

THESIS

CONSUMING IDEALS: AN ARCHAEOLOGICAL INVESTIGATION OF THE SOCIAL
HYGIENE MOVEMENT IN COLORADO

Submitted by

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ABSTRACT

CONSUMING IDEALS: AN ARCHAEOLOGICAL INVESTIGATION OF THE SOCIAL HYGIENE MOVEMENT IN COLORADO

Historical investigations of the Social Hygiene Movement (1890s-1930s) tend to focus on the urban origins of the concerns that sparked much of the resulting reform efforts. Furthermore, archaeological investigations that address artifacts associated with the Social Hygiene Movement often focus on either an urban or a rural setting, and usually only examine a single aspect of the movement rather than considering the impact of the totality of the movement's ideology on American consumer behaviors. As a result, little is known about the materialization of the Social Hygiene Movement in the archaeological record and the differential appearance of associated artifacts at urban relative to rural sites. This project seeks to define Social Hygiene Movement-associated artifact types and undertake a comparative analysis of the occurrence of these artifacts at two urban and four rural sites in the state of Colorado in an effort to better understand the early material expressions of the movement in rural regions of the United States. This study was designed to 1) explore the assumption that artifacts related to health, hygiene, and cleanliness should appear at rural sites later than at urban sites, 2) determine if the Social Hygiene Movement manifested differently in rural regions relative to urban areas as evidenced in the archaeological record by types of consumer products purchased, and 3) if differences do exist, provide information about what other contextual and ideological factors may have caused the divergence. This project concludes that rural residents were likely aware of the emerging health, hygiene, and cleanliness ideals from nearly the beginning of the Social Hygiene Movement.

However, differences in the frequency and types of products purchased suggest that consumer choices were informed by a shared system of rural values developed in opposition to the hegemonic rhetoric of Progressive Era reformers. The evidence presented in this study indicates that rural residents did not alter their hygienic practices and consumer behaviors to be in-line with urban standards, but rather selected the ideological aspects of the SHM that reinforced their rural identities and incorporated the products and practices which complemented their daily realities and social norms. The results highlight the importance of utilizing material studies in conjunction with historical research to achieve more nuanced understandings of the origins of the Social Hygiene Movement and question commonly-held assumptions based on the dominant discourse often evidenced in documentary sources.

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CHAPTER 1: INTRODUCTION

Personal hygiene and cleanliness have become a fundamental part of social, cultural, and economic life in the United States. Americans spend over \$68 billion on beauty and personal care products and over \$9 billion on household cleaning supplies annually (Ho 2013; Koeppen 2012). However, a mere century and a half ago, the majority of Americans only bathed once a week (Hoy 1995). The modern fixation on projecting a healthy and hygienic image was not born overnight, but rather reflects the influence of a dominant discourse that developed through the social reform efforts of the Social Hygiene Movement (1890s-1930s). While historians have studied myriad variables and perspectives related to the Social Hygiene Movement (SHM), much of the research conducted to-date (e.g. Hoy 1995; Pivar 2002; Simmons 1993; Sivulka 2001; Verbrugge 1988) has focused on the urban roots of the Movement. Furthermore, investigations conducted by historical archaeologists have overwhelmingly looked at specific social aspects associated with the SHM, such as the differences in health-related consumer behaviors for the middle and working classes (Bonasera and Raymer 2001), rather than contextualizing all health, hygiene, cleanliness, and cosmetic artifacts in an assemblage within the framework of SHM ideology. Archaeological investigations have also tended to concentrate on either a rural or an urban setting, rather than considering the relationships between them (e.g. Bonasera and Raymer 2001; Howson 1993; Phillippe 1990; Wilkie 1996). As such, this study will undertake a comparative analysis of urban and rural SHM-era sites in the state of Colorado in an effort to better understand the early manifestations of the SHM in rural regions of the United States, how the ideology of the SHM may have impacted the consumer choices of rural residents, and if rural

values and the daily realities of rural life may have caused rural residents to resist the ideals of the SHM.

Testing Assumptions

The movement of America's population towards cities after the Civil War created both a mounting concern about maintaining adequate agricultural production, and a dichotomy between residents living in metropolitan areas and those living in rural and frontier environments (Jellison 1993; Kline 2008). Growing tensions came to a head, however, when Progressive-era reformers turned their attention to the nation's countryside in an attempt to preserve a strong rural population by improving the quality of life on the farm and frontier (Jellison 1993; Piott 2011). Advocates of the SHM viewed the education of America's rural residents in the new urban standards of health, hygiene, and cleanliness as a vital piece to this puzzle (e.g. Ogden 1911). Many reformers (e.g. Bailey 1912), however, assumed that the differences they observed in cleanliness standards between urban and rural regions of the United States reflected an ignorance of the ideals of the SHM resulting from the supposed isolation of rural residents, rather than considering that those living in the countryside may have viewed the ideals as unsuited for their daily existence.

This analysis will seek to test the assumption noted above by identifying SHM-associated artifacts in six Colorado archaeological assemblages and then using those material remains to determine: 1) if artifacts related to health, hygiene, and cleanliness actually did appear at rural sites later than at urban sites, 2) if the SHM manifested differently in rural regions relative to urban areas as evidenced in the archaeological record by types of consumer products purchased, and 3) if differences do exist and the discursive pressure placed on rural residents by

reformers did not produce a homogenous SHM-associated artifact assemblage at both rural and urban sites, what other contextual and ideological factors may have caused the divergence.

A nation-wide investigation of the SHM in rural regions is beyond the scope of this project, however Colorado provides a case study suited to the investigation of the urban to rural transference of the ideology associated with the SHM. Colorado's population growth during the mid to late nineteenth century, due to mining booms and agricultural development (Ubbelohde et al. 2006), created associations between the state's urban and rural regions which were capable of facilitating the spread of the ideology and material culture linked with the SHM. Furthermore, as Colorado's cities strove to develop a reputation for refinement as they lobbied for statehood, the state's rural regions were juxtaposed as uncivilized frontier and mining towns (Everett 2005). The resulting tensions between Colorado's urban and rural communities were similar to those occurring on a larger national scale. Therefore, a comparative analysis of both archaeological site reports and archaeological collections from a sample of temporally-similar urban and rural Colorado sites will be used to understand how the SHM-related consumer behavior of the rural residents of the state compared to that of its urban residents.

Theoretical Foundations

A cornerstone of the argument presented in this study rests on the basic assumption that the contemporary hygienic behavior of most people living in the United States, at least in part, reflects the successful efforts of Progressive-era reformers to indoctrinate the American people in the ideology of the SHM. As of 2013, every day, 80.4 percent of the civilian population of the United States engages in grooming activities and spends over forty minutes doing so (American Time Use Survey 2013). Based on the theories of Michel Foucault (1972), these daily hygienic rituals evidence social practices and customs which continue to reinforce a dominant system of

knowledge that has become so naturalized in American culture that many fail to consider their behavior or related consumer choices in a critical manner. Archaeologist Eric Larsen (1994:69), states that as ideology takes no physical form, archaeologists must address the discourse of ideology. As such, this study will approach the rhetoric of the SHM as evidence of the early formation of a dominant discourse which continues to have a significant impact on American behavior and beliefs. A review of some of the rhetoric will help to contextualize the social pressures that individuals in both urban and rural regions of the United States faced during the formative period of this ideology and expose the historical cause of prejudices that informed the discourses in order to better understand how the SHM may have divergently impacted different social groups.

This study further hypothesizes that the archaeological remains of SHM-associated consumer artifacts can serve as evidence of the early emergence and growth of this ideological approach to health, personal hygiene, and cleanliness. The field of historical archaeology has long operated under the principle that artifacts have symbolic functions which can communicate a multitude of philosophical meanings, such as identity, culture, class, and values (Mullins 2011). As beliefs take on no tangible form, archeologists look to the reoccurring presence of artifacts or artifact types to help identify past ideology in the material record of daily life (Larsen 1994:69). In particular, two of the strengths of historical archeology lie in the discipline's use of material culture to challenge dominant ideology and give voice to underrepresented social groups (e.g. Wylie 2007), and in its ability to investigate the intersection of materiality and ideology (e.g. DeMarrais 2004).

Locating past ideology in material remains can present numerous challenges. However, the historical archaeology of consumer culture (Mullins 2011) provides a framework for

understanding how the standards of the SHM are reflected in artifacts related to health, hygiene, and cleanliness found in the archaeological record. Archaeologist Paul R. Mullins (2011) conceptualizes consumer culture in the United States as the means by which Americans have come to define their society, interpret others, and shape their understanding of themselves, but also as a tool used by institutions to promote dominant social interests. In this sense, artifacts become more than just utilitarian objects (Mullins 2011).

The research by some historical archaeologists (e.g. Wall 1999) on the symbolic meanings embodied in the consumer goods of the Victorian Era illustrates approaches that seek evidence of ideology in the material record. Ceramics, for example, have been interpreted as symbolizing people's acknowledgement of social norms and the ways in which they negotiated their own identities by disregarding, embracing, or revising their consumer behavior in relation to those norms (Mullins 2011). Diana Wall's (1991) ceramic analysis of artifact assemblages from two middle class nineteenth-century homes in New York City concluded that the presence of modest white Gothic-molded ironstone tableware at both locations may have signified a common consumer behavior and indicated a shared belief in the sanctity of private family life. However, each assemblage taken as a whole suggested that the households uniquely made decisions regarding their purchase and use of ceramics to communicate divergent identities based on socioeconomic class.

With this theoretical framework in mind, an examination of SHM-related artifacts at selected Colorado archaeological sites will consider objects as relics of SHM ideology, imbued with symbolic meaning and, on the surface, representing an acknowledgment of the behavioral ideals proposed by SHM reformers. Yet, similar to Wall (1991), the marriage of artifacts, written record, and historical context for each site will take into account the various ways in

which the households and individuals may have negotiated SHM ideals through the use of consumer products in order to shape identities that were unique to their social, cultural, and economical contexts.

To seek ideals in the archaeological record, one must first understand the nature of the ideal or system of ideals. Therefore, the textual record of the discourse associated with the SHM will be addressed to understand the changes in health, hygiene, and cleanliness standards advocated for by SHM reformers. Michel Foucault's theories (e.g. 1971, 1972) regarding discursive power will inform the analysis of the rhetoric of the SHM and how that rhetoric may have informed knowledge regarding cleanliness and personal hygiene, reinforced normative social behaviors, and given shape to power relations between individuals and institutions.

Foucault (1990:43-44) defined "care of self" as a system of health rituals and regimens designed to form a body which conformed to social ideals of gentility, health, beauty, and status. He viewed this "cultivation of self" (1990) as necessary to existence, but viewed the imposition of a dominant discourse regarding this cultivation as a source of conflict and danger (1971, 1990). According to Foucault (1972), truth and knowledge that is rooted in a series of historical events, can easily become systems of power reinforced by institutions and social practice. An idealized truth takes on a law-like quality and becomes the rational for behavior. Institutions possess the power to manipulate truth and knowledge. That knowledge is ascribed to some, denied to others, and used to assimilate the masses. Education is the means by which people can access the knowledge and power of discourse in a society, and creates the scenario in which repeated practice of the discourse legitimizes the idealized truth. Foucault believed that the only way to move beyond the false naturalization of a discourse was to reveal the specific historical series of events which led to its emergence and the function the discourse served in its original

context. In doing so, he proposed to expose the exclusions imposed by discursive power, the constraints it enforced on social behavior, and the ways in which institutions modified discourse to suit their needs.

This study thus approaches the analysis of artifactual and documentary evidence as the material manifestations of consumer behavior informed by the discourse of the SHM. The discursive power of the movement is seen as partially rooted in the recursive relationship between many of the key SHM reform organizations and the medical profession, wherein the rise of medical authority in the United States reinforced the ideals of the SHM and vice versa. As this study also deals with the relationship between rural and urban consumer behaviors, the formation of rural identity and its impact on the values that informed material consumption will be addressed. The discourse of the Country Life Movement (CLM) offers a means of understanding the growing dichotomy between urban and rural populations and provides evidence of the marginalizing insinuations of CLM reformers that rural values and identity arose to oppose. Historical research into the origins of the SHM helps to contextualize the ideals the movement promoted within the concerns of a swiftly changing physical and social American landscape at the turn of the nineteenth century. As modern standards of cleanliness and personal hygiene are not only informed by the reform efforts of the SHM, but are also much more solidified in contemporary American society than they were during the period of the SHM, it becomes important to investigate the early emergence of an ideal that continues to significantly impact consumer behavior and beliefs today.

Summary of Chapters

This study sets out to investigate the differential materializations of SHM ideology in rural and urban Progressive Era-sites in Colorado. Prior historical research on the SHM is

summarized and the rhetoric of the SHM is examined to inform readers of the ideals promoted by SHM reformers. The analysis of SHM-associated artifacts from six sites in the state, representing both urban and rural regions, provides the means by which to compare those assemblages both with each other and to the standards of the SHM. Throughout the course of this study, it became evident that SHM and CLM reformers did not find rural residents ready recipients of urban-based health, hygiene, and cleanliness ideals. Rather, the existence of a rural American identity likely meant that those living in America's countryside interpreted SHM ideals in ways which fit with their pre-established cultural norms and the realities of their day-to-day lives.

Chapter 2 offers the necessary background information for understanding the framework of this study. A summary of the historical background of the SHM, and its place within the larger context of the Progressive Era, offers an understanding of the growth and development of the movement. Particular emphasis is given to the roots of the concerns which drove much of the resulting reform efforts. The Country Life Movement is discussed for the role it played in both spreading the ideology of the SHM and for its contribution to fostering tensions between rural and urban populations of the country. The chapter concludes with a more specific examination of the historical and ideological relationship between Colorado's urban and rural communities.

Chapter 3 presents a sample of the discourse surrounding the SHM. SHM and CLM sources of rhetoric were selected to provide a sense of the scope of the discourse, which reached from the highest branches of American government down to newspaper and magazine articles meant to inform a lay public. In general, the selection of rhetoric represented in this chapter focuses on the growing intensity of hygiene reform discourse, the SHM and CLM concern with

rural health, hygiene, and cleanliness standards, and the emerging power of medical and scientific authority in SHM discourses.

Chapters 4 and 5 detail the contextual and artifactual information for each of the sites in this project's data set. Chapter 4 gives a contextual overview, in which a regional, site-specific, and spatial analysis are presented along with the excavation methods used in the archaeological investigations of each site. Chapter 5 presents the SHM-associated artifacts in each site's assemblage. The associated diagnostic data are used to determine the mean of the manufacture dates of the artifacts and one standard deviation from the mean allows for the consideration of the peak period of SHM-related consumer activity at the site.

Chapter 6 synthesizes and presents the quantitative and qualitative data from this study. The quantitative data from each of the six sites are brought together for a comparative analysis of the frequency, diversity, and composition of SHM-associated artifact assemblages. A qualitative analysis explores repetitively-appearing SHM-associated artifacts and artifact types in terms of the history and advertising discourse surrounding the artifacts. A final discussion brings quantitative and qualitative data together with contextual information to explore the research questions posed by this project.

Chapter 7 considers the final results of the project and the significance of those results for both archaeological investigations of rural lifeways and contemporary hygiene practices. Although the anxieties that fueled the SHM were born of specifically urban conditions, the results of this study challenge historical notions that residents of rural communities were unaware of the ideology of the SHM in the early years of the movement. Instead, other ideological factors are presented as alternatives for interpreting the observed differences in the SHM-associated artifact assemblages.

CHAPTER 2: PROGRESSIVE FRONTIERS

The Progressive Era in the United States (ca. 1890-1920) consisted of a multitude of reform movements aimed at improving the physical, social, and moral lives of Americans (Piott 2011). In fact, many of the mundane and unquestioned aspects of contemporary daily behavior in the United States, from attending public school to brushing one's teeth, resulted from the intentional and ardent efforts of Progressives during the late-nineteenth and early-twentieth century. Even though industrialization, large-scale immigration, and increasing urbanization served as the core impetus behind much of the activism, many advocates ironically embraced modernization and science as tools of reform (Hoy 1995). To further complicate the matter, progressive reform movements often sought to accomplish diverse, sometimes unified and sometimes contradictory, goals (Danbom 1979a). Two such movements nested within Progressive ideals were the Social Hygiene Movement (SHM) and the Country Life Movement (CLM).

The Growth and Development of the American Social Hygiene Movement (1846-1930s)

The roots of the SHM existed in a series of interrelated social reform movements in the United States, starting with the abolition of slavery and progressing through Temperance, the Social Purity Movement, and women's suffrage (Hunt 1999; Pivar 2002). The SHM began during the Progressive Era as a focus on medical science began to replace Victorian Era approaches to health and sexuality. Increasing urbanization, overcrowding and job competition caused by influxes of immigrants, and poor industrial working conditions came together to cause epidemics, alter family and gender dynamics, and exacerbate preexisting class divisions (Hoy

1995; Hunt 1999; Simmons 1993). The influence of the events surrounding the Industrial Revolution in the United States so altered the social and cultural landscape in America that the Anglo population struggled to adjust to the changing way of life (Hunt 1999; Hoy 1995; Pivar 2002).

In the mid-nineteenth century, the majority of people bathed only on Saturday nights in preparation for church the next day, few people owned toothbrushes, and deodorants had yet to be invented (Hoy 1995). However, with the majority of the population residing in more isolated rural settings which hampered the spread of disease, cleanliness had yet to become a central concern in American society (Sivulka 2001; Vinikas 1992). That all changed with the Mexican-American War (1846-1848) which fostered anxiety about soldier health as six men died of disease for every one man who perished as a result of battle wounds (Hoy 1995). Although the scientific understanding of germs still lay in the future, the first National Quarantine Convention in 1857, which grew in part out of the issues brought to light during the war, marked the beginning of American consciousness of the correlation between disease and filth (Hoy 1995).

The Civil War would catapult concerns about cleanliness onto a national stage. Fearing a repeat of the Mexican-American War, the United States formed the Sanitary Commission in 1861 in order to educate soldiers and the many middle and upper class women who would serve as nurses during the war about the risk of losing valuable manpower to disease (Hoy 1995). The campaign proved successful, and the six to one death ratio of the Mexican-American War dropped to three to two in the Civil War (Hoy 1995). In this way, cleanliness would begin to assume the underpinnings of American patriotism (Hoy 1995; Sivulka 2001).

Also during the 1860s, the growing involvement of women in the fight to abolish slavery placed them in increasingly public spheres and spurred early feminist movements (Pivar 2002).

Women's groups focused on social and moral reform, and the ensuing Social Purity Movement (1860s-1900s) worked to define morality and respectability for Americans during the Victorian epoch (Hunt 1999; Pivar 1973, 2002). Temperance groups, such as the Women's Christian Temperance Union, advocated for the purity of body through the prohibition of alcohol because the abuse of the substance by the male head of household often impacted women and children and threatened the family unit (Hoy 1995). The primary concern, however, became prostitution (Hunt 1999; Pivar 2002; Simmons 1993).

Many of the major cities in the United States had informal red light districts and often the local laws and law enforcement expressed a passive form of consent through their efforts to regulate the activity rather than abolish it (Hunt 1999; Pivar 2002). Concerns about the spread of venereal disease grew and the contraction of a sexually transmitted disease came to be viewed as an "avoidable personal failure" (Pivar 2002:133). Reformers rallied against prostitution, which they perceived to enslave women and prohibit them from achieving social equality. Thus, sexual purity came to define the discourse of the Social Purity Movement. With the medical sciences still in their infancy, propaganda focused on advocating abstinence and fidelity (Hunt 1999).

As the nineteenth century progressed, changes in American medical science would significantly alter approaches to the diagnosing and treatment of diseases. In "The Western Medical Tradition: 1800 to 2000," W. F. Bynum (2006) marks the mid-nineteenth century as the time when technological and social changes inextricably linked medical knowledge to science. Before the mid 1800s, doctors were little more than bedside observers, dependant on their five senses to diagnose disease, but Louis Pasteur's work in the 1850s significantly contributed to the development and popularization of the germ theory of diseases. Throughout the second half of the century, technological developments such as the ophthalmoscope and the X-ray enhanced

doctors' abilities to diagnose physical ailments. Yet, these tools were both expensive and required expert knowledge to operate. New instruments and technologies allowed medical professionals to see into and define formerly unknown aspects of the human body and medical authority began to gain legitimacy.

After the Civil War ended in 1865, the increase of industrialization caused urban populations to explode, and the spread of disease became a major concern (Hunt 1999; Hoy 1995). Cities became quickly overcrowded as African Americans migrated out of the South and soldiers returned home from the war in search of jobs (Simmons 1993). Both nurses and soldiers took the knowledge provided to them by the Sanitary Commission's efforts back home, but at this time only about five percent of American homes had indoor plumbing (Hoy 1995). Thus the deficiency of facilities continued to hamper the ease and accessibility of bathing for many Americans. A lack of sewer systems meant that disease outbreaks spread quickly through urban populations, while new factories raised concerns about toxins in the environment. The situation only grew worse in the 1880s as millions of new Europeans and Asians immigrated to the United States (Hoy 1995).

Social patterns began to change in America as men left the home to work. At first, this caused a magnification of the Victorian Era's ideal division of gender roles in the family unit (Verbrugge 1988; Hoy 1995). However, many of the new immigrants needed to work, meaning that larger numbers of women entered the work force. This threatened Victorian notions of gender roles and further emphasized the divide between the classes (Hoy 1995). On the other hand, upper and middle class women increasingly became associated with the domestic sphere which heightened the sense that they were the ones responsible for the physical and moral cleanliness of their families (Hoy 1995; Hunt 1999).

The end of the Civil War brought other changes as well. Juliann Sivulka (2001) marks it as the time when Americans began to develop a culture of consumption. Industrialization made obtaining things such as soap, clothing, and household goods significantly easier, and often cheaper than making one's own. The growing concerns with disease associated with urban tenement housing also encouraged middle and upper class citizens to find ways by which to distance themselves from the lower classes. Sivulka (2001) notes that many upper and middle class urban residents moved to the suburbs and embraced cleanliness and hygiene as a means of disassociation. They accomplished this, in part, through the conspicuous consumption of health, hygiene, and cleaning products. By the turn of the twentieth century, mass communication further facilitated the spread of social hygiene related ideology, and empowered advertisers to utilize peer pressure as a marketing tactic. Capitalizing on progressive ideals, product advertisements distinguished the haves from the have-nots by the consumer's ability to purchase the products associated with ideals of correct American behavior (Brown 2009; Vinikas 1992). Brand names became more than just a way for manufacturers to differentiate their product from their competitor's, but also came to symbolize a "bundle of values" (Sivulka 2001:20).

Some historians suggest that far from rejecting the imposition of middle and upper class notions of proper hygiene, lower socio-economic classes embraced it in an attempt to elevate themselves in society (e.g. Hoy 1995; Simmons 1993). Christina Simmons' (1993) work examines the influence of the Social Hygiene Movement on African Americans. Noting the hegemonic nature of Anglo-American culture during the Victorian Era, Simmons stresses that the representation of white civilization and its associated sexual and gender systems functioned as a symbol of the highest level achieved in the human evolutionary chain. Marginalized in

society, African Americans struggled to maintain their tenuous hold on any political power they could obtain by embracing a strong commitment to cleanliness and sexual respectability.

European immigrants faced the same struggles (Hoy 1995). As they moved into cities in search of jobs, overcrowding and disease led to the association of immigrants with pestilence. Groups, such as the North American Civic League, formed to help immigrants learn the American standards for personal and household cleanliness (Hoy 1995). In this way, ideologies concerning hygiene became much more than a way to avoid epidemics. For stigmatized immigrants, hygiene became a means by which to gain acceptance and full-citizenship in the United States, thus, solidifying the association of cleanliness with patriotism which had begun years before during the Civil War (Ashenburg 2007; Hoy 1995). This association may have had long-lasting impacts on consumer behavior in the United States as recent studies show that lower socioeconomic classes today tend to correlate cleanliness with morality more than upper socioeconomic classes do (Horberg et al. 2009).

During the early 1900s, the Social Purity Movement began to lose momentum and influence as social and political events altered the needs of the reform movement. Women's suffrage efforts meant that female's participation in public sphere became increasingly political and more secular (Ladd-Taylor 1990). Medical and scientific advances allowed for a shift away from abstinence and towards testing and treatment. World War I saw the reintroduction of regulated prostitution through The American Plan formulated by the Army Appropriations Act of 1916, which focused on keeping soldiers healthy and free of venereal diseases (Hunt 1999). Furthermore, the perception that the Anglo-Saxon population was decreasing in size relative to other ethnic groups in the United States caused fears of race degeneration (Cogdell 2004; Hoy 1995; Hunt 1999). In an attempt to prevent upper and middle class women from not engaging in

sexual activities for fear of venereal disease, campaigns instead focused on sexual education and the encouragement of reproduction for the health of the Anglo race. The emerging Social Hygiene Movement promoted the rise of medical authority by replacing abstinence with education, myth with medicine, and transforming health and hygiene from a private family matter into a topic of national concern (Hunt 1999; Hoy 1995; Ladd-Taylor 1990; Pivar 2002).

The SHM reached its peak in America during the 1920s and 30s as legislation, medical and institutional propaganda, and products related to cleanliness, beauty, and the American ideal of health flooded society (Ladd-Taylor 1990). Fighting to maintain dominance amid the onslaught of immigration, upper and middle class Anglo-Americans often saw the lower classes as a source of their troubles. Concerned by their dwindling population numbers, upper and middle class citizens became worried by what became commonly referred to as “race suicide” (Cogdell 2004). The consumption of the products associated with the SHM came to not only communicate and reinforce the ideals of the upper and middle Anglo-American classes, but also produced and demonstrated a social hierarchy aimed at defining the “Other” in terms of health and hygiene (Sivulka 2001; Smith 2007; Thurtle 2007).

The focus on science during the Progressive Era, paired with August Weismann’s theory of germ plasm and the rediscovery of Gregor Mendel’s work in 1900 on the inheritance of genetic traits, inspired social reform-minded people to consider the possibilities of controlling heredity for the betterment of the white race (Cogdell 2004; Stern 2005). Historian Alexandra Stern (2005:30) notes that, although contemporary scholarly work often addresses the history of public health and eugenics separately, during the early twentieth century the lines between the different reform efforts were considerably more blurred. Those who endeavored to stamp out epidemics, control venereal disease, impose marriage laws, and sterilize those seen as mentally

or physically degenerate were all motivated by the Progressive Era idea that scientific advancements could solve social problems by improving physical and mental efficiency and hygiene standards for the optimization of American society (Stern 2005:30). With a shared system of ideals facilitating the flow of ideas and reformers among eugenic, health, and hygiene reform efforts, eugenic thought infiltrated many aspects of American culture (Stern 2005). Eugenicists became preoccupied with promoting health and hygiene standards as a tool for maintaining the purity and dominance of the white Anglo upper and middle classes (Cogdell 2004). Conceptions of the ideal body changed as health and athleticism became paramount (Arnold 2009), but the belief in the mental and physical superiority of Anglos and Caucasians remained a constant for public health and eugenic reformers alike (Stern 2005).

As the actual mechanics of genetic inheritance were not clearly understood, the physical characteristics of races became a focal point of eugenic studies, and outward beauty began to be associated with inner genetic quality. Dr. Knight Dunlap, a professor at Johns Hopkins University stated that, “the foundation of sound mental life is practically recognizable, and is an actual element in human beauty as it is estimated in civilized societies” (1920:48). The United States government’s 1920s health education film series, *The Science of Life*, explained that attractiveness goes “hand in hand with health” (Pernick 1996:61). Organizations such as the American Breeders Association, the Galton Society, and The American Eugenics Society claimed that beauty was a characteristic which marked the value and efficiency of an individual (Cogdell 2004). Conversely, ugliness conveyed genetic defectiveness, and those individuals were not encouraged to marry or reproduce (e.g. Hays 1912). With unattractiveness implying genetic defectiveness and an unhealthy state of being, many Americans became obsessed with

maintaining aesthetically appealing physical appearances, which were much easier to manipulate than genes (Cogdell 2004).

Many archaeologists acknowledge the prevalence of health- and hygiene-related artifacts at mid-nineteenth to the early-twentieth century sites as indicative of a growing American concern with personal care (e.g. Bonasera and Raymer 2001; Larsen 1994; Mrozowski et al. 1989; Phillippe 1990). While a complete review of all the research which addresses this ideological and consumer behavioral shift is well beyond the scope of this project, of importance is the fact that many of these studies consider the broader ideology of the era within site-specific contexts. Research questions tackled by historical archaeologists are often more focused and tend to address a single social concern as it relates to the ideology of the SHM. For example, Eric Larsen (1994) investigated medicinal use at Harpers Ferry, West Virginia to conceptualize the ways in which changing cultural ideals about gender roles and motherhood were reflected in the archaeological record. Bonasera and Raymer (2001) used the medicine vessel assemblage and archaeobotanical remains of the Sixth Ward in Five Points, New York City to better understand the impact of socioeconomic class on health related behavior. Mrozowski and his colleagues (1989) examined health and sanitation concerns as they influenced the paternalistic construction of the urban industrial landscape in Lowell, MA. Additionally, archaeologists examining the Drake farmstead in Stephenson County, Illinois elucidated issues of consumer knowledge by considering the abundance of patent and prescription medicines in relation to the occupant's record of support for Temperance ideals (Phillippe 1990).

As these examples illustrate, many of the archaeological analyses to date that address the growing interest in health and hygiene in the United States tackle a variety of research questions concerned with select aspects of the larger SHM-related ideological changes occurring during

this period. Furthermore, these analyses tend to concentrate on material evidence within either a rural or an urban context. Therefore, although archaeological investigations of both urban and rural sites have occurred with health- and hygiene-related research questions in mind, the material manifestation of SHM ideologies at urban sites compared to rural sites requires further clarification.

Creating a Thoroughly Modern Countryside

The progressive endorsement of modernity, education, and technology perhaps, had an unintended side effect. In the mid-nineteenth century, the rural population of America shifted towards metropolitan areas to take advantage of new industrial jobs, increased access to education, and modern conveniences (Piott 2011), and by the 1920 Census the urban population had grown to exceed the rural population for the first time in the country's history (Bureau of the Census 2013). The rhetoric of innovation and progress favored the urban settings as modern and civilized while simultaneously positioning rural life as backwards and primitive (Adams 1994:206; Kline 2000:1-2). Historian Ronald Kline (2000) argues that this perpetuated a cultural divide in the United States, a divide that many researchers claim continues to impact politics, economy, social relations, and the formation of rural identity today (e.g. Adams 1994; Creed and Ching 1997; Woods 2010).

As notions of progress came to define the dominant discourse in urban-rural relations, tangible differences in the technology and services available to those living in rural regions of the country compared to urban residents played an important role in fostering social tensions between the two populations. Electricity began to appear in the homes of wealthy urbanites in the 1880s (Kline 2000:1), but by the end of the 1930s only 25% of rural residents had power in their homes (Stock 2009:273-274). City residents had received their mail direct to their homes

since 1863 (United States Postal Service Historian 2009), while rural free delivery only began experimentally in 1896 (United States Postal Service Historian 2013). When assessing the role of the SHM in the growing social dichotomy between rural and urban populations of the country, one of the most important innovations to consider is indoor plumbing. Congruent with the rise of cleanliness concerns, by the 1880s and 90s indoor plumbing became increasingly viewed as a necessity for maintaining health and hygiene standards (Hoy 1995), but by 1930 45 million rural Americans still did not have indoor plumbing (Stock 2009:243).

The urban fixation on modernity not only positioned rural residents as the primitive and uncivilized “Other” (Creed and Ching 1997:4), but also ignored many facts that would have challenged progressive ideals. From 1909 to 1914, American farmers had equal, if not greater, purchasing power than nonfarm workers (Kline 2000:5). According to the 1920 census, farm households were more likely to own telephones and automobiles (Bureau of the Census 1920). Those living in rural regions were not socially isolated, but had family and community-based social networks (Pederson 1984). Finally, and perhaps most significant to this study, cleanliness and the spread of disease was not as big of a concern in rural regions where the less

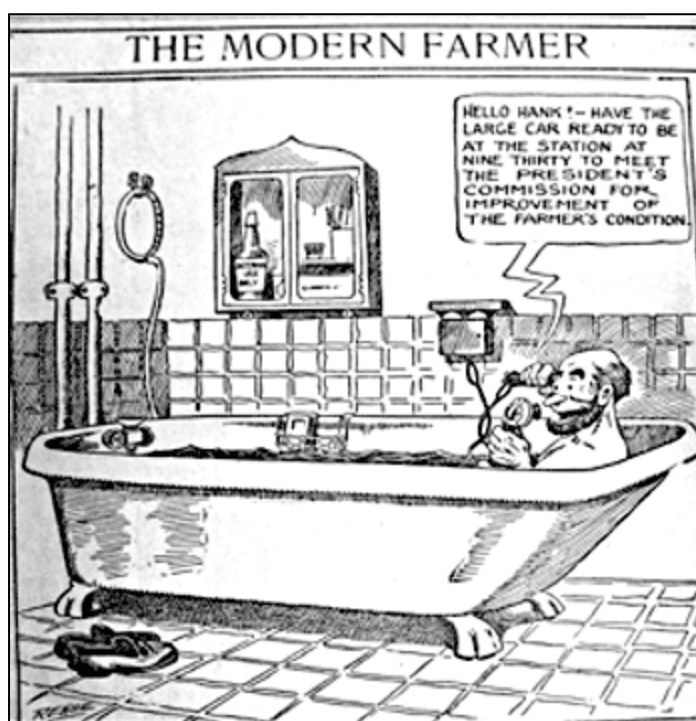


Figure 1. Newspaper clipping, Liberty Hyde Bailey Papers, #21-2-3342, Division of Rare and Manuscript Collections, Cornell University Library, Box 21.

dense population did not present the same sanitation issues as were present in overcrowded metropolitan areas (Hoy 1995). As a result, when progressive reformers set their sights on modernizing and improving country life, they did not find rural residents passive and appreciative recipients (Kline 2000). Rather, reformers came head-to-head with people who resented the implication that their lifestyle was primitive and contested technologies and ideals that did not fit their cultural patterns (Jellison 1993; Kline 2000).

In 1908, shrinking rural populations caused anxieties about a possible decline in the agricultural industry and rising costs of food, prompting President Roosevelt to form the Commission on Country Life (Kline 2000; Jellison 1993). The Commission held thirty hearings across the United States aimed at investigating the ways in which Progressive objectives could be met in rural regions to improve both the lives of rural residents and the efficiency of farming (Kline 2000). Not surprisingly, considering the optimism afforded to innovation during the Progressive Era, in 1909 the Commission proposed introducing the latest advances in technology and education as the solution (Jellison 1993). The Commission's findings, a report primarily authored by the commission's chair Liberty Hyde Bailey, resulted in the formation of numerous organizations whose goals targeted rural life reform (Peters and Morgan 2004; Piott 2011). Just a few of the many examples of such organizations included the American Country Life Association (1919), the USDA Division of Farm Life Studies, and the Rural Electrification Administration (1935). The combined efforts of these organizations became known as the Country Life Movement (CLM).

The specific concerns of CLM-associated organizations addressed a broad range of topics, including education, health, rural quality of life, and farming efficiency (American Country Life Association 1919; Danbom 1979a; Roth 2002). Some researchers of the CLM also

closely align the movement with efforts to improve rural roads and the United States Postal Service's rural free delivery program (e.g. Roth 2002). In addition to the more formal reports of CLM-associated organizations, magazines such as *Country Life in America* and *Suburban Life: A Countryside Magazine* served as vehicles of reform rhetoric, communicating the ideals of the movement in media that targeted rural Americans.

Critiques of the CLM by social scientists tend to emphasize the patronizing and misinformed nature of the reform efforts and the associated discourse towards rural Americans. William L. Bowers (1974), for example, presents a list of eighty-four non-farmer CLM reformers to support his argument that reform efforts were often led by those unfamiliar with rural life. Dennis Roth (2002) also lists urban businessmen, academics, writers, and ministers as the primary demographics of the Country-lifers, and David B. Danbom (1979b) sees the Commission as promoting the industrialization of American agriculture for the benefit of a growing urban society.

These critics see the Commission and its supporters as communicating the idea that the best way to enhance life in the American countryside and place rural values more in line with Progressive ideals was to make "primitive" rural living more like urban life (Jellison 1993; Kline 2000). Although some historians (e.g. Peters and Morgan 2004; Swanson 1972) view reformers as humanitarians trying to construct meaningful social lives for rural Americans, historian Katherine Jellison (1993) argues that the approach of CLM advocates shares marked similarities to the educational efforts of SHM advocates as they pushed urban immigrants to conform to the cleanliness and hygiene standards of the Euro-American middle and upper classes. In both instances, Progressives are seen as paying very little heed to the economic, cultural, and day-to-day realities of the people they wished to help (Jellison 1993; Kline 2000).

Regardless of the interpretation of the intentions of CLM reformers, most historians acknowledge that the movement suffered serious setbacks which ultimately inhibited the successful fruition of its goals. Some historians believe that one of the key downfalls of the CLM was an internal ideological contradiction which sought to preserve a mythical pure and simple agrarian past on one hand, while simultaneously trying to improve the lives of rural residents by introducing modern advances on the other hand (Bowers 1974; Roth 2002). Steven Piott (2011) notes that the population shift from rural to urban regions increasingly made the farmer the minority, and that the resistance of some rural residents to technology and progressive ideals changed the popular view of the American farmer from a model of morality and individualism to that of a backwards problem. Even Peters and Morgan (2004), proponents of the CLM, claim that the Commission's resolve to combine moral, cultural, economic, and technological concerns into its proposed reforms created a rift, and that a mutual respect between urban and rural residents in the United States never materialized as a result.

Researchers also contest the actual degree to which rural households embraced the ideology of the CLM. Piott (2011) claims that the acceptance of higher taxes by rural residents for road and school improvements, the increase in the sales of gasoline-powered tractors, and a larger expenditure on consumer goods and services indicate that at least some people living in rural conditions embraced modernization. Historian Ronald R. Kline (2000), however, noted that, as evidenced by the discourse in many newspaper articles and farm journals, rural residents objected to the insinuations of the Commission's report (eg. Figure 2). Throughout the rural United States, residents voiced their displeasure of the Commission's intrusions on into their lives. A 1908 article on the Country Life Commission in the *Eastern Carolina News* stated of the Commission's efforts that,

"The average farmer in the South is not likely to pay much attention to these junketing trips of the President's commissioners... Our country people are the salt of the earth, and they ask for Northern Commissioners to mind their own affairs while we attend ours."

An article in the *Butte Intermountain* (1910) in Montana proclaimed that, "The rural American needs no patronizing solicitude from the Roosevelt commission or any other self-appointed coterie of busybodies," and by 1915 an article in *Appeal to Reason* railed against the exploitation of farmers by saying that,

"No class of men are furnished as much free advice of 'how to make a living,' 'how to improve the farmer's condition,' 'how to prosper,' etc. Sounds funny, does it not? The creator of wealth kept in poverty by the receiver of wealth and then advised, by the recipient, how to improve his condition! It is an insult added to injury."

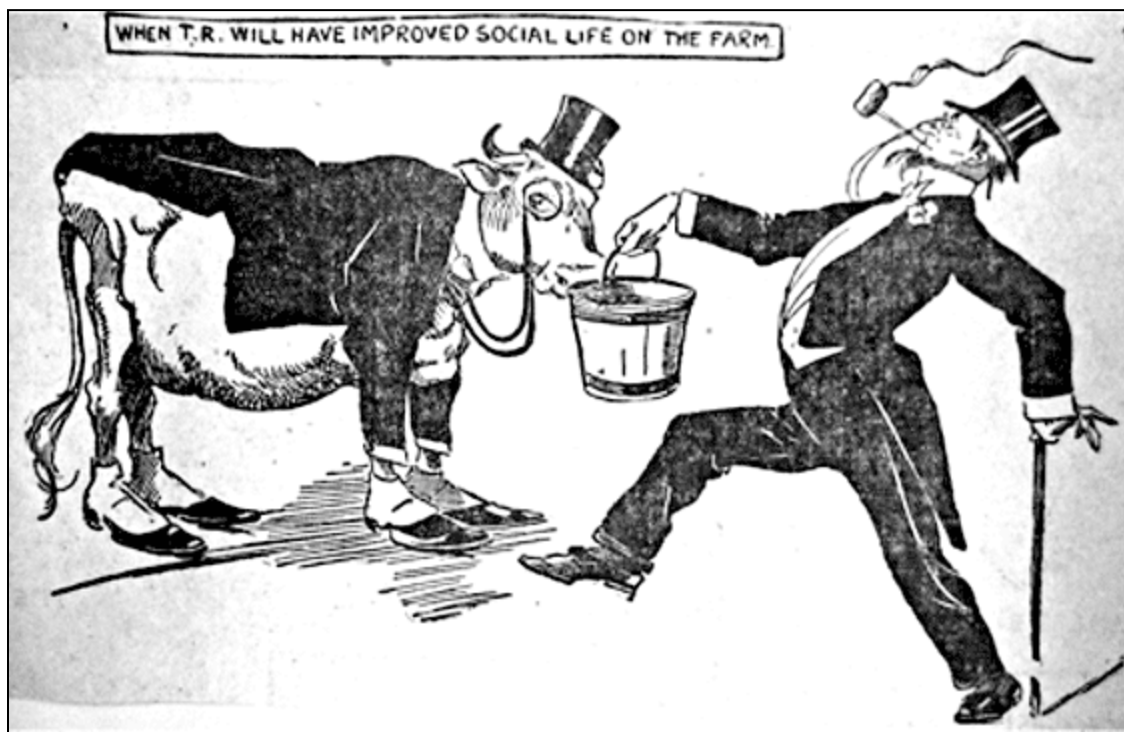


Figure 2. Newspaper clipping, Liberty Hyde Bailey Papers, #21-2-3342, Division of Rare and Manuscript Collections, Cornell University Library, Box 21.

The resistance of rural residents to the efforts of the CLM reformers was not limited to political cartoons and articles, but manifested in tangible, material ways as well. Kline's (2000)

work focuses on how rural residents resisted CLM-associated modernizing efforts by using new technology in a manner inconsistent with the ways that urban middle and upper classes imagined it. Kline (2000) finds that people living in rural regions of the United States adapted technology and used it in ways which fit their economic and cultural needs. For instance, they modified their use of electricity services in a variety of ways such as organizing local co-ops instead of purchasing service from a power company. Those who did sign up for service often used less electricity than power companies desired. Instead of paying large fees to have phone service installed at their farms, many rural residents utilized existing barbed-wire fences to tap into accessible phone lines. Yet, these farmers did not get praised for their innovative solution. As Kline explains, the “squirrel lines” quickly entered the urban vs. rural discourse of the CLM as newspaper articles poked fun at the backwards behavior of rural residents (2000:28).

Many sociologists and historians investigate the rural/urban opposition through its associated rhetoric, but archaeologist Mark Groover (2008) proposes that archaeology also presents a valuable tool for understanding the degree to which rural residents were influenced by dominant discourses, popular culture, and growing consumerism. He presents the work of archaeologists (e.g. Hardesty 1980; Pursell 2001; So 1990) who have noted the impact that industrialization, consumerism, and ideals of modernity had on the homogenization of the material record. However, while acknowledging capitalism as a force that changed the lives of rural residents and strengthened the link between farmsteads and the national economy, Groover (2008) also believes that studies of the material record have the ability to show the ways in which different rural households experienced larger cultural trends in the United States divergently.

Rather than seeing 1920 as a blanket date by which a mass consumer culture infiltrated rural life and made uniform the archaeological record, Groover (2008) presents a series of case studies from late-nineteenth and early-twentieth-century farmsteads in America to demonstrate that the process was not uniform. These studies show that some regions of the country, some subcultures, and some aspects of daily life experienced changes quickly while others lagged. He claims, for example, that as immigrants took advantage of the opening of public lands, some welcomed change while others fought to maintain their traditional cultural practices. Groover emphasizes that the only way to see these material variations and achieve a nuanced analysis of the archaeological record at American farmsteads is to formulate a multi-scale, contextual approach with research questions nested at the global, national, regional, community, and household levels.

By their nature, investigations of changes in America's countryside during the Progressive Era and the resulting rural/urban dichotomy recognize that differences in rural and urban lifeways and cultures are present. Neither historians (e.g. Kline 2008) nor anthropologists (e.g. Adams 1994) claim that a homogeneous or static rural identity existed in the past or exists today, and as Groover's (2008) research illustrates, rural households with dissimilar demographics probably also experienced social and cultural trends in the United States differently. Nevertheless, when academic Raymond Williams wrote that the "contrast between country and city, as fundamental ways of life, reaches back into classical times" he acknowledged the experiential and cultural distinctiveness of the countryside and the important role that concepts of place play in identity formation (1973:1).

Sociologist Marc Mormont defines rural sociology as "the set of processes through which agents construct a vision of the rural suited to their circumstances, define themselves in relation

to prevailing social cleavages, and thereby find identity” (1990:41). In doing so, Marmont highlights that rural identity exists in opposition to urban identity. Social scientist, Michael Woods (2010) examines this rural/urban binary to understand the ways by which American politics act to reproduce the social conflicts that Marmont references. Woods notes that notions of rurality are continually contested and changing, but argues that political policy does fix definitions of rural space and allows the government the right to govern those spaces differently than urban ones. By examining the dominant discourse of government policy making, Woods (2010) concludes that in order for rural interest parties to participate in the planning of rules and guidelines that will affect rural life they are forced to reproduce the hegemonic rhetoric which defines rural space and rural peoples as comparatively different than urban communities. Furthermore, in her investigation of the historical experiences of rural residents in southern Illinois since 1890, Jane H. Adams (1994) finds that many of the families in her study felt as if the policies implemented by the United States government simply happened to them without regard for their personal preferences.

Contemporary research often supports Marmont’s (1990) work by examining how rural identity continues to develop in relation to city life. Gerald W. Creed and Barbara Ching (1997) claim that rural residents radically embrace their marginality to contest and define themselves in opposition to urbane culture. Scholars of rural identity look to a variety of medias, such as music (e.g. Ching 2001; Roell 1994; Watson 2014), motion picture (e.g. Mink 2008), and television (e.g. Johnson 2008) to better understand the common values that residents of the countryside espouse to differentiate themselves from the urban population of the nation.

In her 2012 thesis regarding the rural identity of college students, Lisa Handke asked rural college students about the differences they perceived in the lifestyles and social interactions

of rural compared to urban students. The individuals whom Handke (2012) interviewed confirmed the stereotypes found in pop culture. Interviewees with a rural background valued a strong work ethic, a down-to-earth attitude, wholesomeness, resourcefulness, an appreciation of the simple things, and a conservative lifestyle. When asked how they initially perceived urban classmates, rural students noted that they saw them as being more materialistic and less thrifty. They interpreted the social behaviors of urban students as more outspoken, aggressive, and rude. Other common traits perceived of urban students by their rural counterparts included arrogance, self-centeredness, and a heightened concern with using time efficiently.

The stereotypical view of urban residents as pretentious, materialistic, and obsessed with change is not limited to contemporary social landscapes. Progressive-era discourse suggests that rural residents held similar views of the urban reformers who wished to impose their lifeways on the countryside, and that those living in rural regions embraced values aimed at positioning themselves as distinct from urban society (Creed and Ching 1997). For example, a 1908 article in the *Albuquerque Citizen* reported that when approached about how to improve rural life, the women of the town reported that, "They do not envy their city sisters...they do not ask theaters be erected at the cross roads or that stretches of roadways be paved for promenades." According to the article, the women instead asked for a larger space in which to host the church's sewing circle, thus highlighting their commitment to rural values in contrast to the seeming ostentatious and lavish lifestyle of city dwellers. These ideals were also espoused in popular fiction, and novels such as Peter Kyne's 1914 *The Long Chance* juxtaposed the values of the story's rural hero against corrupt, greedy officials in the state land office as he fought to outsmart them in a struggle for land rights (Shiel & Fitzmaurice 2011). However, the title of a 1908 article in *The Indianapolis News* perhaps most clearly communicated how rural residents of the United States

viewed their values in comparison to urban principles. The title simply read, “Improve the Farmer? Start with the City Folk.”

For the purpose of this study, a review of the Progressive-era rhetoric surrounding the rural/urban social dichotomy documents how the preference given to modernity and technology in Progressive-era discourse resulted in the positioning of rural lifeways as primitive. As Creed and Ching (1997) theorize that the social and political inequality present in rural/urban power relations both shaped and continues to shape rural identity, the hegemonic discourse of urban reformers is then viewed as possibly influencing the formation of rural identity and a system of values meant to contest the implications of urban reformers. However, as Groover’s (2008) and Kline’s (2000) work illustrates, the ideological and cultural differences between urban and rural residents also manifested in material form that can be further examined. Therefore, the impact that rural values and identity had on rural consumer behavior with regard to SHM-associated goods will be examined in more depth in a comparison of urban and rural archaeological sites in Colorado.

An Urban vs. Rural Dichotomy in Colorado (1848-1890s)

Colorado residents were impacted by the growing tensions between rural and urban cultures during the Progressive Era, and a basic understanding of Colorado’s non-native population growth, urban development, and rural expansion during the late-nineteenth and early-twentieth centuries provides a framework necessary for comprehending the physical and symbolic relationships between the state’s urban and rural regions. The establishment of lines of transportation and communication between Colorado’s cities and countryside proved necessary, both for getting supplies to rural communities and for moving the products of mining and agricultural operations. These lines also created relationships between urban and rural areas that

provided the physical infrastructure and information flow necessary for the spread of the ideology and material culture associated with the SHM. However, Colorado's rural communities often got labeled as rough and rowdy frontier towns as the city of Denver sought to differentiate and elevate its image in its quest to promote the territory as worthy of statehood and to establish itself as the state capitol.

When the United States signed the 1848 Treaty of Guadalupe Hidalgo, marking the end of the Mexican-American War, it acquired the entire region forming the present-day state of Colorado. At that time, the landscape was home to numerous Native American tribes, but was sparsely inhabited by Euro-Americans. Several military forts served to protect the frontier and the travelers on the overland trails to California and Oregon. Very few fur traders and trappers remained after the decline of the trade in the 1840s, and many of the trading posts established during that time had failed to form permanent settlements (Nelson et al. 2001; Ubbelohde et al. 2006).

The years 1857 and 1858 witnessed the discovery of gold at Cherry Creek, resulting in the first permanent town in Colorado, which would later become the city of Denver (Bancroft 1959; Ubbelohde et al. 2006). The gold rush in the Denver region was short-lived, and prospectors soon moved into the state's Rocky Mountains to seek new claims. However, Denver continued to grow as it remained the supply center for people looking to restock and rest after crossing the great expanse of the plains to the east, and prior to ascending into the Rocky Mountains to the west. Merchants and shopkeepers took advantage of the influx of prospectors, and numerous businesses sprang up in order to provide gold seekers with goods, supplies, and services (Everett 2005; Ubbelohde et al. 2006).

Keenly aware of the common perception of the ephemeral nature of mining towns, Denver strove to present itself as a permanent and growing city. The population of Denver converted from wood to masonry construction, established newspapers, organized governmental structures, and erected public buildings such as churches, theaters, and educational institutions at an accelerated pace (Everett 2005). Banks soon opened in an effort to curtail the cost and high risk associated with the transportation of gold dust to federal mints located in other states. In 1860, toll companies began constructing roads to connect Colorado's front-range with mining communities in the mountains. Stage and freight lines from the east converged at Denver, making the city a social locus and reaffirming its role as the main supply center for Colorado's mountain communities (Nelson et al. 2001; Ubbelohde et al. 2006).

In 1861, President Buchanan signed legislation establishing Colorado Territory, and the newly appointed territorial governor, William Gilpin, declared Denver the capital (Ubbelohde et al. 2006). However, many factors delayed Colorado's statehood including the Civil War, the lack of reliable transportation and communication facilities between Colorado and the eastern states, and Denver's tenuous hold on its status as the territory's capitol (Everett 2005). It would take another fifteen years before President Ulysses S. Grant established Colorado's statehood in 1876 (Ubbelohde et al. 2006).

When the Pacific Railroad Act passed in 1862, survey crews looking for a transcontinental railroad route had already deemed the central Rocky Mountains impassible without extensive tunnel work. As a result, the Union Pacific laid its lines to the north in Cheyenne, the territory which would later become the state of Wyoming (Everett 2005; Ubbelohde et al. 2006). Worried about social and economic isolation from the nation's

metropolitan regions to the east, many Denver residents moved to Cheyenne to be closer to the Union Pacific rail line (Everett 2005).

In an effort to keep the city alive and prospering, Denver residents sought out alternative solutions to keep their city connected to the rest of the nation. Denverites themselves invested in the construction of the Denver Pacific Railroad to Cheyenne, a project that was completed in 1870 (Everett 2005; Ubbelohde et al. 2006). In fact, 1870 proved to be a hallmark year for railroad construction in Colorado. Railways continued to expand across Colorado's Eastern Slope, forming new communities along the way (Bancroft 1959; Everett 2005; Granruth 2000; Ubbelohde et al. 2006).

With easier access to the labor and the resources required to take advantage of the wealth available in the mining districts, more ore moved down to Denver. The city became a major center for smelting (Ubbelohde et al. 2006). Unfortunately, the boom in silver mining had caused a flood in the market that resulted in a decrease in the value of silver. Additionally, railroad speculation had overextended available funds and forced some railroad companies into bankruptcy. The situation, further amplified by the Sherman Silver Purchase Act and the withdrawal of foreign investments caused by a depression in Europe, ushered in a downturn in the United States economy which had a profound impact on Colorado residents in the 1890s. (Lauck 1907; Steeples & Whitten 1998).

In 1893, 435 of Colorado's 895 operating mines closed. Miners poured out of the mountains and the city became taxed with trying to care for the many homeless workers. Businesses suffered and over 350 closed (Ubbelohde et al. 2006). Many of Denver's residents left abruptly. In response, the Denver Chamber of Commerce spurred the rapid growth of the Colorado agricultural industry (Ubbelohde et al. 2006). The rise of the fruit industry in Western

Colorado and the sugar beet industry in the north stabilized the state and created rural communities along the front-range as Denver's citizens moved out of the city to take advantage of this new source of income (Eatwell 1971; Ubbelohde et al. 2006). Although the efforts of the Chamber supported the economic recovery of Colorado after the Panic of 1893, it also promoted rural and urban population divisions in the state by asking those who had moved to the city to return to rural regions.

From nearly the beginning of Colorado's Euro-American population boom, vastly different perceptions of the lifestyles in urban areas versus the state's rural mining and agricultural regions appear to have existed. Cities, such as Denver and Golden, put forth great efforts to overcome the image of rough frontier towns as they lobbied for Colorado's statehood and the respect of eastern metropolitan areas (Everett 2005). Meanwhile, communities such as Black Hawk (Granruth 2000) came to personify the caricature of western mining towns, a stereotype that continues to pervade interpretations of the American West today. A visitor to Colorado's mining communities claimed that, "It is the rich gold mines that have built up these towns, for there is nothing else under heaven could tempt a human being to live here" (Granruth 2000:14). While Colorado's mining towns were seen as rough, Denver was viewed as civilized. Governor John Evans' stated in the 1860s that Denver was, "really the only tolerable place to live" (Everett 2005:12). Whether or not rural populations responded to this discourse by making an effort to conform to urban middle and upper class ideals of civilized society may, in part, be reflected in their negotiation of the ideology and associated products of the SHM.

Summary

As a movement born of Anglo-American concerns, the development of the SHM closely paralleled the growth of a Euro-American population in Colorado. As overcrowding and disease

began to plague urban regions of the United States, Denver grew to become a city. As American-born citizens fretted about the influx of millions of immigrants, those immigrants poured into Colorado to take advantage of newly available public lands and to pursue jobs in the mining industry. As such, Colorado's frontier represents a model environment for investigating the impact of SHM ideologies on the rural archaeological record. The quick rise of frontier communities and the need of some to establish Colorado and the city of Denver as a respectable place worthy of national attention and financial investment, created a perfect stage for promoting the ideals of the Progressive Era social reformers. The health, hygiene, and cleanliness standards promoted by SHM and CLM advocates functioned to demonstrate a social hierarchy which distinguished the civilized from the primitive, and rural and urban discursive dichotomies fostered the creative negotiation of these ideologies as rural residents adapted broad cultural trends to their own needs.

CHAPTER 3: TALKING CLEAN

In order to indoctrinate the masses in the new American ideals of personal and home cleanliness, SHM reformers had to, first, reach out to and educate the public about these new health and hygiene rituals and the dangers that could befall them should they fail in their practice. What had begun as a more grass roots reform effort during the preceding Social Purity Movement, quickly became subsumed by formal conversations reserved for those specialists versed in modern Western scientific discourse (Pivar 2002). This meant the supplanting of traditional health practices with medical authority. However, the discursive powers shifts in the rapidly changing social landscape of the Progressive Era were not limited to medical authority alone. As the population of urban areas came to surpass rural populations, reform efforts such as the City Beautiful movement (Cocks et al. 2009:79), aimed at transforming cities into safe, healthy, and attractive places to live, also changed the public perception of urban areas from dirty and crowded into epicenters of civilization. This evolution occurred, in part, at the expense of formerly idealized views of agrarian lifeways (e.g. Ogden 1911), and rural residents living in the United States during the Progressive Era found themselves at the intersection of these two major discursive power shifts.

Formal organizations and institutions, such as the American Social Hygiene Association (ASHA) and the American Eugenics Society, were influential in setting the tone of SHM rhetoric. Funded and publically supported by prominent figures, such as John D. Rockefeller, Jr., the organizations associated with the SHM created a powerful discourse that shaped the context of SHM reform in the United States (Pivar 2002). The members of these organizations left much written documentation in the form of publications, agendas, research findings, and

meeting minutes. The records of these organization's founders, members, and supporters will also be considered in this chapter.

As both SHM and CLM reformers were deeply concerned with conveying the new standards in personal and home care to the rural residents of the United States, they utilized a variety of sources from magazine articles to motion picture film to reach out to those living in the nation's countryside. As such, this chapter will also provide a sample of the rhetoric associated with the SHM and the CLM reform efforts as it specifically related to educating America's rural population. A consideration of this discourse is important to understanding how reformers viewed the health, hygiene, and cleanliness standards of rural residents and the ideals that reformers attempted to impose on those living in rural regions. A review of the rhetoric also helps to not only illuminate the ways in which the SHM and the CLM articulated and served to reinforce each other's message, but also how the discourse of these two reform efforts worked to intensify the dichotomous relationship between rural and urban populations of the country.

The Progressive Era in the United States left a vast archival record, and a complete review of all the rhetoric surrounding the SHM and CLM reform efforts is not possible in this study. However, considering a sample of the discourse is important to understanding the recursive relationship between the two movements and the social pressure the movements placed on rural consumers to conform to urban health and hygiene standards. More importantly, it is vital to understand what the ideals were and how they were expressed to the American public in order to comprehend how they are reflected, or not reflected, in SHM-era artifact assemblages. The discourse in product advertisements also played an important role in both supporting and generating the ideology of the SHM and will be addressed in Chapter 7 along with a consideration of the history of the products themselves.

Institutionalizing Clean

Michel Foucault (2003) marked the nineteenth century as the time when doctors, validated by institutions, were increasingly authorized to make decisions about the human body and its conditions. As medical professionals defined the formerly “secret spaces” of the human body (Foucault 2003:xiii), the family unit was no longer seen as capable of independently understanding and administering their own medical care and hygiene rituals. Medical institutions gave much credence to educated physicians and revamped personal health and hygiene as a matter of national social importance. The institutions which spearheaded the reform efforts of the SHM significantly contributed to the discursive shift of health and hygiene matters from a private to a public sphere, and the maturation of medical authority in the nineteenth century.

The sections below present the discourse associated with a select few of the institutions associated with the SHM. As the goals of the SHM were so broad, sex hygiene is used as a vehicle to understand the growing dominance of institutions over the related rhetoric. The discourse is ordered by the chronological founding of the institution with which it is associated. In particular, this ordering makes clear the intensification of the discourse as the concerns of SHM-associated institutions progressed from controlling the spread of venereal disease to controlling the propagation of those seen as medically unfit to contribute to the future population of the country. Once again, while not a comprehensive review, understanding the tone of the discussion allows one to become familiar with the structural power and origins of an ideology, which would trickle down and permeate advertisements and popular press publications on its way to the general consumer population.

The American Federation for Sex Hygiene

Credited by some as the founder of the Social Hygiene Movement in the United States (Burnham 1994; Engs 2003), Dr. Prince Morrow headed the New York Academy of Medicine's Committee of Seven, which formed in 1901 to address venereal disease (Pivar 2002). In 1905, Morrow started the New York Society for Sanitary and Moral Prophylaxis, which emphasized science and medicine in its discourse and aimed to prevent infection through sexual education programs in public schools (Engs 2003; Pivar 2002). By 1910, many social purity groups had merged with Morrow's society, resulting in the American Federation for Sex Hygiene, of which Morrow served as President (Burnham 1994; Pivar 2002).

Although the Federation was short lived, having been subsumed into the American Social Hygiene Association by 1913 (Burnham 1994), Morrow helped to transition the discursive power over sex hygiene from the family to the medical and scientific communities, and from private to public spheres. He argued that people must obtain their information from "a medical man, whose right to speak authoritatively on questions of hygiene cannot be questioned" (1904:356). When speaking of the physician's role in sex hygiene, Morrow claimed that,

"This protective duty. . .devolves upon the physician in his capacity as a sanitarian and guardian of the public health. In safeguarding marriage from the dangers of venereal disease the physician becomes the protector of the wife and mother and the preserver of future citizens of the State" (1904: Preface:v).

Morrow passed away in 1913. Charles William Eliot, acting as the new president of the Federation at the International Congress of School Hygiene, assumed the guardianship role proposed by Morrow, but took a more extreme stance. In the following statement, Eliot not only attempts to impose the medical profession's influence into matters of marriage and reproduction, but also calls for the support of state governments to validate the right of the medical profession to make those decisions:

“Nothing but the compulsory seclusion of all defectives under humane housing, training, and labor conditions will accomplish the eugenic object of the community. Laws which provide that candidates for marriage must be free from syphilis or gonorrhoea do good, provided that proper provision be made for the certificate to that effect from a trustworthy physician appointed by the State” (1913:13).

Under the leadership of Morrow, the SHM sex hygiene rhetoric would begin to take shape, with a considerable weight placed on physicians as the police of responsible sexual behavior for the good of the public. As the Progressive Era hit its stride at the dawn of the twentieth century, the Federation’s emphasis on education as a primary means of reforming what many saw as the social health crisis of venereal disease, placed the organization in a prime position for success with regard to fund raising and public notoriety (Burnham 1994). The rediscovery of Mendel’s work would only exaggerate the extent to which science and medicine would claim authority over the public’s private behaviors as eugenics grew in acceptance as a means of breeding criminal behaviors, mental disorders, and disease out of the American population (Cogdell 2004). A supporter of eugenics, Charles William Eliot, would continue to promote his beliefs as he assumed the role of president for the newly-formed American Social Hygiene Association.

The American Social Hygiene Association and John D. Rockefeller

John D. Rockefeller, an institution in his own right, financed several major organizations that impacted the SHM. Beginning in 1910, Rockefeller provided funding to begin the Bureau of Social Hygiene, and from 1921 to 1933, he supported the National Research Council of the Committee for Research in Problems of Sex (Pivar 2002). Rockefeller contributed to and helped to shape the Johns Hopkins School of Hygiene and Health and the American Social Hygiene Association (ASHA). By the 1920s, the Rockefeller Foundation was also providing support for the National Committee for Mental Hygiene (Pivar 2002).

Founded in 1913, the American Social Hygiene Association merged a multitude of health, hygiene, and purity organizations together (Engs 2003). Pivar (2002:131) notes that the General Secretary of the ASHA, William F. Snow, greatly contributed to the successful transition from the Social Purity Movement to the Social Hygiene Movement. By preserving symbolic language, Snow transitioned the American Purity Alliance into the American Social Hygiene Association. Likewise, the rhetoric drastically changed from a focus on prudence to one of scientific, public sex education (Engs 2003; Pivar 2002).

As a progressive organization, the ASHA embraced modernity and new technologies as a means of connecting with increasingly broader audiences. Motion Pictures presented an opportunity to reach out to the public through a popular medium. Thus, the ASHA, in partnership with the Public Health Service and the United States Army, produced full-length feature films, such as *Fit to Fight* in 1918 and *Cleared for Action* in 1919. These films were aimed at educating troops about venereal diseases (Pernick 1996). The plot of *Fit to Fight* is described in the ASHA's publication *Social Hygiene* (Lashley and Watson 1921:187). As a group of five young men are drafted and training to be soldiers, they are approached by prostitutes. One man resists, one man uses medical prophylaxis, and the other three are infected. The two that were not infected are "held as examples of physical fitness and are selected for service;" the others are disqualified and sent to the hospital ill and exhausted.

With *Fit to Fight* and *Cleared for Action*, the ASHA had found a successful model for communicating their message to larger audiences and they continued to produce films intended for the public sector (Lashley and Watson 1921:185). So great was the concern over the effectiveness of this model that the Johns Hopkins University conducted a study to determine the psychological impact and effectiveness of these films on the American public (Lashley and

Watson 1921). The study stated that, “for the educational aspects of the pictures, as for all other problems of education, the question is ultimately that of the social effects of the material presented. . .in preparing the individual to fit into the social system with as little friction and as few personal conflicts as possible” (Lashley and Watson 1921:183). Published in the ASHA’s 1921 journal, *Social Hygiene*, the study concluded that the films “seem quite effective in inspiring a resolution to avoid exposure and a desire for a general improvement of hygienic conditions” (1921:199).

In the same ASHA publication a report, titled *Progress*, praised exemplary social hygiene educational work in the United States (Gould 1921:320-21). One of the few successful projects that the author describes is a field car, equipped for showing motion pictures, which traveled the countryside through several states. The goal of the project was to increase exposure of sex hygiene-themed motion pictures “so that the most modern educational films on social hygiene could be shown to selected audiences in entire communities in isolated and inaccessible rural districts as well as towns” (Gould 1921:321).

The films, many of which did not shy away from showing lesions caused by venereal diseases (Lashley and Watson 1921), may have caused shock and horror to their audience and impacted public perceptions of sex hygiene. However, regardless of the psychological impact and rhetorical power behind the films, they represented a less intrusive means of manipulating American citizen’s sex hygiene practices compared to the efforts of those within the ASHA which continued to advocate for eugenics. In an article in the ASHA’s *Journal of Social Hygiene*, Professor Roswell H. Johnson warns,

“If reproduction of the inferior is prevented, as should be done, then the remainder must yield a higher birth rate. . .Are our superiors reproducing adequately. . .the answer is decisively no. How then can they be led to do so? By a new attitude toward

reproduction. . .Its purpose should not be to make chaste celibates, but rather efficient mothers” (1919:224-225).

He goes on to say, “do not deprive the ignorant of the information and means of birth control; thus the disparity in the birth rate between them and the educated may be reduced” (Johnson 1919:225). These ideals took hold among those in power in the United States, and the eugenic discourse would not stay constrained to the medical profession for long.

American Eugenics Society

Although many associate the term “eugenics” with the genocide of Germany’s Third Reich, eugenics also played an important role in United States history. In his Ph.D. dissertation, Barry Alan Mehler addressed the rise of the American Eugenics Society (1988). By 1921, the Second International Congress of Eugenics, hosted at the American Museum of Natural History, included over 300 people representing every continent except for Africa. Among those in attendance were President Herbert Hoover, Gifford Pinchott, and Alexander Graham Bell. Some of the speakers at the conference came from Princeton, Harvard, MIT, and even the United States Department of Agriculture.

Funding for eugenic research in America was already coming from well-known institutions, such as the Rockefeller Foundation, the Carnegie Foundation, and the Kellogg’s Race Betterment Foundation (Mehler 1988). As a result of the 1921 meeting, the International Commission on Eugenics Ad Interim Committee of the United States of America began in 1922 (Mehler 1988). This commission would result in the formation of the American Eugenics Society in 1926 (Mehler 1988). From the very beginning, the society represented a network of eugenic-minded peoples, with important ties to European eugenic reform organizations.

Reiterating the discourse of sex hygiene, proposed by the American Eugenics Society, would not provide any additional information than what has already been presented. Of particular importance to the development of the latter half of the SHM, however, was the eugenic importance placed on physical appearance (Maxwell 2010). Since geneticists did not have a sound understanding of how genetics worked, and some eugenicists came to believe that outward beauty reflected inner genetic quality (Cogdell 2004). Unfortunately, this meant that those viewed as physically unattractive may also be seen as defective in matters of intelligence and moral character (Cogdell 2004). Writing in the American Eugenics Society's periodical, *Eugenical News*, one of the Society's founders, Frederick Osborn wrote, "we must fall back on the measure of outward characteristic or group of characteristics, hoping that on average they will be indicative of genetic qualities as well" (1936:69-73).

The American Eugenics Society, with its primary goal of promoting eugenic ideals throughout America by way of an extensive network of eugenic supporters, reached out to numerous elite members of society to join its advisory council (Mehler 1988). One such council member was the president of the American Psychological Association, Knight Dunlap, the author of *Personal Beauty and Racial Betterment*. In his 1920 book, Dunlap claims,

"Human beauty, we have pointed out, is a sign of fitness for parenthood: fitness to propagate children who shall be, in high degree, able to hold their own in the mental and physical struggle with nature and with their human competitors. It is the sign which is intuitively recognized by the race and upon which the process of sexual selection is based. It therefore is nothing superficial: it is the external appearance of the germinal potentiality which is the most important of all things for society" (1920:55).

It was no longer enough to maintain personal cleanliness, to keep a tidy house, or to ward off venereal disease through sex hygiene practices. Eugenic ideals communicated to Americans that they must also concern themselves with their outward beauty as well. An individual's moral

character, intelligence, and even genetic worthiness to marry and reproduce were projected for all to see in their degree of attractiveness. Conversely, this also meant that unattractive individuals may be perceived as genetically and mentally flawed. This was a very serious accusation during a time when the American Eugenics Society was successfully campaigning for and contributing to the passage of state sterilization and segregation laws aimed at stopping the “feeble-minded” from reproducing (Mehler 1988). By 1931, twenty-seven states had passed eugenic sterilization legislation (Pivar 2002). Perhaps it is not a coincidence that, between the years of 1919 and 1929, the sales of cosmetic products in the United States tripled (Hoy 1995).

Indoctrinating Clean

As much of the Progressive Era concerned itself with educating the American public on progressive ideals (Hoy 1995; Piott 2011) it should come as no surprise that SHM-reformers also saw education as the primary method for cleaning up those living in the United States. A plethora of publications strove to communicate the new standards of health, hygiene and cleanliness to the general public in easy to understand formats. However, as the primary concern of this research is the influence of the SHM on rural residents and the role that the discourse of the CLM played in that influence, an effort has been made to focus on messages concerning those living in the rural United States. In most cases, the quotes presented in this section need little analysis when considered in context with the historical background in Chapter 2. Many of these publications were meant to be readily understandable by a lay audience, and as such, their meanings are often very direct and clearly stated.

Before the SHM even began, Colorado’s rural regions may have already felt the underpinnings of marginalization implied by elevated popular views of city life. On the very cusp of the Progressive Era, Edward Roberts (1888:944-945) wrote about Denver’s churches,

opera house, and the “many luxuries of city life” in Harper’s Monthly, and he proclaimed Denver “a metropolis, a centre of refinement, a place rich in itself, influential, and the admiration of all beholders.” Deficient in and removed from the comforts ascribed by the author to urban existence, those living in more remote regions of the state may have been perceived by some as both geographically and theoretically a long ways from “refinement.” That discourse would only intensify as Progressive activists embraced the mantra of modernity and progress.

The 1905 publication *Progressive Men of Western Colorado* (A. W. Bowen & Co.) holds up individuals perceived to personify progressive ideals in the countryside. George E. Pritchford of Routt County, was praised as “He took up in its state of primitive nature and has redeemed from the waste, improving it with good buildings and making it one of the attractive and profitable country homes of the section” (A. W. Bowen & Co. 1905:241). When Eddie P. Wilbur settled in Colorado’s Rio Blanco County, the publication says that the region had “few roads and almost no bridges. . .The land was in its state of primitive nature. . .of little use for civilized life” (A. W. Bowen & Co. 1905:788). And, of Charles Henry Larson’s childhood in Summit County was said, “Mr. Larson attended the primitive country schools of his boyhood and youth in a wild country” (A. W. Bowen & Co. 1905:52). In all instances, the prevailing message instructs its readers that in order for those living in rural regions to become laudable, one must conquer “primitive” living conditions by building infrastructure recognized as “civilized” by the urban and urbane population.

In *Rural Hygiene: A Hand-book of Sanitation Designed for the Use of Students in the Agricultural Schools and Colleges, and for the Residents of the Rural Districts of the United States*, author Isaac Williams Brewer (1909) also applauded those who grew strong off the

obstacles they faced in rural America. However, Brewer echoes the popular Anglo-American concern over a mounting immigrant population and proclaims,

“The child of American parentage born in this country may well be proud of its heritage. . . There is a steady stream of strong, healthy men and women moving from the country to the city. Among them are those destined to rule the land, but in two or three generations their race will vanish and give place to the children of the less fortunate brothers and sisters who have developed strong bodies and sound minds amid the hardships and disadvantages of the life in the country” (1909: 16).

As previously mentioned, the answer to much Progressive Era reform focused on educating the American public about these concerns. Education, however, could not have immediate effects if it just focused on youth. Adult education was also viewed as vital to progress and institutions, such as churches, universities, and farmers’ institutes, stepped up to meet those needs (Cocks et al. 2009; Piott 2011). Outreach also utilized various types of publications, from formal books to newspapers. For example, on January 31, 1913 in Colorado, the *Littleton Independent* in Arapahoe County and the *Plateau Voice* in Mesa County both ran an article explaining the work and goals of the Bureau of Social Hygiene. Of course, it was vital to get those newspapers and publications directly into the hands of rural residents. When speaking of rural postal service in 1917, Lewis Melius wrote,

“Many magazine articles have been written to show the general advantages it affords in rendering rural conditions more tolerable and enduring the inconveniences to which such life is subject...It has given the farmer his daily paper. This great educator of our modern civilization, an almost indispensable necessity of our times...” (1917:26).

An article from the August 1915 *Suburban Life, the Countryside Magazine* (Woodward 1915:81-82) seems to echo Melius’ growing concerns about the quality of life in the countryside. Framing its argument inside a women’s rights agenda, this particular article goes further in linking perceived quality of life with sanitary living conditions. Furthermore, it seems to support

the views of CLM critics (e.g. Kline 2008) by insinuating that America's rural regions needed to become more like its urban ones in order to have a chance at long-term population sustainability.

“If country life is to hold our young people it must not be dependent upon the city for its resources; it must be complete in itself. One means of forwarding the country-life movement is to interest the country-women themselves in the scheme. It is a well known theory that if you want an enterprise to ‘go,’ get the women to advocate it... We once heard a farmer say that his wife was the best spoke in the wheel... Yet this same farmer allowed his helpful wife to occupy a ramshackle house under sanitary conditions that he would have rejected as unfit for his prize Jersey cow, or his esteemed brood mare” (Woodward 1915:81-82).

James Henretta (2011) notes that not all rural residents embraced the notion of the city as the apex of civilization. As urban verses rural discourses intensified and caused friction between the two populations, the rural America that was once romanticized and sought out as a safe haven from the epidemics of overcrowded cities (Sivulka 2001) became the target of much criticism. In his handbook of rural hygiene, Isaac Williams Brewer wrote that rural peoples were ignorant of sanitation rules and that “It is also probable that many cases of death from typhoid fever which are charged to the cities were in reality contracted in the rural districts” (1909:13).

Henry Neely Ogden wrote in his 1911 publication, *Rural Hygiene*:

“It is commonly supposed that good health is the invariable accompaniment of country life. . . If, however, we are honest in our observations, or have lived on a farm in our younger days, or have kept our eyes open when visiting the country, we will remember. . . certain facts which will persistently suggest that, after all, life on the farm may not be such a spring of health as we have been led to believe” (1911:1).

Liberty Hyde Bailey, the chair of the Country Life Commission, wrote much on the topic of the quality of rural life. In an article printed in the magazine *Country Life*, Bailey's tone is less accusatory than Brewer's (1909), but in trying to avoid blaming the rural residents for the standards of living in America's countryside, he painted the farmer as uncivilized and ignorant of modern ways.

“The backwardness of the farmer’s position has not been wholly his own fault. . .Society has not even made it possible for the farmer to do his business freely with the world, as it might have done by providing him with proper postal facilities; the existing transportation agencies do not serve him adequately, for he must haul to them over the worst part of the transportation line and then deliver his articles into a system that he does not understand and in which he does not share. The townsman lives near the railroad, steamboat line, or street-car, and he has traversable roads; he is in a way to serve and be served” (Bailey 1912:23).

With their lives viewed as primitive by a growing urban population, those in America’s countryside found themselves, not only under a national microscope, but also the subject of unsolicited reform efforts. From a review of the discourse, it becomes apparent that it was not considered enough just to build better roads or install a phone line. Mixed Progressive agendas called on rural residents to realign their gender roles, educational systems, agricultural methods, and hygiene practices in line with urban ideals. Yet, they were asked not to leave the countryside least it create calamities, such as driving food costs too high as a result of underproduction.

It would be a mistake to assume that rural residents did not resist progressive demands. Ronald Kline’s (2000) research details clever and creative ways in which those in the country negotiated and modified imposed ideals to suit their cultural needs and beliefs. However, to assume that the dominant discourse had no impact on the independent rural and frontier populations would also be misguided. Nowhere is this more plainly said than in a 1914 article from the periodical *Rural Manhood* which read, “The invasion of modernism into rural life has brought about a change in economic process with such urgency that rural life may seem to be threatened with a spirit of materialism and commercialism. . .This, however, is inevitable in the course of progress” (Rural Manhood 1914:120).

Summary

In the mere twenty-five years between the start of the New York Academy of Medicine's Committee of Seven and the founding of the American Eugenics Society in 1926, sex hygiene rhetoric increasingly placed the medical profession in a dominant role as the guardian of the ideal Anglo-American race. The physician morphed from a mistrusted figure to a recognized and respected authority on an individual's genetic quality and right to reproduce. However, the medical profession did not do it alone. The social context presented a ripe opportunity for those concerned with the future of the Anglo population of the United States. With support from the White House and funding coming from financial giants, such as the Rockefeller Foundation, SHM-era organizations concerned with sex hygiene were able to rise to the top of the Progressive reform agenda. However, what started as a movement concerned with the spread of venereal disease quickly became one which had the power to support eugenic legislation.

To assure that these new ideals took root in American society, SHM reformers needed to disseminate the information to the general public in easily accessible and approachable formats. Newspapers and magazine articles became tools used by SHM-associated institutions and many of their key members and supporters, such as the Bureau of Social Hygiene and avid eugenicist, Margaret Sanger. By broadcasting their messages through films, vernacular publications, and into public schools, reformers not only reached a considerably larger audience, but also placed sex hygiene in the public discourse.

With the discursive power of the medical profession growing stronger daily, the Country Life Movement and the resulting Country Life Association were called on to assist with the goal of transmitting these messages to communities and schools in America's rural regions. Health, hygiene, and sanitation were seen as a vital component of improving rural life, and the two

movements articulated well and served to reinforce each other's discursive power. Articles about personal and home cleanliness appeared in newspapers and magazines with a rural readership, mobile movie theaters showed SHM-themed educational films in the countryside, and just between the years 1918 and 1920 alone, the federal government invested \$537,990 to train more than 35,000 teachers to carry the ideas of the SHM into America's towns and schools (Pivar 2002:240). As the results of this study will show, rural residents of the United States may not have been ready recipients of the ideals proposed by SHM, but they were very likely keenly aware of them.

CHAPTER 4: SOCIAL HYGIENE MOVEMENT ERA

ARCHAEOLOGICAL SITES IN COLORADO

In order to understand how the ideology of the SHM materialized at rural sites relative to urban sites in Colorado, two urban and four rural sites were selected and their historical contexts reviewed. The analysis of each of the six sites in this study includes a consideration of the site's regional context, site-specific context, the excavation methods utilized in the archaeological investigations of each site, and a spatial analysis designed to facilitate an understanding of the impact that accessibility to the information and consumer products of the SHM had on rural residents of Colorado compared to urban residents. The criteria utilized during the site selection process are addressed, as are the methods used to conduct the spatial analysis. In all instances, this project employed data from sites previously excavated under the leadership of individuals and organizations other than the author. The contextual information presented in this chapter will inform interpretations of variations in the archaeological record among the sites selected for the purposes of this study.

Site Selection Methods

To understand if SHM-associated artifacts appear at rural sites later than at urban sites and if the archaeological remains of these sites suggest different SHM-related consumer behaviors for rural residents relative to urban residents, a comparative analysis of two urban and four rural site artifact assemblages was conducted. The author's efforts to digitally catalog the artifacts from site 5DV.12345 prompted further investigation into the possible causes of the high quantities of artifacts related to health, hygiene, and cleanliness in the assemblage and informed the basic parameters required for the selection of the other five sites included in this project. The

Colorado Office of Archaeology and Historic Preservation’s database, *Compass*, was used to search for sites and their corresponding artifact assemblages which could be compared to 5DV.12345.

During the preliminary search, only a review of site criteria occurred. The contents of artifact assemblages were specifically not evaluated during this phase to avoid inadvertently selecting a site or sites with that could have biased the results of the study. The list of selected sites was then cross-checked against collections in Colorado to ascertain if associated artifact assemblages could be located and made accessible for review, or if a sufficiently detailed and available catalog of the assemblage had been compiled for the site in question. The following table provides a summary of the sites included in this study.

Table 1. Summary of Sites Selected

Site Number	Site Name/Neighborhood	County	Occupation Range	Site Demographics
5DV.5997	Five Points	Denver	1887-1910	Urban, African American, Working Class
5DV.12345	Capitol Hill	Denver	1890-1948	Urban, Euro-American, Middle Class
5AH.916	Adelia Wells Homestead	Arapahoe	1890-1938	Rural, Euro-American, Middle Class
5AH.648	Harry Jackson Homestead	Arapahoe	1888-1938	Rural, English Immigrant, Middle Class
5ME.6825	Orr Osborn Homestead	Mesa	1907-1951	Rural, Euro-American, Middle Class
5ME.6826	Stitz Place	Mesa	1900-1918	Rural, German Immigrant, Working Class

Selection methods targeted sites whose primary period of occupation occurred during the SHM (1890-1930). In order to assure that the sample would contain comparable data which had been excavated using contemporary archaeological methods, only excavations which had occurred in 1995 or later were considered. Sites also needed to be residential and each

household had to have both male and female occupants. As the discourse related to the SHM tended to place more emphasis on the woman's contribution to the maintenance of health, hygiene, beauty, and cleanliness, it is quite possible that the inclusion of an artifact assemblage from a female-only boarding house, for example, would hold the potential to skew the analysis. Sites which functioned as hotels, businesses, brothels, etc. were also excluded as personal health, hygiene, and cleanliness practices at these types of establishments, which are more transient and public in nature, probably differed considerably from personal care practices and the related disposal of associated products carried out in a domestic residential environment.

A review of the historical context suggests that the upper socioeconomic classes would probably have been the trend-setters with regard to the ideology of the SHM. As a more representative range of consumer activities and behaviors was desired for the purpose of this analysis, sites whose former occupants were likely of an upper socioeconomic class were also excluded. Additionally, research such as that conducted by Christina Simmons (1993), suggests that although minority groups may have negotiated the SHM differently than the Anglo-American middle and upper classes, they were targeted by SHM advocates and may have been equally as motivated to accept and participate in the SHM. Therefore, race and ethnicity did not act as limiting factors in the site selection process.

The sample includes two urban sites and four rural sites. As much of the historical research tends to focus on urban settings, more emphasis was placed on identifying rural sites in order to gain a better understanding of how this movement may have impacted those residents. However, as studies of the SHM also rely heavily on textual rather than archaeological evidence (e.g. Hoy 1995; Hunt 1999; Pivar 2002) the review of the artifact assemblages from two urban sites in Colorado also provided the necessary comparative materials for this analysis. For the

purpose of this study, urban will be defined as having a minimum population threshold of 2,500, the classification used by the United States Census Bureau during the decades of the SHM (Bureau of the Census 2013). Consequently, sites 5DV.5997 and 5DV.12345 represent the urban SHM-era sites in the sample and sites 5AH.916, 5AH.648, 5ME.6825, and 5ME.6826 represent the rural sites. In order to appreciate the ways that each site's geographical positioning on the landscape may have affected the ease with which they could obtain the information and products associated with the SHM, a spatial analysis was conducted. The following section details the methods used to conduct that analysis.

Spatial Analysis

A spatial analysis helped to facilitate an examination of the Social Hygiene Movement in a rural context by determining the impact of access on rural site inhabitants. People living in major metropolitan areas of the United States today tend to have a higher degree of exposure to the rhetoric of popular culture (Brummett 2014). Therefore, this analysis began with the assumption that the residents of urban sites (ca. 1890-1930) also likely had more exposure to both the information and products associated with the SHM. This exposure would probably have increased in intensity throughout the SHM era because this time period also closely corresponded with the rise of advertising and mass marketing in America (e.g. Marchand 1985; Mizruchi 2008; Sivulka 2001). For that reason, assessing the influence that the SHM may have initially had on people living in a rural context relative to an urban one had to start with an examination of the varying degrees of accessibility site inhabitants would have had to the associated ideas and consumer goods.

The site reports obtained from Colorado's Office of Archaeology and Historical Preservation provided latitude and longitude coordinates which were used to geographically

locate archaeological sites in ArcGIS. Rural sites were considered in relation to their proximity to urban centers, post offices, and railroads. Urban sites were considered in relation to their proximity to grocers, druggists, and trolley lines. In order to visually present changes in population, landscape, and accessibility over time, the spatial analysis included three snapshots in time beginning with the start of the SHM, ca. 1890, and progressing in twenty-year intervals through 1930.

The *Colorado City Population 1880-1990* electronic document (Colorado State University 2000) provided the data necessary to determine the historical populations of Colorado cities and towns. The cities with populations meeting the U.S. Census Bureau's (Bureau of the Census 2013) definition of "urban" were isolated for the census years 1890, 1910, and 1930. The USA Populated Places layer package (2010) was used to geocode the city locations.

Before the proliferation of automobiles and telephones, mail provided rural residents with a vital link to information and goods from urban areas (Lewis 1917; United States Postal Service Historian 2012). In many cases, the location of the post office also corresponded to the closest town which could also have provided additional means of acquiring consumer goods. Many saw documents, such as newspapers, as providing rural people with important education on Progressive ideals (e.g. Melius 1917). Mail order catalogs, such as Sears & Roebuck, afforded rural community members with the opportunity to obtain a wealth of products related to the SHM (Sears Archives 2012). However, direct delivery to rural residences did not begin until 1896, and even then, only to a few towns (United States Postal Service Historian 2008, 2012). Direct service remained limited throughout rural regions of Colorado in the early 20th century, requiring members of rural communities to travel to a post office to retrieve their mail (United States Postal Service Historian 2008, 2012). Even for those rural communities with established

mail routes, residents wishing to receive packages weighing more than four pounds had to travel to their post office to retrieve them before 1911 (United States Postal Service Historian 2012). For this reason, assessing the access rural Colorado residents had to the information and consumer goods related to the SHM, in part, had to focus on the ease with which a site's inhabitants could reach their nearest post office. However, as the location of the closest post office also typically represented the closeted community, the distance of a site to its nearest town also provided an important means of considering how far site residents may have had to travel to access treatments from biomedical doctors if they wished to seek alternative options to traditional or homeopathic treatments or to the patent medicines available by mail order.

The post office data represented in the spatial analysis included a fusion of information gathered from *Colorado Post Offices: 1859-1989* (Bauer et al. 1990) and the United States Postal Service Postmaster Finder (United States Postal Service 2013). The data were then geocoded to populated places (USA Populated Places 2010) in order to locate the post offices in the towns they served. In instances where the place names no longer remained a part of the contemporary Colorado landscape, the section, township, and range coordinates were acquired from *Place Names of Colorado: A Genealogical & Historical Guide to Colorado Sites* (Elliot 1999). Earthpoint (2014) was then used to locate the centroid of each, the coordinates of which were then converted to latitude and longitude for entering into ArcGIS.

Where extant rail lines exist, they were incorporated into maps through the use of a layer package (USA Railroads 2010). Lines that had previously been discontinued were digitized with the assistance of a historical Colorado map (Morris 1919). Errors in the map, which were not uncommon for maps produced prior to modern survey equipment, were accommodated for by tracing the lines to towns the rail lines were known to pass through.

In Denver, the Denver Open Data Catalog supplied layer packages for Street Routes (City and County of Denver Technology Services 2014b) and Abandoned Trolley Tracks (City and County of Denver Public Works Policy and Planning Office 2013). The road layer did not include changes to the trolley line over time, but instead reflected contemporary knowledge of their historical placement as a whole. Metadata for the Abandoned Trolley Tracks layer also did not include periods of operation for each line. However, public transportation in Denver began early in the city's history with the Denver Horse Railroad Company in 1871, and progressed technologically and in scope to include over 156 miles of track by 1900 (Mauck 2001). In short, the use of trolley lines in the spatial analysis merely represents the ability of Denver site residents to easily access transportation.

The United States Postal Service had begun free city delivery to Denver's residents in 1879, and the city had several regularly-published newspapers (Mauck 2001; Perkin 1959). So, rather than assess access to goods and information in terms of post office proximity, the nearness of a site to the types of businesses that would have likely supplied the products associated with the SHM was considered. A review of city directories helped to isolate druggists and grocers as the most appropriate listings for products related to health, hygiene, and cleanliness. Striving for representation of the most regular time intervals possible within the available archival record, Denver city directories were located for the years 1890 (Ballenger and Richards), 1911 (Ballenger and Richards), and 1930 (The Gazetteer Company). Using the address listed in the directories, businesses were located in ArcGIS using an address locator (City and County of Denver Technology Services 2014a).

Examination of the data included a series of point distance analyses to determine the distance between rural sites and their closest urban center and post office, and between urban

sites and their closest grocer and druggist. Although railroads represented a vital link between rural sites and metropolitan regions of the United States, the fact that many regularly scheduled stops along rail lines resulted in the establishment of a post office meant that a separate proximity analysis between sites and rail lines did not provide meaningful additional data (Bauer et al. 1990). In all cases, a point distance analysis provides information about the most direct route between two points. Accounting for natural obstacles, the actual distance that rural residents would have had to travel to access goods and information may have been longer. The results of the spatial analyses, in addition to a review of each site's context are presented in the subsequent sections of this chapter.

The Five Points Neighborhood and Site 5DV.5997

In 1998, SWCA, Inc., Environmental Consultants and Richard Carrillo of Cuartelejo HP Associates conducted archival research and archaeological investigations at five sites in the historic Five Points neighborhood of Denver, Colorado as part of the Broadway Viaduct Project. Originally built in the 1920s as part of the northern extension of Broadway, the viaduct had fallen into disrepair and required replacing. Although the original construction of the viaduct had destroyed many homes, the remains of some of these residential structures survived under the pavement. Considered eligible to the National Register, excavations occurred at site 5DV.5997 in order to recover archaeological data and mitigate the impact of the proposed project construction (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999).

Regional Context

The Five Points neighborhood in Denver, Colorado was founded in the late-1860s. Although well known by the 1880s as an upscale streetcar suburb populated predominantly by

Euro-Americans, the neighborhood experienced a dramatic population change in the 1890s (Mauck 2001; Stephens et al. 2008). As new neighborhoods sprung up around the city, the wealthy residents began to relocate to more prominent regions such as Capitol Hill (Mauck 2001). In addition to Irish, Chinese, and other immigrant groups, Denver's African American population, once scattered throughout the city, became increasingly concentrated in the Five Points neighborhood as racially restrictive housing covenants and Jim Crow laws imposed limitations on their residential options (Fink 2005; Stephens et al. 2008; SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999). By the turn of the century, Five Points had become one of the largest African American communities in the American West (Fink 2005).

Some historians (Mauck 2001; Stephens et al. 2008) highlight the ways in which the neighborhood fostered an entrepreneurial spirit which extended to both African American men and women. Five Points was home to African American doctors, black-owned newspapers, dentists, lawyers, and numerous other business proprietors. Stephens and his colleagues (2008:10) note that this sense of community allowed African Americans to create their own Progressive Era opportunities and play an important role in African American history.

Historical archaeologist Margaret C. Wood (1998) presents contradictory evidence which reveals Five Points as a neighborhood plagued by economic hardship. Wood's research found that the majority of the employed residents of the Five Points neighborhood between 1895 and 1920 were manual laborers, and that most residents did not own their homes. Her examination of Sanborn Insurance maps found that many former residential units had been labeled as tenements and shanties, and that the neighborhood had become increasingly occupied by

industrial facilities. Wood goes as far as to claim that the common denominator of the neighborhood's residents was that "they were working class or working poor" (1998:7).

Site Description

Located on Block 55 at Lots 1 and 2, 5DV.5997 housed three residential structures by 1889 (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999). The only structure that fell within the Broadway Viaduct project area faced 25th Street and was addressed 1320 25th Street. The 1887 Sanborn Fire Insurance map depicts the structure as an L-shaped building. The foot of the L was a two-story frame structure which faced 25th Street to the northeast. The body of the L connected to the foot at its northwest end, projected southwest of the foot, and was a single story frame structure with a brick-lined cellar. The northwest portion of the building had a small porch that had been expanded by 1903 to run the entire length of the structure (Wood 1998). By the 1920s, the construction of the Broadway Viaduct resulted in the razing of the house (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999).

Evidence acquired from Denver city directories and Census records provided information about the residents of the site, the demographics of the neighborhood, and the period during which the site was occupied (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999). The occupation of the structure at site 5DV.5997 appears to have occurred between approximately 1893 and 1910. The 1893 Denver City Directory lists Mrs. Carrie L. Frazier, an African American woman, as the sole resident of the house (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999). Although Mrs. Frazier has no occupation listed, the directory notes her closest neighbors as having working class positions. By the release of the 1900 City Directory, Henry and Lulu Nelson, also of African American

descent, had taken residence in the home (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999). Henry worked as a hod carrier, a person who carries supplies to masons, and Lulu worked from home. The Nelson's provided boarding to Edmund Scott, an African American musician, and Darry Ruth, a student. The directory shows the neighbors on 25th Street as primarily African Americans in working class occupations such as laundress and street cleaner (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999). The absence of any residential listing for 1320 25th Street in both the 1910 and the 1920 United States Census suggests the abandonment of the house at site 5DV.5997 sometime between 1903 and 1910 (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999).

Excavation Methods

Ground Penetrating Radar (GPR) detected possible locations of the brick-lined cellar and foundations of the domestic structure at 5DV.5997 along the eastern portion of the modern dirt parking lot on the corner of Broadway and 25th Street (SWCA, Inc., Environmental Consultants 1998). During the summer of 1998, archaeological testing included five units with excavation depths ranging from 0.3 to 1.6 meters. The following summer, archaeologists from SWCA, Inc. Environmental Consultants and archaeologist Richard Carrillo of Cuartelejo HP Associates conducted a data recovery project at site 5DV.5997.

Prior to the commencement of hand excavation in 1999, a backhoe removed the modern parking lot covering the site to just above the level of the foundation (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999). Both hand and backhoe trenching occurred around the foundation of the structure. While the excavation of a couple of units ceased shortly after the removal of the parking lot layer, the excavation of other units ranged as deep as 2 meters below datum, with the deepest units located in regions rich in cellar

fill on the interior of the foundation (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999). Archaeologists hand excavated a total of thirteen one-meter units, located with the intent of exposing part of the house's foundation, investigating outbuildings, and sampling other levels inside of and surrounding the structure.

The trenches and thirteen units exposed fourteen features including the brick foundation of the house, possible post holes from the porch, a possible hearth or burn area, several depressions, and an outbuilding (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999). Units yielding SHM-related artifacts included: trenches dug along the house foundation; units 101N84E and 101N85E, which were associated with a possible shed; units 99N95E, 96N94E, and 92N94E, located on the interior of the foundation; unit 92N92E located just outside of the house's foundation; and unit 87N97E, a refuse area.

The top levels of the excavation typically consisted of the parking lot and modern fill. The stratum associated with the demolition of the house represented the most significant cultural level in many of the units in and adjacent to the structure. The close association of demolition-related architectural material with occupational materials, such as personal items and faunal remains, suggests that the structure was demolished shortly after being abandoned.

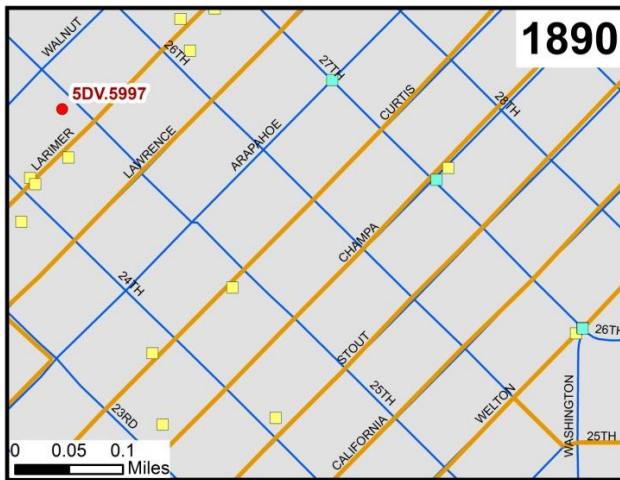
Archaeologists focused much of their efforts on the interior of the house foundations where excavations revealed high densities of intact artifacts from the home's cellar. The cellar fill appeared to slope inward toward the center of the structure. When excavation ceased due to safety concerns over unit depth, artifacts were still being recovered. Consistent with the known occupation of the house, the artifacts recovered dated from the late-nineteenth and early-twentieth century, with the late-nineteenth-century artifacts typically found at lower stratigraphic levels (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999). Although

the authors of the 1999 report (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates: 4.53) do not specifically indicate the nature of the deposits in the cellar, they do refer to them as “intact”. As investigators believed the property to be in use just prior to demolition and as the artifacts recovered from the cellar under the house were whole and covered by demolition fill, it is possible that they are in situ artifacts which the former occupants abandoned in the basement prior to the buildings being razed in anticipation of the construction of the Broadway Viaduct.

Spatial Analysis

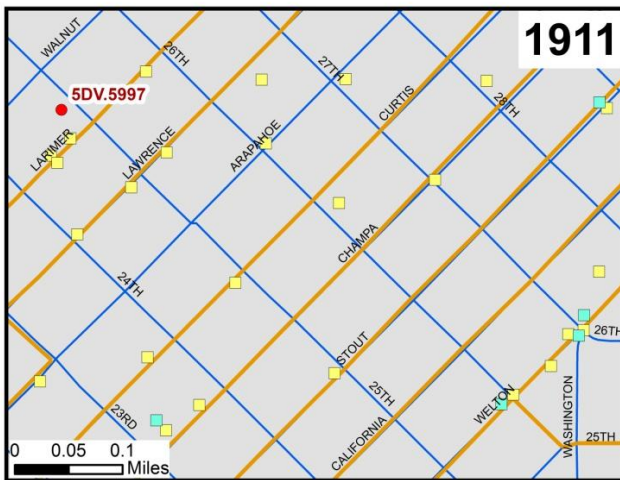
5DV.5997’s location provided its occupants with easy access to transportation, information, and services. The Denver Horse Railroad Company provided Five Points residents with a connection to Denver’s downtown starting in 1871 (Mauck 2001). By 1900, the trolley system in Denver consisted of over 156 miles of track (King 1911; Mauck 2001). Union Station, located approximately 1.1 miles northwest of 5DV.5997 by foot, had been providing a central hub for the rail lines passing through Denver for over a decade when Ms. Frazier took residence in the 1890s (Holland 2001).

Rich in commercial, industrial, and service businesses, Five Points also provided ample access to grocers and druggists that may have supplied the occupants of 5DV.5997 with the products and information associated with the SHM (Mauck 2001). The following map (Figure 3) utilized available Denver directories for the years 1890, 1911, and 1930 in order to ascertain the proximity of such business to 5DV.5997, and to understand changes to that accessibility over time. In 1890, Mrs. Frazier would have had to travel about two-tenths of a mile to the nearest druggist, Oscar McKee, located at the corner of Arapahoe and 27th streets. The closest grocer, Patrick Sinnott, resided less than 240 feet away at 2428 Larimer Street. By 1911, the Nelson’s



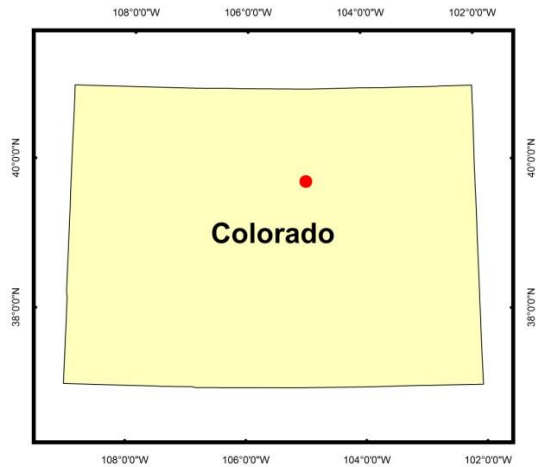
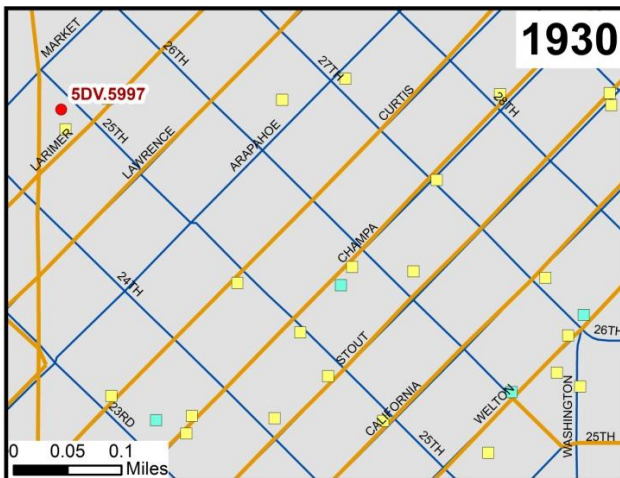
CHRONOLOGY OF REGIONAL DEVELOPMENT:

Site 5DV5997
Five Points Neighborhood
Denver, Colorado
1890s-1930s



LEGEND

- Archaeological Sites
- Drug & Medicine Providers
- Groceries & Provisions
- Historic Trolley Tracks
- Denver Streets



Coordinate System: NAD 1983 State Plane Colorado Central FIPS 0502
 Projection: Lambert Conformal Conic
 Central Meridian: -105.5000
 Standard Parallel 1: 38.4500
 Standard Parallel 2: 37.7500
 Latitude of Origin: 37.8333

Figure 3. Map of Chronological Regional Development, 5DV.5997

had to travel 295 feet to the grocer, Emil Manheimer, at 2463 Larimer Street and an extra tenth of a mile to Rocky Mountain Pharmacy at 2301 Champa Street. Although the house at 5DV.5997 no longer existed in 1930, a review of the map (Figure 3) clearly shows the impact that the construction of the Broadway viaduct had on Lots 1 and 2, and on local businesses.

Summary

Unlike more remote rural region of Colorado, the residents of 5DV.5997 likely faced little to no proximity-related obstacles when it came to accessing the information and products associated with the SHM. As of 1879, Denver residents enjoyed free city delivery (Hall 1895:48). By the time the neighborhood became predominately African American and working-class in the 1890s, numerous trolley lines serviced the area and many of the state's rail lines coalesced a little more than a mile away. Although they may have found their purchasing decisions restricted by their limited income, those living in the house at 5DV.5997 had but to walk a few blocks to obtain the consumer products associated with the ideology of the SHM.

The Capitol Hill Neighborhood and Site 5DV.12345

In 2009, RMC Consultants, Inc. conducted excavations at the site intended for the construction of the new History Colorado Center in Denver (Dominguez et al. 2010). As the Center houses the State Historical Society and the Office of Archaeology and Historic Preservation, mitigating the effects of construction on any historically significant features took on added importance. Located in Denver's Capitol Hill neighborhood, the Historical Society recognized the potential of the site to yield valuable information about residential life in the city during the late-nineteenth and early-twentieth century (McMahon 2008). Similar to site 5DV.5997 the results of ground penetrating radar and archival research revealed that the remains

of domestic structures lay preserved under previous demolition debris and paved parking lots (Dominguez et al. 2010).

Regional Context

In 1866, after homesteading what is today known as the Capitol Hill neighborhood of Denver, Henry Brown donated a portion of his property to the city as the future site of a state capitol building (Zimmer 2009). By the 1880s, building started on the Capitol (Zimmer 2009) and the wealthy of Denver began moving away from the city's downtown business district to build large mansions on the hill (Wyckoff 1999). The upper class residents of the Capitol Hill neighborhood enjoyed luxuries such as paved roads, electricity, a sewer system, and hundreds of acres of public parks (Barnhouse 2012; Wyckoff 1999).

Historian Amy B. Zimmer (2009) explains that this upper class culture in Capitol Hill did not last long. As Denver grew and streetcars provided ever-increasing ease of transportation around the city, the wealthy started to abandon Capitol Hill. Beginning in the 1910s, the one-time residential area became more and more commercial. Apartment buildings and offices replaced the mansions, and the neighborhood's demographics changed and diversified. Some regions of the neighborhood became home to a variety of middle class residents, while halfway houses typified other areas.

In the 1920s, streetcars gave way to automobiles (McMahon 2008). In the Capitol Hill area, the automobile industry comprised many of the new commercial enterprises (Dominguez et al. 2010). From the 1950s to the 1970s, Capitol Hill was transformed again as automobile-related businesses were demolished to make way for expanded retail space (McMahon 2008).

Site Description

The present-day History Colorado Center is located at 1200 Broadway in downtown Denver. When the site was excavated in 2009, the remains of a seven-unit row house and a duplex were identified (Dominguez et al. 2010). Much of the foundation for the row house and the duplex remained intact under pavement.

The row house, constructed sometime between 1890 and 1904 (Sanborn Map Company 1890, 1904), was located on the southeast quarter of the site at the intersection of Broadway and 12th Avenue. The building faced 12th Avenue to the south. The total length of the row house from east to west was 158 feet, and each of the seven units in the row house were between fifty-three feet and fifty-six feet long from north to south. Archaeological investigations of the row house labeled the seven units Structure 1 to 7 from the west to the east (Dominguez et al. 2010). Investigations found that each unit had its own cellar at its north end and a crawl space to the south (Dominguez et al. 2010). Structures 3 through 7 had individual porches facing 12th Avenue, and Structures 1 and 2 had a shared porch.

By 1929, the Sanborn map indicated that the entire block had shifted to businesses servicing the automobile industry. By 1951, the row house no longer appeared on the map (Sanborn Map Company 1951). A synthesis of data from Sanborn maps and Denver Householder's Directories led to the conclusion that demolition occurred sometime between 1947 and 1948 (McMahon 2008). The demolition materials were used to fill in the cellars, which were then graded to make a level surface for use as parking lots (Dominguez et al. 2010).

Sanborn maps provided the addresses for the row house units and the Denver Householder's Directory was used to compose a list of residents for those units from 1926-1930 and for the year 1945 (McMahon 2008). As stated in the final report (Dominguez et al. 2010),

the period of time that a unit was consecutively occupied by a tenant appeared to have significant implications for artifact frequency. A long final occupation, among other factors, coincided with a larger quantity of material culture as the unit was not subjected to periodic emptying and cleaning between tenants. While the other units had a variety of tenants throughout the years (McMahon 2008), the far west unit of the row house, labeled as Structure 1 by archaeologists and noted as address number 23 on Sanborn maps, appears to have been occupied by Mildred R. Yale, widow of Frank Yale, from approximately 1926 to 1947 according to city directories (Ballenger and Richards 1925; The Gazetteer Company 1941, 1947) and the United States Federal Census (Bureau of the Census 1930, 1940). As the length of occupation of Structure 1, unit 23 resulted in a richer archaeological deposit than other units that had more frequent residential turn-over, the analysis of SHM-related artifacts will be restricted to the row house unit bearing the address 23.

Archaeological investigations found that Structure 1, unit 23, was approximately fifty-four feet from north to south and twenty-one feet from east to west (Dominguez et al. 2010). Its south, north, and west wall appear to be brick construction. The unit shared its fourth framed wall with Structure 2, unit 25. Structure 1 had two cellars. One cellar (Structure 1.2) had a stairwell at its north end that connected into the second cellar (Structure 1.1). Structure 1.1 measured 11.8 feet from north to south and nineteen feet from east to west. It was semi-subterranean with 2/5 of the west portion of the cellar unpaved. The second cellar (Structure 1.2) possessed smaller dimensions at three feet from north to south and nine feet from east to west, and had a flagstone floor.

The principle occupant of Structure 1, unit 23, was Mildred Yale. She was born in Independence, Missouri in 1868 according to Federal Census records (Bureau of the Census

1900, 1910). Her race is listed as white and the birthplace of both her parents as Kentucky. Sometime between the 1900 and the 1910 Federal Census, she moved to Denver with her husband Frank T. Yale. The 1910 United States Federal Census lists Frank's occupation as a photographer. They had three children: Mary Catherine, William, and Frank. By 1920, the Census lists Mildred as widowed. She moved into unit 23 sometime between 1925 (Ballenger and Richards 1925) and 1926 (McMahon 2008). Her youngest son Frank, born in 1894, lived with her until at least 1930 and worked as a tax collector for the City of Denver (Bureau of the Census 1930). By the 1940s, Mildred lived alone in unit 23 (Bureau of the Census 1940; The Gazetteer Company 1941, 1947). Mildred did not have a listed occupation in any records save the 1940 Census where she noted her occupation as "housewife". However, the nature of the artifact assemblage from unit 23 prompted researchers to propose that the household was "moderately prosperous" (Dominguez et al. 2010:51). No records could be found post-dating 1947.

Excavation Methods

The final report on the 2009 archaeological excavations of site 5DV.12345 details the methods used (Dominguez et al. 2010). Ground penetrating radar helped to locate features at the site. The primary exploratory efforts focused on tracing the walls of the row house and duplex. During this initial phase, trenches and shovel excavations included data collection with regard to determining the presence of artifacts, stratigraphy of deposits, and the construction methods of the row house. The excavations associated with Structure 1 included both of the cellars (Structure 1.1 and 1.2) and the cellar stairway (F1.23).

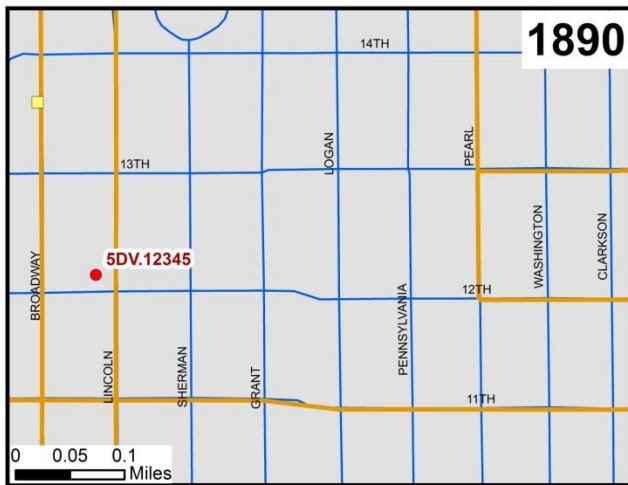
The report (Dominguez et al. 2010) notes that machine excavation of Structure 1.1 occurred to within 20 cm of the cement floor due to the large amount of asphalt, road base, and

brick-and-mortar rubble in the upper stratum. The first 50 cm contained artifacts related to the automotive industry. The main artifact level was designated Stratum III, with artifacts covering almost the entire cellar floor. Fifteen one-by-one meter units were used to hand excavate the entire cellar to a sterile level. Archaeologists determined that the cellar had originally housed a furnace and coal storage (Dominguez et al. 2010). After the installation of a steam heat system in the cellar of Structure 5, Structure 1.1 functioned as storage for empty containers and unused items. In addition to glass, ceramics, and metal artifacts, 193 individual artifacts were recovered. Based on the high accumulation of artifacts in the cellar, Archaeologists posited that the site's occupants did not discard, but stored the objects for many years (Dominguez et al. 2010:58).

Similar to Structure 1.1, the upper 40 cm of Structure 1.2 contained rubble, asphalt, and artifacts related to the automotive industry (Dominguez et al. 2010). Structure 1.2 was also completely excavated. The northwest corner of the landing contained a pile of artifacts. This pile included fifty-eight individual artifacts as well as metal, glass, and ceramics. Although some were associated with the demolition of the row house, a large portion of the artifacts were determined to be stored empty glass containers. When considering the assemblage of both Structure 1.1 and 1.2, archaeologists concluded that the function of both cellars as storage was very important (Dominguez et al. 2010:67), and they further suggested that Depression and World War II era shortages may have encouraged the stockpiling and recycling of reusable objects.

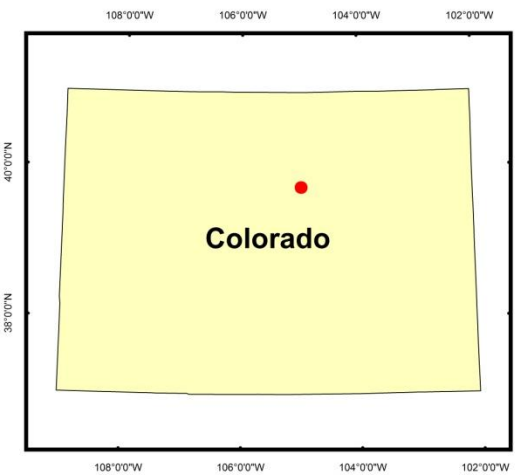
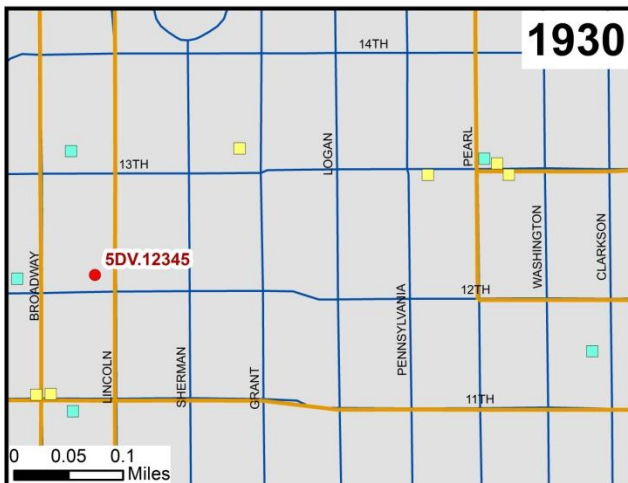
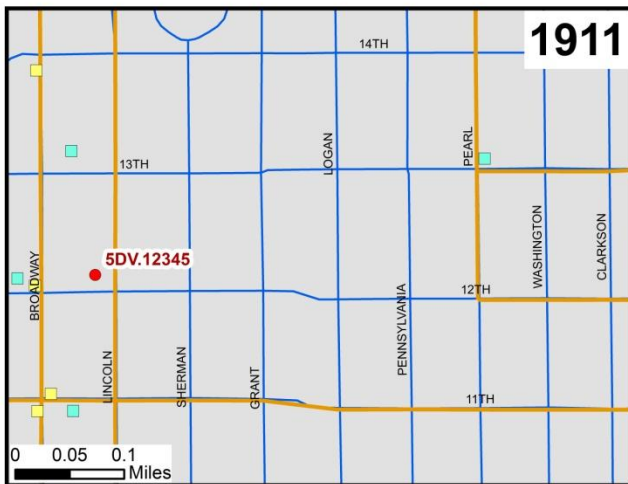
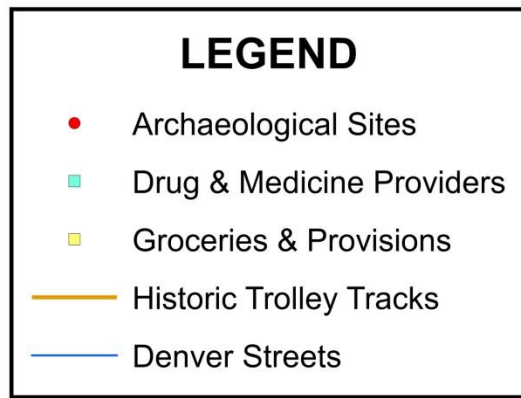
Spatial Analysis

In the same way that the residents of site 5DV.5997 enjoyed close proximity to transportation, shops, and services, so too did those living at 5DV.12345 (Figure 4). However, with construction on the State Capitol building only starting in 1886 (Zimmer 2009), early



CHRONOLOGY OF REGIONAL DEVELOPMENT:

Site 5DV12345
Capitol Hill Neighborhood
Denver, Colorado
1890s-1930s



Coordinate System: NAD 1983 State Plane Colorado Central FIPS 0502
 Projection: Lambert Conformal Conic
 Central Meridian: -105.5000
 Standard Parallel 1: 38.4500
 Standard Parallel 2: 37.7500
 Latitude of Origin: 37.8333

Figure 4. Map of Chronological Regional Development, 5DV.12345

residents at the site probably had fewer options when it came to local shopping. Still, the city's main business district was easily accessible by trolley just to the north. By 1911 several grocers and druggists were located a short walk away from site 5DV.12345. Denver directories for the years 1890, 1911, and 1930 provided the names and addresses of the grocers and druggists.

In 1890, the residents at site 5DV.12345 would have had to travel a little under a quarter of a mile to reach druggist, Thurber Alman, at 1401 Broadway, and less than 0.17 of a mile to grocer, Charles A. Smith, at 1357 Broadway (Ballenger and Richards 1890). By 1911, the distance to the nearest drug store, Metropolitan Pharmacy at 1201 Broadway, dropped to less than 0.07 of a mile, and grocer, John W. Vieira at 1209 Broadway, was a mere 0.05 of a mile away (Ballenger and Richards 1911).

Mildred and her children, occupants of unit 23 since 1926, had easy access to consumer health- and hygiene-related products. In 1930, the Johnson Drug Company operated at the address formerly occupied by Metropolitan Pharmacy. Also close by was the American supermarket chain, Safeway, which had opened less than 0.12 of a mile from site 5DV.12345 (The Gazetteer Company 1930).

Summary

By the time that Mildred and her family moved into the row house at 12th Avenue and Broadway, the Capitol Hill neighborhood had already changed from an upscale community to one of more modest means. Unlike site 5DV.5997 whose final occupation dates to ca. 1903-1910, the ca. 1948 final occupation at 5DV.12345 may reflect a more solidified expression and materialization of health- and hygiene-related ideology. As both of the site's archaeological assemblages primarily reflect similar formation processes (cellar storage), a comparison of the two Denver sites has the potential to highlight the temporal development of SHM ideology.

However, as with all archaeological cross-site comparisons, the impact of different variables such as ethnicity and socioeconomic status on the consumer choices of the sites' inhabitants must also be considered.

The Adelia Wells Homestead, Site 5AH.916

After recording the Adelia Wells homestead during a 1996 a pedestrian survey of the Plains Conservation Center in Arapahoe County, CO, the University of Colorado at Denver's Department of Anthropology conducted excavations in 1997 and 1998 (Stone 1999). Principle investigator, Tammy Stone (1997, 1998, 1999, 2000), considered the data from site 5AH.916, a female owned homestead, in relation to the data collected from the nearby Harry Jackson homestead (5AH.648) in order to investigate the negotiation of ideal gender roles and the conceptualization of middle class status in the American rural West. Understanding that individuals use material culture to construct and manipulate their identity, Stone (2000) looked to consumer behavior to better understand artifacts as actively-used symbols which reified the site's occupant's interpretation of the social constructs of the Victorian Era.

When considering the results of her project in context with other archaeological studies of farm households, Stone (2000:100) concluded that rural residents did not adhere to the ideal gendered division of labor advocated for by social reformers. Stone (2000:101-102) does however find that Wells chose to emphasize her middle class socioeconomic status through her consumer choices. Considering that SHM reformers placed much pressure on the Euro-American middleclass to act as exemplars of health and hygiene, the SHM-associate artifacts at site 5AH.916 have the potential to support Stone's findings and will be addressed in further detail in subsequent chapters of this thesis. The following sections will present contextual

information necessary to the interpretation of the artifact assemblage from the Adelia Wells homestead.

Regional Context

The arid environment of the rural western United States provided many challenges for those seeking to take advantage of the provisions of the Homestead Act of 1862 (Campbell 2008). Although the 160 acres provided by the Act were based on a farming model rooted in the wetter eastern United States, the 160 acre tract remained the most common in western regions of the country as well. Single women and recent immigrants were not excluded from the Homestead Act, so that homesteading provided an opportunity to many for financial independence, land ownership, and middle class status. Entrants were required to live on the tract during a minimum five-year “proving up” period. “Proving up” meant that entrants had to build a home on the tract and cultivate at least part of the land (Campbell 2008:7).

Studies of early building construction techniques among Colorado homesteads (Harris 1993; Mehls and Mehls 1990) indicate the prevalence of soddies or dugouts with sod construction. Lumber was used sparingly and often only for roofs and door and window frames. Outbuildings tended to be rare during early stages of construction, but when present, they tended to be sod construction as well. As time went on, the number of outbuildings usually increased and expansions or rebuilding of the house might occur.

As a female homestead owner, Adelia Wells might have been uncommon, but not unheard of. About eighteen percent of homestead patents in Washington and Logan counties in northeastern Colorado were issued to single women (Harris 1993). A review of land ownership in Township 4 south, Range 66 west, where Adelia lived, showed that women held 13.85 percent of the homestead patents (Stone 1999).

Previous chapters have already addressed the ways in which developments in technology and social life during the late-nineteenth and early-twentieth century influenced life in rural regions of the United States. However, it is worth reiterating that homestead life would have been impacted by changes such as new farming technologies and practices, rural free mail delivery, mail order catalogs, increased access to transportation, and advances in communication.

Site Description

The 160 acre Adelia Wells homestead is located in the southeast quadrant of Section 26, Township 4 south, Range 66 west, between East and West Toll Gate Creeks (Stone 1999). Site 5AH.916 sits on the southern portion of the homestead and possesses surface deposits which cover over 6,100 square meters. Stone's (1997, 1998, 1999, 2000) archival research included a chain-of-deed search, which indicated that after two unsuccessful attempts by other parties, Adelia Wells gained entry rights on the homestead in June of 1890. Wells did not occupy the site, however, until September of that year, following the completion of a house on the property.

Adelia Wells was born around 1837 about forty miles from Buffalo, New York in a town that is known today as Arcade (Bureau of the Census 1880; NewYorkRoots 2015). As of the 1880 Federal Census, Adelia was still living in New York with her widowed mother, Eliza, who was also born in New York and her brother, Eastman. Both Eliza's and Adelia's occupation is listed as "keeping house" and Eastman is listed as a farmer. Adelia's race is noted as "white" in the Census. Wells would have been about fifty-three years old when she took residence at the house on site 5AH.916 (Bureau of the Census 1880). Homestead records show that Adelia's three adult sons also lived on the homestead (Stone 2000). An entry in the 1895 Denver City directory for an Adelia Wells living at 2020 Champa suggests that she may have had a room or apartment in the city as well (Ballenger and Richards 1895).

Affidavits signed by Hames Sturgen of Harman, Colorado, Susi Turner of Salem, Colorado, and by Adelia Wells indicate that only about sixteen to twenty-five acres of land were cultivated on the homestead, with the remainder used for grazing (Stone 2000). The affidavits all mention a four-room stone house built in 1890. Although Wells records the dimensions as twenty-eight by thirty-two feet, while the other two parties claim that the home measured about sixteen by twenty-eight. All three parties note the presence of the stone lined dugout/root cellar with measurements of sixteen by, either fifteen or twelve feet. Also noted are two wells, corrals, pig pens, a chicken coop, and a barn.

Ownership of the homestead becomes unclear after Wells received the patent in 1898 (Stone 1999). Carrie J. Everson purchased the north part of the property sometime after 1900. The 1900 Federal Census does not list Adelia Wells as a Colorado resident, so if she still owned the south portion of the property, it is doubtful that she was living on it. The property passed through many different owners before being condemned in 1938 for use as part of the Lowry bombing range. Based on artifactual and archival analysis, Stone (1999) posits that after Wells left, the property was likely used as farm and grazing land, and the buildings at site 5AH.916 may not have been reoccupied.

Excavation Methods

Excavations occurred as part of the University of Colorado at Denver's archaeological field school (Stone 1999). The 1997 field school opened sixteen units, seven of which reached sterile soil. The unit placement targeted the foundations of the house, a nearby trash pit, a detached kitchen/root cellar/dugout, a trash pit south of the dugout, a well, and a cleared courtyard. In 1998 the nine unfinished units from the previous season were reopened, and three new units were started (Stone 2000). The latter focused on further investigating the detached

kitchen/root cellar/dugout, the house foundation, the well, and the midden near the kitchen. All units measured two by two meters, and were dug in 10 cm levels by shovel scraping until artifact concentrations were reached, at which time hand trowels were used. Excavations reached sterile, with the exception of the unit which included the well. The features, as summarized by Stone (2000), exhibiting SHM-related artifacts are addressed below.

Six units were placed to investigate the house foundations, which were determined to measure approximately sixteen by twenty-eight feet. Locally-sourced sandstone slabs comprised the foundation, which appeared to have its long axes along a southeast to northwest alignment. In all six units, sterile was reached 0.14 meters below datum, just below the levels of stone. A single SHM-related artifact was found in unit S124W86.

The kitchen midden, located southeast of the house, measured 1.7 meters by 2.2 meters. Four units investigated this feature to just over a meter in depth (S118W94, S118W95, S120W94, S120W96). A total of fifteen whole and unburned SHM-associated artifacts were found amongst all four units.

Two units were placed in the southeast corner of the kitchen/root cellar/dugout (S90W104, S92W104). The two units contained fourteen artifacts determined to be SHM-related. Excavations revealed a dirt floor about one meter below the surface, reached by a sandstone staircase. The structure likely had sandstone-lined walls, a sod or wooden covering, and wood shelving. According to Stone's report (1999), the structure functioned as part cellar and part detached kitchen. The presence of a midden on site suggests that items in the kitchen/root cellar/dugout may have been purposely stored rather than discarded there. Pots, pans and canning supplies that had been stored on the shelves were recovered in a stacked nature, suggesting that the structure likely collapsed while still in use. Therefore, the artifact

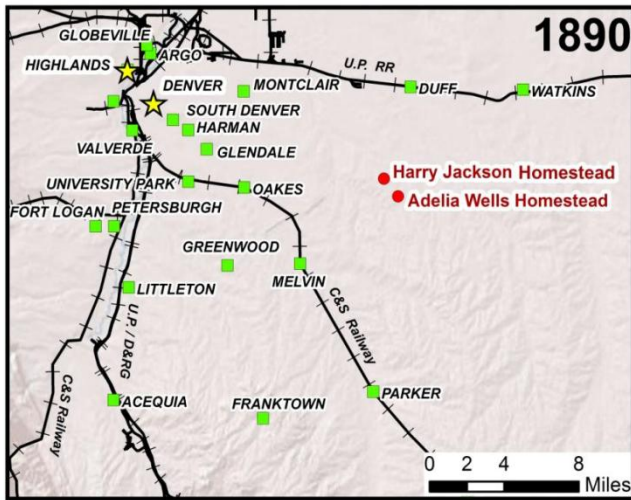
assemblage of the kitchen/root cellar/dugout structure possibly formed in a manner similar to the assemblages of sites 5DV.5997 and 5DV.12345

Spatial Analysis

When Adelia Wells and her sons took up residence on their homestead in 1890, the closest urban center was Denver at 13.25 miles away (Figure 5). The Smokey Hill North Trail cut off, which led straight to downtown Denver, was within a mile of the homestead (Scott 1977). A number of Denver's suburbs had also been established by this time, and offered opportunities for trips to town. By 1891, the town of Aurora, for example, was platted along Colfax Avenue and was on its way to becoming a thriving farming community (Stone 1999).

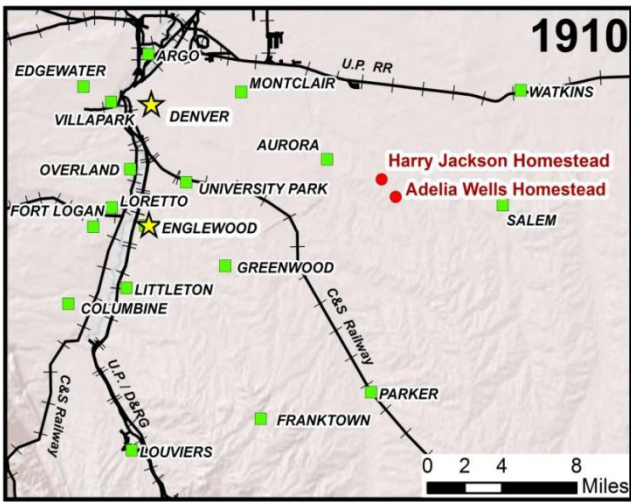
Access to consumer products via home delivery would not occur until after 1902 for homesteaders in Arapahoe County (Stone 1999). Instead, the site's occupants would have had to travel to a nearby post office. In 1890, the closest such facility was the Duff post office located 5.75 miles away. The post office had operated since 1884, but would experience a break in service between November of 1891 and June of 1892 (Bauer et al. 1990).

As time went on, smaller communities were subsumed into the city limits of growing urban centers such as Denver, Englewood, and eventually, Aurora. Roads in this region quickly replaced horses, trails, and rail lines as means of transportation (Rand McNally and Company 1927). In addition to the plethora of consumer goods in mail order catalogs made easily attainable by the introduction of rural free delivery, residents of homesteads in Arapahoe County likely found traveling to shopping opportunities easier as city limits expanded farther into the countryside.



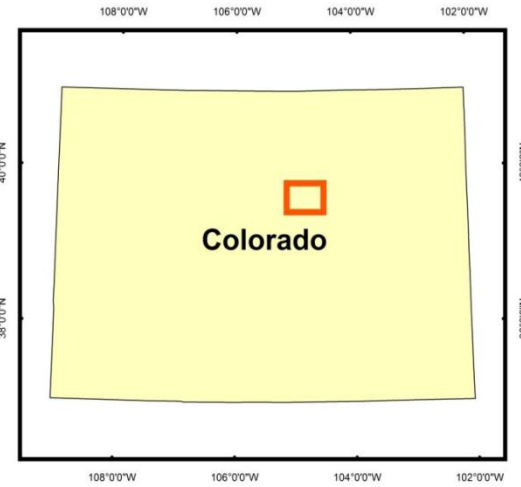
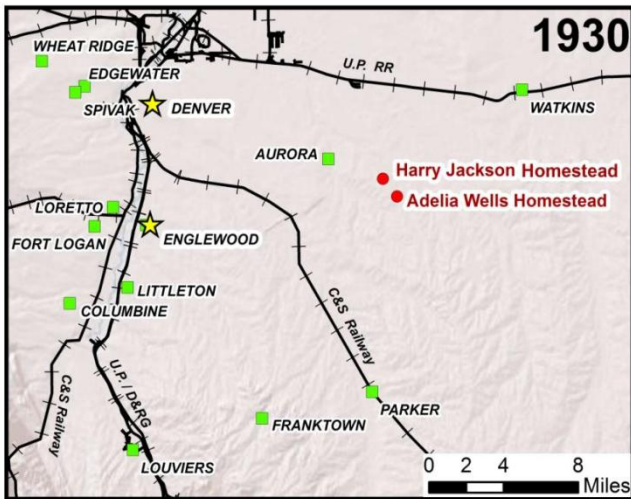
CHRONOLOGY OF REGIONAL DEVELOPMENT:

The Harry Jackson Homestead (5AH648) and The Adelia Wells Homestead (5AH916), 1890s-1930s



LEGEND

- Archaeological Sites
- ★ Urban Centers
- Post Offices
- +—+— Railroads



Coordinate System: NAD 1983 State Plane Colorado Central FIPS 0502
 Projection: Lambert Conformal Conic
 Central Meridian: -105.5000
 Standard Parallel 1: 38.4500
 Standard Parallel 2: 37.7500
 Latitude of Origin: 37.8333

Figure 5. Map of Chronological Regional Development, 5AH.916 and 5AH.648

Summary

Adelia Wells and her sons may have occupied site 5AH.916 during its proving up period, but that does not mean they lived in isolation without access to the products and information associated with the emerging Progressive Era. Stone's analysis of the artifact assemblage of site 5AH.916, in conjunction with her investigation of the built environment suggests that the Wells family was middle class. The number of outbuildings at the site during the early phase of Wells' proving up period and the presence of stone and wood construction materials as opposed to sod construction indicates that Wells was "fairly wealthy" according to Stone (2000).

Mail may not have been delivered to their homestead, but the close proximity of the site to major trails and to other communities suggests that the Wells' family likely had the opportunity to make trips into town to shop and socialize. In fact, Adelia Wells may have even enjoyed a second residence in downtown Denver. Perhaps most importantly, Stone (2000) notes that Wells' socioeconomic status may have played an important role in her identity construction during the Victoria Era when consumerism functioned as a sensitive indicator of middle class standing, even as she confronted the realities and work requirements of a rural life which necessitated a de-emphasis of idealized gender roles.

The Harry Jackson Homestead, Site 5AH.648

The Denver Chapter of the Colorado Archaeological Society first recorded the Harry Jackson homestead in 1992 (Stone 1999). The University of Colorado at Denver revisited this site as part of its survey of the Plains Conservation Center in 1996. At that time, the site covered 2.37 acres as indicated by a dense artifact scatter on the surface. The proposed right of way for the Jewel Avenue expansion included site 5AH.648, thus testing of the site began in 1997 with two test pits placed by Golder Associates (Tucker 1997). In 1998, the University of Colorado at

Denver's archaeology field school followed up with an excavation of three additional test pits and a complete surface collection (Stone 1999). The following analysis utilizes data from the 1998 field work.

Regional Context

Located a mere mile and a quarter away from the Wells' homestead, much of the regional context addressed for the Adelia Wells homestead would also apply for the Jacksons. The Jackson family also gained entry rights to their homestead during the period in Colorado's weather history that was favorable to farming on the plains, but by the early-1890s, dry conditions had returned (Stone 1999). The 1893 economic depression and an 1895 locust infestation caused many farmers to abandon their claims; the population of Colorado's twelve eastern counties decreased by forty percent between 1890 and 1900 (Abbott et al. 1982:172).

The Jackson's social landscape, however, may have differed from that of the Wells. Unlike the Wells, the Jackson family had recently emigrated from England. The Homestead Act of 1862 extended to recent immigrants who wished to obtain United States citizenship (Porterfield 2005). For many, it presented not just a path to citizenship, but possibly to middle class status as well (Stone 1999). Just as Adelia Wells was not the only single female homesteader in the region, neither would the Jacksons have been the only homesteaders from the United Kingdom. The arrival of the railroad to Denver in 1870 encouraged European investment, which in turn led to the recruitment of many English, Irish, and Scottish farmers to homestead the rural regions of Arapahoe County (Pearce 1985). In fact, a minimum of twenty-five percent of those homesteading the American West had recently immigrated from Great Britain and Europe (Campbell 1996:9).

Site Description

Site 5AH.648 is located east of West Toll Gate Creek. Stone's (1999) investigation of patent records revealed that Harry Jackson took out an entrant on the homestead in 1888. Harry Jackson, born in England around 1855, had immigrated to the United States with his family just two years earlier in 1886 (Bureau of the Census 1900). He occupied the land during the five-year proving up period with his wife, Mary, and their five children. Harry Jackson became a naturalized citizen in 1893, less than three months before receiving the patent on his homestead (Stone 1999).

According to Stone (1999), the initial construction of a house and several outbuildings at the Jackson homestead might suggest a higher economic standing. Affidavits on file from Jackson, Robert Meyers, and Thomas Powell indicate that Jackson used the land mostly to graze his ten horses and five cattle. He only cultivated five acres. In addition to a well, a corral, a shed, and a frame barn, Jackson also built a seven-room frame house in the first year of occupying the homestead. The house had two wings. The main wing measured twenty-four by twenty-two feet, and the other wing measured twenty by eighteen feet.

Five years after receiving the patent, Jackson sold the homestead to a Louis Larson, who did not reside in the state of Colorado (Stone 1999). The property changed hands two more times, but the owners did not reside on the homestead. However, the land may have been leased to tenant farmers, for which no information is available. As with the Well's homestead, the land was condemned for use as part of the Lowry Bombing Field, making the likely occupation of the site 1888-1938.

Excavation Methods

At the start of the 1998 field work, the northern portion of the site had already experienced disturbance by the construction of an access road. Additional upcoming construction, in combination with the size of the site, resulted in a short time frame for archaeological investigation. The University of Colorado at Denver's field school excavated three test pits and conducted an intensive surface mapping of the site. The test pits were located to investigate the sites of the former house, barn, and a sheet midden located to the west of the house (Stone 1999).

The 1998 field school mapped and made collections from ninety percent of the site, represented by 120 units. The three test pits were two-by-two meter units that were shovel scraped. Hand trowling only occurred when rocks or artifact concentrations were encountered. Due to time constraints, sterile was not reached in any unit. In order to map the site and record surface deposits, the field crew used a digital transit to record the elevation of each unit at the southwest corner. Topographic maps were produced and superimposed with known depressions and excavated units. All materials on the surface within each unit were mapped and collected.

Only five SHM-associated artifacts were recovered during the 1998 investigation. Two of the artifacts came from the test unit located in the depression representing the former residential structure. One artifact was found on the surface, and the location of two prescription bottle finishes in the site's assemblage could not be ascertained by the author. Neither the unit located in the sheet midden nor the one at the former location of the barn revealed artifacts related to the SHM.

Spatial Analysis

In 1888, when the Jackson's gained entrant to their homestead, the closest city was Denver at 12.3 miles away (Figure 5). Like the Well's homestead, the Jackson homestead was close to the Smokey Hill North Trail cut off which led straight to the city's downtown (Scott 1977). By 1910, those living at the homestead would also have had the option of traveling to Englewood twelve miles away, whose population had risen to meet the definition of an urban community (Bureau of the Census 2013).

Rural free mail delivery had not yet been established by the time the Jackson family sold the homestead in 1898. The Duff post office was five miles away, but accessible to the Jacksons by horse, of which they reportedly had ten. Direct mail delivery would ease issues of accessibility to succeeding tenants of the land, and the establishment of the Aurora post office in 1908 (Bauer et al. 1990) shortened the distance to a physical office by over two miles.

Summary

The differences in the quantities of SHM-associated artifacts recovered from the Adelia Wells and the Harry Jackson homesteads may be more of a reflection of sampling methods and the extent of the excavation rather than cultural differences. Adelia Wells moved to Colorado from New York, a hot bed of discussion regarding health and hygiene due to the influx of immigrants, overcrowding, and epidemics. She likely brought with her to the Colorado plains health and hygiene ideals born both of her middle class status and her experience in New York. However, Britain experienced a parallel movement which also similarly altered health and hygiene ideals and behavior in the United Kingdom (Hunt 1999; Smith 2007). Although the Social Hygiene Movement in the United States differed from Great Britain's, the Jackson family likely brought health and hygiene ideals of their own from England to their homestead.

The Orr Osborn Homestead, Site 5ME.6825

In preparation for the construction of a natural gas pipeline between the El Paso and Transwestern pipeline system in northwestern New Mexico and Piceance Creek in Colorado, Alpine Archaeological Consultants, Inc. and its subcontractor, Centennial Archaeology, Inc., undertook an extensive cultural resource survey of the proposed pipeline corridor (Reed 2001). The resulting cultural resource treatment plan called for archaeological data recovery at selected significant sites. In 1997, excavation of the Orr Osborn homestead occurred in accordance with the proposed treatment plan (Horn 2001a).

Regional Context

Mesa County has become well known for its fruitlands, and, as of 2012, remained the nation's seventh largest peach producer (Slee 2012). In the early 1880s, the U.S. Army pushed the native Utes out of the Grand Valley, making way for Euro-American settlement of the region (Miller 2001). However, early large-scale agriculture in the dry, hot climate of Mesa County depended on irrigation (Sexton 1987). Many historians would argue that the history of Mesa County has been inextricably linked to the region's history of agriculture and water rights (e.g. Haskell 1886; Miller 2001; Sexton 1987).

Once settled, Mesa County grew quickly. In 1882, gravity canals provided the region with water from the Colorado River, and by 1883, the first fruit production had begun (Sexton 1987). In the early 1880s, mining and prospecting also began in Mesa County, which produced gold, silver, and coal (Haskell 1886). The burgeoning mining communities provided an easily accessible market for the agriculture products (Sexton 1987). The arrival of the Denver and Rio Grande Railroad in 1887 (Hellmann 2006) not only linked the budding region to the rest of the country, but it provided a means of moving agricultural product to new markets. The

Reclamation Service responded to growing water needs and broke ground in 1912 on a canal project designed to bring water to 15,000 new acres in Mesa County (Sexton 1987).

Site Analysis

The Orr Osborn homestead is located about two miles to the northwest of Mesa, Colorado, near Windger Flats. At the time of the archaeological investigations in 1997 (Horn 2001a), a standing wood frame farmhouse was located on the western portion of the site. It had two wings that formed a T-shape. The property also included a cistern located to the south of the house, various outbuildings, corrals, wagons, farm equipment, and an eighteen by twenty-four foot root cellar that had been recorded in 1991 and since demolished for building construction. Feature 1 represented an outhouse hole that was about six feet in diameter. A collapsed wood frame structure (Structure 4) was located about 150 feet from the house, and was identified as a garage or maintenance structure.

William Ray Ball held claim to the property from February of 1907 to March of 1915 (Denver Branch of the National Archives, Accession No. 8NN 49 91-247, File Nos. M02233 and M 07563). In March of 1915, Orr F. Osborn filed a homestead entry for the land. When Osborn filed the claim, the property already had a small house on it, but Osborn built a larger house in the fall of 1915 (National Archives, Record Group 49, Patent No. 747980, Serial No. 08777), most likely in preparation for his marriage to Lucile Daly in October of that year (Family Search 2013).

Orr Osborn was born in 1887 in Colorado (Bureau of the Census 1900). By the 1900 Census, Orr was living in Larimer County, Colorado where his father, Joseph, had a 160 acre homestead (Horn 2001a). Both of his parents had been born in the United States to parents who also were natural born American citizens (Bureau of the Census 1900). Their race in the Census

is listed simply as “white”. Osborn’s wife, Lucile Daly (Dailey), was born in 1893 in Utah (Bureau of the Census 1900). Although her mother is not listed as of 1900, her father was also born in Utah to parents who had both emigrated from England. Orr and Lucile had no children of their own. However, both the 1930 and 1940 Census suggests that they took in or adopted a child by the name of Dorothy McKeel. Dorothy was born sometime in the early 1920s.

When he received his patent on the 120 acre homestead, Osborn had a sixteen by twenty-two foot wood frame house, two cellars, a chicken house, a stable, and an irrigation ditch (National Archives, Record Group 49, Patent No. 747980, Serial No. 08777; Mesa County Courthouse, County Clerk’s Office, Deed Book 307, p. 520). Throughout his residency at the site, Osborn continued to make improvements to his irrigation system and continued to expand his cultivation of the homestead, even though he worked in the coal mines during his first three winters (Horn 2001a).

Likely spurred on by plummeting agricultural prices during the Great Depression (McElvaine 2010), Osborn appears to have shifted to raising stock. In 1939, Osborn obtained a Stock Raising Homestead patent for 520 acres of land in Mesa County (Horn 2001a). Less than a year later, he sold his 120 acre homestead to Harry E. Dudley (Mesa County Courthouse, County Clerk’s Office, Deed Book 372, page 513). Dudley is listed in the 1940 Census as a thirty-eight year old white male truck driver who had been born in Illinois. His wife, Katherine, was born in Colorado as were their five children. At the time of the 1940 Census, they lived in the town of Collbran, located about thirteen miles to the northeast of the town of Mesa. Subsequent Grand Junction directories list the Dudleys as living in Mesa (R.L. Polk & Co. 1943, 1946), but by 1951, the Dudley family was, once again, living in Collbran (R.L. Polk & Co. 1951).

The archaeological record at the site indicates use from the 1910s through the 1940s (Horn 2001a). Many of the artifacts reflect the Osborn's period of occupation, but intermingling does exist with artifacts from the later residency by the Dudley family. Only the artifacts from the outhouse suggest a deposit made solely by the Osborn family. According to the interpretation of the artifact assemblage by principle investigator, Jonathon C. Horn (2001a), the consumer behavior at the site indicates that Orr and Lucile Osborn were able to purchase a variety of quality goods, but avoided luxury items and chose to purchase products that allowed them to be self-sufficient instead.

Excavation Methods

Under the direction of Jonathon C. Horn (2001a), a total of 24.5 m² of the site was excavated and a surface analysis was conducted. Excavations included Structures 4 and 8, a former maintenance shed or garage and an adjacent wood frame structure. A large pile of lumber was designated as Structure 5, but no evidence of a structure was found underneath during investigations. A rock pile, Feature 3, was discovered under the lumber and after a two by three meter unit was excavated around the rocks, the area was determined to be used for refuse and lumber disposal. Excavations also included a former outhouse hole (Feature 1) and Feature 2, which was found to contain few cultural materials and have no specific function. Additionally, a surface analysis recorded artifacts in situ and resulted in the excavation of a one-by-two meter block in a trash scatter located on the southern edge of Site 5ME.6825.

SHM-associated artifacts were found in small quantities in Structures 4 and 8, and in Features 1, 2, 3, and the trash scatter. The majority of the SHM-associated artifacts were recorded during investigations of the surface of the site. While the three artifacts recovered from the former outhouse were all medicine containers, medicine bottles were also found at the two

other features, the trash scatter, and from the surface. Of all the investigated structures and features, it can only be argued that artifacts in Structures 4 and 8 were possibly being stored. However, the artifacts from the disposal areas, trash scatter, and surface scatter do lend themselves to comparison with middens and trash deposits at both the Adelia Wells and the Harry Jackson homesteads.

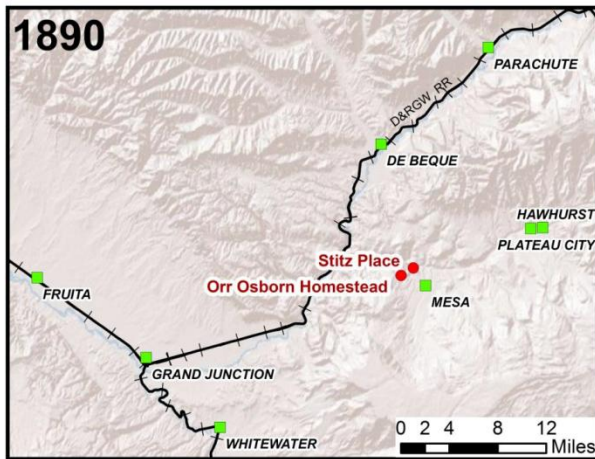
Spatial Analysis

The more than sixty percent increase in the number of post offices in the region surrounding site 5ME.6825 between the years of 1890 and 1910 (Figure 6) speaks volumes about the area's growth in the years leading up to the Osborn's occupation of the homestead. Grand Junction, the county seat, saw a proportionate growth in population during this period as well, and had achieved urban status by the 1900 Census with a population increase of close to 1,500 from the previous census (Colorado State University 2000).

Judging by the arrival of rural free delivery in the towns of Grand Junction, Fruita and Parachute in the years 1902 and 1903, those living at site 5ME.6825 likely enjoyed direct mail delivery by the early 1900s (United States Postal Service Historian 2008). The site's occupants also could have easily reached neighboring communities to retrieve mail and purchase needed goods. The town of Mesa was about 2.08 miles away (Figure 6). Mesa's post office had been established in 1887 and had no known breaks in service (Bauer et al. 1990). Other options included Molina at about 5.89 miles away and Cameo at 7.36 miles. The closest city was the county seat, Grand Junction, at just under 20.5 miles away.

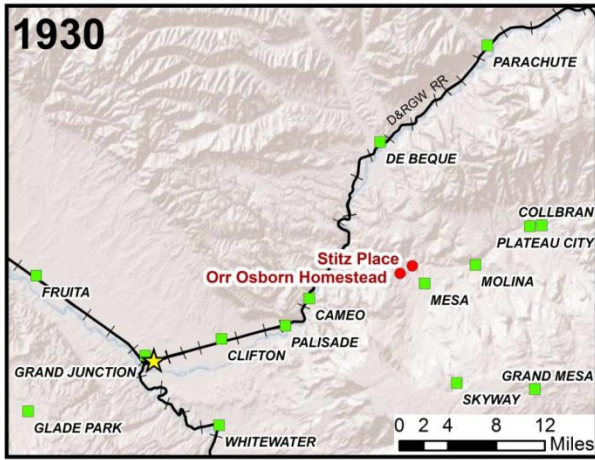
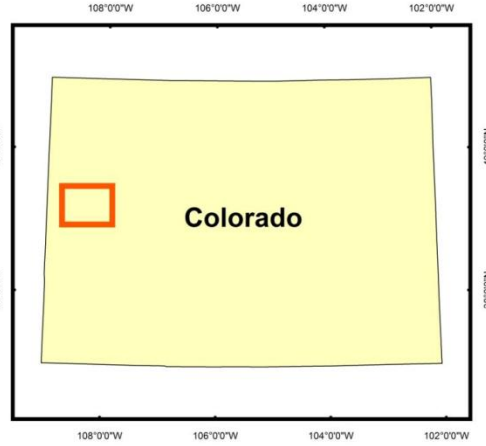
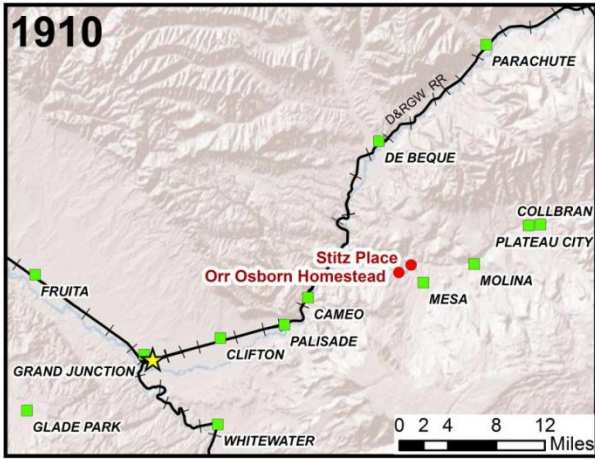
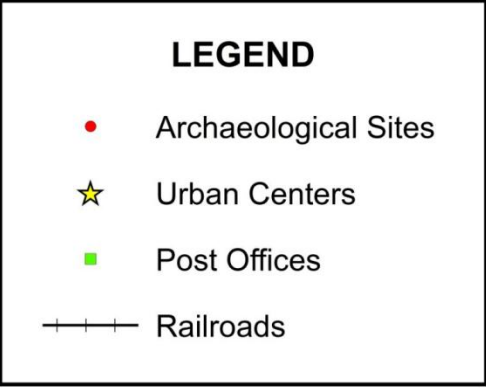
Summary

Orr Osborn and his wife, Lucile, took entrant on their homestead during a time of agricultural prosperity in Mesa County, Colorado. For the Osborn family, this meant that



CHRONOLOGY OF REGIONAL DEVELOPMENT:

The Orr Osborn Homestead (5ME6825) and Stitz Place (5ME6826), 1890s-1930s



Coordinate System: NAD 1983 State Plane Colorado Central FIPS 0502
 Projection: Lambert Conformal Conic
 Central Meridian: -105.5000
 Standard Parallel 1: 38.4500
 Standard Parallel 2: 37.7500
 Latitude of Origin: 37.8333

Figure 6. Map of Chronological Regional Development, 5ME.6825 and 5ME.6826

transportation, mail service, and proximity to growing communities would not have imposed serious accessibility constraints with regards to consumer behaviors. With relatively easy access to the goods and information related to the SHM, any differences in health- and hygiene-related artifacts at site 5ME.6825 compared to the urban sites in this study must be understood in the specific context of the site's inhabitants. The fact that Orr Osborn was raised by a father who had patented his own Colorado homestead and that Orr's homestead bordered that of his brother George suggests that the Osborn family may have held ideals commonly associated with agrarian lifeways, which rejected conspicuous consumption (Horn 2001a).

Stitz Place, Site 5ME.6826

Like the remains of Orr Osborn's homestead, archaeological investigations at site 5ME.6826 also occurred in association with the cultural resource treatment plan prescribed to mitigate potential impact of the TransColorado Natural Gas Pipeline Project (Reed 2001). Archaeologist Jonathon C. Horn also acted as the principal investigator for the archaeological and archival research conducted on the Stitz Place site (2001b). As the site's occupants possessed a German ethnic heritage, and the activities on the site were largely carried out by Anna Stitz, 5ME.6826 was determined to be significant to interpreting the historical role of women and ethnic groups in the development of the Colorado Plateau. As with the Osborn homestead, the resulting excavations occurred in 1997.

Regional Context

Located in close proximity to the Orr Osborn homestead, with a partial temporal overlap in occupation, much of the regional context presented for the Osborn homestead would also apply for the Stitz Place site. However, the social landscape may have differed for the Stitz family and warrants a brief discussion. Not all immigrants received a warm welcome when

arriving to the United States, but as historian Michael C. LeMay (2013) notes, many state governments actually sought out German immigrants to settle the prairie lands. These governments partnered with railroad companies to send agents to convince newly-immigrated Germans to take advantage of the provisions of the Homestead Act of 1862.

German immigrants were celebrated as having a strong work ethic. Frederick Law Olmsted even declared the German's work ethic the equal of natural-born citizens (1857:140). German immigrants also tended to arrive in the United States in a better financial state than some other European groups, such as the Irish (Ferrie 1999). Available funds may be one of the prevailing reasons why Germans, even more than their English or Irish counterparts arriving during the 1840s and 50s, headed West (Ferrie 1999).

The earlier wave of German immigration in the 1840s and 50s had also paved the way for a German presence in politics (Reyes 2013). The German faction of the Republican Party even played a key role in the election of President Lincoln. Once established on the political landscape, German Americans advocated for equal employment opportunity and pay and for equal rights to own property (Reyes 2013:156).

Site Description

Defined as a residential complex, site 5ME.6826 is located to the south of Plateau Creek, about 1.75 miles to the northwest of the town of Mesa, and just to the northeast of the Orr Osborn homestead. At the time archaeologists first recorded the site, they identified a stone oven (Structure 1), a twelve-by-sixteen foot partially collapsed root cellar (Structure 2), a six-by-sixteen foot possible structure with stone wall alignments and an adjoining ten-by-twenty foot room (Structure 3), and an eighteen-by-thirty foot structure (Structure 4). Archaeologists also identified several features including a four-by-six foot depression (Feature 4) thought to

represent an outhouse, several board scatters (Features 1, 3, and 5), a six foot in diameter rock arrangement (Feature 2), artifact scatters, a gravel road, and traces of an earlier road that ran along the north and northwest edges of the site, interpreted as the remains of the first road to run up Plateau Creek in 1894. The excavations of 1997 also revealed Structures 5, 6, and another possible outhouse.

The land itself was first homesteaded by Isaac Harvey in 1893 (National Archives, Record Group 49, Cash Entry Patent No. Ute Series No. 1039). Harvey sold the homestead in 1896 to Harry Davis, and a few months later, Davis transferred the land to Cris F. Lass (Mesa County Courthouse, County Clerk's Office, Deed Book 63, pages 276-277). According to Harvey's Patent, all of his improvements to the land occurred to the west of the residential complex built by the Stitz, meaning that the entire occupation at site 5ME.6826 can be attributed to the Stitz family (Horn 2001b).

In January of 1900, Anna E. Stitz purchased the land, including the water rights from Harvey Ditch No. 1 and No. 2 (Mesa County Courthouse, County Clerk's Office, Deed Book 68, page 515). Anna lived at site 5ME.6826 with her husband, Karl, and their three children. Anna was born in Nebraska around 1876 to German immigrant parents (Bureau of the Census 1910). Karl, born in Germany around 1865, was noted as working as an engineer for a pumping plant in the 1910 Census. He had attained citizenship in Leadville, Colorado in December of 1899 (Lake County Courthouse, Final Certificate of Naturalization, December 28, 1899). In the 1910 Census, Anna listed her occupation as general farmer. With Anna working on-site as a farmer and Karl working as an engineer off the property, much of the activity at the site was likely carried out by Anna (Horn 2001b). Anna sold the property to W.H. Clark in 1918 (Mesa County Courthouse, County Clerk's Office, Deed Book 223, page 120).

The bread oven at the site showed similarities to Bavarian ovens from southern Germany (Horn 2001b). According to Horn, the oven also exhibited marked similarities to another bread oven located to the west of 5ME.6826, up Plateau Creek (5ME.300). The oven at site 5ME.300 was known to have produced bread for the convicts who constructed a new road up Plateau Creek in 1911 and 1912. Horn proposed that Anna Stitz may have also earned extra income by baking for labor crews. He also determined the oven to be the only artifactual and structural remains indicative of German ethnicity at the site.

Horn (2001b) also noted that the archaeological assemblage suggests that the Stitz family was likely not financially well off. He posited that the family's former time spent living in the mining town of Leadville, Colorado may have meant that they experienced financial difficulties resulting from the Panic of 1893. Just as Anna may have made bread for extra income, an abundance of shoe and boot fragments at Structure 6 may have meant that the Stitz family also repaired shoes to earn extra money as well. Horn's investigations further found that many consumer goods from the site represented the least costly versions available from mail order catalogs. Decorative items were extremely rare, as were cuts of meat. The low amount of transportation- and horse tack-related objects may have indicated the inability of the Stitz family to afford more than a single horse. Artifacts indicative of food canning, entertainment, and children's toys were completely absent.

Excavation Methods

In 1997, archaeological crews excavated a total of 190 m² at site 5ME.6826, with 28.2 m³ of soil removed (Horn 2001b). The excavations targeted Features 1, 2, 4, 6, and 7 and Structures 2, 3, 4, 5, and 6. The only units to produce SHM-associated artifacts were those related to the excavation of Feature 1. Initial excavation of Feature 1 occurred in a four-by-six meter block in

a clearing that crews interpreted as a possible location of a former structure, although no evidence of structural remains existed. Most of the artifacts were recovered from the first 10 cm of soil, with the highest density occurring on the north side of the four-by-six meter block. Archaeologists excavated an additional two-by-six meter block adjoining the north side of the initial block using one-by-one meter units. This was followed by three more one-by-one meter units placed to the north of the two-by-six meter block, following the artifact deposits. Archaeologists did not find evidence of a structure at Feature 1, but they did note that the artifacts recovered were typical of a habitation structure (Horn 2001b).

Spatial Analysis

Having filed Homestead Entry papers in 1912, the same year that the Reclamation Service broke ground on a large-scale canal project in Mesa County (Sexton 1987), the Stitz's occupation of the site occurred during a period of growth and development in the region. The railroad had serviced the region for a quarter of a century (Hellmann 2006). The Stitz family also likely benefited from direct mail service. The closest community, the town of Mesa, was less than 1.75 miles away (Figure 6). Molina was less than five miles away. Just as with the Osborn homestead, the closest city was Grand Junction at about 21.5 miles away.

Summary

The archaeological assemblage at site 5ME.6826 suggests that, while very close in proximity to the Osborn's homestead, the Stitz family's experience in Mesa County was likely quite different. The Osborn homestead exhibited evidence of both horses and horse-drawn vehicles (Horn 2001a), suggesting that they likely had a greater ability to travel to surrounding communities than the Stitz family. Although the Stitz family was probably able to obtain consumer goods delivered directly to their place through mail order catalogs, the archaeological

record suggests that the items they did buy were inexpensive. In comparison, although the Osborns seemed to avoid luxury items, the consumer goods they did purchase were of a higher quality. As the Stitz Place was located next to a road and less than two miles from the nearest town, the family did have access to the information and goods associated with the SHM. If both the low quantity of luxury goods found at the site and the tendency of those goods to represent the least expensive option available indicate socioeconomic status rather than consumer choice, than the low occurrence of SHM-associated artifacts suggests that the Stitz family's consumer relations to the ideals of the SHM may have been considerably impacted by their economic ability to purchase the associated products.

CHAPTER 5: ARTIFACTS OF THE SOCIAL HYGIENE MOVEMENT

The following chapter presents the SHM-associated artifacts recovered during the archaeological excavations of the six sites discussed in Chapter 4. To determine if artifacts related to health, hygiene, and cleanliness appeared at rural sites later than urban ones, and if rural residents purchased different quantities and types of SHM-associated consumer products than urban residents, the project identified and proposed a typology for the artifacts. The methods used in the development of that typology are addressed as are the approaches undertaken to analyze the artifacts. Differences in sampling, collection, and reporting methods amongst the various projects, in addition to the overall quantity of artifacts recovered by each excavation and the diversity of objects within the personal health- and hygiene-related artifact categories, prohibit in-depth statistical analyses. Determining the manufacturing date ranges for the artifacts provides information that can be used to ascertain mean dates for SHM-associated consumer activity at each site. The earliest appearances of SHM-associated consumer activity at urban sites in the study will be compared to those at rural sites to find out if there is any difference in the dates at which artifacts related to the SHM actually appeared at rural sites relative to urban sites. Brief discussions of the size and nature of each site's archaeological assemblage also give a sense of the relative quantity of SHM-associated artifacts. The interpretation of these artifacts will be presented in Chapter 6.

Designing a SHM-associated Artifact Typology

In the 1970s, archaeologist Stanly South developed the Carolina Artifact Pattern in which he grouped artifacts based on the way they were likely used at a particular site (South 1978). Since that time, this method has been refined by both South and other archaeologists (e.g.

Sprague 1981) to form an artifact classification system based on the function of an artifact across a wide range of historical archaeological sites in the United States. South (1978) recognized that the classification system had imperfections and that an artifact could serve multiple functions. As such, he encouraged other archaeologists to modify and add to the list as research designs demanded. Ultimately, South hoped to relieve historical archaeologists of a weighty reliance on textual documentation in favor of a more in-depth use of the archaeological record (South 1978).

As proposed by archaeologist Douglas E. Ross (2012), this study utilizes a contextual classification system made specifically for the purposes of this research design. The classification system is only meant as a tool, a vehicle for thinking about the diversity of physical objects in the archaeological record which resulted from a growing concern with cleanliness, health, hygiene, and beauty. While the use of this system does strive to facilitate cross-site comparisons to better understand the impact of this national movement, the individual negotiation of social ideals can result in objects being utilized in very different ways by different people (Ross 2012). Ross (2012) also proposed the use of material culture histories as a means of combating “rigid” classification schemes and uncovering the various identities of an artifact. Therefore, a section of Chapter 6 will present a sample of exemplar products associated with the SHM. The analysis of these products will focus on the discourse employed in advertisements and education pamphlets, not only to better understand how marketing campaigns served to reinforce and naturalize the discursive power of the SHM, but also to understand the different ways in which these objects may have been used according to historical documentation.

The literature review in Chapter 2 highlights changes in the way that Americans thought about germs, health, cleanliness, body odor, and personal appearance. During the co-occurring dramatic growth of consumerism and the wealth of commodities that accompanied it (Groover

2008; Mullins 2011; Sivulka 2001) advertisers and product manufacturers actively promoted those changes to market their goods. This provided Americans with an increasing array of choices for satiating the need for clean. The artifact classification system sought to present a schematic which isolates and defines the types of consumer products resulting from these developing ideals. While the vast assortment of merchandise with ties to the SHM prevents a comprehensive inventory of items for consideration, the table below lists the general categories commonly associated with the nation’s growing concerns. These items will be considered during investigation of the six artifact assemblages.

Table 2. SHM-Associated Artifact Categories

Artifact Category Number	General Artifact Categories	Examples:
1	Multipurpose	Antiseptics, Vaseline, lye
2	Cosmetic Products	Cold cream, make-up, hair dyes and treatments, pomade
3	Cosmetic Implements	Powder puffs, hair combs, compact mirrors
4	Perfume	Toilet water, Florida water
5	Dental Hygiene	Mouthwash, toothbrush, toothpaste, dentifrice
6	Hygiene Products	Shave lotion, douche
7	Hygiene Implements	Fountain syringe, shaving razor
8	Health Products	Medicines, remedies
9	Health Implements	Dropper, syringe
10	Bathing	Soap, wash tub
11	Household Cleaning Products	Bleach, ammonia
12	Household Cleaning Implements	Cleaning brush, broom

The categories were arranged according to function and an arbitrary numbering system was assigned for efficiency in the site-specific artifact analyses. Notions of health, hygiene, cleanliness, and beauty had close ties to each other, especially during an era when outward appearance was seen by some as a reflection of moral character (e.g. Cogdell 2004:52-53). However, Merriam-Webster (2014) dictionary definitions are used here to differentiate the categories below. “Health” is defined as well and free of disease in the body and mind.

“Hygiene” is described as the practices conducive to health, and “cosmetic” as something done to improve appearance.

Both of the “Household Cleaning” categories underscore the importance of the changing landscape of the American home, including the manufacture of an interior germ-free environment (Clark 1986:141-170). The “Multipurpose” category defines products manufactured specifically to serve a variety of functions. Antiseptics, for example, represent one of the key multipurpose products of the era, and were meant to fulfill a diversity of needs from the cleaning of one’s kitchen to use as a vaginal douche (Hall 2008; Marchland 1985). Soaps and cleansers, while preserving poorly in the archaeological record, leave a rich legacy of product advertisement which is integral to discussions of the SHM (e.g. Smith 2007; Vinikas 1992).

Approaches to the Artifact Analysis

When possible, the physical artifact assemblages of the sites were reviewed in person. This included the collections associated with sites 5DV.5997 (Five Points), 5DV.12345 (Capitol Hill), 5AH.916 (Adelia Wells homestead), and 5AH.648 (Harry Jackson homestead). The final reports for sites 5ME.6825 (Orr Osborn homestead) and 5ME.6826 (Stitz Place) included detailed artifact analyses which allowed for their inclusion in the data set. In some cases, these records served in place of collections which had been returned to land owners following the documentation of the artifact assemblages (Alpine Archaeology, personal communication 2014).

In order to examine the period during which the material cultural associated with the SHM began to appear in rural regions and urban centers, dates of manufacture for diagnostic SHM-associated artifacts were assessed. As the diagnostic data present on most artifacts only allows for an assessment of the time frame in which they were produced rather than a specific

year, those date ranges were clearly documented so that an assessment could be made regarding the temporal association of those products with the early appearances of the SHM ideology at the selected sites. Tables listing detailed diagnostic information (Table 10, Table 11, Table 12, Table 13, Table 14, and Table 15) and the sources used to determine manufacturing data ranges (Table 16) are presented in the appendix.

Since all sites in the sample were previously excavated, the reports on the excavations provided valuable data on the diagnostic artifacts uncovered. However, as new research continually enhances our knowledge of the past, the dating of artifacts also utilized independent research on brands and maker's marks, the physical properties of artifacts, and manufacturing methods in order to achieve the most contemporary understanding of the artifacts' date ranges. In most cases, maker's marks and brand information were used exclusively for dating as manufacturing methods on types of containers typically provides only a broad timeframe. Examples of sources used include the Intermountain Antiquities Computer System (2001), the Society for Historical Archaeology's Historic Glass Bottle Identification and Information website (Lindsey 2014), David Whitten's (2014) Glass Bottle Marks website, private collector's research, and academic research.

When fragmented artifacts of similar material, color, and/or decoration were found in the same unit, they were analyzed in order to produce a minimum number of items. For example, in the Trench fill excavated from site 5DV.5997, an embossed fragment of an amber-colored medicine glass bottle was found. An amber-colored prescription bottle finish was also found in the same trench fill. In order to maintain a conservative approach to the artifact analysis, these fragments were presented as possibly representing one bottle, rather than two separate bottles.

Prescription bottle finishes were included in SHM-associated artifact lists for each site due to the high correlation of that finish type with health and hygiene glass containers. Patent bottle finishes were excluded from this analysis because, although the material record does exhibit a high correlation between patent medicines and bottles with patent finishes, bottles with patent finishes are also very commonly associated with food products, such as flavorings extracts.

This study utilizes both qualitative and quantitative methods to analyze the artifacts. The mean of each artifact's manufacturing date range was calculated. Using the minimum number of items represented by the SHM-associated artifacts in each assemblage, the mean manufacturing dates were averaged to obtain a mean manufacturing date for the SHM-associated artifact assemblage at each site. The standard deviation for each assemblage was then calculated. One standard deviation was used to determine the peak time range of SHM-related consumer activity at a site. The following sections list the SHM-associated artifacts from each site and present the results of the quantitative analyses. The results of the qualitative analyses will be presented in Chapter 6 along with more in-depth assessments of specific SHM-associated artifacts and artifact types.

5DV.5997, Five Points Neighborhood, Denver

Excavations at 5DV.5997 recovered a total of 2,691 artifacts (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999). The highest densities occurred in association with the foundation of the domestic structure (over 57% of the total assemblage), and in a unit which targeted an outbuilding northwest of the domestic structure (over 31%). Seven of the thirteen units and the trench yielded thirty-four artifacts associated with the SHM.

The formation processes for the units in which SHM-associated artifacts were recovered is as follows (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999). Thirteen SHM-associated artifacts were found in trench fill removed from the exterior of the home's foundation and could be associated with either refuse or activity related to the home's porch. Nine were found in unit 99N95E and two in unit 92N94E, both of which were associated with intact cellar deposits that were possibly stored. 96N94E yielded four SHM-related artifacts and represented a burn area/trash dump on the interior of the home's foundation. One SHM-related artifact was recovered from unit 92N92E, which was associated with activity on the home's porch. Both units 101N84E and 101N85E investigated the remains of a storage shed. Combined, the two units had four SHM-associated artifacts. 87N97E, which had one SHM-associated artifact, functioned as a place for dumping and incinerating trash.

The following table indicates the artifacts that were identified as having a possible association with the ideology of the SHM. For the purpose of this table, artifacts were grouped according to SHM artifact category. The minimum number of items (MNI) is presented. The total number of fragments represented by each artifact type in the table is also included as this number will be necessary for determining the frequency of SHM-associated artifacts relative to total site assemblages in the subsequent chapter.

Table 3. SHM-Associated Artifacts, 5DV.5997

Object Description	QTY	MNI QTY	Date Range
Artifact Category 1: Multipurpose			
Vaseline jar with external thread finish	4	4	1890-1955
Artifact Category 3: Cosmetic Implements			
Nail buffer	1	1	
Hair comb fragments	2	1	
Artifact Category 4: Perfume			
Perfume bottle	1	1	

Perfume bottle	1	1	1865-1890
Colgate & Co. Perfumers bottle	1	1	1866-1928
Artifact Category 7: Hygiene Implements			
Fountain syringe vaginal pipe	1	1	
Artifact Category 8: Health Products			
Prescription bottle finish	7	6	
Medicine bottle with prescription finish	8	4	
Clear glass vial	5	3	
Huyck Pharmacy bottle fragment	1	1	1880-1889
Caldwell's Syrup Pepsin bottle	1	1	1889-1942
Dr. Kilmer's Swamp Root bottle	1	1	1879-1906
Dr. Jayne's Tonic Vermifuge bottle fragments	2	1	1851-1945
Parke Davis & Co. bottle	2	1	1871-1970
Sloan's Liniment bottle fragments	1	1	1871-1948
Piso's Cure bottle	1	1	1864-1904
Cuticura System of Curing Constitutional Humors bottle fragments	1	1	1878-1910
Omega Oil bottle	1	1	1890-1930
Artifact Category 9: Health Implements			
Syringe dropper	1	1	
Artifact Category 12: Household Cleaning Implements			
Cleaning brush with wood handle	1	1	

Of the thirty-four artifacts identified as having an association with the SHM, a total of fifteen had sufficient diagnostic attributes to determine a manufacturing date range (Figure 7). In order to investigate the earliest appearances of SHM-related consumer behaviors at the site, the dates of manufacture for the fifteen artifacts were examined. The mean date for all diagnostic SHM-related artifacts was approximately 1905, with a standard deviation of just over sixteen years. Based on known manufacturing dates, this places the peak activity for SHM-related consumer behaviors at this site to between 1889 and 1921. This number is both

consistent with the known date ranges of SHM reform activity in the United States and encompasses the known occupation of site 5DV.5997.

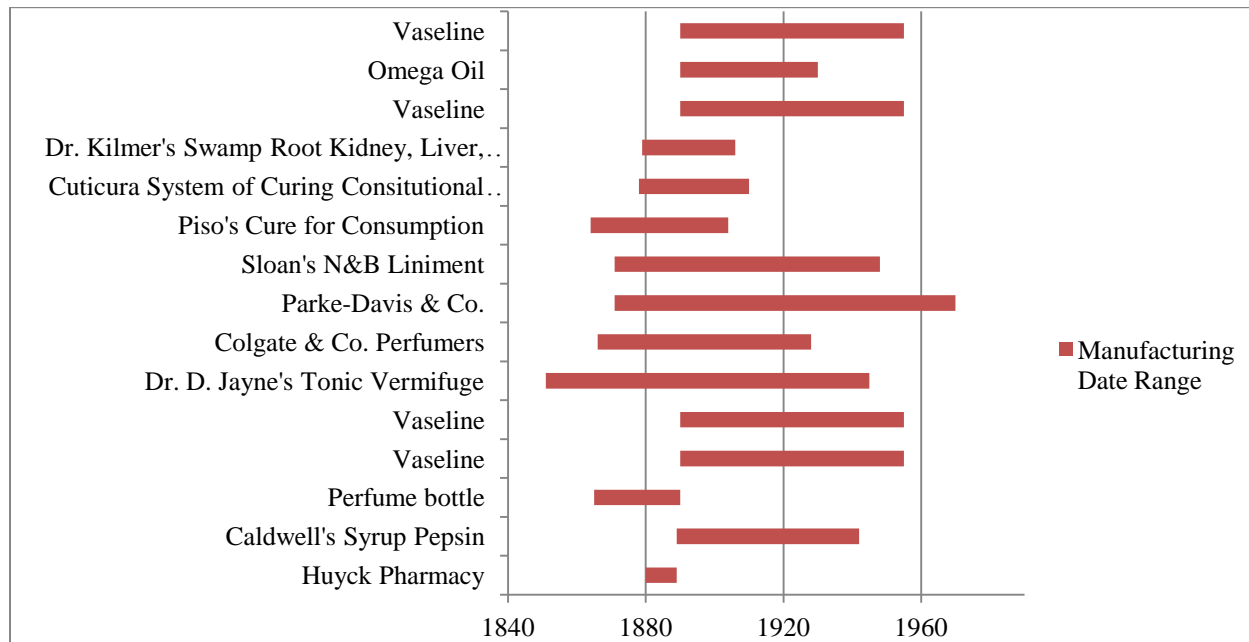


Figure 7. Manufacturing Date Range of Diagnostic SHM-Associated Artifacts, 5DV.5997

5DV.12345, Capitol Hill Neighborhood, Denver

The Phase II analysis of site 5DV.12345 lists 342 artifacts recovered from Structure 1.1 and fifty-eight from Structure 1.2. Both structures were the basements of residential unit 23, part of a seven-unit row house at the intersection of 12th Avenue and Broadway in the city of Denver. Mildred Yale occupied the unit from approximately 1926 to 1947 and used the cellars as storage. Unfortunately, nondiagnostic artifacts were culled from the assemblage during the second phase of analysis and the quantities were not recorded (Dominguez *at al.* 2010). Therefore, the total artifact count is unclear. The following table (Table 4) represents the SHM-associated artifacts identified in the assemblage of Structure 1, unit 23, from site 5DV.12345.

Table 4. SHM-Associated Artifacts, 5DV.12345

Object Description	QTY	MNI QTY	Date Range
Artifact Category 1: Multipurpose			
Zonite bottle with cap	1	1	1932-1942
Zonite bottle cap	1	1	1916-1955
Artifact Category 2: Cosmetic Products			
Tussy cosmetic jar	1	1	1925-1994
Artifact Category 3: Cosmetic Implements			
Hair comb fragment	1	1	
Artifact Category 4: Perfume			
Complete clear glass perfume bottle with cap	1	1	
Perfume bottle	3	3	
Ed Pinaud perfume bottle	1	1	1945- Present
Artifact Category 5: Dental Hygiene			
Tooth powder can	1	1	
Aluminum tooth powder container cap	1	1	
Pepsodent antiseptic bottle fragments	Unk	1	1933-1943
Pepsodent antiseptic bottle	1	1	1936-1946
Pepsodent antiseptic bottle	1	1	1942
Listerine bottle	2	2	1915-1955
Artifact Category 6: Hygiene Products			
Shaving lotion bottle	1	1	1932-1942
Letheric bottle	2	2	1875- Present
Artifact Category 7: Hygiene Implements			
Fountain syringe vaginal pipe	1	1	
Artifact Category 8: Health Products			
Medicine bottle with external thread finish	1	1	
Medicine bottle with prescription finish	1	1	
Medicine bottle with dram scale	3	1	1936-1946
Hynson, Westcott, Dunning medicine	1	1	1901-1959
Pertussan bottle	1	1	1941
Mentholatum jar	3	3	1889-1988

Mentholatum jar	1	1	1902-1964
Vicks Nose Drops bottle	1	1	1931-1975
Vicks Vatronol bottle	2	2	1931-1959
Blue glass medicine bottle	2	2	1916-1970
Amber glass medicine bottle with metal cap	1	1	1894-1978
Vitamin bottle	1	1	1915-1980
Artifact Category 9: Health Implements			
Medicine dropper	1	1	
Artifact Category 10: Bathing			
Complete clear glass soap dish	2	1	
Artifact Category 11: Household Cleaning Products			
Hilex bleach bottle fragment	1	1	1927- Present
Hilex bleach bottle fragment	2	2	1934-1944

Of the forty-one artifacts associated with the SHM, the manufacturing date range for twenty-nine was ascertained (Figure 8). The mean date for the diagnostic artifacts was approximately 1943, with a standard deviation of 10.15 years. This places the peak activity for consumer behaviors at this site to between 1933 and 1953. This peak activity is generally consistent with the occupation by Mildred Yale, which spanned from about 1925 to 1948. Limitations imposed by broad manufacturing date ranges may account for the slight variation between peak SHM-related consumer behavior and the occupation dates. Furthermore, while these dates exist outside of the timeframe of the SHM, the data supports the assumption that Progressive Era reform efforts impacted American ideals concerning health, hygiene, and beauty, and that those ideals continued to influence consumer behaviors well after the formal movement itself ended.

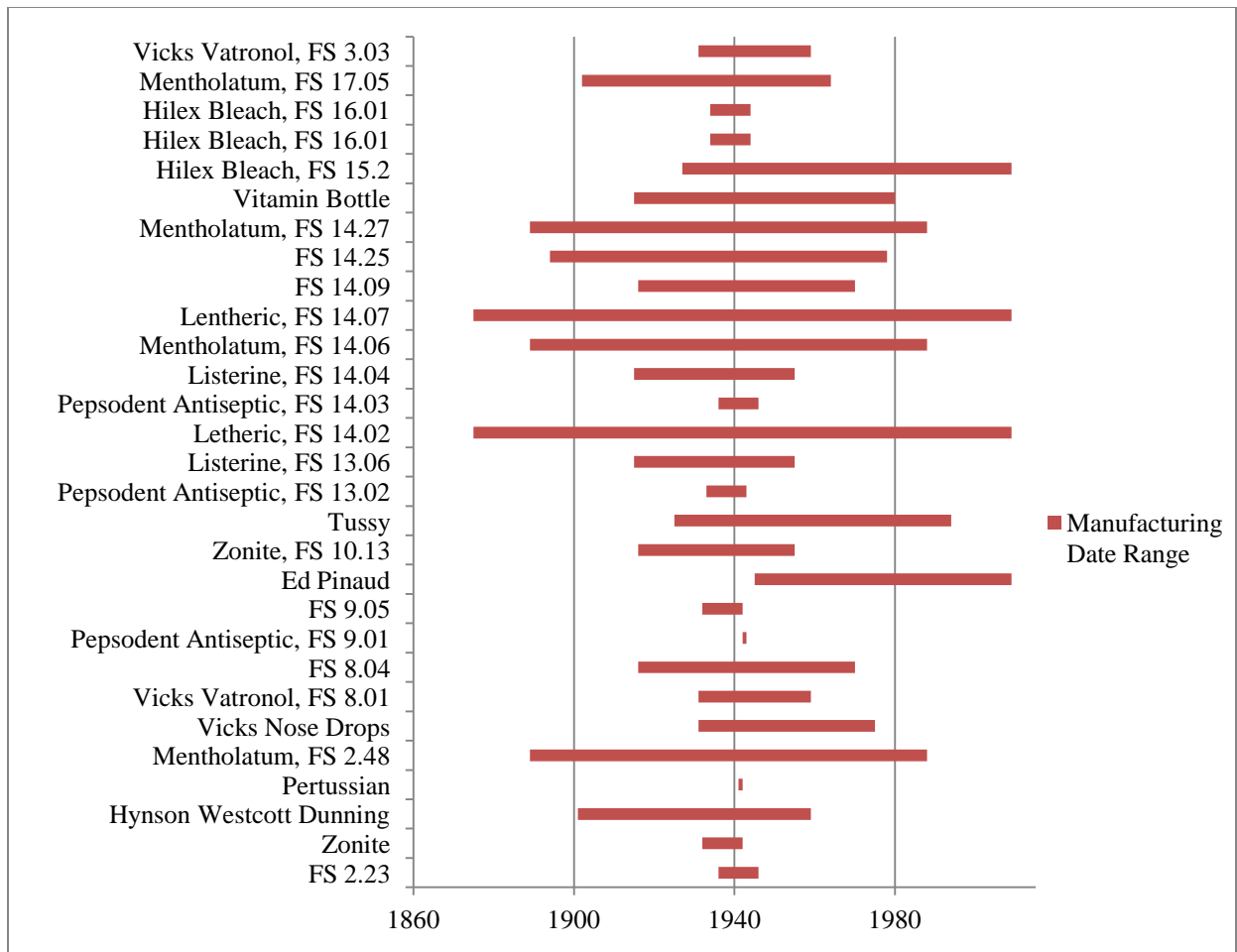


Figure 8. Manufacturing Date Range of Diagnostic SHM-Associated Artifacts, 5DV.12345

5AH.916, Adelia Wells Homestead

The archaeological investigations at site 5AH.916 in 1997 and 1998 recovered a combined total of 25,986 individual artifacts (Stone 1999). Of that number, thirty artifacts were associated with health and hygiene related activities. Archaeological investigations recovered nearly equal numbers of SHM-related artifacts from the midden near the kitchen (15) as from the detached kitchen/root cellar/dugout structure (14). Only one SHM-related artifact was found in association with the house’s foundation. The following table (Table 5) presents the SHM-associated artifacts from the Adelia Wells Homestead, site 5AH.916.

Table 5. SHM-Associated Artifacts, 5DV.916

Object Description	Qty	MNI Qty	Date Range
Artifact Category 1: Multipurpose			
Vaseline bottle with patent finish	14	3	1880-1900
Artifact Category 3: Cosmetic Implements			
Hair comb fragment	2	2	
Artifact Category 4: Perfume			
Perfume vial fragments with patent finish	3	2	
Perfume vial fragment with prescription finish	1	1	
Artifact Category 8: Health Products			
Fragments of medicine bottle with prescription finish	25	4	
Medicine bottle with prescription finish	4	3	
Blue medicine bottle fragments	3	1	
Clear prescription bottle fragment	1	1	
Prescription bottle finish	2	2	
Aqua glass vial fragments	1	1	
Clear glass vial with patent finish	7	5	
Ayers Cherry Pectoral bottle fragments	4	1	1847-1950
Steinhauer & Walbrach bottle	3	1	1860-1899
Spavin Cure bottle	8	1	1870-1906
Syrup of Figs bottle	10	1	1880-1970
Artifact Category 12: Household Cleaning Implements			
Pioneer Pottery Works chamber pot	1	1	1885-1896

At the Adelia Wells homestead, of the thirty artifacts associated with health and hygiene, only eight had a known manufacturing date range (Figure 9). The mean date for the diagnostic artifacts was approximately 1894, with a standard deviation of 13.6 years. Thus, the peak of health and hygiene consumer activities at 5AH.916 dates to between 1880 and 1908. The beginning of the peak SHM activity at the site predates the known occupation of the Adelia

Wells homestead. The possible reasons for this will be discussed in greater detail in the following chapter.

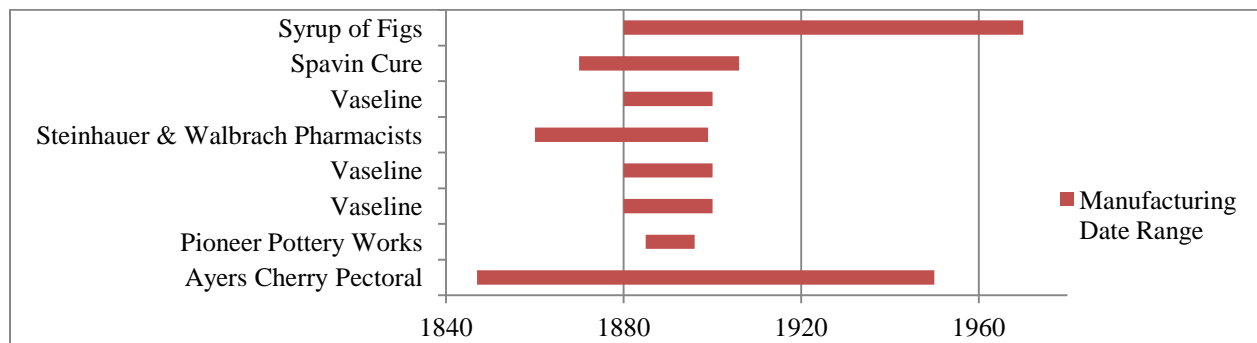


Figure 9. Manufacturing Date Range of Diagnostic SHM-Associated Artifacts, 5AH.916

5AH.648, Harry Jackson Homestead

Surface collection and test pits at site 5AH.648 recovered 8,761 artifacts 3,077 of which resulted from excavations (Stone 1999). High concentrations of window glass were recovered, in addition to toys, and horse tack equipment. None of the ceramics exhibited maker's marks, but an analysis of bottle manufacturing attributes supports Stone's (1999) conclusion that the site was likely occupied by unknown tenant farmers after the Jackson's sold the homestead in 1898.

Of the 8,761 artifacts, only five were determined to possibly be SHM-related (**Error! Reference source not found.**). Of those five, only two had sufficient data to determine a manufacturing date range. Additionally, one metal cap was found with "Rumford" labeled on the top. Rumford Chemical Works was established in 1855 (Gabriel 2014). Starting in 1868, the company produced a phosphate of lime which it marketed in medical journals as a preparation to assist with a variety of ailments, including dyspepsia and mental exhaustion. However, Rumford Chemical Works also produced a wide variety of other products including cream of tartar, baking powder, and yeast powder. For that reason, this artifact was not included in the analysis.

Table 6. SHM-Associated Artifacts, 5AH.648

Object Description	Qty	MNI Qty	Date Range
Artifact Category 1: Multipurpose			
Vaseline jar cap	1	1	1890-1955
Artifact Category 3: Cosmetic Implements			
Hair comb fragment	1	1	
Artifact Category 8: Health Products			
Prescription bottle finish	2	2	
Castoria bottle	2	1	1906-1955

The sample is too small to make any broad conclusions and only one of the two artifacts for which a date range can be established can possibly be attributed to the time period that the Jackson family occupation of the site. Probably deposited by a tenant farmer residing on the land after the Jackson family sold the homestead, the one other artifact has manufacturing dates which place it outside of the time of the Jackson family's residence at the site. That artifact skews the statistical results away from the known peak occupation of the site. Based on the limited data available, the mean date of SHM-associated artifacts would be 1927. A standard deviation of 5.7 years would place the peak between 1921 and 1933. As previously stated, the lack of SHM-related artifacts at the Harry Jackson homestead that are attributable to the Jackson family could be the result of sampling methods. Other possible factors will be discussed further in the following chapter.

5ME.6825, Orr Osborn Homestead

The archaeological work conducted at the Orr Osborn homestead in 1997 resulted in the investigation of an assemblage of 3,751 artifacts. This examination resulted from a combination of excavation and in situ analysis (Horn 2001a). Nineteen of the 3,751 artifacts have been identified as having a relation to the SHM (Table 7). Although the majority of the artifacts came

from surface deposits, SHM-associated artifacts were represented in all areas of the site under analysis. The artifacts are listed in Table 7 in the order they are discussed in Horn's (2001a) final report.

Included in the assemblage, but not the following list of SHM-associated artifacts, was a clear glass side panel of a W.T. Rawleigh Company bottle (Horn 2001a). The W.T. Rawleigh Company operated from approximately 1889 to 1989, and manufactured cleaning products, ointments, and medicines (Whitten 2013). However, they also produced flavoring extracts. The fragmented nature of the artifact does not allow for determination as to the original contents of the bottle, and therefore, is not included in the following analysis.

Table 7. SHM-Associated Artifacts, 5ME.6825

Object Description	Qty	MNI Qty	Date Range
Artifact Category 1: Multipurpose			
Five gallon galvanized wash tub	1	1	
Red Seal lye can	1	1	1883-1950
Pennsylvania Salt Mfg Co. can	6	1	1850-1957
Artifact Category 5: Dental Hygiene			
Listerine bottle	1	1	1916-1929
Artifact Category 7: Hygiene Implements			
Double-edged steel shaving razor blade	1	1	
Artifact Category 8: Health Products			
Pill bottle	1	1	
Medicine bottle with dram scale	8	1	1930
Mentholatum jar	1	1	1905-1988
R.V. Pierce bottle	1	1	1905-1939
Prescription bottle	14	1	1929-1954
Health Products Corporation bottle	4	2	1920-1959
Medicine bottle	1	1	1911-1926
Artifact Category 10: Bathing			
Shower curtain ring	1	1	

Artifact Category 11: Household Cleaning Products			
Purex bottle (possible)	30	1	
Clorox bottle	1	1	1931-1962
Sunbright Cleanser can	1	1	1915-1934
Old Dutch Cleanser can	1	1	1905-1934
J.B. Ford Co. cleanser can	1	1	1898-1942

Fourteen of the nineteen artifacts had a known manufacturing date range (Figure 10). The diagnostic artifacts had a mean date of about 1928. The standard deviation of 12.93 years places the peak activity for health- and hygiene-related consumer behaviors at this site to between 1915 and 1941. These dates nearly perfectly reflect the period of time that the Osborn family occupied site 5ME.6825, and may suggest that the Osborns came to the site with pre-established ideas of health, hygiene, and cleanliness.

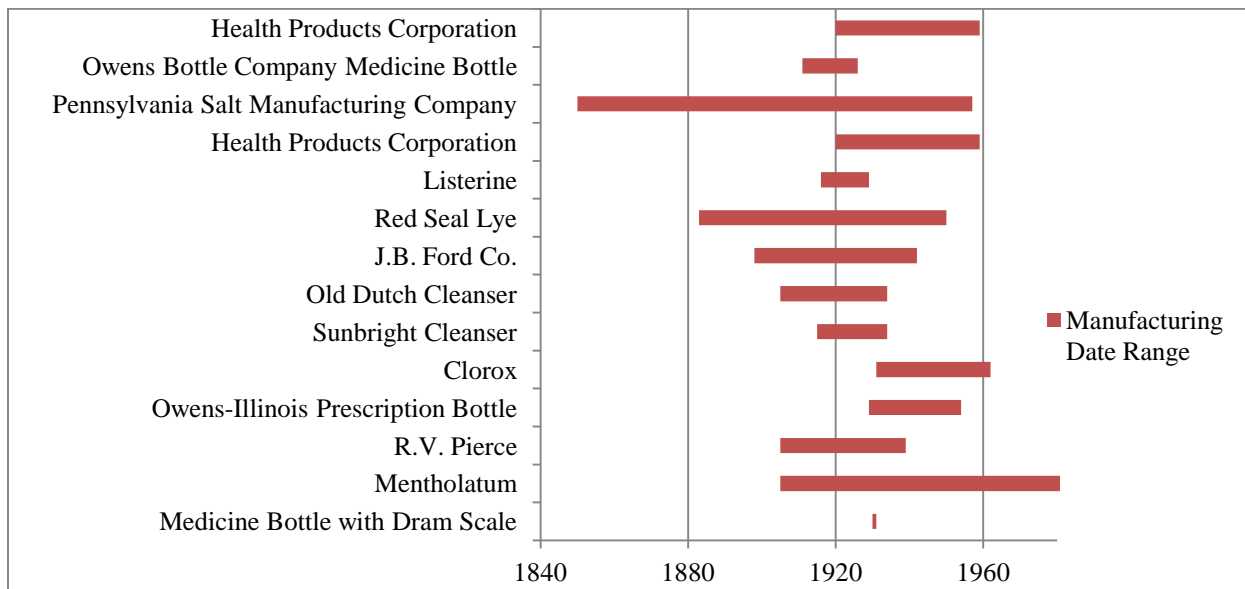


Figure 10. Manufacturing Date Range of Diagnostic SHM-Associated Artifacts, 5ME.6825 5ME.6826, Stitz Place

Archaeological investigations at site 5ME.6826 recovered 5,447 total artifacts (Horn 2001b). Over 1,300 of those artifacts fell under the footwear category. Window glass, lantern

glass, and chimney lamp glass was also recovered in notable quantities. Ceramics were primarily undecorated and representative of the most versatile forms of dishware rather than a variety of specific shapes. However, only three artifacts were found to have an association with health and hygiene activities (Table 8). These artifacts are listed in the order in which Horn (2001b) discusses them in his final report on the investigations at the site.

Feature 1 was the only excavated unit of the site to reveal SHM-associated items. Based on the limited data available, the mean date of SHM-associated artifacts is 1913. With a standard deviation of 1.4 years, the peak SHM-associated consumer activity at the site ranges between 1912 and 1914. As members of the Stitz family were the only occupants on record for site 5ME.6826, it is not surprising that these dates are consistent with the site's known occupation.

Table 8. SHM-Associated Artifacts, 5ME.6826

Object Description	Qty	MNI Qty	Date Range
Artifact Category 5: Dental Hygiene			
Dr. E.L. Graves tooth powder can	1	1	1904-1920
Artifact Category 8: Health Products			
Bottle stopper with embossed medical crosses	2	1	
Dr. King's New Life Pills bottle	11	1	1880-1948

Summary

The archaeological data reveals considerable variation in the quantity of SHM-associated consumer products present at each of the six sites in the sample. Each site also has a variety of different artifact types in its assemblage. Statistical analyses of such eclectic artifact collections means that results can be influenced by a variety of variables including limitations to known product manufacturing dates, small sample sizes, and the different use-lives of artifacts. It is

important to keep those variables in mind when assessing the data. In this study, as in many historical archaeological investigations, it is imperative to consider that calculations based on the manufacturing dates of artifacts are always limited by the current knowledge available about those products and the companies that produced them (Table 16, Appendix II). Where information and currently-available research is limited, the manufacturing date range can be broad and more reflective of the life span of a company or a particular brand than the actual time that the product was likely used at a particular site. Moreover, when the sample size is small, data for a single item can have a great impact on statistical analyses. For example, the SHM-associated artifact assemblage of Stitz Place (5ME.6826) contains three artifacts and only two of those artifacts exhibit diagnostic information that allows for dates of manufacture to be determined. In that instance, a single artifact's manufacturing date range can significantly influence interpretations of the assemblage. It is also crucial to understand that the use-life of an artifact (e.g. Schiffer 1987) has implications on the formation of an artifact assemblage, as the use-life is directly related to the rate at which an artifact is discarded. A wash tub, for example, may be in use for many years while the contents of a bottle of medicine may only be present for a few days before being completely consumed. Finally, in the case of this study, one must take into account that not all ideological concerns of the SHM occurred at once. Anxiety about health and sanitation occurred well before dental hygiene became a part of the average American's daily routine.

In spite of the variables that can influence the results of a quantitative analysis of SHM-associated artifacts, there is validity in addressing all of the components of the SHM as one complex social phenomenon. Analyzing a sample of artifacts with different use-lives can bias the data, but isolating a single artifact type for the purpose of statistical analyses in this study

would significantly depress the sample size. It would also detract from an attempt to assess the scope of artifacts associated with the ideals of the SHM. Examining the movement from the perspective of a single concern that fueled it, such as looking only at medicine bottles to understand the growing concern with health and maintaining a healthy appearance, fails to take into account the very important roles that household cleanliness, sex hygiene, dental hygiene, and beauty also played in the SHM.

The following chapter will compare the SHM-associated artifacts of the six sites in the data set. Fortunately, in the case of this study many of the artifacts that probably had longer use-lives, such as the fountain syringe vaginal pipe and hair comb fragments, do not have known dates of manufacture and do not factor into manufacturing date range or peak SHM-associated consumer activity statistical analyses. Those artifacts, however, are included in an assessment of the diversity of SHM artifact categories present at each site. Therefore, the fact that some types of artifacts will likely appear in lesser quantities than those with a shorter use-life should be kept in mind when considering that data. Further qualitative consideration will also be given to some of the prevalent artifacts and artifact types from the sites in the study to provide a greater depth of understanding about the different ways some of the artifacts may have been used, the discourse utilized in the marketing of these products, and the possible social meanings associated with the artifacts and their use. Finally, Chapter 6 will strive to bring together all the analytical methods employed throughout this project in order to determine if artifacts related to the SHM appear at rural sites later than at urban sites and if differences exist in the consumer behaviors of rural site inhabitants relative to urban residents

CHAPTER 6: CONSUMING IDEALS

The data presented in the previous chapter suggests that differences do exist between rural and urban SHM-associated artifact assemblages. The presence of SHM-related artifacts at both rural and urban sites confirms Mark Groover's (2008) argument that the material record can provide important information about large cultural trends in the United States, and also substantiates his claim that household demographics have the ability to greatly impact the way people experience those trends. To facilitate a better understanding of the possible causes for observed variations in the assemblages of the six sites in this study, this chapter will synthesize the quantitative, qualitative, and contextual information to illuminate the ways in which the ideology of the SHM may have impacted the consumer behavior of people living in different social and geographical contexts. The resulting analysis will show that the rural residents of Colorado did have the ability to access the products associated with the SHM, had an awareness of the ideals and standards to which the SHM and CLM reformers wished them to abide, but used their purchasing power to resist some aspects of SHM ideology while adapting other aspects to fit their practical needs and cultural values. Finally, a discussion of rural identity, not as a homogeneous shared experience of rural life, but as a system of values which arose to contest urban accusations of uncivilized rural lifeways, provides a way to conceptualize the rural cultural ideals that influenced SHM-associated consumer behavior in Colorado's countryside.

Quantitative Comparison of SHM-associated Artifact Assemblages

Conducting a quantitative comparison of the SHM-related artifacts from these sites is challenging, as the data set represents the work of multiple organizations, each with its own method of investigation. Furthermore, the limited time available to review artifact assemblages

prohibited a more thorough analysis of the minimum number of items represented in the collection. In instances where the author had the opportunity to conduct a first-hand examination of an assemblage, the resulting data were considered along with the inventories and interpretations of the artifacts by the organization which investigated the site in an effort to determine the minimum number of items present. In cases where the reports of the sites included in this study did not present sufficient information for interpreting an artifact or did not provide the figures required to produce statistical analyses of assemblages, as in the case of the Capitol Hill (5DV.12345) assemblage which lacks a total artifact count, those data are excluded from quantitative comparisons.

The impact of small sample sizes and the limitations of known product manufacturing dates on the analysis of SHM-associated products should also factor into considerations of the data. Unfortunately, not all container and product manufacturers throughout history have been as kind to historical archaeologists as the Owens-Illinois Glass Company. While the bases of their bottles often include plant numbers and date codes (Lockhart 2004), most artifacts in this study provided only enough clues to discern a manufacturing date range. Based on currently available information, those date ranges can be broad.

Relative Frequency of SHM-associated Artifacts

To try and gain a better understanding of the onset and development of consumer behavior related to the growing American concern with health, hygiene, and cleanliness at SHM-era Colorado sites, a mean was obtained for the known manufacture date of all temporally-diagnostic artifacts in this study. The mean of the manufacturing date range for each SHM-associated artifact was averaged to obtain a mean date for each site's SHM assemblage as a whole. That data was used to calculate the amount of variation that exists between the average

manufacturing dates and each site's mean date using the standard deviation formula. One standard deviation from the mean provided the peak period of SHM consumer activity for each site. Table 16 presents the results, along with relevant site occupation and artifact assemblage information from the original project reports.

Table 9. Frequency of SHM-associated Artifacts and Site Data Comparison

Site	Qty of SHM Artifacts	Qty of Temporally Diagnostic SHM Artifacts	Total Artifact Count	Occupation Range	Peak Occupation Range	Mean of Dates of Mfg.	Peak SHM Consumer Activity
Five Points, 5DV.5997	34	15	2,691	1887-1910	1893-1910	1905	1889-1921
Capitol Hill, 5DV.12345	42	29	Unknown	1890-1948	1925-1948	1943	1933-1953
Adelia Wells, 5AH.916	30	8	25,986	1890-1938	1890-1900	1894	1880-1908
Harry Jackson, 5AH.648	5	2	8,761	1888-1938	1888-1898	1927	1921-1933
Orr Osborn, 5ME.6825	19	14	3,751	1907-1951	1915-1940	1928	1915-1941
Stitz Place, 5ME.6826	3	2	5,447	1900-1918	1900-1918	1913	1912-1914

** The occupation range and total artifact counts were obtained from data analyses and final reports prepared by the archaeologists that investigated the sites. The Peak Occupation Range references the time that the site was occupied by the principle residents of the site as addressed in Chapter 4. All other data is a result of the author's assessment. The Mean of Dates of Manufacture provides an average manufacture date for temporally-diagnostic artifacts based off of the MNI results. The Peak SHM Consumer activity is determined using one standard deviation from the mean manufacturing date.*

As predicted by historical research (e.g. Hoy 1995; Hunt 1999), SHM-era urban sites do appear to have larger quantities of artifacts related to health, hygiene, and cleanliness relative to the total quantity of artifacts. It is impossible to ignore that the residents of 5DV.5997 (Five Points) and 5DV.12345 (Capitol Hill) had to do little more than walk out their front door to gain

access to consumer products related to the SHM (Figure 1 and Figure 2). However, the spatial and contextual analyses in Chapter 4 show that rural sites were not isolated from the national market. The artifact assemblages provide further proof that the occupants of the rural sites in this study participated in the national market. For example, the SHM-associated artifacts from the Adelia Wells homestead (Table 5) reveal an assemblage containing products that traveled to the homestead from as far away as Vermont in the east and California in the west. Even the Stitz family, whose socioeconomic status may have impacted their consumer behaviors, had non-SHM artifacts in their assemblage that came from as far away as Massachusetts, Pennsylvania, and California (Horn 2001b:38-42). The fact that SHM-associated products appear at each SHM-era archaeological site in this study suggests that the ideals associated with the movement did reach rural residents and did impact their consumer choices, and that accessibility to the national market is not the primary cause for smaller quantities of SHM-associated artifacts at rural relative to urban sites.

The frequency of SHM-associated artifacts, relative to the total artifact assemblage from each site, holds the potential to further illuminate the differences in urban and rural SHM-related consumer behaviors. Unfortunately, the total artifact count for the excavations of Structure 1 (unit 23) at the Capitol Hill site (5DV.12345) is unknown. The final report only addressed the quantity of individual objects and not the quantity of the artifact lots (Dominguez et al. 2010). Therefore, a comparative analysis of the relative frequency of SHM-associated artifacts at site 5DV.12345 with other Colorado sites will not be possible.

SHM artifact frequencies were calculated for other sites in the data set and are reported in Figure 11. Similar to the SHM artifact counts, the relative frequency of SHM-associated artifacts at urban site 5DV.5997 (Five Points) is more than double that of the highest recorded

frequency of SHM-associated artifacts at a rural site (Orr Osborn homestead, 5ME.6825). The two lowest frequencies, each with a SHM-associated artifact assemblage representing a mere 0.06% of all artifacts, came from sites 5AH.648 (Harry Jackson homestead) and 5AH.6826 (Stitz Place). It is worth noting that the inhabitants of both sites represent recent immigrants to the United States. The Jackson family (5AH.648) had immigrated only two years before taking entrant on the homestead in Arapahoe County, Colorado (Stone 1999). Likewise, although

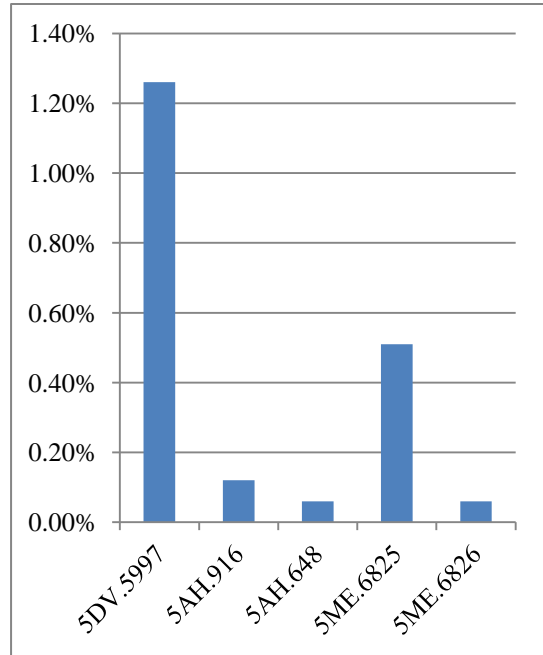


Figure 11. Relative Frequency of SHM-associated Artifacts

Anna Stitz (5ME.6826) was a first generation American citizen, her husband, Karl, gained his citizenship just the year before they took up residence at site 5ME.6826 (Horn 2001b).

While the artifact counts and frequencies do support the theory that SHM reform activity, at least initially, focused on urban regions of the United States, the peak SHM-associated consumer activity and the mean date of manufacture for SHM-associated products at urban and rural sites does not support that data. Table 9 shows that, with the exception of the Harry Jackson homestead, the mean date of manufacture and the peak SHM-related consumer activity appears just as consistent with the known occupation of rural sites as it does with urban sites. In all instances but the Harry Jackson homestead, the peak SHM-associated consumer activity also closely corresponds to the principle occupants of the sites as discussed in Chapter 4. Contrary to the belief of SHM reformers, this suggests that rural site residents were not unaware of the growing American concern with health, hygiene, and cleanliness.

A Growing Assortment of Consumer Goods

Each of the sites within the data set exhibit considerable variation in the diversity of SHM-associated artifact categories present in their assemblages (Figure 12). Sites 5DV.12345 (Capitol Hill) and 5DV.5997 (Five Points) both have more SHM-associated artifact categories represented in their assemblages than any of the rural sites in the study. Both of the sites also have more SHM-associated artifacts, which probably accounts for some of the increase in artifact category diversity. The archaeological evidence also indicates that there is an increase in this diversity through time in both urban and rural contexts. This is congruent with the work of many historians (e.g. Hoy 1995; Sivulka 1998, 2001) who note an expansion of health and hygiene product diversity and frequency over time as American consumer culture grew in popularity. With a thirty-three year difference between the final resident's first occupation of the sites, the assemblage of 5DV.12345 has twenty-four percent more SHM-associated artifacts than earlier site 5DV.5997, but showed a fifty-seven percent increase in SHM artifact categories. Unfortunately, without the total number of artifacts available for site 5DV.12345, it is impossible to know the degree to which sample size may influence these results.

One could argue that the differences in the variety of artifact types among the sites in the study may be the direct result of dissimilar socioeconomic conditions of the households, and that this may complicate interpretations of diversity growth over the course of the SHM. However, the data suggests that socioeconomic status may not have been a primary factor in SHM-related purchasing. For example, both the Five Points Site (5DV.5997) and the Adelia Wells homestead (5AH.916) were occupied during the early part of the SHM and the excavated deposits both represent cellar storage and midden debris, however the Wells family is perceived to have been more financially well off than the Nelson family, but the Wells homestead has less diversity and

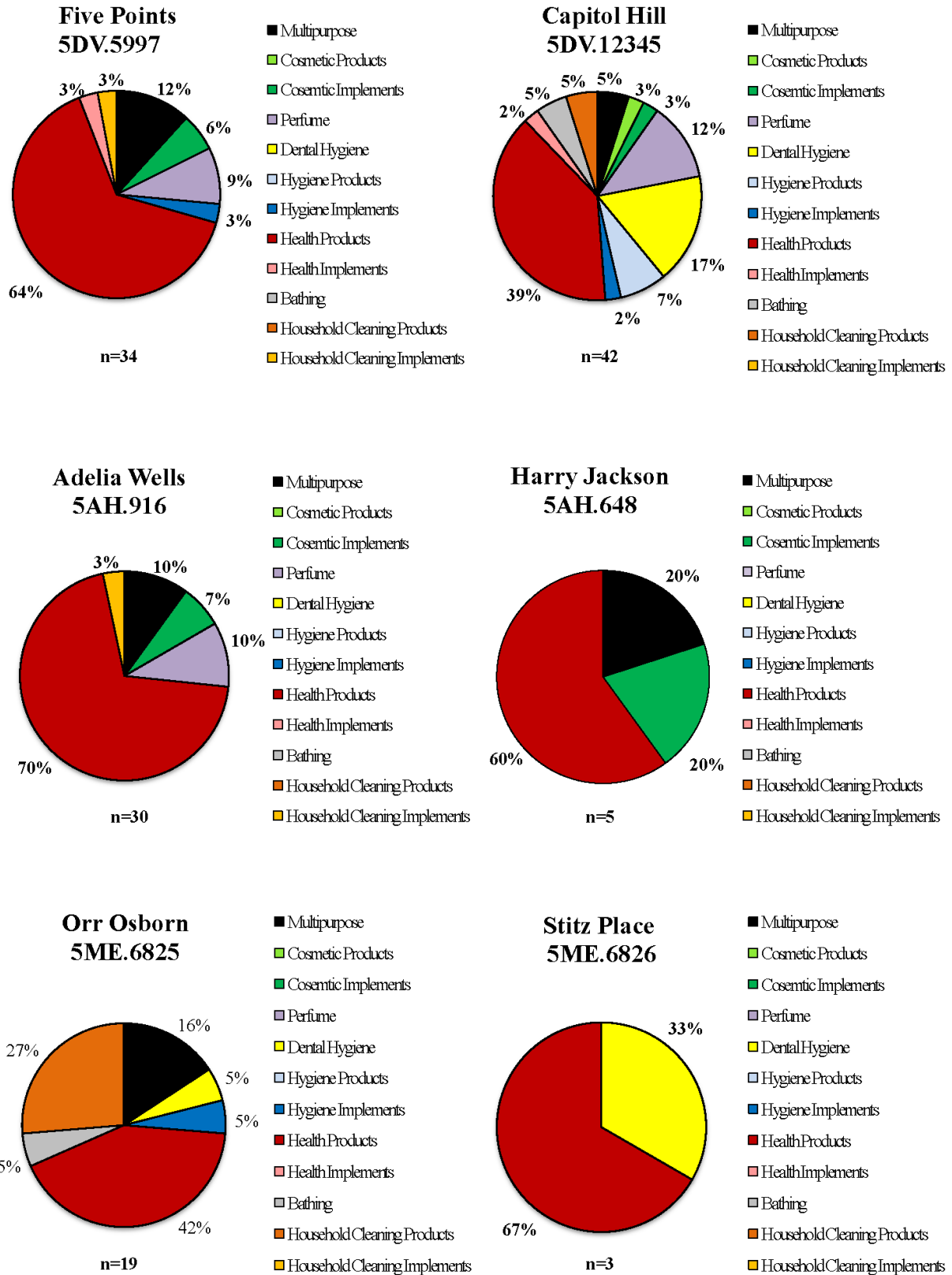


Figure 12. Frequency of SHM-associated Artifact Categories by Site

a significantly lower relative frequency of SHM-related consumer goods. Additionally, the temporal pattern of increasing SHM-associated artifact diversity also seems to hold true for sites whose residents had similar socioeconomic statuses. The Adelia Wells homestead (5AH.916) and the Orr Osborn homestead (5ME.6825), were both situated in rural regions of Colorado, the residents of both sites came from families representing multiple generations of United States citizenship, and both were viewed as financially well off (Stone 2000; Horn 2001a). With a ten year difference between the time that the Wells family likely left their homestead and the time that the Osborn family took entrant on theirs, the SHM-associated artifact category diversity increased by twenty percent and the relative frequency of SHM-associated artifacts in the assemblages increased from 0.12% (5AH.916) to 0.51% (5ME.6825).

Of the SHM-associated artifact categories evidenced in the archaeological assemblages of the sites in the data set, health-related products had the highest frequency at each site. Frequencies ranged from thirty-nine to seventy percent of the total SHM-associated artifacts. No differences were found with regard to the relative frequency of health products for households that included children compared to those that did not have record of children, nor is there an evident pattern for rural relative to urban sites. Families that had recently immigrated had similar relative frequencies of health products in their archaeological assemblages as those that came from families that had been in the United States for generations. Additionally, socioeconomic status did not seem to greatly impact the relative frequency of health-related products found at sites.

Overwhelmingly, diagnostic health-related artifacts revealed a tendency for site residents to purchase over-the-counter treatments, as opposed to prescribed medications obtained from a pharmacist. Only sites 5DV.5997 (Five Points) and 5AH.916 (Adelia Wells), contained

evidence of prescribed medication. 5DV.5997 had one bottle from Huyck Pharmacy, located on 307 Colfax Avenue in Denver according to the 1881 directory (Corbett and Ballenger 1881). 5AH.916 yielded one bottle from Steinhauer & Walbrach Pharmacists in Denver. The 1895 city directory lists the pharmacy as having two locations, one at 1414 15th Street and one at 1539 Larimer Street (Ballenger and Richards 1895). Consequently, were the Adelia Wells listed as living at 2020 Champa Street in the 1895 directory also the Adelia Wells of site 5AH.916, then her city apartment would have been located less than a mile away from either of the pharmacy's locations. Also of interest is the fact that the January 1897 *Denver Journal of Homeopathy* specifically lists Steinhauer & Walbrach as carrying "a full line of Boericke & Tafel's homeopathic medicines" (1897:157), and multiple vials suggestive of homeopathic containers were found in the Adelia Wells homestead artifact assemblage. The relationship between prescription, patent, and homeopathic treatments and medications will be discussed in more depth in the qualitative analysis.

Many historians (e.g. Jones 2010) focus on the period between World War I and World War II as a time when dental hygiene began to gain legitimacy as a profession in the United States and grow in popularity as a regular practice among Americans. The sites included in this study support that belief. The three sites for which the known occupation ends before the United States became involved in World War I (Five Points, Adelia Wells homestead, and Harry Jackson homestead) do not exhibit evidence of dental hygiene products, while those sites with later occupation dates do have dental hygiene artifacts. One noteworthy occurrence, however, is the presence of tooth powder at site 5ME.6826 (Stitz Place). As the site's occupants were interpreted as being at an economic disadvantage (Horn 2001b), their decision to purchase tooth powder with their limited funds, during a time when regular dental hygiene was only beginning

to become common, lends weight to the idea that, not only were hygiene discourses altering consumer behavior, but those discourses were reaching rural areas of the county.

Cosmetic products and implements appear at four of the six sites, with frequencies ranging from three to twenty percent of the SHM-associated assemblages. By far, the most common artifact type in this category was hair combs used for grooming. Two of the four sites were located in downtown Denver (Five Points and Capitol Hill), while the other two sites were the Adelia Wells (5AH.916) and the Harry Jackson (5AH.648) homesteads in Arapahoe County. Thus, the sites furthest from Colorado's urban areas were the sites which did not exhibit evidence of cosmetic products or implements.

Artifacts related to the maintenance of household cleanliness were found at four out of the six sites, with frequencies ranging from three to twenty-six percent. Site 5ME.6825, the Orr Osborn homestead, had the largest frequency and diversity of household cleaning artifacts. Additionally, one of the artifacts in the site's assemblage, Red Seal Lye, was categorized as a multipurpose artifact for its ability to serve a variety of functions. However, one of the most popular uses of lye, in addition to making soap, was as a household cleansing product and scrub (How We Cook in Los Angeles 1894:8). The two sites with no household cleaning implements and products were 5AH.648 (Harry Jackson homestead) and 5ME.6826 (Stitz Place), the sites with residents who had recently immigrated to the United States.

Artifacts assigned to the multipurpose category were found in the assemblages of five of the six sites, with frequencies ranging between five and twenty percent. With the exception of the Red Seal Lye from the Orr Osborn homestead, multipurpose artifacts were overwhelmingly represented by antiseptics and Vaseline products. The various ways in which these two products were intended by manufacturers to be used will be discussed in the qualitative analysis.

Perfume bottles appeared at half of the sites in the data set, with a fairly consistent frequency of nine to twelve percent of the SHM-associated assemblages. Two of the three sites with perfume bottles in their artifact assemblages were urban sites 5DV.5997 (Five Points) and 5DV.12345 (Capitol Hill). The one rural site with evidence of perfume use is 5AH.916, the Adelia Wells homestead, a site whose head of household may have lived in an urban setting part of the time.

Artifacts classified as hygiene products and implements were found at half of the sites, but in relatively low frequencies. A single shaving razor represented the only occurrence of a hygiene-related artifact at a rural site (Orr Osborn homestead, 5ME.6825). The two urban sites in the data set (5DV.5997 and 5DV.12345) had artifacts in this category. Similar to 5ME.6825, shaving products also occurred at site 5DV.12345. However, the SHM-associated artifact assemblages at both urban sites also included a vaginal pipe for a fountain syringe. This type of artifact, used as a douching implement, was not found at any of the rural sites in the data set. As an artifact with an important connection to SHM ideals, the qualitative analysis will present a more detailed discussion of fountain syringes and the products related to their use.

Summary

The quantitative analysis of the artifact assemblages included in this study in many ways supports the research of historians who investigate the SHM. Urban sites do exhibit more and a greater variety of SHM-associated artifacts, and health- and hygiene-related consumer activity does appear to increase throughout the period when SHM reform efforts were prevalent. However, by considering rural sites' SHM-related artifact assemblages relative to urban ones, a better understanding of the impact of the movement on rural residents of the United States can be achieved. A review of the artifacts at rural sites indicates that residents had access to SHM-

associated products, made the choice to purchase them, and thus, probably would have had an understanding of the ideals promoted by the SHM. Furthermore, as the mean date of manufacture and the peak SHM-associated consumer activity at each site suggests, a rural awareness of the emerging SHM standards likely occurred early on, and not at the delayed rate which one may assume when considering the rising concern SHM and CLM reformers had for transmitting health and hygiene ideals to America's countryside in the early 1900s (e.g. Ogden 1911:1; Woodward 1915). However, comparing the frequencies of the various SHM artifact categories present in each assemblage illuminates divergences in urban and rural consumer choices when engaging with the different types of products. The following qualitative analysis will further investigate the products themselves to better understand how they were used, how they were sold, and the history and discourse surrounding them.

Qualitative Analysis of SHM-associated Artifacts

The following section includes a brief artifact history for several SHM-associated consumer products and consumer product types. Advertisements from newspapers, magazines and catalogs were referenced to examine the discourse used in marketing campaigns and the ways that ads instructed consumers to use the products. Where applicable, institutional and other published discourse was incorporated to provide an enhanced understanding of the public knowledge of health, hygiene and consumer behaviors as they related to the products. As the range of SHM-associated artifacts, even amongst the six sites reviewed in this study, is too great to provide a summary of each product, those artifacts that appear at multiple sites comprise the central focus of this analysis.

Feminine Hygiene

“Every woman should possess a good two quart rubber douche bag called fountain syringe.” (Margaret Sanger 1917:8)

Women have vaginally douched for thousands of years (Vymazalová and Strouhal 2015).



**Figure 13. Goodyear Crown Syringe, 1895
Montgomery Ward & Co. Catalogue**

Yet, many researchers (e.g. Ferranti 2009; Peril 2002; Tone 1999) have noted how the historical context, medical discourse, and growth of mass marketing during the nineteenth and twentieth centuries in the United States led to the proliferation of the practice among American women for both hygiene and birth control. In many ways, the fountain syringe is emblematic of the social conflicts surrounding the ideals of the SHM. Although other SHM-associated products can also claim this distinction, the discourse regarding douching presents a useful tool for understanding the intrinsic ties between the SHM, socioeconomic class concerns, changing gender roles, and the growing power of the medical profession.

Today, historians and historical archaeologists find clues about the popularization of douching in America in publications, product advertisements, and the material record at historic sites in the United States. More specifically, the archaeological remains of fountain syringe pipes and antiseptic bottles provide evidence of the practice at late-nineteenth and early-twentieth century sites (e.g. Wall 2005; Morton 2014; Van Bueren and Wooten 2009; Yamin 2005). Vaginal pipes were often made of hard rubber (Montgomery Ward 2008:106; Sears, Roebuck and Company 2007:341), and antiseptics were commonly used as an ingredient in douching solutions (Morton 2014). Although antiseptics had a variety of uses, which will be

addressed in further detail later in this chapter, manufacturers undertook marketing campaigns that specifically highlighted antiseptic's application in feminine hygiene



Figure 14. Fountain Syringe Vaginal Pipe, 5DV.5997

during the period of the SHM (Hall 2008, 2013; Morton 2014; Peril 2002). Two of the most common brands of antiseptic included Zonite and Lysol (Morton 2014).

Before advertisements constructed a social concern with feeling “fresh,” physicians suggested douching as a means of contraception (Ferranti 2009; Morton 2014). In fact, Ferranti (2009) notes that douching as method of contraception was first suggested by Dr. Charles Knowlton in 1832, making it the first doctor-recommended form of birth control in the United States. It was the supposed health benefits of douching that allowed the practice to survive the prohibition of the sale of contraceptives by the Comstock laws of the 1870s and the ban placed on the dispensing of contraceptives and contraceptive advice by the American Medical Association until 1937 (Ferranti 2009; Morton 2014). Tone (1999) notes that advertising agencies exploited this to sell contraceptives under legal euphemisms like “feminine hygiene.”

The shift from health and hygiene as a private matter to a public discourse during the SHM placed women's reproduction on the national stage. Anglo-Americans, who perceived their population to be threatened by the influx of immigrants and the increasing movement of women into the public sphere, feared for the future of their race (Smith 1999). The fight against “race suicide,” as it was coined, found advocates in the highest ranks of American politics. In his 1906 State of the Union address, Theodore Roosevelt stated that, “willful sterility is, from the

standpoint of the nation, from the standpoint of the human race, the one sin for which the penalty is national death, race death” (Lovett 2009:92).

On the other hand, advertisers and activists capitalized on a changing social landscape, which included women’s rights movements and the rising cost of raising children, to urge women to use their purchasing power to take control of their reproductive system (Tone 1999). Eugenicist and advocate for female reproductive rights, Margaret Sanger, remains well known today for her multiple editions of *Family Limitation*, a pamphlet designed to educate working class women on pregnancy prevention (Jensen 1981).

“Of course, it is troublesome to get up to douche. . . But it is far more sordid to find yourself several years later burdened down with a half a dozen unwanted children, helpless, starved, shoddily clothed, dragging at your skirt, yourself a dragged out shadow of the woman you once were. . . Women of the working class, especially wage workers, should not have more than two children at most. . . It has been my experience that more children are not really wanted, but that women are compelled to have them either from lack of foresight or through ignorance of the hygiene of preventing conception. . . It is only the workers who are ignorant of the knowledge of how to prevent bringing children in the world to fill jails and hospitals, factories and mills, insane asylums and premature graves” (Sanger 1917:2-3).

The marketing surrounding douching and the consumer products associated with the practice relied heavily on medical and scientific discourse in advertising tactics. For example the Lehn & Fink Corporation’s 1930s advertisement series for the antiseptic Lysol, titled “Frank Talks by Eminent Women Physicians,” featured well-known doctors, such as Dr. Madeleine Lion (Tone 1999). In one ad, Lion is quoted as saying, “Surely in this question of correct marriage hygiene, the modern woman should accept only the facts of scientific research and medical experience. . . The woman who does demand such facts uses ‘Lysol’ faithfully in her ritual of personal antisepsis” (McCall’s 1932:87).

The act of douching was not all about contraception, however. Advertisements played on scientific advancements in relation to germ theory to discuss douching in terms of preventing disease (Morton 2014). Ferranti (2009) further argues that, as cleanliness became increasingly associated with gentility and social status, douching became a symbol of respectability. A 1917 publication for nurses claims that “a dainty woman gets much comfort mentally, as well as physically, if she is kept clean and free from odors” (Reed 1917:160). The pressure placed on women to be “dainty” only increased after the SHM era as advertisers of products such as Lysol and Zonite used scare tactics. For example, a 1948 Lysol ad pictures a distressed woman sitting on her couch while her husband walks out the door. The ad reads, “Why Does She Spend the Evenings Alone. . . Wives often lose the precious air of romance, doctors say, for lack of intimate daintiness dependent on effective douching” [Museum of Menstruation and Women’s Health 2000; emphasis in original].

The discourse surrounding douching as a contraceptive measure during the SHM was rife with contradictory messages. The use of medical authority to sell products related to douching may have endeavored to legitimize the practice during a period when Progressive rhetoric favored scientific and medical authority, but the medical community did not actually endorse douching as a birth control method (Tone 1999). Furthermore, while reformers like Margaret Sanger (1917) strongly advocated douching as a contraception method for working-class women, she and other eugenic-minded activists shied away from encouraging the practice for middle and upper class Anglo women for fear of discouraging reproduction among those seen as the most vital to the survival and proliferation of a mentally and physically superior race (Franks 2005). However, as many advertisers capitalized on the ties between cleanliness and gentility to

promote douching products, the ads targeted the very middle and upper class women considered to be symbols of respectability (Ferranti 2009).

The complexity of the discourse surrounding the practice of douching reveals much about the rapidly-changing social environment during the SHM, but today the fountain syringe vaginal pipes found in the archaeological assemblages of urban sites 5DV.5997 (Five Points) and 5DV.12345 (Capitol Hill) can only suggest the act of douching, but not the intention behind the act. Regardless, these artifacts evidence the growing popularity of a concern with feminine hygiene, a concern which has become so ingrained in American culture that between twenty and forty percent of women between the ages of fifteen and forty-four still do it in spite of the now-known associated health risks (Barclift 2012), making it all the more important to investigate the historical context and discourse which first motivated the wide-spread popularity of the practice.

Antiseptics

Antiseptics may have been a key ingredient in the preparation of douching solutions, but they could also serve a wide variety of functions in the realm of health, hygiene, cleanliness and beauty. One such advertisement in a 1913 (48) *Ladies Home Journal* used the dominant discourse of the medical profession while advertising Lysol's effectiveness as a home cleanser. "Better Than Carbolic Acid. . .Your physician will tell you how important it is to get real LYSOL, because it is the strongest, safest and cheapest preventative of disease for the family and home." The 1923 *Zonite Handbook on the Use of Antiseptics in the Home* listed a plethora of ways in which consumers could utilize their product, including for the treatment of pimples and wounds, for disinfecting



Figure 15. 1923 Zonite Handbook, author's personal collection

toothbrushes and children's toys, for cleaning one's hair and scalp, as an after shave, and even as a veterinary antiseptic. Of all the sites studied, only the Capitol Hill site (5DV.12345) yielded a bottle of antiseptic. Although this site's archaeological assemblage also included a fountain syringe pipe, the antiseptic itself could have been used for a variety of other SHM-related activities and practices.

Vaseline

In 1859, at the age of twenty-two, Robert A. Chesebrough, while considering investments in the oil industry, discovered oil workers using "Rod Wax" to treat their cuts and burns (Vaseline 2014b). This black, unrefined material, a natural byproduct of oil drilling, formed on rigs and frequently caused them to malfunction (Vaseline 2014a). Chesebrough began experimenting with the substance and finally established a refinement process which produced petroleum jelly, which he named Vaseline (Sherman 2002). First patented in 1865, by the end of the 1880s, Vaseline had become so popular that it sold at a rate of one jar per minute in the United States (Vaseline 2014a).

What the Civil War did for ideals of cleanliness (Hoy 1995, Sivulka 2001), World War I and World War II did for Vaseline (Vaseline 2014a). During the World War I, soldiers used Vaseline to care for their sunburns, cuts, and other minor injuries. By World War II, the United States Military commissioned Vaseline to make a sterile wound dressing using petroleum jelly (Vaseline 2014a, 2014b). In this way, Vaseline became associated with patriotism (Vaseline 2014a).

Today, a jar of Vaseline contains petroleum jelly. During the SHM era, however, a jar of Vaseline could contain myriad forms of the product. Just some of the many consumer goods made by Vaseline included Carbolated Vaseline, Pomade Vaseline, Vaseline Cold Cream,



Figure 16. Vaseline Container, 5DV.5997

money in doctor's bills, not to mention pains and discomforts."

Just as fountain syringes had non-advertised functions, Vaseline was also used in birth control efforts (MacKell 2004:33). Archaeologist Rebecca Yamin (2005) has noted that Vaseline may have been used to glue a penny over the cervix, as the copper was thought to decrease sperm survival (Yamin 2005). Unlike douching, which has been found to be ineffective as birth control, this method may have had more success as many modern intrauterine devices (IUD) continue to utilize copper today for its ability to prevent reproduction (Takeshita 2012).

Given the diversity of uses Vaseline products served, it is not surprising that half of the sites studied revealed evidence of Vaseline. Sites 5DV.5997 (Five Points), 5AH.648 (Harry Jackson) and 5AH.916 (Adelia Wells) all had Vaseline jars in their artifact assemblages, and all but 5AH.648 had multiple jars. Vaseline jars during the late-nineteenth and early-twentieth century were, rather unfortunately, embossed simply with some version of "Trademark/Vaseline/Chesebrough Mfg Co./New-York" (Whitten 2015). Decades later, these glass jars do little to tell us which of the many Vaseline products they contained or how the inhabitants of a particular site may have used them. However, whether used as a pomade, to

Perfumed White Vaseline, and Capsicum Vaseline (American Housekeeper Advertiser 1910:305). The range of uses for each type of Vaseline was almost as numerous as the types themselves. An advertisement in the Littleton Independent (1908) claimed that Capsicum Vaseline could treat headaches, sciatica, toothaches, gout, and both rheumatic and neuralgic complaints. The advertisement in the *American Housekeeper Advertiser* (1910:305) journal claimed that, "Each one is necessary. Their practical utility will save you

treat a burn, or as a contraceptive device, Vaseline products all suggest consumer behavior related to health, hygiene, and/or beauty, and therefore, evidence SHM ideals in the archaeological record.

Dental Hygiene

“‘The gospel of the tooth-brush,’ as General Armstrong used to call it, is part of our creed at Tuskegee [University]. . .No student is permitted to remain who does not keep and use a toothbrush” (Booker T. Washington 1907).

During the majority of the nineteenth century, for the most part, only the upper socioeconomic classes in America cleaned their teeth (Jones 2010). It was not until the 1840s that dental hygiene began to develop as a profession in the United States (Segrave 2010). Even though 1857 marked the year that the United States awarded its first patent for a toothbrush (Cappelli 2008), tooth pastes and powders remained a luxury due to the high cost associated with packaging them in glass jars (Jones 2010). All of that changed in 1896 when Colgate released the collapsible toothpaste tube, which significantly lowered costs (Jones 2010). During the following two decades, dental hygiene products and paraphernalia would become one of the most advertised classes of consumer products in the United States (Jones 2010; Segrave 2010). Regardless, dental hygiene would not become a part of the average American’s daily routine until soldiers returning from World War II brought the habit, taught to them by the United States Army, home (Sherrow 2001).

In his review of toothpaste’s role in the history of the global beauty industry, Geoffry Jones (2010) notes that it was really during the interwar period that marketing campaigns made fresh breath and a nice smile a cornerstone of American beauty ideals. An advertisement in the January 1922 *Ladies Home Journal* for Pepsodent, a popular maker of dentifrice, toothpaste, and antiseptic mouthwash, claimed that teeth are coated with a film that “germs bred by the millions

in” and that makes “teeth look dingy.” By using Pepsodent to clean their teeth, consumers could “watch the added beauty” (1922:61).

The Lambert Pharmacal Company took the pressure up a few notches with their Listerine advertisements. Dr. Joshua Lawrence invented Listerine in 1879 and, in partnership with a businessman named Jordan Lambert, began marketing the product as a surgical antiseptic (Reichert 2003). For over fifteen years, this proved rather unsuccessful, so they rebranded Listerine as an oral antiseptic for the emerging dental profession, but it was not until 1914 that the product became available to the general public as mouthwash (Reichert 2003). By capitalizing on the scientific sound of the word “halitosis,” found in an antiquated medical dictionary, advertisers were able to promote Listerine as a cure for a condition which could have serious social implications if left untreated (Marchland 1985:18). The ensuing marketing campaigns utilized a sociodrama advertising technique with “social shame” and “personal fear” appeals (Marchland 1985:20).

One such ad campaign coined a phrase which earned its way into American vernacular speech, “Often a bridesmaid but never a bride” (Reichert 2003:123). Another ad in the August 1928 edition of *The Farmer’s Wife* specifically targeted rural customers. It pictured a country woman slumped against a building next to a sign which read “Dance Sat. Night, Weber’s Hall, Bring Your Best Girl!” The text reads “DON’T FOOL YOURSELF. Since halitosis never announces itself to the victim, you simply cannot know you have it. . . You can’t be welcome when you have halitosis” [Farmer’s Wife 1928:25; emphasis in original]. Ads did not target women alone, and campaigns featuring men also played on social concerns, such as success in business and love (Marchland 1985, Reichert 2003). As individuals could never be aware of

their own offensive personal body odor, they were required to take preventative measures to ensure they remained popular and desirable as a mate.

With so much social pressure not just insinuated, but clearly spelled out, it makes sense that half of the sites included in this study exhibited the remains of consumer products related to dental hygiene. Those sites were 5DV.12345 (Capitol Hill), 5ME.6825 (Orr Osborn) and 5ME.6826 (Stitz Place). Listerine bottles were found at sites 5DV.12345 and 5ME.6825. Thanks to the combined efforts of institutions such as the dental profession, the advertising agencies, and the U.S. Army, today almost all Americans own a toothbrush and report using it to brush their teeth at least once per day (Cappelli 2008:214).

Homeopathic Kits

Although modern American medical care favors the dominant Western model referred to as biomedicine, individuals can today and have in the past had the ability to draw on a variety of options to treat illness and injury, including traditional healing methods and homeopathic medicine (Singer and Baer 2012). Variables influencing the selection of a particular method of treatment are

numerous and can include the ability of one to access a type of treatment, the cost associated with a treatment, the type of illness or injury that needs addressed, and cultural beliefs concerning illnesses and their causes (Singer and Baer 2012). In his history of American homeopathy, John Haller (2005) notes that many people approached biomedicine in the early nineteenth century with hesitation, doubt, and even fear. Far from a “monolithic medical orthodoxy,” biomedicine at that time was comprised of conflicting systems and divergent



Figure 17. Homeopathic Vials, 5AH.916

doctrines (Haller 2005:1). Physicians imposed harsh treatments that could include bloodletting and blistering, but homeopathic medicine provided a popular alternative. However, the emergence and growth of biomedicine worked to steadily marginalize homeopathic medicine during the SHM. By the mid-twentieth century, biomedicine had successfully discredited and sidelined homeopathic medical practitioners.

Perhaps no single event could be more credited with shifting the popular view of homeopathic medicine than the release of the Flexner Report in 1910 (Nevins 2010, Ullman 1991). In 1908, the Carnegie Foundation for the Advancement of Teaching was commissioned by the American Medical Association to conduct a study of medical school educational standards in America (Nevins 2010). As a result, Abraham Flexner visited over 150 schools across the nation between the years 1909 and 1910. In his report, Flexner wrote, “On the laboratory side, though the homeopaths admit the soundness of the scientific position, they have taken no active part in its development. Nowhere in homeopathic institutions. . . is there any evidence of progressive scientific work” (1910:159). Flexner continued to say that, “The ebbing vitality of homeopathic schools is a striking demonstration of the incompatibility of science and dogma” (1910:161).

At least during the early decades of the SHM, it appears as if many Americans continued to turn to homeopathic options, which offered a means of self medication removed from the expense and harsh treatments of the Western medical profession. The 1897 Sears & Roebuck Co. catalog advertised a variety of homeopathic medicinal remedies (2007:44). Multiple

Homeopathic Medicines.					
We are prepared to furnish anything in the line of Homeopathic supplies, and guarantee them to be full strength and fresh condition. We mention a few of the more prominent. We will be pleased to furnish information on Homeopathic medicines if you are in doubt as to what to order. We will also send a copy of Halsey's Manual (152 pages), a complete homeopathic treatise, free on request. When ordering the following remedies please specify what form you wish them in--pills, powder, discs or liquid.					
Name.	Strength.	Name. Strength.			
Aconite.....	3x	Cuprum met.....	3x	Mercurius viv.....	3x
Antimon crud.....	3x	Digitalis.....	2x	Natrum mur.....	6x
Apis mel.....	3x	Drosera.....	2x	Nitric Acid.....	6x
Arnica.....	3x	Dulcamara.....	3x	Nux vomica.....	3x
Arsenic alb.....	3x	Eupatorium p.....	1x	Opium.....	3x
Baptisa.....	1x	Ferrum phos.....	3x	Phosphorus.....	3x
Belladonna.....	2x	Gelsemium.....	1x	Phosphorus ael.....	3x
Bryonia alba.....	2x	Glonoin.....	3x	Phytolacca.....	0
Calcarea carb.....	3x	Graphites.....	6x	Podophyllin.....	3x
Cantharis.....	3x	Hamamelis.....	1x	Pulsatilla.....	3x
Carby veg.....	3x	Hepar sulphr.....	3x	Rhus tox.....	3x
Caulophyllum.....	1x	Hydrastis.....	1x	Sanguinaria.....	2x
Causticum.....	3x	Hyoscyamus.....	3x	Secale cor.....	1x
Chamomilla.....	3x	Iodid.....	3x	Senna.....	3x
China.....	2x	Ipecac.....	3x	Silicea.....	6x
Chinin, arsen.....	2x	Kali bichr.....	3x	Spigelia.....	3x
Chimicifuga.....	1x	Lachesis.....	6x	Spongia.....	3x
Cina.....	3x	Lycopodium.....	3x	Staphysagria.....	3x
Cocculus.....	3x	Mercurius bnod.....	3x	Tartar emetic.....	3x
Coffea crud.....	3x	Mercurius corr.....	3x	Veratrum alb.....	3x
Colchicum.....	3x	Mercurius sol.....	3x		
Colocyntis.....	3x				

Figure 18. Homeopathic Medicine, 1897 Sears, Roebuck, and Co. Catalogue

glass vials, similar to ones pictured in homeopathic medicine advertisements, were found at the Five Points site (5DV.5997) and the Adelia Wells homestead (5AH.916). It is worth noting that the final known occupation for both of these sites falls within the first two decades of the SHM (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999; Stone 1999), while the other four sites addressed in this study all exhibit evidence of occupation after the 1910 publication date of the Flexner Report. Thus, these vials may provide evidence of the transitional period during which the authority of biomedicine was still under contention.

Prescription and Patent Medicines

So much has been written about the emergence of patent medicines in the nineteenth and twentieth centuries, the marketing associated with the medicines, and their relationships to both prescription medicines and folk treatments that it hardly bears repeating (e.g. DeGrandpre 2006; Linn 2014; Nelson and Chaser 2012; Parascandola 1985; Rosenberg 2012; Sumner 2004; Wilkie 1996). It is important to note that for nearly half of the SHM, patent medicines were available over the counter, were often significantly cheaper than doctor's prescriptions, and were encumbered by no institutionalized restrictions with regards to contents (DeGrandpre 2006).

DeGrandpre (2006) notes that the period surrounding the 1906 Pure Food and Drug Act produced a rhetoric which contributed to the growing authority of the Western medical profession. The Council on Pharmacy and Chemistry, formed in 1905 by the American Medical Association reported on drugs in a publication called *New and Nonofficial Remedies* (DeGrandpre 2006). The very nature of the periodical imposed the views of the mainstream medical profession on over-the-counter medicines, and the contents of the publication offered unflattering views of patent medicines and communicated a distrust of the general public's ability to make decisions regarding their own health. One of their bylaws read, "Articles bearing

therapeutically suggestive names will not be accepted. . .because they tend to encourage unwarranted self-medication by the laity” (New and Nonofficial Remedies 1922:22).

Some archaeologists have considered patent medicines, not from the medical community’s point of view, but from that of the consumer’s. Laurie Wilkie’s (1996) analysis of a nineteenth and early-twentieth century Louisiana plantation determined that new commercially-produced patent medications may have actually functioned as substitutes for traditional medical preparations. In this sense, patent medicines became an extension of customary health practices, rather than something imposed by changing discourses in the medical community. Likewise, Meredith Linn’s (2014) assessment of archaeological assemblages from Irish immigrant residential sites in New York City and New Jersey found that the producers of patent medicine may have utilized cultural symbols to encourage potential consumers to make connections between traditional medical practices and new over-the-counter medicines.

Whether for cultural or economic reasons, or to assert control over one’s wellbeing in a social context of rapidly shifting public discourses on health, the popularity of patent medicines can clearly be seen in the material record of SHM-era sites in Colorado. Every single site in this study contained patent medicine, even site 5ME.6826 (Stitz Place), whose inhabitants may have found their consumer behaviors restricted by economic realities (Horn 2001b). For the variety of patent medicines evidenced, only one appeared at multiple sites. Mentholatum was discovered in the archaeological assemblages of sites 5DV.12345 (Capitol Hill) and 5ME.6825 (Orr Osborn homestead). Founded in 1889, Mentholatum produced an



Figure 19.
Mentholatum
advertisement

ointment advertised to relieve pain, ease itch, and cure colds (Mentholatum 2015). The company attributes some of its success to a wide referral base among doctors and medical retailers (Mentholatum 2015). A Mentholatum ad from the 1922 *American Magazine* (Figure 19) highlights the product's ability to keep a woman's lips pretty and healthy, thus, creating a tangible connection between medicine, health and beauty.

Summary

The discourse surrounding many of these products closely reflects the tensions between the growing power of the medical profession's authority and individuals seeking to maintain control over their own self care. On one hand, archaeologists such as Morton (2014), Wilkie (1996), and Linn (2014) present sound research which interprets the use of over-the-counter products as a means by which individuals could actively make decisions about their own medical treatments in a way which fit their cultural and financial needs without having to involve doctors. On the other hand, many of the popular health- and hygiene-related product advertisements during the SHM, such as Mentholatum and Lysol, make use of doctor recommendations in their marketing strategies. Regardless of whether the sponsorship was sincere, fabricated by advertisers, or paid testimonial, the interjection of medical and scientific discourse in marketing campaigns must enter into interpretations of consumer behavior as evidenced in the archaeological record. In short, although health and hygiene products gave individuals the opportunity to decide how to manage their own care of self, those practices and product choices were often presented to consumers as preapproved by the medical profession.

Michel Foucault stressed the importance of repetition in the establishment and naturalization of dominant discourses (1972). Similarly, when product advertisers repeatedly utilized marketing approaches that offered the illusion of freedom from the doctor's office while

simultaneously using the support of the medical profession to grant that freedom, they contributed to the establishment of the authority of the medical profession and its ability to legitimize the use of over-the-counter health and hygiene aids. This is not to say that individuals did not view or utilize products in ways not intended by doctors or product manufacturers, much like “squirrel” telephone lines (Kline 2000:28). However, it must also be noted that many of the products with advertisements that repetitively made use of medical and scientific discourse and sponsorship are the products that are not only found in the archaeological assemblages of multiple sites in this study, but can also still be found on drugstore shelves today.

Discussion

Comparative analysis of the six archaeological assemblages suggests that while the SHM may have had its origins in concerns specific to urban realities, such as sanitation issues and epidemics born of overcrowding (Hoy 1995; Hunt 1999), the impact of the resulting health, hygiene, and cleanliness ideals on consumer choices did not stay isolated to metropolitan regions of the United States for very long. Although to very different degrees, products associated with SHM ideals appear in all sites in the study, both urban and rural. Furthermore, the strong correlation between the peak SHM-associated consumer activity and the period of occupation for the majority of the rural sites in this study indicates the possibility of an awareness of the standards and practices espoused by the SHM from nearly the beginning of the movement. With the rural population conscious of the behaviors desired of them by SHM reformers, a more nuanced analysis will be required to uncover the root of the differences that occur between rural and urban artifact assemblages from SHM-era sites.

Strong Foundations

What becomes clear when reviewing the early manufacturing dates of the SHM-associated artifacts in this study for both rural and urban sites is that many of the dates occur before the start of the SHM (1890s-1930s). In fact, five out of the six sites in the data set have SHM-associated artifact assemblages that include at least one artifact with an early manufacturing start date that precedes the time that many historians (e.g. Hunt 1999) associate with the beginning of the movement. While it would be easy to explain this away as an unfortunate statistical occurrence born of limitations to knowledge about product manufacturing dates, the fact that some of the brands represented in the artifact assemblages existed before the start of the SHM provides some vital clues to understanding the rate at which health and hygiene artifacts appear in the archaeological record.

The reform efforts of the Social Purity Movement (1860s-1900s) built strong foundations for the acceptance of the ideals associated with the SHM, but have also created challenges for interpreting SHM-associated artifact assemblages. The Social Purity Movement began over twenty years before the SHM, was born of similar social concerns, and tackled many of the same issues (Hunt 1999; Pivar 2002). While the dramatic rise in the sale of cosmetic products (Hoy 1995) and dental products (Jones 2010; Segrave 2010) have strong ties to the time period of the SHM, the growing concern for personal and public health predates the start of the movement. But, as Juliann Sivulka points out, Americans did not begin to value the aesthetics of cleanliness over the health aspects until the 1920s (2001:214), so omitting health products from this study on the basis their association with Social Purity Movement ideals would fail to recognize the importance of health concerns to the development of the SHM. Instead, SHM-associated health products are viewed as evidence of the formation of health and cleanliness standards that would

inform SHM reform efforts, continue to evolve throughout the movement, and provide the basis by which many Americans became familiar with and accepting of the ideals of the SHM.

Just as the Social Purity Movement laid the groundwork for the SHM, so too did the Homestead Act of 1862 (Campbell 2008) provide the means by which to transmit Progressive-era ideals to the countryside decades before the start of the CLM (Kline 2000; Jellison 1993). By offering land and an avenue for achieving middle class status, the United States government assured the movement of people from urban areas into the country's rural regions from 1862 until the Act's termination in 1976 (Porterfield 2005). Much of the rhetoric reviewed in Chapter 3 surrounding the growing rural/urban dichotomy in America implied that the social and geographical isolation of rural residents (e.g. Bailey 1912:23) was a primary cause of the perceived differences in hygiene and cleanliness practices. However, it would be irrational to think that individuals arrived at their homesteads free from ties to friends and families in the more populated East and with no knowledge of the rising national concern for cleanliness. More likely than not, they brought with them the knowledge, ideals, practices, and consumer preferences to which they had become accustomed.

The SHM-associated artifact assemblage from the Adelia Wells Homestead (5AH.916) offers evidence to disprove the assumptions held by CLM and SHM reformers regarding the isolation of rural residents from the knowledge of national health, hygiene, and cleanliness ideals. As previously mentioned, the artifacts found at Wells' homestead clearly show participation in the national market. Furthermore, the 1894 mean date of manufacture for the temporally diagnostic SHM-associated artifacts in the Wells homestead's assemblage further supports the likelihood that Wells was aware of national trends. Furthermore, the peak SHM-associated consumer activity at the site ranged from 1880 to 1908. Reviewing those artifacts

proves that it is not the case of a single artifact with a broad manufacturing date range skewing the results. Every temporally-diagnostic SHM-associated artifact in the assemblage had an early date of manufacture that predated the start of the movement. As Wells was the first to occupy the homestead, this thesis makes no claims that SHM-associated consumer activity was occurring a decade before the site was occupied. The results of the analysis may be influenced by a lack of currently available knowledge about product manufacturing dates. However, the date range may also indicate that Wells brought some of the artifacts with her when she moved to the homestead, or that Wells used her purchasing power to select well-established and trusted brand name products. In both instances, the peak SHM-associated consumer activity date range might suggest that Adelia Wells had knowledge of the growing health, hygiene, and cleanliness trends that predated her residency at her Colorado homestead.

In this instance, the historical context of the site's inhabitants is vital to comprehending the results of the data. Adelia Wells was in her fifties when she first took residence at site 5AH.916, and she was coming from Arcade, New York, a region of the United States that had a high level of access to the national market (Pred 1970). Wells may have brought some of the artifacts found at site 5AH.916 with her when she moved. Equally as likely, however, is that what Wells brought with her were pre-established health, hygiene, and cleanliness ideals and product loyalties born of over fifty years of exposure to the ideals of the Social Purity Movement while living in the eastern United States.

The strong foundations set by the Social Purity Movement means that the dates of the SHM (1890-1930s) proposed by historians represent a time when the discursive strategies for dealing with health, hygiene, and cleanliness concerns shifted, but do not represent the start of these concerns. As evidenced in the archaeological records of the six sites in this study,

cleanliness ideals had a firm foothold in American culture by the start of the SHM and had already begun to impact consumer choices. Moreover, the anxiety expressed by CLM and SHM reformers over the assumed lack of information making it to rural residents may have been misplaced. If the presence of health, hygiene, and cleanliness products at a site is viewed as indicative of the site's occupant's understanding of the ideals SHM, then the desired information was reaching people in the rural United States and it reached them early on in the movement. The differences in the frequencies and diversities of SHM-associated artifacts between rural and urban site assemblages must, then, reflect other factors.

The Impact of Rural Identity on Consumer Choice

During much of the Progressive Era, rural residents lacked many of the amenities, such as indoor plumbing, that made embracing idealized SHM practices more feasible for the urban middle and upper classes (Jellison 1993). But, practicality was not the only issue ignored by reformers who wished to educate rural America in the new health, hygiene, and cleanliness standards. They failed to calculate the resistance that the rural population of the nation would have to implications that life in the country was backwards and primitive (Creed and Ching 1997; Kline 2000). This lack of foresight on behalf of reformers not only played a significant role in the failure of the CLM to achieve many of its goals (Piott 2011), but it also contributed to the formation of a rural identity based on values constructed in direct opposition to many of the commonly perceived downfalls of urban life (Adams 1994; Creed and Ching 1997; Kline 2000; Mormont 1990). As the archaeological assemblages of the sites in this study suggest, those values many have had a significant impact on the SHM-associated consumer choices of rural residents.

Adelia Wells, once again, provides a great way to conceptualize the impact of rural identity on consumer choice. Wells may very well have kept an apartment in the city of Denver during the time when she owned and was proving up her homestead (Ballenger and Richards 1895). Even if she did not, the presence of a prescription bottle from Steinhauer and Walbrach pharmacists in Denver (Table 5) indicates that Wells had the ability to travel to the city to purchase consumer goods. However, even though Wells' homestead is only 13.25 miles from Denver (Figure 3) and the occupation of her homestead overlaps with the occupation of urban site 5DV.5997 in the Five Points neighborhood of Denver (Table 9), the archaeological assemblage at her homestead exhibits a much lower frequency of SHM-associated artifacts than 5DV.5997 (Figure 11). Furthermore, the Wells homestead artifact assemblage exhibits less diversity of SHM-associated artifact types than 5DV.5997 by over 33% (Figure 12).

If Adelia Wells was relatively well-off from a socio-economic standpoint, had the means to travel to and/or live in the city of Denver, and was using her consumer choices to reinforce her middle class status (a factor that theoretically should have served to increase the amount of SHM-associated artifacts in her homestead's assemblage (Hoy 1995; Hunt 1999), then another variable has to have contributed the low presence of SHM-associated artifacts found at her homestead. Different approaches to archaeological sampling can contribute to dissimilar artifact assemblage compositions. In this case though, the recovery of most of the SHM-associated artifacts from Adelia's root cellar and midden (Stone 1999) suggests sampling methods that are similar to those at the Five Points site (5DV.5997), which found a prevalence of SHM-associated artifacts in the excavations of the cellar and nearby trash piles (SWCA, Inc., Environmental Consultants and Cuartelejo HP Associates 1999) and the cellars of the Capitol Hill urban site 5DV.12345 (Dominguez et al. 2010). The fact that Adelia came from Arcade, New York, a rural

town with a strong history of agriculture (Arcade Historical Society 2014), and her brother worked as a farmer, suggests that she may have already formulated an identity based on rural values that influenced her consumer behavior with regards to SHM-associated products.

The artifact assemblage of the Orr Osborn homestead (5ME.6825) also supports the idea that rural identity influenced the SHM-related consumer activities of the occupants of rural sites. Similar to Adelia Wells, the Osborn family came to their homestead with a family history of rural living. With a father and brother who also homesteaded in Colorado, Orr Osborn may have strongly identified with rural values (e.g. Handke 2012). Also like Wells, the Osborn family appears to have had a middle class socioeconomic standing, which allowed them to purchase high quality goods (Horn 2001a). They also owned several horse-drawn vehicles, which means that they could have easily traveled to the surrounding towns to purchase the goods they required and wanted (Horn 2001a).

The artifacts from the Osborn homestead clearly indicate knowledge of the ideals of the SHM, with Listerine and a variety of both household cleaning products and patent medicines appearing in the assemblage. Nevertheless, the frequency of SHM-associated artifacts in the assemblage is less than half as much as urban site 5DV.5997 (Five Points), and the diversity of SHM artifact categories at the Osborn homestead is less than both 5DV.5997 and 5DV.12345 (Capitol Hill). Moreover, the peak occupation of the Osborn homestead occurred later during the period of the SHM. Site 5DV.5997 was abandoned five years prior to Orr Osborn filing entrant on his homestead, a temporal gap which should function to bring the frequencies of SHM artifacts from 5ME.6825 and 5DV.5997 closer to each other.

The SHM assemblage of the Orr Osborn homestead (5ME.6825) also differs in composition and tends to support Horn's (2001a) interpretation of the site's total assemblage.

When considering all artifacts from 5ME.6825, Horn posited that the Osborn family reinforced a rural identity independent of urban ideals by avoiding the purchase of items they viewed as luxuries. The site's SHM-associated assemblage contains no evidence of cosmetic products and implements or perfume. Furthermore, containers of Red Seal Lye, and possibly the Pennsylvania Salt Manufacturing Company as they also produced lye (Industrial and Chemical Engineering 1928), may have allowed the Osborn family to continue the rural tradition of making their own soap rather than relying on brand name packaged soap, which had been associated with the upper classes for much of the nineteenth century (Sivulka 2001:13-26). However, making their own soap would not likely have been a matter of necessity, but of choice. The presence of several different brand name cleaning products alludes to the fact that the Osborn family had access to and could afford brand name consumer goods. Instead, the Osborn family appears to have selected the SHM-associated products which reinforced their rural values while avoiding the aspects of SHM ideals which they viewed as incompatible with their cultural and social needs or the realities of their day-to-day lives.

The results of a comparative analysis of SHM-associated artifacts from both urban and rural sites in Colorado seem to echo Ronald R. Kline's (2008) central thesis in *Consumers in the Country: Technology and Social Change in America*. The rural residents of Colorado were not isolated from information sources or the national market. They appear to have been fully aware of the ideals of the SHM. However, they also seem to have adapted some of those ideals to suit both the realities of their existence and their preexisting cultural and social values, while simultaneously resisting those aspects which they may have viewed as a poor fit with rural beliefs that valued hard work and a simple, no-frills lifestyle.

Patriotic Ideals

Patriotism stands out as a reoccurring theme in SHM research (e.g. Ashenburg 2007; Hoy 1995; Sivulka 2001; Vaseline 2014a), and the occurrence of two immigrant families in the households discussed in this study presents the opportunity to explore the impact that cultural context may have on the material manifestation of the SHM in artifact assemblages. Both rural sites 5AH.648 (Harry Jackson homestead) and 5ME.6826 (Stitz Place) had residents who had immigrated to the United States. In spite of the fact that they may have been doubly targeted by both CLM reformers as rural residents and SHM reformers as immigrants, the two sites also had the lowest frequencies of SHM-associated artifacts and the lowest diversity of SHM artifact categories. As historians (e.g. Hoy 1995; Jellison 1993) claim that immigrants readily embraced SHM ideals and practices to avoid stigmatization and obtain full symbolic American citizenship, it becomes vital to understand why the archaeological assemblages of sites 5AH.648 (Harry Jackson homestead) and 5ME.6826 (Stitz Place) exhibit contradictory artifactual evidence.

It is important to mention that both sites representing immigrant families (5AH.648 and 5ME.6826) do have other variables that may influence the appearance of SHM-associated artifacts in their assemblages. Less excavation occurred at the Harry Jackson homestead (5AH.648) due to impending construction on the site and the survey of surface artifacts may have biased the assemblage with building-related materials, such as window glass, as opposed to artifacts which may have been stored (Stone 1999). Although the archaeological work at site 5ME.6826 did not face the same pressure, it was determined that the Stitz family may have faced serious financial hardship which limited their consumer choices (Horn 2001b). While both of these factors may impact the quantity of observable SHM-associated artifacts, it should also be noted that both sites did exhibit some health- and hygiene-related artifacts and that the total

assemblages for both sites contain more artifacts than either the Five Points site or the Orr Osborn homestead (Table 9).

As previously stated in this chapter, health, hygiene, and cleanliness ideals started to gain popularity in the United States prior to the start of the SHM. Therefore, it stands to reason that those who had been living in the country and were exposed to these changing cleanliness standards for a longer period of time also likely had more opportunities to adapt their practices to the expectations of the SHM reformers and to incorporate SHM-associated products into their consumer choices. SHM reformers may have focused much of their efforts on educating immigrants, and some immigrants may have tried to conform to these ideals as a means of gaining symbolic American citizenship (Ashenburg 2007; Hoy 1995), but the likelihood that this transformation happened overnight is just as implausible as the assumption that health, hygiene, and cleanliness ideals began suddenly in 1890 with the start of the SHM. The results of the comparative analysis support this idea. The archaeological assemblages of natural born rural residents have more SHM-associated products than rural residents who had immigrated to the United States.

Historians Christina Simmons (1993) and Suellen Hoy (1995) both propose that marginalized social groups were more likely to adopt the standards of the SHM to avoid marginalization, but the archaeological evidence from the Harry Jackson homestead and Stitz Place does not support that assumption. As archaeologist Mark D. Groover explains, some immigrants likely tried to maintain their cultural practices while others were more accepting of changes (2008). The specific recruitment of German and English immigrants to settle America's West suggests that the popular perception of immigrants coming from those two countries may have been more positive than of those coming from other regions, such as Ireland (LeMay 2013;

Pearce 1985). With fewer stigmas to overcome, there is a possibility that English and German immigrants did not feel the need to use conformity to SHM ideals as a means of asserting their right to American citizenship. However, the work ethic that English and German immigrants were known for (LeMay 2013; Pearce 1985) may also indicate ideals that were very similar to the principles held by rural citizens of the United States. In that case, it stands to reason that immigrants living in the country may have related to American rural identity and expressed those commonly held values through their consumer choices.

Summary

The discourse surrounding the SHM, expressed in everything from formal legislation to products advertisements, reached America's countryside. The evidence is in the artifacts. But, it was not the delayed effect that many reformers feared. The Social Purity Movement and westward expansion laid the groundwork for the transmission of ideas and products long before the CLM decided that pertinent action needed to be taken to educate the country's rural residents about the new standards in cleanliness and hygiene (Kline 2000; Jellison 1993). However, for all the effort of the reformers, the artifactual evidence of the six sites in this study suggests that rural residents did not fully embrace the ideals and practices of the movement in the ways that reformers had hoped. In many cases, rural residents appear to have used only those product types which fit their social, cultural, and practical needs.

Contrary to the accessibility concerns expressed by CLM and SHM reformers, getting the information and products associated with the SHM may not have represented the primary obstacle that SHM reformers faced when asking rural residents to conform to new standards of hygiene and cleanliness. Railroads, wagon roads, mail order catalogs, and rural free delivery all provided access to the information and products associated with the SHM for many of the site's

inhabitants, and yet, noticeable differences still persist in the manifestation of SHM ideals in the sites' archaeological records. The very strategies that reformers employed to promote the ideals of the SHM in the country stigmatized the people whom reformers proposed to help. The rural identity that formed to resist the marginalization imposed by reformers embraced the values that rural people perceived as contradictory to urban ideals, and that identity created an obstacle that factored into the downfall of the CLM and affected rural acceptance of SHM standards.

The discourse surrounding the SHM became more intense and the advertisement strategies of the associated products became less passive as the movement progressed from concerns about sex hygiene in the 1890s to eugenics in the 1930s. The increase of SHM-associated artifact frequencies and diversity through time evidence that fact at both urban and rural sites. Nevertheless, for all of the discursive pressure placed on rural residents from myriad sources, all the rural sites in this study still exhibited lower amounts of SHM artifacts and noticeably different artifact compositions than urban sites. The fact that later occupied sites, such as the Orr Osborn homestead, continued to exhibit differences in frequency and diversity from urban sites well into and beyond the end of the formal period recognized by historians as the SHM, illustrates that rural identities and consumer behaviors would take more than forty years of reform efforts to subvert.

CHAPTER 7: CONCLUSION

Contemporary American ideals regarding cleanliness and personal hygiene are less contested than they were at the start of the SHM. In the twenty-first century, basic hygienic practices have become such an important aspect of society that the average person probably seldom contemplates the social and political history that informs their daily shower. In less than 150 years, the accepted knowledge that prompts these cleanliness and hygiene rituals has become so naturalized as truths that the knowledge itself is unquestioned. This leaves many unanswered questions about the formative years of American hygiene and cleanliness ideals. In this regard, historical archaeology has the potential to enhance our comprehension of a movement for which, in spite of all of the recorded discourse surrounding it, a lack of understanding still exists about how these national trends played out in the day-to-day lives of average Americans. Similar to the attention paid by historical archaeologists to the ideological impacts of the Victorian Era on consumer behavior (e.g. Wall 1991), so too does an investigation of the SHM as a shared system of concepts hold the potential to illuminate the nuances of a movement which not only significantly influenced consumer and hygiene practices in the past, but continues to shape social norms and consumer choice today.

With ideals regarding personal hygiene practices ingrained in the minds of Americans, and the discursive power of clean firmly in place, many have stopped questioning the validity of the message or the significance behind their daily grooming and household cleaning habits. However, not only are some of these rituals not always healthy for us, but the use of health, hygiene, and cleanliness practices and related consumer behavior to differentiate the haves from the have-nots continues to negatively affect minorities. For that reason, it is important to reveal

the roots of an American ideal which was constructed in a different social context than the one we live in today. Perhaps by doing so, Americans can become more conscious of the implications of some of the most mundane acts of our daily lives. Therefore, this chapter will summarize the results of this study, address the continued impacts of the SHM, and suggest further avenues for research.

Rural Hygiene

When considering the contemporary importance placed on hygiene in the United States, it becomes easy to forget that rural residents did not simply jump on the SHM bandwagon. In that sense, archaeological analyses are vital to providing insight into ways that people dealt with these large, abstract ideas in their daily lives. Rural residents not only resisted allegations by reformers that their lifestyle was backwards, but in response they came to identify with a system of values that would also have likely conflicted with ideal SHM-associated consumer behavior. Rural residents used their purchasing power to resist SHM-related consumer products that they viewed as luxuries and as incompatible with a simple, no-frills, hard-working lifestyle. Even though the results of this project show an increase in SHM-associated artifact frequency and diversity over time, the comparison of rural to urban artifact assemblages also clearly indicates that, by the end of the formal SHM in the 1930s, rural residents still were making different consumer choices about health, hygiene, and cleanliness products than urban residents.

As much research suggests, in spite of the marginalization of rural Americans by Progressive-era reformers (Piott 2011), rural identity is alive and well in contemporary America (e.g. Adams 1994; Golding 2012; Mink 2008; Watson 2014; Woods 2010). In the author's own experience, gained from five months living in the remote Alaskan town of McCarthy, rural residents of the United States continue to make choices about their hygiene practices which

complement the daily realities of their lives and reinforce their social and cultural norms. With limited access to indoor plumbing, most town residents bathe less frequently and employ more creative means when they do (Figure 20). Town residents often reinforce their independence from urban hygiene norms by poking fun at overly-groomed summer tourists.



Figure 20. Bathtub by the Nizina River in McCarthy, Alaska.

What Happened to the SHM?

Unlike the CLM, which had more success at intensifying the cultural rift between rural and urban populations of the United States than actually achieving many of its goals (Peters and Morgan 2004; Piott 2011), the SHM did not come to an end in the United States in the 1930s because it failed. The average American went from bathing once a week (Hoy 1995) to spending over forty minutes per day grooming in a span of less than 150 years (American Time Use Survey 2013). The 1930s marks the end of the movement because active reform efforts ceased to be relevant past that time.

Changes in technology drastically altered the way of life for those living in the rural regions of the nation. The imagined isolation of the countryside lessened as the popularity of automobile ownership grew (Hvattum 2001) and more homes were equipped with telephones and radios (Groover 2008). Manufacturers and advertisers continued to capitalize on American ideals of health, hygiene, cleanliness to sell products, but made use of the popularity of radio to reach broader audiences. Bob Hope's radio show was sponsored by Pepsodent, a manufacturer of dental hygiene products, and even the popular term, "soap opera", derives from the

sponsorship of daytime radio serial programs by major soapmakers in the late 1930s (Cox 2005:2).

Today, American ideals of cleanliness continue to be reinforced through product advertisements, consumer choices, discursive practices, and hygiene rituals. Formal government-funded institutions, such as the Center for Disease Control (e.g. 2014), continue to run and support programs designed to instruct Americans in proper hygiene practices. Americans spend about one billion dollars a year on antibacterial products, even though research now shows that common antibacterial chemicals interfere with normal hormone production, the nervous system, and the body's resistance to bacteria (Downs 2008). 125 years after its first edition (2015b), *Good Housekeeping* magazine (2015a) still features articles that instruct Americans on the proper ways to clean their homes, care for the health of their families, and maintain an attractive and hygienic appearance. Cleanliness even continues to factor into American identity, as a recent episode of *Backstrom* on Fox illustrates. When two female colleagues, one American and one foreign, discuss the attractiveness of a fellow male co-worker, the foreign-born woman claims that part of his sex appeal lies in the fact that he is a "little bit dirty," to which her colleague exclaims, "Okay, you are so not American (Backstrom 2015:11:35-11:41).

Over three quarters of a century after the formal end of the SHM, the influence the movement had on the stigmatization of minorities may still have negative repercussions. Today, minorities of both sexes spend more time per day grooming than their non-minority counterparts (Das and DeLoach 2011). African American and Hispanic women are more likely to douche than other social groups, even though the practice has known health risks (Barclift 2012). Furthermore, statistical analyses indicate that there is a direct correlation between the time a

minority male spends grooming and his average earnings, with a doubling in grooming time equaling a nearly four percent increase in pay (Das and DeLoach 2011). Just as historians (e.g. Simmons 1993) have suggested that marginalized groups of people in the past may have embraced health and hygiene practices to overcome social stigmas, so too do contemporary researchers point to this reason as the primary cause of these behaviors (Das and DeLoach 2011).

From the examples listed above, it becomes clear that, in many ways, the ideals of the SHM are still present in American culture today. Although certainly not uncontested, for a large portion of the population these ideals have become a natural part of daily life as a citizen of the United States. As Foucault (1971, 1972) would certainly point out, it is the recursiveness of the discourse, rituals, and consumer behavior that transforms health, hygiene, and cleanliness ideas into a body of knowledge, almost law-like in its form. The only way to disrupt the unconscious acceptance of the rules and make society aware of the issues they impose is to use both the discursive and artifactual evidence associated with the SHM to unveil the historical origins of the ideals and reassess their applicability to contemporary social systems.

Further Research

The results of this study reveal a variety of opportunities for further research. Investigations of sites in other states may contribute important information about regional variations in the SHM's impact on consumer behaviors. A comparison of artifact assemblages from immigrant households in urban environments relative to those of recent immigrants living in rural regions of the United States may help to determine if urban immigrants faced more pressure to conform to SHM standards, as the evidence from this study may suggest. As the temporal difference of sites 5DV.5997 (Five Points) and 5DV.12345 (Capitol Hill) were too great, and no total artifact count could be determined for site 5DV.12345, a comparative analysis

of SHM-associated artifacts from an African American household relative to an Anglo-American household could not occur. However, that avenue of research could prove to be interesting. Finally, should the archaeological remains of Adelia Wells' residence in Denver ever be discovered, or should a similar scenario involving the opportunity to investigate the artifact assemblages of a single family or resident dually occupying an urban and rural residence ever present itself, the fluidity of rural identity and its impact on SHM-related consumer behaviors could be examined. Ultimately, as more archaeological site assemblages become available and used to investigate questions related to the formative years of America's growing concern with health, hygiene, and cleanliness, not only will researchers have a greater ability to design comparative studies that limit the primary variables affecting SHM-associated consumer behaviors, but interpretations of the ways in which the SHM influenced the daily lives of Americans will become more nuanced.

Conclusion

The SHM looked to subvert the social and cultural practices of individuals and social groups who had varied identities and cultural norms in favor of homogenizing health, hygiene, and cleanliness ideals, practices, and related consumer behaviors for the supposed good of the general public of the United States. In their efforts to reform rural residents, SHM and CLM advocates relied on a rhetoric which only heightened the dichotomous relationship between urban and rural residents of the country. However, contrary to much of the discourse from the SHM that painted rural residents as unhygienic, uncivilized, ignorant, and backwards, the artifacts from the sites in this project suggest that the rural residents of Colorado were aware of the standards to which SHM reformers wished they would conform. Moreover, that awareness was not delayed, as the SHM and CLM advocates feared. When considering the whole of the

artifactual, discursive, and contextual evidence, it becomes clear that rural residents did not alter their hygienic practices and consumer behaviors to be in-line with urban standards, but rather selected the ideological aspects of the SHM that reinforced their rural identities and incorporated the products and practices which fit with their daily realities, social norms, and values. In the rural areas of the United States today, individuals continue to make decisions about hygiene and cleanliness standards independent of the dominant American ideal of clean.

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APPENDIX I

Table 10. Diagnostic Information for SHM-associated Artifacts, 5DV.5997

Object Description	Qty	MNI Qty	Manufacture's Marks	Unit	Level	FS	Artifact Category	Date Range
Complete clear glass prescription finish	1	1		101N84E	2	113	8	
Syringe dropper	1	1		87N97E	3	161	9	
Complete clear glass prescription finish	2	1		Unk		194	8	
Clear glass bottle body fragment	1	1	Body: HUYCK PHARM...	101N85E	2	243	8	1880-1889
Complete clear glass possible perfume bottle	1	1		101N85E	2	243	4	
Complete aqua glass Caldwell's Syrup Pepsin bottle	1	1	Body: CALDWELL'S SYRUP PEPSIN/MFD. BY/PEPSIN SYRUP COMPANY/MONTICELLO, ILLINOIS	96N94E	3	286	8	1889-1942
Clear medicine bottle with prescription finish	1	1		96N94E	3	286	8	
Fountain syringe vaginal pipe, synthetic	1	1		96N94E	3	287	7	
Complete clear glass bottle with prescription finish	1	1		99N95E	3	299	8	
Complete clear glass possible perfume bottle	1	1		99N95E	3	299	4	1865-1890
Nail buffer with bone handle	1	1		99N95E	3	303	3	
Complete amber glass prescription finish with body fragments	5	1		Trench Fill		306	8	
Complete clear glass Vaseline jar with external thread finish	2	2	Body: VASELINE/CHESEBROUGH/NEW YORK	99N95E	4	320	1	1890-1955

Table 10 Continued (Diagnostic Information for SHM-associated Artifacts, 5DV.5997)

Object Description	Qty	MNI Qty	Manufacture's Marks	Unit	Level	FS	Artifact Category	Date Range
Clear glass vial with prescription finish	1	1		99N95E	4	320	8	
Aqua glass Dr. Kilmer's Swamp Root bottle body and base	1	1	Body: DR KILMER'S/SWAMP ROOT/KIDNEY LIVER/AND BLADDER CURE/BINGHAMTON/N .Y. U.S.A	99N95E		320	8	1879-1906
Complete clear glass prescription finish	1	1		92N94E	3	322	8	
Complete clear glass prescription finish	1	1		92N92E	2	331	8	
Complete clear glass vial with prescription finish	1	1		99N95E	4	416	8	
Black comb fragments, synthetic	2	1		92N94E	1	421	3	
Light green glass Dr. Jayne's Tonic Vermifuge bottle body fragments	2	1	Body: JAYNE'S.../C VERMIFUGE/T ST/PHILA	Trench Fill		428	8	1851-1945
Clear Colgate bottle with prescription finish	1	1	Body: COLGATE & CO/PERFUMERS/NEW YORK	Trench Fill		428	4	1866-1928
Complete clear glass prescription finish	2	2		Trench Fill		428	8	
One amber prescription finish and one amber embossed base, from same Parke Davis & Co. bottle	2	1	Base: 18 P D & CO	Trench Fill		428	8	1871-1970

Table 10 Continued (Diagnostic Information for SHM-associated Artifacts, 5DV.5997)

Object Description	Qty	MNI Qty	Manufacture's Marks	Unit	Level	FS	Artifact Category	Date Range
Light green glass Sloan's Liniment bottle body and base	1	1	Body: AN'S N&B LINIMENT/E.S. SLOAN BOSTON	Trench Fill		428	8	1871-1948
Complete dark green glass Piso's Cure bottle	1	1	Body: HAZELTINE & CO./PISO'S CURE/FOR/CONSUMPTION	Trench Fill		428	8	1864-1904
Aqua glass Cuticura System of Curing Constitutional Humors bottle body and base fragment	1	1	Body: SYSTEM/...ING/...AL HUMORS	Trench Fill		428	8	1878-1910
Complete clear glass Vaseline jar with external thread finish	1	1	Body: TRADEMARK/VASELINE/CHESEBROUGH/NEW YORK	Trench Fill		428	1	1890-1955
Complete clear glass bottle with prescription finish	1	1		Trench Fill		428	8	
Clear glass vial body and base fragments	3	1		Trench Fill		428	8	
Mostly complete light green glass Omega Oil bottle	1	1	Body: OMEGA OIL	Trench Fill		428	8	1890-1930
Cleaning brush with wood handle	1	1		99N95E	4	439	12	
Complete clear glass Vaseline jar with external thread finish	1	1	Body: TRADEMARK/VASELINE/CHESEBROUGH/NEW-YORK	101N85E	n/a	440	1	1890-1955

Table 11. Diagnostic Information for SHM-associated Artifacts, 5DV.12345

Object Description	Qty	MNI Qty	Manufacture's Marks	Structure	Stratum	FS	Artifact Category	Date Range
Clear glass medicine bottle base and body with dram scale	3	1	Base: 19, Owens Illinois Makers Mark, 6	1.1	XXXVIII	2.23	8	1936-1946
Complete amber glass Zonite bottle with a plastic screw cap	1	1	Cap: ZONITE/Base: 14, Owens-Illinois Maker's Mark, 2	1.1	XXXVIII	2.28	1	1932-1942
Complete clear glass Hynson, Westcott, Dunning medicine bottle with a bead finish	1	1	Body: HYNSON WESTCOTT DUNNING/Base: S inside a circle	1.1	XXXVIII	2.32	8	1901-1959
Complete clear glass possible perfume bottle	1	1		1.1	XXXVIII	2.34	4	
Clear glass medicine Pertussan bottle with external thread finish	1	1	Body: PERTUSSAN/Base: 6, Owens-Illinois Maker's Mark, 1	1.1	XXXVIII	2.36	8	1941
Complete milkglass Mentholatum container with metal lid	1	1	Base: MENTHOLATUM	1.1	XXXVIII	2.48	8	1889-1988
Complete blue glass Vicks Nose Drops bottle with external thread finish	1	1	Base: VICKS NOSE DROPS, 8 inside of a triangle	1.1	XXXVII	6.03	8	1931-1975
Complete blue glass Vicks Vatrolol bottle	1	1	Base: VICKS VATRONOL, Triangle	1.1	XXXVII	8.01	8	1931-1959
Complete blue glass bottle with metal cap	1	1	Base: Maryland Glass Corporation marker's mark, 7	1.1	XXXVII	8.04	8	1916-1970
Complete clear glass medicine dropper	1	1		1.1	XXXVII	8.17	9	
Complete clear glass Pepsodent antiseptic bottle with external thread finish	1	1	Body: PEPSODENT ANTISEPTIC/Base: 9, Owens-Illinois maker's mark, 2.	1.1	XXXVII	9.01	5	1942

Table 11 Continued (Diagnostic Information for SHM-associated Artifacts, 5DV.12345)

Object Description	Qty	MNI Qty	Manufacture's Marks	Structure	Stratum	FS	Artifact Category	Date Range
Possible tooth powder can	1	1		1.1	XXXVII	9.03	5	
Complete clear glass bottle with external thread finish	1	1	Paper Label: FREE...FROM... SHAVING.../Base: 12, Owens-Illinois maker's mark, 2	1.1	XXXVII	9.05	6	1932-1942
Complete clear glass Ed Pinaud bottle with extract finish	1	1	Body: ED PINAUD, PARIS/Base: PROPERTY OF ED PINAUD INC. NY REGISTERED 671 ED. PINAUD INC.	1.1	XXXVII	10.06	4	1945-Present
Complete plastic Zonite cap	1	1	Lid: ZONITE	1.1	XXXVII	10.13	1	1916-1955
Complete fountain syringe, synthetic	1	1		1.1	XXXVII	10.14	7	
Hair comb fragment, synthetic	1	1	RE..., CO...HAMBURG	1.1	XXXVII	11.12	3	
Complete clear glass medicine bottle with external thread finish and attached cap	1	1		1.1	XXXVII	12.05	8	
Clear glass Tussy jar with external thread finish	1	1	Base: TUSSY	1.1	XXXVII	12.08	2	1925-1994
Clear glass base and body fragments of Pepsodent bottle	Unk	1	Base: PEPSODENT ANTISPETIC 17, 12, Owens-Illinois maker's mark, 3	1.1	XXXVII	13.02	5	1933-1943
Complete clear glass Listerine bottle with packer finish	1	1	Body: LISTERINE, LAMBERT PHARMACAL COMPANY/Base : Obear-Nestor Glass Company maker's mark, 9	1.1	XXXVII	13.06	5	1915-1955

Table 11 Continued (Diagnostic Information for SHM-associated Artifacts, 5DV.12345)

Object Description	Qty	MNI Qty	Manufacture's Marks	Structure	Stratum	FS	Artifact Category	Date Range
Complete clear glass Letheric bottle with metal cap attached	1	1	Base: LENTHERIC 150 C.C.	1.1	XXXVII	14.0 2	6	1875- Present
Complete clear glass Pepsodent bottle with plastic cap	1	1	Cap: PP/Base: PEPSODENT ANTISPETIC 10, 9, Owens-Illinois maker's mark, 6	1.1	XXXVII	14.0 3	5	1936- 1946
Complete clear glass Listerine bottle with prescription finish	1	1	Body: LISTERINE, LAMBERT PHARMACAL COMPANY/Base : Obear-Nestor Glass Company maker's mark, 5	1.1	XXXVII	14.0 4	5	1915- 1955
Complete milkglass Mentholatum jar with external thread finish	1	1	Base: MENTHOLATU M REC. 19 1 TRADEMARK	1.1	XXXVII	14.0 6	8	1889- 1988
Complete clear glass Lentheric bottle with partial metal cap	1	1	Base: LENTHERIC	1.1	XXXVII	14.0 7	6	1875- Present
Complete blue glass bottle with metal cap	1	1	Base: 5, Maryland Glass Corporation marker's mark, L	1.1	XXXVII	14.0 9	8	1916- 1970
Complete clear glass possible perfume bottle	1	1	Base: 2	1.1	XXXVII	14.2 1	4	
Complete clear glass medicine bottle with partial gold label and prescription finish	1	1		1.1	XXXVII	14.2 2	8	
Complete amber glass medicine bottle with metal cap	1	1	Base: 7 1 1/2 Obear-Nestor maker's mark	1.1	XXXVII	14.2 5	8	1894- 1978
Complete milkglass Mentholatum jar with metal cap	1	1	Cap: MENTHOLATU M/Base: MENTHOLATU M REC TRADEMARK	1.1	XXXVII	14.2 7	8	1889- 1988

Table 11 Continued (Diagnostic Information for SHM-associated Artifacts, 5DV.12345)

Object Description	Qty	MNI Qty	Manufacturer's Marks	Structure	Stratum	FS	Artifact Category	Date Range
Complete clear glass perfume bottle with external thread finish and a stopper/dabber	1	1		1.1	XXXVII	15.0 2	4	
Complete clear glass soap dish	2	1		1.1	XXXVII	15.0 5	10	
Complete amber glass vitamin bottle with external thread finish and black plastic cap	1	1	Paper label: VITMAN A, B1, B2, C, D...DAILY REGIMEN...AD ULTS AND CHILDREN.../Ba se: 6, Obear- Nestor Glass Company maker's mark, 1 1/2	1.1	XXXVII	15.0 7	8	1915- 1980
Aluminum possible tooth powder container cap	1	1		1.1	XXXVII	15.1 8	5	
Neck and finish of Hilex bleach bottle	1	1	Neck: HI-LEX	1.1	XXXVII	15.2	11	1927- Present
Complete Hilex bleach bottle base	2	2	Base: 7, Owens- Illinois maker's mark, 4/HI-LEX REG. U.S. PAT. OFF.	1.1	XXXVII	16.0 1	11	1934- 1944
Complete milkglass Mentholatum container with partial metal cap	1	1	Base: Hazel Atlas makers mark	1.1	XXXVII	17.0 5	8	1902- 1964
Complete blue glass Vicks Vatronol bottle	1	1	Base: VICKS VATRONOL, triangle	1.2	XXXVII	3.03	8	1931- 1959
Complete clear glass perfume bottle with cap	1	1		1.2	XXXVII	3.04	4	

Table 12. Diagnostic Information for SHM-associated Artifacts, 5AH916

Object Description	Qty	MNI Qty	Manufacture's Marks	Unit	Level	FS	Artifact Category	Date Range
Clear glass prescription finishes with body fragments	15	2		S90W104	7	941	8	
Aqua glass vial body and base	1	1		S90W104	9	948	8	
Clear glass prescription finish fragments with base	6	1		S90W104	9	948	8	
Blue glass body and base medicine bottle fragments, possible refit with oil finish	3	1	Finish Neck: TAKEN EXT DOSE/Body1: H &.../Body2: ...RO	S92W104	6/7	363/ 367	8	
Clear glass vial with patent finish	3	1		S92W104	7	376	8	
Mostly complete Pioneer Pottery Works Chamber Pot	1	1	Base: IRON STONE CHINA, PIONEER POTTERY WORKS	S92W104	7	388	12	1885- 1896
Clear glass possible perfume vial fragments with patent finishes	3	2		S92W104	8	2032	4	
Clear glass possible perfume vial fragment with prescription finish	1	1		S92W104	8	2032	4	
Mostly complete clear glass vials with patent finishes	4	4		S92W104	9	2045	8	
Clear glass medicine bottle fragment	1	1	Body: 3xvi	S118W94	0	Unk	8	
Comb fragment, celluloid	1	1		S118W94	2	Unk	3	
Aqua glass Ayers Cherry Pectoral bottle fragments	4	1	Body1: AYERS/BODY2: PE.../Body3: ...CTORAL	S118W94 /S120W94	4/5	1035	8	1847- 1950

Table 12 Continued (Diagnostic Information for SHM-associated Artifacts, 5AH.916)

Object Description	Qty	MNI Qty	Manufacture's Marks	Unit	Level	FS	Artifact Category	Date Range
Complete clear glass bottle with prescription finish	1	1		S118W94	5	Unk	8	
Clear glass bottle body and base fragments with a prescription finish and a glass stopper	4	1	Body: ...NCS	S118W95	1	1903	8	
Light yellow glass body, base and finish fragments of Vaseline bottle with patent finish	6	1	Body1: CH.../Body2: EBROU, ASE/Body3: GH MF...	S118W95	2	1911 /1913	1	1880-1900
Clear glass wide prescription finish	1	1		S120W94	1	608	8	
Complete clear glass bottle with prescription finish	1	1		S120W94	3	628	8	
Partial clear glass Vaseline jar with patent finish	3	1	Body: CHE..., V...	S120W94	5	654	1	1880-1900
Complete clear glass Steinhauer & Walbrach bottle with prescription finish	3	1	Body: STEINHAUER & WALBRACH PHARMACISTS, DENVER, COLO/Base: WT & CO.	S120W96	5	1822	8	1860-1899
Partial clear glass Vaseline jar with patent finish	5	1	Body: CHESEBROUGH	S120W96	5	1822	1	1880-1900
Complete amber Spavin Cure bottle with patent finish	8	1	Body: SPAVIN CURE KENDALL/Base: ENOSBURGH FALLS VT, 1	S120W96	5	1822	8	1870-1906

Table 12 Continued (Diagnostic Information for SHM-associated Artifacts, 5AH.916)

Object Description	Qty	MNI Qty	Manufacture's Marks	Unit	Level	FS	Artifact Category	Date Range
Nearly complete clear glass bottle with prescription finish	2	1		S120W96	5	1822	8	
Clear glass prescription finish	1	1		S120W96	5	1836	8	
Black comb tooth, celluloid	1	1		S120W96	8	1860	3	
Clear glass body and base fragments of Syrup of Figs bottle	10	1	Body: SYRUP OF FIGS, CALIFORNIA FIG SYRUP CO., SAN FRANCISCO, CAL.	S124W86	2	1511	8	1880-1970

Table 13. Diagnostic Information for SHM-associated Artifacts, 5AH648

Object Description	Qty	MNI Qty	Manufacture's Marks	Unit	Level	FS	Artifact Category	Date Range
Mostly complete clear glass prescription finish	1	1		Unk	Unk	Unk	8	
Half of a clear glass prescription finish	1	1		Unk	Unk	Unk	8	
Partial side panel of an light green glass Castoria bottle	2	1	Body: CASTORIA	298° & 18.1 meters from datum	Surface	N/A	8	1906-1955
Black comb tooth, synthetic	1	1		S102W107	0	202	3	
Metal Vaseline cap	1	1	Cap: CHESEBROUGH CO.	S102W107	2	217	1	1890-1955

Table 14. Diagnostic Information for SHM-associated Artifacts, 5ME6825

Object Description	Qty	MNI Qty	Manufacture's Marks	Structure	Stratum	FS	Artifact Category	Date Range
Double-edged steel shaving razor blade	1	1		S 4 & 8	Unk	Unk	7	
Clear glass medicine bottle with an external thread finish and a dram scale	8	1	Base: Illinois, 13, Owens-Illinois maker's mark, 0	F1	Unk	Unk	8	1930
Complete milkglass Mentholatum container with metal screw top cap	1	1	Base: MENTHOLATUM REG. TRADEMARK	F1	Unk	Unk	8	1905-1988
Complete light green glass R.V. Pierce bottle with external thread finish	1	1	Body: R.V. PIERCE, BUFFALO, N.Y./Base: Pierce Glass Company maker's mark, 2	F1	Unk	Unk	8	1905-1939
Complete clear glass, machine-made, octagonal pill bottle with external thread finish	1	1	Base: 3F	F2	Unk	Unk	8	
Chrome-plated brass wire shower curtain ring	1	1		F3	Unk	Unk	10	
Clear glass, machine-made prescription bottle	14	1	Base: OWENS, 24, Owens-Illinois maker's mark	F3	Unk	Unk	8	1929-1954
Fragments of a round amber bottle, possible Purex	30	1	Body: ...X, ONE, QT, ...TE...TS...	F3	Unk	Unk	11	
Five gallon galvanized wash tub	1	1		Surface	N/A	Unk	8	
Base of an amber glass Clorox bottle	1	1	Base: REG. US...OFF..., CLOROX inside of a diamond	Surface	N/A	Unk	11	1931-1962
Sunbright Cleanser can end	1	1	Lid or Base: SUNBRIGHT CLEANSER	Surface	N/A	Unk	11	1915-1934
Old Dutch Cleanser can end	1	1	Lid or Base: OLD DUTCH CLEANSER-CHASES DIRT	Surface	N/A	Unk	11	1905-1934

Table 14 Continued (Diagnostic Information for SHM-associated Artifacts, 5ME.6825)

Object Description	Qty	MNI Qty	Manufacture's Marks	Structure	Stratum	FS	Artifact Category	Date Range
J.B. Ford Co. cleanser can with internal friction lid	1	1	Lid: THE J.B. FORD CO., WYANDOTTE, MICH.	Surface	N/A	Unk	11	1898-1942
Red Seal lye can with external friction lid	1	1	Lid: RED SEAL, HIGH TEST, SIFT TOP CAN, LYE	Surface	N/A	Unk	1	1883-1950
Complete clear glass machine-made Listerine bottle	1	1	Body: LISTERINE, LAMBERT, PHARMACAL COMPANY/Base: Illinois Glass Company maker's mark	Surface	N/A	Unk	5	1916-1929
Clear glass Health Products Corporation bottle base fragment	1	1	Base: HEALTH, PRODUCTS, CORPORATION, NEWARK NJ	Surface	N/A	Unk	8	1920-1959
Pennsylvania Salt Mfg Co. can	6	1	Body: PENNA SALT MFG CO, PHILA PA	Trash Scatter		Unk	1	1850-1957
Complete clear glass, machine-made medicine bottle	1	1	Base: Owens Bottle Company maker's mark	Trash Scatter		Unk	8	1911-1926
Clear glass Health Products Corporation bottle body and base fragments	3	1	Base: HEALTH, PRODUCTS, CORPORATION, NEWARK NJ	Trash Scatter		Unk	8	1920-1959

Table 15. Diagnostic Information for SHM-associated Artifacts, 5ME6826

Object Description	Qty	MNI Qty	Manufacture's Marks	Structure	Stratum	FS	Artifact Category	Date Range
Top portion and closure of a Dr. E.L. Graves tooth powder can	1	1	Top: DR. E. L. GRAVES UNEQUALED TOOTH POWDER, PATENTED SEPT. 27 '04	F1	Unk	Unk	5	1904-1920
Clear glass square-paneled Dr. King's New Life Pills bottle fragments	11	1	Body: ...W L...,BUCKLEN & CO., ...U.S.A.	F1	Unk	Unk	8	1880-1948
Purple glass bottle stopper with embossed medical crosses	2	1		F1	Unk	Unk	8	

APPENDIX II

Table 16. Source Information for Temporally-diagnostic SHM-associated Artifacts

Product	Site(s)	Source(s)
Huyck Pharmacy	5DV.5997	Corbett and Ballenger 1881
Caldwell's Syrup Pepsin	5DV.5997	Kwas 2011
Perfume bottle, FS 299	5DV.5997	Wilson 1981
Vaseline	5DV.5997, 5AH.916, 6AH.648	Lindsey 2014; Sherman 2002; Whitten 2015
Dr. Kilmer's Swamp Root	5DV.5997	Griffenhagen and Bogard 1999
Dr. Jayne's Tonic Vermifuge	5DV.5997	Griffenhagen and Bogard 1999
Colgate & Co. Perfumers	5DV.5997	Colgate 2015; Turner 2007
Parke Davis & Company (PD & Co)	5DV.5997	Hoefle and Davis 2000; Whitten 2014
Sloan's Liniment	5DV.5997	Goulder-Izant 1953
Piso's Cure	5DV.5997	Sullivan 2007
Cuticura System of Curing Constitutional Humors	5DV.5997	IMACS 2001; Newton 2008
Omega Oil	5DV.5997	IMACS 2001; Munsey 2012
Owens-Illinois Bottle, FS 2.23	5DV.12345	Lockhart 2004
Zonite	5DV.12345	Chicago Tribune 1931; Dominguez et al. 2010; Lockhart 2004; Wall Street Journal 1955
Hynson, Westcott, Dunning	5DV.12345	Kraemer 1922; Whitten 2014
Pertussan	5DV.12345	Dominguez et al. 2010
Mentholatum	5DV.12345, 5ME.6825	Horn 2001a; Mentholatum 2015; Whitten 2014
Vicks Nose Drop	5DV.12345	Vicks 2015; Whitten 2014
Vicks Vatronol	5DV.12345	Dominguez et al. 2010; Vicks 2015
Maryland Glass Corporation	5DV.12345	Whitten 2014
Pepsodent Antiseptic	5DV.12345	Horten 2002:96; Lockhart 2004
Owens-Illinois Bottle, FS 9.05	5DV.12345	Lockhart 2004
Ed Pinaud	5DV.12345	Business Profiles 2013; Ed Pinaud 2014
Tussy	5DV.12345	Justia Trademarks 2015
Listerine	5DV.12345, 5ME.6825	Horn 2001a; Marchland 1985; Toulouse 1971; Whitten 2014
Lentheric	5DV.12345	Dominguez et al. 2010; Lentheric 2009
Obear-Nestor Bottle, FS 14.25	5DV.12345	Whitten 2014
Vitamin Bottle	5DV.12345	Whitten 2014
Hi-Lex	5DV.12345	Lockhart 2004
Pioneer Pottery Works	5AH.916	Jervis 1897
Ayers Cherry Pectoral	5AH.916	Griffenhagen and Bogard 1999; Olson 2006

Table 16 Continued (Source Information for Temporally-diagnostic SHM-associated Artifacts)

Product	Site(s)	Source(s)
Steinhauer & Walbrach	5AH.916	S. S. Wallihan & Company 1871; Whepley 1899
Spavin Cure	5AH.916	National Museum of American History 2015; Willow House Chronicles 2012
Syrup of Figs	5AH.916	Fike 1987
Castoria	5AH.648	Griffenhagen and Bogard 1999
Owens-Illinois Bottle, F1	5ME.6825	Lockhart 2004
R.V. Pierce	5ME.6825	Fike 1987; Horn 2001a; Toulouse 1971
Owens-Illinois Bottle, F3	5ME.6825	Lockhart 2004
Clorox	5ME.6825	Horn 2001a, Clorox Company 2015
Sunbright Cleanser	5ME.6825	Horn 2001a
Old Dutch Cleanser	5ME.6825	Horn 2001a
J.B. Ford Co.	5ME.6825	Horn 2001a
Read Seal Lye	5ME.6825	Horn 2001a
Health Products Corp.	5ME.6825	United States Patent Office 1951; Whitman 1925
Pennsylvania Salt Mfg Co.	5ME.6825	Chemical Processing 2015; Industrial and Chemical Engineering 1928
Owens Bottle Co., Trash Scatter	5ME.6825	Toulouse 1971
Dr. Graves Tooth Powder	5ME.6826	Old Glass Bottles and Items of Antiquity 2014
Dr. King's New Life Pills	5ME.6826	Fike 1987