr>
<tr>
<td>California Sake Brewery Co. (B)</td>
<td>489 Bryant Street, San Francisco, California</td>
<td>1934</td>
<td>1937</td>
<td>May be related to Matsuo Sake Brewing Co.</td>
<td></td>
</tr>
<tr>
<td>Aiji Matsuo Brewery</td>
<td></td>
<td>1937</td>
<td>1941</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matsuo Sake Brewing Co.</td>
<td>San Francisco, California</td>
<td>1934</td>
<td>1935</td>
<td>May be related to Katsuo Shioji.</td>
<td></td>
</tr>
<tr>
<td>San Francisco Sake Brewery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nichi-Bei-Shuzo</td>
<td>1965(A?) Kamehameha Avenue or 1500 Kamehameha Ave, Hilo, Hawaii</td>
<td>1934 or 1935</td>
<td>1938</td>
<td>Another form of the name may be NICHIBEI SHUZO KABUSHIKI KAISHA LTD; Name may have been changed to Kokusui Co., Ltd. Brewery (from 1948-1957), shares same address.</td>
<td></td>
</tr>
<tr>
<td>Sake Brewery</td>
<td>City, State</td>
<td>Start</td>
<td>End</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------</td>
<td>-------</td>
<td>-------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>San Francisco Seishu Jozo</td>
<td>San Francisco, California</td>
<td>1934</td>
<td>1938</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ka-Shu Seishu Jozo</td>
<td></td>
<td>1934</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Katsuzo Shoji</td>
<td>342 5th Street, San Francisco, California</td>
<td>1934</td>
<td>1934</td>
<td>1934</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>May be related to the San Francisco Sake Brewery.</td>
<td></td>
</tr>
<tr>
<td>Nippon Sake Brewery Co. Inc.</td>
<td>San Francisco, California</td>
<td>1935</td>
<td></td>
<td>1937</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Owner may have been interred at Tule Lake, letter delivered to camp (Daily Tulean Dispatch Jan 5, 1943, pg. 3). May be related to California Sake Brewery Co. (A).</td>
<td></td>
</tr>
<tr>
<td>Hiro Shuzo</td>
<td></td>
<td>1935</td>
<td>1938</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maui Shuzo</td>
<td></td>
<td>1935</td>
<td>1938</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maui Sake Brewery Co LTD.</td>
<td>Kula, Hawaii</td>
<td>1935</td>
<td>&quot;late 1930s&quot;</td>
<td>1942</td>
<td></td>
</tr>
<tr>
<td>Matsuo Sake Brewing Co.</td>
<td>San Francisco, California</td>
<td>1937</td>
<td></td>
<td>1941</td>
<td></td>
</tr>
<tr>
<td>Kashu Seishu Jozo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hilo Shuzo</td>
<td>Hilo, Hawaii</td>
<td></td>
<td>1930s to 1950s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brewery Name</td>
<td>Address</td>
<td>Start Year</td>
<td>End Year</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>---------</td>
<td>------------</td>
<td>----------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>Kanda Shokai Ltd. Brewery</td>
<td>539 Cooke St, Honolulu, Oahu, Hawaii</td>
<td>1934</td>
<td>1935</td>
<td>May be related to Fuji Sake Brewing Company LTD, same address.</td>
<td></td>
</tr>
<tr>
<td>Fuji Sake Brewing Company LTD</td>
<td>539 Cooke St, Honolulu, Oahu, Hawaii</td>
<td>1935</td>
<td>1963 or 1965</td>
<td>Two entries for this company indicate that it may have shut down between 1942 and 1948; May be related to Kanda Shokai LTD, same address, building is still owned by company which is currently leasing the building. Current location may be 1021 Smith St # 4.</td>
<td></td>
</tr>
<tr>
<td>American Sake Brewery Co.</td>
<td>2444/46 East 8th St, Los Angeles, California</td>
<td>1934</td>
<td>1935</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Jose Sake Brewery</td>
<td>91 Jackson St, San Jose, California, or 5101 East 15th St Oakland, California</td>
<td>1934</td>
<td>1935</td>
<td>May be related to The Nippon Sake Brewery Inc.</td>
<td></td>
</tr>
<tr>
<td>The Nippon Sake Brewery Inc.</td>
<td></td>
<td>1935</td>
<td>1940</td>
<td>May have succeeded the San Jose Sake Brewery.</td>
<td></td>
</tr>
</tbody>
</table>

Appendix B: Information From Online Auction
VINTAGE 13" HUGE GLASS PICKLE JAR VINTAGE BARREL LINES

$ 49.99

“Up for sale is a nice vintage Glass Pickle Jar. Measures 13” tall and has a maximum diameter of 8”. Jar is clean overall with some scratches on the bottom. Marked 7 I 7 3.”