"IN BITS AND PIECES REMEMBERED": REVISITING THE ARCHAEOLOGY OF FORT VASQUEZ, A NINETEENTH CENTURY TRADING POST

By

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This thesis entitled: "In Bits and Pieces Remembered": Revisiting the Archaeology of Fort Vasquez, a Nineteenth Century Trading Post written by Megan Murphy has been approved for the Department of Anthropology

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"In Bits and Pieces Remembered": Revisiting the Archaeology of Fort Vasquez, A 19th-Century Trading Post

Thesis directed by Professor Catherine M. Cameron

This study examines the archaeology of Fort Vasquez, a nineteenth century fur trade fort in the South Platte River Basin of Colorado that operated from 1835-1842. I use artifact analysis, historical documentation, historical and archaeological analogue, expert opinion, and the excavation notes of Dr. James Judge from 1970 to address two research questions. 1) What are the global trade connections that can be identified from the Fort Vasquez artifact collection? 2) Is Dr. James Judge's hypothesis about the function of Fort Vasquez as being primarily a storage facility out of which traders operated remotely, supported by an in-depth analysis of specific artifact categories and updated historical and archaeological research regarding the Fur Trade Era.

I determined through my analysis of beads, pipes, ceramics, buttons, leather, and miscellaneous ornamentation that Fort Vasquez had global trading connections to countries in Europe and Asia. Additionally, my examination of these artifact categories combined with other lines of evidence leads me to conclude that Judge's hypothesis is not well supported. I instead propose that Fort Vasquez primarily functioned as a nexus of social events and trade.

DEDICATION

For those who support and encourage me:

To my sister and best friend for your never-ending support; to my mom who taught me to be curious and to ask questions (at an impossibly fast rate); to my dad who has encouraged me to pursue archaeology since I decided to do so in third grade (I am one step closer to saving a seat in my lecture hall for you). To my friends at the Fort Vasquez Museum who have taught me more than I could have ever learned on my own; Bill, Amy, Daniel, Natalia, Kama, Mitch, and many more. To my family at Front Range Boxing Academy who really get me; Dave, Gib, Alex, Althea, Reilly, Sarah, and anyone else who has ever hit me with a solid jab to the nose: I love you guys. To the amazing women in my academic career thus far who have been incredible mentors to me; Maria Bruno, Ellen LoFaro, Sarah Sherwood, Magda Siekert, and Emily Pawley. To my friends in the CU Boulder Anthropology department who have shaped me, challenged me, and inspired me; Erin Smith, Kaitlyn Davis, Kelly Zepelin, Erik Jurado, Zach Cooper, Devin Pettigrew, Anden Drolet, Sam Jo Linford, Bailey Duhe and so many more. To Elyse and Sam Burditt, I love you both dearly. And of course, to my partner, Dylan Iverson, who is the most patient man in the world.

And for those who watch over me; Jack, Val, and Joan:

"A little while and I will be gone from among you, whither I cannot tell. From nowhere we come, into nowhere we go. What is life? It is a flash of firefly in the night. It is a breath of a buffalo in the wintertime. It is as the little shadow that runs across the grass and loses itself in the sunset." – Isapo-Muxika, Chief Crowfoot

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CONTENTS

1.	INTRODUCTION	2
	A. Purpose of Study	4
	B. Importance of Study	7
	C. Summary of Methods	8
	D. Organization of the Thesis	8
2.	HISTORICAL BACKGROUND	11
	A. Global Connections: The Beginning of the Fur Trade	12
	i. Phase 1	13
	ii. Phase 2	16
	iii. Phase 3	17
	B. The Fur Trade in the Far West	19
	C. Indigenous Life on the Great Plains	21
	D. Indigenous Trade on the Great Plains	26
	E. Fort Vasquez and the South Platte Fort Concentration	
	F. The Archaeology of Fort Vasquez	37
3.	METHODS	44
	A. Data Sources	48
	B. Part 1: Fort Vasquez Function Hypothesis	

	C. Part 2: Artifact Analysis
	i. Beads53
	ii. Pipe Stems and Bowls54
	iii. Ceramics55
	iv. Additional Artifact Types56
4.	RESULTS
	A. Room and Site Function
	B. Artifact Analysis Results
	i. Ceramics69
	ii. Pipes76
	iii. Beads92
	iv. Buttons102
	v. Miscellaneous Ornamentation109
	vi. Leather112
	C. Artifact Analysis Conclusion117
5.	CONCLUSION121
	A. Outcome of Research for the Fort Vasquez Museum125
	B. Directions for Future Research

TABLES

Table
3.1 Number of Artifacts Analyzed versus Total Number in FV Collection
4.1 "Distribution of the Most Frequently Occurring Artifacts in the Original Fort Rooms" from
James Judge's 1971 report64
4.2 Harrington's Pipe Stem Bore Dating Scheme77
4.3 Buttons Analyzed from the Fort Vasquez Collection103
4.4 Summary of Findings for Artifact Categories Analyzed in 2019120

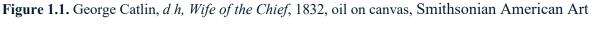
FIGURES

Figure
1.1. George Catlin, d h, Wife of the Chief, 1832, oil on canvas1
1.2. A map showing the location of Fort Vasquez
2.1. The last known photograph of the ruins of Fort Vasquez
2.2. A redrawn map of Fort Vasquez with corresponding room interpretations from Judge's
report
3.1. Cody Newton's (2017) map of Fort Vasquez
4.1. A drawing by Lieutenant Albert from Comer's "Ritual Ground" (1996)61
4.2 An illustration from Judge's (1971) report depicting the location of the post-holes in Room
9
4.3. A map depicting my reinterpretation of the room functions in Fort
4.4. Two pie charts depicting percentage of space devoted to functional categories according to
Judge's and my own interpretation
4.5. a stoneware sherd from the Fort Vasquez collection70
4.6. An earthenware sherd from the Fort Vasquez collection70
4.7. Bar graph depicting number of sherds per ceramic type72
4.8. Average Thickness in Millimeters per Ware Type Bar Graph72
4.9. Pearlware with transfer-printed décor from the Fort Vasquez collection73

4.10. Percentage of Total Sherds Excavated by Room Bar Graph	.74
4.11. Percentage of Predicted Vessel Type Pie Chart	75
4.12. A pipe stem from the Fort Vasquez collection	78
4.13a-I Pipe Bowls	83
4.14 a-f Pipe Bowls	87
4.15 President Filmore Head Pipe	.86
4.16 Percentage of Total Pipes by Room Bar Graph	88
4.17 Evidence of Smoking on Pipe Bowls Pie Chart	.89
4.18 Number of Beads per Type Bar Graph	92
4.19 Number of Seed and Pony Beads by Color Bar Graph	93
4.20 Seed beads that exhibit surface peeling from the Fort Vasquez collection	94
4.21 A faceted or "Russian blue" bead from the Fort Vasquez collection	.94
4.22. A white padre bead and a sky blue padre bead from the Fort Vasquez	
collection	.95
4.23. A white tube bead from the Fort Vasquez collection	.96
4.24. A blue oval or "barley corn" bead and three white "barley corn" beads from the Fort	
Vasquez collection	97
4.25. A Venetian skunk bead from the Fort Vasquez collection	98
4.26. A glass lamp-work bead from the Fort Vasquez collection	98

4.27 A bone bead from the Fort Vasquez collection with the interior cross-section and the
polished exterior
4.28 Percentage of Total Beads by Room Bar Graph101
4.29 An image of Button a104
4.30 An image of Button b104
4.31 An image of Button c105
4.32 An image of Button d105
4.33 An image of Button h106
4.34 Percentage of total buttons by room Bar Graph107
4.35 Artifact 170~13 from the Fort Vasquez collection109
4.36 Artifact 54~12 from the Fort Vasquez collection110
4.37 A photo from an Etsy.com listing for an identical scottie dog necklace111
4.38 The underside of the Scottie dog from the Fort Vasquez collection in comparison with the
underside of the antique listed on Etsy.com112
4.39 Artifact 233~13 in full view and close-up photo of the heel depicting evidence of machine
pegging112
4.40 Artifact 89~5 from the Fort Vasquez collection114
4.41 Photograph of artifact 179~13115
4.42 Percentage of Total Shoes by Room Bar Graph115





Museum, Gift of Mrs. Joseph Harrison, Jr., 1985.66.144

"Whilst painting my portraits amongst the Sioux, as I have described, I got the portrait of a noble Shienne Chief, by the name of Nee-hee-o-eé-woo-tis, the wolf on the hill (PLATE 115). The chief of the party of that tribe, on a friendly visit to the Sioux, and the portrait also of a woman, Tis-see-woo-na-tis (she who bathes her knees, PLATE 116)... This was one of the finest looking and most dignified men that I have met in the Indian country; and from the account given of him by the Traders a man of honour and strictest integrity. The woman was comely, and beautifully dressed; her dress of the mountain-sheep skins, tastefully ornamented with quills and beads, and her hair plaited in large braids, that hung down on her breast" – George Catlin (1844: 2)

Chapter 1

Introduction

When George Catlin travelled across North America painting portraits of Native Americans he worried that he was recording a way of life that was disappearing. What he did not realize was that his paintings would speak to the global trade connections of the nineteenth century. The portrait featured above is of a Cheyenne woman named *Tis-se-wóo-na-tis* or She Who Bathes Her Knees. She is the wife of Wolf on the Hill, whose likeness was also captured by George Catlin's brush (Catlin 1844). This portrait speaks to not only a new Cheyenne way of life, but to a large web of global connections that provided the Cheyenne and other indigenous peoples with new material culture that trickled into all aspects of life.

Tis-se-wóo-na-tis, for example, has red paint on her face. This paint is not from local berries or pigments, but rather is vermillion from China (Nassaney 2015; Gale 2009). The large medallions hanging from her ears and on her necklace are also from the east; they are Chinese tokens crafted into jewelry (Lemire 2018). The long blue beads hanging from her ears are faceted blue glass beads that would likely have come from Russian traders who received them from Bohemia (modern day Czech Republic). The small beads embroidered along her shoulders and collar are seed beads and could have been produced in Venice, Murano, Bohemia, or Amsterdam. Some of the larger beads could have come from China or the other aforementioned parts of Europe (Dubin 1987; Smith 2002; Spector 1976; Kidd and Kidd 1970; Hayes III 1982). These are just some of the many places connected in a global web of consumerism during the Fur Trade Era.

The stereotypical notion of native plains people is a band of mystical horse-riding warriors wearing and producing objects entirely from local sources, traveling across vast, featureless grasslands, and camping in tipis under the stars (Malis 1972). During the nineteenth century, however, the indigenous people living in the southwest/plains borderlands were very globally connected (Nassaney 2015). In fact, it is because of these global connections that horses were reintroduced to North America (Ostler 2016). As will become clear, much of the "mystical plains warrior" aesthetic is a recent development in native history. The presence of a prehistoric interregional trading network in North America made the proliferation of European goods during the Fur Trade Era faster. By first trading at native gatherings and then mountain-man rendezvous, it was not a jump for native people to become the primary clients at trading posts speckled throughout the American west (Comer 1996; Vehik and Baugh 1994; West 1998). This thesis will focus on one fur-trading post, Fort Vasquez, and how it is representative of the nineteenth century American west by focusing on two research questions: 1) What global trade connections can be identified through the Fort Vasquez artifact collection? 2) Is the hypothesis formulated from Dr. James Judge's 1970 excavation of the fort supported by a re-examination of the archaeological material with consideration of recent academic developments in historical archaeology? As I will discuss further, Judge hypothesized that Fort Vasquez functioned primarily as a storage facility that traders operated out of remotely, rather than a place for Native people to come to for trade and social events (Judge 1971).

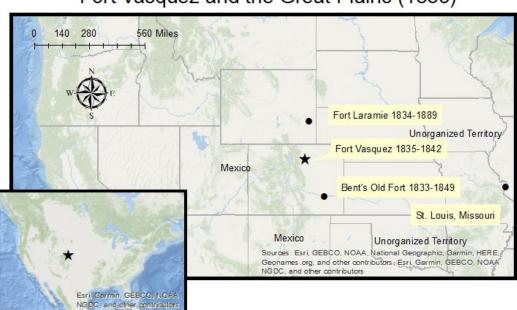
For the reader to consider my specific research questions and how I propose to address them, a brief discussion of the fur trade in the American west is required for context. The fur trade was a global phenomenon that began in the sixteenth century¹ and ended by the mid-nineteenth century. Trade began between Europeans and Native Americans on the north-eastern coast of the

¹ Fur has been traded in antiquity for thousands of years around the world, but the historical fur trade era (FTE) consists of the time when fur was being sought after and traded as the primary commodity (Nassaney 2015).

United States and gradually spread south and west through the following centuries (Phillips 1961). Fashion furs were the primary objective for early trappers and traders, but a multitude of other commodities were circulated. For most of this span of time beaver pelts were the main target in addition to muskrat and otter. By the early-nineteenth century, however, beaver-felt hats were no longer in style and had been replaced with silk hats. It was during this time that western trading forts, like Fort Vasquez, began to take advantage of an emerging market focusing on indigenous clients (Chittenden 1935a; Hafen 1965; Newton 2012; Lavender 1954; Phillips 1961). In the west, Native Americans produced bison hide robes to trade at Europeans' forts speckled throughout the plains for trade goods produced around the world, like glass beads, pigments, copper kettles, and fabric (Woodward 1979; Gale 2009). As I will detail in Chapter 2, this final phase of the fur trade was considerably different than early north-eastern trading ventures in terms of intensity of trade activity and the organization of professional enterprises (Wolf 1982; Nassaney 2015; Gilman 1982). The fur trade ended in North America with the discovery of gold in the west as economic focus shifted from maintaining business relationships with native Americans to forcibly displacing them in order to exploit the land for mining (West 1998)

A. Purpose of Study

This thesis will re-examine the archaeology of Fort Vasquez, one of four nineteenth century fur trade forts in a 15 mile stretch of Colorado's South Platte River basin, to better understand the activities that took place at the fort. The goals of this research are twofold. First, the artifact collection associated with the excavations in the 1970s has been underutilized since the project ended, with the exception of recent work undertaken by archaeologist Cody Newton (2012; 2017;



Fort Vasquez and the Great Plains (1835)

Figure 1.2. A map showing the location of Fort Vasquez in reference to the two largest trading forts of the time. Modern-day state lines are included for context.

2018). I will attempt to meet the collection's full research potential by examining six artifact categories to determine what kind of global consumer connections Fort Vasquez had during its time as a trading fort. I will also consider any artifactual evidence that suggests site use after the abandonment of the fort in 1842. Historical documents and eye witness accounts reference other secondary uses of the forts ruins and I will be testing these claims by determining if they are reflected archaeologically (Peterson 1982; Hafen 1964).

And secondly, I will be critically evaluating the conclusions drawn by Dr. James Judge about the primary function of the fort from his excavation of the site and offering my own interpretation. Beyond the reports published by the original site directors in the *Colorado Magazine*, their findings have not been reconsidered by the archaeological community in light of recent methodological and theoretical developments in the field (Baker 1964; Judge 1971). When looking at the site in its entirety, Judge concludes that Fort Vasquez's primary function was a storage facility, estimating that 8672 cubic feet were devoted to storage activity. He considers three other primary functions of the fort: maintenance, living quarters, and trade. According to his interpretation the least amount of space in the fort was dedicated to trade and the most was devoted to storing trade goods and maintaining the fort. He ultimately comes to the conclusion "that the primary function of the fortified trading post was to provide adequate security and maintenance facilities for a trading system in which the fort was more a base of operations for the traders than a center of trade for the Indians" (Judge 1971: 203). According to Judge this conclusion is supported by contemporary historical accounts of bringing trade goods directly to Indians to trade, rather than waiting for them to come to a trading post to conduct business.

In the conclusion of his site report Judge reflects on the proximity of the four forts along the South Platte River. He argues that it does not make sense for four competing businesses to be in such proximity to each other, especially during the early nineteenth century when there was seemingly plenty of space to spread out along the river. Judge contends that his conclusion about the primary function of Fort Vasquez provides a possible explanation as to the proximity of the four forts. Ultimately, Judges argues that the proximity of the forts was unimportant to the traders, as most of their business was likely done outside of the forts, which operated more like homebases. Judge believes that the forts were possibly built so close together, because of the availability of clay and soil required to construct adobe bricks (Judge 1971).

In this thesis I will re-evaluate Judge's conclusions using artifact analysis, field reports, historical documentation, and comparison to other contemporary forts. This will include a reinterpretation of the activities taking place within different rooms of the fort and a revised conclusion as to the primary function of the fort. Additionally, by considering the external global

connections and the internal daily activities this thesis will provide a more detailed and holistic conceptualization of Fort Vasquez and the fur trade of the west.

B. Importance of Study

Fort Vasquez has the potential to provide archaeologists and historians with a better understanding of the specific global connections that the American west and indigenous people had with the outside world in the nineteenth century. The artifact collection from the fort has been analyzed by scholars previously to provide a broad understanding of what general artifact types were being traded at the fort (Judge 1971; Peterson 1982; Newton 2017), but the sources of the artifacts have not been discussed in a way that would place the fort in a global consumer network. Additionally, Judge's hypothesis about the function of Fort Vasquez has not been evaluated or tested. This study will address both the exterior global connections of the fort, as well as the interior function of the fort.

Beyond Fort Vasquez as a singular site, continued research can also address gaps in knowledge for the history of this region. For instance, equestrian hunter-gatherers of the nineteenth century were highly mobile and locating archaeological sites associated with groups like the Cheyenne and Arapaho can be challenging (Newton 2012). We know that these groups were present at these forts and the surrounding landscape, which can be useful for piecing together archaeological evidence associated with ephemeral populations. And although some archaeologists might be hesitant to use a European or American built and controlled fort to supplement the archaeology of equestrian hunter-gatherers, they should be aware that the landscape immediately surrounding the fort would have been filled with indigenous camp sites. There are even historical documents associated with Fort Vasquez that reference "50 lodges of Chiens" in areas near the fort (Sublette 1836). The archaeology of the fort itself can produce a

clearer understanding for archaeologists of the material culture of equestrian hunter-gatherers, but it also can act as landscape marker for locating indigenous campsites.

C. Summary of Methods

To test the hypothesis of the original excavator of the fort's interior, Dr. James Judge, about the primary function of the fort, I re-examined the field journals and notes from the 1968-70 excavations, consulted with historical documents and photographs, and referenced contemporary forts of the time. I combined this evidence with historical documents that discussed the daily activities within other contemporary trading posts. I also consulted excavation plans and reports of other trading posts from the same time and compared those to Judge's conclusions about the function and daily activities of Fort Vasquez (Judge 1971). I support my own interpretation based on these sources with data obtained from artifact collection analysis. I chose to analyze six categories of artifacts from the Fort Vasquez collection: pipes, beads, ceramics, buttons, leather, and miscellaneous ornamentation. I chose the three primary categories based on several factors distinct to each, which will be discussed in detail in Chapter 3. I created new tables and diagrams to reinterpret the distribution of artifacts within the site.

D. Organization of the Thesis

In Chapter 2 I begin by providing a brief overview of the history of the fur trade in North America beginning in the sixteenth and seventeenth centuries. I then focus primarily on the fur trade in the far west during the late-eighteenth and nineteenth centuries. Following my outline of the history of the fur trade I provide a history of indigenous people on the plains leading up to the construction of posts like Fort Vasquez. I follow my broad review of the plains with the specific histories of the Cheyenne people and the Arapaho people, both of which migrated to region much later in history. I chose to discuss the Cheyenne and Arapaho in depth, because they were the primary clients at Fort Vasquez as noted in historical documentation (Sublette 1836) and were the main occupants of this region of Colorado during the nineteenth century (Moore 1996; West 1998; Ostler 2016; Newton 2012; Hafen 1964). Following this section, I discuss the meaning of trade and trade-goods for indigenous people prior to and during the fur trade and how this allowed places like Fort Vasquez to be successful. I then focus on the history of Fort Vasquez. I place Fort Vasquez in a specific social, political, ecological, and economic environment by reviewing its connections to the indigenous people in the region. I address the founders and builders of the fort and the other forts along the South Platte with which Vasquez competed.

Following the historical overview of the site I then discuss the reconstruction of the site in 1939 by the WPA, the initial excavation of the site in 1966-67, and finally the main excavation in the 1970's (Baker 1964; Judge 1971). In this section I examine the interpretive issues involved in both the reconstruction and later excavations of the site. This discussion of issues with the current interpretation of the site leads into the second half of this study in which I propose a new interpretation of Fort Vasquez.

Chapter 3 provides an overview of the methods I used in my reinterpretation. I begin by discussing my analysis of the artifact collections. I discuss the methods used to collect data and why I chose these techniques for this study. Additionally, I explain the broad framework and history of historical archaeology. Included in this discussion are recent critiques of the subfield and how I have attempted to reconcile them in my own work. Other methods that I discuss in this section are artifact collection analysis, the use of field journal and site reports, and the consultation of historical documents and photographs.

In Chapter 4 I follow my methods sections with the results of my analysis. I begin by discussing Judge's interpretation of the fort and critiquing aspects with which I do not agree. I present historical documentation and archaeological evidence of typical function of rooms and the overall fort for adobe trading posts in the nineteenth century plains and southwest. I then use my analysis of specific artifacts categories to support my overall interpretation of the site. I discuss the distribution of different attributes by artifact category. This data was used to determine the type, origin, and dates for the artifacts, which contributed to my interpretation of room and site function. From there I also discuss the different global connections I was able to identify by artifact categories. Finally, I provide an overall discussion of my interpretation of site function in comparison to Judge's interpretation.

In my final chapter I conclude by summarizing my findings and reflecting on how my interpretation of the site differs from previous interpretations. I then discuss how my new interpretation fits into the regional history of the South Platte River basin and why it is important for historians of the western fur trade to consider a new interpretation of Fort Vasquez. I follow this argument with a discussion of the outcome of my research for the Fort Vasquez Museum. I then make suggestions for future research to test this interpretation and gain new perspectives on the activities taking place within Fort Vasquez, as well as surrounding the exterior of the structure. Finally, I reflect on the Fur Trade Era and how the discovery of gold in the Black Hills ultimately changed the political and social dynamics between indigenous people and Americans in the years following the abandonment of the fort.

Chapter 2

Historical Background

The history of the fur trade is expansive in both time and space. It includes almost every continent and a stretch of time lasting almost 500 years. It created a more globalized world, but also spread disease and enabled the economic exploitation of indigenous people (Wolf 1982; Nassaney 2015; Silliman 2012). In order to understand how trading ventures of the nineteenth century on the Great Plains, like Fort Vasquez, were possible, it is necessary to trace the history of this globally connected trade system. It is not just the history of colonial European expansion, however, that needs to be traced, but also how prehistoric trade networks in native North America made it possible for Europeans to insert themselves into an existing indigenous trade system (Vehik and Baugh 1994; Blakeslee 1975; Comer 1996).

In this chapter I will outline a global history of the fur trade. Although the beginnings of the fur trade era on the east coast of North America may seem disconnected from the later western fur trade, it laid the foundation for a trade system that connected the New World with the Old World. In order to truly understand the magnitude of the global trade connections maintained by western fur trade forts, like Fort Vasquez, it is necessary to also understand the time scale required to build these intensive trade networks. I will follow this section with a brief history of indigenous life on the Great Plains and how it relates to the construction of Fort Vasquez. Following this discussion, I will also highlight indigenous attitudes towards trade and how European traders, like Louis Vasquez, would require an understanding of these traditions to be successful. A specific history of the forts in the South Platte River basin is then outlined in order to provide a more localized context for Fort Vasquez. And finally, the chapter concludes with a discussion of the excavations of Dr. James Judge and an overview of more recent archaeological work focusing on this region.

A. Global Connections: the beginning of the Fur Trade

Often when the fur trade is mentioned the first image to come to mind is a French Jesuit priest in seventeenth century Canada attempting to missionize the native people that he also depended on for survival. While this image is not entirely misrepresentative of the history of the fur trade, historians recognize that the trading of furs and pelts began centuries before these initial encounters in Canada. The fur trade first began in Europe, centuries before the first trappers ventured into the north Atlantic coast of the American continent. The trading of furs can be traced back to the ninth and tenth century with the trading furs from reindeer, bears, otter, and other mammals connecting areas associated with present-day Norway, Denmark, Germany, and England. Similarly, in Russia, at the same time, Viking Rus traders operated out of polities centered around the production and control of pelts (Wolf 1982). Historians have even attributed the creation and expansion of Russia, to the fifteenth century isiak tribute system, which demanded furs from the indigenous populations conquered by Russian traders (Nassaney 2015). Russia's insatiable hunger for fur continued all the way into the nineteenth century as beaver pelts from North America continued to be imported into the country through Amsterdam and the Dutch West Indies Company (Wolf 1982).

Throughout the span of the fur trade in North America six colonial powers competed for control of the market: the English, Dutch, French, Russians, Spanish, and by the late-eighteenth century, the Americans. Not all groups competed at the same time and by the nineteenth century Americans controlled the most dominant fur trade enterprises. However, the interaction of all of these groups set the scene for the globalized market that Fort Vasquez was a part of by the nineteenth century. Understanding *how* places like Fort Vasquez were able to provide indigenous clients trade goods from places as far as China, requires a discussion of the level of participation that different countries had in the fur trade throughout time. Historian Carolyn Gilman argues that the fur trade can be split into three chronological phases based on the intensity of trade and the level of global connection. These phases can be summarized as an initial phase of European exploration, followed by a phase of increasing involvement in trade with continued dependence on indigenous peoples, and a final phase of European independence and indigenous exploitation and displacement. The exact dates of these phases differ depending on the different European groups involved, but generally lasted about a century each, starting in the sixteenth century and ending in the mid- nineteenth century (Gilman 1982). Understanding the development of this trade network in phases is important for this research, because it highlights the evolution of trade and why it operated in a specific manner at Fort Vasquez. Without an understanding of the character of trade during this time, the archaeology of Fort Vasquez is decontextualized.

Fort Vasquez operated in the third phase of the fur trade, which was characterized by colonial expansion, increased global connectivity, and movement of indigenous groups. In order to properly assess Judge's hypothesis, it is necessary to understand the timeline that led up to the establishment of Fort Vasquez and how it affected the way that western fur trading posts operated.

i. Phase 1

In the first phase, European participation was weak and entirely dependent on native people to exploit inland areas for furs to be brought back to the coast. This phase lasted from first contact through most of the seventeenth century (Nassaney 2015). Although Europeans had visited and established temporary settlements the New World much earlier, the first Europeans to realize that North America could solve the problem of depleted beaver populations in sixteenth century Europe

were French sailors in the North Atlantic. While not primarily in search of furs, but rather fish, the men soon realized that they could trade with north-eastern Algonquin populations for furs. Although native people were not originally considered as being an important node of a global network, trappers and traders soon realized that they were crucial for reaching areas and other inland native populations unknown to European newcomers (Wolf 1982). The French, English, and Dutch eventually all became involved in the fur trade in this initial phase.

During this phase the French were the first Europeans to push into the interior. These explorations included traders and trappers often accompanied by Jesuit priests looking to missionize the native people they encountered along the way. The French capital of Quebec was established in 1608 as these early explorers pushed up the St. Lawrence and eventually into the Great Lakes. French policy was to grant trading rights to government sanctioned individuals or companies to establish trading relationships with the native people. However, these rights were often undermined by independent traders called *coureurs de bois* (runners of the woods) who ignored French regulation and traded with native people and Dutch or English traders without permission from the monarchy (Hafen 1965).

The English were also exploring trading opportunities as well as the possibilities for settlement on the east coast and in Virginia during this initial exploratory phase. And although the Dutch were in the Connecticut area, the English were able to establish some posts in Connecticut Valley (Hafen 1965). By the early seventeenth century, however, England was in competition with the Dutch who had also established trading posts in the east. In 1614 the Dutch established a post on Manhattan Island and then continued to push up the Hudson River founding Fort Orange in what is now Albany. Dutch success in the fur trade continued for the next few decades, with the establishment of New Netherlands in 1624 which reportedly shipped more than 8,000 pelts in its

initial year. *Bosch-lopers*, essentially the Dutch version of *coureurs de bois*, pushed further into the wilderness following the Delaware and Schuylkill Rivers, establishing trade relations with the Iroquois, and eventually reached the Ohio River and Great Lakes Region (Phillips 1961).

The introduction of European trade goods to indigenous groups in the northeast during this initial phase created considerable change in social organization and political climate. The Huron or self-identified Wendat, for example, enjoyed a privileged position as middlemen between indigenous groups further inland and the French trading fairs in Montreal. They intensified their involvement as middlemen at the expense of horticulture, which was formally the most crucial aspect of Wendat life. The Wendat continued to focus on their position as middlemen until they were almost entirely destroyed by the Iroquois in 1648 as they vied for the primary middleman position. The survivors who were not killed by Iroquois or European introduced diseases fled to surrounding tribes as refugees. The misfortune of the Wendat was not an anomaly for indigenous people during the Fur Trade Era. Many groups met a fate of severe population reduction as a result of intertribal conflict and territoriality, combined with the deadly introduction of European diseases like smallpox and measles (Wolf 1982).

ii. Phase 2

Around 1650, trade fairs in Montreal were becoming more popular and indigenous people still had considerable control of trade networks that had been established long before Europeans arrived (Comer 1996; Vehik and Baugh 1994). During this second phase Europeans had more control of the transportation of goods to North America and were beginning to obtain furs themselves, but in many places were still dependent on indigenous people for food, fur, and knowledge about the North American wilderness (Phillips 1961). By the 1660's the establishment of French trading bases on the Gulf of Mexico followed a lengthy exploration of the Mississippi (Nassaney 2015; Hafen 1965). In 1664 the English cut Dutch involvement in the Fur Trade short with the conquest of New Netherlands. By the seventeenth century, the English also came into conflict with the Spanish in Florida and on the Gulf Coast for control of southern trade in deerskins with the Cherokees (Hafen 1965; Phillips 1961).

Although Europeans gained more control of the transportation of goods, indigenous people maintained and increased their agency as consumers. Towards the end of Phase 2, in the early to mid-eighteenth century, Native Americans had considerable influence over the types of trade goods that traders supplied. Ann Carlos and Frank Lewis have explored the level of control that native people had over the types of trade goods that companies supplied during the fur trade by examining the financial records and other historical documents related to the Hudson Bay Company (2010). Hudson Bay Company account records indicate that indigenous people strongly impacted the volume, quality, and type of trade goods that the company supplied to its trading bases. As competition between trade companies became more intense, offering indigenous clients a variety of trade goods to choose from was vital to maintaining a profitable enterprise. Account books from HBC reveal a growth in the amount of luxury goods supplied by the company

throughout the eighteenth century. Perhaps the most entertaining and pointed piece of evidence that Carlos and Lewis provide is an itemized list sent by John Isham, the governor of York Factory, to the head office of HBC in 1739 detailing specific characteristics of different trade goods that native clients disliked including the shape and size of kettles, the color of a shipment of beads, the length of blankets, the powder horns being too crooked and weak, and the rings being too wide for native women's fingers (Carlos and Lewis 2010). While European enterprises grew in size and level of organization, it is evident that during this time native clients influenced the types of goods that the companies supplied.

Without pre-existing indigenous trade networks Europeans would not have been able to expand west so quickly. Spain, France, and England mapped onto these trade networks by holding trade fairs in areas where indigenous trading typically took place (Ewer 1954; Swagerty 1991; Wood 1980). In the 1793, for example, the Missouri Company owned by the French instructed Jean Truteau to built a fort among the Mandan. Similar patterns of fort and rendezvous building appeared along the Missouri River near native American villages. The sedentary people who lived along the Missouri became important middlemen in the late eighteenth and nineteenth century (Nasatir 2002). This focus on areas that native people already occupied set the stage for the development of the fur trade in the west.

iii. Phase 3

In the mid to late-eighteenth century the fur trade had entered its third and final phase which lasted until the mid-nineteenth century. This time saw considerable changes in the intensity and organization of trade. The centers of trade had moved west throughout the eighteenth century and by the nineteenth century the trade primarily took place west of and along the Missouri River and its tributaries (Mattison 1961). By this time Europeans had highly organized and competitive trading companies, the most profitable being the Hudson Bay Company (England), the American Fur Company (America), and the Russian-American Company (Russia)(Nassaney 2015). The English traded with native people in the Western Great Lakes and Upper Mississippi Valley, as well as the Subarctic and Arctic, while the Russians traded in the Pacific Northwest. Americans had trading connections in all regions that the trade was operating including the Southeast, greater Southwest, the Missouri River Valley, and Northern Plains (Nassaney 2015).

During this time competition between the English and French for control of the forks of the Ohio River and ultimately the American empire escalated into the French and Indian War. The struggle between the United States and England also continued until 1816 when congress passed an act excluding foreigners from participating in the Fur Trade on American soil (Hafen 1965). This legal action, however, was not successful in preventing the British from profiting from the Fur Trade and with the continued push west the British were able to maintain business throughout the first half of the nineteenth century (Hafen et al., 1970). Fort Vasquez was established at the tail-end of this final phase when the fur trade had moved west.

This period saw significant population decrease for indigenous people due to disease, the displacement of natives from their land, and the exploitation of native populations for labor (Nassaney 2015). Traditional historical narratives tend to characterize indigenous people entirely as victims with little to no agency during this phase. While colonialism was ultimately detrimental for native groups, recent archaeological research suggests that indigenous people had considerable agency and power during this time. Cody Newton has provided convincing evidence to suggest that Fort Vasquez and other contemporaries were provisioned by the local native population. By examining the cut marks on faunal remains and the frequency of bone type from the Fort Vasquez collection, Newton argues that the butchering marks suggest that native people were bringing large

numbers of prebutchered meat to the fort. Additionally, he points to the frequent occurrence of large ungulate rib bone segments as evidence that native people were providing the traders with the sections of the animal that equestrian hunter-gatherers would have found less preferable, while presumably were keeping the meatier parts for themselves. So while traders had the benefit of large organized companies to supply them with trade goods, there is evidence that they still depended on indigenous people for basic necessities (Newton 2018).

B. The Fur Trade in the Far West

American involvement in the western fur trade was established during the early nineteenth century with exploration parties and rendezvous that set the scene for western trading forts like Fort Vasquez. In the early-nineteenth century as beaver became over-exploited and out of fashion, trappers and traders looked west to the bison robe trade. Most of these individuals did so under the direction of larger fur companies. The first of these was not an American company, but rather the North West Company (NWC), which was run by a group of Scottish men. In 1806 famed mountain man Zebulon Pike wrote about an encounter with the NWC at the headwaters of the Mississippi River. The Lewis and Clark expedition similarly encountered the NWC residing near Mandan country. Naturally, this presented the new American fur companies with a challenge (Chittenden 1935; Hafen et al. 1970).

After the Louisiana Purchase in 1803 the United States continued to push west with projects like the famed Lewis and Clark Expedition. During this time St. Louis became the heart of the American fur trade, with trappers and explorers reporting back to various companies headed in the city. Lewis and Clark even reported back to St. Louis that the "Upper Country" was particularly rich in fur pelts and would be conducive to trapping. The famous 1804 Lewis and Clark expedition was not the only exploration of the far west at the time. In the early 1800s Lewis

and Clark were proceeded by explorers like Manuel Lisa and Pierre Chouteau who founded the St. Louis Fur Company in 1808 after exploring along the Missouri River. Their success was not to last, as they were driven from the three major forks of the river by the Blackfeet in 1810. The American Fur Company was also established during this time by a German immigrant who later became famous for his involvement in the fur trade, John Jacob Astor. In 1810 the Pacific Fur Company, a subsidiary of the American Fur Company, was also formed and began to manage business ventures even further west (Chittenden 1935; Hafen et al. 1970).

Although considerable progress was made for American fur traders and trappers, the War of 1812 disrupted the Fur Trade, as the majority of Native Americans sided with the British in the upper Missouri region. As a result, the Pacific Fur Company was toppled and absorbed by the North West Company in 1813, which enjoyed success for almost a decade until it too was absorbed by its old enemy the Hudson Bay Company in 1821. The 1820's continued to see turbulent change for fur trading ventures and persistence exploration by trappers into the western wilderness. Mexican independence from Spain in 1821 allowed Americans to begin trading in the southwest and the famous Santa Fe Trail created a trade route between two important centers of trade: St. Louis and Santa Fe (Chittenden 1935; Hafen et al., 1970). The presence of trading trails like the Santa Fe Trail and the Trapper's Trail² encouraged the building of Fort Vasquez and the other forts in the South Platte River basin, which was located at the intersection of these two routes.

Just prior to the construction of the South Platte forts, the famous mountain men era in the Rockies was in full swing, with many traders originating from Missouri and Kentucky (not unlike Louis Vasquez and Andrews Sublette, respectively) (Hafen 1964). William H. Ashley of Missouri

² A path along the eastern base of the Rocky Mountains that connected Bent's Old Fort and Fort Laramie

was one the most well-known of these trading pioneers as he was able to initiate trader in the Upper Missouri, which he followed with continued expeditions into South Pass, the Platte Rivers, and Green River. Some of the men under the command of Ashley made it as far as South Dakota and Wyoming. In 1825, Ashley and other like-minded trappers inaugurated the first annual trapper's rendezvous in the Central Rocky Mountains. Ashley retired the following year, but his rendezvous continued for 16 consecutive summers (Chittenden 1935; Hafen et al., 1970).

In 1830 some of Ashley's men sold their trading business, which led it to become the famous Rocky Mountain Fur Company. During this time other independent companies and forts owned by families like the Bents, the St. Vrains, and the Sublettes also began to trade in the Central Rockies. However, beaver soon became over hunted in the area and was going out of fashion in the east, replaced by silk. This resulted in ruin for some mountain men, but other chose to focus on the bison robe trade and a primarily indigenous client base. It is during this time that Fort Vasquez was constructed in the South Platte River basin of Colorado. Rendezvous points became more permanent trading posts, some of adobe and others made from timber. The Rocky Mountain Fur Company was profitable in the early years of this transition, but was ultimately crushed and absorbed by the American Fur Company, which had begun to utilize steamboats on the Missouri in the 1820s (Hafen et al., 1970).

C. Indigenous Life on the Great Plains

The interactions between Europeans and indigenous people in the east had a profound impact on what happened in the west beginning in the eighteenth century. However, in order to understand the change in life-style for Plains people of the eighteenth and nineteenth century it is necessary to have an understanding of what life was like prior to these periods of significant movement and change. In this section I will explain how the events that took place in the east played a part in the movement of indigenous people onto the plains and how without this movement and change in life-style the western fur trade would not have been possible.

Although the stereotypical view of a Plains Indian is that of a horse-back bison-hunter, people who lived on the plains pre-contact were not equestrian nomads. There have been many groups of people living on the plains with differing lifestyles for the past 12,000 years, but this section will begin with the eleventh century, as it is important to understand how cultural changes during this time set the stage for indigenous life in the west during the fur trade. Small groups began to migrate onto the plains in the tenth century as the change in climate facilitated an ability to cultivate crops. In Northwest Iowa and Southeast South Dakota small horticultural societies cultivated a variety of wild plants like squash and sunflower, hunted small animals and fished, but also farmed maize for the first time on the plains. Between AD 1050 and 1100 communities of maize farmers, referred to as Great Oasis farmers by archaeologists, began to appear through the eastern plains. These groups lived along streams in square houses with log walls that were built into the ground. Important to note is that they were part of an extensive interregional trading network that reached as far as the Atlantic; they imported shells beads from the Ohio River valley, flint from North Dakota, and other types of stones from the upper Midwest. Additionally, they produced their own type of pottery characterized by a globular shape with a thin tapering neck, decorated rims, and cord-marked surfaces. This pottery appears in sites throughout the broader region including areas in South Dakota, Nebraska, Minnesota, and Iowa (Bamforth, in press; Vehik and Baugh 1994).

Other regions of the plains prior to and during this time hosted groups of people who practiced different subsistence strategies and cultural patterns. Hunter and gatherer groups lived in semi-sedentary communities across the central plains. In the north and northwest highly mobile groups practiced intensive big-game hunting. The south and southwest plains were inhabited by people who made Mogollon style pottery and lived in pithouses. And in the southeast aceramic, mobile hunter-gatherers populated the landscape. Covering the changes and movements of these varying groups and cultures would be too complex for the purpose of this study. What is most important to note is that the plains were highly variable in terms of culture, lifestyle, and subsistence strategy prior to the contact period. Even more crucial to this study is this understanding is that prehistoric trade networks connected extensive regions of the continent and the groups living on the plains were involved in the movement of trade goods long before Europeans were even aware of the New World (Bamforth, in press).

Much took place on the plains following the introduction of maize agriculture, but for the purpose of contextualizing the fur trade I will move forward to the seventeenth century. During this time migration onto the great plains intensified from both the north and the south. In the late seventeenth century a Shoshonean-speaking people migrated southward from the Wyoming-Colorado region through the Rocky Mountains. During this time this group became allied with the Utes who referred to them as "Comanches". In 1706 in the southwest, the Spanish noted that these people had launched a series of raids against the Apaches. At the same time the Apaches were being pushed south off the central Plains by the Pawnees and their French allies, forcing them to take refuge in New Mexico (Hämäläinen 2008). By the 1730s the Comanches had acquired horses from the Spanish both by stealing and trading, allowing them to intensify their raids against the Apaches and other plains and southwest groups. During these raids the Comanches stole children from other groups and brought them to trade fairs in Taos. In addition to human captives, they traded dried bison meat and hides, and deerskin in exchange for horses, maize, sugar, and fruit. As

a result of this intensive raiding and trading, the Comanches were able to command the middleman position between the plains and its borders by 1800 (West 1998).

In the north, dynamic movement was taking place at the same time. Large ethnically and culturally diverse groups from the Missouri valley began migrating down into the plains in the seventeenth century. Collectively these groups were referred to as Western or Plains Sioux and were made of two broad bands, the Nakotas and the Lakotas, which were further divided into different kin and ethnic groups. The Lakotas became the prominent power on the north-eastern plains by the 1830s. These groups originated in the Great Lakes region, where they traveled into the Minnesota prairies, and from there into the Missouri Valley. During this migration they experienced epidemics, new European trade goods, and conflict with other indigenous groups making a similar migration or already living in the area (West 1998; Ostler 2016).

In particular, they came into conflict with other nomadic equestrian tribes, like the Arapaho, Kiowa, Crow, and Cheyenne. The Arapaho and Cheyenne were known to be the prominent groups in the North and South Platte River basins by the 1820s. Both groups became strongly allied with each other during their migrations onto the plains. The Arapaho previously lived as farmers in Minnesota and North Dakota before migrating to the Missouri River Region in the early 18th century where they first became allied with the Cheyenne. After moving south from Missouri, like their Cheyenne allies, they adopted the horse and adapted to equestrian hunting, rather than farming. In the nineteenth century the Arapaho split into Northern and Southern groups with the Northern in Wyoming and the Southern in eastern Colorado and Western Kansas (Sutter 2004). The Southern Arapaho and Southern Cheyenne fought together against the Comanche in 1837 until a peace agreement was reached in 1840. During this time the Southern Arapaho lived

mostly within the region surrounding Bent's Fort along the Arkansas River (Kroeber 1983; Ostler 2016; West 1998).

The Cheyenne left their homeland along the Mississippi river in the 1680s, around the same time the Comanches began their journey. They moved westward to Minnesota river, through the James river basin, and into eastern North Dakota. By the 1770s they had reached the upper Missouri valley in central North Dakota where, as previously mentioned, they allied themselves with the Arapaho. There they built earthen houses along the Missouri and subsisted on horticulture, hunting, and trading. They continued moving southward through the next few decades, reaching the Black Hills in South Dakota by 1800, a place that they considered to be *Noaha-vose* or "the sacred mountain". This location features prominently in contemporary Cheyenne origin stories as the place where the prophet Sweet Medicine was given four sacred arrows and all the bison surrounding Noaha-vose by the All Being, Maheo, after communing with him for four years in his lodge. This time and place marks a major shift in Cheyenne identity (Stands in Timber and Liberty 1967; Boye 1999). The importance of movement, hunting, and the bison became primary for the Cheyenne in the Black Hills (West 1998; Moore 1996; Grinnell 1923).

This movement on to the Great Plains was not coincidental. Although each group experienced varying push and pull factors that led them to this new environment, the entrance of Europeans into the New World was a universal contributing factor in the changing cultural landscape. By 1800 more people lived on the plains than had ever before. The migrations out of the north-east were largely a result of the entrance of the English, French, and Dutch in the east. The new market for European trade goods, like guns, created a significant power imbalance among eastern indigenous people. When the Cree and Objibwe acquired weapons and moved into the Great Lakes region they pushed the Cheyenne and Lakota further west onto the plains. A similar effect took hold in the south, when after the Pueblo Revolt of 1680 the Spanish were forced out of the southwest for a short time, giving the Comanche the opportunity to acquire their horses that were left behind. Horses were not the only European introduction that shifted the power on the plains-southwest borderlands. Diseases like smallpox devastated northern horticultural groups, like the Hidatsa, Arikara, and Mandan. These epidemics starting in the 1780s shifted the balance of power to mobile equestrian groups, like the Lakota, Cheyenne, and Comanche. These nomadic equestrian groups therefore were in an ideal position to succeed in creating and maintaining trade relationships with Anglo traders who had begun to venture out onto the Great Plains (Ostler 2016; Wolf 1982). It was not just the opportune success of equestrian nomads that allowed them to play a primary role in a newly globalized trade network, but also the change in how trade was generally perceived by these groups that came with the introduction of European goods. In the following section I will outline exactly *how* this attitude about the meaning and purpose of trade changed among Plains groups and *why* the fur trade induced this transformation.

D. Indigenous Trade on the Great Plains

While the western fur trade allowed indigenous plains people to enter a globally connected trade system, it is important to note that trade not only existed in North America prehistorically, but those connections stretched across the continent. Archaeologically, trade is difficult to trace in the early periods of prehistoric occupation of the plains, possibly because the goods being traded were primarily perishable. Changing patterns in bison hunting on the plains, particularly in the north, coincide with the appearance of Middle Woodland funerary complexes and Woodland-style pottery in the last 2,000 years. Douglas Bamforth argues that the intensification of bison hunting that resulted in intensive processing of carcasses for the production of permican represents Plains

people participating in this exchange network (2011). Post-contact descriptions of dramatic bison jumps that resulted in the slaughtering of several thousand animals at a time document the participation of Plains people in eighteenth and nineteenth century trade networks that required the intensive processing and production of bison products. This pattern of hunting involving jumps, corrals, processing of carcasses for bone grease, and the reuse of kill sites was established in the northern plains long before European contact. Objects from the Rocky Mountains and the Northwestern plains made their way via these extensive trade networks into the upper Midwest as well (Bamforth 2011). Connections with the Rocky Mountain region and the southwest also occurred at a small scale during the late prehistoric, but not at a large scale. There is also evidence for a trade between the northern plains, interior plateau, and pacific coast during this time (Vehik and Baugh 1994).

Around A.D. 1200 trade between the eastern margins of the plains and the Mississippi River Valley seems to have ceased and trade between the southern plains and the southwest increased (Vehik and Baugh 1994). Trade between plains bison hunters and pueblo farmers was documented by European explorers in the sixteenth century and has been proven to have existed precontact through archaeological evidence at Pecos Pueblo (Kidder 1958; Davis 2017). John Speth argues that larger scale food exchange between Pueblos on the western margins of the Plains and mobile bison-hunting plains groups possibly began after A.D. 1300. He contends that when agricultural pueblos were established on the western margins of the plains, the occupants depended on large mammals as their primary protein source. After depleting large game near their villages, the Pueblo groups near the western margin of the plains entered into a mutualistic food trade with plains bison hunters (Speth 1991).

It is not just the existence of interregional indigenous trade networks prior to contact that is important to understand, but also the character of these networks. Professor Douglas Comer argues that function and meaning of trade on the plains prior to entry into the fur trade is crucial for understanding the relationship between European and indigenous traders (1996). Comer contends that trade for protohistoric and early historic plains groups existed primarily for the purpose of establishing fictive kinship relationships and the creation of continuing reciprocal exchange. It was not until indigenous plains groups became deeply involved in the fur trade that the focus of trade shifted primarily to the accumulation of wealth. He draws from Marcel Mauss' seminal piece, The Gift, for an example of a "traditional" ritual trade system (Mauss 1954). In The Gift Mauss describes the Kula Ring exchange network between the Trobriand Islands off the western coast of Papua New Guinea in the Solomon Sea. The occupants of these islands practice a traditional ritual trade in which mwali bracelets and soulava necklaces circulate ownership throughout the ring. These vaygu'a, or "kind of money", are only exchanged in one direction and never remain permanently in one person's ownership. They are continuously traded in the kula ceremony to people of importance. Each vaygu'a has its own personal history, name, and personality. These bracelets and necklaces cannot be purchased or stolen, and if they come into ones ownership through any means other than a ritual kula ceremony they are not considered valuable. Therefore, a monetary value for vaygu'a does not exist, but rather a ritual and spiritual power is imbued upon the objects (Comer 1996; Mauss 1954).

According to Comer, trade for plains groups, like the Cheyenne and Arapaho, was centered around ritual and the recreation of a "primordial act of creation". While this type of trade is not as extreme as the kula king ceremony, the objects circulating between groups are not primarily valued as monetary commodities, but rather as ritually and socially significant (Comer 1996). For example, the Cheyenne and Arapaho often participated in rituals like the Sun Dance as a part of a trading event (Fowler 2002). Even the more simple act of "passing the pipe" during occurrences of trade seems to be derived from the larger and more complex Calumet Ceremony (Comer 1996; Paper 1988; Godlaski 2012).

Comer argues that trade between Europeans and plains Indians was often characterized by a dissonance in meaning attributed to trade objects (1996). While European traders focused on trade as means of wealth accumulation, plains groups often entered trading events with the intent of establishing a recurring, reciprocal relationship with the traders. This is not to say that traders and indigenous people did not establish relationships that would be recurring and reciprocal, but rather that the motivation to trade was initially different. Comer points to several categories of trade objects as evidence of a preference for spiritual important over monetary value for plains groups. For example, firearms were one of the most sought-after trade objects for plains groups. While it may seem that guns would be an obvious improvement to a bow and arrow, this might not necessarily be the case. In fact, a mounted Cheyenne warrior would likely be able to shoot a bow and arrow more quickly and accurately than a trade rifle. In this case it seems that guns were valued for their "medicine" or magical properties, like their striking power, and less so as a functional technological improvement (Comer 1996).

By the beginning of the nineteenth century, however, it seems that a focus on ritual and fictive kinship in trading for plains people began to diminish significantly (Fowler 2002). In this new social order, a young warrior could improve his status indirectly through the procurement of trade goods. While previously a warrior would need to demonstrate his prowess in battle in order to draft war parties, the ability to procure better battle equipment through trade allowed individuals to attract war parties through their wealth. In turn, status could be manipulated through wealth

accumulation (Ostler 2016; Comer 1996; Grinnell 1915). It is this change in attitude about wealth accumulation that allowed for trading posts in the west to be successful in attracting indigenous clients. Without the desire to improve social status through material objects, it would be difficult to maintain a core client base. Although the meaning of actual trade goods had changed, the act of trade still represented a formation of friendship to indigenous people, like the Cheyenne. Particularly the act of smoking together was still seen as significant in making pacts or maintaining trade relationships. Fort Vasquez is one such example of an isolated fort that would have depended on the interest of indigenous clients in European trade goods as well as the understanding of the rituals that came with trading. Fort Vasquez was one of four forts located in the remote South Platte River basin.

E. Fort Vasquez and the South Platte Fort Concentration

The early European fur traders in the east had focused primarily on trading with indigenous people for fur pelts from beavers, otters, and muskrats, but by the early nineteenth century beaver fur hats were no longer in vogue and had been replaced with silk hats. Fur trading ventures in the west, like fort Vasquez, turned their attention away from fashion furs and towards trade with indigenous populations for bison robes (Wolf 1982; Chittenden 1935a; Hafen et al. 1970; Hafen 1965; Newton 2018). Fort Vasquez was established in the South Platte River basin region of north east Colorado specifically to exploit this competitive, growing bison robe trade.

Fort Vasquez was established by Louis Vasquez and his business partner Andrew Sublette. It was located approximately half-way between two larger, successful trading fort of the time: Fort William (Laramie) to the north and Bent's Old Fort to the south (Figure 1.2). After receiving a trading license in the summer of 1835 from William Clark in St. Louis, the trade with local indigenous people at Fort Vasquez was likely underway by the winter of 1835. In November of 1835 William Sublette, the famous mountain man and brother of Andrew, wrote a letter to Robert Campbell stating, "Andrew and Vasquez on the South Platte all well" (Sublette 1835; Hafen 1964: 204). Later in 1836 William wrote another letter referencing the trade at Fort Vasquez stating that, "Vasquez & Sublette had about 50 lodges of Chiens at there fort on the South fork" (Sublette 1836; Hafen 1964: 204). The adobe fort was likely constructed through 1836-37 by adobelleros, or Hispanic adobe workers from Taos, despite Sublette's claim that he constructed the fort himself. Historical records discussing the construction of the fort are vague, but according to historian of the American west Leroy Hafen, it is safe to conclude that they were successfully trading with indigenous people in the area by 1838 (Hafen 1964).

At the time of the fort's construction Louis Vasquez was 40 years old and a well-known, respected mountain man who was often called "Old Vaskiss" by his peers. Born in 1795 to a Spanish father and French mother, Vasquez grew up in St. Louis Missouri with eleven siblings. The earliest noteworthy documentation of Vasquez's life comes from his twenties when he first began participating in the fur trade of the far west. Historical documents confirm that he obtained a trading license in 1823 from the Indian Affairs Commissioner in St. Louis to trade with the Pawnees. It has been suggested by Hafen that Vasquez was first introduced to the fur trade and the west through participation in the Ashley-Henry expeditions, though he admits that "the information is fragmentary". Vasquez later went on to trade in bison robes and beaver pelts primarily with the Crows between 1832 and 1834 in the western mountains before returning to St. Louis in the summer of 1835. When home he leased his land to his older brother, Benito Vasquez Jr., for ten years in preparation to return west to construct his own adobe trading fort. The trading license was signed by the Superintendent of Indian Affairs, William Clark, in the July of 1835.

Subsequently, Louis Vasquez and Andrew Sublette returned to the South Platte River basin and built their own trading fort in the fall of 1835 (Hafen 1964).

Andrew Sublette, the trading partner of Vasquez, was born in 1808 in Somerset, Kentucky making him 13 years Vasquez's junior. He soon thereafter moved to Missouri with his family of five brothers, one of whom was famous mountain man William "Bill" Sublette. William introduced Andrew to the fur trade, allowing him to participate in his wagon expedition to the Rocky Mountains in 1830 to trade in the rendezvous system. Hafen believes that Sublette and Vasquez formed their trading partnership in the winter of 1834, when both men were in the Rocky Mountains, as evidenced by a letter sent from Vasquez to his brother Benito, in which he states that Sublette is carrying the letter with him back to Missouri. It is unclear how long Sublette spent back in Missouri, but it seems that by the fall of 1835 Sublette had returned to the South Platte and Fort Vasquez was constructed (Hafen 1964).

The items traded at the fort were dictated by the preferences of indigenous clients. The most popular trade items of the time included glass beads from Europe, fabrics, pigments from China, firearms, food items, steel and copper items, and tobacco. In the west these items were traded to indigenous people in exchange for horses and bison hides. In addition to the warm hides, the tongues of the animals were often pickled and shipped to St. Louis as a delicacy. The horns were also used for ivory objects like spoons, combs, and gun powder containers (Woodward 1979; Gale 2009).



Figure 2.1. The last known photograph of the ruins of Fort Vasquez taken in 1903 by F.W. Craigin from the southeast

Fort Vasquez did not enjoy a period of operation as long as contemporaries like Bent's Fort or Fort Laramie. By 1842 the operation was abandoned, and the adobe was left to return to the earth. Historical documents and eye-witness accounts reference post-abandonment use of the ruins for other purposes. In 1859 after the discovery of gold at Pikes Peak, prospectors poured into Colorado as they headed to the Black Hills to strike it rich. Some of the miners have been noted to have slept in the fort's ruins during their travels. Stage coach drivers who passed by in the 1860's noted that travelers often sought shelter in the ruins of the fort and a Methodist preacher is reported to have used the ruins for church services (Hafen 1964). By 1900 the town of Platteville had been established and the ruins provided a place for Sunday picnics. The last known photographs of the original ruins were taken at this time in 1903 by F.W. Craigin (Figure 1-2). The use of the ruins as a place for summer outings continued until the 1930's, when the Works Progress Administration (WPA) undertook the leveling and reconstruction of the fort.

Vasquez was one of four forts located within a 15 mile stretch of the South Platte River which all competed with one another for the business of Cheyenne and Arapaho clients. These forts included Fort Lupton, Fort Jackson, and Fort St. Vrain (Hafen 1964; Hafen 1929; Peterson 1982). At an unknown time between 1836 and 1837 Fort Lancaster, later known as Fort Lupton,

was constructed by retired army lieutenant Lancaster P. Lupton several miles south of Fort Vasquez (Hafen 1929). In a fragmentary journal kept by Lupton during his time at the fort, historians have been able to piece together a basic list of trade objects found at the fort including, "powder, lead, flint, tobacco, cloth, thread, coffee, sugar, and other 'necessaries; of a trading post" (Peterson 1982: 70). This information has been a valuable analogue for what would have been traded at Fort Vasquez.

Fort Jackson, however, has provided historians with the best documentary evidence of trade objects and their prices in the south Platte fort concentration. Large portions of the 1838 inventory of Fort Jackson have been recovered, likely prior to its abandonment. Like its contemporaries the primary commodities Fort Jackson dealt in were typical fur-trade objects, like glass beads, wool, flannel, hawk bells, tobacco, rice, coffee, sugar, lead, brass kettles, vermillion, and brass tacks (Peterson 1982; Complete 1838 Inventory of Fort Jackson 1838). This inventory was a result of the transfer of goods from the failing Fort Jackson to Fort St. Vrain after it was purchased by the Bent Company. According to historian David Lavender, the fort was burnt and leveled under the direction of Louie Herod shortly after the remaining inventory was sold to the Bent Company (Peterson 1982; Lavendar 1954).

Fort St. Vrain, also known as Fort Lookout or Fort George, was the last surviving fort in the South Platte concentration. Having been founded by the Bent, St. Vrain, and Company with the intention of poaching business from the other forts in the 15 mile stretch, Fort St. Vrain was relatively successful in it's mission. Competition with the other forts began immediately upon opening and St. Vrain was able to outlast the others, but only by a few years. It was retired initially in 1844 with business dwindling. Marcellin St. Vrain, the builder and owner, attempted to reopen it again in 1850 but it was abandoned within a year or two. Minor excavations were done by Otero Junior College of La Junta in 1967, but encountered very little evidence of the fort. The excavations revealed some artifacts including pipes, beads, bison bones, and burned adobe, but nothing that would allow for an analysis of fort structure and function (Peterson 1982).

The South Platte fort concentration has puzzled archaeologists in terms of how close the forts were built to each other despite seemingly being business competitors. James Judge partially bases his hypothesis that traders were operating remotely out of Fort Vasquez on the fact that the forts were too close for business to have been successfully operating in the actual structures, "one may entertain the suggestion that some other method of trading, operative at the time, did not mitigate against the clustering of trading posts in the same vicinity. In other words, perhaps the trading posts were not adapted to a trading system which was oriented toward the attraction of Indians to the post location" (Judge 1971: 201). Judge goes on to say that he believes most of the space in Fort Vasquez was dedicated to storage and security, rather than trade, which he contends supports that idea that traders were not actually conducting most of their business in the fort. Judge argues that this is the most likely explanation as to why the forts were located so close together.

Archaeologist Cody Newton, however, has addressed the questions raised about the unusual proximity of the forts along the South Platte. Newton argues that archaeologists need to look beyond the historical information that deals specifically with the posts and explore external environmental and socio-cultural conditions that could have influenced the location of the forts. He points to four factors that acted "in confluence" to create a favorable environment for traders to conduct business: climatic and environmental conditions in the South Platte Basin, the isolated nature of early nineteenth century plains trade, and inter-tribal indigenous relations (Newton 2012).

Newton examines paleoclimatic data to understand what the environment was like in the South Platte Basin prior to and during the nineteenth century. By examining stream flow rates and levels of drought, archaeologists can determine how productive the Great Plains would have been in terms of plant growth. Data indicates that during the 1830s stream flow rates were high, while drought levels were moderate to very wet. These data proxies in convergence with each other suggest unusually favorable grazing conditions for bison in the South Platte River Basin during the 1830s. For a trade system that intensified bison robe production as the primary commodity, environmental and climatic conditions that favor the proliferation of bison herds would be imperative. Additionally, conflict starting in 1825 between the Cheyenne/Arapaho and the Pawnees for control of the bison ranges between modern day western Kanas and eastern Colorado created areas where hunting was less prevalent, allowing herds to continue to flourish (Newton 2012).

With the flourishing bison herds in an area that was already occupied by indigenous people prior to construction of the four forts, Newton argues that traders were drawn to this spot that was also in between Fort Laramie and Bent's Fort. However, these two factors do not explain the proximity of the forts on the river. According to Newton, this is a result of the isolated nature of plains trading in the nineteenth century. He argues that although the forts would have had to compete, they also may have had to trade with each other in order to keep their businesses afloat. Despite a healthy competition, there were probably times were one fort would be low on supplies or trade goods and would be forced to trade with the other forts within the 15 mile stretch. Fort Vasquez was the first non-native constructed building in the south Platte river basin and probably drew the other forts into this relatively isolated area. By constructing their business operations far enough away that it would take some time to reach each other by horse, but not too far so as to not have reinforcement should a fort be attacked or run out of supplies, the traders probably felt that they had reached a reasonable compromise (Newton 2012). Newton's nuanced discussion of environmental and social variables that might have contributed to the motivation to build the trading posts so close casts doubt on Judge's hypothesis about traders operating remotely from Fort Vasquez. In order to properly deconstruct this hypothesis, however, the next section will discuss the preliminary excavations led by Galen Baker (1964) and followed by the main excavations led by James Judge (1971) to provide the reader with a better understanding of the data that Judge used to produce this theory.

F. The Archaeology of Fort Vasquez

The history of Fort Vasquez does not end with the turn of the century. Although by the 1930s the fort had almost entirely returned to the earth, it remained in the imagination of the town of Platteville. When the ruins of the fort were threatened by construction of a four-lane highway, the people of Platteville petitioned for the preservation and reconstruction of the fort. In the 1930s the Works Progress Administration (WPA) partially reconstructed the exterior of the fort and the reconstruction was officially dedicated in 1937 (Peterson 1982). It was not until 1958, however, that the site was officially deeded to the State Historical Society of Colorado. After the fort was passed from Weld County to the SHSC, plans began for a visitor center to be constructed outside the southern wall of the reconstruction (Judge 1971).

Preliminary excavations were conducted in the area where the visitor's center was to be built to ensure that no material of archaeological significance would be destroyed. In November of 1963 a team of students from Trinidad State Junior College led by Professor Galen R. Baker excavated a series of three trenches and one test pit trenches outside of the southern wall of the reconstructed fort. The first trench was located in the center of where the museum was set to be constructed, the second trench was located to the west of the future museum, and the third trench was placed outside to the east of the museum plan. The three trenches were connected with one running from east to west and two running south to north. Finally, a test pit was excavated in the plaza of the reconstruction where a metal detector had indicated the presence of metal. No material that could be attributed to the original occupation of the fort was recovered. The test pit in the fort plaza revealed a metal pole set in a concrete base, which was theorized to be the base of a flagpole from the 1930s. Because the metal pole exhibited evidence of being cut with a blow-torch, excavators believed that it was likely cut-down during World War II to be used for scrap metal (Baker 1964). Testing of Fort Vasquez was carried out again in the summer of 1967 by Baker and his students. The project, however, shifted its focus towards locating the remains of Fort St. Vrain. I did not examine the archaeological material from the 1963 excavation, because it did not unearth anything of significance with the exception of what Baker describes as "a useful opportunity to study a change in the surrounding terrain" in reference to the stratigraphic profiles of the trenches outside the fort.

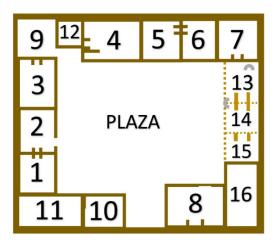
After the preliminary excavations outside the fort, the State Historical Society of Colorado was interested in conducting a more extensive excavation inside the WPA reconstruction to get a better sense of the exact location of the fort. In the fall of 1968 students from Colorado State University in Fort Collins volunteered to conducted full-scale excavations under the supervision of Professor James Judge. The excavations were used as an archaeological field school and continued from 1968-1970 (Judge 1971).

These excavations were considerably more revealing than the preliminary excavations outside the fort. The excavation revealed that the original builders of the fort had excavated the floors of the rooms about four to six inches below the plaza, so that one would step down into the rooms. Although the site had been bulldozed by the WPA, some thin layers that were only one adobe brick thick were still present as a result of the original builders excavating the floor prior to building the walls. Composition tests of the adobe used in the fort construction indicate that the soil removed prior to the construction of the fort was likely used as temper for the adobe bricks made on the spot. Based on excavations at the south wall, Judge states that the exterior walls were probably thicker than the interior walls, in addition to being constructed first (Judge 1971).

A total of 16 internal rooms were excavated, seven of which contained evidence of fireplaces. From the rooms that were excavated a total of over 5,000 artifacts were recovered. Various test pits were also placed outside the fort. The only section of the fort that was not excavated was the plaza area, as there were not enough funds to excavate the fort in its entirety. The eastern wall of the reconstructed fort presented additional interpretive problems, as it was built diagonally over the original fort wall, which resulted in the obstruction of the original stratigraphy and architectural features (Judge 1971).

Judge's Interpretation of Fort

Vasquez Room Function



- 1. TRADE
- 2. TRADE
- 3. LIVING
- KITCHEN 4.
- 5. LIVING OR DINING
- 6. GUEST ROOM
- 7. GUEST ROOM
- 8. **BLACKSMITH SHOP**
- 9 WOODEN WATCHTOWER
- **10. STORAGE**
- 11. STORAGE
- **12. KITCHEN STORAGE**
- **13. LATER OCCUPATION ADDITION**
- 14. LATER OCCUPATION ADDITION
- **15. LATER OCCUPATION ADDITION**
- 16. UNKNOWN

Figure 2.2. A redrawn map of Fort Vasquez after the 1970 excavation with corresponding room interpretations from Judge's report (not to scale).

As previously mentioned, the excavation uncovered 16 rooms inside the fort, as well as three postholes in the northwest corner that Judge postulates were for a wooden watchtower. Judge interpreted the function of each room based on structural features, artifact distribution, and the proximity to other parts of the fort. Room 1, located on the south-west side of the fort, was interpreted by Judge as being the primary trading room, because it was equipped with a fireplace and contained large numbers of trade goods, mostly pipes and beads. South of Room 1 and west of the main gate were Rooms 10 and 11, which Judge argues were storage rooms, because they did not contain fireplaces and revealed large quantities of trade beads. Next to Room 1 were two rooms (Rooms 2 and 3) which Judge interprets as being living spaces. Although these rooms were heavily disturbed by the WPA reconstruction and revealed less artifacts than other rooms, Judge makes this tentative conclusion based on the presence of fireplaces in both rooms. Room 4, located on the northern wall adjacent to the back entrance, was interpreted as being a kitchen because of the large number of burned bones, it's "central" location within the fort, and a small storage room that Judge postulates was used for storing wood. Room 5, east of Room 4, contained the densest number of trade beads and pipe fragments, as well as a fireplace that shared a wall with the fireplace in room 6. Judge contends that location of Room 5 next to the kitchen and the presence of a fireplace indicates that it was possibly a trade room but does not expand upon this argument further. He also notes that it could have been alternatively used as a dining room based on the presence of eggshells. Directly east of Room 5 were Rooms 6 and 7, which Judge postulates were living quarters based on the low density of artifacts and the presence of fireplaces in both (Judge 1971).

The eastern wall, which contains Rooms 13, 14, and 15, presents a significant interpretive problem. Judge suggests that prior to the construction of the adobe fort there may have been a

temporary log structure erected on the eastern side of the original fort. There is no archaeological evidence for the log structure, but the presence of an adobe fireplace and what Judge refers to as a forge were excavated in this area. According to Judge, stratigraphic interpretation of these features indicates that were built earlier than the trading era occupation of the fort and were possibly used in the construction process of the fort. Judge postulates that after the fort was built entirely, the initial log structure was torn down, so a corral for horses and cattle could be built in its place. Judge bases this hypothesis on historical documentation from Fort St. Vrain, one of Fort Vasquez's contemporaries on the South Platte River, which states that there was a corral on the interior of Fort St. Vrain in place of a wall of rooms on one side. There is, however, no archaeological evidence of an animal corral inside Fort Vasquez. There is evidence for the construction of three rooms along this wall between 1842 and 1864. The presence of strata consisting of river gravel overlaying the rooms built after 1842 is consistent with historical documentation of a flood in 1864 (Sanford 1927; Judge 1971).

Room 16, which lies in the south-east corner, was not entirely excavated because it is diagonally overlain by the reconstructed fort's wall. As such, the function of this room is unknown, but tentatively interpreted as being a storage area for Room 8. Room 8, which shares a wall with Room 16's western side was interpreted by Judge as being a blacksmith shop. This conclusion is based on the presence of a concentration of metal and charcoal in conjunction with a large hearth. Judge also points to its "relatively isolated location" relative to the other rooms in the fort, as well as its six feet wide door (Judge 1971).

In his final report of the 1970 excavations, Judge reports that the site presents significant problems for archaeological interpretation. This sentiment is similarly echoed in the work of Guy Peterson and Cody Newton (Peterson 1982; Newton 2017). Judge points to four main issues in

interpreting the data obtained through the 1970 excavation: the lack of historical documentation associated with the site, the brief original occupation of the site, the continual reoccupation and use of the site, and the WPA reconstruction. Judge contends that all of these factors combined, "present the archaeologist with a rather unique set of problems not normally encountered in historic sites" (184). He does, however, state that based on the excavations he believes the fort to have acted primarily as a place to store trade goods and provide protection for traders. Judge makes it clear that he believes that most of the trade took place remotely, rather than in and around the fort (Judge 1971).

The artifacts excavated from Judge's field work were subsequently analyzed by graduate student Guy Peterson, who also participated in some of the actual excavation. Peterson's dissertation, "Four Forts of the South Platte", is somewhat critical of James Judge's interpretation of Fort Vasquez. This is exemplified in Peterson's characterization of interpretative problems with the site, "While any archaeological site presents problems of interpretation, Fort Vasquez presented almost an infinity of them. Arguments over interpretation are also common when an archaeological site is in a 'normal' condition, but some of the arguments on interpretation concerning Fort Vasquez almost reached the state of war" (Peterson 1982: 22). Peterson's primary concern with interpretation is that the stratigraphy at the site is anything but intact. For example, he points to Judge's interpretation of Room 5 as possibly being a trading or dining area based on the presence of eggshells and chicken bones. Peterson argues that these remains could easily be the result of WPA workers digging a hole in the ground to dispose of their lunch remains, rather than an authentic piece of the 1835 artifact assemblage (Peterson 1982).

Peterson's analysis of the artifacts and critique of the excavation of Fort Vasquez, as well as Cody Newton's impressive study of environmental and social influences on the four forts of the South Platte, facilitated a new line of inquiry for my own investigation. Considering their research I question Judge's conclusion that the fort acted primarily as a storage facility that traders would venture out of in search of Indians to trade with on the plains. In the next chapter I discuss the research methods I use to test Judge's hypothesis and form my own interpretation of how the fort functioned.

Chapter 3

Methods

The Fort Vasquez site was primarily occupied in the nineteenth century, in which eyewitness documentation of similar sites is available, which means that it is in the realm of "historical archaeology". Although the archaeological methods for excavating a historical site are no different than a prehistoric site, there is often supplemental documentation and other materials that can and should be taken into consideration when focusing on the close past. Historical archaeologists utilize photography, interviews with archaeological informants, historical building architecture, indigenous oral tradition, and museum collections as complementary lines of evidence to the archaeological record. Although the written record is often referred to as a defining feature of historical archaeology, this does not preclude the study of people who did not produce a written record, but rather is used as a diagnostic feature of the broad time-period in question. For example, this thesis utilizes a historical archaeological approach in the sense that I study photographs, illustrations of architecture, museum collections, and informant interviews in addition to evidence excavated from the site. This is a historical archaeological study in the sense that there are written records I refer to dating to the time of the site's occupation. The indigenous occupants of this region are just as important as the Europeans and Americans who produced some of the documents referred to in this thesis. And in addition to European produced records, the oral traditions of Cheyenne and Arapaho people were consulted as lines of evidence (Boye 1999; Stands in Timber and Liberty 1967; Sutter 2004).

Archaeologists have struggled to reach a consensus on what type of site and methodology constitutes an historical archaeological approach. Early considerations of historical archaeology in the 1960s and 70s focused primarily on the presence of written text or oral tradition as a means of

aiding excavation and analysis (South 1977). James Deetz, for example, has defined historical archaeology as studying, "the cultural remains of literate societies that were capable of recording their own histories" (Deetz 1996: 5). Typically, sites that fall under "historical archaeology" have some sort of written component, whether directly from the site or from the general time period, that can be used to supplement the archaeological record. The association of historical archaeology with the written word was critiqued in the 1990's and early 2000s.

Critics argued that written and oral sources often point archaeologists in the wrong direction and create biases that would not exist if excavation were the only line of evidence (Funari, Hall, and Jones 1998). For example, much is known about Louis Vasquez's life in the 1820's and 1850's-60's through documentary sources, but not much is known about his time in the west in the 1830's-1840's. Two sites besides Fort Vasquez have been commonly associated with Vasquez for which there is no archaeological evidence and very little documentary evidence: Fort Convenience and a simple hunter's cabin at the Vasquez Fork of Clear Water Creek. The only documentary evidence available linking Vasquez to Fort Convenience is a letter he sent to his brother Benito Vasquez Jr. which contains the name "Fort Convenience" in the dateline. This site is never made mention of by Vasquez or any known historical sources again, but the myth of a log structure built by Vasquez and Sublette has been perpetuated by historians for decades. In reality, "Fort Convenience" was probably a humorous way of saying that they were camping where it was convenient (Wilson 2003).

Archaeologists also pointed out that focusing on the written word creates a false dichotomy between literate and preliterate, or history and prehistory. This notion of a binary timeline is mostly unique to the New World, particularly in the study of colonial America. European archaeologists tend to view time and literacy as a gradation rather than a binary (Funari, Hall, and Jones 1998). This view, however, is still problematic as it promotes an evolutionary and ethnocentric view of the past that favors writing as a cultural pinnacle for all civilizations (Little 1992). In this sense, historical archaeology has been criticized for focusing mostly on white, European populations and largely ignoring indigenous people in North America who occupied the same historical landscapes (Rubertone 2000).

Critics argued that although Native populations in the historical period have not been entirely ignored, "historical archaeology's commitment to research on Native Americans has remained tentative" (Rubertone 2000: 426). Patricia Rubertone pointed out that while historical archaeologists do focus on Native Americans, the subfield often produces work that suggests discrete histories, rather than holistic studies that are inclusive of different identities in the past. Rubertone points to the reliance on the direct-historical approach (Dixon 1913; Wedel 1936; Steward 1942; Willey 1953; Willey and Sabloff 1993; Trigger 1989; Lyman and O'Brien 2001), as well as acculturation studies (Redfield, Linton, and Herskovits 1936; Barnett 1940; Linton 1940; McNickle 1957; Foster 1960; Spicer 1964; Spicer 1962; Gordon 1964; Trigger 1989) in the infancy of historical archaeology as contributing to factors to the lack of inclusivity in the subfield.

This point was, however, addressed by archaeologists like Deetz who argues that, "The literacy of the people it studies is what sets historical archaeology apart from prehistory. But not all the people were able to read and write; indeed only a minority could through most of the time with which we are concerned. But even if a majority lacked the ability to write others often wrote about them" (Deetz 1996: 10-11). Deetz goes on to argue that although the focus on writing is what defines historical archaeology it should be noted that this is representative of the variety of methods used by historical archaeologists.

In more recent decades a considerable number of archaeological studies dealing with the historic and protohistoric have been published that address the issue of lack of inclusivity. Engagement with social theory including postcolonial theory³ and indigenous archaeology (Spivak 1990; Naum 2010; Said 1978; Bhabha 1996, 2004; Ferguson and Colwell-Chanthaphonh 2016), feminist and queer archaeology (Battle-Baptiste 2011; Spector 1993; Joyce 2005; Geller 2008; Voss 2008a; 2008b; Wilkie 2010), agency and passive resistance (Adams 1989; Mobley-Tanaka 2002; Scott 1990; Liebmann and Murphy 2011; Mills 2008), and conceptualizing identity and ethnicity in the archaeological record (Greene 2011; Schaafsma 1996; Preucel 2002; Lightfoot, Martinez, and Schiff 1998; Brighton 2009). Interest in post-contact sites with multi-ethnic communities has also grown in historical archaeology (Beaudoin 2013; Schaafsma 1996; Kane 2014; Newton 2012; Liebmann and Murphy 2011), which has shifted the focus from binary identities (i.e. colonizer and colonized) to the practice of identity-making. Additionally, studies that focus on historic native American populations and the significant political and social changes that have taken place in their societies have led the way in creating a more dynamic and inclusive understanding of the more recent past (Fowler 2002; Church 2008; Silliman 2004; 2012).

In 2008 Heather Burke wrote that she believed one of the future directions for historical archaeology was moving beyond just studying essentialized ethnic or racial groups and moving towards, "a focus on the range of imagined identities that are constructed under modernity and it's globalizing form" (Burke 2008: 1445). As such, this study seeks to lay the foundation for an understanding of how globalization during the nineteenth century shaped the identities living on the Great Plains. In order to better understand the processes of globalization the archaeological

³ Postcolonialism considers the process of colonialism and its effects on the life of indigenous individuals and colonizers. This can include notions of identity, otherness, power, and ethnogenesis (Harris and Cipolla 2017).

record requires further exploration. This project therefore seeks to not only fill this gap in knowledge, but to also provide a new understanding of what life was like at a nineteenth century fur-trading post in Colorado.

A. Data Sources

This thesis utilizes three categories of data sources: artifact collections, excavation reports and field journals, and historical documents or photographs. The artifacts were all from the Fort Vasquez Collection, which is comprised of some of the material excavated by Judge in 1970 and is now held by the History Colorado Museum in Denver. Unfortunately, not all of the material excavated in 1970 can be accounted for and the collection is incomplete, as a result of inconsistent collections management over the last 50 years. Excavation reports came from a variety of different sources including the Fort Vasquez Museum's archival collection and other digital sources. The excavation reports were also from other Fur Trade era trading posts in the Southwest-Plains borderlands, like Bent's Old Fort, and were used to compare the architecture and function of adobe trading posts. Finally, in order to obtain a historical frame of reference in addition to archaeological evidence I utilized historical eye-witness accounts. These accounts come from various nineteenth and twentieth century sources including interviews, journal entries, letters, and trade post inventory ledgers. I worked closely with historian and director of the Fort Vasquez Museum, William Armstrong, to find relevant documentary sources.

B. Part 1: Fort Vasquez Function Hypothesis

For the first part of my analysis I investigated architecture and function of fur trade era forts to determine if Judge's interpretation of Fort Vasquez is consistent with a typical site type. I used the excavation reports, book chapters, and journal articles detailing archaeology done at forts throughout the country to identify typical architectural features of a trading fort. I noted data regarding size, shape, building material, presence of bastions, number of rooms, room function, site function, region, and dates of operation. In order to assess room size I referenced Cody Newton's map (2017) of the fort from his final report of the collection.

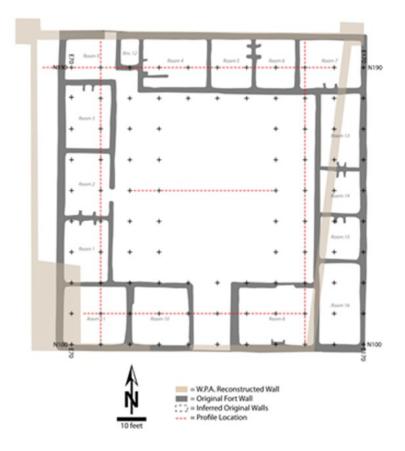


Figure 3.1. Cody Newton's (2017) map of Fort Vasquez (black) and the reconstruction (brown) with the excavation grids from Judge's excavation

I also reexamined the documents associated with the 1968-1970 excavations at Fort Vasquez under the supervision of James Judge. I did not analyze the documents regarding the preliminary excavations as they did not reveal the actual structure or a significant number of artifacts (Baker 1964). By examining the process of excavating and the results of the project I drew my own conclusions and compared them to the conclusions Judge provides in his final report in the Colorado Magazine. I also referenced historical documents, photographs, drawings, and first-

hand accounts associated with Fort Vasquez and other contemporary trading forts in Colorado to compare site function. I consulted with William Armstrong to find first-hand accounts describing the site including some of the first-hand accounts from people who experienced the fort during its primary occupation and some from people who passed by the fort ruins in the decades following its abandonment. There are only two photographs of the fort ruins in 1903 by F.W. Craigin and one drawing identified as Fort Vasquez by Margaret Hill Long in *The Smoky Hill Trail* (1947).

It is important to note that the field notes from Judge's 1970 excavation are fragmentary and do not provide sufficient information to properly assess the context of certain artifacts. The only source that provided provenience information for individual artifacts that I analyzed were the museum tags included in the baggies containing the artifacts. These tags included the general unit that artifact was excavated from and the depth at which it was excavated. Unfortunately, however, a significant portion of the artifacts did not have this information and it is not recorded in the field notes from Judge's excavation. Additionally, stratigraphic profiles for each excavation unit are not present in the field notes. This does not mean that they were not recorded, but rather that they have been lost throughout time. Given this dilemma it is not possible to properly assess artifact context for the artifacts I analyzed. I still considered Judge's distribution of artifacts table, which gives counts of general artifact types by room for artifacts that he considers to be in the "occupation layer", which he states in his report is generally between 8 and 18 inches below the modern surface. Although the depth of certain artifacts I analyzed was included on the museum tags, I was unable to determine if they were in the "occupation layer" without knowing the nature of the stratigraphy for the unit from which they were excavated, because the layer could be at different depths depending on the part of the site. So, the information I used regarding horizontal distribution is strictly from Judge's report, not from the artifacts I analyzed (though they are possibly included in his artifact counts). It is important to be clear that the artifact distributions I refer to throughout this thesis are not derived from the artifacts I analyzed, but rather from the distribution table provided in Judge's report (Table 4.1). I analyzed individual artifacts to determine their specific types for considering overall site function based on what kind of activity they represent (i.e. trade, social events, daily life).

C. Part 2: Artifact Analysis

My primary form of data collection came from working with the Fort Vasquez artifact collection from the History Colorado Museum in Denver. I analyzed the artifacts to test my own hypothesis about the function of Fort Vasquez based on contemporary fort analogues and architecture uncovered during the 1970 excavation. The artifacts were loaned to the Fort Vasquez Museum in Platteville where the analysis was conducted. I requested approximately 400 artifact numbers to examine, with a total of 1166 artifacts contained within the baggies requested. I chose to examine three main artifact categories, as well as a few miscellaneous artifact types that I determined to also provide important data. The artifact categories I analyzed were beads, pipes, ceramics, buttons, leather items, and miscellaneous ornaments. I recorded different attributes based on the artifact category and entered them into an excel spreadsheet to be used for basic statistical analysis. The sample sizes of these categories were based entirely on what material was available for me to analyze (Table 3.1). In requesting certain materials to analyze, I was required to provide History Colorado with a list of the specific artifact numbers of the objects I wanted to analyze. The artifact numbers were only available through an inventory spreadsheet produced in 2017 (Dubin 2014). While the spreadsheet did contain all artifacts in the collection, artifact types were not standardized, so for certain categories I could not identify all of the artifacts I wanted to analyze. For example, although there are 23 buttons in the collection, only 8 were labeled as buttons in the

spreadsheet. Some were labeled by the material they were composed of, such as metal or shell. I obtained complete artifact counts for the collection from a separate report authored by Cody Newton (Newton 2017). While I knew the total amount of artifacts by general category, the vastness of the collection and lack of standardization in the inventory spreadsheet prevented me from analyzing entire artifact categories.

Although there were other artifact categories present in the collection, I chose not to analyze them for different reasons. I did not analyze the faunal remains, because I do not have the expertise required for accurate identification of animal bones. Cody Newton has discussed the faunal remains from this site at length and his work should be referred to for an analysis of this artifact category (Newton 2017; 2018). I did not analyze metal artifacts as most were building materials, like nails and screws, and analysis of these objects would not be useful in answering my research questions. Finally, I did not analyze the stone objects, which were mostly gun-flints, because Judge did not address this artifact category in his final report and therefore, I had no point of comparison from which to draw my conclusions for this category.

Number of Artifacts Analyzed versus Total Number in FV Collection			
Artifact Type	Total Count	Sample Size	Percentage of Total
Beads	2,463	1065	43%
Buttons	23	8	35%
Ceramics	23	23	100%
Faunal Remains	2047	0	0%
Leather	34	3	9%
Metal	989	0	0%
Pipes	86	64	74%
Stone	20	0	0%

Table 3.1. A table comparing the total number of each artifact type in the collection with my sample size

i. Beads

I chose to analyze the beads, because other than faunal remains they are most numerous artifact category in the collection. Additionally, beads are an important and ubiquitous piece of material culture of the fur trade era (Dubin 2009; Woodward 1979; Spector 1976; Hancock 1996). I chose to analyze the beads primarily to determine some of the global trade connections associated with Fort Vasquez. Attributes like shape, color, and size can be used to postulate the country of origin, as well as the time period during which the beads were produced.

I used the Kidd and Kidd (Kidd and Kidd 1970) classification system for glass trade beads to categorize general bead types. The system is the most ubiquitous classification system for glass trade bead form and most historical archaeologists use these types to describe the beads they are analyzing. In this system beads are classified by the associated production technique, with the primary techniques being wound, drawn, and molded. Drawn beads are produced in large, very hot furnaces, with two men drawing out a large rod of glass by slowly walking in opposite directions and maintaining an original air bubble in the center. The rods were then fractured into canes and then into beads. This technique is used for seed beads as it is preferable for producing large quantities of beads. In contrast wound bead techniques produce individual beads by winding a piece of molten glass around a metal rod or wire. Molded beads are produced by heating glass rods and feeding them into a mold that stamps the glass into a pattern as well as perforates the bead (Dubin 2009) (Dubin 1987; Hancock 1996; Kidd and Kidd 1970; Spector 1976; von Wedell 2011).

During my analysis of trade beads excavated from Fort Vasquez I chose to record dimensions (width, height, and thickness), color, shape, and mass, as well as other distinguishing factors like the presence of surface peeling on the exterior of the bead. I chose these attributes, because they are used in identifying time period and in some cases origin of manufacture. Dimensions, shape, and mass can be used to determine rough time period (von Wedell 2011; Hancock 1996). Beads from earlier time periods tend to be inconsistent in size and shape, while beads manufacture in the mid to late nineteenth century tend to be more standardized. Color and shape are useful in some situations for determining location of manufacture. For example, glass beads that have faceted and/or molded surfaces are almost always from Bohemia (modern day Czech Republic), as Bohemian glass bead factories were the only places in the nineteenth century that had the technology and knowledge to produce molded or faceted beads (Karklins 1983). Color is also an important attribute for determining location of manufacture depending on the time period, as only certain countries had the recipes for specific colors at different points in time. The color of seed beads is also important for identifying indigenous preferences, and may even suggest different groups trading at the fort. For example, Arapaho and Cheyenne people tended to use large numbers of blue and white beads in their beadwork, while Crow people preferred pink and green (Dubin 2014; DeBoer 2005).

To record the dimensions of the beads I used a pair of standard digital calipers. The mass of the beads was recorded with a pocket scale that measured in grams. These attributes were recorded in a master excel spreadsheet. Additionally, I photographed all beads that I did not classify as seed beads. I did not photograph all of the seed beads I analyzed, but instead opted to photograph a small sample due to the large number of this bead type in the collection.

ii. Pipe Stems and Bowls

The choice to study pipes was based again the large quantity of objects in this artifact category. Pipes are also an important piece of nineteenth century material culture that are commonly found at fur trading sites. When examining the pipe bowls I chose to record several attributes including dimensions, molded patterns, bowl shape, size, and angle, and presence of a spur. I recorded the dimensions of each fragment to the nearest 0.1 millimeter using a set of digital calipers, so when I looked back at the photographs of the artifacts I would have a sense of their size. Additionally, I described the molded patterns on the bowl and/or stem of each fragment if present. I chose to record molded patterns because certain patterns can be used to determine a date range for production. I also assessed the shape, size, and angle of the bowl relative to the stem. The spur was examined if present for shape, size, and placement on the stem. Bowl and stem morphology are important for determining how a pipe compares to known typologies (Atkinson and Oswald 1969). Finally, I recorded the color of the clay used in the production of the pipe and whether the pipe presented clear evidence of being smoked.

For the pipe stems I recorded the diameter of the bore in mm and converted to measurement to 1/64's of an inch. This method has been used to determine time period of pipe production, as the bore of clay pipe stems from Europe increased in size from 9/64 inches in the late 16th/early 17th century to 4/64 inches by the early nineteenth century (Deetz 1996; Barber 1966; Hanson 1968; Heighton and Deagan 1971; Binford 1962).

iii. Ceramics

When analyzing the ceramics from this collection I recorded their dimensions, mass, color, and design. Additionally, I analyzed the glaze, ware/paste, and decoration of each sherd. This was to identify possible vessel types and compare the pieces to known historic types for identification of date and/or origin. Ware is the composition of the clay that forms the vessel, which varies in porosity, hardness, color, and translucence. The ware is a useful attribute for determining possible function of the vessel, as white paste earthenware and porcelain were typically used in tableware, while buff paste stoneware was typically for utilitarian vessels like crocks or jugs. Glaze can be used as a diagnostic attribute for broad source origin and time period, as certain glaze enjoyed market popularity at different points in time. (Brennan 1982; Miller 1980).

For recording mass, I used the same pocket scale and recorded the mass in grams. I used the same pair of standard digital calipers to record the dimensions of the sherds. I recorded the length and width of longest/widest edges of the sherd, simply to get a sense of their size when returning to reference photographs. The more important size measurement was the thickness of the sherds. The thickness can suggest the vessel type and ware type more accurately. I also recorded the basic color of the sherd (e.g. creamy yellow, bright white). Color and design can also aid in determining potential function for the larger vessel. I photographed the sherds for future reference.

iv. Additional Artifact Types

Beads, pipes, and ceramics comprise the majority of artifact types I chose to examine. While surveying the collection, however, I encountered other artifact types that were much less numerous, but were compelling in terms of information they could offer about the site. These categories included leather objects, buttons, gun-flints, and miscellaneous ornamentation.

When analyzing the leather objects, of which there were only three that I chose to assess, I did not take measurements or weights as the objects were too fragile to be handled. I did, however, take photographs to use for identification purposes. All the leather objects were determined to be shoe fragments. I chose to photograph the shoes and describe them in my analysis, because (as I will discuss later) shoes are useful diagnostic artifacts for dating (Stevens and Ordonez 2005; Anderson 1968). Buttons are also a useful artifact for dating and can be indicative of everyday life, as they were not common trade objects (Gottfred 2003; Woodward 1979; McCloskey and Olsen 2009). When analyzing the buttons I measured the length, width, and thickness to the nearest 0.1 millimeter using digital calipers. I also took the mass to the nearest 0.1 gram using a digital pocket scale. I noted the number of buttonholes present in the button center, as well as any other designs visible on the button surface. Finally, I noted the color and material of the button. The size, shape, and material of historic buttons is important for determining what kind of garment the button was used to fasten. Smaller wood buttons, for example, were commonly used in undergarments in the nineteenth century (Peacock 1972; 2008; Epstein 1968; McGowan and Prangnell 2011)

Finally, there were two artifacts that I characterized as miscellaneous ornaments. These artifacts were particularly compelling but did not fit into any of the other artifact categories I designated. One was labeled in the collection as a button, but upon closer inspection I determined that it was actually a hawk-bell, as I will later discuss (Ivas 2014). I measured the dimensions of the bell to the nearest 0.1 millimeter using a pair of digital calipers and took the mass to the nearest 0.1 gram using a digital pocket scale. The other artifact that I characterized as a miscellaneous ornament was a small piece of jewelry shaped like a black scotty dog. For this object I took the same measurements and took detailed notes on the color, surface designs, and other features. I photographed this artifact from every angle, which as I will explain later, was critical for determining its origin and date.

Chapter 4

Results

The objective of this research was twofold: 1) to analyze the artifact assemblage from the 1970 excavation to identify global trade connections and 2) to reinterpret the primary function of Fort Vasquez. James Judge originally interpreted the fort as being primarily a storage facility to provide protection for the traders and their goods from which they would trade remotely by bringing the goods to local indigenous populations (Judge 1971: 201). I will compare his hypothesis against my own interpretation of the fort's room functions based on the room size, presence of hearths, and location within the fort. I will then test my hypothesis about fort and room function using my analysis of the artifacts. This analysis will include a discussion of the global connections that the artifacts represent, but also what their context in the archaeological record means for the fort. I will then conclude by comparing my overall findings with Judge's interpretation of Fort Vasquez.

A. Room and Site Function

As previously discussed, Judge's (1971) interpretation of room and overall site function is based on artifact distribution, room structure, location, and analogy with other contemporary forts. He argues that "it is apparent from the calculation of space devoted to the various room functions that rooms in which actual trading was carried out comprise the smallest percentage of available space in the fort. On the other hand, storage facilities occupy that largest volume...Implicit in the view presented here is a trading system which is more dependent upon taking the merchandise to the Indians than vice versa" (Judge 1971: 201). It is this hypothesis that I intend to test with the same variables he used in his original analysis. He does state, however, that "[at] this point in the interpretation of the Fort Vasquez material, the assessment of room function will not be phrased in definitive terms but rather as *suggested* functions pending verification through further, more intensive analysis of the artifacts and historical record"(Judge 1971: 192). And indeed, he is correct in his statement that room function assessment requires a more in-depth interpretation of the artifacts. The artifacts need to be analyzed for more than just their general form and distribution throughout the fort.

When considering the distribution of artifact types in different rooms there are a few complications of which to take note. First, after the site was abandoned in 1842 it is likely that the remaining inventory was either returned to St. Louis or sold to other trading ventures (Hafen 1964). Additionally, as demonstrated in this thesis, artifacts from the 1860's, early 1900's, and 1930's have made their way into the archaeological record and will therefore skew statistics that are based purely on artifact type without consideration of complications to the archaeological record. In the 1860's a significant flooding event in the Platteville area reportedly inundated the fort leaving a layer of gravel in the stratigraphy as noted by Judge (Judge 1971; Sanford 1927). Additionally, there is historical documentation of the residents of Platteville not only picnicking at the fort at the turn of the century, but artifact hunting at the site. Eye witness accounts recall picking up beads and other artifacts from the surface of the site during these outings (Peterson 1982). The surface collection of artifacts would not necessarily disturb the stratigraphy of the site, but would skew the artifact counts used in Judge's distribution.

The entire site was also leveled by the WPA in the 1930's. During the project the remaining walls of the original fort were toppled to be reincorporated into the reconstruction and the floor of the fort was bulldozed about a foot beneath the surface. Judge, however, states that the fur trade occupation was located approximately 8-18 inches beneath the surface. The excavation, as stated, took place 40 years after the reconstruction, so it is plausible that more sediment accumulated in

the fort prior to the excavation. As I will discuss in the following section, the distribution of general artifact categories was patterned in a way that suggests that the occupation layer was still reasonably in-tact when excavated by Judge.

The general distribution of artifacts can therefore still be considered but should not be treated as though they are in situ representations of fort activity. Judge acknowledges this in his report stating, "The interpretation of room function is based on a number of variables, including the structural features of the room in question, its position relative to other rooms, and the frequency distribution and loci of artifacts recovered from it. Although certain attributes may be considered 'key' traits in deriving room function, ultimately the most reliable assessment must rest on the total configuration of traits, both structural and functional, displayed by each room" (Judge 1971: 193).

I agree that instead of just using artifact distribution to determine site and room function, archaeologists should examine architectural features, like room size and presence of a fireplace, in conjunction with an historically informed understanding of how typical fur trade forts of the time were constructed. Archaeological data and eye witness accounts from forts like Bent's Old Fort and Fort Laramie indicate that rooms for trading ceremonies were extremely important, if not mandatory, for trading posts catering to indigenous clients (Comer 1996; Dick 1956; Lavendar 1954; Olson 1979). The archaeological evidence from Fort Vasquez, both artifact and architectural analysis, support a fort that had spaces for ritual trading and social events. I reinterpreted the site according to these criteria as demonstrated in Figure 4-1.

Trading ceremonies at Bent's Old Fort, for example, required specific rooms for trade to be conducted. Plains Indian groups used tobacco as important part of trade, which scholars have argued is a continuation of the calumet ceremony. The calumet ceremony uses a sacred pipe made of catlinite and was intended to represent the creation of the world. It was used to create and maintain relationships between different Plains groups dealing with trade, negotiation, peace, and

war. The ceremony often involves dancing, the passing of a ritual stone pipe, and the actual act of trade (Blakeslee 1975; Hall 1997; Comer 1996; Paper 1988; Davis 2017). The sharing of tobacco smoke between participants represents

a union and as Kaitlyn Davis

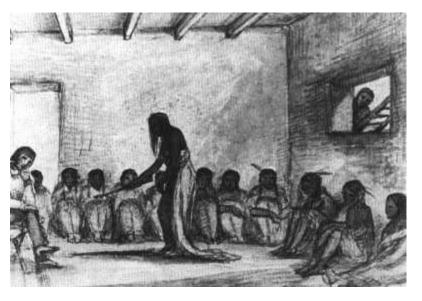


Figure 4.1. A drawing by Lieutenant Albert from Comer's "Ritual Ground" (1996) of a Cheyenne trading ceremony in a trade room at Bent's Old Fort

notes, "is an example of using ritual as a social technology to welcome and interact with other groups" (Davis 2017: 5). The smoking of tobacco at Bent's Old Fort was an important component of ritual trade, as demonstrated by Comer (Comer 1996). A drawing by Lieutenant Albert in 1846 depicts ritual exchange in a trade room at Bent's Old Fort (Figure 4.1). In the image a Cheyenne ceremony is taking place which involves the smoking of tobacco in a designated trade room. In the image both indigenous people and white traders are featured, suggesting that the ceremony involved all trading parties, not just indigenous people. Ethnographic accounts from the seventeenth through the nineteenth centuries confirm that the calumet ceremony or "smoking over the horse" as traders called it, was available for participants who were considered outsiders as it

was a means of welcoming others and creating friendships (Paper 1988). Although the accumulation of wealth had become the driving factor of trade, the ritual of sharing tobacco remained important during the act of trade.

Archaeologists interpreted four rooms in Bent's Old Fort as being dedicated entirely to trade rituals. Additionally, a council room, kitchen, billiards room, and dining room were likely also used to entertain guests and trade partners. Most of the rooms at Bent's were interpreted as being living quarters, with approximately one third of the total rooms being dedicated to this function. Of the roughly 30 rooms at Bent's Old Fort, only three were specifically dedicated to the storage of trade goods. I argue that Fort Vasquez, though considerably smaller, probably functioned in a similar manner. Both forts were catering to a client base comprised primarily of indigenous Plains clients. Fort St. Vrain was founded by the same company as Bent's and was described as a mini version of Bent's Old Fort. There would therefore almost certainly have been rooms for trading ceremonies in Fort St. Vrain (Brotemarkle 2001; Peterson 1982). Fort Vasquez would then be at a disadvantage to not provide similar accommodations for indigenous clients. With the consideration of the importance of tobacco and trade rituals for Cheyenne and Arapaho groups in combination with room size, features, location, and a consideration of artifact distribution, I have reinterpreted the room functions of Fort Vasquez to better reflect this historical knowledge.

I agree with Judge's interpretation of Room 1 as being the main trade room. I believe that Room 1 would have been a room for trading rituals. The size of Room 1 would have provided space for important trading ceremonies that Cheyenne and Arapaho were documented as performing at Bent's Old Fort in trading rooms, some of which included dances and smoking a shared pipe (Lavendar 1954; Comer 1996). These ritual spaces would have been critical for Fort Vasquez, as they not only needed to make their clients happy, but also needed to compete against three other enterprises within a short river stretch. I interpreted Rooms 2 and 3 as living rooms for the primary occupants, most likely being Sublette and Vasquez, because they both have fireplaces and are slightly larger than the other guest rooms. A shared fireplace between Rooms 1 and 2 suggests that these rooms would have been used more often, as it would allow for more efficient heating of the rooms. These two rooms (1 and 2) also contained about a quarter of the total artifacts excavated from the site, though I treated this data with caution due to the complications with artifact distribution and the archaeological record. Rooms 2 and 3 both have fire places and the distribution of artifacts excavated from them, particularly the higher density of buttons, it is reasonable to interpret them as living quarters.

I am also in agreement with Judge's interpretation of Room 4 as being the kitchen and the smaller connecting Room 12 as being kitchen storage. The large amount of faunal remains in combination with the charred stain in the stratigraphy (likely from an oven) is consistent with his interpretation. I also agree with his interpretation of Room 5 as being a trade room. He bases his interpretation on the distribution of artifacts, as the room contained the high number of beads and pipe fragments. The large quantity of artifacts combined with the inclusion of a fireplace suggests that it could have been used for trading or as a guest room. Room 6 shares a fireplace with room 5, which as I previously mentioned, indicates that the rooms would have been more efficiently heated. I therefore interpret Room 6 as also being a trade room or guest room. Rooms 5 and 6 were probably more commonly used as guest quarters as they share a fireplace. Room 7 is also probably a trade room or guest room. It includes a fireplace, which suggests that it was being used frequently enough that it would have needed to have a heat source. Significantly less artifacts were excavated from this room.

I tentatively agree with Judge's interpretation of Room 8 as being the "blacksmith shop". While the presence of metal and nails in this room is not overwhelming, the inclusion of a considerably large hearth and the fact that it is somewhat removed from the living and trading spaces in the fort would support the function as being for blacksmithing. I also agree with the interpretation of Room 16 as being a storage room. While I disagree with Judge's interpretation of the majority of the site as being for storage, I do agree that this room was probably for storage.

DISTRIBUTION OF THE MOST FREQUENTLY OCCURRING ARTIFACTS IN THE ORIGINAL FORT ROOMS. (REOCCUPIED ROOMS 13, 14, AND 15 ARE OMITTED. NO ARTIFACTS WERE FOUND IN ROOM 16.)								
Room	Beads	Bone	Buttons	Ceramics	Metal	Nails	Pipes	Tota
1	428	238		5	61	43	14	789
2	12	265	11	2	5	8	1	304
2 3 4	85	158	4		33	30	2	312
4	11	912	2	3	66	180	11	1185
5	466	40	4	2	41	13	23	589
6	39	266			39	23	3	370
7	35	40			7		1	83
8	27	171	1	5	74	73	3	354
10	369	41		1	17	12	2	442
11	41	1	1		3	1	9	56
12	18	53			1	2	1	75
Total	1531	2185	23	18	347	385	70	4559

Table 4.1. A table from Judge's report on the Fort Vasquez excavation demonstrating the artifact type distribution. It should be noted that this table only include artifacts that Judge says are from the "occupation layer".

The odd dimensions of the room, as well as the lack of a fireplace suggest that people were not spending extended periods of time in the room. And if Room 8 was a blacksmith shop it is possible that Room 16 also provided storage for the tools and materials used in the shop.

I disagree with Judge's interpretation of Room 10 as being for storage. At contemporary trading forts, like Bent's Old Fort, Fort St. Vrain, and Fort Lupton, the room next to the entrance of the fort is often used as the fur trade equivalent of a "drive-thru" window. Not all who came to the fort to trade were invited inside the main entrance, so having a window through which small transactions could be conducted would be necessary(Lavender 1954; Dick 1956; Brotemarkle

2001; Hafen 1929). I also agree that Room 11 was likely a storage room due to its proximity to the exterior store window as well as the absence of a fireplace. Additionally, the lack of evidence for an entrance leading to the fort plaza suggests that there was possibly an interior entrance between Rooms 10 and 11, though this has not been supported through archaeological findings.

Room 9 contains four postholes that Judge postulates belonged to a wooden watchtower. The posts are placed on either side of the western facing wall (Figure 4-4). It is possible that these postholes were used for a watchtower, but it would contrast with other contemporary forts which included adobe towers built into the walls. This is not to say, however, that the fort would not have included a wooden watch tower. There probably was available timber in the South Platte basin as Fort St. Vrain and possibly Fort Jackson also used timber posts in their construction. Though Fort

St. Vrain had adobe towers and looked like a scaled-down version of Bent's Old Fort (Brotemarkle 2001). Without evidence of collapsed adobe towers at Fort Vasquez it is difficult to make an argument against a wooden watchtower in lieu of bastions built into the walls. Room 9 is not included in Judge's distribution of frequently occurring artifacts, Fig republications there was not a significant amount of recorrect reputation are a significant amount of recorrect reputation of the term of term of the term of the term of the term of the term of t

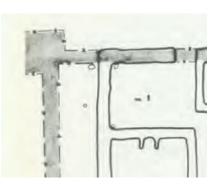


Figure 4.2. An illustration from Judge's (1971) report depicting the location of the post-holes in room 9. The shaded portion represents the reconstruction of the fort, while the outlines represent the original structure.

from this area.

Overall, I do not agree with Judge's interpretation of the highest percentage of the fort's space as being used for storage. What Judge fails to consider in his final report of space devoted to functional categories (Figure 4.3) is that the plaza would have been a space used frequently for social events, trading, and other day-to-day activity as demonstrated by archaeological as well as

historical evidence (Comer 1996; Hafen 1950; Dick 1956; Nassaney 2015). Even without this evidence it defies logic to have a large space separating the rooms if they were mostly being used for storage. If the fort was primarily for "adequate security and maintenance facilities for a trading system in which the fort was more a base of operations for that traders than a center of trade for the Indians" then why have such a large plaza (Judge 1971: 202)? Why not just have a much smaller courtyard?

Judge might argue that the size of the plaza was based on the presence of a corral within the fort, but there is no historical documentation or archaeological evidence to support animals being kept inside the fort. In fact, at other contemporary forts a corral was typically built attached to the outside of the fort, rather than inside (Brotemarkle 2001; Lavendar 1954; Dick 1956). James Beckwourth also discusses building a barn for Fort Vasquez when Sublette named him "agent-incharge" of the fort (Wilson 1972). He states in his autobiography, "Here we erected suitable buildings within the fort for our proposed trading, and, among others, a barn which we proceeded to fill with hay for the coming winter" (Beckwourth 1856: 425). And with Fort Vasquez being a small fort it seems that keeping animals inside the fort would be undesirable, though not impossible. I therefore included the plaza in my own estimates for space devoted to functional categories and I disregard the interpretation of a coral as being the reason for the size of the plaza. Judge's Interpretation of Fort Vasquez Room Function

My Interpretation of Room Function at Fort Vasquez

1. TRADE 1. TRADE 2. LIVING 2. TRADE 3. LIVING 3. LIVING 4. KITCHEN 4. KITCHEN 5. TRADE ROOM/TEMPORARY GUEST 5. LIVING OR DINING ROOM 6. GUEST ROOM 6. TRADE ROOM/TEMPORARY GUEST ROOM 7. GUEST ROOM 7. TRADE ROOM/TEMPORARY GUEST 8. BLACKSMITH SHOP ROOM 9. WOODEN WATCHTOWER 8. BLACKSMITH SHOP **10. STORAGE** 9. BASTION OR WATCHTOWER **11. STORAGE 10. STORE WITH WINDOW 12. KITCHEN STORAGE** 11. STORAGE **13. LATER OCCUPATION ADDITION 12. KITCHEN STORAGE** 14. LATER OCCUPATION ADDITION 13. LATER OCCUPATION ADDITION **15. LATER OCCUPATION ADDITION** 14. LATER OCCUPATION ADDITION **15. LATER OCCUPATION ADDITION 16. UNKNOWN**

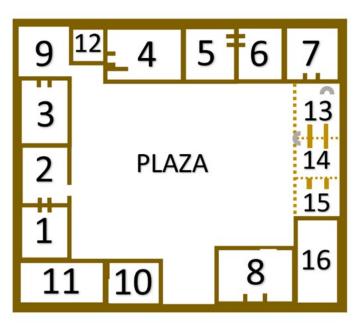


Figure 4.3. A map depicting my reinterpretation of the room functions in Fort Vasquez compared to Judge's interpretation of room function redrawn by myself from Judge's original report (not to scale)

16. STORAGE

Based on historical documents and comparison to contemporary and similar forts I hypothesize that most of the space in Fort Vasquez was used for trading purposes and some trade rooms would occasionally be used as guest quarters. Living space would have composed about 10% of the fort's space, not including guest quarters, as in other contemporary forts guest quarters were used primarily for trade and then for housing visitors (Lavender 1954; Comer 1996; Chittenden 1935b). And finally, storage and maintenance (kitchen and blacksmith) together would have made up 10% of the fort's functional space. It therefore stands to reason that the primary function of Fort Vasquez was trade and the social or ritual activities that accompanied these transactions, not as a storage facility and headquarters from which traders operated remotely.

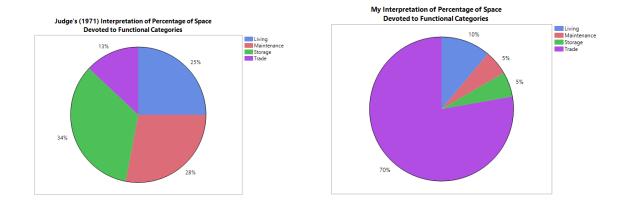


Figure 4.4. Two pie charts depicting percentage of space devoted to functional categories according to Judge 1971 (left) and my interpretation (right), which includes the plaza, while Judge's does not.

B. Artifact Analysis

I analyzed the ceramics, pipes, beads, buttons, leather, and two miscellaneous ornaments in the Fort Vasquez collection to test Judge's hypothesis about Fort Vasquez's primary function as a storage facility. I also consider the results comparatively with my own reinterpretation of the fort's function. I also analyzed the artifacts to determine their source of origin, as this information has never been discussed in publications regarding Fort Vasquez. In order to get as complete an understanding as possible of these different artifact categories I requested every artifact that was *listed* as either a pipe, bead, button, leather, or miscellaneous ornament; I did not select sample sizes, I simply requested every artifact from each category. As I have previously mentioned, however, an important caveat to note when reviewing my artifact analysis is that the Fort Vasquez Collection was significantly neglected for most of the time it was in storage. When I requested specific artifacts to be analyzed from the collection, many were not actually present in the stored collection when the museum staff attempted to locate them or were not labeled consistently in the inventory spreadsheet. It is unclear what happened to the missing artifacts, but I attribute their absence to a lack of consistent collections management over the past 50 years. Therefore, it is important to understand that my analysis of these specific artifact categories is only as complete as the collection was during my research in 2018.

In the following section I will consider both the global trade connections that the artifacts represent and will also consider if they support Judges interpretation, my reinterpretation, or another explanation of the room functions and overall fort function of Fort Vasquez.

i. Ceramics

I analyzed 26 ceramic sherds from the Fort Vasquez collection to determine the primary function of the parent vessel and to identify any global trade connections. Of the 26 sherds, I identified three ware types, four glaze types, six specific ceramic categories, and four predicted parent vessel functions based on these attributes. Based on these results I argue that these vessels represent both storage/transportation and everyday functions, which is not consistent with Judge's contention that the fort was primarily used as a storage facility. *Wares:* The ceramic sherds from Fort Vasquez belong to three different ware categories: earthenware, stoneware, and porcelain. Stoneware is a dense-bodied clay ceramic that is fired at temperatures high enough to vitrify the body of the vessel walls

(Figure 4-6). The paste color of stoneware is typically a light grey or brown as a result of the firing process.

This type of ware is particularly heavy as a result of the



Figure 4.5. a stoneware sherd from the Fort Vasquez collection, demonstrating a dense and vitrified body

lack of porosity from vitrification. In addition to its lack of porosity, stoneware is also coated with specific types of glazes that can withstand high kiln temperatures. As such, stoneware was ideal for transporting or storing liquids or bulk dry goods, like grains, whiskey, or coffee (Rado 1969; Boger 1971).

Earthenware, on the other hand, is lighter in mass and more porous than stoneware. Most historic ceramic tableware is earthenware, as it was almost always made industrially in bulk. The body of earthenware can be a variety of colors, but it is most often white or off-white, but it is never translucent as it is not vitrified. Archaeological earthenware often exhibits evidence of crazing in the glaze (Figure 4-7) in the form of what appears to be small breaks in the glass of the

glaze. This is a result of the porosity of the ware and its tendency to absorb water and expand thus causing the glaze to crack (Rado 1969). It stands to reason that although earthenware was used for a variety of purposes, it was most suitable for tableware rather than storage or transportation (IMACS 1992).

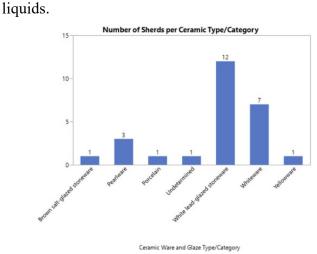


Figure 4.6. An earthenware sherd from the Fort Vasquez collection

And finally, I identified one sherd as being porcelain. Porcelain is a dense, highly vitrified, translucent ceramic type. It can be glazed or unglazed and often looks glass-like. It differs from stoneware in its translucency, as stoneware is opaque and non-glass-like in appearance. Porcelain is a broad category of ware and can refer to any ceramic that is white, translucent, and vitrified. Historically, porcelain was brought to Europe from China by Portuguese traders and has since been most commonly used as fine tableware (Rado 1969).

Glazes: I identified three possible types of glazes during the analysis of the ceramics: lead (n=15), salt (n=1), and tin or lead (8). Identifying glazes without chemical testing cannot produce a definitive result but can still be accurate. I identified the glaze on the stoneware as being mostly lead as all of the stoneware pieces (apart from one salt-glazed) exhibited a transparent, shiny glaze. This excludes glazes like salt or tin, as they would not produce a clear, glassy surface. Salt-glazed vessels exhibit a surface that is often described as resembling an orange peel, resulting from tossing salt into the kiln during the firing process. Only one piece of stoneware exhibits these tiny surface dots. The earthenware pieces were either tin or lead glazed, but a definitive result cannot be determined without chemical testing. Tin-glazing produces an opaque, often white glassy surface and is often used on white earthenwares and transfer prints. With white earthenwares it cannot be determined if the glaze is opaque or clear, as the surface appears to be the same color as the body of the sherd. And finally, the porcelain sherd is not glazed, because it is vitrified. Porcelain, although it can be glazed, does not a require a glaze because the vitrification process renders it impervious to moisture; the porcelain sherd in this collection is not glazed (IMACS 1992; Rado 1969; Boger 1971).

Ceramic categories and vessel functions: I identified seven specific ceramic categories based on the combination of ware type, glaze type, color, and decoration (Figure 4.7). The most common ceramic category is white lead-glazed stoneware, comprising 46% of the sherd assemblage. These sherds likely belonged to storage and transportation vessels. Stoneware was historically use for this purpose, because of its durability and impermeability (Brennan 1982; Miller 1980). The stoneware in this collection reflects this function; on average the stoneware ceramics were considerably thicker than the earthenware and porcelain (Figure 4.8). The white lead-glazed stoneware is also glazed on both the exterior and interior of the sherds, suggesting that it would have been possible to transport liquids in the parent vessels. Additionally, some of the white leadglazed pieces appear to be part of the rim and upper portion of a jug or crock, two very common stoneware pieces for transportation and storage during the fur trade. Only one piece of a stoneware is not included in this category: a brown salt-glazed stoneware sherd. This sherd differs from the white lead-glazed in not only it's salt-glazed exterior surface, but it's lack of glazed interior. The unglazed interior suggests that it was likely used for storing or transporting dry goods, rather than



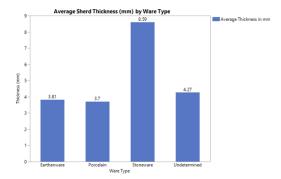
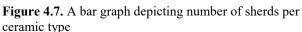


Figure 4.8. Average thickness in millimeters per ware type



The earthenware was slightly more variable in its specific category types. Of the broad earthenware category, I identified whiteware (n=7), yellowware (n=1), and pearlware (n=3). The whiteware most likely represents common tableware like plates or bowls to be used for daily activities (Miller 1980). Tableware was not a common or useful trade item as it was heavy to transport and too easily broken; it would have more likely been used by people living at the fort. The single yellowware sherd was slightly thicker than the rest of the earthenwares. This is consistent with known typical functions of this type of ceramic; yellowware pieces were typically bowls, pitchers, or other type of kitchen containers (Brennan 1982). Finally, there were three pieces identified as pearlware based on the presence of transfer-printed décor (Figure 4.9). In the mid-nineteenth century the most popular type of transfer-printed ceramic was pearlware, which

was transported to the United States from the United Kingdom in huge quantities (Majewski and O'Brien 1987; Little 1969). These sherds are classified as decorative tableware, rather than common tableware. Although occasionally found in the western frontier in the form of "harlequin sets", which are sets of transferwares with differing patterns and colors often being combined from Figure 4.9



Figure 4.9. Pearlware with transferprinted décor from the Fort Vasquez collection

disparate sets, transferware or pearlware ceramics were not a common occurrence.

Archaeological Context: When considering the context of individual ceramic sherds notes detailing strata in which the sherds were located is no longer available. The only available information regarding vertical excavation is the approximate depth at which they were excavated, but as I have previously discussed stratigraphic profile for each excavation unit are no longer available. Considering general excavation depth is not helpful when one cannot associate it with

specific strata. The horizontal distribution of ceramic sherds is not particularly telling in terms of room function, because the sample size is small. I still considered the distribution of ceramics, but I do not assert that it is as meaningful as other lines of evidence that I have incorporated into this research.

It makes sense that 3 ceramic sherds would be found in the kitchen (Room 4) and 2 sherds in the dining room (Room 5), but it seems odd that 5 sherds would be excavated in the blacksmith's shop (Room 8) and 5 would be excavated in what Judge interprets as being the main trade room (Room 1) (Figure 4.10). Unfortunately, it was not possible for me to completely recreate the specific horizontal distribution of ceramics in the fort based on Judge's report and notes, because

the locations listed on the artifact tags do not match the distribution table that Judge provides in his report and the excavation notes do not discuss specific finds. Although it's not inconceivable that ceramics would have been used in these rooms, without the knowledge of what strata these ceramics were excavated from,

it is not possible to test Judge's hypothesis with this artifact category. I therefore was unable to determine

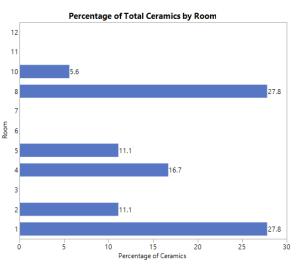


Figure 4.10. Percentage of total sherds excavated by room from based on Judge's distribution of artifact table

what types of ceramics were found in different rooms, which would have been useful for clarification. And with a sample size that is so small, the percentages of total sherds excavated by room are not helpful without context. For example, if the ceramics found in Room 1 were excavated from the floor level and all from utilitarian or storage vessels that would explain their

presence in a room interpreted as a trade room, because they could have held dried goods or even beverages to be traded.

Ceramics Conclusion

The ceramics in the Fort Vasquez collection do not fully support James Judge's argument that Fort Vasquez was mostly a storage facility from which traders ventured out to satellite trading points on the plains. While half of the ceramic assemblage is consistent with storage and

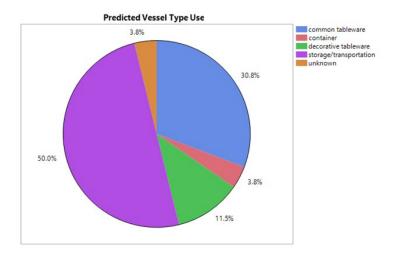


Figure 4.11. A pie chart depicting the percentage of predicted vessel type based on ware and glaze identifications

transportation vessels, the fact that about 46% of the assemblage is tableware suggests that people were living in the fort (Figure 4.11). Judge does acknowledge that people were living in the fort, but the crux of his argument is that they were mostly trading remotely, rather than spending most of their time in the fort. Ceramics were not a common trade good in the western frontier, because they are not durable and are heavy in great quantities which would complicate their transportation from the east. Additionally, the primary clients of Fort Vasquez were Cheyenne and Arapaho people, who were still nomadic equestrians in the nineteenth century century. Earthenware ceramics would not be nearly as desirably as tin cups and kettles, which were lighter and more durable.

Common tableware was likely being used by the occupants of the fort, suggesting that they were taking the time to have prepared meals on ceramic dishes. The presence of decorative tableware further suggests that not only were people living at the fort, they were also possibly entertaining guests. This is supported by James Beckwourth's account of his visit to Fort Vasquez, during which he attended a dinner with traders and other visitors within the walls of the fort (Beckwourth 1856: 427). It is unlikely that decorative and common tableware would be present at the fort in nearly the same quantity as utilitarian ware if it was not somewhat important in the daily lives of Fort Vasquez's occupants.

ii. Pipes

Clay pipes are one of the most common artifact types found at historic sites in North America. The earliest known appearance of European clay pipes in North America is in the early 17th century and they were produced and used until the invention of the cigarette at the end of the nineteenth century. Although they are often referred to as "kaolin clay" many are actually ball clay, which is a type of sedimentary clay composed of varying degrees of kaolinite and other granitic rocks (Allaby 2013). They are produced by pressing the clay in a mold and using a piece of wire to create the bore in the stem (Walker 1983; Binford 1962). Clay pipes are an artifact associated with Europeans; indigenous people in North America had been smoking tobacco and other dried herbs before the arrival of Europeans often in stone pipes (Godlaski 2012).

Stems: The diameter of the bore that runs from the pipe stem to the bowl is often used by archaeologists to date historical sites. The diameter of stem bores provides a fairly standard denominator for dates based on what archaeologists and historians know about the production of clay pipes and the preferences of smokers. Early pipes from the 17th century tend to have large bores, averaging at 9/64 inches. Throughout the succeeding centuries the bore diameter gradually became smaller, likely as a result of the increasing length of pipe stems and the preference of

Diameter	Dates
9/64	1590-1620
8/64	1620-1650
7/64	1650-1680
6/64	1680-1720
5/64	1720-1750
4/64	1750-1800

Table 4.2. Average diameterwith date range for pipe stemsbased on Harrington's model

smokers to have less material transmitted from the bowl through the stem. By 1800 the average stem bore diameter was significantly smaller at an average of 4/64 inches. Several archaeologists have proposed formulas and schemes for determining precise dates for production based on bore diameters, but none of these methods have been proven to be exact. In general, the bore diameter can be used

to determine an approximate production date of the pipe within a 30-

50 year range (Harrington 1954; Binford 1962; Heighton and Deagan 1971; Barber 1966; Hanson 1968) (Table 4.2).

The difficulty with using stem-bore dating methods for dating the pipes excavated at Fort Vasquez is that by the nineteenth century stem-bore dating is much less reliable. If the pipes at Fort Vasquez were produced during or close to its occupation period, then the bores will be not as useful for dating. However, I still chose to measure the bores because there is a possibility that the pipes could be older as a result of being personal items. If the pipes were produced in the late eighteenth or very early nineteenth century the stem bore dating would still be useful (Walker 1983).

More than half of the stems have a bore diameter of 5/64, which according to Harrington's model would indicate a production date between 1720 and 1750. These unusual results could be the outcome of multiple scenarios. The first possibility is that the stems are actually from the nineteenth century, but because the formula deals primarily with the seventeenth and eighteenth century the diameter measurements are not as accurate. This is the most likely possibility, but difficult to prove.

The second possibility is that the dates are accurate, and the pipes were older than the site occupation. This situation presents a unique interpretive issue. It is possible that the fort was selling old pipes, either because they were cheaper to purchase from larger trading companies or were just left-over merchandise from earlier trading ventures that were passed on to Vasquez. Another explanation is that the pipes were personal items, rather than trade goods. Perhaps the breadth of possible production dates is the product of the "heirloom effect", the phenomena of older or passed down personal artifacts creating dating issues for archaeologists.

The smaller number of pipe pieces (both stems and bowls) in comparison to the large number of beads suggests that clay pipes were not a popular trading item at Fort Vasquez. This would make sense when one considers the smoking preferences of the Cheyenne and Arapaho, the primary clients of the fort. Neither Cheyenne or Arapaho were known to use regularly ball clay pipes. Both Cheyenne and Arapaho preferred to smoke "straight pipes" made from the shank-bone



Figure 4.12. a pipe stem from the Fort Vasquez collection

of different ungulates and red catlinite "T-shaped" stone pipes (Kroeber 1983; Grinnell 1923). There are other examples of groups on the Great Plains using wood and even fired clay, but they did not typically purchase European sporting pipes (Godlaski 2012). This is not to say that it is impossible that the pipes at Fort Vasquez were trade goods but based on the comparatively small number and the preferences of Cheyenne and Arapaho clients it is more likely that the pipes were personal items. I believe that the most likely explanation is that the pipes belong to early nineteenth century and the stems are unable to be dated because the formula does not apply to their time period.

Bowls: The pipe bowls from the Fort Vasquez site provide the archaeologist with more questions than answers. There are several attributes that archaeologists use to date clay pipes: maker's marks, bowl size, bowl shape, angle of bowl, spur or heel shape and size, and bowl thickness. The pipes from Fort Vasquez have largely survived in fragments that do not include spurs or heels and are mostly not large enough to determine bowl shape, size, or angle. This leaves the archaeologist to rely mostly on design, which is not a definitive means of determining date or origin. Design can provide a broad date range and in some cases country of origin, but because of the mass production of pipe by the late eighteenth century, any pipes produced within 50 years of the fort's construction will not provide definitive answer based purely on design. Pipes from the nineteenth century could have been produced in several different countries including England, Ireland, Scotland, Germany, the Netherlands, or Canada (Walker 1983; Kastl 2009; Humphrey 1969; Alexander 1983; Atkinson and Oswald 1969). As the pipes represent a variety of forms and possible date ranges, I will first discuss each individual bowl and then summarize my findings in terms of their implications for an interpretation of fort function.

Pipe 4.13a: This pipe provides no indication of makers marks or specific initials to allow for easy dating or sourcing. The design consists of raised ovals below the rim separated by a single raised line. The rim decoration is worn considerably, but appears to be a geometric pattern of sinuous, meandering raised lines. A pipe with a similar pattern was excavated from the Reed Site, New York which suggests a date in the early to mid nineteenth century (Kastl 2009). The date could range from 1800-1880, though similar patterns seem to have produced more intensively in the 1830s and 1840s. The bowl has clear evidence of use with a black smoke stain on the outer rim and inner bowl.

Pipe 4.13b: Pipe 4.13b is a typical example of a fluted pipe, which were extremely common in the early to mid ninenteenth century. Many fluted pipes were English, but this does not exclude the possibility of other countries of production origin. The fragmentary nature of this bowl does not allow for assessment of bowl shape or angle, which creates an even greater challenge in dating the artifact. The thickness of the bowl suggests an early nineteenth century production date, but fluted pipes have been excavated in site ranges from 1780-1900. Evidence of smoking in the form of a black stain is present on the inner portion of the bowl (Alexander 1983).

Pipe 4.13c: The design on this bowl is another commonly produced motif; scallops running up the bowl vertically with leaves projecting outward from the exterior seam of the bowl. This motif is more commonly seen in the 1830s and specific examples have been associated with pipe-makers in England (Tatman 1982; Atkinson 1978). However, similar motifs have been found on pipes dating as early as 1780 and without the spur or complete bowl it is difficult to place it chronologically (Alexander 1983).

Pipe 4.13d: This pipe is partially vertically scalloped for more than half of the bowl with a rim separated by a single horizontal line and decorated with oval protrusions alternating in size. On this pipe the spur and bowl are almost nearly completely, allowing for more specific typological dates. Based on Atkinson's typology the pipe seems to date between 1840-1880. The original analysis notes, presumably written by Guy Peterson, indicate that this pipe is a "Dublin" type, however I have not been able to corroborate this conclusion (Peterson 1982). In order to determine if it truly is a Dublin type the four-leaf clover maker's mark would need to be visible on the spur, but it is not apparent on this pipe (Atkinson and Oswald 1969) A similar pipe was excavated from the J. Reed Site, New York, which also confirms a likely date of mid to late nineteenth century (Kastl 2009).

Pipe 4.13e: Pipe 4.13e is another scalloped pipe, with raised ridges extending vertically for half of the bowl, separated from the rim by a horizontal line, and smaller vertical scallops decorating the bowl rim. This is another design that is common in the early to mid-nineteenth century. Similar pipes with separated bands of scallops or flutes have been found at historical North American sites dating to this time, but because the design is so common it is impossible to determine the source of production without maker's marks (Humphrey 1969). The bowl is incomplete and does not allow for analysis of bowl angle and shape, or spur size and shape.

Pipe 4.13f: This pipe bowl is unique in that it appears to have a decorative inclusion, most likely of paint. Painted pipes are not common in historical north American sites, except in the form of German "coffeehouse pipes", which were typically porcelain or glazed. These pipes were most popular in the late nineteenth century into the early twentieth century (Walker 1983; Peterson 2010). Pipe 4.13f is glazed but is not composed of porcelain and does not have the typical intricate designs that one would expect on a coffeehouse pipe. There is also a possibility that the artifact is not a pipe, but rather a small ceramic sherd. I am inclined to suggest that it is a pipe bowl, because of the shape and thickness of the wall.

Pipe 4.13g: This pipe is another variation of the scalloped variety common in the nineteenth century, particularly in England. The scallops surround the bottom quarter of the bowl, while the rest is undecorated and smooth. This artifact, however, is considerably thicker with a wall thickness of 5.6 mm, in comparison to an average of 3.5 mm for the entire collection. The thickness of the bowl combined with the decorative scallops suggests a production date between 1800-1850 (Atkinson and Oswald 1969).

Pipe 4.13h: The decorative theme on this pipe is unique to this collection. The small fragment that remains of the bowl exhibits a raised floral motif and a rim decoration with a horizontal line

surrounding the bowl with parallel tick marks. I considered the possibility that the motif was a maker's mark, but I was not successful in identifying the individual to which it belongs. The fragmentary nature of the piece does not allow for definitive dating in terms of bowl shape, size, and angle. Botanical motifs were fairly common among English pipe-makers of the early ninenteenth century, so it is possible that the pipe dates between 1800-1850, but it cannot be proven (Alexander 1983; Atkinson and Oswald 1969; Walker 1983).

Pipe 4.13i: The irregular shape of this pipe in combination with the thickness of the bowl walls presents a contradiction when it comes to dating the piece. Degenerate spurs, or spurs that are molded into the bowl wall, rather than protruding, are typically found on bowls from the sixteenth to seventeenth centuries. The size and shape of the bowl, however, is more consistent with a pipe from the mid to late ninenteenth century (Atkinson and Oswald 1969). This pipe has evidence of smoking in the form of a black stain on the interior of the bowl.



a.

Figure 4.13



b.



c.



d.



g.



e.



h.



f.



i.

Pipe 4.14a: Pipe 4.14a is too fragmentary to properly assess the bowl shape, size, or angle. The only attribute that could be used for identification is the fluting on the exterior of the bowl. Fluting and scalloping were common decorative motifs on pipes from the early nineteenth century, but without a more complete bowl to examine, I cannot provide a confident date and origin of production (Alexander 1983).

Pipe 4.14b: This bowl is round and slightly angled with no decorations other than three rim bands. The analysis notes from the Judge excavation suggest that the bowl is a "possible Dublin" type, but there is no Irish maker's mark to confirm this identification (Peterson 1982). Based on the size and shape of the bowl it is likely to date to the early nineteenth century (Atkinson and Oswald 1969).

Pipe 4.14c: This bowl piece is rounded and exhibits two long scallops on the exterior portion. The roundness of the bowl with the décor suggests a production date in the early nineteenth century, but because scalloped and fluted bowls were being mass-produced during this time by multiple countries it is not possible to definitely identify the production origin (Alexander 1983).

Pipe 4.14d: The exterior of this pipe has a botanical decoration consisting of a single parallel line running vertically down the dorsal seam of the bowl with leaves projecting upwards and outwards from the seam on either side. Botanical motifs were popular during the early nineteenth century, but this does not exclude a production date of an earlier or later time (Atkinson and Oswald 1969; Alexander 1983). This pipe was identified as a "typical Dublin" type during the analysis from the Judge excavation, but there is no Irish maker's mark to confirm this identification (Peterson 1982). A black smoke stain on the upper interior portion of the bowl indicates that the pipe was smoked.

Pipe 4.14e: This pipe is the most complete of the collection. Although the bowl is fragmented, it is almost complete. The stem, spur, and bowl are all present, which allows for typological comparison. The molded pattern on the bowl consists of scallops on the lower half, a botanical image on the middle section, and a rim with raised ovals banded by two horizontal lines. Pipes with identical designs have been excavated from sites in Rome, New York, and Old Sacramento, California (Hanson 1971; Humphrey 1969). The drooped forward angle of the pipe bowl and its rounded rim suggest a production date around 1840. Additionally, the spur type, smaller and not pointed or flat, is consistent with a production date of around 1840 (Atkinson and Oswald 1969). Analysis of similar pipes indicates that this pipe is likely English in origin (Humphrey 1969). This pipe also exhibits evidence of being smoked.

Pipe 4.14f: This pipe is the only one in the collection made from a clay other than ball clay. Often referred to as "red-clay", this pipe is a pipe made of fired red-earthen clay. Red-clay has been used as a material for pipes starting in the seventeenth century and became increasingly popular in the nineteenth century. This pipe fragment exhibits a molded pattern that appears to represent hair (Figure 4.15). By the mid nineteenth century effigy pipes, often referred to as "president heads", were popular smoking accessories. Often made of red-clay these pipes had bowls molded to look like presidents, Indian chiefs, or even objects like cowboy boots. I suggest that this bowl fragment resembles the hair on President Fillmore red-clay pipes, which were being mass-produced by the 1850's (Humphrey 1969). If this is the case, the pipe is likely a relic of a gold-miner or transient individual taking refuge in the fort's ruins. The possibility remains, of course, that this is a fragment of another president-head or effigy pipe.

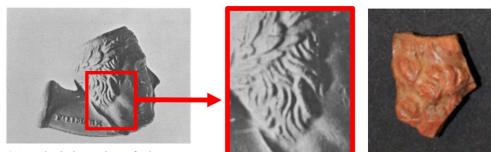


Figure 4.15. The hair section of a known President Filmore from Humphrey (1969) compared to pipe 4.14f

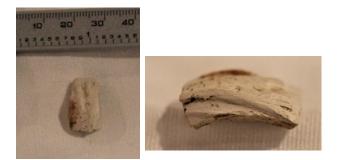
Figure 4.14



a.



b.



c.



e.







f.

Archaeological Context of Pipes: Similar challenges experienced with interpreting the ceramic context exist for the context of the pipes from the Fort Vasquez collection. Individual artifacts are not associated with known strata, so I was not able to properly contextualize the pipes I analyzed in terms of vertical exaction. And again, I was unable to place the pipes I analyzed in the exact horizontal locations from

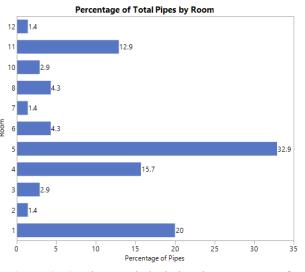
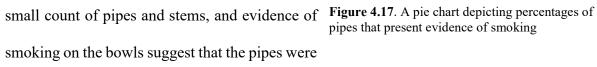


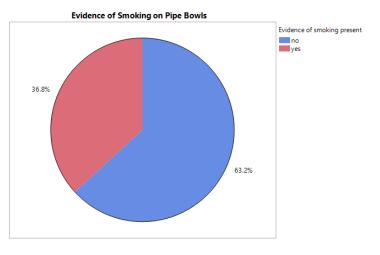
Figure 4.16. A bar graph depicting the percentage of total pipes excavated during Judge's 1970 excavation by room.

which they were excavated as a result of poor excavation documentation. According to Judge's distribution table the room with the most pipes (n=23) was Room 5, or what he interprets as the dining room (Figure 4.16). As I mentioned previously, I interpret this room to be a trade room, rather than a dining room. Also, as I have stated, I am treating artifact distribution with caution as a line of evidence only to be used after historical analogue, room size and features, and location within the fort. Using caution, however, I do believe that it makes sense for there to be a large number of pipes excavated from a room that would be used for trade. Although they are not indigenous pipes, it has been documented that traders would share pipes with clients, or "smoke over the horse", before conducting business. The room with second highest number (n=14) of pipe fragments was Room 1, which I also have interpreted as being a trade room. Room 4 had 11 pipe fragments in it, which also makes sense in terms of its function as a kitchen or dining area, because this would likely be a place where occupants and visitors of the fort would socialize. The one room function interpretation that is not consistent with the number of pipes excavated from it

is Room 11. I interpreted Room 11 as being a storage room. This room contained 9 pipe fragments, which is somewhat strange as they were not particularly popular trade goods for indigenous clients. The presence of the pipes in this room could be the result of traders using this room frequently and simply smoking as they went about their daily business, but I do not find this to be an entirely satisfactory explanation.

Pipes Conclusion: The data obtained from the pipes in the Fort Vasquez collection does not support Judge's belief that the fort was used primarily as a storage facility. The possible range of production dates, differing designs, comparatively





pipes that present evidence of smoking

personal items used during social functions or everyday life, rather than trade items. As previously mentioned, clay pipes were not a trade item that would have been particularly sought after by indigenous clients in Colorado, as most Cheyenne and Arapaho people smoked from catlinite pipes (Kroeber 1983; Grinnell 1923; Godlaski 2012; Paper 1988; Davis 2017). This does not preclude the possibility that they would purchase clay pipes, but they were not top selling items for forts with indigenous client bases. The fact that the pipes are so varied in design and possible date of production indicates that they were likely not being shipped to the fort in batches, but rather were personal items belonging to traders and or visitors to the fort. If the pipes had come to the fort in batches one would expect to find design repeats, as pipes were mass produced in molded batches

during the nineteenth century. There are no repeat designs in the Fort Vasquez collection, suggesting that the pipes come from different production sources. Finally, the presence of smoke stains on approximately 37% of the pipes indicates that tobacco was being smoked in the fort (Figure 4.19). The smoking of tobacco during this time was often a social activity, rather than a solitary vice. It is likely that the pipes were smoked during social events like the dinner that James Beckwourth describes in his autobiography (Beckwourth 1856). Another source, the diary of E Willard Smith, documents Louis Vasquez smoking a long (non-European) pipe with Cheyenne and Blackfoot people during a journey from St. Louis to the fort:

"The chiefs seated themselves around the fire, forming a ring with Mr. Vasquez and commenced smoking their long pipes, which they passed around several times-every one smoking out of the same pipe. They were all well acquainted with Mr. Vasquez. They remained with him two or three hours. Before they left, we presented them with some tobacco and knives" (Smith 1839 *in* Hafen 1950).

Although this source does not reference the use of a European clay pipe, it demonstrates that the smoking of tobacco during this time was understood by both Anglos and indigenous people to be a social activity. The presence of pipes points to social events or at least daily life at the fort, something that would not be readily reflected archaeologically if the fort served primarily as a storage facility.

Clay pipes, as mentioned, were common items found at trading posts in the nineteenth century and likely represent social activity. Kipp's Post, a trading post built in North Dakota in the 1820s, provides a useful comparison when considering pipes in this context. In the Fort Vasquez collection there is a ratio of one ceramic sherd to four pipes fragments; at Kipp's Post the ratio of ceramic sherds to pipes is the same. Additionally, at Kipp's Post there is significant evidence for

native people actually living in the fort or at least spending significant time there. There were 26 catlinite pipes excavated at Kipp's among a suite of other native made objects including whetstones, bone beads, arrowheads, and pottery. Even more telling is the burial of an infant interred with thousands of blue seed beads in the wall trench of the fort, suggesting that it was the child of a native woman, possibly the wife of a trader. Although it is speculative, the similar ratios of artifacts that reflect distinct activities (pipes for socializing versus ceramics for daily life) suggest that similar activities were taking place at both Fort Vasquez and Kipp's Post (Woolworth and Wood 1960). A more in-depth analysis of other similar types compared with typical domestic sites could provide more insight.

iii. Beads

The distribution of bead types in the Fort Vasquez collection is what one would expect at a nineteenth century fur trade fort. The most popular types of beads, seed and pony, are small beads that would have typically been used for bead embroidery work, which is now commonly seen as being quintessential to plains groups' mater also be expected the collection cont differing size, color, and shape tha

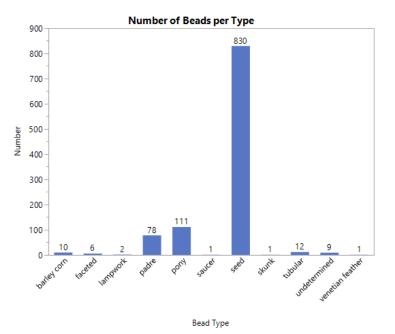


Figure 4.18. A bar graph depicting the total count of each bead type in the Fort Vasquez collection

quintessential to plains groups' material culture (Dubin 1999; 2014; Monture 1993). As would also be expected the collection contains a varied selection of trade beads, or larger beads of differing size, color, and shape that would have been used for various types of personal ornamentation, sometimes sewn onto clothing or worn as jewelry (Figure 4.18).

During the fur trade the centers of glass beads production were Venice, Amsterdam, and Bohemia and Moravia (modern-day Czech Republic). Some factories in France, Switzerland, Germany, Spain, and Belgium also produced glass beads during this time, but they did not dominate the market in the same way as Italy, Holland, Bohemia, and Moravia (Dubin 1987; 2009). In the following section I will discuss each bead type and the global connections they represent, as well as what the distribution beads in the fort tells us about the function of the rooms and the fort itself. Seed beads and pony beads: As previously mentioned, the most common bead types found during the excavation were seed beads and pony. Both are small torus shaped beads made from drawing a tube of glass, introducing an air bubble slowly through the tube, allowing the tube to cool and finally cutting or breaking it into smaller components. Pony beads first appear on the plains in the early 1800s and measure about one-eighth to one-tenth inch. Their namesake is derived from the idea among bead collectors that they were brought to the plains on horseback, thus the name "pony" beads. Seed beads are similar to pony beads but are typically smaller, thus the name "seed" bead. The seed bead first appeared in the eastern united states in the early 18th century, but it was not until the mid-1800s that they became popular in the west. Murano, an island north of Venice, Italy, was the most prolific producer of glass beads, particularly seed beads during the nineteenth century and it is likely that the beads in the Vasquez collection represent this trading connection to the Italian glass market (Smith 2002; Dubin 2009; 2014).

Beadwork was initially met with skepticism by indigenous artisans, as porcupine quillwork was the preferred medium for decorating clothing and other leather accessories. By the nineteenth century, however, the availability of beads combined with the vibrant colors not as easily achieved in quillwork facilitated an

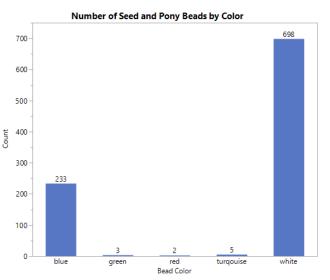


Figure 4.19. A bar graph depicting the total count of seed and pony beads by color

west, different tribal groups were known to have specific preferences for bead colors for their embroidery work. The Arapaho and Cheyenne were well-known for using white and blue beads as the background for their embroidered pattern (Dubin 2014). This preference is reflected in the archaeological record at Fort Vasquez as most of the seed and pony beads were white followed by blue beads.

The seed beads from the Fort Vasquez

exhibit a curious ailment that is apparent in Figure 4.20: surface peeling. As demonstrated in the



Figure 4.20. Seed beads that exhibit surface peeling from the Fort Vasquez collection

photograph, surface peeling refers to the shedding of the outer colorful layer of the bead leaving only the discolored center of the bead. Initial I was unsure of the cause of the pathology and questioned whether the surface of the bead was composed of a material other than glass. I theorized that perhaps the beads had been dipped in an organic component like kaolin clay to change the surface color of the bead. Upon further investigation, however, it became apparent that surface peeling is a common symptom of "glass disease" (O'Hern and McHugh 2014). In further support of this explanation is that fact that white beads are particularly susceptible to glass disease and the seed beads most commonly affected by this ailment in the Fort Vasquez collection are white (Hancock 1996).

Faceted beads: The Fort Vasquez collection contains six faceted beads. These beads reflect the Kidd types If3, If5, and Ic12 and are either a deep blue or emerald green glass (Kidd and Kidd 1970). Faceted beads are colloquially referred to as "Russian blues" by bead collectors, because they are believed to have been traded



Figure 4.21. A faceted or "Russian blue" bead from the Fort Vasquez collection

along the northwest pacific coast by Russian traders. There is strong evidence, however, that this bead type was originally traded by the English in the northeast. They are also frequently found at nineteenth century sites in the southwest. It is almost certain, however, that Russia was not the production source for this bead type, but rather they are linked to Russian traders. Some historians have suggested that they were made in Venice, shipped to China, and traded to Russian traders, while others insist that Bohemia (modern-day Czech Republic) was the only country at the time with the technology for creating faceted beads. The facets are created by reheating a long cane and then pressing or drawing the sides into square, hexagonal, or octagonal cross sections. The canes were then cut or broken into beads and the ends were faceted with a grinding wheel. The faceted beads at Fort Vasquez reflect different processes for creating facets, as some of the beads are long and tubular, while others are short and hexagonal (Dubin 2009).

Padre Beads: Other than seed and pony beads, padre beads were the most common beads excavated from Fort Vasquez. They are wound glass beads that match



the WIb12 and W1b2 Kidd types (Kidd and Kidd 1970). F Typically, they are a sky blue color, though only one sky blue $\begin{pmatrix} 1 \\ c \\ c \end{pmatrix}$

Figure 4.22. A white padre bead (left) and a sky blue padre bead (right) from the Fort Vasquez collection

padre was found at Fort Vasquez, while the rest were white or seafoam. Much like "Russian blues", padre beads have a mysterious history and the production source is attributed to different countries. They are thought to be some of the earliest beads traded in the Southwest, possibly by Spanish conquistadors or friars, hence the name "padre beads". They have been excavated from old Pima shrine sites in California and are occasionally associated with early Spanish contact sites. Though it is possible, like for most glass beads, that they were produced in Italy (Dubin 1987; 1999; 2009). They have also been attributed to China, as many resemble the famous Peking glass beads produced in the 18th century. The sky blue bead in the Fort Vasquez collection could possibly be Chinese in origin, as the color is consistent with the blue Peking glass beads (Dubin 2009). The origin for Fort Vasquez's white and seafoam padres remains accordingly enigmatic.

Tube Beads: There are twelve white tube or tubular beads in the Fort Vasquez collection, all identified as being the Ia5 type in Kidd's classification (Kidd and Kidd 1970). Tubular beads can be produced

with both wound and drawn techniques and can be quite elaborate with multi-colored layers, but the beads in the



Figure 4.23. A white tube bead from the Fort Vasquez collection

Vasquez collection are all simple drawn, monochrome beads. The origins of tube beads have been attributed to both the Dutch and the Italians (Huey 1983; Karklins 1983). It is possible, however, that both production centers independently produced tube beads, as they are made with the same technique as seed and pony beads, but not fractured as small. Also just as likely, is the fact that glass makers from Murano and Venice were partially responsible for initiating the glass bead industry in Holland. The tube beads at Fort Vasquez were more likely to have been produced in Italy, however, as the Dutch glass-bead industry began to collapse in 1750 (Karklins 1983).

Plain forms: I have categorized three bead types as being "plain form" beads, meaning that they are not bulkdrawn beads or individualized lamp-work beads, but rather are wound monochrome beads of shapes that are not the typical padre or donut. Two of these types fit into the "barley corn" category, otherwise known as oval beads, named for their shared shape with barley. All of the white barley corn beads in the Fort Vasquez collection fit the Kidd and Kidd (1970) classification as bead type WIc1. There was only one blue barley corn bead in the collection, which I classified as Kidd and Kidd (1970) type WIc11. Additionally, there was one bead that fits the Kidd and Kidd Fort Vasquez collection





Figure 4.24. A blue oval or "barley corn" bead (above) and three white "barley corn" beads (below) from the

(1970) WIIb1 type, which is often colloquially referred to as a saucer bead. Saucer beads are wound beads that are flat, round discs, rather than globes like padre beads. Neither bead type can be definitively matched with a country of origin as both are common trade bead types and were produced by all countries that had glass-making factories. Early examples of oval beads have been found at sites known to have Dutch associations, but Venetian artisans were also known to produced wound, oval beads (Wray 1983).

Fancy glasswork beads: The types that I have classified as fancy glasswork beads include lampwork beads, venetian feathers, and skunk beads. All of these beads were produced with the same essential technique of reheating a wound bead and pressing different molten glass canes or rods onto the surface to create intricate designs. Unlike seed and pony beads this process was often performed with oil lamps, rather than the large extremely hot furnaces that the bulk produced drawn beads required. Most of these fancy glasswork beads were made in Venice, which was famous for this technique with a history of glass-working dating back to 1200 AD on the island of Murano. Venice was so well-known for its intricate glass beads that the names of different design often have the word "Venetian" in them; for example the Venetian Skunk bead and the Venetian Feather bead. The Venetian skunk bead in the Fort Vasquez Collection provides an example of the production process of lamp-work beads. Outlined in Figure 4.25 is a pock-mark on the bead where one of the spotted glass inlays popped out of the surface of the bead. The spots were produced by reheating a plain white wound glass bead and press molten blue glass spots onto the bead's exterior to create the iconic spotting of the Venetian Skunk bead. This glass-inlay process requires patience and a steady hand and produced beautifully crafted beads with intricate designs that were sought after by Europeans and indigenous people alike.



Figure 4.25. A Venetian skunk bead from the Fort Vasquez collection



Figure 4.26. A glass lamp-work bead from the Fort Vasquez collection

Artifact 10~3 appears to be a thick pipe stem at first glance, but upon close inspection I concluded that it is a bone bead. The striations in the exterior surface combined with yellowish-discoloration are consistent with other bone bead examples. Examples of native American bone beads have been found in archaeological sites ranging from Maine to Alaska, though the bulk of bone beads have been found north American southwest due optimal preservation from climate and soil conditions (Orchard 1975; Hodge 1920). Bone beads were usually manufactured from the femur, ulna, and radius polished exterior (below)



Figure 4.27. A bone bead from the Fort Vasquez collection with the interior cross-section (above) and the

of birds, but could be produced from other faunal bones. The sections of the bones were chipped at with a piece of stone and then broken once the bone was thin enough to easily snap. The bead was then polished on a sandstone slab to ensure a smooth surface (Orchard 1975).

This artifact has specific context information associated with it on the museum tag; it was excavated in Room 5 at a depth of 1 inch. The excavation depth makes it questionable as to whether it is associated with the fur trade occupation of Fort Vasquez, but without the stratigraphic profile for its excavation unit it cannot be assessed if it is associated with the fur trade. If it is from the Fur Trade occupation, it could possibly be a remnant of the dances and social events during which native Americans were invited into the fort walls, as described by E. Willard Smith (Hafen 1950). Additionally, the fact that it was excavated in Room 5, which I have interpreted to be a trade room, is appropriate as this is where trading ceremonies would likely have taken place. I have found no documentary or otherwise published archaeological evidence to support bone beads as a European trade good, so it is likely that this bead came from an indigenous individual, but it is not clear if the individual was there during the fort's primary occupation or simply passed through after its abandonment.

Conclusion: The beads in the Fort Vasquez collection provide a sense of the global trade connections that the fort would have held. Of all the artifact categories I analyzed, the beads are the best example of how far-reaching the trading connections were for trading companies during the fur trade. The bead types analyzed in this collection exhibit possible connections with China, Italy, the Netherlands, and Bohemia. Additionally, the number of beads excavated from the fort does support Judge's interpretation of the site as a storage facility. It does not, however, support the contention that this was the only function of the fort. Beads were shipped in bulk by the pound and their minute size would mean that they would be lost easily. The presence of a bone bead in the fort suggests that there were social events in which native Americans would have been welcomed into the fort, although this cannot be confirmed as the bead has not been definitively dated.

Beads were excavated in higher densities on the west side of the fort, which supports the idea that trading was taking place in the rooms along the western wall. Because beads are small items that were traded in bulk it is likely that they would have easily been dropped. Additionally, they were perhaps the most ubiquitous trade good during the fur trade, which would explain their strong presence in the archaeological record at Fort Vasquez. The general distribution of beads in Fort Vasquez supports an interpretation of rooms being used for trade but could also be supportive of rooms being used for storage. The distribution of the beads in conjunction with room size and presence of a fireplace is a more holistic indicator of whether a room was being used regularly or just as a store room. For example, I agree with Judge's interpretation of Room 11 as being a storage

room, because it does not have a fireplace or evidence of a door connecting to the plaza. It is also located next to what I believe to be the trade-store window near the entrance of the fort.

In terms of horizontal distribution of beads, the context is more reliable because the sample size is large and more likely to accurately reflect general activity in the fort. The largest number of beads wer excavated from Rooms 1, 5, and 10, which I have interpreted as being places where trading was likely taking place. I argue that in terms of artifact

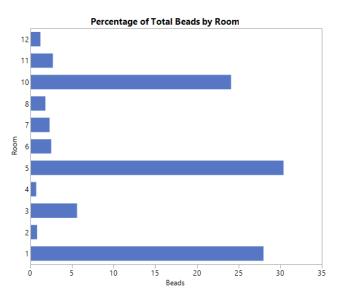


Figure 4.28. A bar graph showing the percentage of total beads excavated by room according to Judges (1971) distribution table.

room function, beads are the most reliable artifact category. The sheer number of beads in comparison to the other artifact categories means that they are more likely to be a reasonable indicator of where they were more commonly found in the fort, though it is not exact by any means. Also, the small nature of these beads means that they would have easily been dropped and lost, so they would make their way into the archaeological record more easily than larger and more conspicious artifacts like ceramics. However, it should be noted that because beads are so lightweight they would also be particularly suseptible to stratigraphic disturbances like flooding, which would likely have washed them around the fort. This is supported by the fact that they are found in every room in the fort, even Room 12, which was likely a storage pantry for the kitchen. Although they are found all over the fort, the rooms with considerably larger numbers of beads are

probably still good indicators of places where beads were being traded and stored, rather just postoccupation disruptions to the stratigraphy.

iv. Buttons

I analyzed eight buttons in the Fort Vasquez collection composed of a range of materials including wood, bone, and metal (Table 4.3). During the fur trade buttons were not typical trade items and are not commonly listed in trade ledgers and invoices (McCloskey and Olsen 2009). It is reasonable to argue that the buttons found at Fort Vasquez are representative of lost personal items that fell off of individuals living and working at the fort. Further supporting this argument is the fact that every button excavated at the Fort is a different type; if they had been popular trade items one would expect to find repeats of the same type, like we see with trade beads. Additionally, the small number of buttons in comparison to beads, which are known to have been trade items, indicates that they were not being traded in bulk at the fort.

Buttons are not optimal diagnostic artifacts for contextual dating, as there is not a robust literature dealing with the typology of historical buttons. There are, however, general fashion trends that can be used to make informed suppositions as to the century in which a button was produced. In the beginning of the nineteenth century fashion, for those could afford to me mindful of such a luxury, was more conspicuous and could even be described as gaudy at times. As the century moved on men's fashion became less showy, while women's fashion became more theatrical; Epstein describes it as being characterized by "tasteless excess and overtrimming characteristic of the Victorian era"(Epstein 1968: 49).

In terms of button fashion trends there are a few characteristics that are typical of the nineteenth century. Generally, buttons became smaller and less flamboyant than their 18th-century

Name	Mass (g)	Dimensions (mm)	Description
а	0.7g	15.85 x 16 x 1.54 mm	wooden button with 5 holes
b	1.8g	22.70 x 22.64 x 4.50 mm	1 corroded metal button, one large center hole, might have been covered in fabric
с	0.5g	15.04 x 15.83 x 2.21 mm	1 button broken into two fragments, five holes, circle, bone
d	0.2g	9.6 x 8.8 x 1.33 mm	1 small white button with four holes inside an smaller circle, bone
e	1.8g	18.21 x 18.27 x 4	1 heavily corroded button, looks like it has four holes, but only 2 are not rusted over
f	1.0g	14.64 x 14.7 x 3.0 mm	1 metal button with 2 holes
g	>0.1g	11 x 7 x 1.8mm	1 button fragment, ridges on one side, two visible holes, probably had at least 3 holes
h	2.7g	20 x 20 x 5 mm	1 metal Carhartt button, circa 1900

Buttons Analyzed from the Fort Vasquez Collection

Table 4.3. A table listing each button analyzed with the associated data used to identify garment type and time period to which it belongs.

predecessors. This is because buttons began to be mass-produced in industrial settings during this century, thus moving the practice of button-making from the realm of artform to craftwork. Although women's fashion was becoming more dramatic, it was generally menswear that used buttons. Most buttons in women's fashion were either part of the undergarments or were worn as means of fastening the bust of a dress. Men also wore undergarments that required small buttons, but their jackets and other pieces of outerwear had button embellishments in the form of fabric and metal buttons. The nineteenth century has been described by material culture experts as the prime

of metal button-making, with sporting buttons becoming particularly popular in the 1840s. These metal buttons had intricate hunting and animal scenes embossed or engraved on them and were bigger than an undergarment button. Fabric buttons also became popular at the same time as sporting buttons and practically replaced them in popularity by the 1850s. These buttons were used to fasten outerwear and were, as the name implies, covered with fabric or silk string on their exterior. Fabric buttons were first produced in Massachusetts in a factory setting in 1833 and eventually spread as they became more popular throughout the nineteenth century. They can be both large and small, with silk string buttons usually being smaller and fabric outerwear buttons being larger. As I will discuss in the following section these trends are reflected in the archaeological record of Fort Vasquez (Epstein 1968).

Button a: This artifact is a molded, wooden, and varnished button with five center holes. Wooden buttons became popular for utilitarian wear in the early to mid-nineteenth century, though they reached their peak popularity in the twentieth century. Wood was used for its softness, which allows for buttons to

be molded, engraved, and embossed with ease. This button was probably of Button a

used in an undergarment as simple wooden buttons were not considered decorative (Peacock 1972). The preservation of the button, however, calls into question whether it is related to the 1835-42 occupation or if it is from a later visitor to the site.

Button b: What remains of this button is a metal disc with a single hole in the center on that interior face, while the exterior contains small crisscrossing lines, which are likely the result of fabric interacting with corroding metal. It is likely that this button is a typical nineteenth century fabric button, often

Figure 4.30. An image of used to fasten men's coats (Peacock 2008). Although the fabric no Button b



Figure 4.29: An image



longer remains, the plain exterior surface and the corroded pattern suggests that the button probably had some sort of threat or fabric covering. Some fabric buttons in the nineteenth century were used for underwear or linen, but these "dorset thread buttons" were much smaller than this button and did not have a robust metal backing, but rather a small metal loop used to weave the thread around (Epstein 1968; Peacock 1972).

Button c: Button c is probably composed of bone based on the striations in the material and is tan-yellow in color. It contains five holes and its fractured in two pieces. Bone buttons were first known to be produced by the French in the

twelfth century but became particularly popular by the eighteenth Figure 4.31. Button c from century. Bone buttons were produced by cutting discs from an

animal's shinbone and then drilling or punching holes in them and polishing them. Usually they were used for utilitarian purposes like fastening undergarments or linens (Epstein 1968).

Button d: This button is also possibly made from bone, based on the striation visible in the material. It is smaller than button c with four holes and is white in color. Much like button c it was probably used for utilitarian purposes, rather than being decorative. It was likely also used to fasten undergarments or linens (Epstein 1968).

Button e: Button e is heavily corroded with only two holes visible, though it probably had four holes. It is difficult to make any definitive

statements about the function of the button as it is poorly preserved. It is, however, probably from the primary occupation of the fort, as metal buttons were produced in mass quantities during this time (McGowan and Prangnell 2011). It probably was not a fabric button, as coat buttons typically had on central hole, rather than four. During this time pewter buttons were made in bulk with

Figure 4.32. Button d from the Fort Vasquez collection





the Fort Vasquez collection

stamping molds that could cast up to ten buttons at a time, so it is also possible that the button is of this specific material. Although it cannot be a certain identification, I would suggest that the button was utilitarian, as decorative pewter and metal button usually had one hole or loop on the back to allow for the surface to have molded décor (Epstein 1968).

Button f: This button is also a metal button, but with only two holes and smaller than buttons b and e. As discussed with the other two metal buttons, the nineteenth century was the "golden-age" of metal button-making, with factories on the east coast producing metal buttons in bulk. This button, although metal, did not have any fancy décor or indication of fabric having been attached. It was probably used as a practical fastener, rather than as ornamentation (Peacock 2008; Epstein 1968).

Button g: Button g is a small button fragment with only two visible holes, though based on the placement there were probably three holes total. On one side of the button there are incised ridges. It is unclear what the button is composed of as it is considerably decomposed. It is therefore also difficult to determine from what kind of garment that the button came from, though the smaller size suggests that it was utilitarian, rather than decorative.

Button h: This button is a metal disc with a single loop on the rear face. The external face of the button displays a raised image that reads "the" with the symbols of a train-car and a heart followed by the word "brand". In other words: "the Carhartt Brand". By working with the company archivist and historian David Moore we were able to identify this motif as being a Carhartt brand logo dating to

between 1890 and 1900. Moore believes that the button is consistent



Figure 4.33. Button h from the Fort Vasquez collection

with overalls being produced in the early twentieth century (Moore, Personal Communication, 2019). This button obviously is not associated with the fur trade occupation of Fort Vasquez, but

instead speaks to the reuse of the site and complications this has caused in interpreting artifact assemblage distribution. The button is possibly associated with cattle-ranching activity in Platteville, for which there is a detailed account from an interview with Weld county resident J.W. Birkle (1934). It is possible that the walls of the fort were used as a corral during this time, which would explain the presence of the button in the fort. Fort Lupton, a neighboring fort, was periodically used as an animal corral post-occupation (Hafen 1929). Another possibility lies in the building of the railroad through Platteville during the early 20th century. The train tracks sit adjacent to the highway and Fort Vasquez, thus offering another possibility for the source of the button.

Buttons Context: Buttons are a small artifact category in the Fort Vasquez Collection. According to the Judge report there were 23 buttons excavated (the Carhartt buttons does not belong to the primary occupation and one was not actually a button as I will discuss in the following section), but I was only able to locate eight of

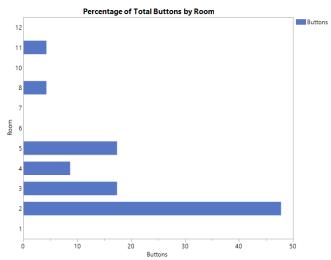


Figure 4.34. A bar graph depicting percentage of total buttons excavated by Judge per room. This distribution includes the Carhartt button and another artifact that was mislabeled as a button.

them in the collection, because not all were labeled as "buttons" in the artifact inventory spreadsheet I was required to use for my research request. According to Judge's report most of the buttons were excavated from Room 2, which I have interpreted as living quarters. Similarly, Room 3, which I have also interpreted as living quarters contained approximately 17.4% of the total buttons excavated from the site. Room 5 also contained approximately 17.4% of the total buttons

excavated from the site. I have interpreted Room 5 as a trade room or guest room and it makes sense for buttons to be found in this room as well. If this room was being used frequently, it is reasonable that buttons would be lost in this area. The other locations that contained buttons in smaller quantities were the kitchen (Room 4), the blacksmith shop (Room 8), and Room 11 (storage). The presence of buttons in small quantities in these areas is not unusual as buttons frequently pop off clothing during the course of daily activity. For instance, working in a blacksmith's shop would involve a lot of movement and would likely result in clothing tearing or buttons coming loose.

Buttons Analysis Conclusion: The buttons in the Fort Vasquez collection, although few, do provide archaeologists with important information to consider. The presence of two larger metal buttons that may have had fabric on the exterior suggests that they were individuals wearing formal clothing. Fabric buttons, as previously discussed, were typically used as decoration on men's overcoats. Trappers and traders were not known to typically wear formal overcoats like their counterparts in the east (Gottfred 2003). Perhaps, however, they needed these formal outfits for social events in the fort. Additionally, the four smaller buttons likely came from undergarments, which is probably reflective of daily life at the fort. If the fort was being used mostly for storage it seems unlikely that the fastenings for undergarments would make their way into the archaeological record. Finally, the Carhartt button demonstrates not only post-Fur Trade occupation, but also the interpretive challenges that come with the archaeology at Fort Vasquez. There is the potential that more buttons from the collection do not actually date to the primary occupation, but without stratigraphic profiles to contextualize the artifacts I cannot definitively say that they are from the primary occupation.

v. Miscellaneous Ornamentation

Artifact 170~13: Originally mislabeled as a button during the 2017 inventory of the Fort Vasquez collection, artifact 170~13 is a hawk bell. Hawk bells were a common trade item during the Fur Trade, sought after by indigenous populations to be worn on clothing, often women's dresses, for dancing and feasting events. Even today if one attends a modern powwow the jingling of bells can be heard as traditional dancers perform in events like the "jingle dress dance" (Stegner 2008). Brass and copper hawk bells have a long history of production in medieval Europe to be used in falconry, thus the name "hawk" bell (Oggins 2004). Some of the earliest hawk bells found in north America are from Spanish contact sites in the southeast dating to the sixteenth century. Documentation from the Hernando de Soto entrada in Florida (1539-41) notes that the Spanish gave indigenous leaders sets of bells as gifts. The French have also been documented as trading

hawk bells with the Choctaw, Natchez, and other Mississippi valley tribes in the eighteenth century. Accounts from this time reference Native Americans attaching the bells to belts to be worn



during dances to produce the iconic jingling sound associated Figure 4.35. Artifact 170~13 from the Fort Vasquez collection with contemporary powwows (Ivas 2014).

Ledgers from contemporary trading forts frequently list hawk bells in their ledgers and inventories (McCloskey and Olsen 2009). An invoice of goods sent to Fort Vasquez's neighboring trading post Fort Jackson lists "4 packs small Hawks Bells" and "4 packs Large Hawks Bells" as being delivered in 1837 to the fort. Also listed is "11 packs small Hawks Bells" and "2 packs Large Hawks Bells" in their inventory of merchandise upon its sale to the Bent & St. Vrain Co. in 1838 (Complete 1838 Inventory of Fort Jackson 1838). It is therefore a reasonable assumption that similar goods were being delivered to Fort Vasquez. It cannot, however, be determined whether this single bell is the product of a trade exchange or if it escaped a dancer's regalia during a ceremonial dance at the fort, like the event mentioned by E. Willard Smith in his visit to Fort Vasquez (Hafen 1950).

Fortunately, the excavators provided a record of the horizontal location of the bell, noting that it was excavated from N160 E080 on their excavation grid or Room 1. I have interpreted room 1 as the main trading room and the presence of a hawk bell makes perfect sense in this location. Hawk bells, as I have discussed, were a popular trade good and were known to have been traded at Fort Jackson. The presence of one artifact in this location, however, is not enough to base an entire interpretation of room function on, but at the most can be used as a small additional line of evidence.

Artifact 54~12: Of the artifacts I analyzed from the Fort Vasquez collection this little, black scotty dog was the most challenging to identify. Upon initial review I was perplexed as to the material the dog was composed of and hypothesized that perhaps it was some sort of bison ivory or



even jet. I was puzzled by this piece as I have never Fort Vasquez collection encountered any jewelry or trinket from the Fur Trade Era or even the Victorian Era that resembled this little canine. This is because our pup is not from the Fur Trade nor the Victorian era, but rather likely dates to the 1920s or 1930s. This identification was discovered by my colleague at the Fort

Vasquez Museum who has an expertise in antique beads and jewelry. She managed to locate a listing of an identical piece being sold by an online antiques dealer (Figure 4.37). The listing indicated that the identical piece was made of celluloid and had a distinctive feature that we were able to use to match our artifact to the online listing: both dogs have the word "JAPAN" stamped on the stomach, indicating country of production. Japan is known is have been the leading global producer of celluloid objects in the 1920s and 1930s, with scottie dog necklace



Figure 4.37. A photo from an Etsy.com listing for an identical

factories creating trinkets like dolls, jewelry, tennis table balls, and other cost-effective items of the like (Young and Young 2002). In getting in touch with the collector she agreed that piece likely dated to this time based on the material and the "JAPAN" stamp on the underside. During this time Scottie dogs were fashionable (American President Franklin Delano Roosevelt's dog, Fala, was a Scottie and likely the inspiration behind the trend) and produced in large quantities by both Japan and America (Garmon 2019). If artifact 54~12 was produced during this time it could be a reflection of how the fort ruins were used in the early twentieth century. Historical accounts note that the residents of Platteville took a liking to the fort ruins as a place for Sunday picnics and summer play-dates (Hafen 1964; Peterson 1982). Perhaps this dog is the product of a lost necklace during a summer's day picnic at the fort. Unfortunately, the only contextual information that the original excavators provided for this artifact is that it was excavated from room 3. There was, however, no record kept of the depth at which it was excavated or what strata it is associated with.



Figure 4.38. The underside of the Scottie dog from the Fort Vasquez collection with the word JAPAN stamped on the stomach (left) in comparison with the underside of the antique listed on Etsy.com (right)



vi. Leather Analysis

The three leather pieces that I analyzed from the collection I identified as being the sole and counter sections of men's leather shoes. Counters, or the firm leather section attached at the back of the heel, are durable and are the most likely piece of a leather shoe to preserve. The first shoe,

artifact 233~13, consists of one large sole piece, a counter, and other smaller fragmentary pieces of the sole and heel. Unfortunately, the archaeological context for this artifact was

not noted clearly. The museum tag associated with the artifact states that it was excavated from an unknown location at an unknown depth, which precluded me from using it as a piece of



Figure 4.39. Artifact 233~13 in full view (right) and a close-up photo of the heel depicting evidence of machine pegging (left)



evidence for examining room function. The form of the shoe, however, provided me with important information about the time period in which it was produced. The holes in the sole indicate that the shoe was likely pegged using a machine, possibly a hand-operated peg machine. Additionally, the remnants of wooden pegs that would have fit through the holes are still present in the sole. The dense presence of wood peg holes suggests that the shoe was produced at the earliest in 1811, when a machine was invented that allowed for the more efficient production of wood pegs, thus liberating the shoe-maker from the tedious task of whittling the pegs by hand. It is, however, more likely that the shoe was produced post-1830, when hand-operated peg-machines allowed for the insertion of wooden pegs and nails into shoe soles in larger quantities. The density and sheer amount of peg holes in this sole suggests a mechanized production method, rather than hand cobbling. Additionally, the preservation of the counter also suggests a post 1830's date of production, as counters were introduced to shoe patterns during this time to reinforce the structure (Anderson 1968). The rounded toe of the shoe supports a production date between 1830 and 1840, as square toes became the preference of the fashionable by the 1850s and remained the popular style until the 1870s (Stevens and Ordonez 2005). Although a rounded toe was popular again in the 1870's this shoe likely predates the square-toe phase; the shoe sole is not turned or volcanized, both attributes would more likely have been present if the shoe had a post-1870 dates of production. Turned shoe soles were produced by sewing the upper portion inside out to the sole and then flipped back. This method of production became popular with the introduction of L.R. Blakes stitching machine in the 1860's. And vulcanization is simply the process of hardening rubber for the sole of a shoe, which was not patented until 1844 by Goodyear. Finally, the lack of instep on this shoe sole also suggests a date of production predating 1850. Prior to this time shoe soles were produced on straight lasts, meaning that there would be little to no difference between

left and right soles. This shoe indicates little consideration for instep differentiation, suggesting that it was produced pre-1850. The likely date of production for this shoe is between 1830 and 1840, thus placing it just prior to or during the primary occupation of Fort Vasquez (Anderson 1968). The size and shape of the sole suggests that this shoe was a men's leather dress shoe.

The second shoe, artifact 89~5, is more complete than artifact 233~13, but presents similar attributes. The pieces of the shoe that remain include the sole, the heel, counter fragments, and other corroded metal fragments that could either be a buckle or interior structural supports. The preservation of a previously mentioned counter, as suggests а production date post-1830. Additionally, the metal nails suggest that the shoe was not made using the McKay method, which was most popular post-1860. It Figure 4.40. Artifact 89~5 from the Fort is also not likely to be the product of a Davey Pegging



Vasquez collection

Machine developed in 1854, which used wooden pegs in the heel. The pegging around the sole of the shoe used wooden pegs, however, which suggests a minimum production date of 1811, but a more likely production date in the 1830's when pegging was first mechanized. It was not uncommon during this time for "nailed shoes" to have wooden pegging securing the midsole and outsole with nails securing the heel and outsole to the rest of the shoe. Finally, this shoe also has a lack of instep consideration. Photographs portray what appears to be a left-foot instep, but this is a result of the leather being warped and slightly bent forward. The shoe was more likely produced on a straight last, indicating a pre-1850 date of production. This shoe also was likely

produced between 1830 and 1840, during or just prior to the occupation of the fort (Anderson 1968). The heel of this shoe indicates that it is likely a men's dress shoe. This shoe does have an archaeological context associated with it in the artifact notes. It was excavated at an approximate depth of nine inches in room 1. I interpreted this room as the main trading room, which means that it was probably being used for formal social events that would require dress shoes like artifact 89~5.

The third leather piece is too fragmentary to assess for production time period, but it does appear to also be a piece of a shoe, possibly the inner sole. This is consistent my interpretation of room 2 as living quarters, as a shoe is likely to be found in a place where someone would be dressing themselves on a daily basis. Although I cannot say definitively whether it belongs to a moccasin or a dress shoe, it seems consistent with the material of the other dress shoes in



Figure 4.41. Photograph of artifact 179~13

While it may not seem curious that shoes would be found at Fort Vasquez, it is the style of shoe that begs reconsideration. Traders and trappers in the American west almost always wore indigenous buck-skin moccasins, often with beadwork on the upper of the shoe. An experienced

the collection.

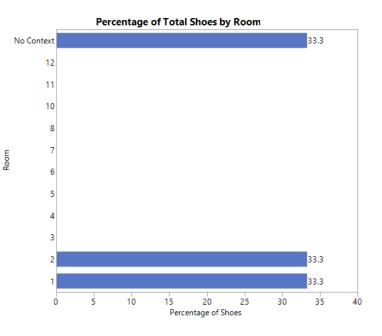


Figure 4.42. Bar graph depicting percentage of total shoes by mountain man would not trek room. One shoe did not have a recorded context

through the prairie in a pair of stiff leather dress shoes. Moccasins were far better suited to the environment as they were light, flexible, waterproof, warm, and easy to repair (Gottfred 2003). It is therefore worth questioning why dress shoes that would have been more common in the east would be found at a trading fort in Colorado.

It is possible that the shoes were worn by an inexperienced individual who soon abandoned them for a more pragmatic and durable set of moccasins. I suggest, however, that the shoes were not worn to the fort out of a lack of understanding for trader life, but rather with the knowledge of the social events that life in a trading fort entailed. Although historical documentation of life at Fort Vasquez is scant, the few sources that do reference the fort discuss social events like dinners taking place in the adobe walls. As previously discussed, James Beckwourth noted a dinner party taking place at the fort when he first arrived. And in an even more detailed account, college student E. Willard Smith took a trip out west as a graduation present from his parents and kept a diary of his travels with Louis Vasquez and Andrew Sublette from St. Louis to Fort Vasquez and other surrounding areas. In one entry he describes arriving at the fort and causing "considerable stir among the inmates" and eating some of the best meat he has tasted in a while. He also describes other social events taking place at the fort that are of considerable interest when investigating the possibility of social events at the fort:

"The men at the Fort have been carousing, having got drunk on alcohol. There are about twelve lodges of Shians encamped at the Fort. They have been trading with the whites. They had a scalp-dance in the Fort to-day, dancing at the music of an instrument resembling the Tambourine. They were armed with short bows, about three feet long" (Smith 1839 *in* Hafen 1950). So, what does this have to do with two pairs of brittle, decaying shoe soles? I argue that these dress shoes would have been purposefully brought to the fort for such events as described. The accounts of both James Beckwourth and E Willard Smith provide us with evidence that important social events like traditional dances and dinners took place at the fort. Perhaps one would need a pair of dress shoes for just such an occasion. Not only do historical eye witness accounts contradict the interpretation that the fort was primarily a storage facility, but the archaeological evidence supports an alternative interpretation of the fort being a place for trading, dancing, dining, smoking, drinking, and making-merry.

C. Artifact Analysis Conclusion

The different artifact categories that I analyzed from this collection all provided new information that could be added to the interpretation of room and site function, as well as a more in-depth understanding of the different trade connections that tied Fort Vasquez to a globalized market. The documented disturbances to the archaeology required that artifact distribution be considered with an understanding that the site is not pristine. An overall distribution of the average depth of the artifact categories that I analyzed suggests that the most accurate horizontal distribution of artifacts would be found at vertical depths ranging from approximately 7-13 inches. However, artifacts that are diagnostic of the fur trade were excavated from depths ranging from 1 inch to 25.5 inches below the surface. So, although a considerable amount of artifacts were probably excavated from stratigraphic levels that were reasonably in-tact, an equal amount of artifacts were excavated from levels that were quite obviously disturbed, which clearly complicates an archaeologist's ability to interpret the significance of horizontal artifact distribution. Further complicating my ability to reconstruct the excavation and test Judge's hypothesis was the lack of standardization and control of records of the excavation itself. Only a portion of the artifacts that

I analyzed had general excavation associated with them, so I depended on Judge's table of general artifact distribution. I was unable to connect a large number of specific artifacts with their vertical and horizontal location, which made it impossible to associate specific sub-types of artifacts with locations within the site. For example, as previously mentioned, if I was able to place specific ceramic types with locations within the fort I could have considered what ceramic type distribution meant for room function.

Despite considerable challenges in interpretation and review of old field notes I was still able to make general conclusions about artifact categories to test against Judge's hypothesis about fort function. Judge argued that the fort acted primarily as a storage facility that would be used to protect trade goods, while the traders would venture out into the prairie and conduct trade remotely with indigenous populations in the surrounding region, "Since the trading post was 'fortified', the hypothesis can be offered that the primary function of this rather imposing structure was the *security of trade goods* rather than the 'center' for trade which would depend on the attraction of Indians for success." (Judge 1971: 201). I conclude that this hypothesis is not strongly supported by my analysis of artifact categories, my interpretation of room function, and historical documentation of how trading forts functioned.

Of the artifact categories I analyzed only two provided interpretations of fort function that could be considered somewhat supportive of Judge's hypothesis. The beads could support his contention that parts of the fort were being used for storage, as there were considerable quantities throughout the fort. However, according to my interpretation of room function, beads were found in the highest quantities in rooms 1, 5, and 10, all of which I have interpreted as being associated with trade, not exclusively storage. This is more consistent with the traditional fort model of primarily a trading facility, not a storage facility. The other artifact category that could be used in support of Judge's hypothesis are the ceramics. The presence of utilitarian ceramics in the collection supports the hypothesis that goods were being stored in the fort, a fact with which I agree. While I do not believe that the primary function of the fort was storage, I do concede that at least certain parts of the fort were being used to store goods. The presence of decorative and common tableware, however, suggests that social events were taking place in the fort. If traders were returning to the fort after remotely trading on the plains with indigenous populations it seems that there would not be much need for fancy tableware. Finally, historical documentation from more than one source confirms that groups of Cheyenne were camping in areas very close to the fort, which contradicts Judge's idea that the traders would need to bring trade goods to their clients, rather than attract the clients to their fort (Sublette 1836; Hafen 1950). Additionally, when discussing Judge's interpretation of the fort, William Armstrong, Fur Trade historian and director of the Fort Vasquez Museum, says that he believes it would be extremely unlikely that traders would leave the trading post and venture out with merchandise into the surrounding landscape, "It was far from a repository. Bent's didn't function that way and neither did any other fur trading post that I can think of; I believe Judge is wrong. If he's correct this would be the only fur trading post of its time to follow a primarily storehouse model. It defies logic and tradition" (Armstrong, personal communication, 2019).

When considering the distribution of all excavated artifacts throughout the fort with historical documentation and analogue I do not agree with Judge's contention that the fort was primarily a storage facility. Although the artifacts do not preclude this explanation, it is not strongly supported by the archaeological record. Overall, I found that the analysis of sub-types of artifact categories (i.e. types of ceramics or types of buttons) in combination with their distribution in the fort points to Fort Vasquez as being place where trade and social events were used to facilitate business relationships with less areas dedicated exclusively to storage of trade goods.

	Summary of Findings for Artifact Categories Analyzed in 2019					
Artifact Category	Most Frequent Distribution by Room	Overall Interpretation	Global Connections	Comparison to Judge's Interpretation		
Beads	1, 5, 10	Trading and storage	Italy, China, Bohemia	Somewhat consistent, but not rooms interpreted as storage have large amount of beads		
Buttons	2, 3, 5	Everyday life in the fort	Undetermined	Inconclusive; Judge acknowledges that traders lived in the fort		
		Storage/transportation		Somewhat consistent, but decorative tableware and everyday tableware suggests		
Ceramics	1, 5	and social events	England	that social events were also		
Shoe	1,2	Social events	Undetermined	Not supportive		
Ornamentation	1	Trade or social events	France	Inconclusive		
Pipes	1, 4, 5, 11	Social events and everyday life	, England, Ireland, or Scotland	Not supportive		

Table 4.4. A table summarizing my findings for each artifact category in terms of my interpretation of fort function, as well as the global trade connections they represent.

Chapter 5

Conclusion

In this thesis I have attempted to dust off the field notes and artifact boxes from the Fort Vasquez collection and provide a new perspective. My first goal for this research was to determine the global trading connections that Fort Vasquez held during a time in history where the world was growing increasingly more connected. Although the artifacts were analyzed by Guy Peterson there has been no discussion of their production origin in any publications to date. To ignore the connections that this small dot on the prairie had with the global market does a disservice to the story of the fort and the people who lived and worked there.

The artifacts from Fort Vasquez demonstrate the products were arriving in St. Louis and being shipped out to the prairie from places as far away as China, England, Ireland, Italy, the Netherlands, the Czech Republic, and Scotland. As an intern at the Fort Vasquez museum I often refer guests to a table of reproduced trade goods, holding up each item and pointing on a world map to where these items were produced. For most visitors the far-reaching assemblage of artifacts is shocking, as many people tell me that they were under the impression that all of the items being traded were made at the fort or by native Americans. Fort Vasquez, although a small adobe square in a vast sea of prairie grass, is anything but isolated. This thesis highlighted the many ways in which Fort Vasquez was tied into a global trade network.

The artifact category that best exemplifies these global connections is beads. The beads from Fort Vasquez almost certainly came from glass factories in Italy, as Venice and Murano were the most prolific producers of glass beads during the Fur Trade. There were also faceted beads in the collection that most likely came from Bohemia or modern-day Czech Republic, as this region was known for it's faceted and molded beads (Dubin 1987; 2009). There is also the possibility that some of the beads came from the Netherlands, as there were bead factories located in this region during the Fur Trade, though they were more prolific in the early centuries of the trade (Karklins 1983). Finally, the single sky-blue padre bead could represent a Chinese trade connection. These beads were also produced in Italy, but the sky-blue color was popular for Chinese Peking glass beads (Dubin 1987; 2009). Additionally, although not a bead, but rather an ornament, the hawk bell represents a likely connection with France, which was known for produced brass bells during this time (Ivas 2014; Woodward 1979)

The clay pipes represent possible connections to Ireland, the United Kingdom, Germany, the Netherlands, or Canada (Walker 1983; Atkinson and Oswald 1969; Hanson 1971; Humphrey 1969; Kastl 2009; Atkinson 1978; Tatman 1982). It is almost impossible to source nineteenth century clay pipes without chemical or petrographic analysis to an exact location, as they were being manufactured in bulk at the time and pipe molds of the same or similar designs were used by multiple pipe makers. England, however, was the most prolific producer of clay pipes during the time and it is not unlikely that at least some of the pipes came from pipe makers in the United Kingdom (Atkinson and Oswald 1969).

The ceramics from the collection also represent a possible connection to the United Kingdom. While most utilitarian stoneware was being produced by American potters, the transferware represents a connection to England. Staffordshire was such a prolific producer of transferware that a type of ceramic, "Staffordshire Blue", is named for the region (Little 1969). As the reader will recall, a piece of blue on white transferware was excavated at Fort Vasquez. England also produced transferware in colors other than blue, like the red transferware found at Fort Vasquez. As such, the transferware found at the fort was probably shipped from England to the East coast and brought out to Fort Vasquez (Miller 1980; Brennan 1982; Majewski and O'Brien 1987).

My second goal for this research was to reexamine Judge's interpretation of the site. Judge contends that approximately 34% of the fort was dedicated to storage, which indicates that most of the trading was conducted remotely and the fort acted as a storage unit and home-base for traders that would venture out to trade with clients. Judge states, "it is apparent from the calculation of space devoted to the various room functions that rooms in which actual trading was carried out comprise the smallest percentage of available space in the fort. On the other hand, storage facilities occupy the largest volume" (Judge 1971:201). He goes on to argue that the distribution of artifacts supports this conclusion, as well as the proximity of Fort Vasquez to the other forts in the South Platte concentration. According to Judge, the only reason that the forts would have been built so close together is because they were not actually conducting trade at the forts, but rather were conducting trade remotely. Cody Newton has disputed this argument and suggests that the forts were located close together for different reasons (2012). Newton points to favorable grazing conditions for bison in the basin, the social and political climate of native American groups in the region, and historical documentation of cooperation between the posts to support his argument. He states that "given the isolation of these posts and distance from supply centers, it is conceivable that interpost trade was a forced economic reality and, whether amicable or not, was necessary...competition was not all consuming and demonstrates that the rivalry has been overemphasized" (Newton 2012: 245). And it is with Newton that I find myself in agreement based on my analysis of the fort.

My examination of select artifact categories supports an interpretation of Fort Vasquez as not only a place where goods were being stored, but also a nexus of social events and daily life on the frontier. The presence of ceramics that were both utilitarian and decorative suggests that not only were goods being transported to the fort, but people were living and working there. Transferware in particular suggests that formal events were taking place at the fort, as there would be no need for fancy table-ware if traders were just operated out of the fort remotely. As I have mentioned, this interpretation is also supported by historical documentation from James Beckwourth and E Willard Smith, who both noted social events taking place at the fort (Beckwourth 1856; Wilson 1972; Hafen 1950).

The presence of formal mens' shoes at the fort also supports this interpretation. Traders and trappers were known to wear buck-skin moccasins, rather than leather dress shoes. I suggest that these shoes were brought to the fort for the social events described by Beckwourth and Smith. Perhaps the occupants of the other forts in the concentration attended these events to participate in trade with each other. If Cody Newton's contention that the rivalry was overemphasized this is certainly a possibility. The presence of buttons that would have belonged on waist or overcoats also supports this theory. Although the buttons are not numerous, they still represent the need for formal clothing in addition to the typical linen undergarments of the time. The array of clay pipe types at Fort Vasquez also supports this narrative, as it is more likely that the pipes were personal items used at social events, rather than trade items.

The beads were the only items that could be used in support of the storage-unit theory. The large number of beads excavated throughout the fort could be used to argue that they were be stored at the fort. I argue, however, that because beads are small and easily dropped that they probably made their way into the archaeological record more easily than some of the large trade goods. This is not to say that they were not being stored at the fort; in all likelihood they were being ordered in bulk and stored accordingly at the fort. However, the strong presence of them in

the archaeological record indicates at the most that they were a popular trade good, which is not a ground-breaking assumption as beads were known to have been some of the most sought after goods during the fur trade (Smith 2002; Hancock 1996; Karklins 1983; Huey 1983; Dubin 2009; Dubin 1987; Spector 1976; Wray 1983; von Wedell 2011; Kidd and Kidd 1970).

My interpretation of room function and overall fort function also supports the contention that the fort was a place for trade and social events, rather than primarily a storage facility. I concluded that approximately 70% of the space in the fort was used for trading or social events, as opposed to Judge's interpretation of only 13% of the fort being used in this capacity. I based my contention on the size of the rooms, their location in the fort, and the presence or absence of a fireplace. I also took historical documentation and excavation of other contemporary forts into strong consideration. Based on these factors in conjunction with my artifact analysis, I conclude that Fort Vasquez was used not primarily for storage, but as a nexus of social and trade activity for the people who lived in the fort as well as in the surrounding basin. Although there would have been storage rooms in the fort, the evidence compiled during my research does not support a conclusion that storage accounted for more than a third of the fort's function.

A. Outcome of Research for the Fort Vasquez Museum

This research has culminated in the construction of an exhibit in the Fort Vasquez museum presenting the archaeology of the fort and the global trade connections the artifacts represent. I worked with William Armstrong, the Fort Vasquez Museum director, to design an exhibit that we felt would allow museum visitors who have no prior experience with archaeology to engage with the field in a way that is easily digestible. The exhibit consists of a glass case with mounted artifacts that I selected from the collection that I felt best represented the global trade connections of the fort, the different occupation periods demonstrated in the archaeology, and daily life at the Fort. I selected the sky blue padre bead (artifact 228~13), the white and blue Venetian skunk bead, some white seed beads (artifact 4~c1), the most complete clay pipe (pipe 4-11e), the bowl of a pipe with evidence of smoking (pipe 4-9i), the Scottie dog necklace (artifact 54~12), two pearlware redtransfer printed ceramic sherds (51~15) a shoe sole (artifact 233~13), the hawk bell (artifact 170~13), a piece of faunal remains (artifact 4~c1), and a musket gun flint (163~13). The beads and pipe 4-11e were included in the case represent connections with Italy, China, and the United Kingdom. Pipe 4-9i was chosen as a representation of daily life as it provides evidence of smoking at the fort, which would have been a part of daily life as well as social events and possibly trading rituals. The transfer-ware ceramics were included to highlight the occurrence of social events in which fancy dishware was used at the fort. The shoe sole was also selected for this reason, as it was likely worn during special occasions rather than as a daily item. The hawk bell was chosen for its representation of a connection to France, as well as the importance of dancing for indigenous individuals as part of ritual trading events. The musket flint and animal remains were included as a representation of daily life and the importance of hunting for traders and trappers living in Fort Vasquez. And finally, the Scottie Dog (my personal favorite) was chosen to demonstrate the continual reoccupations of the fort after it's abandonment in 1842. This is the first time that the artifacts excavated from the site are being displayed in the museum.

B. Directions for Future Research

A common problem I encountered with my research is the lack of contemporary literature discussing specific artifact categories. Historical archaeology could benefit from the analysis of everyday objects like buttons and jewelry. In my research I found that when specific artifact categories are discussed it is often in the context of extravagant and anomalous examples, rather than typologies of utilitarian or everyday wear. Counterintuitively, this problem increases as the time periods approach the present. It seems that the typologies of 20th century artifacts, in this case specifically jewelry and buttons, lie almost exclusively in the realm of amateur collectors. Historical archaeology could benefit from peer-reviewed work discussing artifact categories, rather than just disparate collections from individual sites. Historians do discuss general fashion trends and this information is useful, but there are few archaeologists who have focused specifically on creating typologies of everyday clothing items like buttons. This is not to say that there is no archaeological information available about historical clothing and everyday objects, as this is not the case (Anderson 1968; Brennan 1982; Miller 1980; Kane 2014; Huey 1983; Smith 2002; Karklins 1983; O'Hern and McHugh 2014; Hancock 1996; Lovell 2006; Wray 1983; von Wedell 2011; Dubin 1999; Stevens and Ordonez 2005), however, certain artifact categories do not have a robust literature to which archaeologists can refer.

For future research focusing specifically on Fort Vasquez there are a few avenues that should be explored. First, the historical documentation for the fort is sparse in comparison to other contemporary sites. There are documents relating to Louis Vasquez's family held at the State Historical Society of Missouri in St. Louis that have not been addressed by researchers primarily because they are almost entirely in French. The translation and transcription of these documents would be useful to a researcher looking to learn more about Louis Vasquez's life and could potential uncover new information about the fort. Second, the rest of the Fort Vasquez collection should be reanalyzed, as I was only able to look at a fraction of the artifact categories in depth. There are other leather objects in the collection labeled as "vermillion pouches" that could provide more information on daily life at the fort and another potential global connection. Cody Newton has published an impressive site report based on the 2017 inventory of the collection and an analysis of the faunal remains, but specific artifact categories could still benefit from a more indepth analysis, like the metal objects. There are also other shoe soles in the collection that I did not have time to examine. The shoe soles in my research provided a new perspective on social activity at the fort and if the other shoe soles belong to different types of shoes or even women's shoes more evidence could be added to this perspective.

A widescale comparative artifact analysis from different contemporary forts in Colorado and surrounding states would be an extremely useful exercise. A surface collection and test pit excavation was conducted at Fort St. Vrain that yielded some artifacts, including beads, ceramics, and pipes, that could benefit from comparative analysis with the Fort Vasquez collection (Peterson 1982). This research could address questions about whether the forts were using similar everyday items and if they were trading similar products. This information could then be compared to forts that are even further away that have been excavated like Bent's Old Fort (Dick 1956).

The most potentially fruitful future research project regarding Fort Vasquez, however, would be the excavation of the plaza area. According to Judge, his 1971 excavation only excavated the room blocks lining the walls of the fort. There was supposedly a small pit placed in the center of the fort where a metal detector indicated the presence of metal, but this pit revealed what was later determined to be the base of a flag post from the WPA reconstruction. Ken Malone and William Crowley, both former directors of the site, have suggested that there was a well located in the plaza of the fort, but I have found no documentary evidence to support this claim (Judge 1971). A systematic excavation of the plaza could explore the validity of this claim and would undoubtedly yield more artifacts for analysis. Additionally, my research using the 1971 excavation field notes was complicated by the fact that the notes were fragmentary and challenging to understand. An archaeologist looking to expand upon my own research would benefit from a controlled excavation of the plaza with stratigraphic profiles available to properly contextualize

artifacts and features. As I have mentioned, the plaza is place where daily activity and special social events would take place frequently and any interpretation of a fur trade fort that does not consider this area is incomplete. Although there would have been separate trade rooms for specific rituals, like the sharing of tobacco as demonstrated by illustration at Bent's Old Fort, the plaza would have hosted a wider variety of activities, like the dance described by E. Willard Smith (Hafen 1950). Excavating the plaza is the next and most important step in understanding life at the fort.

Another avenue of exploration would be the excavation of the hinterland of the fort. There historical references to Cheyenne lodges located in the surrounding landscape. If these camps were located there is a strong possibility that trade goods purchased from the surrounding forts would be found in them. This could give archaeologists a better understanding of not only what kind of trade goods indigenous clients preferred, but could also be used as a point of comparison to determine what artifacts are representative of daily activity at the fort as opposed to trading activity.

Fort Jackson is the only fort in the concentration on the South Platte that has not been excavated. The problem is not that it has not been found, but rather that it is currently on private property and the property owner has not allowed any archaeological investigation on his land. Although it may not happen in the near future, perhaps if the property is ever sold archaeologists might be given an opportunity to locate and excavate Fort Jackson. Not only would an excavation provide comparative data for the Fort Vasquez collection, but it would also provide archaeologists and historians with a better understanding of Fort Jackson itself. Fort Jackson has more documentary evidence associated with its operation, but out of the four forts it has the least amount of archaeological evidence to support its legacy (Peterson 1982).

Finally, a recent study has come out discussing DNA testing on pipes from colonial contexts that revealed new information about slavery. Genetic material extracted from a clay tobacco pipe stem was identified as belong to a woman of west African descent. Methodological advances in archaeology that can provide new ways of understanding the genetic background of individuals present at a site could provide new insights into the function of Fort Vasquez. The testing of the pipes from the Fort Vasquez collection could provide information about who was smoking them and if they were being passed around a trade room or smoked by just one individual (Schablitsky et al., 2019).

C. Importance of Research

In 1858 William Green Russell and John Beck decided to chase rumors of gold in the Rocky Mountains that originated almost 50 years earlier. Both experienced in the art of prospecting, Russell and Beck formed two separate groups that made up the Cherokee Party and set out for the Front Range in the spring. The journey was long and difficult, with Russell and Beck not meeting up until July and the majority of the original 100 gold-seekers having defected, leaving only about a dozen left. On July 6th, as all hope was seemingly dissipated, the group happened upon gold in Dry Creek. By 1859 tens of thousands were streaming across the plains to the Pikes Peak Region. From this time onward the relationship between whites and indigenous groups was not the same. As the fur trade came to an end, so did the amicable and mutually beneficial partnerships that had been formed by the like of Louis Vasquez with indigenous clients. Now indigenous people were no longer needed to make money; they were in the way. As the nineteenth century moved into its later half, indigenous people faced atrocities like the Sand Creek

marks one of the last times on the western frontier that relationships between whites and indigenous people were somewhat amicable (West 1998; Turner 1920).

Post-colonial theorists, like Eric Wolf, have depicted the Fur Trade as a time where indigenous people were taken advantage of and ultimately left in the dust of materialistic Europeans (Wolf 1982). While this is not entirely untrue, it is undoubtedly a narrative that is too simplistic for a nuanced understanding of an event that spans centuries and thousands of miles. As demonstrated by the stories of places like Fort Vasquez and Bent's Old Fort, the relationships formed by traders and natives were critical for not only business, but the ability to exist safely in an unfamiliar environment. The web of social connections formed during this time is too nuanced to be generalized as colonial exploitation. Was there conflict? Absolutely. Were there unequal transactions? Yes, on behalf of all involved parties. Is there one all-encompassing narrative that can be used to characterize the Fur Trade? No.

While broad comparative work like Wolf's is necessary to understand large-scale economic and cultural changes, small-scale analysis is just as important for a more complete narrative. Small stories are the drivers of the larger movements that archaeologists and historians study. I have explored just one of these small stories in the hope that it will inspire others to do the same. Fort Vasquez was a place not only of business, but of the creation of relationships between people who spoke different languages, were born in different places, and were raised in different cultures. Although historical documentation of these relationships is sparse, the archaeology is there and it should not be forgotten. James Deetz concludes his landmark work on historical archaeology, *In Small Things Forgotten*, with a reminder that, "It is terribly important that the 'small things forgotten' be remembered. For in the seemingly little and insignificant things that accumulate to create a lifetime, the essence of our existence is captured" (Deetz 1996: 259). I echo this sentiment in my contention that Fort Vasquez is a small site with lots of "bits and pieces" that deserves to be remembered.

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