A History of Transplants: A Study of Entryway Gardens at Amache

David Holden Garrison
University of Denver

Follow this and additional works at: https://digitalcommons.du.edu/etd

Part of the Archaeological Anthropology Commons, and the East Asian Languages and Societies Commons

Recommended Citation
https://digitalcommons.du.edu/etd/1026

This Thesis is brought to you for free and open access by the Graduate Studies at Digital Commons @ DU. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons @ DU. For more information, please contact jennifer.cox@du.edu,dig-commons@du.edu.
A History of Transplants: A Study of Entryway Gardens at Amache

Abstract
Previous research shows that during the period of Japanese American internment gardening became a popular activity for the interned. Primarily approached historically, little work has been conducted to archaeologically analyze the efforts of landscaping by former internees. Gardening activity can paint a better picture of Japanese American identity during the period of forced confinement. This research investigates internee gardens methodologically through surface survey, ground penetrating radar, excavation, oral history, soil chemistry, archaeobotany, and palynology. The thorough investigation of landscaping efforts of internees builds upon knowledge of expression within Japanese American relocation centers, as well as the understanding of a lineage of gardening as Japanese immigrant tradition. Using available materials, gardeners adapted both tradition and environment for the purpose of improving conditions under internment and maintaining an affiliation to heritage. My examination of internee landscaping better explains how many collectively maintained, adapted, and publicly expressed an ethnic identity.

Document Type
Thesis

Degree Name
M.A.

Department
Anthropology

First Advisor
Bonnie Clark, Ph.D.

Second Advisor
Lawrence Conyers

Third Advisor
Ginni Ishimatsu

Keywords
Amache, Internment, Japanese American, Japanese garden, Landscape archaeology

Subject Categories
Archaeological Anthropology | East Asian Languages and Societies

Publication Statement
Copyright is held by the author. User is responsible for all copyright compliance.

This thesis is available at Digital Commons @ DU: https://digitalcommons.du.edu/etd/1026
A History of Transplants:
A Study of Entryway Gardens at Amache

A Thesis
Presented to
The Faculty of Social Sciences
University of Denver

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
David H. Garrison
August 2015
Advisor: Dr. Bonnie J. Clark
ABSTRACT

Previous research shows that during the period of Japanese American internment gardening became a popular activity for the interned. Primarily approached historically, little work has been conducted to archaeologically analyze the efforts of landscaping by former internees. Gardening activity can paint a better picture of Japanese American identity during the period of forced confinement. This research investigates internee gardens methodologically through surface survey, ground penetrating radar, excavation, oral history, soil chemistry, archaeobotany, and palynology. The thorough investigation of landscaping efforts of internees builds upon knowledge of expression within Japanese American relocation centers, as well as the understanding of a lineage of gardening as Japanese immigrant tradition. Using available materials, gardeners adapted both tradition and environment for the purpose of improving conditions under internment and maintaining an affiliation to heritage. My examination of internee landscaping better explains how many collectively maintained, adapted, and publicly expressed an ethnic identity.
TABLE OF CONTENTS

Chapter 1: Introduction........................................................................................................1
  Significance.....................................................................................................................4
  Research Questions........................................................................................................5

Chapter 2: Background........................................................................................................8
  Japanese Immigration......................................................................................................8
  Japanese American Internment.......................................................................................10
  Amache..........................................................................................................................13
  Japanese American Gardens..........................................................................................19
  The Site Today...............................................................................................................25
  Previous Research.........................................................................................................25

Chapter 3: Methods...........................................................................................................28
  Introduction.....................................................................................................................28
  Areas of Investigation....................................................................................................29
    Block 7G....................................................................................................................29
    Block 12G..................................................................................................................30
    Block 12H..................................................................................................................30
    Block 12K..................................................................................................................31
    Block 12L..................................................................................................................31
  Surface Survey Methods...............................................................................................32
    Artifact Documentation and Analysis.........................................................................33
    Feature Documentation...............................................................................................34
    Digital Mapping..........................................................................................................35
  Ground-Penetrating Radar Methods.............................................................................35
  Excavation Methods.......................................................................................................38
  Lab Methods..................................................................................................................38
  Archival Research..........................................................................................................39
    Granada Pioneer..........................................................................................................40
    McClelland Collection.................................................................................................40
    Internee-Donated Collections.....................................................................................41
  Oral Histories..................................................................................................................42
  Conclusion......................................................................................................................44

Chapter 4: Testing the Methodology of Landscape Archaeology at Amache...................45
  Introduction.....................................................................................................................45
  Archaeological Findings: 7G.........................................................................................46
    Surface Survey............................................................................................................46
    GPR.............................................................................................................................49
    Excavation...................................................................................................................50
    Archaeobotany............................................................................................................54
    Soil Chemistry............................................................................................................54
LIST OF FIGURES

Figure 2.1: Historic photograph depicting racism and xenophobia in California. - Image courtesy of the Japanese American Relocation Digital Archives.................................................10

Figure 2.2: Poster of exclusion order. – Image courtesy of the Japanese American Relocation Digital Archives.................................................................11

Figure 2.3: Map depicting assembly and relocation centers. – Image courtesy of the Japanese American Relocation Digital Archives.............................................12

Figure 2.4: Map depicting location of Amache in Granada, CO. Image courtesy of The National Park Service.................................................................14

Figure 2.5: Map depicting layout of Amache. Image courtesy of DU Amache Project…16

Figure 2.6: Bainbridge Garden nursery, Bainbridge Island, WA. – (denshopd-i34-00022) Image courtesy of Densho, Tsukuda Family Collection.........................................22

Figure 2.7: Historic photograph of Amache. Some internee landscaping is visible……23

Figure 2.8: Historic photograph of Amache. Internee landscaping is much more prominent.................................................................24

Figure 3.1: Field school student maps an artifact.........................................................36

Figure 3.2: Field crew conduct GPR with GSSI SIR-3000 and 900MHz antenna……37

Figure 3.3: Historic Photograph of Mataji Umeda in his entryway garden. Image courtesy of Helen Yagi Sekikawa.................................................................41

Figure 3.4: Roundtable discussion with former internees at JANM, Spring 2011……43

Figure 4.1: Block 7G directory map. Note that North is at the bottom of this map……46

Figure 4.2: GIS rendered map depicting 7G features and field artifacts......................48

Figure 4.3: Slice map with 7G excavation units overlaid.............................................50

Figure 4.4: Excavation unit 2003N/2001E and its vertical cedar planks.................53

Figure 4.5: Block map directory for 12G.................................................................57

Figure 4.6: GIS rendered map depicting 12G features and field artifacts..................59
Figure 4.7: Block 12H directory map. .................................................................61
Figure 4.8: GIS rendered map depicting 12H features and field artifacts. ........62
Figure 4.9: Slice map with 12H excavation units overlaid. ...............................64
Figure 4.10: Block 12K directory map. .................................................................69
Figure 4.11: GIS rendered map depicting 12K features and field artifacts. ........69
Figure 4.12: Feature 12K-1, row of internee planted Chinese Elms. .................72
Figure 4.13: Amplitude slice map of the 12K garden. .......................................73
Figure 4.14: Vertical profile showing the linear feature as a compilation of high amplitude point-source reflections. .................................................................74
Figure 4.15: Three large wood slats found in context 12K-1008, in the southeast corner of unit 1003N/998E. .................................................................75

Figure 5.1: Historic photographs of Umeda gardens. Image courtesy of Helen Yagi Sekikawa.................................................................89
Figure 5.2: Photograph of Feature 12H-2 excavation. Planters visible in northeast corner of unit .................................................................92
Figure 5.3: Photograph of Feature 12H-4 excavation. River cobbles and concrete standing stones visible .................................................................93
Figure 5.4: Photograph of Feature 11H-7 excavation. Wooden walkway revealed ....96
Figure 5.5: Photograph of Feature 11H-7 excavation. Wooden walkway and concrete wall visible .................................................................96
LIST OF TABLES

Table 1: Identified 7G Features ................................................................. 49
Table 2: Identified 12G Features .............................................................. 60
Table 3: Identified 12H Features .............................................................. 63
Table 4: Identified 12K Features .............................................................. 71
Table 5: Garden Attribute Table .............................................................. 97
CHAPTER ONE: INTRODUCTION

At the end of February 2015, a news headline reads, “Why Oklahoma Lawmakers Voted to Ban AP U.S. History.” The article describes recent efforts nationwide to change how American History (primarily 20th century history) is taught in the high school classroom. The objection to the AP U.S. History curriculum on one level is simply that it teaches “what is bad about America.”

When I took 20th century U.S. history in 2005, I was afforded the opportunity to read Howard Zinn’s *A People’s History of the United States* and engage with critical ideas about how America got to where it is today, warts and all. Despite my high school’s approach to U.S. History, Japanese American internment was very briefly addressed during our World War II unit. Nearly three-quarters of a century later, our nation still grapples with how to talk about or teach this moment of difficult history.

It was February 19, 1942 that President Roosevelt signed Executive Order No. 9066 thereby setting into motion the events that would start Japanese American internment. Just three months after the Japanese bombing of Pearl Harbor, Japanese Americans were ordered to relocate outside the newly designated “exclusion areas” or be forcibly removed from their homes and placed into assembly centers before relocation into the internment camps.

During the three years under internment, approximately 120,000 Japanese Americans endured the confinement experience. While the amount of time and
experience varied greatly from family to family, this period represents a critical moment for understanding what it truly means to be American and how quickly one’s freedoms can be taken away.

Of the ten incarceration centers created by the War Relocation Authority (WRA), the Granada Relocation Center (colloquially known as Amache) held the smallest amount of people. At its peak population, Amache totaled around 7,500 residents, making it the tenth largest city in Colorado at the time. The central area of the site contained administrative buildings and residential areas categorized by a number and letter designation (e.g. Block 7G). Each block contained barracks, a mess hall, and a combination laundry/latrine building. Amache functioned like other cities with its own police, fire department, and school but the perimeter of barbed wire was a daily reminder that Amache’s residents were not there on their own accord. Living under confinement, internees worked for pay, took up hobbies, established clubs and religious organizations, created a newspaper (The Granada Pioneer) and even ran a cooperative store.

After the Exclusion Order was lifted in January 1945, internees were free to move back to their homes or find new lives elsewhere. Amache officially closed October 15, 1945 and internees were pressured to leave by that date. The experience of internment would remain in the minds of those who lived through the period but was seldom talked about. In 1976, former internees began what would become a yearly tradition of commemorating both the internee experience and those who died at Amache. Still held annually in May, the grassroots pilgrimage raises awareness about the site. During the eighties, the movement to preserve Amache gained momentum. In the early 2000’s archaeological reconnaissance overviewed of what remains exist at the site and
subsequently it was designated a National Historic Landmark. With stakeholder community support, Dr. Bonnie Clark began work in 2005 on the University of Denver Amache Project, a long term community archaeology project that seeks to improve both the understanding and awareness of daily life under confinement at the WWII Japanese internment camp.

I became interested in the site when accepted to the University of Denver as a Master’s candidate in Anthropology with a focus on historical archaeology. I had previous experience working with stakeholder communities in New England and jumped at the chance to offer my experience and help tell the story of internment. Though considered a difficult history, this is what makes the story of internment so important to tell. I became fascinated with how internees transformed the land and tried to create a sense of place that felt normal while living through such trying times. I was drawn to the photographs of internee gardens that showed Japanese American ingenuity and creativity. It was the modest yet fascinating entryway gardens I chose to pursue and research.

As I read the headline about the sterilization of the high school history experience, I thought about the strength and perseverance of internees whose story has been marginalized and even silenced since World War II. It is a disservice to a whole population and multiple generations of people to continue to silence this story. My hope is that, in whatever small way, I help contribute to the narrative and explanation of internment and the story of the Japanese American experience. It is not only important to remember the faults of the American past but to be able to learn from them and think critically about the totality of the American experience.
Significance

My thesis research seeks to examine entryway gardens constructed by the former internees of the Amache internment camp. The investigation of this widespread phenomenon speaks not only to the conditions and details of everyday life under confinement but also contributes to a better understanding of the Japanese American experience.

Amache offers a rich integrity for the study of landscaping works through multiple threads of evidence. While this project takes an archaeological perspective, historical archaeology makes use of archival documentary evidence, survey, excavation, and oral history. Particularly unique to my research (and that of the DU Amache Project as a whole), is the use of ground penetrating radar, soil chemistry, palynology, and archaeobotany as methodologies for the study of entryway gardens at Amache.

As internment archaeology gains momentum, there is an explicit need for models to guide future research. Previous archaeological research at internment camps have used survey and excavation to analyze gardens but have not implemented a host of other techniques available to the contemporary archaeologist. My research addresses the necessity for best practices associated with the study of gardens and also informs the history of the Japanese American experience within internment camps.

As currently classified, there are three styles of gardens present at Amache. Public ornamental gardens are characterized by aesthetic design and serve as public gathering areas where numerous activities likely occurred. The presence of hardscaping such as koi ponds or garden beds are just two examples of features that distinguish ornamental gardens. Vegetable or “Victory” gardens served primarily as a source of supplemental
food. These gardens were likely tended by multiple persons and functioned similarly to contemporary community vegetable gardens. My research aims to explicate the third style: entryway gardens located in front of barrack buildings. Serving as a basic means to “beautify” a desolate landscape, entryway gardens were personal to individuals, families and expressions of the maker’s individuality. My analysis of entryway garden making at Amache ultimately seeks to explicate the intersection between Japanese American heritage and the constraints of imposed confinement.

**Research Questions**

My research concerns both the physicality of entryway gardens (as they appear today and at the time of their creation) as well as their implications for Japanese American identity. I focus primarily on entryway gardens at Amache but also address various other landscaping works when relevant to the better understanding of how internees interacted with the landscapes of confinement. Through multiple lines of evidence I seek to address the following questions: What is the extent and integrity of entryway gardens and other landscaping works at Amache, what does the material culture and flora of entryway gardens look like, and what are the implications of entryway gardens related to the maintenance of a Japanese American identity?

The following chapter addresses the historical context necessary for understanding my study of Japanese American gardens. I detail the social climate leading up to internment, the actual process of relocation, life under confinement, site deconstruction, and information about archaeological work conducted at the site. Background on Japanese American gardening and agricultural work prior to internment helps set the stage for analyzing my research questions.
Chapter 3 details the methodology of investigating the established research questions. The loci of interest are detailed along with surface survey, ground-penetrating radar, and excavation methods. Soil chemistry, archaeobotany, and palynological protocols are explained briefly since these methodologies were conducted by outside researchers. Lab protocols, archival research, and oral history methods are then explained.

Chapter 4 directly addresses the first research question: What is the extent and integrity of entryway gardens and other landscaping works at Amache? This chapter seeks to explain just how widespread entryway gardens are at Amache and what different kinds of data can be collected from diverse archaeological methodologies. Surface survey, ground-penetrating radar, archaeobotany, soil chemistry, palynology and excavation data all contribute to the better understanding of what information can be gained from entryway gardens and the best practices for these methods is discussed. This chapter focuses on the 2010 field season and the efficacy of the methods chosen for identifying and elucidating the most information about entryway gardens.

Chapter 5 addresses the second research question: what does material culture and flora of entryway gardens look like? This chapter describes what entryway gardens look like physically by examining four excavated entryway gardens and the unique vegetation, material culture, and modification to the landscape internees used to create these spaces. By detailing the appearance and materials associated with entryway gardens, I present information about the individual landscape design choices of internees.

Chapter 6 discusses my third and final research question: what are the implications of entryway gardens related to the maintenance of a Japanese American
identity? This chapter concerns what interpretations can be made about the Japanese American identity while reconciling life under confinement. My third research question deals specifically with ideas about the importance of tradition, agency, and environment in the construction of an entryway garden. I seek to address how the internee’s landscape design decisions at Amache fit into the historical context of the Japanese American commitment to agriculture and landscape.

Chapter 7 concludes my thesis by elucidating the main themes and addressing the implications of my research. Further avenues for research are suggested as well as what questions arise out of my own work.
CHAPTER TWO: BACKGROUND

Japanese Immigration

The earliest Japanese immigrants came to America following the Meiji Restoration of Japan in 1868. As Japan pushed a series of socio-political initiatives that would revolutionize and modernize the nation, some families chose to migrate in search of new opportunity. Some immigrants had the intent to remain in America while others planned to travel back to Japan after working in the states. In May of 1882, the Chinese Exclusion Act passed, thereby prohibiting all Chinese immigrants from entering the United States. This sudden effect on the American workforce created a new demand for immigrant labor, primarily on railroad construction projects and in the agricultural sector (CWRIC 1997). America would see the largest influx of Japanese immigrants between 1885 and 1924 (O’Brien and Fugita 1991:14).

Japanese immigrants endured a constant struggle in the face of great discrimination since the first wave came to America. In the period from 1900 until World War II, a series of both small and large-scale legislative measures made the struggle for a steady life more difficult.

By the turn of the century, the large influx of Japanese immigrants as well as political pressure resulting from a Japanese victory in the Russo-Japanese War (1904-1905), led to a series of legislation that would affect Japanese immigration for the next two decades (CWRIC 1997: 32). Pressure from the San Francisco nationalist group, the
Asiatic Exclusion League, led to the San Francisco Board of Education ruling that Japanese and Korean children would join Chinese immigrants in the segregated Oriental Schools (Densho timeline). Further pressure from xenophobic groups led President Theodore Roosevelt to create the 1907-1908 Gentlemen’s Agreement, which prohibited issuing laborer passports. During this period, the only Japanese allowed into America were the relatives of already present immigrants or laborers who had previously worked in the States.

Adhering to the stipulations of the Gentlemen’s Agreement, the Japanese American population continued to grow. Many Japanese wives would come to America through marriages arranged by families back home. An exchange of photographs between those Japanese living in America and their families in Japan would allow for an arranged marriage and for many Japanese women to come to America (CRWIC 1997:34). With an increase in Japanese American couples, the number of American born Japanese steadily grew. The burgeoning population and with the conclusion of World War I, there was resurgence in anti-Japanese sentiment (see Figure 2.1). Upon the 1913 California Alien Land Law’s (Webb-Heney act) enactment, “aliens ineligible to citizenship” were prohibited from owning agricultural land and were only allowed to lease agricultural land for three years. This specific phrasing was exclusive to Japanese and Chinese immigrants and was established in 1870. Though the act did not explicitly mention the Japanese, they were the primary ethnic group concerning nationalists in California (Ichioka 1988:153). The Immigration Act of 1924 would effectively cut off all Japanese immigration for the next 28 years.
Japanese American Internment

After the Japanese bombing of Pearl Harbor on December 7th, 1941, the already prevalent xenophobia and racism towards Japanese Americans only worsened. On February 19th, 1942, President Roosevelt signed Executive Order No. 9066, which allowed for the exclusion of any people from designated areas for the purpose of national security (Burton, et al. 1999). Exclusion areas were demarcated primarily on the West Coast where the Japanese American population was largest. Under the pretext of national security, the population was ordered to move inland from the coast but this would be largely unfeasible for families who had settled down or owned businesses.
Figure 2.2. Poster of exclusion order.

With few families choosing to uproot and move inland, the War Relocation Authority (WRA) was established to oversee the forcible removal of persons of Japanese descent from the West Coast. Congress agreed that the Japanese American population
should be removed from their homes and imprisoned without due process (see Figure 2.2).

The WRA convened in April 1942 with a number of governors for the purpose of determining the location for relocation centers (Burton, et al 1999). The response by the governors differed from state to state but was largely negative and characteristic of the racist anti-Japanese sentiment for the time. Governor Nels Smith explained to the WRA that if the Japanese were brought into Wyoming, “they would be hanging from every tree” (Daniels 1993:57). At the other end of the spectrum was Governor Ralph Carr of Colorado who welcomed the evacuees (Schrager 2008:161). In total, the WRA determined that 10 relocation centers were to be constructed in 8 sites across the country (see Figure 2.3).

![Figure 2.3. Map depicting assembly and relocation centers.](image-url)
By the end of March 1942, forcible relocation began and a total of over 112,000 Japanese Americans moved into the assembly centers (CRWIC 1997). Often crudely constructed, the assembly centers temporarily housed the crowded Japanese Americans in a largely unfinished living environment. 15 assembly centers in total were created with the majority being in California and 3 others located in Washington, Oregon, and Arizona (Harvey 2004:41). A good portion of those Japanese Americans that would eventually live at Amache were housed at the Santa Anita assembly center (Burton et al. 2002:369; Harvey 2004:41). Those who lived at Santa Anita were primarily people who had previously lived in the Los Angeles area. The other population of people who lived at Amache would come from the rural Merced assembly center (Burton et al. 2002:356; Harvey 2004:43). Those who lived at Merced primarily came from the Central Valley and Northern California. The Santa Anita assembly center was built later and therefore the Japanese Americans housed there would arrive at Amache after those from Merced.

**Amache**

By the summer of 1942, internees were moved from the temporary assembly centers into the Granada Relocation Center (Harvey 2004:74). Amache was constructed less than a mile from the town of Granada, in southeastern Colorado in Prowers County (see Figure 2.4). Located in the Central High Plains, the vegetation at Amache consists of desert shortgrass, sagebrush, yucca, and prickly pear cactus (Carillo and Killam 2004).
Figure 2. 4. Map depicting location of Amache in Granada, CO.

The 10,500 acres of land that make up the relocation center previously consisted of 18 privately owned farms and ranches. Much of the land was obtained through eminent domain and the remainder was purchased from local landowners. The agricultural sections of Amache would be used to supply the residents living there and due to the existing infrastructure built by the previous farmers, the WRA did not have to heavily invest in work facilities (Simmons and Simmons 1993).

Living in military-style barracks, Japanese Americans at Amache were forced to cope with an unfamiliar landscape, which seemed inhospitable and desolate when compared to their previous homes in California. In order to “re-territorialize” the destitute site of Amache, and maintain some sense of previous life, a series of formal educational
and recreational activities were established. These took the form of school for children, classes and clubs for adults, a craft workshop, as well as landscaping and gardening works. While conditions at Amache improved over time, this was largely due to the action of internees. Amache was the smallest of the ten relocation centers and was open from August 1942 until October 1945 (Harvey 2004).

The Amache compound consisted of two sections, one for military police and administration and the other for the Japanese American internees. The internee living area was divided into blocks (see Figure 2.5). Twenty-nine blocks were used for housing, while the remaining blocks were reserved for special uses like classrooms, a cooperative store, and warehouses. Each housing block consisted of 12 barracks, a mess hall, a recreation building, and a combination laundry, bath, and latrine building (Burton et al. 2002; Simmons and Simmons 1993) Blocks were designated by a letter and number (e.g. Block 7G) and within each block, barracks were numbered 1-12. The insides of the barracks were particularly crude and contained brick or concrete flooring, one light bulb per apartment, a coal-fired stove, and wooden cots.
The communal bathhouses had showers, toilet, and laundry; bathhouses were constructed in an H shape and located in the middle of each block. The facilities also contained an office for the block manager and a room housing the boiler. A public tap outside the bathhouse (and the interior sinks) served as the only access to water for internees.

Mess halls, one per block and located next to the latrine, served as a primary gathering place for internees. Meals and community events were held at the mess halls, which had a capacity of 250 persons. Nighttime movies, dances, and holiday events were just a few of the goings-on held at the block mess halls (Simmons and Simmons: 1994).
One recreation hall was located per block and differed in function depending on the block. Some were used for games and social activities (e.g. Boy Scouts and YMCA) while others were used for religious services (Buddhist and Methodist Churches). Recreation halls were located at the end of blocks and appeared similar to the barracks but shorter.

Five blocks were chosen specifically for alternative uses. Blocks 10F and 10G were used to construct an internee High School and sporting fields, which were locally protested by the surrounding communities. Protesters complained that the Japanese Americans were being treated favorably while the neighboring communities were being left by the wayside. Due to this outcry, Block 9G’s planned elementary school was never constructed and instead the barrack Block 8H was used for elementary school facilities instead of residential housing. Block 9F contained the internee-run cooperative store. The store ordered various goods from distributors as well as the Sears-Roebuck catalog. In addition, the internees who had various tradeskills ran a number of repair shops.

For many of the Issei, living under internment could be summed up with two Japanese concepts: Shikata-ga-nai and Gaman. Shikata-ga-nai translates to “it cannot be helped,” while Gaman translates to “bearing up” or perseverance (Harvey 2004:211). Many Issei saw internment as inevitable and chose to make the best of the situation so that their children would experience less of a struggle after the period of internment (O’Brien and Fugita:1991:78). Internees at Amache began to rebuild and create new social networks to strengthen bonds. Social clubs and activities took root and many searched for employment. The agricultural work of internees was so successful that
harvests not only provided for camp but also other relocation centers (Harvey 2004:123). Besides those employed in the farms, many internees tended to victory gardens located within the residential blocks. A variety of nonlocal plants were introduced to the area including: Chinese cabbage, mung beans, and daikon (Harvey 2004:127).

In December 1944, the Supreme Court declared Fred Korematsu guilty of remaining in a military area contrary to the exclusion order. The Supreme Court case would call into question the legality of the entire exclusion order process and by the new year restrictions on resettlement of the West Coast were lifted. (Children of the Camps, PBS). Those living in the relocation centers were now free to return to their homes on the West Coast or begin somewhere new. By the summer of 1945, the WRA would end many services at Amache and on October 15, 1945, the Granada Relocation Center was officially closed. Upon closure, the residential area was sold to the town of Granada and the surrounding farmland was sold to local farmers for cultivation and cattle grazing. (Simmons and Simmons: 1994). Barracks and various other structures were sold off locally and statewide or bulldozed. The town of Granada converted a non-residential portion of Amache for use as the town dump, which is still used to this day.

Founded in 1979, the Denver Central Optimist Club was responsible for various preservation and commemorative efforts at Amache. In 1983, the Denver Central Optimist Club erected a monument to the 31 soldiers from Amache who lost their lives in combat. The monument was also dedicated to those individuals who died during their incarceration at Amache (Otto 2010). In addition to the preservation efforts by the Denver Central Optimist Club (later re-named the Amache Club), Granada high school
teacher, John Hopper, founded the Amache Preservation Society (APS) in 1993. The APS has worked to raise interest in local history while also maintaining the site, managing a local museum, and doing outreach programming. Both Optimists and the APS worked together to restore the Amache cemetery. Presently The Amache Club and APS continue the pilgrimage tradition established by the Denver Central Optimist Club in 1980s. Since 2000, a guard tower and water tower were reconstructed as part of the site interpretation plan. A barrack reconstruction is planned and soon to be implemented.

**Japanese American Gardens**

Since the arrival of first generation Japanese immigrants (Issei), agricultural work has been of great importance to the community. A number of early immigrants came to America with the intention of seeking new opportunities. Due to exclusionary acts imposed on Asian immigrants, Japanese Americans were offered few areas of employment. Many worked on farms and later had the opportunity to start produce, trucking, and landscaping businesses. With few taxes imposed on farmers, America became desirable to Japanese immigrants, especially non-firstborn sons.

Santa Clara County had developed the nickname, “the garden valley” and drew a number of early Japanese immigrants. By picking up where Chinese workers had started, Japanese immigrants began to make a name for themselves in the agricultural industry. Japanese farmers and sharecroppers established themselves in the valley starting as laborers but developed into entrepreneurs (Tsu 2013:53). The influx and dominance of the Japanese in the agricultural labor force would plant the roots for future growth within the industry.
In the San Joaquin Valley, at the early turn of the 20th century, an Issei entrepreneur named Kyutaro Abiko founded the Yamato Colony. A Japanese American agricultural settlement, the Yamato Colony gave new opportunities to hard-working immigrants sought to improve their lives in America. 3,200 acres were initially purchased in Livingston, CA with the intention of creating a “Japanese Christian utopian colony.” Despite difficult farming conditions at the start, the colony became extremely prosperous after the founding of the Livingston Co-operative Society in 1914. By 1917, the value of the land rose from $35 to $175 an acre (Noda 1981: 65).

San Mateo County, outside of San Francisco had developed the nickname, “the flower basket” of the nation by 1908. The burgeoning flower industry was so successful, Japanese American growers began to pursue shipping chrysanthemums outside of California (Yamada and Fukami 2003:29). In 1931, the California Chrysanthemum Growers Association was formed in order to maintain stability for the flower growers after the stock market crash of 1929.

The popularity of Japanese style gardens was increasing in America by the turn of the century. Wealthy Caucasians took interest in hiring Japanese landscapers in order to create Japanese style gardens on their estates. Architectural Historian Anna Hosticka Tamura explains the interest in the Japanese garden as being the result of “orientalism, garden appreciation, and economic gain” (2004:5). Despite the questionable power-relations, Japanese American gardeners were able to establish a demand in their skills and develop a gardening industry.
In 1934, forty-three percent of West Coast Japanese Americans worked in agriculture and an additional twenty-six percent worked in agriculture-related activities and business (Helphand 2006:158). During this pre-war period, Japanese Americans worked as primarily as farmers, nursery owners, orchardists, and as residential gardeners (see Figure 2.6). Kendall Brown states, “Gardens are a crucial part of the immigrant experience for many ethnic Japanese in the West, integral in terms of economics and the politics of identity” (1999: 12).

Into the 1940s, Japanese Americans founded gardening associations and publications. Figures such as Fujitaro Kubota and Shoji Nagumo were some of the first and most successful Japanese American business owners and were important in cementing a tradition of Japanese American agricultural enterprise. Nagumo was responsible for making connections between Southern Californian Japanese agriculturalists and people in similar lines of work. Nagumo founded a publication, “Gadena no Tomo” or the Gardener’s Weekly for the Japanese American community (Hirahara 2003:139-142). These business owners were able to make a living adapting knowledge of gardening to a new audience.
During the time of confinement, Japanese Americans brought with them agricultural expertise and prior years of gardening experience. However, the new environments were, for the most part, far different than the landscapes of their homes. One former internee remarked how, “the landscape became dreary, devoid of the greenery familiar on the West Coast. The Issei, who once had gardened our extensive farms, were faced with the sight of vast empty land where the sage grew and tumbleweeds rolled” (in Helphand 2006: 161).

Figure 2. 6. Bainbridge Garden nursery, Bainbridge Island, WA.
A former internee of Amache, Mas Ueysugi recalled how many internees were former California farmers who were used to working “marginally tillable soil” into “beautiful and productive” land. “At Amache,” Ueysugi explains, “we did the same.” (Dusselier 2008:63). For internees, gardens became symbols of the camps, cherished with pride, and admired by the War Relocation Authorities. An act of “re-territorialization,” the construction of internee gardens changed the landscape by building little pieces of home (see Figures 2.7 and 2.8) This act, viewed as a symbol of Americanization by War Relocation Authorities, was actually a challenge to confinement (Dusselier 2008). By physically altering the landscape, internees were able to re-inscribe a foreign environment of oppression, into a more livable space.
Adults were not the only ones improving the landscape. One instance of improvement at camp by children was when the elementary school students decided to undertake a landscaping plan (Dumas and Walther 1944:40-41). The elementary school students were displeased with windswept dust that affected their daily lives and submitted landscaping plans with the guidance of adults. Multiple plans were chosen and the school administration organized 700 students to complete the task. Limestone was gathered from a nearby quarry in order to create walkways and paths around Amache. The students chose green rye in place of grass as groundcover and blooming cactus, yucca, and wild flowers to improve the landscape. Not only would this create a more pleasurable environment, it also served to stabilize the dust problem.
The Site Today

The site is characterized by sandy matrix in an aeolian depositional environment. This concentration of sand is due to the high winds in the area pulling unconsolidated sediment from the Arkansas River. In addition, all vegetation was cleared during construction of the camp leaving less vegetation to stabilize the aeolian sediment.

Amache has good integrity as an archaeological site since the purchase of the site by the city of Granada. Many of the building foundations are still intact. Environmental conditions would be classified as unstable; however, deposition of aeolian sediment buries and helps preserve artifacts and features. Grazing by cattle negatively impacted the surface and near surface of the site but has since ceased due to efforts by stakeholder groups to remove cattle from the site.

Previous Research

Archaeological investigations have only recently been conducted at Amache. The first intensive survey was done in 2003 in an attempt to determine the extent and integrity of the site’s archaeological resources. Based on comparisons with other recorded internment camps, the researchers suggested that Amache, with remnant landscaping, largely intact building foundations, scattered surface artifacts, and both formal and informal trash dumps, is among the camps with the greatest archaeological integrity (Carrillo and Killam 2004). Significant artifacts on the site surface included imported Japanese and U.S. Quartermaster ceramics, items of personal adornment, and objects modified by the former internees. In recognition of its physical integrity and its
Two theses derived from the 2008 field season research: April Kamp-Whittaker studied the lives of children while Dana Shew focused on women at Amache. By
studying these often marginalized groups, Kamp-Whittaker and Shew were able to explicate a better understanding of what daily life was like for both women and children. Both theses examine the construction and fluidity of Japanese American identity using archaeological data, oral history, as well as various archival documents. (Kamp-Whittaker 2010; Shew 2010).

Paul Swader, whom served as co-crew chief for the 2010 field school, recently completed his Master’s thesis on object modification, material re-use, and the ingenuity of internees at Amache (2015). Data gathered from the 2010 field season (Clark et al. 2010) served as the primary evidence used in both Paul and my thesis research.

The DU Amache Project continues to research diverse aspects of life under confinement. Two major themes of the research project include the analysis of daily life of internees as well as the negotiation of internee and Japanese American identities.
CHAPTER THREE: METHODS

Introduction

Field methods were chosen considering field school student ease, graduate research goals, and the necessity of archaeological clearance for future reconstruction on site (Clark 2010). Primary field research for this thesis was conducted during the DU Amache Project 2010 summer field school for which I served as a crew chief. Due to these reasons, a suite of techniques was used and applied differentially across the site areas of interest. The decision to embrace diverse research methods is in accordance with the archaeological tradition of using “multiple lines of evidence.” A commitment to complementary data allows the archaeologist to tell a more substantiated story and gives more credence to the interpretation of a site. Two graduate students, Paul Swader, and myself chose four blocks as loci of interest. Both Swader and my research maintained a focus on the site as a whole but some blocks were chosen as they pertained directly to our individual research. Each block was chosen based on archaeological integrity, archival research, and the consideration of future site reconstruction. A fifth block, 12L, was chosen during the field season by Swader upon discovering a significant amount of material culture relevant to his graduate research.

Research questions developed by Dr. Bonnie Clark, Swader, and myself were specifically concerned with both the social landscape and material culture. Due to this and the nature of site preservation, surface survey was chosen as a primary method for
data collection. Amache maintains good archaeological integrity as evidenced by the sheer quantity of internment period artifacts and features maintained on and just below the ground surface. Architectural remains primarily consist of barrack foundations, which in some cases, have been significantly affected by dismantling and environmental processes. Intensive surface survey provides a quick and methodical way to obtain data at a site as large as Amache. Surface survey, field analysis, and artifact collection were conducted for two weeks at the start of the field school. Ground-penetrating radar was conducted for two days and was used to explore subsurface areas of interest based on survey data. Two weeks of excavation were conducted with units chosen based upon both survey and GPR data.

Areas of Investigation

The five blocks chosen for investigation represent populations of Japanese Americans primarily from the Los Angeles metropolitan area as well as the central valley of California. Preliminary archival research and preseason surface survey was conducted to discover the intricacies of each block including recreation hall repurposing, the known presence of internee landscaping, as well as general integrity and quantity of internment period artifacts.

Block 7G

Block 7G was chosen as an area of investigation by myself after preliminary research revealed historic photographs of an elaborate Japanese style entryway garden. Only the eastern half of block 7G was surveyed since archaeological integrity was poor in the western half. The western portion of 7G appears to have been greatly affected by the
dismantling processes from the end of the internment period. It also appears that deposition of aeolian sediment has obscured the features and surface artifacts. The population of 7G was mostly from Sacramento and the Central valley of California, a group of people who were primarily rural farmers. This block also housed a smaller number of people from coastal California, which meant this block did not include a completely geographically homogenous population. The recreation hall for this block served as one of the Buddhist temples for Amache.

**Block 12G**

12G is one of three adjacent blocks at the southern most end of Amache that were chosen for survey in 2010. 12G maintains good archaeological integrity and is of particular interest since it was the site of one of Amache’s many guard towers. The guard tower in this area was located in between blocks 12G and 12H. Plans for future site development include the reconstruction of the guard tower and so archaeological clearance was necessary in the area. 12G was a block primarily populated by people who, before internment, lived in the Los Angeles area. It’s recreation hall served as the other Buddhist temple at Amache.

**Block 12H**

Block 12H, the second of three adjacent blocks, was initially chosen for survey due to the possible future reconstruction of a barrack and the guard tower located at the edge of the block. After surface survey revealed remnants of internee entryway gardens and GPR revealed potential buried garden features, this block was chosen for test
excavations as well. The population of 12H largely consisted of people who had previously lived in the Los Angeles area.

**Block 12K**

Block 12K is the last residential block in the southeast corner of Amache. Pre-season reconnaissance revealed good archaeological integrity of architectural, artifact, and feature remains. 12K was also chosen due to the presence of known internee-built vegetable gardens that were identified in historic photographs prior to survey. In 2008, a field crew from the University of Denver conducted a test excavation in block 12K in one of the photographically documented vegetable or victory gardens, designated VG-1. The water tower was located in the southwest corner of this block. Another reason the block was chosen was due to the planned reconstruction of a water tower located at the edge of the residential area. Block 12K was largely populated by Japanese Americans originally from the Los Angeles area.

**Block 12L**

The area east of Block 12K, defined for survey purposes as 12L, is not a residential block but an open field containing an informal trash dump. 12L was chosen during field school as it contained a high concentration of artifacts that were relevant to the graduate research of Swader. The area contains large piles of beer cans from the late 1940’s, suggesting that areas of the trash dump were created after the dismantling of the camp. Block 12L is a valuable source for archaeological data due to the accumulation of aeolian sediment that has preserved a diverse collection of artifacts. This assemblage most likely includes artifacts from nearby barracks, and the remains of fencing materials
similar to those found in the units excavated in 12K, which suggests there may be items from the historic vegetable garden. A large quantity of modified tin cans was found and likely used as planters and watering cans during the internment period.

**Surface Survey Methods**

Surface survey methods were largely based upon those used during the 2008 field season (Clark et al. 2008). The 2008 methods were highly effective in identifying both features and diverse artifacts. The chosen methods allowed us to sample different block areas across the site, and identify individual characteristics unique to the blocks. These methods provide us with a robust dataset that allows for comparison between blocks while simultaneously obtaining a better understanding of the total site area.

Survey transects were carried out by 4-6 field crew members who walked at 2 meter spacing. Two meter spacing was chosen since it allowed a thorough investigation of the ground surface, which contains a high volume of small artifacts that could easily be missed should a larger spacing be used. A crew chief followed the students and took a tally count of non-architectural objects called out by the crew members. The tally counts provide a general distribution of artifact types for each block, allowing for comparison between the block assemblages. Tally sheets were designed to catalog counts for different artifact categories including: ceramic, glass, and metal, and were further broken down by more diagnostic information like color, size, and vessel type. Artifacts were for field analysis or collection based upon research questions and how much more information could be gained from closer inspection. Unique personal objects, ceramics, temporally diagnostic items, landscaping-related, and modified objects were flagged. All flagged
objects were given Field Artifact numbers (FA), digitally mapped, and then chosen for either “catch and release” analysis or collection. Objects that were deemed suitable for public interpretation or that could benefit from post-fieldwork lab analysis were chosen for collection. All collected objects are currently stored at the University of Denver but will eventually be curated at the Amache Preservation Society in Granada.

Artifact Documentation and Analysis

Upon completion of a block survey, Swader and I returned to flagged objects and decided whether or not further analysis should be conducted. The objects chosen for analysis included ceramics, glass, and metal that appeared diagnostic or could contribute to our understanding of daily life at Amache. Other objects chosen for analysis were those directly related to our research questions involving re-purposing and landscaping activities. Swader personally analyzed objects that displayed signs of repurposing after completion of the field school.

Each of the flagged objects were assigned an FA number and added to a Field Analysis Log, which registered all artifacts to be analyzed within a given block. Field analysis, conducted by students, consisted of photographic documentation, hand-drawn sketches, and completion of an artifact analysis form. Separate analysis forms for glass, ceramic, metal, and “other artifacts,” were created for the 2008 field season and used during the 2010 field season as well. These forms catalog information including size measurements, color and patterning, maker’s marks, and other descriptive information about the objects. All analyzed objects were studied in the field and left in-situ unless we felt more information could be gained from lab analysis at DU. Objects chosen for
collection were given a Field Specimen number and later a Lot Number, after analysis by students in the historical archaeology course at DU. The Lot Number serves as the definitive identifier for all artifacts collected during the 2010 field season.

Feature Documentation

While conducting surface survey, crewmembers identified potential features by alerting the crew chief and then placed a pin flag at the location. Crew chiefs later returned to the potential features and decided which would be added to the master feature list or disregarded. Three types of features were identified: trash scatter, landscaping related, and architectural. Trash scatters were often located on the margins of a block or at the edge of barracks while landscaping features were found adjacent to barracks and in public areas such as outside the mess halls. Rows of internee-planted trees were also considered a feature if they were in good condition and not particularly affected by site deconstruction. Across all areas surveyed, a total of 24 landscaping, 3 architectural, and 1 trash scatter features were identified.

Feature documentation included completion of a master feature form, photography, digital mapping, and a drawing of a plan view sketch map if deemed useful for research purposes. The master feature list records the given feature number, the block where the feature was found, the categorical type of feature, the associated materials and vegetation, and a short description. The feature documentation methods were chosen to provide a range of data that captured different aspects of the features. Master feature forms provide qualitative analysis of features, while digital mapping and hand-drawn sketch maps record accurate spatial details.
**Digital Mapping**

A GeoXH GPS unit was used to map the locations of all flagged artifacts, feature reference points and perimeters, GPR grid points, excavation unit reference points, and data locations (see Figure 3.1). The GPS unit and accompanying antenna provided accuracy of 10-50 cm, which was corrected using data from a nearby base station in Lamar to a sub 10 cm accuracy. A GIS specialist added all data collected in the 2010 field season to the digital base map of the site. Interactive block specific GIS maps were created using the base map, which display all relevant data points and polygons collected during the 2010 field season. All infrastructural and architectural data were also digitized on the base map.

**Ground-Penetrating Radar Methods**

Ground-penetrating radar (GPR) was employed as a geophysical method for near-surface data collection. GPR records the amplitude of energy pulses that reflect off of subsurface features and soil interfaces. GPR is a valuable technique for the collection of data used for locating and mapping subsurface archaeological features (Conyers 2006:131). At Amache, this method was used to investigate and map buried landscaping features. Due to its ability to quickly record chemical and physical changes in the ground, GPR was used to strategically test large areas to determine the location and depth of features in three-dimensions (Conyers 2009:245-246). This is done without disturbing the site, which is common with other sampling methods such as shovel testing.
The data were collected using a GSSI SIR-3000 system and a 900 MHz dipole antenna (see Figure 3.2). These data were processed into plan view amplitude slice maps and vertical linear profiles. Amplitude slice maps allow for spatial analysis of form, while linear profiles are used to study vertical structure, stratigraphy, and determine the depth of materials and features.

The accuracy of GPR, measured by depth of radar penetration and subsurface resolution, is highly dependent on several variables including the type of soil and sediment, ground moisture, and surface vegetation. We removed surface vegetation (e.g. sagebrush and prickly pear cactus), which could have caused coupling loss by keeping
the antenna from running parallel to the ground. Aeolian sands are highly resistive to electrical current and the arid environment provided limited ground moisture. These two factors allow for good GPR penetration and the ability to clearly image subsurface features on GPR profiles (Bristow and Jol 2003:2).

After surface surveys, GPR grids were established in Blocks 7G, 12H, and 12K. The location of these grids was determined by the identification of features from surface survey and preliminary research using historic photographs. GPR data was then used to help determine the location of excavation units.

Figure 3.2. Field crew conduct GPR survey with GSSI SIR-3000 and 900MHz antenna.
Excavation Methods

After setting up an area-specific grid, excavation units were established in blocks 7G, 12H, and 12K. The placement of units was based on the anticipated location of features determined by surface survey, ground-penetrating radar, and historic photographs.

Excavation units were primarily laid out in 2x2 meter squares with the exception of one extension unit that measured 1x2 meters. After a unit was defined with string, a crew cleared away any surface vegetation and units were hand excavated with trowels and shovels. The excavated soil was passed through an 1/8” screen to remove the majority of loose soil. Students carefully examined remains in the screen for artifacts that were recorded and collected for further analysis in the lab.

Field crews excavated ten-centimeter levels or followed stratigraphic layers if there was a change in soil type or sediment mineralogy. If such a change occurred, the identified layer was removed, screened, recorded, and the artifacts and ecofacts processed as a single group. All excavation was documented on a context form and placed on a context register. The Harris matrix method was used to direct and record excavation. This single context method allowed us to better understand the historical landscape in question. As the excavations progressed, the crew chiefs assigned each unit specific Harris designations that were later tied together. Often used at historic sites with architectural features, the Harris matrix helped to connect natural soil or sediment horizons with anthropogenic layers across multiple excavation units. During excavation,
soil samples were collected in each context level for chemical, palynological, and botanical analyses.

**Lab Methods**

Following the field school, the Lab Director organized artifacts collected during intensive survey and excavations, assigned lot numbers to aid in analysis and entered provenience data into the established site database. Soil samples were sent to appropriate specialists (palynology, macrobotanical, and soil chemistry) for analysis. The artifacts were then analyzed by students in Dr. Clark’s course, Historical Archaeology, held in the Fall of 2010. Students completed both basic functional analysis, as well as more intensive analysis based on material type (e.g. for ceramics they determined ware, vessel form, and decorative techniques). The field and lab data were then synthesized into technical reports written by students for each collection analyzed.

**Archival Research**

Archival documents provide a great deal of information throughout all stages of research both prior to and post-fieldwork. The DU Amache project has access to a wide range of primary sources including newspapers, photographs, and transcribed interviews and personal accounts. Since the project’s inception, a database of community archival materials has developed. The database holds a variety of photograph collections that include family portraits, administration photographs, and candid snapshots of daily life at Amache. The Amache newspaper, *The Granada Pioneer*, was recently uploaded to a database and provides valuable insight to what was deemed important by internees while
living at Amache. Due to the importance of agriculture and domestic landscaping at Amache, valuable details can be accessed through the primary sources available.

*Granada Pioneer*

The internee published newspaper was released twice a week from October 30, 1942 until September 1, 1945. Featuring both Japanese and English sections, the newspaper provides details about goings on in camp and to a large extent, stories related to the agricultural efforts of the farms at Amache. During the 2010 field season, a list of landscaping related articles was compiled, which were then accessed through the digitized versions of the newspaper found through the University of Denver Penrose Library and Densho archives online.

*McClelland Collection*

Digitized from three slide carousels and a photo album, the McClelland collection is a compilation of personal candid and “staged” photographs resulting from photographer Joe McClelland’s work for the WRA. Due to the nature of the photographs, it is important to consider the context that many of the photographs were taken by a non-internee contracted to take photographs that depicted “daily life” at Amache. In many cases, these pictures were organized by the photographer and obfuscate the reality experienced by Japanese Americans under internment. Due to the sheer variety of pictures contained in the collection, the McClelland photographs are invaluable as they provide a look into life at Amache despite the collection’s context.
Internee-Donated Collections

Since the beginning of the DU Amache Project, scans of former internees and their relatives’ personal photo albums have been collected. While each of these collections was reviewed, one of the most useful for the purposes of my research were family photographs donated by Helen Yagi Sekikawa. The subject of many of the pictures is the avid gardener, craftsmen, tomato farmer, and grandfather of Helen, Mr. Mataji Umeda. Mr. Umeda is shown in his elaborate Japanese-style garden surrounded by various crafts that he produced (see Figure 3.3). This particular collection was very useful in both finding the location of one of the most significant gardens at Amache, as well as providing insight into one internee’s personal connection with gardening.

Figure 3.3. Historic Photograph of Mataji Umeda in his entryway garden.
Oral Histories

Oral histories were conducted as a complementary line of evidence to be used in conjunction with survey, excavation, and artifact analysis. Due to the relatively recent nature of the internment period, we have the honor of consulting with people who experienced incarceration first hand. The Japanese Americans who experienced internment and their families are an invaluable resource as they not only provide insight and can corroborate archaeological hypotheses, but can also help guide research by producing new research questions and presenting unique outsider opinions on the work we do. As suggested by Margaret Purser, the inclusion of oral history provides not only a wider range of voices in the archaeological story told but also a necessary check on the authority of researcher claims against the claims of the people who lived through the period we study (1992:34).

Oral histories used in this thesis were primarily conducted in the Spring of 2011 by Dr. Bonnie Clark, Christian Driver, and myself. Following a presentation by Dr. Clark held at the Japanese American National Museum, we invited former internees and their relatives to gather in the community space for an informal question and answer period (see Figure 3.3). Christian and I prepared questions related to our thesis topics that we felt could benefit from the input of former internees. While we guided the discussion with our questions, we were eager to hear anything the informants wished to talk about and were happy to ask them to elaborate on the points that most interested them. Upon concluding this “roundtable” discussion, we invited any former internees who wished to
conduct more in-depth private interviews to speak with us and arrange a time for a meeting.

Six personal interviews were conducted in total. Each of the interviews was with a former internee of Amache whose ages ranged from infancy in camp to about 20 years old. This span of ages allowed us to gain an array of perspectives ranging from people who could only remember their parent’s views on internment, to people who were young adults that endured incarceration.

Figure 3. 4. Roundtable discussion with former internees at JANM, Spring 2011.
Conclusion

Research at Amache allows for a wide variety of methods. While many of the methods used are traditional archaeological techniques, the relatively recent nature of the site allows for the unique use of other methods generally used in cultural anthropology. In addition, the DU Amache Project’s commitment to community archaeology has allowed for the collection of a wide variety of primary sources and the ability to personally communicate with those who lived through internment first-hand. The use of different methods allows this research to combine multiple lines of evidence in a complementary and convincing way.
CHAPTER FOUR: TESTING THE METHODOLOGY OF LANDSCAPE ARCHAEOLOGY AT AMACHE

Introduction

In this chapter I address my first research question: what is the extent and integrity of entryway gardens and other landscaping works at Amache? This chapter explains just how widespread entryway gardens are at Amache and what different kinds of data can be collected from diverse archaeological and interdisciplinary methodologies. Surface survey, ground-penetrating radar, excavation, archaeobotany, soil chemistry and palynology data all contribute to a better understanding of how to archaeologically study landscaping works at Amache. Each method is discussed within the context of the blocks surveyed during the 2010 field season.

This chapter focuses solely on the 2010 field season and the efficacy of the methods chosen for identifying and elucidating the most information about entryway gardens. Because I served as a crew chief and was present for the entire research cycle, I can most confidently address this question with 2010 data. Details related to the entryway gardens excavated in Blocks 7G and 12H are further discussed in chapter 5 with a comparison of two other entryway gardens excavated in later field seasons. By evaluating each step of the archaeological investigation, I reveal best practices and begin to develop a methodology for the study of entryway gardens at Amache.
Archaeological Findings: 7G

Surface Survey

Five surface features were identified, 4 of which were related to landscaping or gardening (see Figure 4.2 and Table 1). Feature 7G-2 was identified as the Mataji Umeda garden from historical photographs. Feature 7G-1, an entryway garden, is located directly across from the Umeda garden and serves as an interesting comparison. According to the 1944 site directory, Umeda is listed as having lived in barrack room 6F. In the 1943 directory, Umeda is listed as living in barrack room 5F (Digitized Amache directory).
Feature 7G-1 used a piece of slab concrete as a small pond that could have kept water in the garden for decoration. In addition to this, the location of features 7G-1 and 2 are just south of the recreation hall that housed the Buddhist temple. Patrons visiting the temple would almost certainly pass the elaborate Japanese-style garden if they were headed to the Buddhist temple. Seeing this garden would likely provide comfort and a sense of pride amidst an otherwise institutional and dreary habitat.
Figure 4.2. GIS rendered map depicting features and field artifacts.
Table 1: Identified 7G Features

<table>
<thead>
<tr>
<th>Feature #</th>
<th>Type</th>
<th>Materials</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7G-1A</td>
<td>Landscaping</td>
<td>Brick, Standing Stones, Glass, Ceramic, Limestone, Shell</td>
<td>Remnants of Umeda Garden Extending to Edge of Barrack</td>
</tr>
<tr>
<td>7G-1B</td>
<td>Landscaping</td>
<td>Glass, Ceramic, Shell</td>
<td>Continuation of Umeda Garden to Western Side of Barrack</td>
</tr>
<tr>
<td>7G-2</td>
<td>Landscaping</td>
<td>Cobble, Quartz, Concrete</td>
<td>Mataji Umeda Garden</td>
</tr>
<tr>
<td>7G-3</td>
<td>Architectural</td>
<td>Brick, Concrete</td>
<td></td>
</tr>
<tr>
<td>7G-4</td>
<td>Landscaping</td>
<td>Brick, Concrete, Sandstone</td>
<td></td>
</tr>
<tr>
<td>7G-5</td>
<td>Architectural</td>
<td>Concrete</td>
<td>Constructed Wall</td>
</tr>
</tbody>
</table>

**GPR**

An 18x11 meter L-shaped grid was laid out between barracks 5 and 6 where features 7G-1 and 7G-2 are located. The area was chosen to reveal any subsurface garden features that could be related to the landscaping works above ground. The GPR data revealed a high amount of subsurface activity just outside the westernmost entryway of barrack five adjacent to feature 7G-2. Analysis of GPR profiles showed a curious planar reflection located just beneath a unique point source reflection. The planar reflection was hypothesized to be the historic garden ground surface and upon closer inspection contained multiple fainter point source and planar reflections upon and adjacent to it. The point source reflection appeared as a very weak “multiple” which, is often interpreted as a result of metal on or near the modern ground surface. This point source reflection
however, did not have the distinct alternating black and white appearance associated with a multiple due to metal.

Interpretation for this particular profile was that beneath ground surface was a vertical feature adjacent to a possible historic garden ground surface. The individual point source and planar reflections upon the garden surface were possible objects that had collapsed or been filled in on top of the surface. We believed this activity was certainly related to the construction of an entryway garden or possibly associated with the Umeda garden. The area was chosen for excavation in an attempt to test the hypothesis that an historic garden surface had been revealed by the GPR.

*Excavation*

Slice maps were gridded in order to determine the best location for excavation units. Slice maps revealed both the area of interest as well as an area adjacent to the area of interest in an attempt to find the edge of the garden surface and the area just outside the garden perimeter (see Figure 4.3). Joining the GPR data with the excavation units

![Figure 4.3. GPR slice map with 7G excavation units overlaid](image-url)
proved that the point source reflections were indeed a result of the vertical and horizontal wooden posts from the garden surface.

A 2x2m unit 2003N/2003E was laid out to be specifically at the edge or outside the believed entryway garden area. Based on the GPR data and the surface remnants, we targeted the area in front of the barrack entrance and likely adjacent to the subsurface entryway garden feature. Two surface artifacts collected include a large piece of quartz and a large piece of shale. The typical material culture associated with architecture for the site was found throughout the shallow depths and specifically in context 7G-002 (brick, nails, coal). In the next context, 7G-004, crushed limestone and a number of river cobbles were excavated. We interpreted these finds as being related to the entryway garden and landscaping in general. The crushed limestone is well documented as a material used in the creation of pathways and general site improvement (Dumas and Walther 1944).

A 2x2m unit designated 2003N/2001E was laid out directly above the feature revealed in the GPR slice maps. Excavation further supported the hypothesis that this was indeed an entryway garden. At 14 centimeters below ground surface (cmbgs), context 7G-001 was closed out upon the discovery of a cedar wood plank, which extended from the west wall across the majority of the northern portion of the unit. Inclusions for the context 7G-001 were large concentrations of stone gravel, ferrous wiring, and several sherds from a terra cotta planter.

The surrounding matrix was excavated according to an arbitrary context designated 7G-003. Inclusions within context 7G-003 were high concentrations of river cobbles, ferrous wiring, tarpaper roofing, and a single small key. Also included within
context 7G-003 were two vertically sunk planks of cedar. These two, along with the horizontal plank found in context 7G-001 seemed to form a rectilinear feature, which was interpreted as a form of fencing or barrier. This find helped further confirm our belief that we had found the historic entryway garden surface. The fencing was likely to provide delineation for the garden space as well as keep out a number of pests local to the area (see Figure 4.4)

The post mold and posthole fill were excavated to try and reveal the best picture of the subsurface activity as related to human activity. Further excavation in the unit revealed yet another vertical sunk cedar post, which was found just underneath the linear feature in the northern portion of the unit. There was a lack of significant artifacts found after context 7G-003, however the large number of rectilinear lumber alignments was an excellent discovery related to entryway gardens.

A 2x1m unit designated 2000N/2001E was opened as a southern expansion to unit 2003N/2001E. This unit was laid out directly between Unit 2003N/2001E and the barrack. The unit was opened in order to discover any further possible inclusions related to the entryway garden or see if there was some delineation between the barrack and garden space. The unit did not reveal anything of particular interest but did feature high concentrations of architectural materials as well as some more sherds of terra cotta. This excavation unit led us to believe that entryway gardens likely were built up against the barrack rather than fully enclosed spaces. This evidence presents the idea that by joining the garden to the barrack, internees would have been in a more pleasurable environment immediately beyond the threshold of the barrack entrance.
The excavations in 7G revealed a great deal about the subsurface remnants of entryway gardens. The complex stratigraphy related to the garden was a result of considerable landscape manipulation by the internees. Excavation of this area greatly contributes to our understanding of garden archaeology at Amache by showing that while there may be some indicators of landscaping on the ground surface; much more information can be gained through excavation at these feature areas. The cedar lumber would surely have been either imported or bought at a local hardware store, as they were not available at Amache and the high number of post molds within unit 2003N/2001E indicate there were even more cedar used in the historic garden feature than excavated.

Figure 4.4. Excavation unit 2003N/2001E and its vertical cedar posts.
Archaeobotany

Two flotation samples were taken during the excavation of the 7G entryway garden. Sample 7G-003 was taken at a depth of 42 cmbd while sample 7G-004 was taken at a depth of 60 cmbd. While each sample was 10L in volume, sample 7G-003 produced 13.6 seeds/L while 7G-004 only produced 1.8 seeds/L.

Both samples contained dimensional lumber, which was found during excavation. The wood, likely an architectural component associated with the garden, was identified as a Western Red Cedar-type (Cupressaceae family). Both sample 7G-003 and 7G-004 contained numerous local weedy flora such as: Opuntia (pricklypear cactus), spurge, Chenopodium, and wild-type sunflower. Due to the ubiquity of the weeds at Amache, it is no surprise evidence of these particular species was the most prevalent in the soil samples.

While sample 7G-004 had little evidence of non-local flora, sample 7G-003 contained two particularly interesting finds. Evidence of Portulaca was found, which depending on the species, can flower brilliantly in addition to providing decorative groundcover. The second find of interest was a high number of Brassicaceae family seeds. These particular seeds were identified as either Lepidum (peppergrass) or Sisymbrium (tumble mustard). Both species can grow fairly tall and would have also served a decorative purpose in a landscape where Yucca and cactus dominate.

Soil Chemistry

Despite the evidence that our excavations at 7G were an entryway garden, the soil chemistry analysis demonstrated soil amendments through some tests but appeared the
opposite in the pH test. Generally, the arid soils at Amache are fairly alkaline, which is found in all samples across the site. Of particular note to the 7G soil samples was a spike in pH between the 10-20 cm depths. This evidence counters our hypothesis about evidence of internee soil amendments, as we would expect there to be a decrease in pH at the garden surface level. An explanation for this increase in pH could be that elevated carbonate levels in the soil complicate evidence of pH amendments by the internees (Marin-Spinotta, Eggleston, Szymanski 2015: 7).

When compared to the control site, the 7G samples had higher concentrations of phosphorous, organic carbon, potassium, and magnesium at the 15-30 cm depth. Each of these elevated concentrations can be associated with soil amendment; phosphorous and potassium are classically considered two of the three most important additions for plant growth. Organic carbon is also considered important and could be the result of internee composting.

_Palynology_

Of the five total samples collected from the 7G excavations, only three samples had enough pollen for an informative sample size. A number of local flora make up the majority identified in the samples across the whole site. Some of the most widespread plants identified in the pollen sample include sagebrush, ragweed, goldenrod, goosefoot, pigweed, grasses, juniper, and pine.

The presence of additional plants in the pollen sample speaks to a number of interesting phenomena. These outliers can likely be explained as either being blown in or intentionally brought to Amache by internees. In the 7G assemblage, we find evidence of
Cerealea and a *Zea mays* (maize), potentially due to local cultivation. The presence of Rosaceae and Liliaceae grains could suggest the ornamental planting of a rose or lily plant but this is difficult to tell with a single grain. A few *Typha latifolia* (wide-leaf cattail) grains were identified and due to their rarity, support intentional internee planting in the entryway garden. The presence of numerous Asteraceae in the 7G samples could further suggest numerous ornamental cultivars. Asteraceae contains sunflowers, asters, and daisies among other typical ornamental flowering plants (Jones 2011)

**Archaeological Findings: 12G**

Block 12G was surveyed using the same methods as all other blocks. This was done in an attempt to uncover any unknown features or significant artifacts. 12G was also of importance because of plans to reconstruct a guard tower that was located on the border of 12G and 12H. Block 12G represents a block area that is primarily populated by people whom, before internment, lived in the Los Angeles area (see Figure 4.5). Just as the case with Block 7G, a Buddhist Temple was located in the southeastern recreation hall of the block.
Surface Survey

There were five features identified in Block 12G (see Figure 4.6 and Table 2). All five were designated as landscaping features. Most were downed trees that had previously been planted by internees in rows along the barracks. The other features consisted of a combination of concrete foundations, limestone scatters, brick, cobbles, and wood plank walls. One feature of particular importance, 7G-3, was an entryway garden that featured a small concrete pond inclusion. Ethnographic and historical research explains that many internees kept pets and this feature could have served as a
bird bath or habitat for a turtle. The feature appeared too shallow to contain fish or even much water.
Figure 4.6. GIS rendered map depicting features and field artifacts.
Table 2: Identified 12G Features.

<table>
<thead>
<tr>
<th>Feature #</th>
<th>Type</th>
<th>Materials</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Landscaping</td>
<td>Concrete, Limestone</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Landscaping</td>
<td>Limestone, Cobbles, Downed Trees</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Landscaping</td>
<td>Concrete, Brick, Cobbles</td>
<td>Small Pond Feature</td>
</tr>
<tr>
<td>4</td>
<td>Landscaping</td>
<td>Wooden Planks, Brick, Limestone</td>
<td>Entryway Garden</td>
</tr>
<tr>
<td>5</td>
<td>Landscaping</td>
<td>Limestone, Downed Tree</td>
<td></td>
</tr>
</tbody>
</table>

Archaeological Findings: 12H

Block 12H was initially chosen for survey due to the possible future reconstruction of a barrack and guard tower in the area. After surface survey revealed remnants of internee entryway gardens and GPR revealed potential buried garden features, this block was chosen for test excavations as well. The population of 12H largely consisted of people whom had previously lived in the Los Angeles area (see Figure 4.7).
Surface Survey

Five features identified in the block were all classified as landscaping related (see Figure 4.8 and Table 3). The features exhibited the common characteristics of landscaping remnants such as crushed brick, sandstone, wooden planks, and concrete fragments but many lacked the surface integrity of gardens in other blocks. However, one feature incorporated a ceramic pipe that appeared to have been used as a planter. The feature was positioned directly in front of a barrack, the typical location for an entryway garden. To confirm whether or not the feature would be suitable for excavation, GPR was conducted to try and determine whether garden surfaces could be seen in the subsurface.
Figure 4.8. GIS rendered map depicting features and field artifacts.
Table 3: Identified features for 12H.

<table>
<thead>
<tr>
<th>Feature #</th>
<th>Type</th>
<th>Materials</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Landscaping</td>
<td>Entryway Garden</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Landscaping</td>
<td>Concrete Border Near Barrack Entryway</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Landscaping</td>
<td>Ceramic Pipe, Concrete, Downed Tree</td>
<td>Brick, Flower Pot Fragments, Concrete, Metal</td>
</tr>
<tr>
<td>4</td>
<td>Landscaping</td>
<td>Concrete</td>
<td>Concrete, Downed Tree</td>
</tr>
<tr>
<td>5</td>
<td>Landscaping</td>
<td>Concrete, Brick, Downed Tree</td>
<td>Concrete Wall near Barrack Entryway</td>
</tr>
</tbody>
</table>

GPR

An 18x12 meter L-shaped grid was laid out between barracks 5 and 6 near features 12H-3 and 12H-4. The area was chosen to reveal any subsurface features that could be related to the landscaping works above ground. The GPR data revealed a couple of high amplitude point source reflections just outside of the westernmost entryway to barrack 5 and below feature 12H-3. We believed these point source reflections could potentially be a buried garden but the only above ground evidence was the water pipe (see Figure 4.9). Correlation of GPR and excavation data proved the point source reflections were due to both the planters as well as the buried brick surface. This area was chosen for excavation to try and reveal whether the point source reflections were actually a garden surface. A second interesting subsurface area, revealed by the GPR data, was a curvilinear feature of multiple high point source reflections. Since this subsurface feature
was located directly in between the barracks and not adjacent to a barrack it was not chosen for excavation, however, it may be related to an internee-constructed work shared by the front yards of the two barracks.

Figure 4.9. GPR slice map with 12H excavation unit overlaid.
Excavation

A single 2x2m excavation unit designated 2997N/3004E was opened in 12H above a potential subsurface garden feature found in GPR slice maps, which was also associated with surface exposed stoneware pipes. Immediately upon removal of the topsoil a second vertical stoneware pipe was revealed adjacent to the first. A mix of concrete, crushed brick, gravel, and coal was found scattered throughout the first context designated 12H-3001.

The ceramic pipes found in the first context and exposed on the surface are found across Amache and known to be relics of the plumbing system used at Amache. The interesting aspect to the pipes located in the 12H excavation is that they were vertically sunk into the ground and appear very similar to terra cotta planters. These vertical pipes are interpreted as evidence of internee ingenuity and the repurposing of the pipes as ceramic planters used in the entryway garden. A second point of interest is that the planters appear to be placed along a symmetrical horizontal axis, a principle congruent with western ideals of garden organization.

Context 12H-3002 revealed a series of bricks in the northeast corner of the unit that appeared to be in situ. These bricks led up to the barrack doorway and are interpreted as a brick pad or pathway that would have been associated with the garden context. River cobbles, crushed brick, and concrete were found within this context. Focus was turned to the excavation of the planters where two particularly interesting inclusions were discovered. Crushed eggshell as well as the remnants of a shell were both found in the planter context. These inclusions are interpreted either as evidence of internee soil
amendment, landscape design, or both. Both inclusions would have affected the soil chemistry and could be evidence of composting. The shell remnants appear to be abalone, a shellfish that was eaten at Amache. The shell of the abalone is brilliantly colored and could just as effectively been used as a glimmering addition to the design of the entryway garden. In either case, it is highly likely the internee(s) tending to this garden would have been cognizant of both soil amendment technique and appreciated the design quality of the abalone. Shell has been found in at least one other occasion in the use of garden as a decorative element (in the Umeda Garden).

Archaeobotany

A total of three samples were collected from the excavations at the 12H entryway garden. Sample 12H-3002 was taken from the suspected garden surface, while samples 12H-3005 and 12H-3006 were taken from water pipes re-purposed as ceramic planters. Similar to the samples from 7G, the dominant species recovered were local flora such as pricklypear cactus, Chenopodium, spurge, and ragweed.

Sample 12H-3002 contained one interesting sample, which was identified as evidence of an Asteraceae-family seed, possibly Lactuca. This could either be a wild or domesticated lettuce and is the only evidence of a lettuce found at Amache to date (Archer 2009, 2011). Other seeds of interest recovered include Ipomoea (morning-glory) as well as buffalo-bur nightshade. Morning-glory is well documented photographically in the use of entryway gardens at Amache and buffalo-bur nightshade was recovered during the 2008 field season (Archer 2009).
Soil Chemistry

Soil chemistry findings in the 12H excavations proved to be the most interesting related to our interest in chemical evidence of soil amendment. Calcium levels in two particular 12H samples were much higher when compared to other garden and control samples. Excavation produced a large quantity of eggshell scattered throughout the unit, which could likely explain the elevated calcium levels. The use of crushed eggshell in the gardens can be explained as a means to improve calcium uptake, a common problem for well-drained dry soils. The use of the eggshell could also be seen as a means to control pest populations like slugs or snails (Marin-Spinotta, Eggleston, and Szymanski 2015:7-8).

Palynology

Pollen preservation in the 12H entryway garden was relatively good and allowed for all seven samples to be analyzed. In addition to the typical flora found at Amache, a number of interesting grains were found that speak to the construction of an entryway garden.

A single rosaceae grain was found (like at the 7G garden) as well as four total Sambucus grains. The quantity of Sambucus (elderberry) pollen strongly supports intentional planting since elderberry pollen often remains close to its source. A single Cornus (dogwood) grain was identified, which further demonstrates the intentional planting of this non-local ornamental tree. Much like the Cornus, a Prunus grain was identified, which could possibly be from a cherry, plum, peach, apricot, or almond tree.

Pollen recovery in the 12H garden contexts was highly successful and shows the efficacy
of palynology in enriching our understanding of the historic entryway garden landscape (Jones 2011).

**Archaeological Findings: 12K**

Block 12K is the last residential block in the southeast corner of the Granada Relocation Center (see Figure 4.10). Japanese Americans from Los Angeles primarily inhabited the block. The block contains features and artifacts of high archaeological integrity. Features of particular interest are the vegetable gardens identified in historic photographs. In 2008, a field crew from the University of Denver conducted a test excavation in block 12K in one of the photographically documented vegetable or victory gardens, designated VG-1. The water tower was located in the southwest corner of this block. Because of a planned reconstruction of the tower, we chose to systematically survey this block. Excavation of the victory garden provides an interesting comparison to the entryway gardens previously mentioned in Blocks 7G and 12H.
Common features identified in Block 12K were different forms of landscaping created by internees (see Figure 4.11 and Table 4). Rows of trees were planted running parallel to barracks (see Figure 4.12). A vegetable garden is located in the southeast corner of the block, adjacent to barracks 5 and 6. In addition, concrete borders were built along various buildings, such as the mess hall and a barrack. An architectural addition was also found connected to the mess hall, identified by a concrete foundation and concentration of bricks.
Figure 4.11. GIS rendered map depicting 12K features and field artifacts.
Table 4: Identified features for 12K.

<table>
<thead>
<tr>
<th>Feature #</th>
<th>Type</th>
<th>Materials</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Landscaping</td>
<td>Three Chinese Elms</td>
<td>Internee Planted Row of Trees</td>
</tr>
<tr>
<td>2</td>
<td>Architectural</td>
<td>Concrete, Brick</td>
<td>Internee Built Addition</td>
</tr>
<tr>
<td>3</td>
<td>Landscaping</td>
<td>Concrete, Cinderblocks</td>
<td>Possible Garden Border</td>
</tr>
<tr>
<td>4</td>
<td>Landscaping</td>
<td>Four Chinese Elms</td>
<td>Internee Planted Row of Trees</td>
</tr>
<tr>
<td>5</td>
<td>Landscaping</td>
<td>Four Chinese Elms</td>
<td>Internee Planted Row of Trees</td>
</tr>
<tr>
<td>6</td>
<td>Landscaping</td>
<td>Tree, Building Materials, Cobble</td>
<td>Landscaped Surface Next to Entryway</td>
</tr>
<tr>
<td>7</td>
<td>Landscaping</td>
<td>Three Chinese Elms</td>
<td>Internee Planted Row of Trees</td>
</tr>
<tr>
<td>8</td>
<td>Landscaping</td>
<td>Limestone, Chinese Elm</td>
<td>Landscaped/Decorated Tree at Barrack Entryway</td>
</tr>
<tr>
<td>9</td>
<td>Landscaping</td>
<td>Five Chinese Elms</td>
<td>Internee Planted Row of Trees</td>
</tr>
<tr>
<td>10</td>
<td>Landscaping</td>
<td>Concrete, Two Chinese Elms</td>
<td>Concrete Garden Border</td>
</tr>
<tr>
<td>11</td>
<td>Landscaping</td>
<td>Limestone, Chinese Elm</td>
<td>Landscaped/Decorated Tree at Barrack Entryway</td>
</tr>
<tr>
<td>12</td>
<td>Landscaping</td>
<td>Concrete, Downed Tree</td>
<td>Concrete Standing Stones</td>
</tr>
</tbody>
</table>
Figure 4.12. Feature 12K-1, row of internee planted Chinese Elms.

**GPR**

A subsurface survey, using ground-penetrating radar, was conducted on the southeast corner of block 12K. The area was chosen because of preliminary research involving historic photographs that present a vegetable garden to the east of barrack 6 and the recreation hall. Data from this garden, designated VG-2, was of significance because it would help advance research outlined in the Amache research design (Clark 2010) concerning gardening and landscaping at the camp. It is also very near the foundations of the water tower and thus locating it and assessing its integrity prior to any possible ground disturbance was a priority.
After GPR data were collected and processed, amplitude slice maps were created. They showed a high amplitude linear feature in the southeast corner of the grid (see Figure 4.13). Looking at the vertical linear profiles we deduced that the feature consists of a concentration of many small point-source reflections (see Figure 4.14).

During excavations we recovered many metal wires, nails, and staples. However, they were primarily recovered from the screen rather than in situ. By analyzing the profiles, we were able to recreate their subsurface positions prior to excavations. This enables us to argue that the high amplitude point-source reflections were created by metal wires, nails, and staples. In addition, their placement in the linear profiles correlates these artifacts with wood fragments recovered from excavations. This evidence suggests the feature is the remains of a fence (Clark, Garrison, and Swader 2012).

![Figure 4.13. Amplitude slice map of the 12K garden.](image)
Excavations in 12K were centered on a linear feature believed to be evidence of a historic victory garden. A 2x2m unit designated 1001N/996E was laid out above the southern end of the linear feature. Within the first two excavated contexts (12K-1001 and 12K-1004) a large amount of nails and ferrous wire were discovered. At just about 13 cmbgs a fragment of treated cedar wood plank was exposed. At around 17 cmbgs, an
even larger cedar plank was discovered. Context 12K-1010 revealed a change in soil that was interpreted as a possible furrow and was excavated as its own context to determine any further evidence of gardening. When no further evidence was discovered, the unit was closed out around 44 cmbgs. The inclusion of the cedar planks and large amount of ferrous wire led us to believe we had found more fencing related to the victory garden. The distinct linear soil change could have been a possible furrow or builder’s trench used in the construction of the garden barrier.

A second 2x2m unit designated 1003N/998E was opened diagonal from unit 1001N/996E and above the northern end of the linear feature. Within the first 20 cmbgs a large quantity of metal staples, wire, and nails were discovered. The heaviest concentration of these artifacts was found in context 12K-1005. In context 12K-1008 more of these architectural artifacts were discovered but with a tapering frequency. Also found in this context located at about 25 cmbgs was a fragmented large cedar plank that ran at an angle southeast to northwest across the unit. Three nails were imbedded in the end of the plank, characteristic of the garden fencing discovered through excavation across the site (see Figure 4.15). With no further inclusions of interest, the unit was closed out at 40 cmbgs.

A third 2x2m unit designated 1005N/996E was laid out diagonally northwest of unit 1003N/998E forming a checkerboard pattern. In the shallow depths of the first context (12K-1003), metal and glass fragments were discovered. The second context (12K-1006) revealed more glass, metal, nails staples, as well as staples and cement. At around 10 cmbgs a number of cedar plank fragments were discovered. In the lowest
contexts (20-40 cmbgs) limestone fragments and eventually a siltier soil was discovered until the unit was closed out at 40 cmbgs, where sterile soil was revealed.

Excavations at 12K were highly informative and appeared to confirm our belief that the 12K victory garden existed in the location. The subsurface feature was likely due to the high level of cedar posts connected by wire that appear to form the southeastern edge of the garden. High concentrations of wire and nails seem to support the idea that the cedar planks were used to gird off the edge of the garden.

![Figure 4.15. Three large wood slats found in context 12K-1008, in the southeast corner of unit 1003N/998E.](image)

**Archaeobotany**

Three samples were taken from the 12K excavation unit 1001N/996E. The sample contexts were 12K-1004, 12K-1005, and 12K-1008. All samples produced local flora characteristic of the environment as well as *Ulmus* seeds, likely due to the Chinese Elms planted across the site.
Samples 12K-1005 and 12K-1008 produced *Verbena* seeds, the most interesting find for the block samples. Verbena is a diverse family type but has been associated with European herbal garden traditions. *Verbena* seeds have not previously been recovered at Amache (Archer 2011).

*Soil Chemistry*

When compared to the control site, the 12K victory garden samples were similar to the 7G garden samples between the 15-30 cm depths. The 12K sample had higher concentrations of phosphorous, organic carbon, potassium, and magnesium just like the 7G samples. The fact that we see similar levels in an entryway garden and a victory garden further support the idea that soil amendment was a widespread practice, regardless of the type of garden. I believe this commitment to soil amendment further reinforces the depth of landscaping knowledge on the part of the internees of Amache.

*Palynology*

Five of the six pollen samples collected in the 12K excavations contained a large enough sample size to analyze. In addition to the typical species native to the area, a few individual species of interest were identified. A single *Solanum tuberosum* (potato) grain was identified, which correlates with the multiple lines of evidence supporting 12K as the site of the historic victory garden. The presence of *Datura* and *Canna* may suggest ornamental cultivars in the victory garden or at least nearby. *Canna* (canna lily) cultivation would have been very difficult but could have been brought with an internee, obtained as a rhizome, or purchased from a nursery. *Canna* is also found in many
Japanese Hawaiian sites, which could suggest the intentional cultivation of a plant related to Japanese diasporic gardening practice.

**Conclusions**

The 2010 archaeological field season proves the site has great potential to reveal information about entryway gardens and landscaping features at Amache. The work conducted at Amache contributes to the growing field of internment archaeology (Casella 2007) and the archaeology of the impact of WWII on the American home front (Archaeology 2011).

Work at Amache during the 2010 field season, located in Blocks 7G, 12G, 12H and 12K. Focused on investigating internee entryway gardens, landscaping features, and internee ingenuity through salvaged and re-purposed materials. A suite of methods was used to expose and reveal information about these areas including intensive surface survey, GPR, excavation, archaeobotany, soil chemistry, and pollen analyses.

Surface survey at the site continues to reveal the sheer quantity of diverse landscaping features above ground and improves how we classify features based upon growing criteria. Due to the arid climate and relatively undisturbed nature of the site, carefully constructed gardens remain intact on site. These are the remnants of not only daily life under internment, but the stories of Japanese American history. Surface survey has also contributed to a Geographical Information System database for the site. This invaluable tool allows us to better compare areas of interest across the site as it catalogs much of the spatial data collected during the field season.
GPR work conducted on site has proven to be a great success. During the 2010 season we chose to use the 900 MHz antenna, which proved that a finer attention to shallow depths reveals subsurface artifact assemblages and features with better results. GPR survey in Block 7G revealed the wooden remnants of a rectilinear entryway garden fence. These girded off gardens appear to be the best photographically documented kinds of gardens at Amache and to be able to identify them through subtle subsurface changes is invaluable to future research. The GPR conducted in Block 12H revealed one of our most unique subsurface entryway garden finds. Block 12K GPR analysis revealed a linear architectural feature, which excavation likely proved to be the location of the 12K vegetable garden pictured in historic photographs.

The three gardens excavated in 2010 revealed a great wealth of information both for analysis of the site and related to best methods of practice for future work. Intensive surface survey revealed landscaping features superficially, but using excavation, we obtained even more substantial data. Strategies related to salvaged and re-purposed materials are identified in diverse material culture employed in the gardens. Scavenged materials were dramatically revealed through the use of broken water pipes placed into the ground collar up to create attractive planters. Large construction materials such as these would not have been widely available, especially because the camp dump was located outside the guarded perimeter. The pervasive presence of wire in the gardens is particularly noteworthy given that its use was restricted to the war effort and it was not available for purchase (Swader 2015).
Soil chemistry differences between garden samples and control samples indicate soil amendment was widespread practice under confinement. The amendment as well as watering of gardens were performed for only three years and yet their impacts are still apparent 70 years later.

Crumbled eggshell points to food remains as one source for soil amendment. One former Amache internee recalled the use of eggshell and tealeaves in the preparation of gardens (personal communication). Access to food remains may have been an important aspect of life at Amache. It is likely that workers at mess halls would have had best access to the food scraps. Given the agricultural knowledge of many Japanese Americans, it becomes no surprise that evidence of soil amendment is found at Amache.

Macrobotanical and pollen evidence from excavation suggests widespread landscape transformation. Local plants, such as yucca, asters, and purslane, were surely being transplanted and added to people’s gardens. More exotic varietals were brought to Amache or ordered from distributors or local purveyors. Evidence of exotics include: cattail, rose, elderberry, dogwood and canna. Canna is found in Hawaiian Japanese sites possibly indicating maintenance of Japanese gardening practices.

Using the methods explained, a robust dataset was collected from the relatively recent garden features. Through the use of surface survey, test excavations, and interdisciplinary specialists, a great deal of information is gained from the gardens. The results suggest the gardens of Amache maintain good integrity with a rich potential for future research.
CHAPTER FIVE: THE MATERIAL CULTURE OF ENTRYWAY GARDENS

Introduction

In this chapter I address my second research question: what does the material culture and flora of entryway gardens look like? This chapter describes what entryway gardens look like by physically examining and comparing four excavated entryway gardens and the unique materials used in their construction. By detailing the appearance and materials associated with entryway gardens, I present information about the individual landscape design choices of internees. By analyzing the entryway gardens comparatively and elucidating both western and eastern gardening concepts, I can begin to reveal implications about the Japanese American identity and the agency of internee gardeners. This chapter draws upon the two previously discussed entryway gardens from the 2010 field season as well as two additional entryway gardens, one each from the 2012 (11H entryway garden) and 2014 (12H entryway garden) field seasons. During the 2008 field season, two school entryway gardens were excavated, which are not discussed in this thesis. The entryway gardens were designed by the elementary school students, who were no doubt influenced by the landscaping efforts of the adult population (Clark 2009, Kamp-Whittaker 2010). The decision to not include the 2008 excavated gardens was due to the fact that they were constructed by elementary students and not adults.
I begin this chapter by explaining what exactly we mean by a Japanese style garden and how it differs from the concept of a Western garden. After the primer on Japanese gardens I go on to detail each of the excavated entryway gardens and reveal possible interpretations as to how the design decisions at Amache may relate to various Japanese gardening principles. This exercise in interpretive archaeology attempts to reveal the intentions of the gardeners so further claims can be made about issues of internee agency and identity in Chapter 6. The diverse gardens at Amache both align with and depart from the concept of a Japanese garden. Possible explanations are presented and an argument is made for understanding the fluidity of the Japanese American garden within the context of Internment.

**Japanese Style Gardens**

The Japanese style garden as we understand it today has a long and complicated history, which makes it difficult to easily encapsulate or compartmentalize a stylistic definition. The Japanese garden originally developed from Chinese gardens of the Song Dynasty (960-1279 A.D.). Eventually the Japanese garden became more influenced by aspects of Japanese culture and religion. Considered the oldest garden-making document in Japan, *The Sakuteiki, or, Records of Garden-Making*, dates to about the 11th century A.D. and is attributed to Tachibana no Toshitsuna (though there may be other authors). Originally written on scrolls and lacking any pictures, *The Sakuteiki* features explicit directions relevant to the construction of gardens. Primarily written for the aristocratic landowners of the Heian capital of Heian-kyo (present-day Kyoto), *The Sakuteiki* provides the reader with specific information on how to construct a proper garden.
Detailing the roles of nature and taboo, the scrolls discuss the use of rocks, water, and plants in the formation of a Japanese style garden. Aristocrats living in Heian-Kyo had very formalized real estate where buildings formed a semi-symmetrical landscape composed of interconnected boxes, with a southern court used for an ornamental garden. Despite the general formalization of Heian aristocratic property, *The Guide to the Sakuteiki* states, “There were as many styles and forms of garden as there were garden owners” (Takei and Keane 2001:18).

Popularized during a period of great transformation in Japan, aristocratic gardens developed during an interesting episode of environmental change. Development for the capital Heian-kyo meant large-scale deforestation for the construction of lower-class residences. Because of this, the immediate environment was largely man-made rather than a wild and natural environ. While people rarely traveled far from the capital, just outside of Heian-kyo was a wilder forested area. Short trips to this environment could give gardeners ideas about their own residential garden as well as provide resources to incorporate back home. Known as *manabu* or *manabi*, the act of studying the wild environment is detailed in *The Sakuteiki* scrolls. The author suggests diverse styles of gardens, or motifs, which express different aspects of the natural environment. By “studying” these in the natural world, the gardener could get closer to an accurate interpretation. The author lists the “Ocean style, Broad River style, Mountain Torrent style, and Wetland style” as common motifs gardeners use. Since the goal of traditional gardening is to recreate an authentic microcosm of the natural world, attention to detail is important. In addition to garden styles, there also exist different styles of islands and
waterfalls to incorporate. The precise details of “how gardens should be” stems from attentive observation of the natural environment by the author.

_The Sakuteiki_ largely describes two styles of garden: the _Tsuki-yama_ (Artificial-Hill garden) and the _kare senzui_ (Dry Garden style). The Artificial-hill garden has a very definitive design layout wherein hills or mountains are depicted in the background with a water feature in the foreground and an island contained within the water feature (Engel 1959: 19-20). The _tobi-ishi_, is a path of steppingstones that guide the viewer through the garden. Carefully trimmed trees and mossy ground cover are featured throughout the Artificial-hill garden.

_Kara senzui_ (literally, “dry mountain water”) refers to the Dry Garden Style but at the time of _The Sakuteiki_, simply referred to areas of a garden evocative of landscapes devoid of water. This term would evolve over time to become _kare sansui_, the sand and stone courtyard gardens built in Zen temples and in the domains of the warrior class (Takei and Keane 2001: 161). _Kare sansui_, used within the context of this chapter refers to the more recent translation. These stylized gardens represent the highly symbolic re-interpretation of the natural environment through the eyes of the gardener and the viewer (Engel 1959: 20).

A third style of Japanese garden is the _Cha-niwa_, or Tea Garden. This garden style has three major components and is directly related the Japanese tea ceremony, which has its origins in the 9th century, pre-dating the writings of _The Sakuteiki_. The Tea Ceremony is a highly formalized procession that moves through three spaces and is ultimately about a transformative aesthetic experience. The first space is the _soto-roji-
niwa or outer entrance garden. This first space is defined as the movement from the street up to a waiting pavilion and then along a winding narrow path of inlaid stepping stones (roji) up to the actual teahouse where the ritualized tea ceremony is performed. Tea Ceremony scholar Kakuzo Okakura explains the roji: “…the garden path which leads from the machiai (waiting pavilion) to the tearoom, signified the first stage-of mediation-the passage into self-illumination” (Okakura 1956). The roji induces calmness and intends to separate the participant from the environments of an urbanized cityscape.

The second space, the teahouse, is where the actual formal ritual is performed. From the teahouse, the third space can be seen, the inner teahouse garden. This garden is characterized by its understated qualities. The inner teahouse garden is a simple collection of subdued rock and plant forms. Symbolically, the garden is meant to represent the two Japanese concepts of wabi and sabi. In the 1994 book, Wabi-Sabi: For Artists, Designers, Poets and Philosophers, author Leonard Koren asserts, “wabi-sabi is a beauty of things imperfect, impermanent, and incomplete; a beauty of things modest and humble; a beauty of things unconventional…” and that this concept is “one of the defining aesthetic sensibilities of Japanese civilization” (Koren 2015:7). Wabi is understood as “a sense of quietness, astringency, good taste, and tranquility,” while sabi is defined as “the appearance of antiquity, age, hoariness, rusticity, natural textures” (Engel 1959:21). These concepts together embody a true Japanese sense of understanding beauty: the beauty of transience and imperfection. This concept is not unique to any particular one garden; rather it defines a Japanese aesthetic.
David Engel describes three fundamental characteristics to the Japanese style garden: “naturalism, asymmetry, and a drawing together of natural architectural forms into a unified, harmonious composition. It is a work of art, built on a human scale, naturalistic in content but subjective in spirit” (1959:5). Some characteristics that would contrast with these could be: priority of human expression over natural expression and symmetry. The contrast to an artistic composition may be a utilitarian creation. The Tea Garden stresses the process of experiencing the garden rather than a singular finished product.

Methods

In order to best compare the excavated gardens, a list of Japanese design principles as well as a list of the attributes and inclusions associated with the excavated gardens was compiled. Finally, an attribute table was created where the excavated garden features were matched up with the design principles (see Table 5). This interpretive exercise allowed me to try and analyze the intentions of the gardeners as discussed in chapter 6.

7G

Located in Block 7G, just South of the Buddhist Church, are barracks 5 and 6, which face each other. In this general vicinity, two major features were identified. Feature 7G-1A/7G-1B and Feature 7G-2. Feature 7G-1 is believed to be the Mataji Umeda garden despite the fact that we know Umeda moved across the way at some point during his stay.
It is documented at Amache that internees moved about from designated barrack rooms and shifted living situations over the course of internment. Due to this reason, we cannot be absolutely certain if the expert gardener Mataji Umeda was associated with Feature 7G-2 but what I would like to stress about this area is the dialogue between the elaborate Feature 7G-1A and the 2010 excavated Feature 7G-2 entryway garden. Distinct contrasts exist between these two features and reveal a few points of interest about the landscaping design choices at Amache. In all likeliness, because of the extent that we know Umeda was an expert gardener, he is probably associated with both garden features in 7G.

Feature 7G-1 is technically an entryway garden because of its location, however it extends around the West side of Barrack 6 and would be in clear view of people navigating their way to the Buddhist temple located at the North end of Block 7G. This transitional space between the public walkways of the Block and more private “front yard” between barracks makes Feature 7G-1 a particularly unique garden.

Feature 7G-1A/B appears most similar to a Tsuki-yama style garden because of the inclusion of its pond feature. Most interestingly, the pond feature is constructed of poured concrete. This material would surely have been deliberately sought out by the gardener and perhaps existed in excess from the construction of camp. Oral histories document trips to the local hardware store in Lamar so it would not be inconceivable that a determined gardener would make the trek in order to satisfy the need for a water feature (Personal communication with Tom Shigekuni).
In addition to the three styles of garden identified previously, three “moods” exist within the realm of the Japanese garden. The moods are placed within a hierarchy based upon levels of formality. The first mood, shin, is the most formal and is often located at the front of a home. Gyo is a transitional and intermediate mood that often leads to the third mood, so, located at the rear of a home. The so style is the least formal garden mood due to its location within the private backyard of a home (Engel 1959:21).

According to the mood classifications, Feature 7G-1A adheres to the shin style and Feature 7G-1B adheres to the transitional gyo mood. The biggest difference is that the barrack “backyard” layout at Amache does not correlate to the courtyard layout of Japanese homes or even the private backyards of non-confined peoples homes. In fact, the back of barrack 6 would be a pretty public space due to its proximity to the Buddhist temple. Helen Yagi Sekikawa noted that the top photograph in Figure 5.1 was taken in the backyard of Umeda’s residence. It is quite miraculous to identify the potential deliberate usage of two out of the three moods by one gardener, Mataji Umeda.

If Feature 7G-1 represents a more visible garden, then Feature 7G-2 presents a contrasting potentially more private entryway garden. The nature of internment really broke down much of the private individual freedoms of the internees in drastic ways. One way an internee could salvage some semblance of personal privacy was through the design of an entryway garden. In Western society, the most common method for maintaining privacy is the construction of a fence. The excavation of Feature 7G-2 revealed a number of rectilinear wooden posts. Close inspection of photographic evidence shows that one of Umeda’s gardens has distinct plywood planks dividing the
interior space with the public barrack walkway (see Figure 5.1, bottom photograph). I argue that it is most likely that Umeda’s later home was in Barrack room 5-F, with the private entryway garden area and Feature 7G-1 was simply a more elaborate garden designed across the way during his earlier years at Amache. Another inclusion of note in Feature 7G-2 was a medium-sized piece of crystalline quartz. This particular specimen could have been found at the Arkansas river and will later be compared with stones found in 12-H.
Figure 5.1. Historic photographs of Umeda gardens. Photos courtesy of Helen Yagi Sekikawa.
Feature 12H-2 was an entryway garden excavated during the 2010 field season and was located in front of Barrack room 5-F, which was home to the Hirota family from Los Angeles. The Amache directory notes that Saiichiro and Bun Hirota lived in 12H-5F in both 1943 and 1945. Saiichiro is noted as the manager and owner of a retail grocery store in the 1940 census.

This particular garden was immediately identified by the ceramic plumbing pipes, which were sunk vertically into the ground to appear as terra cotta planters (see Figure 5.2). This salvage technique further demonstrates how integral the re-purposing of objects was in the creation of entryway gardens.

The Feature 12H-2 garden featured inlaid brick, likely forming a walkway or patio area. The Japanese have two design elements relevant to this sort of inlaid stone. *Tobi-ishi*, are steppingstones, while *nobedan*, are inlaid rock or cut-stone pavements. In the case of Feature 12H-2, it is likely we have an instance of *nobedan*. *Tobi-ishi* traditionally refers specifically to whole stones set into the earth. These walkways often protrude from the earth depending on the natural curvature of the stone. *Nobedan*, on the other hand, refer specifically to the inlaid and cut stone. Brick, being a much more prevalent resource (either from salvaging or purchase from the hardware store) would further demonstrate resourcefulness and adaptation in the creation of an entryway garden.

The concepts discussed here of course have translations into Western gardening techniques. Westerners use terra cotta planters and brick patios are just as common in the West. Certainly there is overlap between what is considered a Western and Japanese
garden so it can be difficult to determine the intention of the gardener and how they identify themselves. While Feature 12H-2 may not be a “smoking-gun” about how internees navigated both Japanese and American identities, the Feature provides an excellent example with which to compare the 2014 excavated 12-H garden.

Feature 12H-4 was identified through surface survey and GPR during the 2010 field season but was not excavated until the 2014 field season. Feature 12H-4 was an entryway garden located in front of Barrack room 6F, which was occupied by the couple Chosaburo and Ai Okumura from Los Angeles. A conversation at the 2015 Amache
reunion in Las Vegas revealed that the Okumuras were involved in other traditional Japanese activities. As recalled by a young neighbor in Block 12H, the Okumuras were “very refined” (personal communication 2015).

Feature 12H-4 featured the use of river cobbles as is seen in other garden contexts as well as various set concrete pieces. A lack of planter holes and the inclusion of the concrete make this particular garden most similar to the Kare sansui style garden. The larger concrete pieces surrounded by the smaller cobbles could possibly evoke an island-style dry-landscape garden (see Figure 5.3). Two excavated inclusions are of particular note. One is a piece of greenstone and the other is a piece of magnetite. While the greenstone could have been collected at the Arkansas river, magnetite is not found locally (Haas and Glasser 2015). These two stones, like the quartz piece found in Feature 7G-2, show how important decorative stones were to the gardeners of Amache. Mataji Umeda was from Fresno County while the Okumura’s were from Los Angeles. This comparison shows that despite 12-H’s reputation as a Block with refined people; rural people were making similar design choices across the site.
Feature 11H-7 was excavated during the 2012 field season and was an entryway garden located in front of Barrack rooms 9F and 9E. The two men who lived in 9E are identified as Zenhichi Sairyo and Kashichi Yokoi. Sairyo’s occupation is listed as gardener in the WRA records while census data reveals Yokoi was a nursery operator in 1940. Both men from the Los Angeles area clearly possessed a proficient knowledge base for the creation and maintenance of a garden at Amache.

Feature 11H-7 offers some of the most interesting links to Japanese garden design principles at Amache. The most startling is the 1.5 meter long feature comprised of sunken concrete pieces that runs parallel to the barrack and extends in front of the barrack entryway. The sunken concrete most certainly appears as a mountainscape. The importance of setting stones is well documented in traditional Japanese gardening. The
Sakuteiki explains, “The stones of steep mountain cliffs rise in the angular manner of folding screens, open shutters, or staircases” (Takei and Keane 2001:184). This evocative image perfectly describes the pieces excavated in Feature 11H-7.

Another aspect of Feature 11H-7 was the inclusion of an inlaid cedar walkway extending from just past the set-stones up to the barrack entrance (see Figures 5.4 and 5.5). Oral history documents that the Tea Ceremony was practiced at Amache. One explanation for this cedar walkway is that it is, in fact, an example of the roji garden that leads from the waiting area to the Tea House. While it would be considered a contradiction to have something as imposing as the mountainscape included in a Tea garden, it is entirely possible that this is a perfect example of the fluidity of landscaping at Amache. Clearly the gardeners who constructed this particular entryway garden were knowledgeable of traditional gardening practices but maybe they were also cognizant of both how to adapt these practices to serve a necessary function (Tea Ceremony) as well as how to simply “make-do” given the limited resources and nature of Amache’s environment.

Regardless of whether or not we see a synthesis of Japanese garden styles, the mountainscape demands a particular movement in how a person interacts with the barrack. The set-stones create a wall that requires a person move around them. This attention to the process of moving through the garden space also coincides with the Tea garden and it’s attention to mindfulness or wabi.
Figure 5. 4. Photograph of Feature 11H-7 excavation. Wooden walkway revealed.

Figure 5. 5. Photograph of Feature 11H-7 excavation. Wooden walkway and concrete wall visible.
Conclusions

Table 5

<table>
<thead>
<tr>
<th>GARDEN</th>
<th>ATTRIBUTES</th>
<th>DESIGN PRINCIPLES</th>
<th>POTENTIAL GARDEN STYLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>7G-1A/B</td>
<td>Private front yard</td>
<td>Shin mood</td>
<td>Tsuki-yama</td>
</tr>
<tr>
<td></td>
<td>Wraps around to side of barrack</td>
<td>Gyo mood</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concrete pond feature</td>
<td>Set stones</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sunken concrete slabs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crushed brick</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shell</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crushed limestone</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rectilinear wooden posts</td>
<td>Fencing</td>
<td>Hybrid</td>
</tr>
<tr>
<td></td>
<td>Crystalline quartz inclusion</td>
<td></td>
<td>Japanese/Western</td>
</tr>
<tr>
<td>7G-2</td>
<td>River cobbles</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vertical ceramic pipes</td>
<td>Nobedan</td>
<td>Hybrid</td>
</tr>
<tr>
<td></td>
<td>inlaid brick</td>
<td></td>
<td>Japanese/Western</td>
</tr>
<tr>
<td>12H-2</td>
<td>Vertical ceramic pipes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>inlaid brick</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>River cobbles</td>
<td></td>
<td>Kare-sansui</td>
</tr>
<tr>
<td>12H-4</td>
<td>Concrete</td>
<td></td>
<td>Island-style</td>
</tr>
<tr>
<td></td>
<td>Greenstone inclusion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Magnetite inclusion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11H-7</td>
<td>Sunken concrete slabs</td>
<td>Set stones</td>
<td>Mountainscape</td>
</tr>
<tr>
<td></td>
<td>Inlaid cedar walkway</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wabi-sabi</td>
<td></td>
<td>Roji</td>
</tr>
</tbody>
</table>

Each of the excavated entryway gardens contributes to how we understand landscaping at Amache. The explicit Japanese design principles and what is seen through the excavations are drastically similar. The comparisons in this chapter are interpretive suggestions but as the comparisons between the excavated gardens grow, it becomes
more convincing that we see a clear use of diverse Japanese design principles and the construction of different kinds of both Japanese gardens and moods.

Studies continue to demonstrate internee ingenuity through the salvaging, re-purposing, or acquiring of various building materials. Whether it is the ceramic planters or inlaid brick in Feature 12H-2, the cedar walkway of 12H-7, or the use of concrete both as set-stone or poured as is the case in 7G-1. Cobbles are collected from the Arkansas River and larger more magnificent stones are being procured from other locations.

In the next chapter I discuss the implications these design decisions have in the expression of a Japanese American identity. Explicit decisions reflect the agency of the internees and the adaptation of traditional principles speaks to the fluidity of identity, especially under the conditions of confinement.
CHAPTER SIX: ENTRYWAY GARDENS
AND THE POLITICS OF IDENTITY

Introduction

Chapter 6 discusses my third and final research question: what are the implications of entryway gardens related to the maintenance of a Japanese American identity? This chapter concerns what interpretations can be made about the maintenance of a Japanese American identity while reconciling life under confinement. My third research question deals specifically with ideas about the importance of tradition and agency in the construction of an entryway garden. I seek to address how the internee’s landscape design decisions at Amache fit into the historical context of the Japanese American commitment to agriculture and landscape.

Since the dawn of post-processualist archaeology, there has been an ongoing desire to rediscover the individual within the context of the societies under examination. By drawing on various social theorists, these archaeologists attempted to reveal the various power struggles inherent in everyday life. By examining practice theory and its adoption in historical archaeological thought, I seek to present a toolkit for the analysis of cultural phenomena during the period of confinement at Amache. Using practice theory as a theoretical framework helps explain seemingly contradictory gardening behaviors found in the archaeological record.
Tradition and Horizon

In James Deetz’s seminal 1977 work, *In Small Things Forgotten*, the author presented a novel way for historical archaeologists to make sense of the diverse and disparate assemblages that had accumulated through years of excavation. Through a careful analysis of specific archaeological assemblages, Deetz posited questions and presented interpretations with larger meaning than simply a stylistic difference. In one chapter, Deetz reveals how a change in gravestone design spoke to a changing epistemological view on death in early colonial New England. I believe through a close analysis of the archaeology of entryway gardens, we can begin to see what role ideology played during the period of confinement.

Deetz presents two concepts that are of particular use to the analysis of entryway gardens: tradition and horizon. The author states, “An archaeological tradition as it is defined in prehistory is a pattern of long persistence of cultural traits in a restricted geographical area. It is the hallmark of cultural conservatism, and examples of such traditions are many” (1977: 40). The second definition is, “...horizon in archaeology is a pattern characterized by widespread distribution of a complex of cultural traits that lasts a relatively short time” (1977: 40).

These concepts give us a point of entry in the analysis of entryway gardens as a cultural phenomenon. Since there is such a rich history behind the Japanese garden, we can identify this as a tradition by Deetz’s definition. A “hallmark of cultural conservatism,” the traditional Japanese garden is governed by a rigid set of guidelines i.e. what is considered appropriate or inappropriate. The practice and design of entryway
gardens appeared for a very short period of time. Despite the relatively short time period of confinement, the presence of entryway gardens was ubiquitous. Though similarities can be drawn between the entryway gardens of confinement and the landscaping of a front or backyard prior to, or after internment, the specifics are quite different. While the basic practice is the same, confinement presents a severely different context. Given the rich history of agricultural and landscape work on behalf of the Issei prior to internment, it becomes no surprise that the Japanese Americans continued to practice gardening even under confinement.

**Dominance and Resistance**

In the early 90’s and well into the 21st century a number of historical archaeologists began to really focus on the agency of individuals and the exposition of the dominance/resistance dynamic. In *The Archaeology of Inequality*, an edited volume by Randall H. McGuire and Robert Paynter, the authors present a series of case studies that reveal inequalities across various social lines including race, class, ethnicity, and gender. McGuire and Paynter state,

> The contributions on racial inequalities highlight the variation in the form of the color line, across time and throughout the USA, and the associated variation in the material strategies used by whites to dominate and by people of color to resist. (1991: 16)

The exposition of the dominance/resistance dynamic in historical archaeology greatly contributed to the marginalized voices of individuals who had effectively been written out of much of previous archaeological work. The authors assert, “We simply argue for additionally considering how humans create misery in the course of domination, and
remember that these actions spur others to resist domination in the hopes of alleviating their social conditions” (1991: 20).

The institution of Japanese American Internment is characterized by a series of oppressive and racist acts specifically designed for the domination of an immigrant. Aspects of domination coursed through many facets of confinement from the taking of land and property to the barbed wire and guard towers of the actual relocation centers. A number of works have sought to expose the daily acts of resistance by the Japanese Americans under confinement and do so effectively.

In *Artifacts of Loss*, Jane E. Dusselier, the author discusses the agency of Japanese American internees under the dominant structures of confinement. Dusselier states,

> Perhaps more dramatic than interior changes to internee living quarters and shared gathering places was the rearticulation of outside living spaces. Internees re-territorialized the camps, a process of altering hostile and unfamiliar landscapes into arenas of identity articulation in which differences are declared and subjectivities enacted. (2008:51)

The “re-territorialization” of the stark entryways of barracks into familiar and liveable spaces demonstrates a political act of agency by the Japanese Americans. Rather than simply endure confinement, Japanese Americans transformed the landscapes into spaces that aligned with a Japanese American identity.

Dusselier invokes the spirit of internee persistence in one passage that states, “Seventeen years old when he was imprisoned at Amache, Mas Ueysugi later recalled that many internees were former California farmers and accustomed to converting “marginally tillable soil” into “beautiful and productive” land. “At Amache,” Ueysugi continued, “we did the same.”” (2008: 63). The practice of landscaping was unhindered
by confinement and Ueysugi’s testimony demonstrates that despite the structures of confinement, Japanese Americans maintained a sense of identity by continuing a familiar way of life.

Landscaping, as an act of resistance is further demonstrated by one specific case at the Jerome Relocation Center in Arkansas. Internees constructed a makeshift porch attached to a barrack that served as a common dinner-time gathering place. In response, a War Relocation Authority official ordered the deconstruction of the porch under the pretense that it was a fire-hazard. Internees asserted the hypocrisy of this since barracks were, by nature, extreme fire-hazards. Dusselier hypothesizes that the WRA’s orders were a means to reduce gathering spaces at Jerome. The author explains, “As this example illustrates, issues of territory and power were critically important to camp administrators, which made gardening and landscape projects even more essential to re-territorialization efforts” (2008:87). Entryway gardens take a number of forms at Amache but the use of wooden fencing and constructed barriers is fairly common throughout. Porch-like areas were certainly constructed at Amache as evidenced archaeologically and through photographic documentation. While there are no recorded reports of the WRA actively ordering the dismantling of Internee landscaping projects, the fact that this happened at other Relocation Centers is testament to the idea that landscaping can be viewed as an act of resistance, at the very least, counter to the institution of confinement.

One concept many historical archaeologists have drawn upon is that of “hidden transcripts,” as identified by anthropologist James C. Scott. In *Domination and the Arts of Resistance*, Scott explains, “Every subordinate group creates, out of its ordeal, a “hidden
transcript” that represents a critique of power spoken behind the back of the dominant” (1990: xii). The author further clarifies, “The hidden transcript is not just behind-the-scenes griping and grumbling; it is enacted in a host of down-to-earth, low-profile stratagems designed to minimize appropriation” (1990: 188). I believe entryway gardens, at Amache and other internment sites, represent one particular hidden transcript. Though they could be viewed simply as a hobby, through a critical lens, their ability to “minimize appropriation” is revealed. Eleanor Conlin Casella states, “...landscape features indicate both the persistence of Japanese culture and its rich fusion with mainstream American culture, even while such non-normative expressions of identity risked sanctions” (2007: 136). The fact that all four gardens compared in chapter 5 show potential for Japanese gardening principles speaks to the devotion of Japanese Americans to maintain a Japanese ethnic identity under confinement.

**Collective Action**

A further nuanced version of agency in archaeology has been articulated by a number of scholars through the novel concept, *collective action*. This approach seeks to situate the actions of various conflicting groups. Rather than focusing primarily on resistance, collective action hopes to further explain the domination/resistance dialectic by looking at how sense can be made of discrepancies in the archaeological assemblages. Those discussing collective action build off of interpretivist archaeology and assert the necessity for multiple lines of evidence to make sense of complex understandings of the past (Preucel and Hodder: 1996). Dean Saitta states in *The Archaeology of Collective Action* that, “The application of new theory, and, especially, imagination to the study of
discrepancies can implicate novel organizational realities and dynamics for past societies, thereby contributing to learning and furthering the development of social theory (2007: 33).

David M. Carballo identifies one of the common themes of collective action studies as, “[a] clearer elucidation of the material correlates of mutual monitoring, signaling of affiliation, and social obligations associated with community membership (2013: 16). Casella and Dusselier identify cogent lines of evidence that reveal resistance and the maintenance of a Japanese identity against the dominant structures of confinement. In order to further complicate the understanding of entryway gardens, through the lens of collective action, I find it most useful to reconcile the “signaling of affiliation” and indicators of “community membership” with the “discrepancies” evidenced within the gardens.

The pervasive application of Japanese gardening principles lines up well with a “signaling of affiliation;” entryway gardens certainly convey a Japanese ethnic identity. The discrepancies arise when we see elements that conflict with traditional Japanese design principles. These discrepancies are seen archaeologically through potential Western gardening design principles (7G and 12H-2) as well as the conflicting synthesis of tea garden and dry-landscape garden designs (11H).

The deliberate choice of using recitlinear garden delineations (7G) and the use of stoneware pipe planters (12H-2) can be viewed as Western gardening decisions. While we expect there to be a fluidity in the expression of identity in the archaeological record, it is a worthy exercise to try and ascertain meaning from the discrepancies or outliers that
conflict with the traditional Japanese design principles prevalent in each of the excavated gardens. Internee ingenuity and re-purposing can be seen through many facets of confinement life (Swader 2015). The decision to create a rectilinear garden, use ceramic planters, and the synthesis of diverse and traditionally conflicting Japanese gardening principles could definitely be viewed as a means of “making-do” under the restrictions of confinement (Casella 2007:79). Japanese internment was, by definition, a period of turmoil for one target population of people. Under those circumstances, it is perfectly understandable that certain “concessions” would be made and the fluid identity of what it means to be a “Japanese American” would arise. Much of the social theory previously discussed explains that internee agency, resistance, dominant structures, and discrepancies between these conflicting forces can be identified in the archaeological record. A more recent concept in archaeological practice theory further contributes to the explanation of the phenomenon of entryway garden construction.

**Survivance and Residence**

Two concepts applied to archaeological practice theory that are of particular use to reconciling the discrepancies in the archaeology of entryway gardens are *survivance* and *residence*. The concept of survivance was first laid out by Gerald Vizenor and applied to Native American studies and critical literary thought. Vizenor explains, “Survivance stories are renunciations of dominance, detractions, obtrusions, the unbearable sentiments of tragedy, and the legacy of victimry” (2008:1). Stephen W. Silliman expands upon the concept of survivance and explains the virtues of its application to archaeological theory, “... survivance emphasizes creative responses to
difficult times, or agentive actions through struggle. It attempts to strike balance in these complicated interpretive realms” (2015: 59). The creation of entryway gardens at Amache is, in itself, a narrative of the “creative responses to difficult times.” The discrepancies laid out previously pose a problem for the clear understanding of internees intentions. Silliman establishes the second useful concept,

Acts of residence involve individuals staking out claims for themselves, even under contexts of oppression and domination, that may have little to do with outright or even impromptu resistance and that relate more to living through or in those worlds. (2001:194-5, 2015: 61)

Survivance and residence are extremely useful in reconciling the discrepancies found in the archaeology of entryway gardens. Through the lenses of survivance and residence, the creation of culturally fluid entryway gardens is the result of “living through” the “context of oppression.” Internees chose to create the entryway gardens out of necessity. The fact that we see a variety of design choices speaks to the individuality of internees, the backgrounds Japanese Americans brought with them to Amache, and the structural impositions of confinement.

**Conclusions**

Practice theory has played an integral part in the development of historical archaeology and its application to the entryway gardens at Amache proves very useful. The use of practice theory has greatly nuanced the critical understanding of the assemblages archaeologists study and how we interpret the people who created those assemblages. In order to better understand Amache and the phenomenon of entryway gardens, it is important to try and understand what this period of conflict and turmoil meant for those who experienced it. Issues of agency, resistance and domination, and the
navigation of a Japanese American identity all speak to why one would create an
entryway garden and why the gardener chose to design the entryway garden in a specific
manner. With a great depth of landscaping knowledge, the application of traditional
Japanese gardening principles, and the ingenuity necessary for living under confinement,
Japanese Americans created the truly unique entryway gardens of Amache.
CHAPTER SEVEN: CONCLUSION

The analysis of entryway gardens at Amache offers a specific look into everyday life under confinement. Simply looking at photographic evidence, the complete transformation of the landscape from a desolate place to a thriving and lived-in place of beauty is startling. When you take a closer look at the phenomenon of gardening and landscaping at Amache a much deeper picture is revealed. I developed a series of research questions in order to best study entryway gardens and have presented the results of these questions through multiple lines of evidence.

By testing a variety of archaeological methods, I present the best practices for the study of entryway gardens. Surface survey, ground-penetrating radar, excavation, palynology, soil chemistry, ethnobotany, and oral history all contribute to a robust dataset for the study of gardens at Amache. Each method has its merits and limitations and the testing of these provide great information about the future application of the methods at the site.

On the surface level, the remains of entryway gardens provide little insight into the intricacies of their construction. Using the data collected, we can begin to piece together what decisions Japanese Americans made in the construction of entryway gardens. Through the analysis of the assemblage and a close reading of traditional
Japanese gardening principles, we begin to see a very clear picture of what was important to the gardeners. The entryway gardens at Amache demonstrate a clear understanding of traditional Japanese knowledge and serve as an indicator of how the gardeners chose to identify themselves. We see a confluence of traditional knowledge and the adaptation of traditional knowledge to the rigors of confinement. Upon closer examination we can attempt to understand the ideology of the gardeners and how they maintained a Japanese American identity.

Practice theory is used to gain a better interpretation for what exactly the entryway gardens say about issues of identity under confinement. We can identify resistance against structures of domination as well as discrepancies between what may be considered traditional (Japanese) and a Western identity. Survivance and residence offers a means to reconcile these differences and how the gardener was simply “making do” under the restrictions of confinement.

A few questions arise out of the research presented in this thesis. We have excavated four entryway gardens and discovered a great deal of information from all four. Two of the excavated gardens were in Block 12H and both seemed to display more traditional principles than the other two excavated entryway gardens. These two gardens were also between the same set of barracks. It may be that this particular barrack area presents a unique case at Amache since we know the history of the gardeners. Despite this, we know that the gardens and traditional gardens are so widespread at Amache, it may be worth investigating somewhere completely different where we have a good
knowledge of the history of a particular gardener. This would allow us even richer comparison.

A recurring theme of internment studies is the pervasiveness of Shikata-ga-nai, “It cannot be helped” or “nothing can be done about it.” From a Western perspective, this translation could be interpreted as pessimistic. There is an aspect to Shikata-ga-nai, which is the maintenance of dignity in the face of adversity and exterior forces. The entryway gardens of Amache demonstrate this dignity and fly in the face of the dominating structures of confinement. In the period of time that Japanese Americans lived at Amache, they created liveable spaces despite poor conditions. Those forced from their homes carried more than a few physical reminders of daily life. The maintained dignity is present all across Amache. The entryway gardens are but one symbol of this perseverance under confinement.

Within the themes of internee ingenuity and studying the landscape, there are numerous potential areas for further research. One particular area I would be interested in investigating are backyard areas. Backyards would provide a rich dataset to compare with the entryway gardens. The DU Amache Project has, at times, investigated what sort of activities may occur in public view versus private areas. We know that the Umeda Barrack had a garden in its backyard and it may be worth investigating some back areas in Block 12H.

The information gained has been extremely useful in the preservation and interpretation of the site. The importance of studying areas likely to be impacted is incredibly important, especially before wide-scale site reconstructions. The gardens at
Amache are not readily identifiable on the surface level. By improving our methods each field season, we can be sure to learn as much information about the widespread activity of gardening without worry of their destruction. The environment at Amache has become quite overgrown since the period of internment. The landscape does not necessarily appear very similar to how it looked under confinement. By studying the gardens we can begin to tell a much more accurate story of how internees interacted with a foreign landscape. With new information on the various activities of the people who endured internment, we can begin to see a much clearer picture of what actual everyday life was like at Amache.
Archaeological Institute of America
2011  Archaeology of World War II. *Archaeology* 64(3): 26-35.

Archer, Steven N.
2009  *Amache Garden Testing - Archaeobotanical Analysis*. Manuscript on file at the University of Denver, Department of Anthropology.

Beckwith, Ronald
2010  *Landscape Gardens and Gardeners at Manzanar Relocation Center* Presentation at the Society for Historical Archaeology Conference.

Bristow, Charlie S. and Harry M. Jol

Brown, Kendall H.

Burton, Jeffery, and Mary Farrell, Florence Lord, and Richard Lord

Carballo, David M.

Carrillo, Richard F. and David Killam

Casella, Eleanor Conlin
Clark, Bonnie J.


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

Clark, Bonnie K., David Garrison, and Paul Swader
2012 *Archaeological Investigations at the Granada Relocation Center (Amache), National Historic Landmark, Prowers County, CO: Report on the University of Denver 2010 Field Season*

Conder, Josiah

Conyers, Lawrence B.


Currie, Christopher

CWRIC (Comission on Wartime Relocation and Internment of Civilians)

Daniels, Roger
Deetz, James

Dobres, Marcia-Anne; John E. Robb

Dumas, Enoch and Margaret Walther

Dusselier, Jane E.

Ellis, Sheri Murray
2004  *Camp Amache, Prowers County, Colorado: Site Management, Preservation, and Interpretive Plan.* SWCA Environmental Consultants.

Engel, David H.

Haas, Jeremy and Adam Glasser
2015  *Artifact Analysis Report: 8F and 12H.* University of Denver Historical Archaeology Course.

Harvey, Robert

Helphand, Kenneth I.

Hirahara, Naomi

Houston, Jeanne Wakatsuki and James D. Houston

Ichioka, Yuji
Ishimoto, Tatsuo and Kiyoko Ishimoto  

Itoh, Teiji  

Jones, John  
2010 *Analysis of Pollen from Amache Internment Camp, Colorado.* Washington State University, Pullman, WA.

Kamp-Whittaker, April  

Koren, Leonard  


Marin-Spinotta, Eggleston, Szymanski  
2015 *Camp Amache Soil Chemistry Report.* University of Wisconsin, Madison, WI.

McGuire, Randall H. and Robert Paynter  

National Park Service  

Noah, Anna C.  
1999 *An Archaeological Study of the Japanese Gardens of Manzanar World War II Relocation Center.* University of California, Los Angeles, Anthropology Department.

Noda, Kess  

O’Brien, David J., and Stephen S. Fugita  
Preucel, Robert W. and Ian Hodder
1996  *Contemporary Archaeology In Theory: A Reader.* Wiley.

Purser, Margaret

Saitta, Dean

Satsuki, Ina.

Schrager, Adam

Scott, James C.

Sears, Roebuck And Co.

Sears, Roebuck and Co.
1944-45 Sears, Roebuck and Co., Fall and Winter, Minneapolis Edition 189.

Shew, Dana Ogo

Silliman, Stephen W.


Simmons, T. H., & Simmons, L.
Skiles, Stephanie  

Skiles, Stephanie A. and Bonnie J. Clark  

Slaughter, Michelle Ann  
2006  *An Archaeological and Ethnographic Examination of the Presence, Acquisition, and Consumption of Sake at Camp Amache, a World War II Japanese Internment Camp.* Unpublished Master's Thesis, Department of Anthropology, University of Colorado at Denver.

Swader, Paul  

Takei, Jiro; and Marc P. Keane  

Tamura, Anna  

Tsu, Cecilia M.  
2013  *Garden of the World: Asian Immigrants and the Making of Agriculture in California’s Santa Clara Valley.* OUP U.S.A.

Vizenor, Gerald  
2008  *Survivance: Narrative of Native Presence.* University of Nebraska Press, Lincoln, NE.

Yamada, Gayle K. and Dianne Fukami  