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**American Wasteland: A Social and Cultural History of Excrement,
1860-1920**

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**American Wasteland: A Social and Cultural History of Excrement,
1860-1920**

by

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Dedication

This work is dedicated to my parents, Max and Petra Gerling; my two sons, Marlo and Falco; and my wife, Pilar Cabrera Fonte. Their love and support made this possible.

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All three of my siblings—Bobby, Susie, and Andreas—have been great sources of support and encouragement throughout this process. But I owe Andreas special thanks. He encouraged me to go into American studies and unknowingly planted the seed of this project. In September of 2001, as my wife and I were on our “American Dream” road trip around the country, she inadvertently stole Andreas's black, velvet-covered copy of Dominique Laporte's *History of Shit* as we left his home in San Francisco. That book—actually only a history of French excrement—left me wondering why there was not a history of American excrement. So I thank Andreas for being a connoisseur of subversive literature and for always reminding me that he was looking out for his little brother. He also gave me very helpful feedback on the prospectus of this dissertation.

My mother-in-law, Irene Fonte, provided so much support to my wife and me while we raised two kids, taught classes, and wrote our dissertations. I owe her my deepest gratitude.

My parents, Max and Petra Gerling, have been unconditionally wonderful since I was born. They've been the kindest and most loving parents. They didn't flinch—even a little—when I told them what my dissertation would be about. And they have always listened patiently to my stories and anecdotes.

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Finally, I couldn't have completed this work without the love and support of my wife, Pilar Cabrera Fonte. I've been so fortunate to have a partner with whom I can share not only a family, travel, and a home, but also books and ideas. Raising kids (and changing their diapers) with her has been my greatest joy.

**American Wasteland: A Social and Cultural History of Excrement,
1860-1920**

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The University of Texas at Austin, 2011

Supervisor: Janet Davis

Human excrement is seldom considered to be an integral part of the human condition. Despite the relative silence regarding it, however, excrement has played a significant role in American history. Today the U.S. has more than two million miles of sewer pipes underneath it. Every year Americans flush more than a trillion gallons of water and fertilizer down the toilet, and farmers spend billions of dollars to buy artificial fertilizer. Furthermore, excrement is bound up in many complicated power relationships regarding race, gender, and ethnicity. This dissertation examines the period in American history, from the Civil War through the Progressive Era, when excrement transformed from commodity to waste. More specifically, it examines the

cultural and social factors that led to its formulation as waste and the roles it played in the histories of American health, architecture, and imperialism.

The first chapter assesses the vast changes to the country's infrastructure and social fabric beginning in the late nineteenth century. On the subterranean level, much of America's immense network of sewers was constructed during this era—making it one of the largest public works projects in U.S. history. Above ground, the United States Sanitary Commission, founded at the onset of the Civil War, commenced a widespread creation of sanitary commissions in municipalities, regions, and even internationally, that regulated defecation habits. Chapter Two assesses the social and architectural change that occurred as the toilet moved from the outhouse to inside the house—specifically, how awkwardly newly built homes accommodated this novel room and how the toilet's move inside actually hastened its removal. The third chapter shifts focus to the way Americans considered their excrement in relation to their body in a time when efficiency a great virtue. Americans feared ailments related to “auto-intoxication” (constipation) and went to absurd lengths to rid their bodies of excrement. The fourth chapter analyzes the way excrement was racialized and the role it had in the various projects of American imperialism. The colonial subjects and potential American citizens—from Native Americans to Cubans, Filipinos, and Puerto Ricans—were regularly scrutinized, punished, and re-educated regarding their defecation habits.

Table of Contents

Introduction	1
Chapter One—Sewers and Sanitary Bureaucracies	16
1.1 Introduction	16
1.2 Background	22
1.3 Excrement’s Changing Role: From Fertilizer to Sewage; Privy Vaults to Nearby Streams	25
1.4 The United States Sanitary Commission’s Opinions on Defecation and Excrement	52
1.5 The Few Voices Advocating Excrement as Fertilizer	71
1.6 Conclusion.....	75
Chapter Two—The Toilet: Domesticating Excrement	78
2.1 Introduction	78
2.2 From the Outhouse to the Toilet.....	80
2.3 Excremental Habits in the Urban Home.....	90
2.4 Excremental Habits in the Suburban and Rural Home	96
2.5 Women and Excrement	108
2.6 Public Defecation	129
2.7 Conclusion.....	138
Chapter Three—Eliminating the “American Disease:” Waste and the American Body	141
3.1 Introduction	141
3.2 Scope of the Problem of Constipation.....	146
3.3 Prominent Figures and Events in the History of Constipation and Autointoxication	153
3.3.1 Sylvester Graham	153
3.3.2 Midcentury Milling	156
3.3.3 James Jackson.....	161
3.3.4 John Harvey Kellogg.....	166
3.3.5 Bernarr Macfadden.....	170
3.4 Dangers of Constipation.....	172
3.5 Cures.....	190

3.6 The Body and Efficiency.....	204
3.7 On civilization.....	220
3.8 Sinful Stasis.....	231
3.9 Conclusion.....	239
Chapter Four—“Benevolent Civilizers:” Race and Sanitary Imperialism from Native Americans to the New Insular Subjects.....	242
4.1 Introduction.....	242
4.2 Race.....	246
4.3 Captain John G. Bourke and the Native Americans.....	257
4.4 Sanitary Imperialism.....	280
4.5 Conclusion.....	315
Conclusion.....	318
Bibliography.....	326

Introduction

During the 1930s, University of Texas Historian Walter Webb (1888-1963) and his friend the naturalist Roy Bedichek (1878-1959) concocted a history project known as “The Privy Papers of Sitting Bull.”¹ Inspired by their friends John and Alan Lomax and others who were traveling around the country collecting and recording folk art, the pair decided that outhouses were a rapidly disappearing icon of the American landscape, and that within a few decades there would be no more opportunities to record the literal writings on the outhouse walls.² So they each kept records of the privy poetry they found as they traveled through the countryside. Bedichek often recorded the graffiti on actual toilet paper and either kept it or sent it to Webb. Webb folded his record of this sometimes-obscene privy poetry lengthwise and kept it in the inside pocket of his blazer. Several years after starting this venture, Webb was on his way to Oxford for a visiting professorship when the plane nearly crashed in difficult weather. Perhaps it was the dignity and formality awaiting him at Oxford, but he was apparently so horrified at the thought of his reputation being tarnished by being found dead with these writings in his breast pocket that he tore them up as soon as he landed. As for Bedichek’s file, he was

¹ William Owens, *Three Friends: Roy Bedichek, J. Frank Dobie, Walter Prescott Webb* (Austin: University of Texas Press, 1975), 252–253. At the same time, A. Jiménez was compiling bathroom graffiti in Mexico. For a comparative look at bathroom graffiti in Mexico and the U.S., see Jiménez’s *Picardía Mexicana*

² Email correspondence with Bedichek’s grandson, Alan Pipkin. 10/11/11.

suspicious that a publicist from his office stole it, though another version of the story asserts that his wife was shocked by the papers and burned them.³ Bedichek's grandchildren are quite familiar with the story, though they are not aware of the papers' fate.⁴

Featured in this story are Webb, a prominent historian, someone dedicated to preserving and recovering American history, and Bedichek, someone who built his reputation as a naturalist. Both of them committed to record the inscriptions in a disappearing icon of the American landscape. Yet this record is now lost in part because the shame and the taboo yoked to excrement were too powerful. The taboo, which is not limited to the U.S., is indeed powerful and the consequences are profound. 2.6 billion people in the world have no access to a toilet. This means that many of them have to squat behind bushes, in alleys, in plastic bags, or in waterways. In many parts of the world, women wait until sundown or wake before sunrise and walk long distances to defecate in relative privacy in a field with tall grass. In addition to the enormous inconvenience, that practice puts them at a much higher risk for sexual assault and animal attacks, according to the UN Office of Human Rights.⁵

Several million Americans lack a flush toilet as well, but the greater problem in the U.S. is that use of the flush toilet is the perhaps the most wasteful practice in the

³ Owens, *Three Friends*, 252-253. Joe Frantz, *The Forty Acre Follies: An Opinionated History of the University of Texas* (Austin: Texas Monthly Press, 1983) 164.

⁴ Email correspondence with Pipkin and Rob Bedichek, another grandson of Roy. 10/11/11. Pipkin says he's heard the story many times, and it was always told with a smile.

⁵ "Women and Girls Right to Sanitation." Last modified October 3, 2011, accessed October 8, 2011, <http://www.ohchr.org/EN/NewsEvents/Pages/Womenandgirlsrighttosanitation.aspx>

history of this country. According to EPA estimates from 1991, Americans flush away 1.7 trillion gallons of mostly drinkable water every year through our two million miles of sewer pipes.⁶ Meanwhile, our excrement gets mixed with a poisonous blend of medical, industrial, and household wastes before going into a landfill. Depending on the municipality, most sludge either goes to a landfill and a small portion is repurposed, quite controversially because of the heavy metals involved, as fertilizer. Farms supplement the loss of nutrients in the soil by spending billions of dollars on artificial fertilizers at a time when key ingredients—potassium, nitrogen, and phosphorous—are no longer plentiful. In short, our system is not sustainable. This work seeks to unpack the complicated reasons why Americans adopted such a practice. Illuminating the foundations of the stigmatization of excrement may help us rethink the stigmatization of excrement.

This dissertation examines the period in American history, from the Civil War through the Progressive Era, when Americans radically revalued excrement. More specifically, it examines the cultural and social factors that led to its formulation as waste and the roles it played in the histories of American health, architecture, and imperialism. The manner in which we defecate, and what we do with the excrement after it leaves our bodies and then our homes, indicates a great deal about our social values. These values reflect the way we think about our bodies and our environment, but, as this work argues, also reflect the way we avoid thinking about excrement in a meaningful way. America's decision to sewer its cities changed life profoundly; and just as it is important to keep in

⁶ “How to Conserve Water and Use it Effectively.” Last modified September 30, 2011, accessed October 8, 2011, <http://water.epa.gov/polwaste/nps/chap3.cfm>

mind the factors that led to this change, it is equally important to measure how those values changed as a result.

The first chapter assesses the vast infrastructural and social changes occurring in the U.S. beginning in the latter half of the nineteenth century. On the subterranean level, much of America's immense network of sewers was constructed during this era—making it one of the largest public works projects in U.S. history. Cities and towns across the nation sought to abate diseases such as cholera and typhoid, to appear technologically progressive, and to uphold notions of civilization by installing sewers. While very little public dialog took place regarding the wisdom of sewerage, its momentum never slowed and the “flush and forget” attitude set in. It was also then that the use of excrement for fertilizer peaked and waned. Above ground, the United States Sanitary Commission (USSC), founded at the onset of the Civil War in 1861, commenced a widespread creation of sanitary commissions in municipalities, regions, and even internationally. As the USSC was the first large-scale bureaucracy that regulated where one should defecate, much of the focus of the first chapter is on the way these regulations were implemented and enforced. Union soldiers were encouraged to take this new knowledge back to their communities, and the propensity to punish those who defecated “improperly” took on racial undertones as this generation moved westward and overseas.

Chapter Two assesses the social and architectural change that occurred as the toilet moved from the outhouse to the water closet inside the house. Architectural pattern books from the mid-nineteenth century reveal that the transition was inelegant, as some

turned closets or small bedrooms into water closets and others building new houses remained unsure for several decades of where in the house they should be placed. Some attached the water closet to the house, but put the entrance door facing the outside. Others located it as far from the master bedroom as possible, usually near the servant bedroom. Either way, the toilet moved inside, into the domestic realm and became a responsibility of the women of the house. So in addition to architecture books and magazines, I use domestic manuals in this chapter to evaluate the social ramifications of excrement's domestication during this period. Rather than making Americans more comfortable with excrement, this new intimacy with it only served to hasten its disappearance from sight and mind.

The third chapter shifts focus to the way Americans considered their excrement in relation to their body in a time when efficiency was hailed as a superior virtue. While many histories of this period mention neurasthenia as a popular, culturally specific illness, almost none mention the widespread increase in constipation in the late nineteenth century. Health manuals and popular magazines provide evidence of the enormous anxiety Americans felt about the idea that their excrement was poisoning them from the inside. By 1900, the term "autointoxication" took hold, and allegations persisted that constipation resulted in everything from tuberculosis and cancer to insanity, suicide, and murder. And with the assistance of quacks, alternative health gurus, legitimate medicine, and a proliferation of publications and advertising alike, this fear led to an array of absurd tools and procedures designed to eliminate excrement from the body as

quickly as possible. Americans bought Dr. Bragdon's Sphincter Expanders, ate sand, used expensive and unnecessarily complicated enemas, had abdominal massages with cannonballs, and even had the "kinks" surgically removed from their intestines—all out of a paranoia that constipation was killing them. The metaphor of the machine; the vilification of excrement by Judeo-Christian writings, civilization, and germ theory; and an emphasis on efficiency all contributed to this widespread craze.

The fourth and final chapter analyzes the way excrement was racialized and the role it played in the various projects of American imperialism. Beginning in 1891, the same year a popular treatise was written comparing the way civilized Judeo-Christian people of the day defecated to the uncivilized way Native Americans managed their excrement, the Office of Indian Affairs instituted a "field matron" program in which white women travelled to reservations to instruct the Native Americans on sanitary matters, including the proper way to deal with excrement. Within two decades of the Spanish-American War, the U.S. occupied Cuba and maintained intervention rights, and had acquired the Philippines, Hawaii, Puerto Rico, Guam, the Panama Canal Zone, American Samoa, and the Virgin Islands, along with many new potential citizens. Among the very first orders of business of the Bureau of Insular Affairs was the widespread inspection of water closets in the homes of the citizens, construction of sewers, creation of new laws dedicated to proper defecation techniques, and administration of harsh punishment for those who resisted. Furthermore, this new phenomenon of sanitary imperialism was on display for everyone to see as sanitarians visited these places from all

around the world to study and in some cases copy the systems of sewage and inspection implemented by the American occupiers. In short, Americans' new attitudes about excrement were positioned at the forefront of the imperial and civilizing projects of the turn of the century.

The term "sanitary imperialism" was first used by Columbia University political scientist named Parker Thomas Moon in 1927 to refer to what he considered to be the primary benefit received by Cuba, Haiti, the Dominican Republic, and the Panama Canal Zone. He wrote that "One of our newer policies, then, is this sanitary imperialism, this prophylaxis of the tropics, this medical 'cleaning up' of the Caribbean."⁷ Moon acknowledged that while the U.S. has "been 'cleaning up' the Caribbean a certain number of business interests have been doing a little 'cleaning up' on their own account." I use it here not to downplay the profound effects American imperialist policies had on both itself and the smaller countries it oversaw, but rather to reflect what was a primary element of the imperial projects the U.S. undertook after 1898. I also argue that the approaches, tactics, and strategies of sanitary imperialism were extensions of the policies and actions of the USSC and the Office of Indian Affairs.

One unexpected theme that appears throughout the dissertation is the role Christianity played in excrement's transformation. I did not begin this research with the intention of making more than cursory acknowledgements to the role of the Judeo-

⁷ From a lecture entitled the "Monroe Doctrine" at the Second Conference on Cause and Cure of War. *Report of the Second Conference on the Cause and Cure of War*. No publishing information available. P. 200.

Christian tradition in the story of excrement. As the research progressed, however, allusions to biblical passages appeared consistently in health manuals, housekeeping manuals, and even in popular journal articles alongside excrement-removal advice—always to the effect of emphasizing and accelerating the disposal process. From Deuteronomy 23:12, which states that one should clean one’s camp of excrement lest god see it and be offended, to the Wesleyan adage that “cleanliness is next to godliness,” Christianity’s function in excrement’s devaluation was substantial. The failure of some colonial subjects and Native Americans to adopt Christianity was also used by Anglo-Americans to explain the savage defecation methods of the non-whites they were trying to train. These defecation methods—which the health officers of the Office of Indian Affairs, the Bureau of Insular Affairs, and the occupying military forces all criticized—consisted of defecating in holes in the ground near one’s abode or using an outhouse. Americans commonly used these methods just one generation earlier, but by the turn of the century became a signifier of uncivilized behavior to the Anglo-Americans, who used it as a way to reinforce pre-existing racial stereotypes.

In order to fully understand a culture, it is vital to understand what that culture devalued—what it considered to be waste. Thus far, historians have paid only cursory attention to the topic of waste in American history, though that trend is beginning to change.⁸ As Hawkins and Muecke, editors of *Culture and Waste*, write, “when waste escapes a perfectly circular model of production and consumption it acquires a crucial

⁸ See, for example, Susan Strasser’s *Waste and Want*, several works by Joel Tarr, Clay McShane, Shane McMichael, Gay Hawkins and Stephen Muecke’s *Culture and Waste* collection, Martin Melosi, *Effluent America...*,

role in reorganizing social values.”⁹ While human excrement was never part of a *perfectly* circular model, it was an integral part of the nutrient cycle until the late nineteenth century. Sewer systems broke that cycle, and it has been broken ever since. This work pieces together the reasons—economic, social, and cultural—that led to this shift.

One of the central questions running throughout this dissertation is when excrement transitioned from being a usable—albeit unpleasant—resource and fact of everyday life to being a waste. Excrement was not routinely termed “human waste” until the 1880s for several reasons. In the early 19th century, excrement was a widely used fertilizer, hauled out of urban privies by scavengers who sold it to farmers for a profit. In some areas it was also dried into fertilizer bricks, rich in phosphates and nitrogen. However, the discovery of the phosphate-rich Guano Islands in the early nineteenth century and the adoption of artificial and mineral fertilizers in the mid-nineteenth century devalued human excrement considerably. The sewerage of the cities and the autointoxication craze also functioned to secure excrement’s role as waste. Paradoxically then, in an era that valued efficiency so much, one of the most wasteful practices in our history proliferated across the country. This transformation of excrement from a commodity to “human waste” is fundamental to understanding the evolution of public policy regarding excrement.

I chose this time period because it was the historical moment when technological, social, and cultural circumstances fundamentally changed the meaning of excrement in

⁹ Gay Hawkins and Muecke, Stephen, eds., *Culture and Waste: The Creation and Destruction of Value* (Lanham, MD: Rowman and Littlefield, 2003), x.

the minds of Americans. From a broad perspective, the growth of American cities during the 19th century made the status quo in rapidly growing places such as New York and Boston intolerable. Some European cities began sewerage even earlier: Paris's modern sewer was designed in 1850; Hamburg built its sewer in the 1840s; and construction on London's great sewer began in 1859. These engineering feats were admired by American engineers who, after serious cholera outbreaks in 1832 and 1849, studied European examples and brought ideas back to the U.S. Almost no city in the U.S. had a sanitary sewer system in 1860, but by 1920, every major city in the U.S. had one. Furthermore, the USSC, the first far-reaching bureaucratic organization that instructed people how to defecate, began in 1861. And while some homes had indoor toilets early in the century, the 1860s was the first decade in which more houses were built with indoor toilets than without. Likewise, although Americans considered constipation to be a serious problem throughout the 19th century, medical literature refrained from categorizing as such until the 1860s. By 1920, however, the autointoxication phenomenon had been debunked by medical professionals. So 1860 and 1920 are, in essence, imperfect bookends. But these 60 years include the most significant changes in the social perceptions of excrement linking America's pre-sewer years and the modern day.

I routinely refer to this time period as the Long Progressive Era for several reasons—the primary reason being the fact of historical continuity. First I do not wish to suggest that there were not important shifts between the Civil War, Reconstruction, the Gilded Age, and the Progressive Era. But this work focuses on the important continuities

across these periods. Likewise, historian Rebecca Edwards uses the term in order to stress the common social strains spanning the late-nineteenth and early twentieth centuries.¹⁰ Primarily, I use Long Progressive Era because so many of the hallmarks of Progressivism had prominent roles in the story of excrement—highly organized bureaucracies made up of men (often Protestant) concerned with efficiency, order, and obsessive documentation; empire building; the notion that non-white races could be assimilated into mainstream society if they reorganized their values; construction of public works, especially sewers; liberal responses to industrialization and urbanization; diet reform; professional engineers; and the establishment of public places. As it were, many of these trends were already well under way in the 1860s.

When dealing with a topic that carries so many layers of stigma and taboo, choosing the proper language to deal with it is always difficult. Many sanitation activists today encourage “calling it what it is” and using the vernacular. Their argument is that the lack of frankness or directness in discussions about excrement—that are so often a

¹⁰ Edwards, Rebecca, *New Spirits: Americans in the Gilded Age, 1865-1905* (New York: Oxford University Press, 2005), 7. A roundtable discussion at the 2007 Organization of American Historians meeting also took up the issue, with some arguing that the Gilded Age—often considered between 1877 and 1900—is not the most useful way to describe the late-nineteenth century. The term gained traction in popular usage in the 1910s when “Van Wyck Brooks and Lewis Mumford found it a useful motif for lamenting the alleged shallowness and vulgarity against which they were rebelling.” Alan Lessoff, “Editor’s Note,” *Journal of the Gilded Age and Progressive Era* 8, no. 4 (October 2009): 461-462. But that designation applies a moral judgment that could equally be applied to other time periods in American history. It also, as historian George Fredrickson points out, leaves the entire U.S. South out. Another fact indicating that perhaps the Gilded Age and Progressive Era should be treated as one unit is that historians are already doing so, from the *Journal of the Gilded Age and Progressive Era* to the commonly used acronym GAPE.

matter of life and death—are obscured by language that is too careful and detached from the terminology most of us use ostensibly use at home. I agree with this argument, but as this work is a history, I decided that “shit” also carries a great deal of semantic baggage that did not have anything to do with this study. It also offends some. “Feces” is another term I considered. It is easy to turn into an adjective—fecal—it is not especially offensive, it is unambiguous. But it is also slightly awkward: it sounds plural when it is actually singular. “Excreta” was not possible because it includes urine, sweat, spit, etc. Most of the euphemisms of the day—excrementitious product, Z, ash, night soil, gong, feculent material, etc.—were not feasible as they too often refer to a specific context or are just too indirect. “Excrement” is not perfect either. It could refer to animal excrement; it is slightly too formal; and it perhaps even contributes to the maintenance of the taboo. But it is also relatively direct and inoffensive.

One of the choices I had to make early on in this process was where to draw the parameters around excrement. Flatulence, urine, snot, sweat, etc. are all other types of bodily excretions/secretions sometimes associated with excrement, but that ultimately carry a far different set of meanings than does excrement. At times, however, it is impossible to completely separate excrement from these phenomena. Urine is probably the most similar in that it also goes down the toilet and through the sewers and is also an excellent fertilizer. But urine was not nearly as offensive to the late-nineteenth and early twentieth century American as excrement and for that matter did not have the same level of negative associations. Perhaps urine does not have the same physical presence as

excrement. That is, it disperses more easily. Urine is also more or less sterile and was not feared during the period of miasma theory or germ theory. Likewise, although both are taboo and excrement eventually decomposes completely and becomes part of the soil, flatulence is much more transitory. They may have been feared as excremental miasmas were, but the record does not suggest the same concern existed for flatulence.

The methodology required for this work varied considerably by chapter and by topic. For the material on sewers, I was able to consult a rich body of work on urban history written mainly by Joel Tarr and Martin Melosi, and a number of municipal histories of various cities. I also consulted a number of primary documents written by sanitary engineers. These mostly contained discussions regarding design and function and almost never referred to excrement directly, but they were helpful in determining the major engineering debates of the time. Also useful for the first chapter were nineteenth-century farming manuals and journals that openly discussed the use of human excrement as a fertilizer. Among the USSC papers were hundreds of inspection forms that scrutinized the excrement disposal of the Union soldiers, describing in stark detail the conditions of the privies, the soldiers' reactions to the privies, and often recommending how soldiers should be punished and what a camp needed to do to become sanitary.

In the second chapter I consulted an array of architectural pattern books in order to find out how the bathroom transitioned into the home. I also used popular domestic manuals, some of which offered advice to women on how to properly attend to the sanitation and plumbing of the home. Also of great help was the New York Public

Library's collection of backhouse photos featuring quite lurid photos of the outhouses behind tenements at the turn of the century. For Chapter Three, my primary resource was the rich collection of alternative health books and manuals at the University of Texas's Stark Center. From the writings of Sylvester Graham and James Jackson through to Bernarr Macfadden's many publications, these sources provided a broad scope of medical practices and theories from the early nineteenth century through the early twentieth century. I also researched advertisements sent in to the American Medical Association Fraud Division in the early twentieth century. These advertisements, along with the AMA's responses were very helpful in ascertaining the full spectrum of devices used to "cure" constipation.

Records of American deeds in Cuba, the Philippines, the Panama Canal Zone, Hawaii, and Puerto Rico, kept in the National Archives, provided the main source of information for the fourth chapter's section on sanitary imperialism. The BIA and provisional governments in these locations kept meticulous records of their sewer-building project in the form of pictures, receipts, letters, and narrative descriptions. They also printed manuals and instructions for the inspectors, letters of complaint from local citizens regarding their treatment, and clipped reports from local newspapers documenting their attitudes. For the section on Native American defecation I used reports from the Office of Indian Affairs and inspection reports filed by field matrons from various reservations.

This dissertation demonstrates that excrement's relative silence belies its complex yet significant position in American history. Excrement is at the nexus of many of the Long Progressive Era's most illuminating themes, and it played major roles in some of the country's most significant developments. Excrement was an impetus to embark on one of the largest public works endeavors. Constipation was one of the most feared ailments of the turn of the century. And excrement was one of the primary targets for eradication in the phase of American imperialism from the Native Americans to the Filipinos. In addition to being a portrait of a heretofore unexplored element of the period, this dissertation helps the reader understand excrement's position among these themes, thereby allowing for a richer understanding of the period as well. I do not wish to rescue excrement from the lower rungs on the ladder of beautiful things. I do not wish to elevate it or glorify it. By all objective standards, it smells terrible, it can carry dangerous bacteria, it is an abject lump of bile, undigested food, water, and dead bacteria. But that lump's meaning—or the meaning we have assigned to it at specific metonymic moments—can tell us a great deal about changing American values in ways that are not otherwise clear. To that end, I insist that if we look more carefully at some of the layers of negativity and stigmas it accrued over the course of the Long Progressive Era—a hermeneutics of excrement and defecation—we will understand the ways it has shaped and been shaped by American society.

Chapter One—Sewers and Sanitary Bureaucracies

1.1 Introduction

In 1897, famed sanitarian George Waring wrote an essay describing what NYC would be like 100 years later, in 1997. He accurately predicted that the city would be virtually void of the animals that were so ubiquitous in the city in the nineteenth century. He also predicted that, barring some sort of engineering miracle, the Hudson River would be one vast cesspool, brimming full of the bodily waste of the city's inhabitants. Waring had a unique perspective as he was in the business of engineering miracles for the betterment of sanitation. Waring's prediction may have been more accurate had Manhattan not stopped dumping raw sewage into the Hudson in 1986. Just six years later, New York City began selling its 225 tons of sewage sludge¹¹ per day to Hudspeth County in West Texas, remedying a centuries-old problem.¹²

Waring's essay is indicative of the mindset of much of the U.S. between the Civil War and WWI regarding the concern for the future of sanitation. For many Americans in 1897, excrement was yesterday's problem—new sewer systems and flush toilets made it

¹¹ Sewage sludge was officially renamed "biosolids" in 1992 by the wastewater industry's PR wing, winning out over biolife, allnutri, scadoo, bioslurp, powergro, and nutri-cake.. The EPA shortly thereafter began referring to raw sewage as "beneficial biosolids." John Stauber and Rampton, Sheldon, *Toxic Sludge is Good for You: Lies, Damn Lies, and the Public Relations Industry* (Monroe, ME: Common Courage Press, 1995), 106, http://www.google.com/products/catalog?q=toxic+sludge+is+good+for+you&oe=utf-8&rls=org.mozilla:en-US:official&client=firefox-a&um=1&ie=UTF-8&tbm=shop&cid=16148711872221375481&sa=X&ei=7t6eTp_hHImjsQL04p3NCQ&ved=0CFUQ8wIwBQ.

¹² Allen Myerson, "Buying an Uneasy Home for New York City Waste," *New York Times* (New York, July 16, 1995).

possible for them never to see or smell their excrement once it left their bodies. But as a career sewerman, Waring likely knew that the new sewer systems—as effective as they were at clearing excrement from the home in most places by the turn of the century—created a whole host of new problems. Contemporary sewer systems represent a palimpsest of faulty methods to get it out of sight as soon as possible—each new method solving one problem and creating another. Rather than a society that recognizes human excrement’s excellent potential for fertilizing the land, it has been contaminating waterways for more than a century (as well as Hudspeth County) after being mixed with a poisonous blend of industry waste, medical waste, and whatever else businesses and individuals decide to flush down the drain, using an enormous amount of water. While human excrement can be heated and dried to the point where dangerous pathogens are killed, a frightening amount of chemicals (from any perspective) are combined in the wastewater that remain active and potentially dangerous (depending on the final use of the sludge). These chemicals include glyphosate (herbicide), triclosan (disinfectant), Diphenhydramine (antihistamine), and carbamazepine (anti-epileptic drug), among many others.¹³ Dried sludge containing these chemicals is then sold as fertilizer to farms, municipalities, counties, and mostly individuals. Thousands of complaints of sickness related to the sludge have been reported over the course of the past decade. While recycling excrement as fertilizer is an environmentally sensible return to methods used in

¹³ “*Household Chemicals and Drugs Found in Biosolids from Wastewater Treatment Plants,*” United States Geological Survey (n.d.), <http://toxics.usgs.gov/highlights/biosolids.html>.

the early nineteenth century and before, it is forced to make use of what may have been a considerable mistake—sewers.

This first chapter has several roles within the larger scope of the work. First, although the timeframe of this dissertation is limited to the sixty years in question, this chapter considers conditions before and after it in order to underscore excrement's considerable transformation. Second, the main themes of this chapter are two fundamental changes in the fabric of American life caused by excrement: the enormous public works projects of the sewer-building revolution combined with the above-ground social structure of the sanitation bureaucracies that made the sewers possible in the first place. Although a very small number of municipal sewers were constructed before the Civil War, the vast majority were built after 1861 and the creation of the United States Sanitary Commission (USSC). The USSC revolutionized American attitudes toward filth, offal, and disease. As George Fredrickson points out, not only did the Commission save thousands of Union soldiers' lives, but it also radically changed the way local, state, and federal government bureaucracies were capable of contributing to a sort of national perfection—an attitude whose development would come to define the Progressive Era.¹⁴ Third, this particular lens through which we will analyze the role of excrement in the U.S. provides for a richer understanding of how the Progressive Era began in many ways at

¹⁴ George Fredrickson, *Inner Civil War: Northern Intellectuals and the Crisis of the Union* (New York: Harper and Row, 1965); Stanley Schultz and Clay McShane, "Pollution and Political Reform in Urban America: The Role of Municipal Engineers, 1840–1920," in Melosi, Ed., *Pollution and Reform in American Cities, 1870–1930* (Austin: University of Texas Press, 1980); Judith Ann Giesberg, *Civil War Sisterhood: The U.S. Sanitary Commission and Women's Politics in Transition* (Boston: Northeastern Press, 2000), <http://www.h-net.org/reviews/showrev.php?id=4966>.

the onset of the Civil War. Such a shock to the social fabric of the country caused several Progressive Era traits to surface; among them are the impulse to sanitize, the anti-Jacksonian willingness to tolerate large bureaucratic institutions, and the reliance on so-called experts within and without these bureaucracies and their related reliance on science.¹⁵

Ultimately, not only did fears about excrement cause the sewerage of the American underground and the institution of defecatory policies first undertaken by the USSC, but these two important events in turn fundamentally transformed the way Americans related to their excrement. Other factors such as the autointoxication craze and the toilet's move indoors influenced American perceptions of excrement and are considered in later chapters, but sewers and sanitation bureaucracies were the two most visible, and arguably the two most profound, factors. This chapter also creates a foundation for the next three chapters, culminating with the racialization of excrement in the American imperial era via the uniquely Progressive notion of civilization. Progressive Americans believed that sanitation and cleanliness reflected a society's (and a person's) morality and degree of civilization.

Also key to this chapter as well as the entire dissertation is the determination that Americans between 1860 and 1920 witnessed (albeit subconsciously) a radical shift in their lifestyles and their perceptions of the world around them: excrement shifted from

¹⁵ In this chapter we will meet both the expert bureaucrat whose primary skill is navigating the thickening social landscape and the type of expert willing to work outside of the bureaucratic structure.

being a nuisance to deal with on a daily basis to something that—via new technology, new attitudes toward abjection, and more developed notions of civilization—could ostensibly be erased from their lives. Throughout this dissertation, I build an argument regarding when and how excrement became “waste.” Once a useful and valuable fertilizer, human excrement was transformed by powerful social and cultural forces into a form of matter that could no longer function in the economies of the body, the Christian home, the farm, or city. In this chapter, I examine excrement’s social and pecuniary worth in the farm/city equation. In particular, I argue that excrement transformed from an asset (however unpleasant) into a waste because of the rise of the guano trade, the building of sewers, and the increasing import of civilization that accompanied an excrementless existence.

Over the course of the 19th century, municipal waterworks moved from being a rarity (Philadelphia was the first, in 1802) to being commonplace. By 1890 there were very few cities in the nation that were without municipal plumbing systems. Engineers were, from the beginning, much better at pumping water into homes than at removing wastewater from them, however. In the postbellum era, for reasons of disease abatement and civilization,¹⁶ properly disposing of waste became a matter of great public concern. In the era of self-styled celebrity, George Waring capitalized on his modest engineering

¹⁶ According to Duffy, responses by public health officials to outbreaks of disease were bafflingly inconsistent. So while it shouldn’t be understated, the role of disease in the ballooning of sewer systems must be considered alongside matters of “civilization.” John Duffy, *The Sanitarians: A History of American Public Health* (Urbana: University of Illinois Press, 1990).

knowledge by marketing himself as the godfather of sewers.¹⁷ Considering the importance of sanitary engineering, it should come as no surprise that sewer builders were deemed heroes. And due to the massive public works projects that sewer-building turned into, and contrary to some assumptions about the Victorian Era, public discourse concerning city excrement disposal was actually quite prolific.¹⁸

This chapter will help the reader understand specifically the nature of sanitation bureaucracies, the societal role of sanitation engineers, and more generally what the new bureaucracies and sewer systems meant to post-bellum Americans approaching the Progressive Era. These practices not only led to new attention and growing bureaucracies set up to deal with human waste, but, as the next chapter discusses in greater detail, provided an unlikely platform for women to enter the public realm. Furthermore, the USSC and subsequent sanitation bureaucracies provided an example for the Office of Indian Affairs and the Bureau of Insular Affairs several decades later in instructing potential citizens on proper defecation practices.

¹⁷ Waring took on this identity to the dismay of many members of the American Society of Civil Engineers (ASCE). From Leonard Metcalf and Harrison Eddy, *American Sewerage Practice* (New York: McGraw Hill, 1914). For a critical evaluation of Waring based on his role as a celebrity and anti-contagionist, see James Cassedy, "The Flamboyant Colonel Waring: An Anti-contagionist Holds the American Stage in the Age of Pasteur and Koch," *Bull History Med* 1962, 36. For a more positive assessment of Waring, see Martin Melosi, "Pragmatic Environmentalist: Sanitary Engineer George E. Waring Jr.," *Essays in Public Works History* 4 (April 1977).

¹⁸ It was, however, often filled with erroneous beliefs about the contagiousness of miasmata, etc.

1.2 Background

Excrement is literally waste that is discharged from the body, but it specifically refers to fecal matter. Fecal matter is essentially a mixture of decomposing food, water, stomach acids, and intestinal flora—all with a coating of mucous. The bacteria living inside excrement emit a number of gases. Among them are mercaptans and indoles such as skatole, which is one of the most potent fecal-smelling organic compounds in excrement. It is dangerous to eat. While urine is mostly sterile, excrement is full of bacteria and occasionally parasites such as pinworm. Some dangerous diseases such as typhoid or cholera are spread by ingestion of just tiny bits of fecal matter contaminated with the bacteria. Most of this information was not lost on the late-19th century American.

There are, however, some fundamental differences in what we know today and what they knew a century and half ago. For example, the miasma theory of disease was the dominant idea informing 19th century Americans of how diseases were spread. Anti-contagionists—as those who supported miasma theory were known—believed that diseases could be spread by clouds of gases rising from decomposing matter (excrement, of course, included). An 1885 article in *Harper's* shows that germ theory, as boosted by Koch and Pasteur, was by then relatively accepted in the scientific and medical community. The author, J.S. Billings, M.D., wrote in 1885 that “a very minute quantity of excreta from a case of cholera or of typhoid fever may, when introduced to the alimentary canal of a healthy person, produce in that person a disease similar to the one from which

the germ originally came.”¹⁹ He even poked fun at the anti-contagionists (or perhaps just the subject matter): “Unpleasant sights and smells are not necessarily injurious to health, although they may turn the scale in the case of a feeble invalid just hesitating between life and death.”²⁰ However, even though the medical community came around to accepting germ theory in due time, there were skeptics for decades.²¹ And Americans feared sewer gases for decades after germ theory replaced miasma theory.

The story of the relationship Americans had with water in the 19th century was a pragmatic one. Given that the federal government was smaller in the nineteenth century than in the twentieth, and given that modern water carriage and water delivery systems mandate an enormous amount of resources and coordination, it could not have been any other way. The first priority of city-dwellers in the new republic with regards to water was, naturally, the acquisition of it—specifically the acquisition of clean drinking water. Wells and local ponds became insufficient water supplies as cities grew larger and denser.²² Over the course of the first half of the 19th century, municipalities and private companies constructed water delivery systems large enough to sate the thirst of these growing cities. Cities, in essence, became very effective at piping water to Americans. In the middle decades of the 19th century, as plumbing historian Maureen Ogle

¹⁹ “Sewage Disposal in the Cities,” *Harper’s Magazine*, Vol. 71, Issue 524 (September, 1885) 578.

²⁰ *Ibid.*

²¹ “The Germ Fallacy in Regard to Contagion,” M.J. Rodermund, M.D., *Physical Culture*, Vol. XI. Feb. 1904, No 2. P. 141.

²² Joel Tarr, *The Search for the Ultimate Sink: Urban Pollution in Historical Perspective* (Akron, OH: University of Akron Press, 1996), 9.

chronicles, people began to tap into these pipes to bring water directly to their homes.²³ They created makeshift faucets, pipes, sinks, etc., until a standardized plumbing industry got off the ground in the later decades. The problem, however, was what to do with the water once it entered the home. A family could only drink so much, after all. Sinks, new flush toilets, and other sanitary uses for water left the resident with few alternatives but to pipe the wastewater out into the backyard. Wells were also often placed in the backyard, and it was only a matter of time before wells were contaminated with wastewater—thus necessitating the construction of municipal sewer systems. Occasionally, water closets were connected directly to cesspools, but these easily overflowed or leached into cellars and wells.²⁴ During this period of transition, after the construction of waterworks but before the construction of sewers to remove the water, excrement was still a perceptible factor in the daily life of Americans. Even if they had indoor toilets to remove the excrement from the house, it was only removed to the back yard—not yet out of sight and out of mind.

Two fundamental changes happened in the U.S. because of the problem of excrement. These changes—the establishment of sanitary organizations and the building of sewers—also shaped the way Americans would come to think of excrement²⁵. First,

²³ Maureen Ogle, *All the Modern Conveniences: American Household Plumbing, 1840-1890* (Baltimore: Johns Hopkins University Press, 1996).

²⁴ Tarr, *Ultimate Sink*, 9

²⁵ See Howard Kramer, “Agitation for Public Health Reform in the 1870s” in *Journal of History of Medicine* 3 and 4 (Autumn 1948 and Winter 1949). See Joel Tarr and Francis McMichael, *Retrospective Assessment of Wastewater Technology in the U.S. 1800-1972* (Pittsburgh: Carnegie-Mellon University, 1977). *Values and Technology* Chapter 6. See “Evolution of Wastewater Technology,” 171-173.

the United States Sanitary Commission (1861), the American Public Health Association (1872), the National Board of Health (1878), and other such organizations represented the bureaucratic side of the larger Sanitary Movement in the latter half of the 19th century. For the first time in American history, groups of professionals discussed and propagated proper ways of dealing with excrement. Second, the vast majority of Americans who lived in cities after 1880 experienced a radical change in their lives. Not only did they witness the gargantuan public works projects of sewer installations that unearthed most city streets and employed thousands of workers, but their excrement suddenly began to disappear from their lives. These two major paradigm shifts are intended to be in conversation throughout this chapter.

1.3 Excrement's Changing Role: From Fertilizer to Sewage; Privy Vaults to Nearby Streams

This section outlines the sewer-building explosion in the late-nineteenth century in contrast with the excremental customs sewers replaced. Human excrement was widely used as fertilizer on nearby farms until sewers began to usher it away to be diluted in bodies of water. The widespread use of sewers certainly altered the previous practices of excrement removal, but should not be considered the lone culprit in the devaluation of excrement in the middle to late nineteenth century. The rise of the guano industry and the manufacture of artificial fertilizers played an important role in excrement's transition from asset to liability as well.

Before 1880, the vast majority of Americans had an intimate relationship with their excrement. That is, they did not have the luxury of flushing it away, never to see, smell, or think of it again. Even in one of the most sewered cities in the nation in 1880, Boston, only 75,000 water closets were used (compared to 6,500 in 1857).²⁶ And even those fortunate families could not completely escape their excrement. According to the 1880 census, Bostonian sewage, which was ultimately funneled into the bay, was reintroduced to the shore by the high tide as soon as the low tide could empty it: “hardly any gets away from the vicinity of dense population.”²⁷ Approximately half of the homes in Chicago, which was also sewered earlier than most cities, had water closets and were connected to the sewer in 1880. Very few had water closets connected to cesspools—the other option for draining a water closet when a sewer line was not available. Although many cities, especially in the Northeast, had built sewers to carry stormwater out of the streets as early as the 18th century, municipal laws forbade excrement from being dumped in them. Boston was one of the lone exceptions to that rule, and they still waited until 1833 before allowing excrement in their storm sewers.²⁸ Still, many storm sewers were merely gutters on the sides of the streets that guided rainwater to a body of water on lower ground.

²⁶ “Social Statistics of the Cities,” *1880 United States Federal Census*, 131. Search for “municipal cleaning.” Compiled by George Waring.

²⁷ *Ibid.*, 132.

²⁸ Joel Tarr and Francis McMichael, “The Evolution of Wastewater Technology and the Development of State Regulation: A Retrospective Analysis,” in *Retrospective Technology Assessment--1976* (San Francisco: San Francisco Press, 1977). Footnote 24 p. 189. St. Louis allowed fecal matter in their sewers in 1842, and Washington D.C. in 1858.

Some homes in the early decades of the 19th century had indoor toilets, but this luxury was typically only for the wealthy. Monticello, Thomas Jefferson's home, for example, had several indoor toilets. British sociologist David Inglis, writing in the tradition of Pierre Bourdieu and Norbert Elias, termed the set of mores governing excretion during the period of 1750 to 1850 the "bourgeois fecal habitus."²⁹ This term not only describes the practice of indoor defecation, but the entire "set of symbols oriented around the theme that the bourgeois body does not have excretory capacities."³⁰ Although Inglis's study focuses on European culture, it offers important contributions to this study. Inglis notably points out that although indoor toilets and separate, private spaces for defecation were rare before the mid nineteenth century, they were indeed employed by some in the upper classes as a significant way of marking class. The implication is that excrement, the anus, and the act of defecation itself were indicative of the lower classes. Swedish anthropologist Jonas Frykman also writes that the peasant class in Sweden in the early nineteenth century—who would have had similar outhouses and experiences with dirt as an American at that time—had a much more intimate, less combative relationship with dirt in general.³¹ While men as wealthy as Thomas Jefferson could keep slaves to whisk his excrement away and wash his bedpan immediately—thereby erasing signs of

²⁹ David Inglis, *A Sociological History of the Excretory Experience: Defecatory Manners and Toilet Technology* (Lewiston, NY: Edwin Mellen Press, 2001), 5.

³⁰ Inglis, *Excretory*, 114.

³¹ Jonas Frykman and Orvar Löfgren, *Culture Builders: A Historical Anthropology of Middle-Class Life* Jonas Frykman, -, trans. Alan Crozier, Sixth. (Rutgers University Press, 1987), 187.

recent defecation—only sewers could accomplish this task on a large scale.³² For so many rural farmers in the early to middle nineteenth century, however, excrement was very much a part of everyday life. Many farmers concerned about the fertility of their fields used both human and animal excrement on their fields relatively free of the stigmas attached to it in the present day.³³

In short, the vast majority of Americans prior to 1880, when the sewer-building boom began, used what urban studies historian Joel Tarr calls the “cesspool-privy vault” system. That is, their bowel movements were realized in an outdoor privy—or outhouse—that was typically above a pit. Regional variances tended to determine the size and shape of the pits, but they were usually dug a few feet deep (3’–6’), and they were often (especially as the century progressed) lined with bricks in order to prevent leaching. In rural areas, a filled pit or vault would simply be covered over with dirt and the outhouse moved over another pit. In more urban areas where crowded spaces did not afford the residents the luxury of moving the outhouse, the pit had to be emptied on a regular basis. This process was typically done via subscription to the services of a scavenger (more on scavengers below).

When Paul Revere assumed the presidency of the newly formed Boston Board of Health, one of his first acts was to regulate the excrement of the city. He posted public

³² In Europe, many members of the upper classes still had cesspits in the basements of their mansions, castles, etc. So the smell was never truly neutralized until wastewater sewers were built and connected.

³³ Frykman writes of the comfort Swedish peasants felt being covered with dirt and sweat, even preferring it as an extra barrier against the cold: “The farmer knew that dirt gave life.” *Culture Builders*, 190.

notices “earnestly recommending” that all privy vaults “whose contents are within 18 inches of the surface” be emptied. But from that day forward, only licensed scavengers could do so. The poor shape of the scavengers’ hauling carts was a consistent problem, so the Board of Health organized for “suitable carts”—ones that wouldn’t spill their contents—to be purchased for the scavengers.³⁴ In some cases, such as in Washington D.C., privy vaults were not used as much as were simple pine boxes that sat on the ground. Most were about three feet wide, 18 inches high, and 15 inches deep. As one can imagine, these boxes were “often leaky and rotten...a relic of an old and unthinking age not too soon forgotten.”³⁵

The outhouse structure (sometimes referred to in the U.S. as a backhouse) also varied a great deal. Some two-story outhouses have been built to accommodate those who live on the second floor of a house. And in more populated areas such as New York tenements, outhouses were built in rows. Still, the basics of the outhouse were fairly universal: four walls, a roof, a single door (usually with ventilation), a wooden seat with a hole in it, and something for cleaning (often a peg on the wall holding old rags, a catalog, or scraps of paper). Nevertheless, this cesspool-privy vault system was one that was beginning to be phased out after the Civil War—a process accelerating rapidly after 1880. Many building codes after the turn of the century actually required indoor plumbing be

³⁴ Public Notice from Boston Board of Health, dated October 2, 1799. Reprinted in Ronald Barlow, *The Vanishing American Outhouse: Privy Plans, Photographs, Poems and Folklore* (El Cajon, California: Windmill Publishing Company, 1989).

³⁵ Azel Ames, "The Removal and Utilization of Domestic Excreta," APHA 4 (1877): Social Statistics of Cities, Tenth Census, footnote, p 75.

installed and prevented outhouses from being built.³⁶ In New York City in the 1780s, a man named William Hitchcock secured a contract with the city to collect manure from the city and dump it north of the main population around the Tenth Ward. As Commissioner of Streets and Scavengers, Hitchcock apparently did well financially until the stench from his dumping ground forced him to dump by the piers instead. Shortly thereafter, the city revoked his contract in favor of selling “dirt carter’s” licenses.³⁷ Then in 1818, the city expressed its nativist attitudes by creating a separation between cartmen hauling excrement and cartmen hauling more profitable goods. While native-born cartmen could haul whatever they wished, immigrant cartmen were restricted to hauling excrement.³⁸

Beginning in the 1830s, a business called the Lodi Manufacturing Company in New Jersey was paid by New York City to haul all of the scavenged night soil. The scavengers would empty their contents into the Lodi boats, which would take the excrement downstream to be turned into poudrette (French for “fine dust”)—a fertilizer deodorized and dried by a method credited to the French.³⁹ Lodi then turned around and sold the poudrette for 40 cents per bushel.⁴⁰ Lodi later marketed “tafeu,” allegedly the Chinese word for processed night soil, which was excrement combined with Peruvian

³⁶ Edith Elmer Wood, *The Housing of the Unskilled Wage Earner: America’s Next Problem* (New York: The Macmillan Company, 1919), 20.

³⁷ Graham Russell Hodges, *New York City Cartmen: 1667-1850* (New York: New York University Press, 1988), 134–135.

³⁸ Hodges, *Cartmen*, 136.

³⁹ Richard Wines, *Fertilizer in America: From Waste Recycling to Resource Exploitation* (Philadelphia: Temple University Press, 1985), 26–27.

⁴⁰ *Ibid.*, 27.

guano.⁴¹ In the next few decades, many other poudrette and tafeu companies entered the business landscape. Perhaps the exotic names gave the poop a level of sophistication they thought necessary for marketing purposes. According to fertilizer historian Richard Wines, the poudrette and tafeu companies “peaked in the 1870s or 1880s, and then dropped rapidly to insignificant levels in 1900.”⁴² But by the end of the period in the scope of this work, this propensity for recycling human excrement will have all but disappeared.

Contrary to the relative silence in the 1880s about whether or not it was responsible to use sewers to flush away a once-valuable fertilizer, there was a vibrant debate in the 1840s and 1850s regarding how to maximize excrement’s fertilizing potential. Lemuel Shattuck, one of the country’s earliest and most respected sanitarians, stressed in his famous 1850 Report of the Sanitary Conditions of Massachusetts, that returning excrement to the soil was a well-founded “law of nature” and that that principle “at the root of the whole science of agriculture.”⁴³ In a study he made of the practice in England, he found that sewage irrigation was worth a respectable amount of money:

The average value of the land, irrespective of the sewer water application, may be taken at £3 per imperial acre, and the average rent of the irrigated land at £30, making a difference £27; but £2 may be deducted as the cost

⁴¹ Ibid., 29.

⁴² Ibid. (Wines), 30.

⁴³ Lemuel Shattuck, *Report of the Sanitary Commission of Massachusetts, 1850* (Boston: Harvard University Press, 1948), 217. Quoted from Dr. E.H. Barton, “Untitled paper presented to the Medical Society of Louisiana in 1850,” in *DeBow’s Review of the Southern and Western States*, vol. 11 (Louisiana: University of Louisiana, 1851), 480.

of management, leaving £25 per acre of clear annual income due to the sewer water.⁴⁴

One author of a piece in *The Farmer's Magazine* from 1839, wrote that to neglect to use any type of manure, including night soil (“the most powerful of all”), on one’s farm is like making “riches make themselves wings and fly away.” He wrote that if a Chinese farmer saw that some American cities let their night soil go down the storm sewers and into the water, “he would naturally say that we deserved to be poisoned and starve.”⁴⁵

Another author identified only as “Mr. Foote,” wrote an essay in the *Southern Cultivator*, published in Atlanta, in 1843 claiming that “the secret of all good farming lies in the skillful management and judicious application of *homemade manures*.”⁴⁶ Another source claimed in 1849 that the fertilizing value of night soil depends on the type of food consumed—“it being richest when large quantities of meat and other nutritive food is consumed.”⁴⁷ Though he maintained that excrement from “best hotels” was not noticeably different from that of the “poorly supplied work-houses.”⁴⁸

Wines writes of the synergistic recycling system practiced in the New York metropolitan and rural areas in the 1830s-1850s. He describes the system in effect in the middle of the nineteenth century in various areas of the U.S. For example, Long Island farmers, whose land was sandy and not especially suitable for heavy farming, used

⁴⁴ Shattuck, 215-216

⁴⁵ Rusticus, “On the Use and Abuse of Manures,” *The Farmer's Magazine*, 1839, 82–83. Author identified only as Rusticus.

⁴⁶ Emphasis in original. From Mr. Foote, “Mr. Foote’s Prize Essay,” *The Southern Cultivator*, April 26, 1843, 57.

⁴⁷ R.L. Allen, *The American Farm Book: Or Compend of American Agriculture* (New York: Orange Judd and Co., 1849), 69.

⁴⁸ *Ibid.*

various scraps brought from Brooklyn and Manhattan, including horse manure, excrement, leached ashes, ground bones, etc. to fertilize their farms. Then they sold the crops grown with that fertilizer back to the citizens of Manhattan and Brooklyn, thus completing a very sensible, economic, and efficient nutrient cycle. This system was in place at the same time in Philadelphia, Boston, and Baltimore as well.⁴⁹ One correspondent from the *American Agriculturist* in 1842 estimated that the excrement alone of New York could fertilize four million bushels of wheat.⁵⁰

Still, New York lagged behind other large cities in the Northeast—including Boston, Baltimore, and Philadelphia, who more readily used their night soil as fertilizer.⁵¹ In a letter to the New York Common Council by the City Inspector, the inspector reported of the “evil inflicted upon this city” in the form of scavengers spilling their loads on the street and dumping night soil off the piers, fouling the waters.⁵² He complained not only because of the smells and the messy harbor (receiving according to his estimates 750,000 cubic feet of excrement per year), but also because of the enormous waste of resources: “By the concurrent testimony of a number of practical chemists and farmers, derived from the surest of all tests, *experience*, the manure which is manufactured from night soil is more valuable than any other kind ever employed in this country.”⁵³

Although, as Wines noted, quite a bit of this recycling was indeed going on between New

⁴⁹ Wines, *Fertilizer in America*, 6-15.

⁵⁰ “Untitled,” *American Agriculturist*, 1842, 236.

⁵¹ John Griscom, “Communication of the City Inspector, With an Ordinance Regulating the Emptying of Sinks, Privies, and Cispools,” in *Documents of the Board of Alderman in the City of New York, Vol. 9*. (New York: Charles King, 1843).

⁵² *Ibid.*

⁵³ *Ibid.*, 167.

York and the surrounding rural areas, Inspector Griscom announced shock that “the creation of a new branch of industry [manufacturing night soil manure]...has not been unanimously adopted by its citizens and sustained by the authorities.”⁵⁴ He went on to say that the fact that there were not more than a few poudrette companies in New York was an offense to “our character as citizens of the commercial metropolis of America.”⁵⁵ Already in 1853, one could find advertisements from three different poudrette suppliers in the New York area on a single page of *The Country Gentleman* magazine.⁵⁶ Evidently, even “gentlemen” farmers used it in 1853. *The Farmer’s Cabinet* advocated its use as well, writing that “It is the most efficient, in its immediate effects, of any manure we have tried.”⁵⁷ Some farmers thought the process for creating poudrette was unnecessary and depleted some of the valuable fertilizing elements in the excrement. George Bommer, a popular agriculturist in the 1840s, wrote that since poudrette is dried and mixed with other material such as lime, it was about half as valuable as raw excrement.⁵⁸

Despite the value of night soil to farmers, scavengers (or nightsoil men) were still paid by the tenant or homeowner (and in some cases contracted by the city) to empty the privy vaults and haul it away. In Boston in the 1840s, for example, the scavenger, under the service of the city in this case, was paid \$3.00 per load in the summer and \$1.50 per

⁵⁴ Ibid., 169.

⁵⁵ Ibid., 170.

⁵⁶ “untitled,” *The Country Gentleman*, September 8, 1853. (Albany: Luther Tucker Publisher) 163.

⁵⁷ Jesse Buel, *The Farmer’s Companion: or, Essays on the Principles and Practice of American Husbandry* (Boston: Marsh, Capen, Lyon, and Webb, 1839),72. Reprinted in *The Farmer’s Cabinet*, 1840. Vol 4. P. 245.

⁵⁸ George Bommer, *New Method, Which Teaches How to Make Vegetable Manure* (New York: Herald Building, 1843), 64.

load in the winter.⁵⁹ The fate of the night soil varied drastically. Complaints abounded nearly everywhere scavengers existed about the leaky boxes, loudness, and messiness of their work, waking people up and spilling excrement all over the streets.⁶⁰ Although the cesspool-privy vault system was messy, labor intensive, and many privy vaults were not properly sealed and allowed leakage into the water table, it was the method of excrement disposal that most easily lent itself to maintaining the nutrient cycle. But factors other than just aesthetic and health-based ones contributed to this system's eventual termination.

Farmers began to use guano in the U.S. in the 1820s, and its use became quite popular in the 1840s with the more widespread importation of Peruvian guano, a good deal of which came from the Chincha Islands off of Peru's coast. Guano's popularity continued through the 1850s and slowly replaced recycled fertilizers such as excrement.⁶¹ Though already in 1844, the *American Agriculturalist* portended that guano importers could have access to a sizeable market on the East coast if it "could be exempted from duty."⁶² And a year later it predicted a "mania" for the old, dried bird droppings, rich in phosphorous and nitrogen.⁶³ British merchants were responsible for much of the early

⁵⁹ Shattuck, 314.

⁶⁰ Shattuck, *Report*, 24; "Notes of the Month," *The Sanitary Record*, October 15, 1889, 185.; Griscom, *Letter*, 164.

⁶¹ Wines, 33-39.

⁶² Wines quoted, 36. His source is *American Agriculturalist* 3 (1844): 99.

⁶³ Wines, 39.

guano trade, though American traders soon joined the rush and sought to mine guano from islands off of Mexico and Africa in addition to South America.⁶⁴

Within a few years, Americans were allowed by law to simply put their flag on Pacific or Caribbean Islands with guano deposits and then mine it to depletion. Known as the Guano Islands Act of 1856, the law was the first of its kind allowing for American overseas expansion. And, by not specifying what legal status these islands had under U.S. law after they were depleted of their valuable resources, it effectively set a precedent for the insular cases that would be decided in the early twentieth century. It was proposed by Senator William Seward, Lincoln's expansionist Secretary of State and included a provision that the guano would not be subject to tariffs, but rather be treated "as though transshipped from any domestic port."⁶⁵ Historian Jimmy Skaggs suggests that the Seward-sponsored Guano Islands Act be called Seward's Outhouse.⁶⁶

Bird droppings, even though mountains of it had been drying for centuries, proved to be a more concentrated, richer, and more transportable source of fertilizer. By 1867, an American guano company signed a lease to use the phosphate deposits in South Carolina in addition to the guano it imported from Peru and the "Guano Islands." Its use skyrocketed in the U.S. in the 1870s, and by the 1880s, it was the fertilizer of choice for most farmers.⁶⁷ Just 40 years earlier, the farms of the northeast engaged in a successful

⁶⁴ Wines, 54-70.

⁶⁵ Jimmy Skaggs, *The Great Guano Rush: Entrepreneurs and American Overseas Expansion* (New York: St. Martin's Press, 1994), 57.

⁶⁶ Skaggs, 56.

⁶⁷ Guano info from *The Great Guano Rush*, Skaggs, and from Wines, *Fertilizer in America*

recycling system where the excrement from humans and horses and butcher scraps in the city were sold to rural farmers, who used them as fertilizer for the crops they then sold back to the urbanites.

Some farmers begrudgingly went with the tide even though intuition and experience told them that excrement was a more sensible fertilizer. Horace Greeley wrote in New York in 1871 that

It seems to me plainly absurd to send ten thousand miles for this stimulant [guano] when this or any other great city annually poisons its own atmosphere and the adjacent waters with excretions which are of very similar character and value, and which Science and Capital might combine to utilize at less than half the cost of like elements in the form of Guano.⁶⁸

Echoing Victor Hugo's point in *Les Misérables* less than a decade earlier, Greeley voiced an attitude that was losing fashion in the U.S.

So the guano age in fertilizer history created two important shifts in American law and society relevant to this work. First, the Guano Islands Act failed to specify what the status of the islands would be after the riches were mined from it. Until then, incorporation into the United States of foreign lands was always total (with exception of Indian nations). The act thereby provided a precedent for the liminal status future insular

⁶⁸ Horace Greeley, *What I Know of Farming: A Series of Brief and Plain Expositions of Practical Agriculture* (New York: G. W. Carleton and Co., 1871), 121–122.

territories such as Puerto Rico and the Philippines were stuck in at the turn of the century. Second, as Wines argues, the import and use of guano as fertilizer interrupted, or at least prevented the expansion of, the harmonious system whereby excrement from the cities was hauled to the farms to help grow crops to feed the cities. It paved the way for artificial fertilizers that were easier to transport.⁶⁹ And more importantly, it left excrement without a purpose, hastening its transition to waste and the development of sanitary sewers.

Meanwhile, as farms moved away from using human excrement as fertilizer, human excrement began to vanish from American cities as well. Once a home connected to the sewer line, the residents ideally did not have to be reminded of or concerned about excrement anymore once it left their bodies. The initial public works effort was substantial in every city. It involved tearing up roads, thousands of workmen, and laying miles of pipes. But once that was complete, the landscape of the city changed in subtle but meaningful ways. Those with indoor toilets did not have to get dressed to use the backhouse anymore. Scavengers no longer roamed the streets, spilling their collections along the way. And areas near the backhouses and along the streets likely smelled much better than before the sewers were built.

1880 was a pivotal year in the history of sewers. It was the year the trade journal dedicated to sanitary engineering changed its name from *The Plumber and Sanitary*

⁶⁹ Wines, 53.

Engineer to simply *The Sanitary Engineer*.⁷⁰ It was the year the census paid special attention to sewer building. And 1880 was most significantly the year that sanitary celebrity George Waring supposedly saved Memphis from yellow fever with his separate system of sewers. New York City's sewer by 1880 was built piecemeal, and much of it was only intended for storm water and street run-off. By 1809 a large (16ft wide) open sewer was constructed in the middle of Canal Street, but that was primarily built to drain storm water.⁷¹ Still, by midcentury, one with means could hire a plumber to connect the water closets and sinks (by 1880, there was such thing as "scientific plumbing" that began to replace DIY fixtures with standardized fixtures) to the street's sewer line.⁷² In the first half of the 19th century, the city of New York alternately allowed and forbade various businesses from connecting to the Canal Street sewer and others depending on what was being discharged into it.⁷³ Researchers from the Lyceum of Natural History estimated that in 1829, over 100 tons of excrement were deposited into the ground by New Yorkers—which then naturally bled down into the water table, causing an enormous amount of pollution in the wells.⁷⁴ Occasionally in wealthier homes and buildings, almost always in the Northeast, one would find an indoor latrine with the privy vault in the cellar. But the vast majority of New Yorkers used outdoor privies built atop privy vaults. In the early part of the 19th century, New York already had municipal regulations for the

⁷⁰ Tarr, *Ultimate Sink*, 196.

⁷¹ Joanne Abel Goldman, *Building New York's Sewers: Developing Mechanisms of Urban Management*, History of technology series (West Lafayette, Ind: Purdue University Press, 1997), 26-27, 44.

⁷² Goldman, 72-3; Ogle, 119-152

⁷³ Goldman, 74

⁷⁴ Edwin G Burrows, *Gotham: A History of New York City to 1898* (New York: Oxford University Press, 1999), 589.

construction of privy vaults, stipulating that they must be built with “stone, mortar, and brick, and be dug at least five feet deep.”⁷⁵ These regulations were not, however, enforced with any consistency or rigor, according to historian Joanne Goldman.⁷⁶ When a more comprehensive sewer system began to be built in New York in the early 1860s, they were built with brick and mortar, instead of connecting bored wooden logs, as had been done earlier.⁷⁷ By 1880, New Yorkers were already more sensitive to the offensiveness of excrement and felt it should be kept off the streets.⁷⁸

A Western city such as Austin, Texas, had no sewers in 1880. Nearly all facilities for solid wastes were outhouses with privy vaults underneath.⁷⁹ Some larger cities in the South and West experimented with water closets and earth closets, but in 1880 that number was still very small compared to those using outhouses above privy vaults. In cities, however, where there was not space to move an outhouse,⁸⁰ the privy vault was

⁷⁵ Goldman, 20.

⁷⁶ Ibid.

⁷⁷ Goldman, 82-83. It is important to note that New York by the 1850s was still not building a comprehensive sewer system. Evidence of the piecemeal system by which it was built at the time is the fact that over 200 small contractors were hired to build various segments of the sewer (Goldman, 81).

⁷⁸ Clay McShane and Joel A Tarr, *The Horse in the City: Living Machines in the Nineteenth Century*, Animals, history, culture (Baltimore: The Johns Hopkins University Press, 2007), 26. McShane and Tarr argue that by the 1880s and 18890s, “City residents did not want their neighborhoods smelling like a barnyard.” This attitude was reflected in the sharp rise in letters complaining about manure carts since the 1850s and the municipal laws in Brooklyn and New York City requiring manure carts to be closed (Brooklyn in 1882 and New York City in 1871).

⁷⁹ 1880 Census

⁸⁰ As the health hazards of excrement became better known in the mid-19th century, stricter codes were put in place to force the vaults to be lined with wood, rocks, or some more watertight material.

emptied by a licensed scavenger⁸¹ who would, with ladles and buckets, empty the privy vault and then haul it in barrels pulled by a horse-drawn carriage.⁸² The ultimate fate of excrement removed by the scavenger depended upon a variety of factors: city code, landscape, integrity of the scavenger, distance to the nearest body of water, etc. Most cities required scavengers to operate at night, so there was very little oversight as to what the scavenger did with his collection. Some areas used the “night soil” on farms for fertilizer. Sometimes even the farmers themselves collected the excrement from privy vaults. In Austin, the scavenger was required to dump the excrement 1000 yards outside of city limits.⁸³ In Galveston, the scavengers emptied their buckets into the ocean.⁸⁴ In Houston, the excrement was used by farmers as manure.⁸⁵ The night soil of Chicagoans was taken outside city limits and buried in trenches. In Los Angeles in 1880, 20% of the population of 11,183 was connected to sewers. The excrement of the rest was taken to fertilize nearby orchards and farms.⁸⁶ In San Francisco, the excrement was taken out to sea by boat and dumped.⁸⁷

In 1880, Americans were truly on the cusp of transitioning to a sewer-based system of excrement removal. A significant amount of excrement was still used in 1880

⁸¹ In England, scavengers were sometimes called “Night Men,” “Night Kings,” “Goldfinders,” “Gongfarmers” or “Goungfermours.”

⁸² Joel Tarr and Francis McMichael, “The Evolution of Wastewater Technology and the Development of State Regulation: A Retrospective Analysis,” in *Retrospective Technology Assessment—1976*, Ed. Joel Tarr, 167.

⁸³ Census, 309.

⁸⁴ Census, 321

⁸⁵ Census, 326

⁸⁶ 782.

⁸⁷ 811

for farming. Only 102 of 222 cities counted in the 1880 census had functioning sewer systems, so some of the remaining larger cities still benefitted from selling their night soil to farmers, though the amount was relatively small. In Brooklyn, “20,000 cubic feet of night soil was taken each year from the city’s 25,000 privy vaults and applied to ‘farms and gardens outside of the city.’”⁸⁸ And in Boston, only 10% of the night soil removed was applied to farmland.⁸⁹ As more sewers were built, these numbers dropped even further. Compared to the much more numerous sewage farming practices in Europe leading up to, and after, the turn of the century, the practice in the U.S. during the same time was relatively minute.⁹⁰ It also existed in the public imagination much less, as is discussed below.

During this transition, privy vaults would be filled in with cement or dirt, roads would be torn up to install new sewer pipes, and Americans would install water closets inside their houses. This physical shift in the landscape also meant a psychological shift in the relationship Americans had with their excrement. Privy vaults, no matter how much lime or ash was put on top, still emitted pungent odors. For the generations of Americans accustomed to outhouses, there was no real alternative. One could try to mask the smell or stop flies and other vermin from infesting the outhouses, privy vaults, and cesspools, but it was still a fact of life that one simply lived with. The technology of the

⁸⁸ Tarr, “From City to Farm: Urban Wastes and the American Farmer,” *Agricultural History*, 49:4 (1975: Oct.), 602.

⁸⁹ *Ibid.*

⁹⁰ Tarr, “From City to Farm,” 598-612. Also Christopher Hamlin, “Sewage: Waste or Resource? A Historical Perspective,” *Environment* 22 (1980).

toilet and the sewer literally separated a person from his or her excrement in a profound way.

The sewer-building explosion of the 1880s in tandem with the growing adoption of the water closet formed the turning point during which Americans shifted from seeing their excrement as one of life's tolerable nuisances into something that could actually be eliminated from their consciousnesses. Several factors contributed to this revolution, including widespread use of municipal water delivery systems, public fears about the role of excrement in outbreaks of diseases such as cholera, proto-Progressive Era shift to larger government (specifically municipal) responsibility that led to sewer building, and a greater general concern for sanitation as propagandized by the new sanitation bureaucracies. Only with all of these factors coming together was this shift in the minds of Americans—from being a usable, if bothersome product of digestion to a problem that can simply vanish—able to happen. The use of water closets alone, for example, was not enough to significantly change the excremental situation. Water was piped in to cities before sewer systems were installed. Even though the widespread adoption of water closets can be attributed to the development of piped in water, sewers were never built concurrently with the creation of water delivery systems.⁹¹ This gap led to the widespread problem of overflowing cesspools and privy vaults, flooded cellars, and backyards full of sewage.⁹² Thus, there was a brief transition period in some cities when houses included toilets but the excrement was still a factor in daily life. Not until water closets were

⁹¹ Tarr, "Evolution," 170.

⁹² Tarr, "Evolution," 170.

connected to modern wastewater sewers was this relatively smell-free excremental experience realized. But the seed of Inglis' bourgeois faecal habitus was planted before the moment when one's personal toilet was connected to a newly built sewer. That is, those who experimented with various technologies including the earth closet, the water closet, and the use of the "odorless excavator" could at least imagine the fantasy of the body without "excretory capacities."

Earth closets, invented by Briton Henry Moule but patents for which began in the U.S. in the 1860s, were used by tens of thousands of Americans in the nineteenth century. Earth closets were essentially cabinets with a round hole cut out of wood suspended over a large bucket. After defecation, the user would press a lever that would release dirt or lime or peat that would cover the droppings and mask a good portion of the smell. Some earth closets were even advertised as an alternative to the newer water closets in that they basically composted the excrement and made it ready for use in the garden. The "Self-Acting Earth Closet," for example advertised "A substitute for the Water Closet, securing healthy homes, inoffensive drains, and garden fertility" in 1881.⁹³ As George Waring began his career as an agriculturist (and as he had invested in the Moule earth closet company⁹⁴), the future sewer celebrity advocated for its use over water closets. In a pamphlet he wrote promoting the design, Waring claimed that even after being used many times, visitors would look inside and exclaim "You don't mean that this particular

⁹³ "Self-Acting Earth Closet" from April, 1881 edition of "The Ironmongers' Catalogue." Found at <http://compostingtoilet.org/news/000305.php>.

⁹⁴ Jamie Benidickson, *The Culture of Flushing: A Social and Legal History of Sewage*, Nature, history, society (Vancouver: UBC Press, 2007), 121.

one has been used!”⁹⁵ He claimed that since he emptied the privy vault in his back yard, his whole house had been healthier.⁹⁶ Catharine Beecher was another famous advocate of the earth closet system.

Even though earth closets were relatively odorless, the smell could not be masked entirely. No records known to this author exist indicating that excrement ever emitted a pleasing smell to any civilization or culture. In fact, the history of excrement-related technology indicates that people have always wanted it to be moved away from them in the best possible way. If the space could be afforded, the outhouse was set far enough away from the living quarters where one could not smell its contents.⁹⁷ French historian Alain Corbin suggests that to the nineteenth century Frenchman, excrement not only smelled foul, but also smelled of the wasted profits that excrement as fertilizer might reap: “Utilitarianism and the need for economy strengthened the concern with salubrity: all three ordained deodorization.”⁹⁸ Whether or not decomposing excrement smelled of lost profits to anyone other than the farmer or the scavenger is unknown, but deodorization was certainly a priority. Successful deodorization also changed something for nineteenth century society. Early advertisements for earth closets promised some modicum of odor containment. The water in flush toilets not only masked the smell to some degree, but swept the excrement down the pipes and away forever. But while some Americans had the luxury of using earth closets or connecting to sewers in

⁹⁵ George Edwin Waring, *Earth-closets* (The Tribune Association, 1869), 6.

⁹⁶ *Ibid.*, 7

⁹⁷ Barlow, *The Vanishing American Outhouse: Privy Plans, Photographs, Poems and Folklore*.

⁹⁸ Alain Corbin, *The Foul and the Fragrant: Odor and the French Social Imagination* (Cambridge, Mass: Harvard University Press, 1986), 116.

the second half of the 19th century, many Americans had to wait to enjoy this relative odorlessness. For those, there was the Odorless Excavator.

The Odorless Excavator was a vehicle holding a large tank connected to an air pump powered vacuum apparatus. A man with the surname Walter made the first one in the U.S. in 1862. The idea was that the scavenger could drive up to the privy vault, insert the vacuum hose, and the excrement would never be exposed to the open air. There were many modifications in the coming years, though according to sanitarian Azel Ames, “It has, however, been reserved for American inventive genius to produce the forms of apparatus which are recognized to-day as the most efficient.”⁹⁹ Various odorless excavators were brought to market in the U.S. in the late nineteenth century, and some were even shipped overseas to Cuba and the Philippines around the turn of the century, as is discussed in chapter 4. These had the benefit of relative odorlessness, but occasionally the method of compression combined with the flammable gases emitted from the feces would cause the apparatus to explode, in one known case killing the driver.¹⁰⁰ Though the vehicles were expensive, at least eleven and perhaps twenty cities across the country used them.¹⁰¹

So whether achieved via earth closet, water closet, or odorless excavator, the deodorization of excrement was revolutionary for the late-19th century American. For the first time in history, the fantasy of Inglis’ bourgeois fecal habitus could be within reach.

⁹⁹ Azel Ames, "The Removal and Utilization of Domestic Excreta," 77.

¹⁰⁰ Ames, 77.

¹⁰¹ Eleven according to Ames, twenty estimated by Joel Tarr et al., “Water and Wastes: A Retrospective Assessment of Wastewater Technology in the U. S., 1800-1932,” *Technology and Culture* 25 (April 1984): 226-263., 233.

Even though the relationship between excrement and the poor had existed in language, art, and literature for centuries,¹⁰² it was never olfactorily possible to deny the fact that every human body defecated. Toilets connected to sewers was undoubtedly the most effective way of containing odor of the three methods mentioned above, and as American cities became sewerred in the years this work spans, the bourgeois fecal habitus eventually became the status quo for all but the poorest and most rural. Cities often opted for installing sewers based on data showing that it would attract citizens because they “gave less offense to the senses.”¹⁰³ According to Joel Tarr, unsewered cities such as New Orleans had a difficult time attracting new residents without a sewer system. Toilets and sewers transcended just being convenient: they became symbols of civilization—on an individual as well as municipal level. “Cleanliness is a relative term,” wrote sanitarian J.S. Billings in 1885, “the ideas of the Polish Jew of the lower classes, of a New England housewife, and of a chemist are very different with regard to this subject.”¹⁰⁴ Linking race and class with cleanliness was a familiar practice during this period, meaning one could improve one’s place on the imagined hierarchy by making one’s excrement disappear. Rather than just being a tolerable but annoying presence—in terms of smell, sight, and health—it was now possible to eliminate excrement from their existence almost as fast as it could be produced. Facilitated by new technology, burgeoning social

¹⁰² See *The Civilizing Process*, Norbert Elias; *Scatalogic Rites of All Nations*, John G. Bourke; *A Sociological History of the Excretory Experience*, David Inglis. Inglis explains how the bourgeois body of the 18th century sought to mask its bodily presence by covering its smells. Thus, “the smells of excreta were identified in the bourgeois mind with the bodies of the working classes” (200).

¹⁰³ J.S. Billings, “Sewage Disposal in the Cities,” 577.

¹⁰⁴ *Ibid.*, 579.

attachment to civilization, and health concerns, this transition was a major one in the lives of nineteenth century Americans and fundamentally changed the way excrement was viewed, treated, and talked about.

The debates occurring across the country regarding whether or not to invest in a sewer system that combined wastewater and storm water¹⁰⁵ focused on a few topics. Advocates, according to Joel Tarr, argued in favor of the new sewers based on economy, health¹⁰⁶, and a better image for the city.¹⁰⁷ Detractors—aside from the scavenger lobby who was naturally concerned about their future utility—centered on financing, health dangers, and, interestingly, waste of waste.¹⁰⁸ Tarr states that “[c]hemists in 1873 estimated that the annual voiding of an individual were worth between \$1.64 and \$2.01¹⁰⁹” for fertilization of crops needing high concentrations of ammonia and nitrogen.¹¹⁰ According to sanitation historian Christopher Hamlin, “in England, lawyers argued whether landlord or tenant owned the tenant’s sewage. Some hoarded their excreta in hopes of higher prices.”¹¹¹ But by 1890, excrement was worthless.

While a significant number of European cities in the late nineteenth century adopted systems for irrigating farmland with sewage, the same cannot be said for American cities during the same period. There were, however, some exceptions. In 1876,

¹⁰⁵ Some cities debated the merits of Waring’s “separate system” of sewage, as discussed below, but the majority of cities chose the more economical combined system.

¹⁰⁶ See “The Sewage Question,” *Scientific American*, July 24, 1869 for an early prediction by a chemist that the waters would be fouled with perfectly good but wasted excrement.

¹⁰⁷ Tarr, *Retrospective Technology Assessment*, 174.

¹⁰⁸ *Ibid.*, 176.

¹⁰⁹ Approximately \$35 in 2012 dollars.

¹¹⁰ Tarr, *Retrospective Technology Assessment*, 176.

¹¹¹ Hamlin, “Sewage: Waste or Resource? A Historical Perspective.” 18.

Boston considered applying all of the city's sewage to irrigation farms south of the city. According to an editorial in the *Massachusetts Ploughman and New England Journal of Agriculture*, "the best engineers in the country" assured that the process would be safe. However, the editorial concluded, "the crying need of Boston to-day is to abate an intolerable nuisance in the most economical manner possible," meaning the sewage should be drained out at sea.¹¹²

Pullman, Illinois, the master-planned industrial community financed by the railroad car magnate George Pullman, included in its plan a Waring-style separate sewer system designed by Benezette Williams. Built in 1881, the separate system allowed the town to use the sewage to irrigate a nearby farm. That decision was also prompted by the fact that the nearby waterway, Lake Calumet, was fine for dumping rainwater but not an ideal place to dump raw sewage because of "the absence of any current in this shallow lake."¹¹³ By 1890, the system was pumping a daily amount of 1.8 million gallons of sewage per day on the farm, 140 acres of which were being irrigated by the sewage.¹¹⁴ The system was profitable as of 1894, but the practice ceased within the decade. A few other sewage irrigation experiments occurred during this period in the U.S., including in San Antonio, Texas; Hastings, Nebraska; Howard, Rhode Island; and some municipalities in Southern California, but these experiments were few and far between.

¹¹² "Editorial," *Massachusetts Ploughman and New England Journal of Agriculture*, September 22, 1877., 51

¹¹³ Geo. W Rafter, *Sewage Disposal in the United States* (New York: D. Van Nostrand company; [etc., etc.], 1894), 460.

¹¹⁴ *Ibid.*, 463.

There was no consensus on why so few systems were adopted in the U.S. even though the practice was widespread in Europe.¹¹⁵

In short, the utilization of excrement as a fertilizer always took a back seat to its swift elimination in discussions of excrement removal. Furthermore matters such as cost and ease were of paramount importance in the discussions regarding whether a sewer would be separate or combined. And significantly, these changes were from the beginning yoked to the Progressive notion of civilization. George Waring, in 1867, wrote the following:

The principles herein set forth, whether relating to sanitary improvement, to convenience and decency of living, or to the use of waste matters of houses in agricultural improvement, are no less applicable in America than elsewhere; and the general adoption of improved house drainage and sewerage, and of the use of sewage matters in agriculture, would add to the health and prosperity of its people, and would indicate a great advance in civilization.¹¹⁶

Freud discussed civilization as the process of adding deeper levels of repression—specifically in reference to coprophilia. According to Freud, the typical human being goes through the oral stage, the anal stage, and then the genital stage. Since Western

¹¹⁵ William Jewell, "A History of Land Application as a Treatment Alternative," Belford Seabrook, EPA, 1979. See also Harold E Babbitt, *Sewerage and Sewage Treatment*, 8th ed. (New York: Wiley, 1958), 461, and Metcalf and Eddy.

¹¹⁶ George E. Waring, Jr., "Chapter XI: House Drainage and Town Sewerage in Their Relations to the Public Health," *Draining for Profit and Draining for Health* (New York: Orange Judd & Co., 1867), pp. 222-239

civilization is fixated on genital eroticism, it sees concern with pre-genital stages, such as fecal aspects of the anal stage, as disgusting.

German sociologist Norbert Elias drew from Freud's repression theory in Elias's *The Civilizing Process: Sociogenetic and Psychogenetic Investigations* from 1939. Elias reformulated Freud's argument from *Civilization and Its Discontents* in several ways, most importantly for our purposes, perhaps, in that society affects the way humans behave and the repressions they have. Therefore, society's regulatory controls, such as the way one defecates, form the process by which that society civilizes its citizens. For Elias, control of one's excrement was central to the "civilizing process" occurring in Europe throughout the Middle Ages. Various laws were created and conduct or etiquette manuals were printed that regulated excremental habits. As contemporary literature critic Jeff Persels posited in regards to Europe in the Middle Ages, "The 'civilizing process' here becomes synonymous with the rigorous public and private effort to distance oneself from one's own excrement, the sight and smell of which grow proportionally offensive."¹¹⁷ A similar phenomenon occurred in the U.S., but much later. The first section of this chapter outlines some of the socio-cultural factors aiding in this transition—disease concerns, alternative fertilizers, sewers—the second part zeros in on the first broad attempt to control and discipline defecation practices. While much of this disciplining was done in the name of hygiene, it was often couched in terms of civilization and class. And, as Chapter Four explains, many successors to the USSC,

¹¹⁷ Jeff Persels and Russell Ganim Ed., Jeff Persels and Russell Ganim, *Fecal Matters in Early Modern Literature and Art: Studies in Scatology*, Studies in European cultural transition v. 21 (Aldershot, Hampshire, England ; Burlington, VT: Ashgate, 2004), xvii.

including the Bureau of Insular Affairs, the occupying military governments in the insular territories, and the Office of Indian Affairs also used the language of civilization (but combined it with race) in controlling the defecation habits of their subjects.

1.4 The United States Sanitary Commission's Opinions on Defecation and Excrement

The United States Sanitary Commission (USSC) was the first broad-ranging attempt at regulating hygiene by any organizational body in the U.S. Begun in 1861, the USSC was conceptualized by the Women's Central Association of Relief for the Sick and Wounded of the Army in April of 1861, the same month the American Civil War began. According to historian Judith Giesberg, "American women had closely followed Florence Nightingale's work in the Crimea [the Crimean War, 1853-1856] and believed that the war was their opportunity to follow in her footsteps."¹¹⁸ These women, Dorothea Dix among them, did not have access to the same bureaucratic channels necessary to start a vast organization as the men in society, so they turned to a group of men for advice.¹¹⁹ Within a few months, however, the USSC's upper echelon of administrative positions was populated entirely by men coming from the social elite. Their goal was twofold:

1st, Inquiry into the sanitary condition of the army; 2^d Advice as to its improvement. This latter function included, not only the duty of addressing to the Government, from time to time, such as

¹¹⁸ Giesberg, 15.

¹¹⁹ Ibid.

recommendations or suggestions as occasions and facts might suggest, but also that of keeping the volunteer officers, and the soldiers themselves, constantly and directly instructed and warned of the novel dangers to which they were exposed, of the necessary precautions against them, and of the means of pointing out by experience as best calculated to preserve them in bodily health and vigor for the performance of the duty of their country.¹²⁰

So in addition to observing the defecation habits of the soldiers, the sanitary inspectors would then advise the camp on how to defecate in a better place, how to construct a better privy, and what to do with the results—all of course, as is noted in their purpose statement above, to patriotic ends.

The USSC was a watershed organization spearheading American Progressivism insofar as the term describes a time that witnessed the priority of social virtues such as efficient administration, reliance on expertise and professionals, widespread education, increased cleanliness and health, and greater regulation of social activities. It differed substantially from the antebellum reform movements that were driven by moral uplift efforts and specific issues such as temperance and abolitionism. As historian George Fredrickson goes to great lengths to prove in his *Inner Civil War: Northern Intellectuals and the Crisis of the Union*, the genesis (post-female) and execution of the United States Sanitary Commission were not due to the benevolent outpourings of northerners. It was

¹²⁰ Katharine Prescott Wormeley, *The United States Sanitary Commission. A Sketch of Its Purposes and Its Work* (Boston: Little, Brown and co, 1863), 28-29.

indeed, as Fredrickson notes, “the largest, most powerful, and most highly organized philanthropic activity that has ever been seen in America.”¹²¹ However, since its beginnings in 1861, the USSC was rather the product of social conservatives seeking to shape society into a more orderly one. The turn away from benevolence and toward social order disassociates the USSC from the moral and munificent reform groups organized in antebellum society and aligns it more with the attitudes of scientific management, administrative competence, and social efficiency that would later come to be hallmarks of the Progressive Era.

Fredrickson points not only to the upper class elite administrators in the Commission such as Henry Bellows, George Templeton Strong, and designer of Central Park, Frederick Law Olmsted—president, treasurer, and executive secretary of the USSC, respectively—to prove his point, but also to the callousness and conscious turn away from benevolence by the administrators. Bellows, for example, Harvard graduate and prominent New York City clergyman, paraded a “very nice” hip bone and skull of a dead soldier he found on the battlefield, and seemed surprised when people were shocked by his audiences’ reactions.¹²² “Not only did the commission reject humanitarianism as a primary motive, it even refrained, as one report indicated, from making a public appeal to ‘humanity and sympathy,’” according to Fredrickson.¹²³ As the founders themselves stated, their challenge would be to harness the outpouring of benevolence of the Union citizens and make it less bothersome: “How shall this rising tide of popular sympathy,

¹²¹ Giesberg, 98.

¹²² Fredrickson, *Inner Civil War* 103.

¹²³ Fredrickson, *Inner Civil War* 103.

expressed in the form of sanitary supplies, and offers of personal service and advice, be rendered least hurtful to the army system, and most useful to the soldiers themselves?”¹²⁴ So, while the organization was populated by many who had genuinely compassionate intentions, those who spearheaded the organization refused to let sentimentality dominate their public image over professionalism, efficiency, and expertise.

Indeed, the commission went to great lengths to ensure that it would not be populated by do-gooders or hampered in its actions by non-professionals. Walt Whitman, volunteering in the Army hospitals in order to be near his soldier brother, even wrote to their mother, “As to the Sanitary Commission and the like—I am sick of them all & would not accept any of their berths—you ought to see the way the men as they lie helpless in bed turn away their faces from the sight of the Agents, Chaplains &c.”¹²⁵ President Lincoln was not especially keen on the idea of the Sanitary Commission either. He even famously referred to it as the “fifth wheel” since the Army already had a medical department to take care of the basic sanitary needs of the soldiers. But Bellows, Olmsted, Strong, and the rest would not be outdone. They insisted on a streamlined, professional group of experts comprising an efficient organization. The job of inspector was especially crucial for these purposes:

It was obviously necessary to put experts upon the duty of inspection and inquiry, and for this purpose the commission hastened to secure the

¹²⁴ *The Sanitary Commission of the United States Army: A Succinct Narrative of its Works and Purposes* (New York: U. S. San. Comm., 1864).

¹²⁵ From Walt Whitman, *Selected Letters of Walt Whitman*, 1st ed. (Iowa City: University of Iowa Press, 1990), 64. Also in Fredrickson, 107.

services of a body of physicians specifically fitted for this duty. It was not easy to find at once a sufficient number of gentlemen of the requisite qualifications. It was indispensable that they should possess, not only scientific qualifications and a special acquaintance with sanitary laws, but sufficient tact to perform their duties as agents of an organization till then unknown to the Army Regulations, without awakening jealousy of their interference as officious or seeming intrusive.¹²⁶

Despite the USSC's attempt to *appear* unintrusive, imposing their sanitary practices was integral to their purpose. The inspector's duty was to be the sanitary authority who would both inspect the camp for improper practices and to offer solutions. Even though their efforts likely saved thousands of lives, they were not especially liked. Furthermore, the USSC was an important precedent for the various sanitation bureaucracies that would follow.

Excrement would become vital to the USSC's mission to sanitize the soldiers and their camps. Initially, in June of 1861, the USSC performed a series of inspections around the Washington D.C. area. The inspectors, Olmsted among them, were given brief questionnaires to fill out regarding the sanitary condition of the camps they visited.¹²⁷ Questions ranged from "what is the character of the subsoil?" to "Have the troops any games or amusements, and have any means been taken to promote cheerfulness?"¹²⁸

¹²⁶ USSC: *Sketch of Its Purposes and Its Work*, 29.

¹²⁷ Stille, 85-6.

¹²⁸ Documents of the United States Sanitary Commission, Volume I, section 9.

Also, regarding excrement, “Are there sinks or privies in the fort, barracks, or camp, sufficient for the wants of the men; and if so, are they deodorized, and in what manner and how often? [...] Are the men restricted to the use of these privies?”¹²⁹ “Privy” and “sink” are the most common terms used for the areas designated for defecation. One such answer to this question reads as follows: “Privies at good distance, properly constructed, and not offensive to those in camp. On inspection, however, it was discovered that the earth was not thrown in regularly, and no disinfectants used.”¹³⁰ The inspector provided the camps with reports on the sanitary conditions he observed there, but oftentimes he made his point to those in charge of the camps immediately.

Another discussed the difference between the trench dug for the regular soldiers:

The sinks for officers and men are formed at such a distance from camps to be unobjectionable. The one belonging to officers seems to have been properly attended to by a fresh layer of soil daily thrown upon the surface. The one for men has been prepared with reference to such case, but seems not to have been quite properly attended to. However, the order was promptly given in my presence to secure the requisite attention. The men are strictly confined to the use of sinks. A sink for garbage is also prepared and used.¹³¹

¹²⁹ Ibid.

¹³⁰ Documents, I, 17.

¹³¹ Ibid.

Olmsted was more critical of one of the camps he visited; “the sinks were unnecessarily and disgustingly offensive.”¹³² These reports differed greatly regarding their level of detail, some preferring to simply express offense; some genuinely attempted to fix minute details regarding the placement, size, or care of the company sinks.

The instructions given to the regularly commissioned soldiers in the Union army were vaguer than what the USSC would have liked, and of course lacked the rigorous oversight and inspection system used in the USSC. The 1861 *Regulations for the Army* specified that the privies of the soldiers be placed “150 paces in front of the color line,” and those for the officers should be placed 100 paces away from the “baggage train.”¹³³ Furthermore, the sinks should be “concealed by bushes,” and “a portion of the earth dug out for the sinks to be thrown back occasionally [sic].”¹³⁴ By 1895, although there were certainly more rules and inspections in place, there was no mention of sinks or privies in the Regulations. The USSC’s supplement for the volunteer soldiers, *Rules for Preserving the Health of the Soldier*, also published in 1861, intended to supplement the *Regulations for the Army* for the volunteers without contradicting it.¹³⁵ The USSC did, however, extend far beyond the Army in their prescriptions for dealing with excrement. The

¹³² United States Sanitary Commission, *History of the United States Sanitary Commission, Being the General Report of Its Work during the War of the Rebellion* (Philadelphia: J.B. Lippincott & Co, 1866), 86.

¹³³ United States. War Dept, *Revised Regulations for the Army of the United States, 1861: with a full index* (G. W. Childs, 1862), p. 67-68.

¹³⁴ *Ibid.*

¹³⁵ United States Sanitary Commission. and W Van Buren, *Rules for Preserving the Health of the Soldier*, 4th ed. (Washington: G.P.O., 1861), 1-2. This document was written by William Holme Van Buren and approved by Frederick Olmsted.

USSC's publication begins the fourteenth point with "There is no more frequent source of disease, in camp life, than inattention to the calls of nature."¹³⁶ It continues:

Habitual neglect of nature's wants will certainly lead to disease and suffering. A trench should also be dug, and provided with a pole, supported by uprights, at a properly-selected spot at a moderate distance from camp, as soon as the locality of the latter has been determined upon; one should be provided for the officers and another for the men. The strictest discipline in regard to the performance of these duties is absolutely essential to health, as well as to decency. Men should never be allowed to void their excrement elsewhere than in the regularly-established sinks. In a well-regulated camp the sinks are visited daily by a police part, and a layer of earth is thrown in, and lime and other disinfecting agents employed to prevent them from becoming offensive and unhealthy. It is the duty of the surgeon to call the attention of the commanding officer to any neglect of this important item of camp police [...]¹³⁷

At the end of this passage, the section of the *Regulations* mentioned above is cited, but the authors of the *Rules for Preserving the Health of the Soldier* clearly determined defecation and its consequences to be more worthy of instruction and medical and regulatory oversight and control than did the Army. While the Army determined basic

¹³⁶ Ibid., 7.

¹³⁷ Ibid., 7-8

rules for how far away from camp the privies should be, the USSC advocated active policing of the sinks.

Olmsted, who made his career before the Civil War as a pioneer of landscape architecture, insisted in his *General Instructions to Sanitary Inspectors* that the inspectors put a special stress on the condition of the privies: “In all cases you will visit the privies of the camp, and let it be seen that you regard the manner in which they are formed and kept as most seriously affecting the character of the regiment, as it is sure to have an important relation to its sanitary condition.”¹³⁸ Even if Olmsted was wrong about the science behind excrement’s danger (along with everyone else during that period), he likely knew that the condition and appearance of the sinks would have an important psychological effect on the soldiers. He also knew that getting to the proper sanitary state would not be easy. Olmsted blamed the Union’s loss at Bull Run in 1861 on the poor sanitary conditions and wrote home to his wife that he knew of “but one Sanitary measure to be thought of now & that is discipline.”¹³⁹

In a letter called “Preliminary Survey of Camps near Washington” from July 9, 1861, still just three months into the hostilities, the “resident secretary” of the USSC made note that

Night Soil has been recently deposited in large quantity within a short distance of several of the camps, and between them and the town. This

¹³⁸ Documents I, 24(2)

¹³⁹ Quoted in Suellen M Hoy, *Chasing Dirt: The American Pursuit of Cleanliness* (New York: Oxford University Press, 1995), 41.

has occurred because the scavengers have been unable to pass the lines of sentries at night. Immediately on learning this, a note was sent addressed by the Secretary to the Mayor of the city, and a communication obtained with the health officer, who readily promised that the practice should be avoided. The use of cheap disinfectants was recommended to him to be applied to the night soil already deposited near the camps.¹⁴⁰

While it is true that Olmsted's reputation includes a startling attention to detail, it is also remarkable that he not only sent a letter to the mayor of Washington D.C. regarding this large deposit of excrement between the camps and the city, but he also wrote a note about it for USSC records. Later on in the same letter, Olmsted complained about the condition of the privies (here called "sinks"):

In most cases, the only sink is merely a straight trench, some thirty feet long, unprovided with a pole or rail; the edges are filthy, and the stench exceedingly offensive; the easy expedient of daily turning fresh earth into the trench being often neglected. In one case, men with diarrhoea complained that they had been made sick to vomiting by the incomplete arrangement and filthy condition of the sink. Often the sink is too near the camp. In many regiments the discipline is so lax that the men avoid the use of sinks, and the whole neighborhood is rendered filthy and pestilential. From the ammoniacal odor frequently perceptible in some

¹⁴⁰ Documents I, 17. This was presumably written by Olmsted.

camps, it is obvious that the men are allowed to void their urine, during the night, at least, wherever convenient.¹⁴¹

Olmsted's attention to detail was sometimes outdone by his visceral descriptions. However, his descriptions—and those of the inspectors—provide an insight into parts of Civil War camp life that is rarely if ever written about in histories of this era even though chronic diarrhea was the second most often cited reason for medical discharge with over 200,000.¹⁴² Medical historian Alfred Jay Bollett claims that diarrhea was such an important factor in the war that the term “having guts” arose during this period and eventually came to mean simple fortitude.¹⁴³

Some inspectors used their words sparingly: “Trenches dug for privies, but no cross-bars for support; very offensive; no earth thrown in; and much too near camp. No disinfectants used.”¹⁴⁴ Others were more disgusted. Dr. Aigner, a chief inspector in November 30, 1861 wrote of the difficulties of getting the soldiers to defecate in the designated spots and the effectiveness of doling out punishments for “easing themselves” away from the sinks.

The privies are all at a proper distance from camps, and properly constructed, but the great difficulty is to make all the men go there and

¹⁴¹ Ibid.

¹⁴² Alfred J. Bollett, “Scurvy and Chronic Diarrhea in Civil War Troops: Were They Both Nutritional Deficiency Syndromes?” *Journal of the History of Medicine and Allied Sciences* 47, no. 1 (1992), 49.

¹⁴³ Alfred J. Bollett, “An Analysis of the Medical Problems of the Civil War,” *Transactions of the American Clinical and Climatological Association* 103 (1992), 130.

¹⁴⁴ Documents I, 17.

nowhere else at all times. In three of four regiments the men are prevented from easing themselves elsewhere by the guards, and rigidly punished for any violation of this regulation; but the territory surrounding the camps of all others presents many evidences of gross neglect of camp police, and gives many a regiment, otherwise well reputed, a bad odor.[...] The horses and mules are almost invariably kept too near the camps, and the daily removal of their dung is a myth dreamed of only by the authors of the army regulations and the Sanitary Commission Inspectors.¹⁴⁵

Aigner also indicates the impossibility of maintaining the written standards of the USSC during wartime and almost mocks the expectations of the other inspectors.

Professor F.H. Hamilton, Surgeon of the 31st Regiment N.Y.S.V., had a peculiar antidote to the diarrhea plaguing so many of the soldiers. Hamilton noticed that the ethnically German soldiers have diarrhea the least and assumed it was because of their beer-drinking habit:

The Germans who drink “lager” furnish the fewest cases of diarrhœa. Indeed, those who can get lager are seldom reported. I allow one quarter cask of lager to every 24 men per day. The men subscribe for it under directions of the captains. The Germans are accustomed to drink much more per day, but this answers the medical purpose which I have in view. It regulates the bowels, prevents constipation, and becomes in this way a

¹⁴⁵ Documents I, 36.

valuable substitute for vegetables. I encourage all men to take it moderately, but most of them have no money to pay for it.¹⁴⁶

Whether it was the poverty of the soldiers or the inability of the beer to fully substitute for the other redeeming qualities of vegetables is not known. Nevertheless, Hamilton's discovery did not spread throughout the Union.

In the second year of the war, the USSC established guidelines for inspection of the Union hospitals. Unlike the USSC's Relief Agents, who were responsible for staffing and stocking the hospitals where the army's provisions were lacking, its Special Inspectors were in charge of inspecting the camps and the hospitals and enforcing the USSC codes regarding its sanitary conditions. The early questionnaire used by the inspector in the summer months of 1861 was eventually revised and replaced with another that had 180 questions, 14 of which pertained to human excrement.

Inspections of the hospitals became more and more important as the war went on, and the USSC Central Office eagerly created and revised guidelines and questionnaires for the hospital inspectors. Among other questions, the inspectors were to answer "Is strict cleanliness observed in the wards—in their floors; in bedstands and bedding; in clothing; in vessels used for food; spittoons, bed-pans, sinks, and water closets?"¹⁴⁷ And later, "Is the drainage completely provided for? Are the sinks, and drains and sewers of the Hospital liable to obstruction or overflow? Is there a free outlet for them at a safe

¹⁴⁶ Documents I, 17.

¹⁴⁷ Documents I, 56.

distance from the Hospital?”¹⁴⁸ And since the miasma theory of disease was prevalent at the time, there were also many questions regarding ventilation and adequate “air-space” for the sick soldiers.

As had been the case throughout the nineteenth century, animal excrement was discussed more openly than human excrement in these inspection forms. Question 75 on 19a and 19 read, “Is their [the cattle and horses] dung daily removed, or so placed or covered as to be unobnoxious?” “Dung” and “manure” are not uncommon in nineteenth century documents, as in these inspection forms, yet human excrement is never referred to by a noun. Instead, euphemisms abounded, indicating that—despite the bloodshed, general filth, and animal waste ubiquitous during the Civil War—human excrement warranted delicate language. Men “ease themselves,” “take to the woods,” “void themselves,” “men go to a distance in the woods,” “go to the pit,” “idiomiasmata,” “attending to the duty,” etc. As one can see, some of these euphemisms are so vague that one not already in the know could only guess as to what they were really talking about. Yet the only question regarding animal excrement openly identifies it as such with its use of the word “dung.”

Significantly, few inspectors complained about the smell or state of the makeshift stables for the horses and cattle (a good deal responded to the question with “not obnoxious”), but if the privy trench was in sorry state or if the trench was abandoned for more peaceful, less smelly areas for defecation—as was quite common among the

¹⁴⁸ Documents I, 56.

soldiers—then the inspectors often spared no adjectives. In response to one set of questions, “Are the men forbidden to ease themselves elsewhere?” and “Do you find this prohibition to have been enforced?” one inspector wrote “horribly no.”¹⁴⁹ Another wrote “While all about for a great space the ground is covered with the filth of the men, the stench of which to those that went to go to the pit must be almost past endurance.”¹⁵⁰ “The privies were in shocking condition, filthy and offensive,” remarked another.¹⁵¹ And many soldiers seemingly concurred with the inspectors and opted to bypass the trench privies for a more peaceful spot elsewhere near or in the camps. One inspector wrote that “The outskirts of the camp in every direction were covered with small square bits of paper.”¹⁵² Another noted that “the men do not use [the trench] when they can find standing place among the corn.”¹⁵³ Given the number of these reports of what will be termed “promiscuous defecation” 40 years later in the Philippines, it was quite common for the Union soldier to avoid the official privies altogether.

But the Sanitary Commission was right that the overall health of the camp was sacrificed when the men opted to defecate capriciously. And the USSC, with the wording of its questions, tacitly advocated punishment for these men. “A private was put under

¹⁴⁹ From Inspection reports, # 25.

¹⁵⁰ Robert Collyer, Notes on Pennsylvania, 8th Infantry, Frame 449.

¹⁵¹ From Inspection reports ,#83

¹⁵² The matter of what 19th century Americans used instead of toilet paper will be discussed later. However, it is notable that quite a number of privies during the Civil War were located in corn fields—likely because of the cover the fields offered the soldiers but also the cobs of corn, which were routinely used before toilet paper.

¹⁵³ From Inspection reports , #115.

arrest for such an offense while I was in camp,” noted one inspector.¹⁵⁴ Another inspector recorded that one soldier was punished with “8 days confinement” for his indiscretions away from the privy. At least one regiment even kept a special police force to regulate the soldiers’ defecation. In some camps, it was not forbidden, as “six men were seen at one time attending to this duty—trenches were used only exceptionally.”¹⁵⁵ But in most cases, as partially evidenced above, the offense was against regulations and was certainly punishable. Such defecation regulations with punishable violations began in American society here, with the Union soldiers overseen by the USSC and disciplined by camp police, but the act of punitively controlling a group’s defecation habits eventually repeated in the regulations of the Bureau of Indian Affairs (BIA) and the Bureau of Insular Affairs (BIA) in their respective treatment of Native Americans, Filipinos, and Cubans.

Even though punishment was one outcome of a strict effort to control defecation, it is important to note that education and uplift were central to the self-determined responsibilities of the USSC. The leaders of the USSC did not want the advice and instructions for the soldiers to stop in the camps and battlefields. Naturally, these men had a vested interest in seeing the North win the war, and they could help in this effort by reducing the number of casualties of the Union—as they most certainly did. However, as Fredrickson has shown, the intentions of the social conservatives at the head of the commission sought to extend their influence beyond just the soldiers and wartime. As is

¹⁵⁴ From Inspection reports , #67

¹⁵⁵ From Inspection reports , #114

noted in their formative documents, “The Sanitary Commission, by a gracious permission, was to teach them [the soldiers]. Who shall say where the results of this teaching ended, or shall end?”¹⁵⁶ In other words, the founders of the USSC imagined that the soldiers would adopt these healthy habits and spread them throughout American society when the war ended. The military was for them an ideal starting point for wholesale social reform. So the gospel as spelled out by the USSC was not merely a supplementary organization meant to aid in winning the war, but rather the beginning of an American sanitation revolution.

Furthermore, Olmsted, ever the social engineer, more directly expressed the commission’s intent to make missionaries of the soldiers. Already in the beginning of the USSC’s existence, in 1861, he wrote, “If five hundred thousand of our young men could be made to acquire something of the characteristic habits of soldiers in respect to their habitations, their persons, and their clothing, by the training of this war, the good which they would afterwards do as unconscious missionaries of a healthful reform throughout the country, would be by no means valueless to the country.”¹⁵⁷ Having learned how to defecate properly (sometimes the hard way if caught by the privy police) and deal with their own excrement and the excrement of their fellow soldiers, the members of the Union Army would then take this knowledge back home and teach it to their own families and neighbors. Over the course of the Civil War, Union deaths from preventable

¹⁵⁶ *The United States Sanitary Commission: A Sketch of Its Purposes and Works*, 28.

¹⁵⁷ Hoy 42.

diseases steadily decreased.¹⁵⁸ The Confederacy never had an equivalent to the USSC, but starting in 1862, Northern women with experience in the USSC travelled to the South to work with aid societies established to help the former slaves. As historian Suellen Hoy notes, Booker T. Washington, who started the Tuskegee Institute that had a strong emphasis on hygiene, always remembered the sanitary advice of these women.¹⁵⁹

Within a year of the end of the Civil War, after the USSC's success in controlling disease deaths was widely known, Stephen Smith, a New York City doctor, founded the Metropolitan Health Association in New York City after the Citizen's Association of New York published a damning report on the sanitary condition of the city. Inspectors from the Citizen's Association paid special attention to the poor living conditions in the city in 1864 due to the crowded and unmaintained privies behind the tenements.¹⁶⁰ In that report, the Citizen's Association (Henry Bellows, President of the USSC, was on the board) openly acknowledges the inspiration of the USSC in making "disability and mortality rates [...] far less than in the tenant-house population of the City of New York."¹⁶¹ Several years later, in 1872, Smith helped form the American Public Health Association, founded to "advance the cause of Public Hygiene," and to oversee the

¹⁵⁸ Bollett, "An Analysis of the Medical Problems of the Civil War.," 129-130.

¹⁵⁹ Hoy, 54.

¹⁶⁰ As detailed in Stephen Smith, *The City That Was* (New York: F. Allaben, 1911). Smith relays the accounts of the Citizen's Association's inspections, which were far more vivid in detail (especially in regards to excrement) than Riis was 25 years later in *How the Other Half Lives*.

¹⁶¹ Citizens' Association of New York., *Report of the Council of hygiene and public health of the Citizens' Association of New York upon the sanitary condition of the city.*, 2nd ed. (New York: D. Appleton and Co., 1866), cxvii-cxix.

rapidly growing number of municipal and state health boards.¹⁶² Between 1869 and 1886, 32 of the 36 states in the nation developed official state health agencies.¹⁶³

In 1884, the Ladies' Health Protective Association was founded in order to help clean up America's cities. And within another decade, similar groups such as the Women's Health Protective Association of Brooklyn, the Street Cleaning Aid Society, and the Sanitary Protective League came into being, along with Chicago's famous Municipal Order League.¹⁶⁴ This model was eventually repeated in cities all across the country. The role of women in the sanitation campaigns is pursued further in the next chapter, but the point is while the specific system of inspections and recommended punishments carried out by the USSC was unique for its time, its basic concern with sanitation propagated quickly after the war ended. As John Shaw Billings, assistant surgeon general of the Army during the Civil War, noted in 1876, their experiences during the war had "done more for the cause of Public Hygiene than any other agencies."¹⁶⁵ Hoy agrees, writing that the "Civil War experience unquestionably shaped the sanitary reform movement in the critical decades of the late nineteenth century."¹⁶⁶ In fact, many of the volunteers who helped in settlement houses such as the Hull House got

¹⁶² American Public Health Association, *Public Health Reports and Papers, Vol V* (Boston: Houghton Mifflin, 1879), iii-iv.

¹⁶³ Robert D Leigh, *Federal Health Administration in the United States*, Lettered on cover: Harper's public health series (New York, London: Harper & brothers, 1927), 10.

¹⁶⁴ Hoy, 75.

¹⁶⁵ From a letter from Billings to Henry Bowditch, Jan 4, 1876. Henry Bowditch, *Public Hygiene in America: Being the Centennial Discourse Delivered Before the International Medical Congress, Philadelphia, September, 1876* (Boston: Little Brown and Co., 1877).147.

¹⁶⁶ Hoy, 60.

their start in the USSC.¹⁶⁷ And given the attitudes regarding excrement held by the popular scientific minds of the day, these societies and associations were far less concerned with proper reuse of excrement than they were with simply making it disappear from sight. Taken in tandem with the extraordinary growth of sewer lines beginning in 1880, the predominant message conveyed to the American public was that excrement needed to be eliminated.

1.5 The Few Voices Advocating Excrement as Fertilizer

Even though they were a small minority, there were voices supporting the practice of recycling excrement in the Long Progressive Era. After Waring abandoned his advocacy of the earth closet and began designing sewers, his “separate” system—which kept the storm sewers separate from the sanitary sewers—was designed in order to be able to recycle the excrement more easily, as was done in Pullman, IL. Dr. Henry Barnes, a professor of hygiene at Tufts University and a member of the Massachusetts Board of Health wrote and spoke passionately about reusing sewage in the 1880s. He wrote that

To employ the city to enrich the plains would be a sure success. But the filth is swept into the abyss. All the human and animal manure which the world loses, restored to the land instead of being thrown into the water would suffice to nourish the world [...] these horrid scavengers’ carts, these fetid streams of subterranean slime which the pavement hides, what

¹⁶⁷ Hoy, 101.

is all this? It is the flourishing meadow, the green grass, the thyme and sage; it is game, it is cattle, hay, corn, bread upon the table, warm blood in the veins.¹⁶⁸

He added that the “present system does harm in endeavoring to do good.”¹⁶⁹ Likewise, the sanitarian Henry Bowditch and the journal the *Massachusetts Ploughman* advocated vociferously for the use of sewage on fields. Bowditch, who spent time in 1870 studying the sewage systems in England, wrote that “There is no single subject attracting more attention in England, and which excites more heated partisanship than the vast questions looming up under the various names of ‘earth closet,’ ‘water closet,’ ‘sewage,’ ‘its danger to health,’ ‘its widespread and fatal waste,’ ‘its utilization as manure.’”¹⁷⁰ But the issue never caught as much traction in public discourse in the U.S.

American fiction of the era is curiously devoid of discussion of excrement, sewers, and toilets. Considering the importance of the engineer in society and the respect given to public works, the fact that sewers seldom even make a cameo in American fiction indicates that more powerful social and cultural forces were at work. Literature critic Rosalind Williams notes the frequency of sewers and other subterranean landscapes in European fiction contrasted with its relative nonappearance in American fiction. She

¹⁶⁸ 1884. Quoted in Tarr, “From the City to Farm.” 1975. P. 598.

¹⁶⁹ Henry Barnes. “Sewage on the Fields,” *Engineering News and American Contract Journal*. June 14th, 1884, 297.

¹⁷⁰ “Sewage. What Shall We do with It? The Earth Closet. Irrigation of Land. Drainage to the Rivers or Sea.” Annual Report of the State Board of Health of Massachusetts. Annual Report of the State Board of Health of Massachusetts, *Sewage. What Shall We do with It? The Earth Closet. Irrigation of Land. Drainage to the Rivers or Sea* (Boston: Wright and Potter, 1871), 233.

attributes this phenomenon to the importance of the horizontal expanses of space in American culture versus the crowded vertical growth in Europe.¹⁷¹ While the proliferation of the frontier and wide-open landscapes in American fiction of the late-nineteenth century lends credence to her theory, a more plausible explanation for the lack of sewers, specifically, is that it simply was not appropriate. While fascinating on engineering and environmental levels, sewers suffered from their association with sewage to the point that publishers were likely unwilling to offend a large potential readership.

One notable exception to the lack of excrement in fiction is one of the many sequels written for Edward Bellamy's *Looking Backward*.¹⁷² Part bildungsroman and part utopian novel, *Young West: A Sequel to Looking Backward* by Solomon Schindler in 1894, features the son of Julian West living in a 21st Century that features comfortable and slow-moving "aeroplanes," a secular and rational society, and public works bureaucrats and engineers who rise to celebrity and political prominence. As a member of the latter category, Young West, after thriving in a progressive boarding school, rises from sewer engineer to eventually become the country's President.¹⁷³ The great invention that catapulted him into the national spotlight was a "chemical process by which offal could be not only deodorized, but which would destroy also every infectious germ

¹⁷¹ Rosalind H Williams, *Notes on the Underground: An Essay on Technology, Society, and the Imagination* (Cambridge, Mass: MIT Press, 1990).

¹⁷² Bellamy, a friend of Schindler, asked Schindler to translate *Looking Backward* into German for him, which he did in 1890.

¹⁷³ All of South and Central America seems to have been annexed by Young West's time.

contained therein.”¹⁷⁴ Twenty-first century farms were fallow, and Young West knew that depositing all sewage at the bottom of the ocean was a tremendous waste of a valuable resource:

How could this waste be prevented? How could the refuse that accumulated in our vast centres of population be returned to the ground from which it originally came, without imposing unpleasant tasks upon a number of citizens, or exposing the community to the dangers of infectious disease?¹⁷⁵

West’s idea set off a years-long debate between the government’s “agricultural department” and the “architectural department” (save the “sewerage battalion,” who supported West’s idea). In the end, West’s idea won out. Existing sewer pipes were connected to newly laid pipes that would suck out the excrement and send it to new processing plants. The plants combined West’s new chemical compound with “dough” made of sewerage, which was then pressed into bricks. The “foul air” was consumed by an electric furnace. The final products, the bricks, were plowed into the ground of the near-barren farms. The West system turned out to be a great success, with cities eagerly adopting the plan and farmers quite satisfied with their re-fertilized land. Opponents of West’s system heralded the accomplishments of the pre-existing sewer system that had (in truth) gone far in the abatement and elimination of some diseases.

¹⁷⁴ Solomon Schindler, *Young West: A Sequel to Edward Bellamy’s Celebrated Novel “Looking Backward”* (New York: Arno Press, 1971), 202-3.

¹⁷⁵ Schindler, 204.

Schindler wrote *Young West* at a time when there were few critics of the environmental costs of the new sewer system. More significantly, however, was that Schindler, a radical Jewish progressive living in Boston, foresaw the dismissal of excrement by the modern sewer system as a crime against the environment. At the time he was writing *Young West*, Schindler was also deep in the process of forming an ethos that synthesized the sort of nationalism found in Bellamy and the Prussian land he left two decades earlier (with its state-owned utilities) and belief in a social order with economic equality, government insurance (something like Social Security), and science and industry driving social progress instead of religion and capitalism.¹⁷⁶ It is unclear whether Schindler's attitude toward capitalism or his proximity to the cesspool that was the Boston Harbor contributed to his belief in a more rational and less wasteful sewer system. Perhaps he was influenced by Progressive Era notions of efficiency and waste. Or perhaps Schindler was aware of the excrement-based "poudrette" and "tafeu" or the progressive sewage efforts of the Massachusetts Board of Health.

1.6 Conclusion

Even though periodicals and other media from mass culture proliferated rapidly in the late-nineteenth century and into the early twentieth century, Americans had an increasingly more difficult time discussing excrement openly and frankly. Some engineers and agriculturists wrote of excrement delicately, but they ultimately failed to

¹⁷⁶ Arthur Mann, "Solomon Schindler: Boston Radical," *New England Quarterly* 23 (December 1950), 453-476.

make the case for maintaining excrement as a fertilizer. Even the engineers themselves admitted that “it was a bit indelicate to speak in public of anything so unclean as sewage.”¹⁷⁷ There were exceptions of course. Solomon Schindler was one of them. But powerful and quiet social factors played an enormous role in the ultimate decisions to adopt the sewer systems. As historian Christopher Hamlin points out, many practices and discussions involving the use of sewage for fertilizer occurred in Europe, but not in the U.S.¹⁷⁸

Combined, the first and second parts of this chapter demonstrate a society propagating the message that excrement was dangerous and needed to be eliminated immediately. Beneath the surface, the message was that the elimination of excrement is not only a matter of health but one of class and civilization. This message grew to be integral to the Long Progressive Era, and over time, race and gender become enmeshed in the message as well. The anxiety over excrement was worsened by the fact that while civilization became a more important Progressive and Victorian virtue, excrement became more difficult to discuss. It was in this climate that American cities decided to invest heavily in building sewer systems, an infrastructure that would need to be updated but fundamentally changed society’s relationship with excrement thereafter. Sewers tended to make urban areas much safer, as the vast geography of the U.S., in contrast with that of Europe, made it feasible for cities to simply dump their sewage into a nearby waterway. On the other hand, this practice caused many problems, either with the next

¹⁷⁷ Leonard Metcalf and Harrison Eddy, *American Sewerage Practice* (New York: McGraw Hill, 1914), 1.

¹⁷⁸ Hamlin, “Sewage: Waste or Resource? A Historical Perspective.” 16-20, 38-41.

city down the river or with the same city that did the dumping. Chicago experienced both of those problems: first when it dumped raw sewage into Lake Michigan, where it also took its drinking water from; and then in 1900 when it reversed the Chicago River away from Lake Michigan toward St. Louis. Sewers also prevented one of man's most important fertilizers from being widely exploited and developed for commercial use. As the next chapter explains, the messages embedded in the push to sewer the entire nation were unique to the U.S. at that particular moment in history. Inasmuch as we have been led to believe that sewerage was the rational and natural result of a society driven by science and progress, it was also the result of a society with considerable preconceptions about gender, class, race, and religious morality.

Chapter Two—The Toilet: Domesticating Excrement

2.1 Introduction

Slovenian philosopher Slavoj Žižek begins his book, *The Plague of Fantasies*, with a comparison of three cultures—French, German, and Anglo-American—in terms of their toilets. In the German toilet, the hole is in the front with a platform in the back, “so that the shit is first laid out for us to sniff at and inspect for traces of some illness.”¹⁷⁹ The hole and the platform of the French toilet are reversed, in order for the shit to “disappear as soon as possible.” In between these two cultural metaphors—those of the German need to confront one’s own waste and the French unwillingness to acknowledge its presence—stands the Anglo-American toilet: “the basin is full of water, so that the shit floats in it—visible, but not to be inspected.” According to Žižek, then, Americans will acknowledge their excrement, on one sensory level—sight—but not on any other. The water serves as a buffer of sorts, creating a safe distance between the American and his or her excrement, preventing more direct confrontation with it through smell.

To determine whether or not there is any validity to Zizek’s analysis on the representation of cultural biases and beliefs in the details of their toilets would perhaps be appropriate for a work of comparative cultural analysis. This chapter, however, explains a similar proposal—that the presence of a sewer-connected toilet or water closet in one’s

¹⁷⁹ Žižek, p. 4

home made for a fundamental shift in the daily life of Americans in the late nineteenth century, and that that shift ultimately changed the way Americans conceived of and related to their excrement.

This chapter maintains that when Americans abandoned these modes of defecation and used an indoor toilet that simply flushed the excrement away out of sight and out of mind, several important changes occurred to the status quo in American society. First of all, as the place of defecation moved into the domestic sphere, the role of the domestic woman changed as she became the member of the household in charge of excrement. This move had two important consequences: A, women were more able to enter the public sphere as sanitation experts in the late nineteenth century; and B, excrement was now enveloped into the Christian rubric of the late-nineteenth century women's home and subject to its judgment. Second, indoor sewerage reinforced class divisions as toilets became status symbols. Third, architecture changed substantially, reflecting and reinforcing the populace's own trepidation, as a new room and a new act had to find a place inside the home. Whereas previous methods of excrement removal caused one to have a more sensory-intense experience with excrement on a daily basis, the toilet flushing to a sewer main contributed to the ongoing reformulation of excrement as a waste. Fourth, the public toilet became a liberated space in a time when speech was informally controlled by Comstockery and concerns with civilization.

This chapter also answers basic questions ignored in most historical accounts of the period—such as where and how the late-nineteenth and early-twentieth century

American defecated, the significance of the smell of excrement, and the relative lewdness of bathroom graffiti. Furthermore, this chapter helps to answer one of the fundamental questions of the dissertation: how did Americans come to adopt such a wasteful and environmentally unfriendly sewer system? Chapter one provides several parts of the complex answer (the unfettered belief in technological progress, fear of disease, small municipal budgets), and this chapter adds an important cultural reason. As excrement became domesticated during the second half of the nineteenth century, it was vilified. Excrement in the back yard was one thing, but in the house—the crucible for morality and civilization—it was something much worse. Catch phrases such as “cleanliness is godliness” proliferated in homemaking guides of the middle and late nineteenth century. Furthermore, women, who were supposed to be the guardians of virtue during this era, were the ones responsible for keeping excrement (and signs of it) out of the house as the toilet entered the domestic sphere. So the odd paradox of this period is that by entering the home, excrement was met with far more radical efforts to expel it forever.

2.2 From the Outhouse to the Toilet

Although they are far less popular than a century ago, outhouses still exist and function today. Some, such as the double-decker outhouse in Gays, Illinois, (see figure below) function today only as relics of a former era. Others, such as those that can be found in national parks still provide a convenient place for defecation and urination

where plumbing does not reach. These were most often made of wood, but others were made of brick, stone, logs, and later sheet metal.

Nevertheless, outhouses were the typical location for defecation prior to and during the sewer-building boom. Outhouses were commonly constructed as far away from the house as one could still reach conveniently—often between 50 and 300 yards. The buildings are most commonly constructed with wood, with four sides, and a door on one of those sides. Outhouses nearly always included some type of hole in the door or walls to let light in and let some air out. Thomas Jefferson requested that one of his outdoor privies use Venetian blinds for ventilation.¹⁸⁰ Commonly, these holes were cut in the shapes of symbols such as suns and moons—suns or stars indicating a men’s outhouse and moons for women.¹⁸¹ The outhouse was usually built over a pit as deep as six feet. And the interior included a bench of sorts with one or two holes cut in it placed directly over the pit.¹⁸² Most outhouses also had seat covers or plugs to keep flies and vermin out.

Although Gayetty’s Medicated Paper, America’s first toilet paper, was introduced in 1857, it was a luxury few Americans could afford. Therefore, most outhouses were equipped with a corncob hanging by a string from the wall. And after the Sears Catalog became commonplace in the 1890s, it was a staple in many outhouses for use as toilet

¹⁸⁰ “Privies,” accessed January 4, 2010, at <http://www.monticello.org/site/house-and-gardens/privies>

¹⁸¹ Barlow, P. 4.

¹⁸² It was very common for a family outhouse to have two seats, though public outhouses often had many more.

paper. Several photos from the early 19th century of the inside of outhouses oftentimes feature scraps of newspaper or piles of rags. Some also had buckets of lime to control the odor. Occasionally, middle class outhouses were decorated with wallpaper, mirrors, and even carpets.¹⁸³

The outhouse was called many things depending on the region and the era. Although the “backhouse” was the most common synonym, Ronald Barlow, in his *Vanishing American Outhouse*, has listed several more:

One-Holer, Two-Holer, Dooley, Backhouse, Pokey, Loo, Easer, Johnnie, Biffy, Donnicker, Ajax, Jericho, Depository, Willie, Convenience, Closet, Cloaca, Stool, Throne, Head, Vault, Pool, Post Office, Federal Building, White House, Garderobe, Roadside Rest, Oklahoma Potty [and in Pennsylvania Dutch country] der Abdritt un’s Scheisshaus.¹⁸⁴

And just as the nicknames varied from region to region, the styles varied considerably as well. An outhouse in the southwest might be constructed of adobe, while the outhouse of a wealthy northeasterner made of brick. It was also quite common for homes near rivers, ponds, or oceans to have an outhouse perched over it so the water could dilute the excrement.

One Department of Agriculture report written in 1871 describes a “typical” rural house in ominous terms:

¹⁸³ Barlow, 15.

¹⁸⁴ Barlow, 4.

The wastefulness and the danger of our present system are too much to contemplate, but we keep ourselves comfortable by not contemplating them. The actual condition of at least too many of our farm houses is very much as follows: [...]At the bottom of the garden, or at some other inconvenient distance, stands—a temple of defame—the common privy of the establishment, covering a stifling vault, from the accumulations of which there arises in warm weather the vilest air to which the human senses have ever learned to accommodate themselves; while in winter the cold blasts that find easy passage through the loose foundation rise through the seat, causing infinite discomfort and danger to health. This necessary resort, even of delicate women, whose condition should command our greatest care, is approached by a path that is often blocked up with snow, deep with mud, or overhung with dripping trees, or overgrown with wet grass.¹⁸⁵

This description of a privy in a non-urban setting is especially cautionary in tone because it is part of an appeal for indoor toilets for the sake of American civilization (and specifically American women). The author goes on to claim that indoor toilets are quite obviously the next rung on our evolutionary ladder and that allowing rural people to use outhouses constitutes a breach of our standards of civilization: “Taking the whole country into consideration, the conditions described above are certainly as good as the average in

¹⁸⁵ United States. and Frederick Watts, *Report of the Commissioner of Agriculture for the year 1871*. (Washington: Govt. Print. Off., 1872), 466.

the case of those who live on farms and in small towns—probably better than the average—and they indicate how far we fall short of being a civilized people.”¹⁸⁶ The author’s point is noteworthy in part because the standards of defecation have become very rigid in the minds of some since the outbreak of the Civil War, when so few had indoor toilets. But it is also noteworthy because the toilet is, at that point, at least according to this author, a symbol of advanced civilization. And furthermore, the toilet is a symbol of civilization at a time when a majority of Americans had no access to one.

Although it is unclear who precisely the audience was for the Department of Agriculture’s annual reports (perhaps farmers), the author, who may have been George Waring,¹⁸⁷ makes a strong appeal for the widespread adoption of indoor toilets for the wellbeing of the women and children:

Surely it is not too much to say that no house, however well appointed in other respects, is a fit abode for civilized women, nor a fit place in which to bring up their children, that is not supplied with the simple conveniences that will enable them to attend to the calls of nature without exposing themselves to the public gaze, to the inclemency of the weather, and to the foul odors of a common privy. This is plain language, as the subject demands. Leaving out all other considerations, the proposed reform should secure the best efforts of all sensible men and women, for

¹⁸⁶ *Ibid.*, 467.

¹⁸⁷ The introduction states that the report was prepared with the help of George Waring, but the tone of the writing is quite similar to the tone Waring uses in his own articles.

the single reason that it will secure relief from an *evil*, our tolerance of which almost justifies Mr. Darwin's theory of our origin.¹⁸⁸

The subject of “evil” excrement receives more attention below, but all of these passages taken together indicate that the author believes indoor toilets are necessary for the safety and wellbeing of women and children in addition to being symbols of civilization and the advancement and evolution of America itself. Outhouses continued to exist in the United States in the years following this report. The CWA and WPA maintained an outhouse-building campaign as part of the New Deal that built 250,000 outhouses between 1933 and 1945.¹⁸⁹ But the proportion of outhouses to indoor toilets continued to shrink as the Long Progressive Era advanced.

An oft-overlooked aspect of literature on 19th century sanitation is the toilet itself. The 1870s witnessed a revolution in plumbing. Indoor plumbing had been an obsession of many do-it-yourselfers since the 1820s—as engineers were able to pipe water into cities—but the fixtures were pell-mell and lacked any sort of standardization. By the 1870s, according to Maureen Ogle, “scientific plumbing” became a virtue, and by 1890 this was codified by the omnipresence of standardized fixtures.¹⁹⁰ But in the meantime, indoor plumbing faced many challenges. First and foremost was the issue of what to do

¹⁸⁸ United States. and Watts, *Report of the Commissioner of Agriculture for the year 1871.*, 466. The author is specifically talking about building an earth closet in the house. Emphasis is mine.

¹⁸⁹ Charles Peters and Timothy Noah, “Wrong Harry,” *Slate*, n.d., http://www.slate.com/articles/news_and_politics/chatterbox/2009/01/wrong_harry.html.

¹⁹⁰ Ogle, 151.

with the sewage.¹⁹¹ Although the flush toilet was invented in 1775 by Briton Alexander Cummings, it was nearly a century later before American manufacturers such as Wolff, Kohler, and J.L. Mott began manufacturing ceramic and cast iron flush toilets—sometimes stylishly embossed with Victorian designs, sometimes with pragmatic simplicity. Sometimes a spare bedroom was converted into a water closet, and sometimes it was crammed underneath a stairwell. But sewer gases, not yet entirely eliminated by newer toilet designs, complicated the question of where to put a bathroom. George Waring called household wastes stuck in sewer pipes “the seat of the enemy of which we hear so much under the name of ‘sewer gas.’” He went on: “there is no safety in sewerage or in house-drainage until we prevent the production of these gases.”¹⁹² Waring still believed in the danger of miasmas in 1883, as many did, and these could arise from clogged or semi-clogged pipes, toilets without traps, or simply toilets that were not clean enough.

By 1885, a middle-class American connected to a municipal sewer and waterworks had a dizzying number of toilet choices if they were to build a house or replace an existing one. Some popular choices for homes that were not yet supplied with water were earth closets, pan closets, and ash closets. But if one was connected, the standard choice was the water closet, or flush toilet. This was not necessarily a choice to be made flippantly. As William Paul Gerhard advised in an 1885 *Good Housekeeping*

¹⁹¹ Joel Tarr, *The Search for the Ultimate Sink: Urban Pollution in Historical Perspective* (Akron, Ohio: University of Akron Press, 1996).

¹⁹² Waring, *Suggestions for the Sanitary Drainage of Washington City* (Washington D.C., Smithsonian Institution, 1883), 12.

article “in a certain sense the most important plumbing fixture in the house, is the water-closet.”¹⁹³

William Paul Gerhard’s five-part series on bathrooms in *Good Housekeeping*’s first year of publication (1885), called “Domestic Sanitary Appliances,” indicates that the introduction of a bathroom to newer home designs was an important transition for Americans in the Long Progressive Era. On the one hand, there was no such thing as a standard bathroom. Today, when a house is listed as having 1.5 bathrooms or even 1.75 bathrooms, it is clear that one bathroom contains a sink, a toilet, and a bath with showerhead, while the second bathroom contains a sink and a toilet and no bathtub. But it was not uncommon in 1885 for a bathroom to contain a bathtub (made out of wood or tin or zinc), a urinal, a water closet, and maybe even a slophopper¹⁹⁴, or any combination thereof. Other bathrooms in less wealthy homes may just resemble an outhouse with a simple wooden platform with a pan underneath the hole (pan closet). As Gerhard points out, “The pan-closet, although still popular with ignorant architects and builders, is particularly faulty [in the respect that they do not effect a complete removal of faecal matter].”¹⁹⁵ But even if one followed Gerhard’s advice and opted for a water closet, there was still an important choice to be made between dry hoppers, valve closets, plunger closets, washout closets, washdown closets, trap jet closets, and Dececo closets,¹⁹⁶ just to

¹⁹³ William Paul Gerhard, “Domestic Sanitary Appliances: Comforts of a Bathroom: it’s sanitary construction and arrangement,” *Good Housekeeping*, October 17, 1885., 1.

¹⁹⁴ A sink connected to the sewer line that was used for dumping the contents of bedpans

¹⁹⁵ Gerhard, “Domestic Sanitary Appliances: Comforts of a Bathroom: it’s sanitary construction and arrangement.”1.

¹⁹⁶ A variation of the Rogers Field flush tank “invented” by Col. George Waring

name a few of the available types. The type of trap, the shape of the bowl, the material used, style of flush, and the type of cistern were all important variables in consideration of which toilet to procure. All of these flush toilets had two things in common—they were designed to be defecated in (unlike the slophopper or urinal), and they had the water trap barrier to prevent odors from rising up into the house from the sewer pipes. In the evolution of the various types of toilets used in the 19th century, this latter trait would prove to be crucial in future manifestations of the toilet—which hasn't change all that much between its invention by Alexander Cummings in 1776 and today.

The neutralization of the odor of excrement and its subsequent disappearance down the hole would be the two irresistible factors that justified using up to five gallons per flush. As Gerhard notes, the water closet “is in all respects the most complete apparatus for the instant and thorough removal of waste discharges from the body.”¹⁹⁷ Furthermore, the Western Historical Publishing Company noted in 1892 that “it is well known to students of physiological science that one of the most potent factors in the health or disease of civilized communities, [sic] is the freedom of the dwellings from sewer gases.”¹⁹⁸ Even though it was clear to most scientists and doctors by the 1890s that bacteria, not miasmas, caused diseases, sewer gases were still stigmatized as being more than just a nuisance. Still in 1881, when President James Garfield was shot by Charles Guiteau, sewer gases were initially blamed for Garfield's decline after a brief recovery.

¹⁹⁷ Gerhard, 1.

¹⁹⁸ *Master hands in the affairs of the Pacific Coast historical, biographical and descriptive. A resumé of the builders of our material progress.* (San Francisco: Western Historical and Pub. Co., 1892).272-3.

George Waring was brought to the White House as a sewer gas expert to determine if miasmas were indeed causing his decline.¹⁹⁹ In reality, Garfield's advanced infection was most likely caused by a doctor sticking his finger in the President's wound.²⁰⁰ By 1875, architect E.C. Hussey, who published a popular pattern book called *Home Building: A Reliable Book of Facts*, advocates sternly on behalf of the Jennings's [sic] Sanitary Specialties toilets. Still under the mistaken impression that smelly miasmas of sewer gas poison those who smell them, Hussey warned of the dangers of indoor water closets: "[water closets] are the most potent sources from which arise, and spread through the premises, the death laden gases which prepare the way for many of the most dangerous diseases, attacking children and adults."²⁰¹ In the late 1870s and early 1880s, the Jennings²⁰² water closet was the most advanced in terms of using water and an s-shaped trap to hold the gases under the toilet. Hussey also ties the added expense and safety to the growing virtue of civilization discussed in chapter one: "The matter of expense cannot, by civilized people, be allowed to interfere with the use of the very best appliance that can be used for such purposes [. . .] a just God will not hold us guiltless if we neglect

¹⁹⁹ Nancy Tomes, *The Gospel of Germs: Men, Women, and the Microbe in American Life* (Cambridge, Mass: Harvard University Press, 1998), 68.

²⁰⁰ "A President Felled by an Assassin and 1880's Medical Care" New York Times, July 25, 2006.

²⁰¹ E. C Hussey, *Home Building. A Reliable Book of Facts, Relative to Building, Living, Materials, Costs, at About 400 Places from New York to San Francisco* ([New York: Leader & Van Hoesen, 1877), 214.

²⁰² George Jennings gained fame in Great Britain for unveiling a new and effective public toilet at the Crystal Palace Exhibition in London in 1851. His reputation grew from there. In Lawrence Wright, *Clean and Decent: The Fascinating History of the Bathroom & the Water Closet and of Sundry Habits, Fashions & Accessories of the Toilet, Principally in Britain, France & America* (Toronto: University of Toronto Press, 1967).

it in providing for others.”²⁰³ In other words, God will be angry if the homeowner buys something less than the Jennings Sanitary Specialties toilet.

2.3 Excremental Habits in the Urban Home

As architecture historian Gwendolyn Wright writes, the home can be viewed as a metaphor, “suggesting and justifying social categories, values and relations. Domestic architecture in particular illuminates norms concerning family life, sex roles, community relations, and social equality.”²⁰⁴ This view is especially valid upon the inclusion of an entirely new room and activity inside the home. While the dominant trend in the transition from Victorian homes to bungalows after the turn of the century was for homes to lose smaller, single-purpose rooms (e.g. libraries, parlors) to larger, more inclusive rooms, the inclusion of the water closet went against that trend. Undoubtedly, for Americans throughout the nineteenth century the water closet was a status symbol; or as David Inglis calls it, the bourgeois fecal habitus. While men of status and wealth such as Thomas Jefferson had indoor toilets even before running water, it was exceedingly rare for a New York tenement to have an indoor toilet a full century later.

Some early American homes—mostly in wealthier home—incorporated a water closet into or at least very near the home structure. Empirical evidence remaining from Benjamin Franklin’s Philadelphia home suggests that he originally used an outhouse built

²⁰³ Ibid.

²⁰⁴ Gwendolyn Wright, *Moralism and the Model Home: Domestic Architecture and Cultural Conflict in Chicago, 1873-1913* (Chicago: University of Chicago Press, 1980), 1.

over a privy pit dug in 1765. When he expanded his home in 1787, he dug a very deep (at least 12 feet by my own estimate) brick-lined privy vault which was positioned just a few feet from the back door leading out of the kitchen. Its depth suggests that it was not intended to be emptied at all. Another Philadelphian, Elizabeth Drinker, recorded in her diary the two straight nights it took for five night soil men to empty her privy vault, which had been accumulating “offerings from the temple of Cloacina” for 44 years. At \$3 per foot, they removed enough night soil so that the seat was 16 feet from the bottom of the pit by the time they had finished.²⁰⁵ Thomas Jefferson had three flush toilets installed in the White House in 1801 and had three indoor toilets in Monticello finished in the first decade of the nineteenth century. He tended to keep locks on the bathroom doors (for unknown reasons), even offending his guest and friend Pierre S. du Pont de Nemours by denying him access to the indoor toilets once in 1815 when Jefferson was away.²⁰⁶

Cesspools appeared in cities almost immediately after having water piped in. Manhattan, for example, received a steady and voluminous supply of water for the first time when the Croton Aqueduct was completed in 1842. The water table below the city certainly had a uniquely dense amount of fecal matter infiltrating into it for more than a century by then:

In 1829 researchers from the Lyceum of Natural History estimated that in every twenty-four hours New Yorkers deposited over one hundred tons of

²⁰⁵ Elizabeth Drinker, *The Diary of Elizabeth Drinker: The Lifecycle of an Eighteenth Century Woman* (Philadelphia: University of Pennsylvania Press, 2010) 207-208.

²⁰⁶ Based on information at <http://www.monticello.org/site/house-and-gardens/privies> and in correspondence with Monticello historian William Beiswanger.

excrement into the alluvium, from whence, accompanied by other soluble waste, it percolated down to the water table. In the 1830s, due to the increase in privies and to seepage from old graveyards, downtown wells were bringing up a tainted brew.²⁰⁷

However, the cesspools created after Croton water arrived made the city a swampy, malodorous mess. By 1849, physician John Griscom described the island as “thirty thousand cesspools studding it up and down, and filling the atmosphere with nauseous gases.”²⁰⁸ Wealthier New York residents took advantage of the new Croton water to transform a small bedroom of the house into a bathroom.²⁰⁹

The tenement homes in New York were much slower than wealthier and more rural homes in transitioning to indoor bathrooms. It is likely that the owners of tenement buildings simply did not want to invest the money or were not willing to lose the indoor space that adding indoor toilets would necessitate. One big difference between the outhouses in rural areas and the outhouses behind tenements was that those behind tenements were much closer to both the domicile and the water sources. There were codes in place that mandated privy vaults in city limits had to be lined with bricks or other stone to prevent, but these rules were frequently flaunted and the codes were virtually unenforceable.

²⁰⁷ *Gotham*, 589.

²⁰⁸ John Griscom, *The Uses and Abuses of Air* (3rd Ed.: New York: Redfield, 1854), 183. Found in May Stone, “The Plumbing Paradox,” *Winterthur Portfolio* 14, no. 3 (Autumn 1979), 292.

²⁰⁹ “The Plumbing Paradox,” p. 300.



Figure 1. Outhouses behind a NYC tenement, 1902-1914²¹⁰



Figure 2. Inside of a tenement outhouse, 1902-1914

²¹⁰ Figures 5-11 are from the New York Public Library's Digital Gallery. Collection titled "Photographic negatives of the New York City Tenement House Department, 1902-1914."



Figure 3. Outhouse floor and privy vault, indicating various materials used for toilet paper, 1902-1914



Figure 4. Tenement outhouse with hanging rags, 1902-1914



Figure 5. NYC Outhouses with graffiti, 1902-1914

Despite significant advances in sewerage and the efforts of individuals to build or remodel to include a place to defecate inside the home, such changes were heavily based on class. Indoor toilets came very slowly to the poor, even well into the twentieth century. To some extent, indoor toilets became markers of not only civilization, but class as well. Still, the advances were remarkable. Out of Boston's 52,669 dwellings in 1893, 52,000 were estimated to be connected to the sewer lines. Philadelphia, which built its waterworks already at the turn of the century, had 53% of its households connected to sewers.²¹¹ New York City had 123,000 dwelling connections to the sewer line with an estimated 81,828 dwellings—apparently meaning that many dwellings had multiple connections.²¹² Almost all of Washington D.C.'s were sewerage,²¹³ yet Baltimore was still

²¹¹ According to estimates of the U.S. Commissioner of Labor in 1893-4 addenda to the 1890s census: <http://www2.census.gov/prod2/decennial/documents/1890c5-01.pdf>

²¹² <http://www2.census.gov/prod2/decennial/documents/1890c5-01.pdf>

²¹³ <http://www2.census.gov/prod2/decennial/documents/1890c6-01.pdf>

two decades from finishing its municipal sewer system.²¹⁴ Southern and Western states—the more rural areas of the country—were typically slower to acquire indoor toilets. By 1940, when the U.S. Census began counting indoor flush toilets again, it found that 64.7% of the country defecated inside the home. But that number was as low as 21.5% in Arkansas, 18.7% in Mississippi, and 45.9% in Texas. More urban areas like Maryland were at 94%, and 91.1% of New Jersey residents defecated inside the home with flush toilets by 1940. By 1990 the percentage of Americans without indoor flush toilets had dropped to 1.1%.²¹⁵

2.4 Excremental Habits in the Suburban and Rural Home

The word “toilet” comes from the French for cloth or garment—indicating the space in an upper-class home where one changed clothes. This area was often the most convenient choice for putting a new toilet in homes that were already built. France’s proclivity for including toilets in the home preceded America’s, and over time, in France, the space where the flushing mechanism was located in the home became a euphemism for what is now called the toilet. Even through the 1880s, “toilet” was still often used in American architectural pattern books as a room used for changing clothes. Also, “bathroom” was quite often used in these pattern books as a word meaning a room with a

²¹⁴ The figures in this paragraph differ in some cases from the figures extrapolated from the same census data on page 97 of Susan Strasser, *Never Done: A History of American Housework*, 1st ed. (New York: Pantheon Books, 1982).

²¹⁵ “Historical Census of Housing Tables—Sewage Disposal,” <http://www.census.gov/hhes/www/housing/census/historic/sewage.html>

bathub in it. It was common to see architectural plans calling for a bathroom with a bathtub and a “WC,” or water closet, either somewhere else in the house or perhaps completely absent of one (particularly in the cheaper houses).

While the typical urban American home had little space for adding a bathroom, the country home often did. However, the rural home seldom had wastewater connections, and only some were connected to water delivery systems by the turn of the century. Still, in an era where the pace and pollution of urban life—in addition to urban afflictions like neurasthenia—made the rural areas seem like spaces for reinvigoration and natural health, the sanitation revolution (primarily an urban phenomenon), began to turn that model on its head. Dr. Harvey Bashore, a Progressive Era sanitarian, noted this trend reversal in his Preface to *The Sanitation of a Country House* from 1905:

While municipal hygiene has made much progress during the last hundred years, the rural districts still cling to their old-fashioned ways, still trust in Providence and the “old oaken bucket.”[. . .]to make the country as healthy as the city—contradictory as it may seem—is the aim of this work.²¹⁶

In his work, Bashore offered a few alternatives for houses equipped with water delivery systems to the cesspool system—where a pipe takes the toilet’s wastewater from inside the house to a spot in the backyard where the effluent simply sits stagnant—which he

²¹⁶ Harvey Brown Bashore, *The Sanitation of a Country House*, 1st ed. 1st thousand. (New York: J. Wiley & Sons, 1905)., v-vi.

calls “a relic of medieval shiftlessness and carelessness for which no excuse can be offered.”²¹⁷ While “water-carriage of excreta” to the sea was fine, Bashore also strongly advised against allowing the excrement to be piped into small streams, ponds, or rivers, reminding the reader that “‘out of sight, out of mind’ is not hygiene.”²¹⁸ This irresponsible attitude “has a bad moral effect on the rural citizen, who is by no means overburdened with sanitary devices.”²¹⁹ A wastewater treatment system using sand filtration was one possible solution, though it is unlikely the rural citizen has the means to build such a system. The ideal solution for Bashore was to lead the toilet wastewater (as opposed to the wastewater from the bathtub or the sink) to an underground “settling tank,” where the excrement would be broken down into tiny particles. From there, the liquid would flow into a “flush-tank, from which it is discharged by an automatic siphon into surface gutters, and from these allowed to spread over the ground or run into furrows between growing vegetables or grain.”²²⁰ Bashore also granted the option of adopting this same system, though without using the settling tank and flush-tank.

Sanitary engineers Frederick Dye and George B. Davis emphasized the magnitude of considering the fate of one’s excrement when building a home in a rural area. They wrote in 1898 that sewage disposal is “probably one of the most important subjects a sanitarian has to consider when dealing with a house in a country district, for whether the building be large or small all sewage matter must be disposed of in a proper and efficient

²¹⁷ Ibid., note, 49.

²¹⁸ Bashore, 47.

²¹⁹ Ibid., 48-9.

²²⁰ Ibid., 50-53.

manner.”²²¹ Writing in England and publishing their work seven years before Bashore might account for their advocacy of the cesspool method so despised by Bashore. Dye and Davis also wrote that sewage farming is a “very good” practice as well: “crops raised on such ground are as safe and good to eat as those grown in the ordinary way.”²²² In addition, they also recommended using septic tanks or, as was practiced in France and England, subjecting the sewage to “the Hermite system, by which the sewage is indirectly subjected to electrical treatment.”²²³ In this method, the sewage is blended with seawater and subjected to electrolysis to create an “oxygenated compound of chlorine.”²²⁴ The Hermite method was later proven to be ineffective on solid fecal matter and not used much after the first decade of the twentieth century.²²⁵ They also recommend using “Ferrometers” to infuse the sewage with iron and turn it into a “black inodorous mass.”²²⁶ The ferrometer doses out an appropriate amount of iron into the water tank above the toilet. This method was used at Windsor Castle to neutralize the smell of Queen Victoria’s excrement.²²⁷

In true fashion of Victorian architecture, in which each room has a single purpose and each domestic function, likewise, has its own room, many house designs in the 1850s

²²¹ George B Davis and Fred’k Dye, *A Complete and Practical Treatise Upon Plumbing and Sanitation Embracing Drainage and Plumbing Practice* (London, New York: E. & F.N. Spon, Ltd.; Spon & Chamberlain, 1898)., 355.

²²² Davis and Dye, 355.

²²³ Ibid., 362.

²²⁴ Ibid., 362

²²⁵ *Electrochemical and Metallurgical Industry*, Vol. 4., (Electrochemical Pub. Co., 1906), 134-5.

²²⁶ Davis and Dye, 363

²²⁷ F.R. Conder, “Treatment of Sewage by the Iron Process,” in *Professional Papers of the Corps of Royal Engineers*, vol. VIII (Chatham, England: Royal Engineers Institute, 1887)., 30.

and 1860s called for “bathrooms” or “bath rooms” that were meant exclusively for bathing—with only a bathtub and maybe a slop popper or a sink. It was very rare in the 1850s to see a combined bathroom and water closet, or WC as labeled in some architectural plans. We can still safely say that “bathroom” is a euphemism for the place where one defecates, but close study of 13 popular architectural pattern books²²⁸ from 1848 to 1881 indicates that “bathroom” *did not begin* as a euphemism. Instead, it turned

²²⁸ These include O. S Fowler, *A Home for All; or, The Gravel Wall and Octagon Mode of Building*, Stereotyped ed., rev. and enl. (New York, Boston [etc.]: Fowlers and Wells, 1854). A. J Downing, *The Architecture of Country Houses: Including Designs for Cottages, Farm Houses, and Villas, with Remarks on Interiors, Furniture, and the Best Modes of Warming and Ventilating* (New York: D. Appleton & co, 1859).; Samuel Sloan, *The Model Architect. A Series of Original Designs for Cottages, Villas, Suburban Residences, Etc., Accompanied by Explanations, Specifications, Estimates, and Elaborate Details. Prepared Expressly for the Use of Projectors and Artisans Throughout the United States* (Philadelphia: E.S. Jones & co, 1852).; Gervase Wheeler, *Homes for the People, in Suburb and Country; the Villa, the Mansion, and the Cottage, Adapted to American Climate and Wants*, 6th ed. (New York: G.E. Woodward, 1868).; Henry W Cleaveland, William D Backus, and Samuel D Backus, *Village and Farm Cottages. The Requirements of American Village Homes Considered and Suggested; with Designs for Such Houses of Moderate Cost* (New York: D. Appleton and company, 1856).; D. H Jacques, *The House: A Pocket Manual of Rural Architecture or, How to Build Country Houses and Out-Buildings*, Rural manuals no. 1 (New York: Fowler and Wells, 1859).; Sloan, *The Model Architect. A Series of Original Designs for Cottages, Villas, Suburban Residences, Etc., Accompanied by Explanations, Specifications, Estimates, and Elaborate Details. Prepared Expressly for the Use of Projectors and Artisans Throughout the United States.*; Samuel Sloan, *American Houses a Variety of Original Designs for Rural Buildings* (Philadelphia: H.B. Ashmead, 1861).; George E Woodward, *Woodward’s National Architect: Containing 1000 Original Designs, Plans, and Details, to Working Scale, for the Practical Construction of Dwelling Houses for the Country, suburb, and Village, with Full and Complete Sets of Specifications and an Estimate of the Cost of Each Design* (New York: G.E. Woodward, 1869).; M. F Cummings, *Cumming’s Architectural Details Containing 387 Designs and 967 Illustrations of the Various Parts Needed in the Construction of Buildings* (New York: Orange Judd & Co, 1873).; A. J Bicknell and William T Comstock, *Victorian Architecture: Two Pattern Books* (Watkins Glen, N.Y: American Life Foundation, 1975).; Hussey, *Home Building. A Reliable Book of Facts, Relative to Building, Living, Materials, Costs, at About 400 Places from New York to San Francisco.* (1875); William T Comstock, *Modern Architectural Designs and Details; Containing Eighty Finely Lithographed Plates, Showing New and Original Designs in the Queen Anne, Eastlake, Elizabethan, and Other Modernized Styles* (New York: W.T. Comstock, 1881).

into a euphemism after the time when water closets and bathrooms occupied the same space.

Furthermore, over the course of the next few decades, into the 1880s, Victorian architecture was still the fashionable style for those with and without a great deal of money. Moving into the early 20th century, however, the bungalow became the chic style, in part because of its reaction against the Victorian aesthetic and use of space. The anti-Victorian crusade started in the 1890s, and the “popular crusade to replace Victorian aesthetic ideals and family standards reached a crescendo by 1910.”²²⁹ Among the new architectural values meant to reflect new Progressive American values were naturalness, honesty, and above all, simplicity.²³⁰ And part of that move toward simplicity was a conflation of many functions into fewer rooms. Parlors, for example, which were meant to exclude children and were stuffed with all sorts of bourgeois knick-knacks, were transformed into the family room or living room beginning in the 1890s.²³¹ A china cabinet no longer needed its own room, vestibules lost their previous importance, and chambers and bedrooms were seldom separate entities.

But an important change, as yet unnoticed by architectural historians, presaged this paradigm shift. Already in the 1860s house patterns started to combine the bathroom and the water closet. It is unclear whether this shift can be attributed to an effort to

²²⁹ Clifford Edward Clark, *The American Family Home, 1800-1960* (Chapel Hill: University of North Carolina Press, 1986), 132

²³⁰ Clark, 135-151.

²³¹ For more on Victorian parlors, see Katherine C Grier, *Culture & Comfort: Parlor Making and Middle-Class Identity, 1850-1930* (Washington, D.C: Smithsonian Institution Press, 1997).

simplify plumbing, or to save space, but the period from 1850 to the 1880 was when the term bathroom began to describe a place where one defecates. The water closet would be challenged in the mid nineteenth century by the earth closet and other designs, but when Americans really began to defecate in the home, the water closet was by far the most popular method. And although the benefits of defecating inside the house are clearly understood by modern Americans, the water closet did not become incorporated into the middle class American house overnight. It entered with fits and starts and a good deal of anxiety.

Many factors played into the question of whether or not a family had an indoor water closet. Climate, region, rurality, whether or not the house had water delivery capabilities, negative experience and negative rumors regarding the supposedly noxious miasmas were all important factors in this decision. Certainly some houses built after the turn of the century still shunned the indoor water closet, opting instead for the outhouse. Architect and phrenologist Orson Squire Fowler, a fierce advocate for octagonal houses who wrote the popular book *A Home for All* (a pattern book of sorts) in 1848, doesn't even mention water closets.²³² It is clear that some Americans had by that time put water closets in their homes, but it hadn't yet become practical or popular enough for cutting edge architects to include them. By 1850, Andrew Jackson Downing's pattern book, *The Architecture of Country Houses*, already included water closets in a few of the designs for upper crust houses and mansions. Fewer than 10% of his designs included water

²³² Croton water began to serve New Yorkers in 1842, so it is likely that some altered their homes and even began building new homes with water closets in the 1840s.

closets. If they were present at all, Downing often located a single water closet upstairs near the servant's quarters, indicating that problems with containing the smells and/or negative stigmas tended to trump convenience with regards to the location.

Over the course of the late 1850s, some pattern books included water closets, and some did not, but plans with water closets were still outnumbered by those without. Gervase Wheeler's *Homes for People in the Suburb and Country* from 1855, for example, included 14 patterns with water closets and 23 without. It was rare for a house to have more than one water closet for fewer than 7 bedrooms, though a few mansions did have two water closets. Of those 14 plans with water closets, some were accessible from outside, and almost all of the water closets were separate from bathrooms with bathtubs.

Architects of the 1850s felt that the space, layout, and design of a house reflected the moral character of the family and could have a profound effect on the society. Henry William Cleaveland and the Backus brothers wrote in the introduction to their 1856 pattern book that the

degree in which [man] has been raised by civilization and refinement above the unreasoning animal is shown in nothing more clearly than the character of his dwelling [. . .] But we may well wonder when we see families, among people calling themselves civilized and Christian, content to dwell in hovels hardly good enough for swine [. . .] Regarded in this

light, human dwellings acquire new consequence. They become an important moral influence.²³³

Cleaveland, Backus, and Backus not only emphasize the importance of the home, but they do so by underscoring their message with heavy-handed appeals to civilization and proper Christianity. Therefore the quality of one's home is not an expression of how much money they have, but one of how dedicated they are to the ideals of an American society increasingly dependent on these notions of civilization and Christianity. In that context, there was a great deal at stake with the introduction of a new room and new domestic function.

Whether the water closet was then seen as a way for dirt and filth to infiltrate the home or whether it was seen as a more sanitary way of disposing of excrement was unresolved at the time. Cleaveland, Backus, and Backus do not explicitly include water closets in any of their 25 designs, but go on to say toward the end of their book that

[i]f the right precautions are taken, all causes of offence will be effectively precluded. The partial and imperfect method by which many have brought the water closet under cover—methods which, through ignorance or disregard of pneumatic laws, have converted the whole house into a great

²³³ Cleaveland, Backus, and Backus, *Village and Farm Cottages. The Requirements of American Village Homes Considered and Suggested; with Designs for Such Houses of Moderate Cost.*, 2.

flue for bad air—have undoubtedly prejudiced multitudes against all attempts of the kind.²³⁴

So to answer the matter of whether water closets brought filth and contamination or greater sanitation into the home, Cleaveland, Backus, and Backus suggest that—depending on the quality of the water closet and the proficiency of the plumber—it has the potential for both. Certainly, although the toilets we use today are very close in design to the toilets used 150 years ago, many of the early toilets had design flaws such as faulty or ineffective traps and bowls that were too shallow. And these faults often allowed for the escape of sewer gases into the home. As mentioned above, Hussey also indicated that a few more dollars spent on a higher quality water closet could be the difference between sickness and health.

By 1859, Daniel Jacques's *The House: A Pocket Manual of Rural Architecture* actually presented as many patterns with water closets as without. That same year, however, Samuel Sloan's *The Model Architect* favored houses without water closets to those with by almost a two-to-one ratio.²³⁵ By *Woodward's National Architect* in 1869, however, that ratio was reversed, meaning that if the pattern books accurately indicated what kind of homes were being built, more new homes were being built with indoor water closets than without sometime in the 1860s. Other factors very likely affected this statistic one way or another; for instance, some of the later pattern books included water closets in their plans for wealthier homes, but still left them out of their plans for cheaper

²³⁴ *Ibid.*, 145.

²³⁵ 15 patterns were without water closets; 8 included water closets.

homes. But balancing that out is the fact that many Americans were also converting closets and small bedrooms into water closets in their pre-existing homes.

The sanitation revolution, kick-started in the 1860s with the efforts of the U.S. Sanitary Commission during the Civil War, no doubt had a strong effect on the way Americans thought about and dealt with their excrement. The USSC taught Americans that dealing properly with one's excrement meant the abatement of some very serious diseases. Furthermore, sewers, already present—however imperfectly—in places like New York, Chicago, and Boston, meant the possibility of excrement being swept away,

out of sight and out of mind (with some serious caveats). But as mentioned above, Americans were not necessarily comfortable with the privy in the house right away.

This apprehension can be seen in some of the pattern books beginning in 1855. Wheeler's *Homes for People in the Suburb and Country* features some water closets on the first floor that were accessible only from the outside. Though the rooms were still physically part of the house

structure, one was forced to go out to a

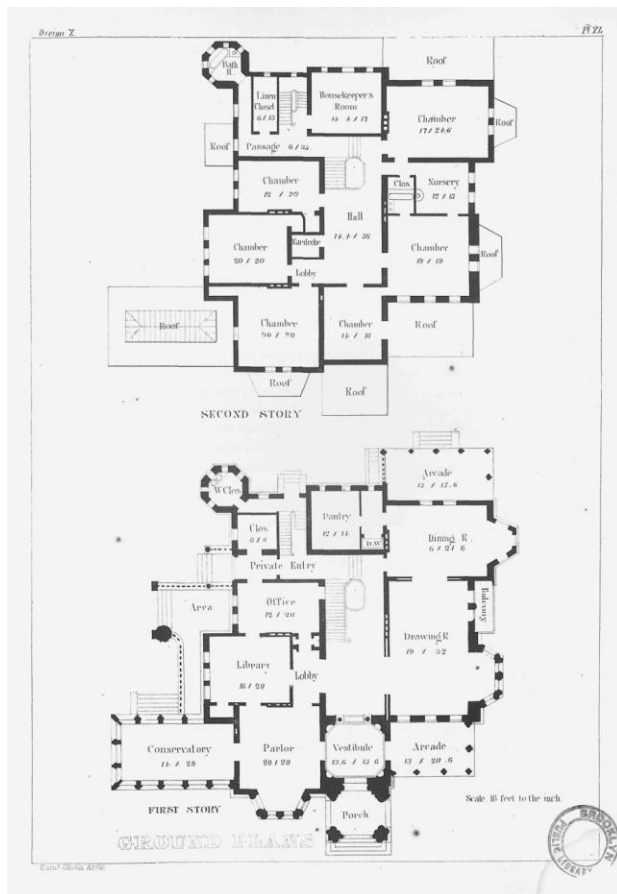


Figure 6. Design X from Sloan, 1861. One can see how the water closet is more of an appendage, and not fully integrated into the house.

veranda or into the back yard and then enter the water closet. Typically this indoor/outdoor water closet was in the back of the house nearest to the kitchen.

Woodward's National Architect from 1869 features even more of these water closets accessible only from the outside than Wheeler's book. The trend continued, but seems to be phased out by 1881.²³⁶

Patterns with water closets in the home demonstrated some consistency throughout the 1860s through 1881. For example, it was more common to see a water closet upstairs than downstairs. When downstairs, the water closet was usually near the kitchen, but not attached directly to it or opening into the kitchen. If they did happen to open to the inside, they usually opened to a hall or pantry or "lobby" off of the kitchen. When the water closet was found upstairs, it was usually quite far from the master chambers or master bedroom. Most often, as noted above it was located near the servant's quarters, but almost always to a hall or vestibule, not directly into a bedroom. If it opens to a bedroom, it usually also opens to a hall. And given the cavernous nature of some Victorian houses, starting at the top of the stairs, one sometimes had to make 4-5 turns down hallways and through vestibules or around corners to find the water closet. The placement was undoubtedly a way to protect the homeowners from foul smells and dangerous miasmas. Perhaps there was also consideration of the idea that Progressive Era

²³⁶ Another interesting point, perhaps, is that as late as 1881 some patterns called for a "toilet" on the second or third floor but was clearly intended as a changing room and not a water closet. Toilet then, unlike bathroom, was likely a euphemism for water closet. However, it is entirely possible that wealthier homes with "toilets" converted them into water closets and maybe even full-fledged bathrooms.

Americans often tried to hide from guests the fact that they had bodies that performed natural functions.

2.5 Women and Excrement

Alexis de Tocqueville, in his famous visit to the U.S. in the 1830s, determined that the American home was the crucible for the American's "love of order which he afterwards carries with him into public affairs."²³⁷ The home, he claimed, offered stability necessary for democracy. Even if we take deTocqueville's claims as hyperbole, we must still admit a rupture in the order of things when a new room and a new practice enter that home.

Architectural historian Clifford Clark goes further when he writes that from the 1850s, "(t)he new image of the middle-class American family home developed by the architects and social reformers projected a powerful ideal for family life—a cult of domesticity that was shared by a host of other essayists, advice-book writers, and ministers."²³⁸ Indeed, the family and the house were thought by so many Americans in the late-nineteenth century to be the moral and psychological bedrock for a decent, democratic society. But the introduction of defecation into the home provided a new challenge for domestic caretakers—women—in the Long Progressive Era: namely, how does one keep the domestic sphere moral, clean, and decent when an "evil" such as excrement is figured in.

²³⁷ Alexis de Tocqueville, *Democracy in America*, Library of America 147 (New York: Library of America: Distributed to the trade in the U.S. by Penguin Putnam, 2004).

²³⁸ Clark, *The American Family Home, 1800-1960.*, 29.

Throughout the course of the 19th Century, the domestic space increasingly became the realm reserved for the female head of household.²³⁹ Thus, as defecation became a domestic act in the latter half of the 19th century, women became authorities on ridding the domestic sphere of all types of filth. This fact, along with women's significant roles during the life of the USSC, offered women an unusual amount of public attention in relation to sanitary concerns.²⁴⁰ But, as Amy Kaplan points out via the works of Stowe, Beecher, and Sarah Hale, "the narrative of female domesticity became central to Separate Spheres, but also the constitution of the bourgeois home, which was the center of the civilizing mission."²⁴¹ Proper sanitation soon became emblematic of the values of upper- and middle-class white America, and thus an integral part of the civilizing project.

The Victorian trend in architecture meant that American homes now had an individual room for every imaginable activity. That is, each room had a function, and

²³⁹ See Gail Collins, *America's Women: Four Hundred Years of Dolls, Drudges, Helpmates, and Heroines*, 1st ed. (New York: William Morrow, 2003).; Suellen Hoy, "'Municipal Housekeeping': The Role of Women in Improving Urban Sanitation Practices, 1880–1917," in *Pollution and Reform in American Cities, 1870–1930*, ed. Martin Melosi (Austin: University of Texas Press, 1980), 173–198; Joan Jacobs Brumberg, *The Body Project* (New York: Random House, 1997); Linda K Kerber, *No Constitutional Right to Be Ladies: Women and the Obligations of Citizenship*, 1st ed. (New York: Hill and Wang, 1998).; Kathryn Kish Sklar, *Catharine Beecher; a Study in American Domesticity* (New Haven: Yale University Press, 1973).; Nancy F Cott, *The Bonds of Womanhood: "Woman's Sphere" in New England, 1780-1835* (New Haven: Yale University Press, 1977).

²⁴⁰ Examples include Chicago's Municipal Order League and New York's Ladies Health Protective Association.

²⁴¹ Amy Kaplan, *The Anarchy of Empire in the Making of U.S. Culture, Convergences* (Cambridge, Mass: Harvard University Press, 2002).

often only one function. So in the 1860s through 1880s²⁴² when Americans began to connect their houses to water delivery systems and build makeshift water closets in their home, it was not architecturally anachronistic to turn a closet into a single-purpose bathroom. However, when bedrooms were converted to bathrooms (which was much more common), and when plan-book authors and architects began to include bathrooms in their designs, they often included a bathtub and sink in addition to a toilet. Thus, the transition of the American home from the cluttered, many-roomed Victorian home to the simpler and more practical bungalow around the turn of the century was preceded and presaged by the entrance of the bathroom as a multifunction room. Furthermore, as Clifford Clark admits, George Waring and his crusade against “poisonous” sewer gases paved the way for a shift in American consciousness: “Under Waring’s leadership, sanitation became accepted as a prerequisite for healthy middle-class family life and the campaign to get rid of damp basements, foul sewer gas, and dirty kitchens became a national crusade.”²⁴³ As proliferate as the sanitation revolution in the U.S. was in the late nineteenth century, it should be no surprise that it affected architecture and by consequence familial relations in a profound way.

Building from the USSC information from the first chapter and from the transition of the place of defecation from outdoors in the outhouse to inside the house and the domestic sphere, it is clear that the changing attitudes toward excrement in the long Progressive Era had a profound effect on the changing role of the woman during the same

²⁴² Some urban areas such as Manhattan started their conversions earlier—already in 1842—but the majority of the country began their transitions in the timer period mentioned above.

²⁴³ Clark, 102.

period. George Waring pointed out the “natural” role for women outside of the domestic sphere when he wrote that the cleaning and organization of village society was “especially women’s work” requiring “the sort of systematized attention to detail, especially in the constantly recurring duty of ‘cleaning up,’ that grows more naturally out of the habit of good housekeeping than out of any occupation to which man is accustomed.”²⁴⁴ In other words, sanitary work in the home worked as a springboard for women to enter the public sphere.

Historian Gail Collins writes of the social forces acting on women during the nineteenth century. Due to writers such as Sara Josepha Hale, Grace Greenwood, and others, the popular media available to women told them that they were lucky “to be presiding over the hearth rather than engaging in ‘the silly struggle for honor and preferment’ in the outside world.”²⁴⁵ More and more women in the mid-nineteenth century—such as Hale—were entering the workforce and the public sphere, but the notion of what the “True Woman” should do reinforced the idea that the woman needs to stay home and create a solid Christian household. Lydia Maria Child’s *American Frugal Housewife* from 1835 was dedicated to those who were “not ashamed of economy” in house-tending, and like Catharine Beecher’s *Treatise on Domestic Economy*, urged women to be the moral beacons of a clean home.

²⁴⁴ George Waring, “Village Improvement Associations,” *Scribner’s Monthly*, May 1877., 98. Found in Hoy.

²⁴⁵ Collins, 87.

Sanitary reformer Harriette Plunkett wrote of the half of the Separate Spheres doctrine that justifies woman's role as master of the home (specifically from a sanitary point of view) this way, using a quote from Dr. B. W. Richardson, President of the British Medical Association:

As a rule, to which there are the rarest exceptions, the character of the judgment hereupon is dependent on the character of the presiding genius of the home, or the woman who rules over that small domain. The men of the house come and go ; know little of the ins and outs of anything domestic ; are guided by what they are told, and are practically of no assistance whatever. The women are conversant with every nook of the dwelling, from basement to roof, and on their knowledge, wisdom, and skill the physician rests his hopes.²⁴⁶

In other words, that “small domain” of the home is one that is ruled by and known best by the women.

One popular sanitation manual from 1904 (updated from 1887 and 1898 editions) makes it very clear that women housekeepers are definitively responsible for knowing the plumbing system and being able to fix it if necessary. The manual gives rather detailed instructions on ensuring a tight cesspool, proper ventilation of wastewater pipes, ideal

²⁴⁶ Harriette Plunkett, “Editorial Chit-Chat: Home Sanitation,” *Peterson's Magazine*, May 1889., 476.

toilet fixtures, etc. Richard's sanitation manual for housekeepers also states the following, marking the movement women made between spheres:

Every woman should have a knowledge of sanitation at her command [. . .] In all the more public forms of responsibility which women are called upon to assume, such as, work upon school committees, positions either upon boards, or as officials of penal and charitable institutions, a scientific and thorough understanding of sanitation, as well as of hygiene, is the only solid foundation of a successful effort.²⁴⁷

This passage indicates that not only is the woman in the position of controlling the sanitation of the home, but that she is also responsible for taking that knowledge with her into the public sphere. That transition from the home to the public sphere was facilitated by domestic concerns, as is articulated well by Judith Ann Giesberg in *Civil War Sisterhood*. But the role of excrement has been understated in studies such as Giesberg's. While women were responsible for cleaning the bedpans from the night's activities, defecation was routinely reserved for the outhouses.²⁴⁸

²⁴⁷ Ellen Henrietta Richards, *Home Sanitation; a Manual for Housekeepers* (Boston: Ticknor, 1887), Revised Edition 1904. 71

²⁴⁸ The report from the department of Agriculture references the stains underneath the bedroom windows through which the woman of the house tossed the urine collected in the bedpans: "The desire (and a praiseworthy one it is) to save labor to the overworked females of the family reduces the accommodation for all manner of liquid wastes to the least that is possible in all the bed-rooms of the house; indeed, water is very sparingly used on the upper floor, even for washing, and the usual means for getting it down stairs when it has been used is to throw it out at the window, suggestive stains discoloring the sides of many an otherwise well-kept house, beneath the windows, especially of the men's bedrooms" From *Annual reports of the Department of Agriculture. 1871* (U.S. G.P.O., 1872), 456.

Plunkett made direct reference to the doctrine of separate spheres in this passage, in which she also charges women with the duty of cleaning the house of all excrement:

But as the improvement of the sewers requires municipal action, a woman must take them as she finds them, and must concentrate her efforts on protecting her house and her family from the noxious effluvia generated in them. Her "sphere" begins where the service-pipe for water and the house-drain enter the street-mains, and, as far as sanitary plumbing goes, it ends at the top of the highest ventilating-pipe above the roof.²⁴⁹

Even while supporting the doctrine of separate spheres by acknowledging that the woman's place is in the home, Plunkett is an example of a woman who used domestic science expertise as a springboard into the public sphere. Many of these women made that transition coming out of the USSC, as noted in the first chapter. Many, however, were from the next generation and, as Suellen Hoy points out in *Chasing Dirt*, became "municipal housekeepers" based on their proficiency in the domestic realm. For Plunkett and many sanitary reformers, mastering the excrement in the domestic sphere allowed them to breach that gap between the home and the municipal realm to advise and in many cases execute sanitary reform. Many particularly ambitious women did not have to "take them [the sewer pipes] as they find them" anymore, they could contribute profoundly to the public welfare. Alexis de Toqueville had a point, as mentioned above when he identified the American home as the foundation for their "love of order which he

²⁴⁹ Harriette Plunkett, *Women, plumbers, and doctors, or, Household sanitation* (D. Appleton and Co., 1884), 94.

afterwards carries with him into public affairs.”²⁵⁰ Beyond offering the female head of household the stability necessary for carrying out democracy in civil life, the new excremental duties brought on by the indoor toilet and the practices mandated by the USSC offered the right platform for women to be able to enter the public sphere as sanitation authorities in a time when the public desperately needed such experts.

In many ways, the Beecher sisters’ *American Woman’s Home* from 1869 was a newer edition of Catharine Beecher’s 1841 *Treatise on Domestic Economy*. Unlike the Grimke sisters, Angelina and Sarah, who believed that women deserved space in the public sphere equal to that of men, Catharine Beecher sought to assert a different style of feminism. Beecher found it more realistic and more practical that women empower themselves by claiming the role as master of the domestic sphere. As education was still a crucial factor in the success of the domestic engineer, Beecher wrote the popular *A Treatise on Domestic Economy* and several other domestic manuals. In it, Beecher present several house plans, including one that even shows a privy almost attached to the house structure.²⁵¹ But nowhere in the exhaustive exposition of women’s domestic responsibilities does Beecher discuss cleaning the privies or outhouses/backhouses. Depending on the location and circumstance of the home, that responsibility was left to scavengers to clean out the privy vault or to the men to fill in the holes when near capacity, dig holes elsewhere, and move the outhouse atop the new holes. Daily cleanliness of the outhouse was most likely a chore shared by the family. However, since

²⁵⁰ Tocqueville, *Democracy in America*., 333

²⁵¹ Catharine Esther Beecher, *A Treatise on Domestic Economy* (New York: Source Book Press, 1970),276. None of the other plans included a privy or water closet.

the chore does not appear in Beecher's book or in others' domestic manuals, the duty may also have fallen to the man of the house or the children. Beecher's *Treatise* was reprinted nearly every year until 1856, but by 1869, when she co-authored *American Woman's Home* with her sister Harriet Beecher Stowe, so much had changed in society. Chief amongst these changes was the entrance of the toilet into the home.

Whereas privies enjoyed only a fleeting mention in the 1841 *Treatise*, 28 years later *American Women's Home* included a full chapter on "excrementitious matter."²⁵² As noted above, it was in these few decades when new home plans started to include water closets within the structure. Catharine Beecher, however, was one of the proponents of the earth closet²⁵³ over the more popular water closet. After defecation into an earth closet, more dirt is sprinkled over the excrement to contain the smell and begin the composting process. Beecher's position in the debate of the better closet highlights the fact that there was debate regarding the sewer system's inability to return important fertilizer to the earth. She wrote, "In China, not a particle of manure is wasted, and all that with us is sent off in drains and sewers from water-closets and privies, is collected in a neat manner and used for manure."²⁵⁴ She went on to quote extensively from a

²⁵² Catharine Esther Beecher, *American Woman's Home; or, Principles of Domestic Science* (N. Y., 1869), 403.

²⁵³ The first earth closet was patented in 1860 by Rev. Henry Moule, but it is likely that variations existed before. They were still used well after the turn of the twentieth century, but the clear winner in terms of proliferation was the water closet. See Charles Edward Hooper, *The Country House: A Practical Manual of the Planning and Construction of the American Country Home and Its Surroundings* (London: Batsford, 1906)..Hooper also—oddly for the time—advocates using a cesspool

²⁵⁴ Catharine Esther Beecher, *American Woman's Home; or, Principles of Domestic Science* (N. Y., 1869), 403.

pamphlet written by sanitarian George Waring²⁵⁵ on the environmental necessity of choosing earth closets over water closets.

After Beecher's *Treatise*, other domestic manuals assigned the cleaning of the toilet to the woman of the house. Helen Kinne in 1914 wrote that the "seat and basin of the toilet should be thoroughly washed daily."²⁵⁶ Maria Elliott in 1905 wrote "No careful housewife thinks of neglecting to wash out the chamber when she does her chamberwork. Yet there are many who never do more than flush the closet, which perhaps receives all the human wastes of the house. Would these women think the chambers could be kept always pure and sweet by a mere rinse of cold water?"²⁵⁷ Elliott apparently visited households in which the toilet was not regularly cleaned. Other domestic manuals were written for the housekeeper, rather than the wife, and thus assigned toilet duty to the housekeeper.

As many municipal sewerage and sanitation projects essentially bypassed African-American neighborhoods, black residents often had to take matters into their own hands. Lugenia Burns Hope, an African-American social reformer in Atlanta, is yet another example of a woman working in the public sphere to ensure proper sanitation via toilet

²⁵⁵ After his work as chief drainage engineer of Central Park and before freelancing as a sanitation engineer promoting the "separate system" of sewerage, as detailed in Chapter 1, Waring was the consulting director of "The Earth Closet Company."

²⁵⁶ Helen Kinne and Anna Maria Cooley, *Foods and household management: a textbook of the household arts* (Macmillan, 1914), 360

²⁵⁷ S. Maria Elliott, *Household Hygiene*, Text book ed. (Chicago: American school of home economics, 1905), 192. She doesn't refer to God in this book. Instead, she says "health is the birthright of every individual," indicating a more progressive stance. As the Progressive Era continued, there came a move toward "domestic science" and "home economics" in the universities and society in general. God figured less in the sanitary equation.

reform. Born in 1871, Hope studied for several years in the early 1890s in Chicago, and while she was there she gained a good deal of inspiration and practical knowledge of social reform working at Jane Addams' Hull House. Significantly, this was also at a moment when Chicago was updating their sewer system and experimenting with innovative sewers at the World's Fair in Chicago. Shortly after moving to Atlanta, she became active in the fight for better municipal conditions for Atlanta's black neighborhoods.²⁵⁸ By 1908 she was the president of Atlanta's Neighborhood Union, a group designed to heighten "the standard of living in the community and to make the West Side of Atlanta a better place to rear our children," according to their charter.²⁵⁹ The neighborhood union leaders took a survey of the neighborhood and determined that the presence of excrement caused considerable problems in the neighborhood.²⁶⁰ So in addition to adding playgrounds and settlement houses to the neighborhood, urging the citizens to replace their outhouses with indoor toilets and lobbying the city to provide adequate sewage treatment options were central to their mission.²⁶¹ Hope and the union were relatively successful in their efforts. By 1914 the city passed ordinances forbidding outhouses²⁶² and forced the Atlanta Board of Education the year before to acknowledge the overflowing toilets at many of the African-American schools in the city.²⁶³

²⁵⁸ Jacqueline Rouse, "The Legacy of Community Organizing: Lugenia Burns Hope and the Neighborhood Union," *The Journal of Negro History* 69, no. 3/4 (Summer/Autumn 1984), 114-115.

²⁵⁹ Quoted from Rouse, 118.

²⁶⁰ *Ibid.*

²⁶¹ *Ibid.*, 121.

²⁶² *Ibid.*, 123.

²⁶³ *Ibid.*, 125.

Hope was one of many women during this period who made the leap from housekeeper to “municipal housekeeper.” As historian Suellen Hoy writes, earlier women reformers were typically from the upper classes, but “middle class housewives made up the majority of club women interested in improving urban sanitary conditions” in the Progressive Era.²⁶⁴ Although many of them were inspired by—and sometimes trained by—Jane Addams, middle class women were much more likely to have knowledge of the daily rituals of housekeeping than upper class women who often hired housekeepers.

The entrance of the toilet into the home provided women the expertise necessary to make that leap into the social sphere and to tackle the problems many excremental problems municipalities faced. But a second effect of the toilet’s entrance into the home was that it ultimately hastened excrement’s removal. Prior to the indoor water closet, when the family defecated in the outhouse, it was quite likely the man’s duty to dig the privy pit, build the outhouse structure, and to tend to it when the hole needed to be filled and another one dug. No domestic manual for women in the nineteenth century that I have seen makes any mention at all of her duties with the outhouse. But excrement entered a new logic, a new set of rules, and a new tradition of morals when it came into the home.

2.3 Evil Excrement

²⁶⁴ Suellen M Hoy, “‘Municipal Housekeeping’: The Role of Women in Improving Urban Sanitation Practices, 1880–1917,” in *Pollution and Reform in American Cities, 1870–1930*, (Austin: University of Texas Press, 1980), 174.

The appearance of a Christian home was an important one for so many of the health and domestic manual authors and for many women across the U.S. in the middle and late nineteenth century. Women were charged with the responsibility of being the guardians of virtue and morality, and their homes were supposed to reflect that morality. Cleanliness was a crucial part of that matrix. In addition to the persistent linkage of excrement and evil, two phrases were commonly used in domestic manuals, health manuals, and sermons of the mid to late 19th century that connect Christianity and cleanliness: John Wesley's phrase "Cleanliness is next to godliness" and Deuteronomy 23:12. Understanding the world through the lens of the Christian duality of good and evil was quite common in the 19th century, especially among reformers who wished to cast certain vices such as alcohol as the work of the devil, impeding the path toward human perfectibility. Other virtues, and even foods such as milk, were contrastingly linked with god as something naturally good.²⁶⁵ That cleanliness, Christianity, civilization were intertwined during this era has been well documented. This section explains how excrement was conceptualized within that specific configuration.

Mosaic Law has been credited in the Christian tradition with providing certain rules for sanitary living. In Plunkett's domestic manual, she credited a mixture of Mosaic Law and modern science with increasing human awareness to the laws of hygiene.²⁶⁶ She wrote that the West was further advanced in sanitation because of that combination and that "Till the light of Christian civilization has illuminated the entire Orient, there will be

²⁶⁵ Melanie DuPuis describes early-19th-century reformer Robert Hartley's attempts to link milk with god in *Nature's Perfect Food* (NYU Press, 2002), 17-45.

²⁶⁶ Plunkett, 231

occasional outbreaks of [disease].”²⁶⁷ She held up America as a sanitary beacon to the rest of the world. Beecher, even has a chapter in her book *American Women’s Home* (1869) entitled “A Christian House,” in which she declares that a “wise woman seeks a home in which to exercise [her] ministry.”²⁶⁸ Cleanliness is obviously part of this plan (especially clean air), and so is a healthy excrement disposal system.²⁶⁹ According to Beecher, this can be an earth closet or a water closet, though the water closet “must have the latest improvements for safe discharge.”²⁷⁰ In other words, the excrement must be able to exit the home swiftly and effectively.

She also described the moment when toilets moved indoors and cleaning became a woman’s social and religious duty. She also describes sewer gases and flatulence as “evil.” A great many writers of the nineteenth century—such as the health reformer James Jackson and a Harvard medical professor also named James Jackson—referred to constipation as evil. Others, such as the reverend Charles Brigham referred to feces as “pungent convictions of sin,” and considered it a vile besmirchment of the pure and holy body.

Brigham and dozens of authors of domestic manuals drew from Deuteronomy 23:12, which states this:

²⁶⁷ Plunkett, 234

²⁶⁸ Beecher, 23-24.

²⁶⁹ *Ibid.*, 150 and 43.

²⁷⁰ *Ibid.*, 38.

Designate a place outside the camp where you can go to relieve yourself.

¹³ As part of your equipment have something to dig with, and when you relieve yourself, dig a hole and cover up your excrement. ¹⁴ For the LORD your God moves about in your camp to protect you and to deliver your enemies to you. Your camp must be holy, so that he will not see among you anything indecent and turn away from you.

The “indecent” mentioned is excrement. It is not precisely clear in this passage why a god who created humans would be offended by the excrement of one of his followers and chose to not protect that person. Nevertheless, the popular interpretation of this passage is a sanitary one—that a person should not leave excrement in his or her living space.

Christianity did not always value bodily cleanliness as a corporeal equivalent to spiritual purity. Although the Bible provides plenty of inspiration for cleanliness via Mosaic Law and various Old and New Testament parables, the use of Christian doctrine as incentive for being clean, and subsequently for swift removal of excrement, only became customary in the mid to late nineteenth century.²⁷¹

In a section of her work *Women, Plumbers, and Doctors: or Household Sanitation*, Harriette Plunkett specifically charges women with the duty of overcoming fecal squeamishness and roots this duty in the danger of disease and, poignantly, in the Bible:

²⁷¹ Historian Suellen Hoy disagrees, instead marking the confluence of Christianity and cleanliness in the early 20th century. See *Chasing Dirt*, 3-7.

The urgent and instinctive need of absolute removal [of excreta] is felt by every one; but the squeamishness which would regard the deliberate and thorough consideration of this subject by a faithful mother as a needless occupation of her thoughts by a repulsive and disagreeable matter, is certainly a misplaced delicacy. Neglected, it will thrust itself forward upon offended senses, and wreak its baleful power in sickness and death. Not so does the most refined mother feel, when she sees some darling first-born still in death, slain by the neglected poison. From the day when Moses issued the explicit directions contained in Deuteronomy xxiii, 12-15, to this latest hour of the nineteenth century, it has formed one of the urgent problems of civilization.²⁷²

Interestingly, Plunkett urges women to toughen up and avoid being overly delicate when it comes to removing excrement from the home. It is one's Christian duty, it is a step toward civilization, and it is highly important. Also significant is that Plunkett does not even feel the need to explain what Deuteronomy 23:12 contains. Plunkett also wrote that "To the woman, whose destiny it is to remain a large share of the time at home, whose *divinely appointed mission* it is 'to guide the house,' a new sphere of usefulness and efficiency opens with the knowledge that in sanitary matters an ounce of prevention is worth a ton of cure."²⁷³

²⁷² Plunkett, 93.

²⁷³ Ibid., 10. Emphasis mine

Many women's groups rose in the late 19th century to fight on behalf of better public health. Oftentimes they made statements specifically regarding the proper place for excrement. The Ladies' Protective Health Association, in New York, for example, was formed specifically to deal with the intent of protecting "the public against the nuisances which [the city permits] in the interest of manure-dealers."²⁷⁴ They fought publicly against the placement of manure dumps (for livestock manure) in the city.²⁷⁵ The Municipal Order League, led by sanitary reformer Ada Sweet, also led the way for public baths in Chicago, which usually came equipped with water closets.²⁷⁶ They also complained of the poor state the scavengers left the streets in.²⁷⁷ And their influence is widely acknowledged for making the Chicago World's Fair a far more sanitary fair than those of the recent past. The Columbian Exposition featured more than 3000 water closets, twelve times as many as the Paris Expo four years earlier.²⁷⁸

Scores of sanitation and domestic manuals quote Deuteronomy 23:12-14 as evidence that god wants them to get rid of their excrement as expediently as possible. *The Southern Cultivator* (which advertised itself as "a practical and scientific magazine") referenced it in 1869 regarding excrement recycling.²⁷⁹ Another author writing in the *Journal of the American Medical Association* in 1891 used it to support his argument in favor of better rural hygiene, calling contaminated water "evil" and names Moses "one of

²⁷⁴ "Editor's Table," *The Sanitarian*, January 1895., 82.

²⁷⁵ McShane and Tarr, *The Horse in the City.*, 124.

²⁷⁶ G.W.W. Hanger, "Public Baths in the United States," *Bulletin of the Bureau of Labor* 54 (1904)., 1250.

²⁷⁷ Hoy, *Chasing Dirt*, 76.

²⁷⁸ *Ibid.*, 78.

²⁷⁹ "Untitled," *The Southern Cultivator* 27, no. 12 (December 1869)., 379.

the first hygienists on record.”²⁸⁰ Dr. Samuel Treat Armstrong wrote a chapter in *In Sickness and in Health: A Manual of Domestic Medicine and Surgery, Hygiene, Dietetics, and Nursing* in 1896 that also argues for its quick disappearance as a matter of health and morality.²⁸¹ And many more use this Old Testament passage for the purpose of hastening excrement removal from the home.²⁸²

Others don’t directly quote Deuteronomy or use the phrase “cleanliness is next to Godliness,” but still use a more broadly defined Christian ethos to justify excrement’s removal from the home. In *The Sanitarian Vol. II*, from April 1874, Dr. John Fox quoted the Deuteronomy passage and wrote the following:

The principle of the removal out of sight of dead organic matter, I maintain that no individual can violate without peril, and no nation can allow to be set aside without national loss and deterioration. Is it beneath a human, Christian Legislature,—not to re-enact the very words, but—to

²⁸⁰ George Jenkins, “Hygiene in the Rural Districts,” *Journal of the American Medical Association* 17, no. 7 (August 15, 1891)., 248-249.

²⁸¹ Samuel Treat Armstrong, “Hygiene,” in *In Sickness and in Health: A Manual of Domestic Medicine and Surgery, Hygiene, Dietetics, and Nursing* (New York: D. Appleton and Co., n.d.), 1896., 355-375

²⁸² S.W. Johnson, “The Earth Closet,” *North American Journal of Homoeopathy* 17 (1869)., 575; Charles John Ellicott, *An Old Testament Commentary for English Readers: Deuteronomy, Joshua, Judges, Ruth, Samuel* (Cassell, Petter, Galpin & Co., 1883)., 64; F.L. Dibble, “Hygienic Teachings of the Great War,” in *Proceedings of the Connecticut Medical Society ...* (the Society, 1867).; George Waring quotes from it in *Earth-Closets*, 37, in order to support earth closet use as well; Frederick Charles Krepp, *The Sewage Question* (Longmans, Green, and co., 1867).; Wilshire S. Courtney, *The Farmers’ and Mechanics’ Manual* (E. B. Treat, 1869).; Michigan. Dept. of Health, “Disposal of Waste and Excreta in Holland,” in *Proceedings and addresses at a Sanitary Convention...under the direction of a committee of the State Board of Health...* (Robert Smith and Co., 1891)., 51.

reaffirm the principle of a Divine mandate? The daily offence indeed must daily be shed, and, in modern language it must, in the interest of public well-being be at once removed, hidden, or disinfected.²⁸³

Another article from Albion Tourgee's *The Continent* in 1883 argues for the proper drainage of one's home, ensuring that all sewage is led out of the house to a safe place. The author (unnamed), wrote that "For every woman who has or expects to have a home is the duty of learning the simple laws of ventilation and drainage." One paragraph later, the author amends the famous phrase: "cleanliness *is* godliness: for it is certain that whoever has learned it, not only for the body, but for everything in which that body must have its being, has mastered many problems, and is already cultured beyond any attainment that godliness without cleanliness can hold."²⁸⁴ Still others use the term "cleanliness is godliness" more broadly in reference to general sanitation and may or may not refer directly to excrement, but the implication is clear.

One paper published by the American Public Health Association in 1875 by Dr. John Peters from New York used the term "Cleanliness is next to Godliness" in reference to how efficiently the Japanese are at removing their excrement from their cities.²⁸⁵ In 1863, the hydropathy journal *The Herald of Health* editor published an article that uses the same phrase, qualifying it by writing that he does not just mean cleanliness on the

²⁸³ Dr. John M. Fox, "Typhoid Fever and Sanitary Administration," in *The Sanitarian* (A. S. Barnes and Co., 1875).

²⁸⁴ Albion Tourgee, "The Household: How?," *The Continent*, March 7, 1883. 314.

²⁸⁵ John Peters, "The Origin and Spread of Asiatic or Bengal Cholera," in *Public Health Papers and Reports of the American Public Health Association*, vol. 1, n.d., 337.

surface, but “cleanliness of the blood and secretions” as well, also bringing up excrement.²⁸⁶ The *Eclectic* magazine from 1871 included a piece on the phrase “cleanliness is next to godliness” in a section on religion and morals. It read “Cleanliness is part of the system of the God of law and order. That which, spread on our gardens and fields, turns to fresh beauty, life, and fruitfulness, out of its place becomes the cause not only of offence, but of disease and death to man and beast.”²⁸⁷ Another notable example of the marshalling of Christianity to improve hygiene was Virginia Randolph, an African-American teacher paid for by the Jeanes Foundation, a fund set up to help African-American schools in the south. In Randolph’s first report she wrote that “It must be impressed upon the minds of the pupils that ‘Cleanliness is next to Godliness,’ and when this law is obeyed, they have conquered a great giant.”²⁸⁸ Randolph’s attitude was also quite present in Booker T. Washington’s Tuskegee Institute, which was very serious about hygiene and connected it with religion.²⁸⁹

And in a report made to the Illinois legislature in 1873, sanitarian S.W. Shattuck of Champaign wrote, “I believe that cleanliness is next to godliness, that proper sewerage is the basis of all sanitary reform.” He continues to admit that a water-based municipal sewage system—though it doesn’t lend itself to recycling of the excrement—is the most sanitary way to remove excrement from homes. In his relatively brief report he also

²⁸⁶ “Cleanliness,” *Herald of Health* 1, no. 3 (March 1863): 136.

²⁸⁷ “Cleanliness Next to Godliness,” *The Eclectic: A Monthly Magazine of Useful Knowledge*, April 1871., 221. No volume or number or authors listed.

²⁸⁸ Virginia Randolph, “Virginia Randolph’s First Report as a Jeanes Teacher,” in *The Jeanes Teacher in the United States, 1908-1933* (University of North Carolina Press, 1937). Appendix A. Found initially in Hoy.

²⁸⁹ H.H. Proctor, “The Religious Side of Tuskegee,” *New York Observer*, July 20, 1905.

quotes Deuteronomy 23:12 in support of his argument that proper sewerage is a product of civilization. It should be no surprise then that he also repeatedly refers to excrement in cesspools—that is, excrement not being carried away from the home—as “evil.”²⁹⁰ One sanitary engineer, in a meeting of municipal and sanitary engineers in Birmingham, England, said that he considered cleanliness to be “before godliness.” However, even though Birmingham and Manchester were without modern sewage systems, he wouldn’t argue that the two cities “must therefore necessarily be Godless towns.”²⁹¹

“Cleanliness is next to Godliness” was such a widespread phrase by the 1880s that Pears Soap used it in a series of advertisement with famous minister and brother of Catharine Beecher, Henry Ward Beecher, appearing in such magazines as *The Ladies Home Journal*. The copy read “If Cleanliness is next to Godliness, soap must be considered as a means of GRACE, and a clergyman who recommends moral things should be willing to recommend soap.”²⁹² His advertisements for Pear continued even after his death in 1887.

William Hammond, surgeon general of the Army, was one of the many who referred to excrement-tinged air in Manichean terms: “The water closets [of the West Philadelphia Hospital] are constructed after a bad plan, and though the trough may be regularly emptied every hour, the excreta remain in it that long, and render the air of the

²⁹⁰ S.W. Shattuck, “Sewerage,” in *Reports Made to the General Assembly of the State of Illinois at its Twenty-Eighth Session. Vol. III* (Springfield, IL: State Journal Printing Office, 1874), 511-519.

²⁹¹ Association Of Municipal Surveyors, *Proceedings of the Association of Municipal and Sanitary Engineers and Surveyors*, ed. Thomas Cole (London: William Clowes and Sons, 1881), 96.

²⁹² “Pears Soap,” *The Ladies Home Journal*, June 1889., 28.

wards more or less impure. The extension of the pavilions on the south side has added to the *evil*.”²⁹³ In fact, “evil” was perhaps the most common euphemism for excrement in the late nineteenth century. More is discussed on this topic in the following chapter.

The consequence of this new arrangement for women was easier entrance into the public sphere; the consequence for excrement was its swift removal via flushing and easier acceptance of our modern-day sewer system. The application of the Judeo-Christian values regarding sanitation—the common use of the term “evil” to describe excrement, quoting Deuteronomy 23:12 either explicitly or implicitly, invoking the term “cleanliness is Godliness”—functioned to hasten excrement’s removal from the domestic realm. Indeed, it makes sense that this passage resonated with Americans in the late-nineteenth century. Nevertheless, the specific, persuasive logic used by these authors of these medical, health, and homemaking articles consequently made excrement “evil” in a very powerful sense.

2.6 Public Defecation

According to sanitation engineers George B. Davis and Frederick Dye, “[t]he inception of public conveniences is, without a doubt, due to the late George Jennings (the founder of the present firm) who, however, did not live to see his advanced ideas in this direction realized. It was in 1858 that he first called public attention to the defilement of our city

²⁹³ Emphasis mine. William Alexander Hammond, *A Treatise on Hygiene: With Special Reference to the Military Service* (J.B. Lippincott & Co., 1863), 371

thoroughfares [. . .]”²⁹⁴ George Jennings had a novel idea about public restrooms: “I am convinced the day will come when public lavatories, replete with every convenience, will be constructed below the pavement level.”²⁹⁵ Davis and Dye did not share his idea for urban, subterranean public restrooms, but they did include in *Treatise* several plans for palatial public restrooms for both genders and staffed by two attendants. They continue with a rare boldness, even for late-nineteenth century sanitarians: “It is acknowledged that accommodation of the kind is an absolute necessity for the natural consequences of eating and drinking, and why there should ever be false delicacy in recognizing and providing for this cannot be explained. This strange form of modesty prevails, however, with the weaker sex, as public conveniences are, as yet, more often failures, financially and practically, than a success.”²⁹⁶ Davis and Dye were correct in their assessment that public restrooms would not be a booming new business.

Public restrooms had actually been in existence for several hundred years (at least) in Ancient Rome.²⁹⁷ These public restrooms were often attached to the public bathhouses, which could be spaces of ruckus behavior. Seneca complained in the first century A.D. about the noise and rowdiness occurring in the bathhouses.²⁹⁸ Even though the restrooms were built over fully operation sewer lines connected to Rome’s main

²⁹⁴ George B. Davis and Frederick Dye, *A Complete and Practical Treatise upon Plumbing and Sanitation*, 171

²⁹⁵ *Ibid.*, 172-3.

²⁹⁶ *Ibid.*, 173.

²⁹⁷ John G. Bourke, *Scatalogic Rites of all Nations: a Dissertation upon the Employment of Excrementitious Remedial Agents in Religion, Therapeutics, Divination, Witchcraft, Love-Philthers ... ; Based upon Original Notes and Personal Observation and upon Compilation from over One Thousand Authorities* (Lowdermilk, 1891)., 136

²⁹⁸ William E Dunstan, *Ancient Rome* (Lanham: Rowman & Littlefield, 2011)., 359

sewer—Cloaca Maxima—the rooms themselves were not lit well or ventilated properly and they were likely co-ed, perhaps lending them to illicit behavior. Some were also decorated with fountains for hand-washing and statues. The actual toilets consisted of marble benches along the walls with holes cut out of the seats.²⁹⁹ As such, there was no privacy whatsoever. Small streams of water ran by the defecators' feet, presumably so they could clean the sponge attached to the end of a stick that they used for cleaning themselves.³⁰⁰

Although some questions remain regarding the public toilets and customs in Roman toilets, the stone architecture presents modern historians with enough evidence to make some basic conclusions about them. Oddly, we know comparatively little about public toilets in the U.S. even in the late nineteenth century. *Plumbing and Mechanical Magazine* has credited The Tremont House in Boston with having the first public (not in the sense that it was open to the public outside of paying guests) bathrooms with modern plumbing. Built in 1829 by prodigious architect Isaiah Rogers, it had eight toilets on the ground floor and several more “bathrooms” (for bathing) in the basement.³⁰¹ It was a long time before hotel rooms came with their own private toilets; Rogers' set-up with the toilets on the ground floor was common throughout the 19th century. Very few American cities had municipally owned water closets or “comfort stations.” Europe, by contrast had many. A National Purity Congress poll taken in 1894 revealed that Chicago had no public

²⁹⁹ Ibid.

³⁰⁰ Zena Kamash, “Which Way to Look? Exploring Latrine Use in the Roman World,” in *Toilet: Public Restrooms and the Politics of Sharing* (NYU Press, 2010).

³⁰¹ “The History of Plumbing in America,” *Plumbing and Mechanical*, 1987, <http://www.plumbingsupply.com/pmamerica.html>.

toilets or urinals; Boston reported 21 urinals; St. Louis had no urinals or stalls aside from a few provided in parks; Brooklyn, likewise, only provided a few in the parks; meanwhile, Birmingham, England has over 500 stalls and urinals; and Liverpool had over 800.³⁰² In 1894, members of the National Purity Congress (of which Anthony Comstock was of course a member) actually called for American cities to attempt to rival Europe's cities regarding public baths and toilets in order to increase cleanliness and hence purity.³⁰³ Not all public water closets turned out to be bastions of purity, however. One public water closet was reported to the State Secretary of Indiana in 1888 situated in the "courthouse yard." The county health officer complained that despite cleaning it often it "smells to heaven" and was the county's only "glaring nuisance."³⁰⁴ Although there was most certainly a shortage of sanitary places to defecate in the city, few cities responded to that need by the 1890s. New York and Boston were two that eventually built large public comfort stations with toilets. Chicago began to do the same at the turn of the century.³⁰⁵ But there were some semi-public options for citizens needing to defecate in the city when away from home. Men could and did urinate on the street, and the most likely could defecate in privies behind saloons, and more wealthy men may have been able to use the facilities in restaurants, department stores, and private clubs.³⁰⁶ Throughout this country's history, women have always had a more difficult time finding accommodations;

³⁰² William Tolman, "Public Baths and Public Stations as Related to Public Morals," in *The National Purity Congress: Its Papers, Addresses, Portraits...1895* (New York: The American Purity Alliance, 1896), 407-417.

³⁰³ *Ibid.*

³⁰⁴ W.A. Fritch, "Sanitary Inspections," in *Indiana State Board of Health Report, 1888* (Indianapolis: William A. Buford, 1888), 92

³⁰⁵ *Proceedings of the City Council of Chicago* (Chicago: John. F. Higgins, 1899), 1348.

³⁰⁶ Email Interview with historian Maureen Flanagan. 6/29/10.

oftentimes the men who made decisions about where to locate a toilet did not want women participating in the public sphere in the first place.³⁰⁷

One notable exception to this trend was the 1893 Chicago World's Fair. Out of the more than 3000 total toilets at the fair, the Clow Sanitary Company, owned by William E. Clow, installed 2,221 of them, complete with wash basins. While a third of these were free to the general public, the rest were furnished with upscale accoutrements and cost five cents to use. This arrangement effectively created a class hierarchy of toilets and, as tickets were required to use the pay toilets, turned the modern conveniences into an attraction itself. It also caused some confusion and anger in fairgoers who were under the impression that the only toilets they could use were the pay toilets. They were located in 32 spots around the fair, and may be the first large-scale pay toilet arrangement in the United States. It is unclear how much Clow paid to build and move the toilets to the fair or what he did with them afterwards, but he did manage to gross over \$300,000 over the course of the fair.³⁰⁸ And insofar as the world fairs are understood as opportunities for the host countries to advertise their modernity and progress, this fair no doubt showed its international visitors that it had relatively high sanitary standards.³⁰⁹

Nevertheless, standing in stark contrast to the anxiety and morality that surrounded the indoor water closets in the U.S. from the Long Progressive Era, most public restrooms at that time functioned as spaces of relative freedom. While behavior inside public

³⁰⁷ The issue of “potty parity” is still not fully resolved, though Congress has made some progress via the Potty Parity Bill of 2010.

³⁰⁸ Receipt from Clow pictured at 1893columbianexpo.com

³⁰⁹ Harlow Niles Higinbotham, *Report of the President to the Board of Directors of the World's Columbian Exposition: Chicago, 1892-1893* (Rand, McNally & co., 1898)., 220.

restrooms is lost to history, patrons of them quite often left their own wisdom on the walls for future generations to study.

One such collection of public toilet graffiti comes from the folklorist Vance Randolph, in his two-volume *Unprintable Ozark Folksongs and Folklore*, published posthumously in 1992. The idea was first proposed to him by renowned psychologist G. Stanley Hall in 1915.³¹⁰ Randolph, perhaps in jest, used the Latin “inscriptoria” and “latriniana” to refer to the “wall-scribblings” of public restrooms. One poem was contributed by a man named “Mr. B.C.” of Salem, Missouri. According to Randolph, “he says his grandfather found it in a local privy during the War Between the States, and that the tax was a war measure of the 1860s.” It read as follows:

When you come here to leave your wax
Don't forget the old War Tax,
Article second, chapter third
Says put a stamp on every turd.³¹¹

Much of the privy poetry Randolph found was political. Interestingly, Randolph notes that although writings in women's toilets are less prevalent than those in men's toilets, the women write inscriptions that “are quite as nasty as those found in back-houses frequented only by men.”³¹² He also notes that of the graffiti collected by Allen Walker

³¹⁰ From Vol II of Vance Randolph, *Unprintable Ozark Folksongs and Folklore* (Fayetteville: University of Arkansas Press, 1992)., 839.

³¹¹ Randolph, 846.

³¹² Randolph, 839.

Read and the graffiti he collected, the themes of the poetry ranged from sexual solicitations (usually homosexual) to urination, to humor dealing with excrement.³¹³

Occasionally, Read came across evidence of either old graffiti or graffiti that was passed down over the course of the decades referring to a historical matter. One example, as follows, refers to the sinking of the USS Maine in 1898 in Havana Harbor:

Remember the Maine

The sinking Ship

So pull the chain

And sink your shit

—Longfellow³¹⁴

Even nineteenth century toilet graffiti tried to mix wit with breaking the taboo of defecation. The satirical reference to Longfellow aside, older graffiti appears decidedly more literary than graffiti in the present era.³¹⁵

Lexicographer Walter Allen Read, author of *Lexical Evidence from Folk Epigraphy in Western North America: A Glossarial Study of the Low Element in the English Vocabulary* from 1935 and fan of colloquialisms, justified his study of epigraphy, or latriniana, or inscriptoria or (below) latrinalia, with the following:

The word *defecate* would be fitting for a process carried out with a sterilized silver tube under the supervision of a doctor, but not for an act

³¹³ Ibid.

³¹⁴ Allen Walker Read, *Lexical Evidence from Folk Epigraphy in Western North America: A Glossarial Study of the Low Element in the English Vocabulary* (Paris: s.n., 1935), 75. Found at Norris Junction Camp, Yellowstone National Park, August 14th, 1928.

³¹⁵ See Mark Ferem, *Bathroom Graffiti* (Mark Batty Publisher, 2006).

so commonplace in everyone's life. That any one should pass up the well-established colloquial words of the language and have recourse to the Latin *defecate*, *urinate*, and *have sexual intercourse*, is indicative of grave mental unhealth.³¹⁶

For Read, then, privy poetry was a liberating violation of social constraints that forced too much haughtiness of tone. Perhaps the lewdness of the act of defecation or the semi-public (yet private in the sense that the scribbler is isolated from the view of others) medium, or a combination of the two, provided an ideal setting for a practice that has lasted for several centuries.

Another set of records of pre-21st century bathroom graffiti has been collected and critically interpreted by the folklorist and anthropologist Alan Dundes.³¹⁷ In a paper entitled "Here I Sit: A Study of American Latrinalia," presented at the 1966 California Folklore Society at Davis, California, Dundes stakes a claim for the relevance of latrinalia or "shithouse poetry." Arguing more broadly for a place for scatological matters in the humanities, he writes "Germane to the present study is the lack of data in standard ethnographies on defecation and urination. When, where, and how are these acts performed? When and how precisely is toilet training for infants introduced? One can read an entire ethnography without ever coming upon any reference to these daily necessities. The study of man must include all aspects of human activity."³¹⁸ Perhaps

³¹⁶ *Lexical Evidence from Folk Epigraphy in Western North America: A Glossarial Study of the Low Element in the English Vocabulary*, Allen Walker Read, p. 16.

³¹⁷ Dundes is indeed a fan of Read's work.

³¹⁸ Alan Dundes, "Here I Sit: A Study of American Latrinalia" (presented at the 1966 California Folklore Society, Davis, California, 1966), 92.

what is most poignant from Dundes's study is the well known fact that the bathroom served as a place of relative social freedom. Utterances considered unacceptable in society are freely and animatedly recorded on the bathroom walls. Even though there is no synonym for bathroom in standard English that refers directly to the acts of defecation or urination,³¹⁹ the walls around the toilet no doubt offer a space for bawdy and elicit solicitations and musings, as expressed by the piece of latrinalia below:

Some people come to sit and think
Others come to shit and stink
But I just come to scratch my balls
And read the bullshit on the walls³²⁰

This bit of self-conscious graffiti legitimizes itself by pointing out the commonness of the practice of writing on privy walls. And by no means is this a practice limited to the twentieth century. It is quite likely that much of what Dundes found were permutations of much older bathroom poetry. After all, even the Ancient Romans were practiced in the art.³²¹

³¹⁹ Bathrooms are ostensibly for bathing, restrooms for resting?, lavatories for washing, privies for privacy, toilets for changing clothes, etc. Some exceptions in "vulgar" English are "shithouse" and "shitter," though the latter refers more directly to the toilet itself, and the former is rare in the present day.

³²⁰ From Dundes "Here I Sit," 100. Found in a public restroom near Berkeley, California, in 1964.

³²¹ Some scatological poetry can be found in the *Priapeia*, more specifically in the "Appendix Vergiliana" or "Juvenalia." Also see William S. Walsh's article about the *Pasquinades* in the *Handy-Book of Literary Curiosities*.

2.7 Conclusion

The intimate space of the home's bathroom, under the domestic watch of the female head of house and often a Judeo-Christian ethos, and the social space of the public restroom, represented by its relative anarchy, both places for defecation, could hardly have operated under more disparate codes of behavior. Many factors came together to alter the place where Americans defecated. The advent of running water made it possible to have a water closet inside the house. Some before that time used earth closets and a tiny minority, such as Thomas Jefferson, were able to build indoor toilets with long chutes underneath connected to a tunnel where the slaves could go to clean up the mess. But for most of America, indoor toilets were installed only after the introduction of a waterworks system in a community. This trend began in the 1850s and continued piecemeal through the country until the turn of the century. During that period, new houses began to include an entirely new room for the water closet. At first this new room created a great deal of anxiety in the home-dwellers, as the architecture reflects; miasma theory of contagion continued to be believed even beyond the turn of the century. Many homeowners retrofitted their homes by putting the new water closet in what was a closet or small bedroom.

With such an important routine act now being done inside the domestic sphere, the implications of this move were profound. First and foremost, the detail of making sure the excrement was cleared from the house was now the woman's. Domestic and plumbing manuals frequently told women that keeping her home free from miasmas and the excrement that caused it were her duties. One positive consequence of this shift is that

it contributed significantly to women's reputations as sanitation experts, facilitating the transition to similar positions in the public sphere for many women. Lugenia Hope, Catharine Beecher, Ada Sweet, Harriette Plunkett, Virginia Randolph, and many more all gained prominent public reputations and some of them built careers as "municipal housekeepers," in part because of the authority afforded to them by knowing the proper way to deal with excrement. Meanwhile, a plethora of media in the late-nineteenth century used Deuteronomy 23:12 to denounce excrement as an "evil" that needed to be excoriated and expelled from the home as swiftly as possible. On top of the assumed health reasons for flushing it away immediately, women were also compelled by moral reasons to keep their homes pure, and free of the unholy "filth taint." So as soon as the practice of defecation entered the home, it became doubly imperative to get it out. While the American home's bathroom during the Long Progressive Era was under strict supervision of god and the woman of the house, the public bathroom was a social space defined by defiance. Although it is impossible to know of the many activities that may have gone on in the public bathroom, one activity—privy poetry—was intended to last. Some folklorists who came slightly later realized the impermanent nature of the graffiti and preserved it in books and articles.

In all, many things changed for defecators during the Long Progressive Era. The nature of that change depended greatly on one's gender, social class, and geographical location. Most Americans acquired water delivery systems and sewers by 1920, or at least had access to indoor, sewered toilets. And, as the Long Progressive Era was also the time when women gained unprecedented access to the public sphere and municipalities

took on enormous public works projects and responsibility for a healthy populace, the implications of those changes were considerable. As the next chapter demonstrates, excrement had meaningful interactions with several other trends of the Long Progressive Era—specifically diet reform, exercise, and the rise of medical science.

Chapter Three—Eliminating the “American Disease:” Waste and the American Body³²²

3.1 Introduction

The previous chapter discussed how life changed for Americans during the Long Progressive Era when the toilet moved inside. With the introduction of new waterworks and sewer systems, Americans were pressured by municipalities, health experts, and sanitarians to abandon previous methods of excrement removal and adopt the water closet. The toilet (and the act of defecation) thus began its move from the outhouse to the indoor water closet, and as such fell under the dominion of Judeo-Christian morals. Naturally, this shift affected gender relations, architecture, and helped reinforce class divisions. Sewers also helped abate cholera and typhoid outbreaks; however, without proper sewage treatment, the dangerous pathogens were often simply sent downstream to the next town. The new way that Americans dealt with excrement via the toilet and the bathroom also contributed to the larger matrix of Long Progressive Era attitudes toward excrement: facilitating the transformation of excrement from a commodity to a waste in the broader sense of the word. This chapter turns to the province of the body: specifically, how Americans reacted to the idea that their bodies created and harbored something as supposedly poisonous and dangerous as excrement.

³²² Rasmus Larssen Alsaker, *Curing Constipation and Appendicitis* (New York: F.E. Morrison, 1917). He writes “Constipation is a very common trouble. It is sometimes called the American disease, though we have no monopoly.” 11

Due to a variety of factors, the late nineteenth and early twentieth century was an era in American history in which unprecedented attention was paid to the body. Prominent men in American culture such as Sim D. Kehoe (Indian club swinger and exercise enthusiast), Theodore Roosevelt, Dudley Sargent, Eugene Sandow, and Bernarr Macfadden trumpeted the extraordinary capabilities of the human body if only it was fine-tuned and vigorously trained. Others such as Sylvester Graham, John Harvey Kellogg, James Jackson, Ellen White, and Horace Fletcher glorified the role of a proper diet in human health to the end of creating a healthy and robust body. Furthermore, the industrial revolution in the U.S. in the second half of the nineteenth century provided a relatively new and powerful metaphor, the machine, for how Americans could make sense of the mysteries happening inside their bodies. All of these factors—the physicality, the focus on diet, and the machine metaphor—were magnified near the turn of the century because of the rapid proliferation of media via newspapers, magazines, and journals, many of which catered specifically to the new concerns Americans paid to the body. This climate contributed in some rather unique ways to the radical transformation of excrement into actual and metaphorical *waste*. As a result of this transformation, excrement was not only something that had to be eliminated from the house, but something that had to be evacuated from the body as quickly as possible.

This chapter maintains that it was the confluence of these factors, along with excrement's new consideration as corporeal waste that ultimately determined that it was a waste in the universal sense of the word. The late-nineteenth century's focus on efficiency and civilization allowed Americans to consider excrement a social and

economic waste in a way that they had not previously. And indeed, the social and cultural forces caused by this era of intense, semi-rational fear of human waste were strong. The American Long Progressive Era witnessed a society in which constipation was thought to cause not only diseases such as tuberculosis and cancer, but also death. By some expert accounts, constipation led to insanity, suicide (even “double suicides”), and homicide.³²³ One author even keyed into Victorian-American anxieties about sexuality and claimed that constipation in young girls carved a path straight to masturbation. Neurasthenia, the other faddish illness of the day, certainly caused rational and irrational fears in the American populace, but constipation’s consequences were arguably more dire and its presence more ubiquitous. The medical and marketing frenzy that naturally followed in the wake of the fears of autointoxication led people to eat sand as a cure. It also led to a marked increase in the use of enemas and rectal dilators in addition to stool softeners, laxatives, purgatives, fiber-rich cereals, interesting exercises, and even rectal electrode therapies. Many patients of constipation even had significant parts of their large intestines removed so that the “kinks” would not impede the normal path of the excrement from the small intestines to the rectum.

The Progressive Era’s quest for efficiency also played a significant role in this transformation of excrement. The body as machine analogy was nothing new to the U.S. during this period. But the comparison gained an enormous amount of currency as the industrial revolution in the U.S. took off and as Americans paid unprecedented attention

³²³ W.H. Birchmore, writing in the *American Journal of Clinical Medicine*. “The unfortunate victim is intoxicated, drunk on the products of his own decomposition.” W.H. Birchmore, “Internal Uncleanliness a Possible Cause of Homicide and Insanity,” *Physical Culture*, September 1907, 210.

to the body's capabilities—via exercise, diet, and defecation. Some even posited the possibility that, if given a perfect diet and if one masticates properly (excessively), the body wouldn't have to produce any excrement at all and defecation would be obsolete. Most did not go so far, but nevertheless, excrement's place as human waste was reinforced and reified as a poisonous danger that doesn't belong in the human digestive system.

In the process of this transformation, a gulf widened between the physiological body (the real body) and the constructed body. This gulf can be understood as a case of medicine being under-informed and simply incorrect about the complex processes of digestion. But we are also obligated to seek an answer for why the body was misunderstood in this specific way, a way that led a distressed public to think that the natural process of their own digestion was killing them, causing them to kill others, or leading them to sinfulness. The answer is not simple. Eventually this gap was bridged as technology improved and medicine got smarter—debunking some of the harmful myths that led American society during the long Progressive Era into a state of paranoia.

But the imprint that paranoia left on American culture and society is profound enough to be evident not only in the way we think about human waste today and the infrastructure that reflects that attitude, but also in the way the body (and its effluent) was used to classify and subjugate non-Anglos around the turn of the century. In the case of municipal sewerage, these projects informed a large number of health reformers and physicians to make analogies between the body and the city in order to emphasize the notion that the anus was essentially the same thing as an open sewer drain. But the

relationship became like a feedback loop as these worries increased anxiety in general about the danger of excrement and quickened the process of municipal sewer building that has continued since then without much reflection.

Further, the body—already the site of swirling gender and class politics by the turn of the century—became the site of racial and ethnic discrimination based in large part on the idea that excremental practices of non-whites were savage or “pre-civilized.” Chapter 4 explains this shift more fully, but it is important to keep in mind throughout this chapter that a broad spectrum of the social reality of Americans was influenced by the excremental politics at work. Making this point clearer is that the logic quite often used to justify such attitudes, Christianity and civilization, were already aligned with the white, American mainstream. And it was often used on its own to justify subjugation of non-white Native Americans, immigrants, and foreigners alike.

This chapter first links the problem of constipation with general assumptions about human digestion. While I do not intend to pose as a medical authority on gastroenterology, it is important to note where and why various health reformers diverged from medical or biological fact. The chapter then moves toward a brief history of constipation leading up to the Gilded Age and Progressive Era. Constipation was hardly new to Americans by the beginning of the Civil War. However, certain new milling processes and agricultural developments likely contributed to a rise in the frequency of constipation during the early part of the Gilded Age and thus played an important social role in the transformation of the social and cultural meaning of excrement. This chapter also showcases a series of prominent health reformers connected by both ideology and

personal relationships, beginning with Sylvester Graham and continuing through Ellen White, James Jackson, Horace Fletcher, John Harvey Kellogg, and Bernarr McFadden. Each of these reformers played an important role in the story of autointoxication. I then detail the many “dangers” these health reformers and others felt were imminent in patients with constipation in order to provide some context for the many contraptions, bad ideas, and outright dangerous methods some doctors used to cure it. I end the chapter with an analysis of the effects of efficiency, civilization, and the Judeo-Christian tradition on waste as it became a tool for empire building. Throughout, I seek to highlight the socio-cultural forces acting on excrement as well as the fundamental role excrement played in American life during the Long Progressive Era. Overall, this chapter explains how fears of autointoxication contributed to the reformulation of excrement as not only a waste but a serious danger.

3.2 Scope of the Problem of Constipation

Food has long been considered a valuable window into the history of American culture and society. How foods are grown reveals a great deal about the economy, infrastructure, and sometimes the values of a society. What foods are available to us locate us in a specific geosocial sphere. The foods we choose to eat within that sphere often speak volumes about us uniting and dividing us by our ethnicities, our economic status, and our social status. How we cook those foods often pegs us to a certain time and usually a plethora of traditions handed down to us. And the communion (or lack thereof) we experience as we share that food has often been considered a sacred ritual. Food, at

whatever stage, has provided us keys to understanding culture and society—that is, of course, until the food enters the digestive system and the nutrients are taken from it. At that point food/bolus seems to become irrelevant. But it is at that point, once the first bite is taken, that food undergoes its most radical transformation.

So at what point does food become fecal matter or excrement?³²⁴ And why does it seem to lose all of its cultural and social relevance once digestion occurs? Regarding the first question, doctors do not agree on when precisely that transformation/transubstantiation occurs. Up until 1822 the whole process of digestion was a relative mystery. It was in that year that a Canadian fur trader named Alexis St. Martin was shot in the side of his abdomen by a musket. As his wound healed, a gaping hole in his stomach remained. An American army surgeon named William Beaumont cared for St. Martin and helped him survive his wound.³²⁵ Beaumont also recognized St. Martin's unique wound as an amazing opportunity to understand digestion on a much more profound level. Curiously, St. Martin allowed Dr. Beaumont to perform many experiments on his gaping wound, including dipping food on a string into the patient's stomach through the hole and pulling it out to see what sort of changes occurred to that food.

³²⁴ The term “excrement” implies something that is excreted, but for the purposes of this chapter, it will be used interchangeably with fecal matter.

³²⁵ St. Martin stayed with Dr. Beaumont for 11 years working as a domestic servant while Beaumont performed these experiments on him. William Beaumont, *Experiments and Observations on the Gastric Juice and the Physiology of Digestion* (New York: Dover Publications, 1959), vi.

There are many different names for the food as it passes through the digestive system: bolus,³²⁶ stool,³²⁷ alimentary mass,³²⁸ digestion-ash,³²⁹ intestinal content,³³⁰ succus entericus,³³¹ chyle,³³² and chyme,³³³ to name a few. And at some point it becomes fecal matter and then excrement as it passes out of the colon and through the rectum in a bowel movement. Historian James Whorton even calls it “waste” as it leaves the small intestine and enters the colon.³³⁴ Etymologies for both “excrement” and “feces” originate or were at least synonymous with terms used to describe what was left over after making wine. The dregs, the lees, or the silt, according to the *Oxford English Dictionary*, were constituted of the sediment resulting from the winemaking process.³³⁵ Medically speaking, the analogy is somewhat appropriate. We know now that the average lump of human excrement is about 75% water. And if we dehydrate the mass completely, most of

³²⁶ Term used by gastroenterologist Chad Long, M.D. in an interview with the author on August, 27th, 2010. Also used by (.)Henry Illoway, *Constipation in Adults and Children* (Macmillan, 1897), 83.

³²⁷ Ibid.

³²⁸ Term used by James Jackson in James Jackson, *Constipation: Its Causes and Treatment* (Dansville, NY: Austin, Jackson, and Co., 1882).

³²⁹ Term used by Horace Fletcher in Horace Fletcher, *The A. B.-Z. of Our Own Nutrition*, A.B.C. life series (New York: F. A. Stokes company, 1903). Fletcher also uses the term “Z” to refer to excrement in this work.

³³⁰ Term used by Tatiana Cabrera, M.D., radiologist, in an interview conducted with the author on September 2, 2010.

³³¹ Term used by Cabrera, mainly used to describe the mass as it becomes mixed with...

³³² Term used by James Knight M.D. in James Knight, *The improvement of the health of children and adults by natural means: including a history of food and a consideration of its substantial qualities* (Putnam, 1875). *The Improvement in the Health of Children and Adults by Natural Means*, NY, G.P. Putnam’s Sons, 1875, P. 73. He claims chyme turns to chyle once the mass reaches the small intestine.

³³³ Term used by Dr. Beaumont in Beaumont, *Experiments and Observations on the Gastric Juice and the Physiology of Digestion..*

³³⁴ James C. Whorton, *Inner Hygiene: Constipation and the Pursuit of Health in Modern Society* (Oxford University Press, 2000) 2.

³³⁵ “Excrement,” *Oxford English Dictionary Online*, n.d.

what is left is made of bacteria (predominantly dead bacteria). The rest is undigested food.

So, technically, excrement is indeed waste produced by the human body. It is composed of matter left over from the process of digestion. But stepping back and viewing excrement from ecological, environmental, and economic perspectives, excrement was not waste at all. It was a valuable fertilizer, it was bought and sold, and it was a real part of everyday life of an urban and rural existence in the 19th century. The sanitation movement had profound effects on the fate of excrement—such as the indoor toilet and the modern sewer systems. The late-nineteenth century's focus on the individual, on efficiency, and on civilization, however, allowed excrement to be considered a social and economic waste in a way that it hadn't previously. This chapter maintains that it was the confluence of all these factors, along with excrement's new consideration as corporeal waste that ultimately determined that it was a waste in the universal sense of the word.

Nineteenth-century Americans, however, were convinced that the excrement that remained in the colon longer than normal effectively functioned as poison, leading to all kinds of sicknesses from tuberculosis to cancer to epilepsy. Auto-intoxication, as constipation was referred to since the turn of the century, was perhaps the most popular sickness of its time—more so even than the legendary catch-all ailment of neurasthenia. John Harvey Kellogg, cereal inventor and owner of the famous Battle Creek Sanitarium, put constipation in the center of American maladies of the early 20th century:

Torpidity of the large intestine is a condition very common among sedentary people, especially women. It is the result, in part, of eating fine-flour bread and irritating condiments. One of the greatest causes—the chief, perhaps—is neglect to attend promptly to the calls of nature. When the feces are retained in the rectum, they become hard and dry through the absorption of their fluid portion. Thus a considerable part of this foul matter is taken into the system, permeating every fluid and tainting every tissue. The dry, hard residue becomes packed in the intestine, and makes defecation difficult, and is productive of several serious diseases of the bowels and other abdominal organs.³³⁶

Compared to many doctors of the era, Kellogg understated the seriousness of constipation in this passage. Several decades later, in 1918, his tone had grown much more serious:

Modern medical research has clearly incriminated the colon as the source of more disease and physical suffering than any other organ of the body. The artificial conditions of civilized life, sedentary habits, concentrated foodstuffs, false modesty, ignorance and neglect of bodily needs, have produced a crippled state of the colon as an almost universal condition among civilized men and women. Intestinal toxemia or autointoxication is

³³⁶ John Harvey Kellogg and Russell Thacher Trall, *The Household Manual of Domestic Hygiene, Foods and Drinks, Common Diseases, Accidents and Emergencies, and Useful Hints and Recipes* (Office of the Health Reformer, 1875), 63.

the most universal of all maladies, and the source of autointoxication is the colon with its seething mass of putrefying food residues.³³⁷

How brutal this fate must have seemed to the upper crust American who valued civilization so much that their esteemed trait would lead to cancer if not treated. Kellogg addressed this consideration as well, calling “the civilized colon” a “Golgotha of pollution” and a “veritable Pandora’s box of Disease.”³³⁸

Kellogg was far from alone in his belief that one’s own excrement was lethal if the bowel was not evacuated on a daily (or thrice daily) basis. In fact, very few medical experts contested this view. Arnold Ehret, German-American health reformer and one of the inspirations for the naturopathy movement, described constipation as a “crime” that can and should be fixed given its dire consequences: “[c]hronic constipation is the worst and most common crime against life and mankind—a crime unconsciously committed, and one whose full enormity is not yet fully realized.”³³⁹ Likewise, the Reverend Charles Brigham, writing in 1870, extended the negative ramifications of constipation far beyond the sufferer, blaming it for a wide array of social ills: “[m]ore of the wretchedness in the world is caused by digestive troubles than by any other cause, we might almost say than by all other causes together.”³⁴⁰ Writing two years earlier in a well known health manual,

³³⁷ John Harvey Kellogg, *The Itinerary of a Breakfast; a Popular Account of the Travels of a Breakfast Through the Food Tube and of the Ten Gates Aad [!] Several Stations Through Which It Passes,also of the Obstacles Which It Sometimes Meets*, Rev. ed. (New York, London: Funk & Wagnalls company, 1926), 3.

³³⁸ *Ibid.*, 25.

³³⁹ Arnold Ehret, *Definite Cure of Chronic Constipation Also Overcoming Constipation Naturally* (Benedict Lust Pubns, 2002), 1.

³⁴⁰ Rev. Charles Brigham, “The Unbounded Stomach,” *The Herald of Health*, August 1870, 114.

William Hall used the human/machine metaphor and blamed retention of this bodily waste for 75% of one's ailments:

It is from the habitual failure to act out this almost intuitive truth, that three-fourths of all the diseases arise, which torture the body, enfeeble the mind, and waste the life of civilized man. Three-fourths of all our ailments occur, or are kept in continuance, by preventing the daily food which is eaten, from passing out of the body, after its substance has been extracted by the living machinery, for the purpose of renovation and growth.³⁴¹

This belief that constipation was the root cause for many other diseases and for many undesirable acts was as mainstream and widespread (and incorrect) as the miasma theory was in early epidemiology. But when did this belief come about? And why does it appear that the entire late-nineteenth century U.S. was populated predominantly by sufferers of constipation?

Many historical celebrities have been quite forthcoming about their low motility and the suffering that it caused them. Martin Luther, for example, wrote extensively about his own digestive problems. Quite a number of his writings contra the pope were colorfully scatological. In fact, he quite often wrote some of his most well known work while sitting on his stone toilet trying to defecate, and allegedly had his “revelation in the tower” while sitting on “the cloaca” (Latin for sewer; sometimes used as toilet).

³⁴¹ William Whitty Hall, *Health and Disease: A Book for the People* (Published by H.B. Price, 1859), 6–7.

Napoleon and Henry VIII famously suffered from hemorrhoids, a common symptom of constipation. And Frederick the Great, the 18th century Prussian King, once quipped that “All culture comes through the stomach.”³⁴² While it is clear that digestion holds an important, if often understated, place in culture, and fears about improper digestion are not unique to any time or place, the American Long Progressive Era presented the most radical manifestations of these fears. The next section traces the constipation epidemic in the U.S. from the early nineteenth century, when health authorities began to grumble about proper diets, to the early twentieth century, when constipation was so feared that Americans ate sand and had important parts of their intestines removed.

3.3 Prominent Figures and Events in the History of Constipation and Autointoxication

3.3.1 Sylvester Graham

The origins of the problem of constipation run deep and are not entirely unique to nineteenth century U.S. However, some social developments of nineteenth century contributed to constipation’s unique timeline in the U.S. Many historians have noted that the European/North American diet was one that was generally low in fiber. The European diet aside, one nineteenth-century phenomenon that most definitely had an impact on the U.S. diet was the proliferation of flour mills in the Northeast in the first half of the century. While refined white flour was hardly new in the nineteenth century (the Ancient Romans already baked a bread with refined white flour), it became much more common

³⁴² “*Alle Kultur kommt aus dem Magen*” quoted in Otto Baumgarten, *Evangelische Freiheit* (Mohr, 1901).

as the mills proliferated and as millers simplified the refining process. For example, millers began using bolting cloth to remove the husks, the bulk. While the removal of the husks from wheat made for a finer, whiter flour, it also eliminated an important source of fiber from their diets, making constipation more normal. In addition, physical movement aids in the digestion process, and as more and more Americans turned to desk jobs and sedentary lives, another important factor in healthy digestion was removed.

Sylvester Graham, one of the 19th century's most prolific diet reformers, found refined flour to be among the greatest problems in American society. Graham was sick often as a youth, was raised with strict religious fervor by a minister father, and tended to be fanatical about his ideas.³⁴³ After Graham was ordained as a minister of the Presbyterian Church in 1826, he joined the Bible Christian Church, an Anglican offshoot that practiced vegetarianism. According to historian Ronald Deutsch, Graham was drawn to the Bible Christian idea that "there was a 'natural' kind of living for mankind, and an 'unnatural' kind, especially in terms of eating."³⁴⁴ Graham quickly began to associate the "unnatural" white flour not only with poor health but also moral decay. Whorton writes that the "lightened loaf was a physical evil because of its constipating effects, and a moral one both because it appealed to civilized society's misguided desire for luxury and because it was a distortion of God-given natural wheat."³⁴⁵ Graham's own writing supports Whorton's point, though Graham was perfectly willing to make the argument solely on physiological bases.

³⁴³ Ronald Deutsch, *The New Nuts Among the Berries* (Palo Alto CA: Bull Pub. Co., 1977), 26.

³⁴⁴ *Ibid.*, 29.

³⁴⁵ James C. Whorton, *Inner Hygiene: Constipation and the Pursuit of Health in Modern Society* (Oxford University Press, 2000), 41.

In *A Treatise on Bread and Breadmaking*, Graham wrote in 1837 that “[i]t is, probably, speaking within bounds, to say that nine tenths of the adults, and nearly as large a proportion of youth in civic life, are more or less afflicted with obstructions and disturbances in the stomach or bowels.”³⁴⁶ He points out that most diseases result from problems in the “alimentary canal,” and thus ultimately makes a vague version of the autointoxication argument that would be so prevalent two generations later. To this end, Graham also writes that in hundreds of chronic diseases that he has witnessed, “costiveness of the bowels has in every instance been among the first and most important symptoms.”³⁴⁷ Notably, Graham refrains from making the leap in logic to causally linking constipation and disease, a false link that doctors made for a full century after he wrote. The importance of Graham’s prescribed remedy—to avoid refined flour and indulge in whole wheat bread—however, was still not understated in Graham’s writing. Claims such as the ones that sexual excess causes insanity or that “folly in dress” killed 80,000 Americans per year made doctors cast a “skeptical but curious and uncertain eye” toward Graham.³⁴⁸ Still, he had a devoted legion of followers, and many of his ideas, including those on fiber, gained traction as the century progressed.

³⁴⁶ Sylvester Graham, *A treatise on bread: and bread-making* (Light & Stearns, 1837), 52.

³⁴⁷ *Ibid.*, 53.

³⁴⁸ Deutsch, 30-34

3.3.2 *Midcentury Milling*

Already by the early 19th century, bread was viewed through the filter of class.³⁴⁹ In fact, the Ancient Romans and Greeks already deemed white bread—a luxury at the time—to be a signifier of wealth and prosperity. A passage from Hippocrates actually specifies that one indication that white bread was healthier was that “it makes less faeces.”³⁵⁰ The fact that whole wheat bread caused bulkier stools led many doctors in the B.C. era to believe that it was not as nutritious as wheat bread. But this process of yoking class and bread was repeated in the late Middle Ages in Northern and Western Europe as well.³⁵¹ As Italian historian Piero Camporesi writes, “The hierarchy of breads and their qualities in reality sanctioned social distinctions. Bread represented a status symbol that defined human condition and class according to its colour, varying in all shades from black to white.”³⁵² Preferences certainly ranged from one culture to another. For example, Germans preferred the darker pumpernickel and rye, while the French preferred bread that had been refined and whitened. But for the most part, white bread—bread that had gone through the process of having the husks removed—was more expensive and more indicative of higher classes in the later Middle Ages.

³⁴⁹ See Elizabeth Engelhardt, *A Mess of Greens: Southern Gender and Southern Food* (University of Georgia Press, 2011) 51-80, for a fascinating analysis of the gender, race, and class issues bound up in biscuits and cornbread.

³⁵⁰ Robert Alexander McCance and Elsie May Widdowson, *Breads, white and brown: their place in thought and social history* (Lippincott, 1956). Galen graded four different types of bread and rated them best to worst in inverse order of how much excrement they would produce.

³⁵¹ *Ibid.* 2-6.

³⁵² Piero Camporesi, *Bread of Dreams: Food and Fantasy in Early Modern Europe* (University of Chicago Press, 1996), 120.

Several factors came together in the 1870s and 1880s that likely increased the production of white flour and caused the production of a smaller percentage of whole wheat flour bread. One consequence of this dietetic shift would have been an upsurge in cases of constipation throughout the U.S. A significant change in the raw wheat market occurred in the 1870s when the Mennonite population, driven out of Russia by a change in the conscription laws, brought a Ukrainian hard winter wheat species into the Great Plains. The American debut of this particular wheat, also sometimes called the Turkey hard red winter wheat, can be traced back to a man named Bernhard Warkentin in Kansas in 1873.³⁵³ Previous to the hard red winter wheat, red fife, also from Ukraine, was used for several decades alongside other soft wheats. According to agronomists Paulson and Shroyer, the use of the hard red winter wheat, red fife, and the later Kubanka durum wheat was as profound an impact on U.S. agriculture as “the steam engine, the Bessemer Process, and electricity were to the industrial revolution.”³⁵⁴ The Turkey hard red winter wheat had several advantages over the soft wheat grown in the Plains and in the Midwest before its arrival. First, it is a hardier wheat and not as susceptible to the cold and the droughts. Second, and more significantly, although it made for a low quality whole wheat flour and bread, it made for a very high-quality white flour when the bran was removed.³⁵⁵

Another change in the wheat consumption habits of the 1870s and 1880s—which may have contributed to a rise in constipation—occurred because of the adoption of a

³⁵³ Gary Paulsen and James Shroyer, “The Early History of Wheat Improvement in the Great Plains,” *Agronomy Journal* 100, no. 3 (n.d.): S70 – S78.

³⁵⁴ *Ibid.*, 71

³⁵⁵ Personal correspondence with mill restorer Theodore Hazen, Dec. 7th, 2010.

practice called “new process milling,” which began in Minnesota, and incorporated the use of the new sifters in the method of bolting. According to *Northwestern Miller* editor Albert Hoppin in 1881, “new process milling,” used primarily in the decade before he wrote the article, can be broken down into four steps.³⁵⁶ Aiding in this process was the invention, or rather perfection, of the middlings purifier by Edmund LaCroix in 1871. This purifier used air flow to separate the three parts of the wheat. And according to mill restorer Theodore Hazen, LaCroix’s middlings purifier “made it possible for the Ukrainian hard wheat to be developed from an inferior [whole wheat] flour to a superior white flour.”³⁵⁷ In other words, the same process that was used to clean dirt and rocks from the grains was also then employed to clean the bran from the endosperm, resulting in a high-quality white flour that displaced wheat flour in the major wheat markets. This process had been used in slightly variant forms in the past, but it had never been done on such a large scale and so cheaply. According to Cadwallader Washburn³⁵⁸ biographer William C. Edgar, LaCroix’s purifier had such a profound effect on the proliferation of wheat that “it changed the industrial future of the [Midwest].”³⁵⁹ And it very well may have had a hand in changing the torpidity of Midwestern or even national bowels.

Due to these advances, the price of white bread dropped significantly in relation to the price of wholewheat bread. In fact, by 1865 in England, white bread was actually

³⁵⁷ Personal correspondence with Theodore Hazen, Dec. 7th, 2010.

³⁵⁸ Longtime owner of Washburn-Crosby Company, which later became General Mills.

³⁵⁹ William Crowell Edgar, *The medal of gold: a story of industrial achievement* (The Bellman company, 1925). LaCroix’s purifier was in the end “borrowed” and sold by others who prospered while LaCroix never made a significant sum from it.

cheaper than whole wheat bread.³⁶⁰ Furthermore, many studies in the 19th and early 20th centuries stated that white bread was in fact more nutritious than whole wheat bread.³⁶¹ So despite the efforts of Graham and his Bread Reform League, there were compelling pecuniary, social, and academic reasons supporting the consumption of white bread over wheat. While it is not possible to confirm an increase in cases of constipation in the U.S. in the 1870s and 1880s, the technological and agricultural components necessary for such a shift no doubt existed.

There was enough concern regarding the role of wheat in the American diet that the U.S. Department of Agriculture commissioned a study on the role of bread in American diets, which they published in 1900. Specifically, *A Report of Investigations on the Digestibility and Nutritive Value of Bread* explored the effect milling had on the way we digest these flours.³⁶² Chemists performed a number of tests on four different types of bread (“ordinary wheat flour [white flour], so-called Graham flour, true Graham flour, and entire wheat flour”³⁶³) and the “feces” of 24 men who ate these breads. The bread, the excrement, and the urine produced were all weighed and tested for weight, proteins, carbohydrates, fat, and calories to determine the digestibility of each type of bread. The chemists determined that the results were inconclusive because of unsatisfactory

³⁶⁰ McCance and Widdowson, *Breads, white and brown*, 46.

³⁶¹ Plagge and Lebbin, *Untersuchungen uber die Verdaulichkeiteniger Brotsorten* (1913); Bischoff *Betrachtungen uber das Soldatenbrot* (1908); Hutchinson (1906) *Food and the Principles of Dietetics*; Ingle (The Importance of the Mineral Constituents of Food (1909); Jago and Jago, *The Technology of Breadmaking* (1911); Snyder, *Studies on the Digestibility and Nutritive Values of Bread* (1903); Wood, *The Composition and Food Value of Bread* (1911). For all of these, see *Bread, White and Brown*, 54.

³⁶² Charles Dayton Woods and Lucius Herbert Merrill, *A report of investigations on the digestibility and nutritive value of bread* (Govt. print. off., 1900).

³⁶³ *Ibid.*, 9.

methods, but the very fact that the study was commissioned indicates a great deal of concern about the debate on bread and the excrement resulting from it.

No matter how significant a role bread played in the history of constipation and the rampant fear of excrement, it was only part of the story. The inactivity resulting from an increase in management jobs and a 19th century diet that was high in fat and generally low in fiber, combined with snowballing fears of autointoxication all contributed to the growing constipation epidemic and the re-imagined role of excrement in society and in relation to the body. But to complete the story of the ascension of constipation in American society, it is important to go back to Sylvester Graham and the perspectives he passed on to future generations of health reformers.

Whereas the general American populace yoked class and culture-based signifiers to the various types of bread, Sylvester Graham saw white bread specifically as a health and moral problem. In his book, *A Treatise on Bread and Breadmaking*, he quotes a Briton at length: “The eating of fine bread therefore, is inimical to health, and contrary to nature and reason and was at first invented to gratify wanton and luxurious persons who are ignorant both of themselves, and the true virtue and efficacy of natural things.”³⁶⁴ This passage supports his larger point that white bread is for the wealthy and those lacking in morals. All of this is to say that constipation was no doubt a ubiquitous malady that was taken extremely seriously. And furthermore, the seriousness with which it was taken had profound consequences on the way Americans felt about excrement.

³⁶⁴ Graham, *A Treatise on Bread and Breadmaking*, 61. Emphasis in Graham. Graham attributes this quote to Thomas Tryon.

So although historian Ronald Deutsch considers Sylvester Graham to be one of his “nuts among the berries,” Graham was in fact at least partially correct by today’s medical standards. Removing his rhetorical flourishes and morality judgments from white bread, it is at least medically accurate to suppose that substituting white bread for whole wheat bread could (depending on how substantial a part of one’s diet bread was) certainly cause constipation. While mainstream America was, for the reasons mentioned above, moving quickly toward a diet rich in white bread, Graham and a significant number of alternative health advocates created a countercurrent seeking regular bowel movements (and sometimes a higher stratum of morality) by returning to whole grains.

3.3.3 James Jackson

James Jackson (1811-1895) was another of those alternative health gurus who fought a sincere battle against white bread and constipation. Jackson, who ran a sanitarium in Dansville, NY, was decidedly opposed to one’s excrement remaining in his or her body a second longer than necessary. As one of the central figures in the U.S. advocating hydrotherapy and as a medical doctor, Jackson had the connections and profile necessary to gain financial backing to buy his own sanitarium. And in 1858 he created the “Our Home on the Hillside” sanitarium and water-cure spa in Dansville, a health center that was arguably more successful than J.H. Kellogg’s Battle Creek Sanitarium.³⁶⁵ Jackson fell ill in 1847 and sought treatment from Dr. S.O. Gleason at

³⁶⁵ Harvey Green, *Fit for America: Health, Fitness, Sport, and American Society*, 1st ed. (New York: Pantheon Books, 1986), 65. Hydropathy, or water-cure treatment, can be traced back to the Ancient Egyptians, but its main modern proponent was a Silesian man names Vincenz Priessnitz,

water-cure spa in Cuba, New York. He recovered and became a devotee of the water cure, then studied to become a doctor himself.

Various elements of water-cure were being regularly practiced in sanitariums such as Jackson's Our Home on the Hillside. As constipation became a widespread problem, these "sans" proliferated the enema treatments that were increasingly more popular by the first decade of the 20th century. Jackson offered a therapeutic respite from constipation at his sanitarium in Dansville via a combination of diet, exercise, and various hydrotherapy-inspired douches and enemas. Like Graham, Jackson recommended whole grains instead of refined flour. Proper digestion was central to Jackson's preference for whole grains. He wrote that when nature called, one should "go to the closet at the appointed hour, sit for a few minutes, gently straining to effect a passage."³⁶⁶ Drugs such as "Castor oil, Rhubarb, Aloes, in pills made of watery extract, Granular Citrate of Magnesia, Cascara" were a last resort for Jackson, only to be used when all other methods failed. Other methods to be tried before the abovementioned cathartics included bathing, water-drinking, exercise, special baths (Sitz bath, hip pack (wet warm towel laid across abdomen), "fomentation of bowels," "wet girdle," "Cold flagellation" (this is where an attendant whips the abdomen of patient with strips of cold wet "crash" for 8-10 minutes,³⁶⁷ hot and cold hand rubbing, enemas, manipulations (massages and exercises called "Swedish movements"), electric therapy via "faradizations of the spine and

who even treated Austrian royalty with an unusual mix of water treatments, douches, and enemas. Sebastien Kneipp, a priest from Bavaria who still has a type of water named after him in Germany, continued Priessnitz's practices and popularized them further.

³⁶⁶ Jackson, *Constipation: Its Causes and Treatment*, 24.

³⁶⁷ *Ibid.*, 43.

bowels” 3-7 times per week—“Sometimes the introduction of one electrode directly into the rectum, the other being passed over the abdomen and back, constitutes an effective measure of treatment.”³⁶⁸ As a vegetarian and naturopathic doctor, drugs were, in Jackson’s mind, truly a last resort. He also advocated cereals and avoiding too much starch, using “meal instead of flour” when possible.³⁶⁹

Jackson used the popular knowledge about the supposedly toxic “miasmas” arising from excrement to draw his own conclusions about the nature of excrement inside the body:

Sewer gas in dwellings, or escaping into the streets, in quantity, is well known to have caused single cases of diphtheria, spotted fever, etc., as well as epidemics of these diseases. Should not, also, the utmost precaution be taken to secure perfect drainage and sewerage for these human temples, if we would avoid sickness and untimely death, and their attendant evils?³⁷⁰

He felt that the gases and the excrement itself “poison[ed] the blood and nervous centres, and disturbing the whole family economy.”³⁷¹ Jackson was certainly not alone in making this intuitive—yet incorrect—analogy.

Guests at Our Home on the Hillside were encouraged to live very regimented lives during their stay. Although they were encouraged to sleep long hours, wear loose clothing (no corsets for women or swaddling infants too tightly), and spend a good deal

³⁶⁸ *Ibid.*, 48.

³⁶⁹ *Ibid.*, 26.

³⁷⁰ *Ibid.*, 7.

³⁷¹ *Ibid.*, 8.

of time in the fresh air, they were to practice efficiency and moderation, avoid “stimulation,” exercise in moderation, and “be regular in all of [their] habits.”³⁷² That included avoiding alcohol and tobacco, and practicing thorough mastication of their meals (several years before Fletcher popularized the practice). The chapel and steady “unsectarian” Christian practices were the status quo at the Jackson san as well.³⁷³ James Jackson and his family believed strongly in the dual nature of humanity—that both the body and the mind are extensions of god. One former patient referred to it as “illuminated,” a “city set on a hill.”³⁷⁴ By 1897, the san had also acquired a “Molière Thermo-Electric Bath” that sent waves of electricity coursing through the water. This contraption was intended to remove “poisons” from the body, and the yearbook description of the bath notes that it was especially helpful for aiding “congestion” of the “stomach and bowels.”³⁷⁵

Although Jackson himself was an ardent vegetarian, he did not want to impose the relatively unpopular idea onto his patients. Therefore, Our Home served meat regularly to those guests who requested it. They also served “Graham bread” as well as white bread, and all guests were treated to Jackson’s own invention, Granula—made from winter wheat—since 1863.³⁷⁶ Essentially twice-baked Graham crumbs, Granula resembled

³⁷² Jackson Sanatorium (Dansville N.Y.), *Year book of the Jackson sanatorium, Dansville, N.Y.*, 1898, No Pagination.

³⁷³ Ibid.

³⁷⁴ The former patient, unnamed, used quotes around this phrase though it is unclear if s/he was referencing the “Sermon on the Mount” or “A Model of Christian Charity.”

³⁷⁵ N.Y.), *Year book of the Jackson sanatorium, Dansville, N.Y.*

³⁷⁶ Ibid. Also Gerald Carson, *Cornflake Crusade*, Getting and spending : the consumer’s dilemma (New York: Arno Press, 1976), 66–67. According to several references, there is supposed to be an accent mark over the u: “granūla”

Grape Nuts. According to Jackson's grandson, James A. Jackson, the cereal was typically mixed with whole milk and left to sit overnight in the icebox. "In the morning, the glass was completely full of soaked Granula, and the top section was largely risen cream. This glassful was stirred and put into a cereal dish, then served with sugar and cream to taste."³⁷⁷ Advertisements for Granula, and Jackson's coffee substitute Somo, oddly did not specifically mention that it helped prevent constipation or any other ailment. By the late 1890s, however, the many Granula knock-offs usually made the constipation-relieving qualities a centerpiece of their advertisements. Even those advertised in Jackson's own publications, such as J.W. Clark's "Phosphi-cereal Coffee" promised to cure constipation.³⁷⁸ Curiously, John Harvey Kellogg also "invented" a cereal named Granula. Since Jackson did so earlier, he sued Kellogg, who then modified the name of his version to "granola."³⁷⁹

Whereas the water cure and various water cure spas dotting the country popularized enemas among a relatively limited group of Americans, health spas such as Jackson's Home on the Hillside and Kellogg's Battle Creek Sanitarium brought enemas further into the mainstream and melded it with a very Christian set of health principles. Clara Barton once stayed at the sanatorium³⁸⁰ around 1880 to treat exhaustion, and reportedly had a very positive experience.³⁸¹ Another of "Our Home on the Hillside's" most prominent guests, and one whose stay was perhaps more consequential in the scope

³⁷⁷ Quoted in *Cornflake Crusade*, 67.

³⁷⁸ *Year Book*

³⁷⁹ Deutsch, *The New Nuts Among the Berries*, 64.

³⁸⁰ Jackson spelled it "sanatorium," though the more popular spelling later was sanitarium.

³⁸¹ Deutsch, *The New Nuts Among the Berries*, 64.

of this work, was Ellen White, a former Millerite who co-founded the Seventh-Day Adventist Church. Ellen White was the person responsible for turning John Harvey Kellogg on to the ideas of natural living, vegetarianism, and full evacuations. In 1863, White, already by that time a religious leader propelled by vivid and symbolic visions of god, stayed at “Our Home” for three weeks. She returned to Battle Creek with her husband, new recipes from Jackson for toasted crumbs of Graham bread (essentially Jackson’s main ingredient for granula), and pamphlets on water cure and diet reform.³⁸² By 1866, the Whites had started a health journal called *The Health Reformer* and opened a new health center called The Western Health Reform Institute in Battle Creek, Michigan. One member of the Seventh Day Adventist Church and a large donor to the Institute was John Preston Kellogg, father of 14-year-old John Harvey and 6-year-old Will Keith Kellogg. John Harvey Kellogg received his M.D. and took over the Institute in 1876, renaming it the Battle Creek Sanitarium.³⁸³ Kellogg refined the standard water cure practice to put more emphasis on the enema when the Battle Creek San began.³⁸⁴

3.3.4 John Harvey Kellogg

Kellogg considered constipation a very serious problem that caused a number of illnesses, including “premature senility.”³⁸⁵ He claimed that not only is it dangerous for

³⁸² Deutsch, *The New Nuts Among the Berries*, 56–58.

³⁸³ *Ibid.*, 59.

³⁸⁴ Deutsch. Also, Elizabeth Abbott, *A History of Celibacy* (Toronto: HarperCollins, 1999), 206. Abbott suggests that Kellogg’s obsession with enemas may have been a manifestation of klismaphelia, a disorder in which the sufferer substitutes the enema for sex.

³⁸⁵ Kellogg, *The Itinerary of a Breakfast; a Popular Account of the Travels of a Breakfast Through the Food Tube and of the Ten Gates Aad [!] Several Stations Through Which It Passes,also of the Obstacles Which It Sometimes Meets*, 32.

adults, but “constipation is often the most serious obstacle in the way of the proper mental and moral development in children.”³⁸⁶ And “[o]ne bowel movement a day is positive evidence of constipation.”³⁸⁷ For that reason, “normal bowel rhythm unquestionably demands at least three evacuations daily.”³⁸⁸ If this doesn’t occur normally through proper diet habits, one should not hesitate to use an enema.

Kellogg was an enthusiastic user of enemas and promoted their use very often for his patients. “If necessary,” he writes, “take an enema every night. *Keep clean inside.*”³⁸⁹ Keeping clean inside was a general rule for Kellogg, but he also got much more specific as to why we need to be internally “disinfected.” In *The New Dietetics*, Kellogg explains the shortcomings of each part of the digestive tract and how to address these problems. In each case, the problem boils down to inefficiency in evacuating the “food residue” quickly enough to avoid putrefaction and the proliferation of unhealthy bacteria. According to Kellogg, the stomach harbors mold; the duodenum, “one of the great storm centers of the body,” is a “receptacle of poisons” and can be disinfected along with the gall bladder by drinking “a solution of hydrochloric acid” thrice daily; the cecum “is a source of almost infinite mischief;” the ileocecal valve is “always incompetent and hence there is no hindrance to the extension of the infection into the small intestine and the

³⁸⁶ John Harvey Kellogg, *How to have good health: through biologic living* (Modern Medicine Pub. Co., 1932), 397.

³⁸⁷ John Harvey Kellogg, *The New Dietetics; a Guide to Scientific Feeding in Health and Disease*, Rev. ed. (Battle Creek, Mich: The Modern medicine publishing co, 1927), 627.

³⁸⁸ *Ibid.*

³⁸⁹ *Ibid.*, 633. Emphasis in original.

development of all the evil results of autointoxication.”³⁹⁰ And the lower colon simply can’t evacuate the excrement quickly enough, but that problem can be addressed with enemas containing *B. acidophilus*, according to Kellogg.³⁹¹

As odd and harmful as some of Kellogg’s treatments sound, he had a relatively accurate understanding of the digestive system, and many of his practices (e.g. the acidophilus enema) are still in use today. Nevertheless, he was very much a man of his era, and, combined with those of other contemporary doctors, his attitudes toward excrement go a long way in telling us how much of the U.S. felt about it. Like so many in the early twentieth century, Kellogg was a sincere follower of Horace Fletcher for several years. Fletcher believed in the notion of health through efficiency of living. The core of Fletcherism involved chewing each bite 32 times as the first step in efficient digestion, though he also advocated Fletcherizing “all their habits of life so as to get the most efficiency out of themselves.”³⁹² Kellogg had Fletcher’s literature available in the lobby of the San, and a relatively large “Fletcherize” sign could be found in the dining room.³⁹³ And they also exchanged a series of letters notable for their open discussion of defecation. In one, Fletcher wrote to Kellogg “I rank it as a very enjoyable operation if healthy conditions prevail and it is as agreeable as anything I know and if we could

³⁹⁰ Pp. 634-636.

³⁹¹ Kellogg’s brother later (1928) advertised Kellogg’s All Bran cereal in what was meant to look like a newspaper column. The headline read “THE TRAGEDY OF MANY LIVES IS CONSTIPATION.” The copy read, “This evil scourge ruins thousands of men and women.” From AMA Fraud Archives, Box 300, Folder 9.

³⁹² Letter from Fletcher to Kellogg, Oct. 31st, 1909. p. 2 From Horace Fletcher papers, 1898-1915. Letters to John Harvey Kellogg, 1903-1915 and undated. MS Am 791 (20). Houghton Library, Harvard University, Cambridge, Mass.

³⁹³ Carson, *Cornflake Crusade*, 236.

indulge it as handily as do the birds without regard to the proximity of human beings and other worms crawling abou[sic] on earth, I would like to be doing it all the time.”³⁹⁴

However, Kellogg was horrified by Fletcher’s unwillingness to stick to a regular defecation schedule (Fletcher claimed he produced so little excrement it was only necessary to defecate once every week or so compared to Kellogg’s three times per day)—Kellogg called this problem “the rock on which Fletcherism split and went to pieces as a system,”—he did advocate the Great Masticator’s call for “thorough chewing.”³⁹⁵ Kellogg also took issue with Fletcher’s diet, claiming that he did not eat enough roughage.³⁹⁶

In order to provide “scientific” justification for his beliefs, Kellogg performed various experiments on human feces measuring the level of “intestinal putrefaction” in the excrement of subjects whose diet varied in terms of their protein intake. In a follow-up experiment, he mixed excrement with various foods and left the mixture in an incubator for three days, after which he measured the levels of indole (a bacterial compound produced in the intestines) in each sample. The intent of the experiments seemed to be to prove that meats putrefy at a higher rate than other foods.³⁹⁷

³⁹⁴ Horace Fletcher, letter to Kellogg, Dec. 15, 1910. From Horace Fletcher papers, 1898-1915. Letters to John Harvey Kellogg, 1903-1915 and undated. MS Am 791 (20). Houghton Library, Harvard

³⁹⁵ Kellogg, *The Itinerary of a Breakfast; a Popular Account of the Travels of a Breakfast Through the Food Tube and of the Ten Gates Aad [!] Several Stations Through Which It Passes, also of the Obstacles Which It Sometimes Meets*, 90.

³⁹⁶ *Ibid.*

³⁹⁷ Results and methodology in Kellogg, *The New Dietetics; a Guide to Scientific Feeding in Health and Disease*, 128–130. It is not perfectly clear that Kellogg performed these studies. If he did not, he seems eager to take credit for them.

Men such as Fletcher and Kellogg adopted and developed an attitude about the body that was unique to the Long Progressive Era. Drawing in part from the time/motion studies of Frederick Winslow Taylor, from the 1880s and 1890s, they found the human body to be nearly as perfectable as a machine so long as its functions were properly tuned and routinized. Another figure who took these beliefs in a slightly different direction was Bernarr Macfadden.

3.3.5 Bernarr Macfadden

Along with John Harvey Kellogg, weightlifter and publisher Bernarr Macfadden completes the line of influence of great health reformers concerned with excrement from the mid-nineteenth century to the early twentieth century beginning with Sylvester Graham. In 1929, MacFadden, who was no doubt influenced by the writings of Graham, Jackson, and Kellogg, and certainly knew of the successes of Jackson's sanatorium and Kellogg's sanitarium, bought Jackson's Home on the Hillside and renamed it the Physical Culture Hotel.³⁹⁸ And his attitudes regarding constipation were very similar to those of Kellogg, Fletcher, Jackson, and Graham. In his *Physical Culture* magazine from 1901 he wrote the following in Kelloggian terms:

It is internal cleanliness which must be sought for. It is this internal cleanliness that keeps the body ever free from disease, and it cannot

³⁹⁸ *An Annotated Catalogue of the Edward C. Atwater Collection of American Popular Medicine and Health Reform, Vol. II, M-Z*. Annotated and Compiled by Christopher Hoolihan (University of Rochester Press, 2004) 7.

possibly be acquired and retained unless the circulation be regularly accelerated with some kind of muscular exercise. or [sic] a substitute is regularly used in the form of an internal bath or hot-air or hot-vapor bath.³⁹⁹

MacFadden's typical response to any health issue was that it should be addressed by vigorous "muscular exercise." If the exercise itself did not cure the malady, the benefit one's character would receive from being more muscular would likely prevent future sicknesses and alleviate current ones. Furthermore, like many doctors of the era, Macfadden noted that the trend was more pronounced in women and that many problems women complained of were due to constipation: "nine-tenths of the women who are nervous wrecks, have been reduced to that condition [neuralgia, headaches, hysteria, heart palpitations, nervousness] by the malady in question."⁴⁰⁰

Regarding the dangers of constipation, Macfadden is clearly in line with the doctors of the day who claimed that the excrement in essence poisons the bloodstream, causing diseases: "When the bowels become inactive, the poisons bred of waste matter that should have been eliminated, but are not, are distributed through the circulation, and then we have disease instead of health." But his get-tough attitude toward remedying constipation and fighting off autointoxication bears his own trademark sturdiness: "Constipation is due to a break in the functional powers. Hence, as a part of its cure, functional vigor must be restored by a system of *general* exercises designed for that

³⁹⁹ Bernarr MacFadden, "Untitled," *Physical Culture*, August 1899, 166.

⁴⁰⁰ Bernarr MacFadden, "Untitled," *Physical Culture*, November 1906, 391.

purpose.”⁴⁰¹ He prescribed a series of exercises such as laying flat on the floor and pulling the left knee up to the chest,⁴⁰² jumping up and down 300-800 times,⁴⁰³ and others in order to strengthen one’s core muscles. Throughout *Physical Culture’s* run and in various books, MacFadden took up the cause of fighting constipation a number of times, and always added something new. Typically, however, he prescribed eating raw vegetables, warned of the dangers of white flour, advocated raw fruits and nuts, and “thorough mastication.”⁴⁰⁴ In general, proper digestion and the timely elimination of one’s excrement was crucial in maintaining vigor and vitality.

3.4 Dangers of Constipation

A study of advertisements, medical books, and health journals from the middle of the nineteenth century to well into the twentieth century reveals that Americans were indeed in a perpetual state of morbid fear that their feces were poisoning them. Constipation, they thought, caused not only the normal level of discomfort, but an enormous array of medical problems that we now know are entirely unrelated to constipation. Americans therefore went to great lengths to cure themselves of constipation; and entrepreneurs, quacks, and legitimate health experts were ready to offer solutions—some of which

⁴⁰¹ Bernarr Macfadden, *Building of vital power: deep breathing and a complete system for strengthening the heart, lungs, stomach and all the great vital organs* (Physical culture publishing co., 1904), 251. Emphasis in original.

⁴⁰² Ibid.

⁴⁰³ MacFadden, “Untitled,” 391.

⁴⁰⁴ Ibid.

worked, most of which failed in terms of cost-benefit ratio, many of which caused more complications than the vulnerable patient bargained for.

Already in 1861 Americans felt that excrement was by nature poisoning the bowels and in turn the body. Therefore it was incumbent upon them to avoid constipation at all costs. Writing in *The Water-Cure Journal* in 1861, prolific author and doctor Russell T. Trall claimed that “[diarrhea] is an effort of nature to overcome morbid conditions and remove obstructions. It is remedial. It should be allowed to accomplish its work. To suppress it with drugs is simply to war upon the human constitution. This remedial struggle should be managed, regulated, directed, not subdued. It [defecation] is a process of purification which should be guided, not suppressed.”⁴⁰⁵ In other words, as unpleasant as diarrhea may be, the body sometimes requires it in order to expel the poisonous excrement.

A good portion of the warnings regarding constipation remained as vague as Trall. This is especially the case in the 1860s and 1870s. Later in 1870, Dr. A.L. Wood, physician and owner of the New York Hygienic Institute, wrote “Any thing which causes constipation is conducive to disease instead of health. More ills and ailments are the direct results of constipation of the bowels than of any other one cause.” Wood also recommended not eating farina for breakfast anymore.⁴⁰⁶ Occasionally, however, experts employed more passionate rhetoric to make the same point. Sir James Eyre, from the

⁴⁰⁵ Dr. A.L. Wood, “Topics of the Month,” *The Water-Cure Journal* (August 1861): 33. Dr. Trall also felt that diarrhea can be cured by deep breaths that transfer “the direction of the remedial effort from the bowels to the lungs and skin.”

⁴⁰⁶ James Eyre, “Cures for Constipation,” *The Herald of Health* (August 1870): 91.

Royal College of Physicians, wrote that the stomach, “when it duly furnishes its pure functional secretions, is, like fire, invaluable,--as a slave; but otherwise it becomes a dangerous, because too powerful, despot!” The stomach can sometimes resemble “the rude violence of elemental strife, devastating by its impetuous fury all that impedes its disastrous course.”⁴⁰⁷ There is no excuse for anything less than daily bowel movements, according to Dr. Eyre, as laxatives and enemas are always options.⁴⁰⁸ Eyre goes on to refer to excrement as “hurtful”:

The bowels and the bladder, as receiving the most hurtful excretions of our bodies, ought not only to be emptied when they crave relief, but a wise man waits not for this; and I would implore all of either sex to remember through life that they ought to anticipate, whenever they may be able, the call to evacuate the intestinal canal, and especially to get rid of the last-named poisonous product; for this, of all others, is the most dangerous to our health to retain, even when composed of its legitimate qualities.⁴⁰⁹

Even when digestion is normal and the body is healthy, then, excrement needs to be eliminated quickly. Claiming that the “best promoter of digestion is a contented mind,”⁴¹⁰ Eyre felt one should ideally defecate twice per day. Significantly, Eyre’s manners prevent

⁴⁰⁷ James Eyre, *The Stomach and Its Difficulties* (Philadelphia: J.B. Lippincott & Co, 1869), vii.

⁴⁰⁸ *Ibid.*, 99-101. He also notes that Napoleon, a famous constive, would often use egg yolk, sugar, and milk as a laxative.

⁴⁰⁹ *Ibid.*, Note on 41-2

⁴¹⁰ *Ibid.*, Note on 72.

him from using the term “defecate,” preferring instead the euphemism “call to the temple of Cloacina.”⁴¹¹

The legitimate debris of the constitution ought, each twenty-four hours at least, before absorption of it to any extent can take place, to be duly and habitually expelled or bad breath, offensive perspirations, drowsiness, and still worse evils will arise. *My most healthy patients are those who have habitually two motions daily.* Happy are those who require not ‘peristaltic persuaders.’⁴¹²

The term “peristaltic persuaders” is Eyre’s careful and indirect way of referring to enemas and laxatives, and “legitimate debris of the constitution” is his euphemism for excrement. Eyre insists that for proper digestion one exercises mildly before dinner and then lies “*in perfect repose*” after dinner.⁴¹³

Around the turn of the twentieth century, several “life guide” books were published, aimed at young men and women. Defecation was not a topic that the authors tended to shy away from. In *What a Young Wife Ought to Know*, Emma Frances Angell Drake reminded the reader no less than eight times of the importance of “daily evacuation of the bowels.”⁴¹⁴ Another author of a similar book attempted to frighten the reader into

⁴¹¹ Ibid., 110. Cloacina was the Roman goddess of the sewers. Martin Luther also used this euphemism.

⁴¹² Ibid., 102. Emphasis in original.

⁴¹³ Ibid., 111. Emphasis in original.

⁴¹⁴ Emma F. Angell Drake, *What a Young Wife Ought to Know*, New rev. ed., Self and sex series (Philadelphia, Pa: The Vir Publishing Company, 1908), 238.

regular bowel movements with the inevitability of unacceptable impropriety. Mary Wood-Allen, in *What a Young Girl Ought to Know*, from 1905, warns that

[s]ometimes when girls do not attend promptly to the daily movement of the bowels, the matter collects in the lower bowel, and little worms gather there and then wander out of the bowels into the other private parts to create irritation. The girl may try to quiet this itching by her hands, and so acquire the evil habit of solitary vice. But if she attends to eating simple food, to having the bowels move once a day, to keeping the private parts clean, she will not be troubled with this itching sensation, and so will have no temptation to allay it by the use of her hand.⁴¹⁵

For Wood-Allen, then, worm infestations resulting from constipation (from neglect) was not in itself threatening enough to dissuade little girls from ignoring their calls of nature; constipation led to masturbation. Kellogg already forged the link between constipation and masturbation twenty years earlier. He claimed that the “hardened mass” of excrement pressed on the male’s sexual parts, “causing excessive local excitement.”⁴¹⁶ By extension, chronic constipation will eventually result with the patient compounding his suffering with “satyriasis.” This correlation between masturbation and constipation—a stretch, physiologically—were both considered by some Long Progressive Era Americans to be manifestations of impurity, vice, and violations of Christian doctrine. In many of these passages on the dangers of excrement, the authors adopt a quasi-religious tone.

⁴¹⁵ Mary Wood-Allen, *What a young girl ought to know: by Mary Wood-Allen* (Vir Pub. Co., 1905), 100.

⁴¹⁶ John Harvey Kellogg, *Plain facts for old and young* (I.F. Segner, 1882), 202.

Alcinous B. Jamison, a New York City proctologist and clairvoyant, wrote several books about the dangers and cures of constipation. In *Intestinal Ills* from 1901 he wrote, “Millions of human being are sent to untimely graves by these ailments [caused by constipation]. Indeed, the body of nearly every human being is a pest-house of absorbed poison instead of being the worthy temple of a wondrous soul.”⁴¹⁷ By Jamison’s estimation, the “protean monster” of constipation “deranges more lives with nervousness than any other pathological condition to which the flesh of man is heir!”⁴¹⁸

Health experts seldom specified the exact ingredient in excrement that caused death and disease. Some, however, believed it was not the excrement itself, but the gases emitted by it that were dangerous. James Jackson intuitively applied the en vogue miasma theory of disease used in municipal sewerage arguments to the body. Since “Sewer gas in dwellings” can cause well known diseases, humans should take care to “secure perfect drainage and sewerage for these human temples”⁴¹⁹ Others perpetuated that analogy as truth, as well. Physician and author Josiah Oldfield, in his *Constipation, and How to Avoid It, and How to Cure It*, also insisted that it is the gases emitted from the constipated excrement that damage the large intestines—a strong testament to the lasting belief in miasma theory.⁴²⁰

⁴¹⁷ Alcinous B Jamison, *Intestinal Ills: Chronic Constipation, Indigestion, Autogenetic Poisons, Diarrhea, Piles, Etc.: Also Auto-Infection, Auto-Intoxication, Anemia, Emaciation, Etc. Dueto Proctitis and Colitis* (New York: C.A. Tyrrell, 1915), xvi.

⁴¹⁸ *Ibid.*, 11.

⁴¹⁹ Jackson, *Constipation: Its Causes and Treatment*, 7.

⁴²⁰ Josiah Oldfield, *Constipation, and how to avoid it, and how to cure it* (Ewart, Seymour, n.d.).

Dr. Jogendra Lal Chundra, a member of the Royal Institute of Public Health in London writing in India in 1911, claimed “It is an absolute fact that 90 per cent of all diseases may be directly traced to some derangement of the stomach or intestines.”⁴²¹ Some doctors, however, specifically named what ailments were caused by excrement poisoning the body through the intestinal walls. “It rarely kills directly, but indirectly it is a great factor in producing disease and death. It is a great aid in building arteriosclerosis, heart diseases and chronic bronchitis,” wrote physician and author Rasmus Alsaker in 1917.⁴²²

The ill effects reportedly arising from constipation were not merely physiological in nature. Many doctors between 1860 and 1920 determined that there was a link between constipation and severe mental illness. According to the highly influential Austro-German psychiatrist Richard von Krafft-Ebing, intestinal irritation and the toxic blood caused by constipation leads to insanity: “It cannot be doubted that the acute, and to a still greater degree chronic, inflammation of the digestive tract not only lowers the spirit of the people but calls forth psychoses which as a rule have the character of melancholia and hypochondriases.”⁴²³

J. Ellis Barker even has a chapter in his *Chronic Constipation: The Most Insidious and the Most Deadly of Diseases, Its Cause, Grave Consequences and Natural Cure* from

⁴²¹ Jogender Chundra, *A treatise on treatment designed for the use of practitioners and students of medicine*. (Calcutta, 1911), 294.

⁴²² Alsaker, *Curing Constipation and Appendicitis*, 12.

⁴²³ R Von Krafft-Ebing, *Lehrbuch Der Psychiatrie: Auf Klinischer Grundlage Für Praktische Ärzte Und Studirende* (Nabu Press, 2010), 175.

1927 called: Chapter IV: “How Chronic Constipation Causes Insanity and Suicide” And in an article from *Physical Culture* in 1913 called “Insanity—its prevention and cure,” Bernarr Macfadden associate Carl Easton Williams wrote that “Auto-intoxication is a frequent cause of insanity, and since this is entirely a matter of nutrition and digestion it is both preventable and curable.”⁴²⁴ The stakes were much greater for some, however. Medical doctor W.H. Birchmore wrote an article that originally appeared in the *American Journal of Clinical Medicine* in 1906 and was reprinted in *Physical Culture* causally connecting mental illness and constipation. Entitled “Internal Uncleanliness a Possible Cause of Homicide and Insanity,” the article argued that “Biliousness, melancholia, homicide—such is the observed sequence now,” was the all-too-common pattern seen in murders across the country.⁴²⁵ In these cases, the “victim is intoxicated, drunk on the products of his own decomposition.” He continued:

It has been shown by experts, that men have committed homicides in the first stage of this same poisoning, or drunkenness who, while legally responsible in the courts, were morally as irrational as any men could be to whom there had been given hashish without their knowledge. It was affirmed as a matter within the experience of all, that from time to time, cases appeared in which a man who was known to his neighbors, as one very careful of his health, would suddenly commit homicide, or suicide.

Especially often was this the case of a mother, whose suicide was

⁴²⁴ Carl Easton Williams, “Insanity—its prevention and cure,” *Physical Culture* (July 1913): 113.

⁴²⁵ Birchmore, “Internal Uncleanliness a Possible Cause of Homicide and Insanity,” 210.

accompanied or preceded by the murder of her child. The most of these cases were demonstrated by the clinical history to be cases of autointoxication (poisoning or drunkenness caused by the retained poisons of food), and there have been a number of ‘double suicides’ from the same cause. The evidence offered was simply overwhelming that madness, suicide and murder were absolutely the mental symptoms of the blood-poisoning by the substances circulating in the blood, and absorbed by the intestines.⁴²⁶

In addition to numerous homicides and suicides, Dr. Birchmore goes on to claim that a rash of child suicides in New York should be attributed to increasing instances of autointoxication. And furthermore, it is incumbent on physicians everywhere to take this threat more seriously. “Experts” in the field of health, such as Benjamin Lust and wife, assert their own claims attesting to the seriousness of constipation. Mrs. Lust even claimed that a quarter of all children die from “bowel difficulties.”⁴²⁷

However overblown and sensational Birchmore and the Lusts painted the disease of constipation, they were by no means outliers in this discussion. James Jackson’s book about constipation from 1882 highlights the seriousness of the ailment worth quoting at length.

⁴²⁶ Ibid.

⁴²⁷ Mrs. Benjamin Lust, “Regulating the Bowels,” *The Naturopath* 4, no. 11 (November 1903): 338.

Among the many derangements of bodily functions to which human flesh is heir, there is, perhaps, not one more common, more chronic, or more disastrous in its effects upon the general health, than constipation. So wide is its sweep that it may truthfully be said to afflict humanity from the cradle to the grave. It embraces among its victims of both sexes, of all temperaments, nationalities, occupations, and habits. This evil is allowed insidiously to gain possession and finally to undermine the general health, because of the ignorance of the majority of the people in regard to its dangerous consequences.⁴²⁸

In addition to the weight Jackson gives constipation, it is notable that his version of it does not discriminate in terms of race, gender, or lifestyle, putting him in contrast with many of his contemporary physicians and bureaucrats.

For Jackson, and for many of the mid-19th century water-cure and naturopathy advocates, the blame should be put on the nation's shifting favor to white flour for the constipation plague. It was an anti-modernist stance that blamed new technological advances for straying away from the way things were supposedly always done. But Jackson and others also presaged the neurasthenia craze by several decades (and George Beard's 1869 article "Neurasthenia, or Nervous Exhaustion" by one year) by blaming sedentary lifestyles and "brain-work." "A physician would know almost instantly that the constipation from which the person suffered was the natural and legitimate result of an

⁴²⁸ Jackson, *Constipation: Its Causes and Treatment*, 3.

over-taxed brain.”⁴²⁹ This congestion of the brain led to “defective action of the bowel,” and then constipation ensued.⁴³⁰

Jackson was one of the health experts of the nineteenth century who took popular attitudes regarding miasmas and applied them to the “human sewer” system. He felt that the gases emanating from fecal matter in addition to the fecal matter itself that was destroying the otherwise good health of Americans.

In constipation, where the bowels become more or less filled up with refuse matter, some of the most noxious gases and compounds are formed [. . .] The odor is often observed in the gas coming from the stomach and bowels of the persons troubled with indigestion and constipation, and indeed, they frequently complain of a rotten-egg taste in the mouth. This gas, in its poisonous effect, is similar to hydrocyanic or Prussic acid, only not so powerful. It is a very destructive agent in its interference with those vital processes concerned in ultimate nutrition, robbing the blood corpuscles of vitality, and preventing the transformation into tissue of the nutrient conveyed by the circulation, and of worn-out tissue into waste, thus poisoning the blood and nervous centres, and disturbing the whole family economy.⁴³¹

⁴²⁹ James Caleb Jackson, *How to treat the sick without medicine* (Austin, Jackson & Co., 1868), 19.

⁴³⁰ *Ibid.*

⁴³¹ Jackson, *Constipation: Its Causes and Treatment*, 7–8.

Jackson's description of the biological mechanisms making fecal matter internally toxic are slightly different from Oldfield's, but the results are no less dire. According to Jackson in 1892, the "evils" of constipation, or the results of it, included the following:

Headache, Dullness of mind, palpitation of heart, general malaise,
Hypochondriasis, Insanity, Hysteria, Diseases of the sexual system,
Dyspepsia, Chronic Intestinal Cattarrh, Functional Diseases of the Liver,
Dyspnoea or oppressed breathing, Ringing in the ears, Rush of blood to
the head, Abnormal sensations of cold and heat in the extremities, Pains in
the Back, Dragging and dull pains of the genitals, Pains in the thighs,
Sense of abdominal distensions, Hemorrhoids, Ulceration of the colon and
rectum, Peritonitis, chronic and acute, Paralysis of the muscular coat of
the bowels from over-distention.⁴³²

In an earlier list, Jackson included "nasal catarrh, sore eyes, sore throat, severe deafness, cankered sore throat, asthma [. . .] spermatorrhoea, leucorrhoea, piles, palsy, vertigo, apoplexy, insanity, chronic melancholy, hysteria, rheumatism, neuralgia, and scrofulous eruptions on the skin."⁴³³ Clearly, constipation was considered by many doctors of the era to be the one seminal malady that caused dozens of other illnesses.

⁴³² Ibid., 9-10

⁴³³ James Jackson, *Laws of Life*, 1873. quoted in William Frank Ross, *Medical hygiene; or, Cures for all diseases without drugs: including essays on testimony of leading drug doctors ...* (Ross, 1895), 38.

The dangers of constipation, or autointoxication, as it came to be called closer to 1900, seemed to have some root in basic intuition. After all, many diseases that struck Americans in the 19th century had constipation as a side-effect. Though it was not the cause of the disease, as so many had thought, excrement was in fact a pollutant in many ways. Historian James Whorton identifies fecal contamination to be a spiritual and bodily pollutant to basic human perceptions: “Holiness seems to require wholeness and freedom from blemish. Dirt defiles, and bodily evacuations, in particular, whether mucous secretions, menstrual discharge, or feces, have been universally regarded as spiritual pollutants.”⁴³⁴ And, as detailed earlier, excrement was a serious environmental pollutant as well. On another intuitive level, however, excrement is a combination of food (presumably non-toxic) and gastrointestinal secretions used to break that food down, so it makes little sense that it would effectively poison one’s body if not evacuated immediately.

But while it lasted, the autointoxication fad was hardly limited to alternative health doctors or unlicensed quacks. “[C]onventional physicians and researchers were at the forefront of developing the principles of autointoxication,” according to medical historian Micaela Sullivan-Fowler.⁴³⁵ Perhaps the first person to use the word “autointoxication” specifically to refer to poisoning via excremental putrefaction was a

⁴³⁴Whorton, *Inner Hygiene*, 9.

⁴³⁵ Micaela Sullivan-Fowler, “Doubtful Theories, Drastic Therapies: Autointoxication and Faddism in the Late Nineteenth And Early Twentieth Centuries,” *Journal of the History of Medicine and Allied Sciences*, 50:3 (1995: July) 364.

French doctor named Charles Bouchard,⁴³⁶ who in 1887 wrote a book called *Leçons sur les auto-intoxications dans les maladies*. In it, he claimed that “Man is in this way constantly living under the chance of being poisoned; he is always working toward his own destruction, he makes continual attempts at suicide by intoxication. And yet this intoxication is not realized, for the organism possesses numerous resources which enable him to escape the intoxication which is always threatening.”⁴³⁷ Bouchard felt that the potass and ammonia specifically made excrement toxic.⁴³⁸

Most histories of the idea of autointoxication trace it back to a Ukrainian Nobel-Prize-winning scientist named Elie Metchnikoff of the esteemed Pasteur Institute.⁴³⁹ He wrote a book called *Etudes sur la nature humaine* in 1903, translated as *The Nature of Man*, in which he explained his theories about the harmful toxic putrefaction of fecal matter:

The large intestine is the reservoir of the waste of the digestive processes, and this waste stagnates long enough to putrefy. The products of putrefaction are harmful. When faecal matter is allowed to remain in the

⁴³⁶ Charles Bouchard, *Lectures on auto-intoxication in disease ; or, Self-poisoning of the individual* (The F.A. Davis Co., 1894). *Lectures on Auto-Intoxication in Disease or Self-Poisoning of the Individual*, Charles Bouchard, Philadelphia, F. A. Davis Company, 1906. Second Edition (1st, 1894).

⁴³⁷ *Ibid.*, 15.

⁴³⁸ *Ibid.*, 144.

⁴³⁹ These histories include Sullivan-Fowler’s; “Intestinal Autointoxication: A Medical Leitmotif.” by Chen, Thomas S. N. M.D.; Chen, Peter S. Y. M.D., *Journal of Clinical Gastroenterology*. 11(4):434-441, August 1989; and “The Ancient Riddle of σήψις (Sepsis),” by Guido Majno in Vol. 163, No. 5, May, 1991 of the *Journal of Infectious Diseases*. Chen and Chen specifically cite Bouchard in 1884.

intestine, as in cases of constipation, a common complaint, certain products are absorbed by the organism and produce poisoning, often of a serious nature.⁴⁴⁰

Metchnikoff also believed that the “colon was a useless appendage, a vestige of a primitive state which evolutionary processes had unfortunately failed to eliminate.”⁴⁴¹

The theories of autointoxication had been popular in the medical community for several decades, but Metchnikoff was able to articulate it in more convincing scientific terminology, and his stature in the medical world no doubt contributed to the popularity of the disease.

Although many doctors were skeptical of the autointoxication diagnosis, a venerated organization of medical science would not come down definitively either way until 1913, when the Royal Society of Medicine in London met to discuss “intestinal toxæmia” and openly questioned some of the more severe treatments for constipation.⁴⁴²

Over the course of the next decade, the myth of autointoxication was more or less exposed as simply a myth.

One physician, Walter Alvarez, wrote a famous article in 1919 claiming that most cases his fellow doctors had labeled as autointoxication were actually something else—and occasionally the actual disease from which the patient was suffering had

⁴⁴⁰ Élie Metchnikoff, *The nature of man: studies in optimistic philosophy* (Heinemann, 1903), 73.

⁴⁴¹ John Harvey Kellogg, “Should the Colon be Sacrificed or May It be Reformed?,” *Journal of the American Medical Association* LXVII, no. 26 (1917): 1957.

⁴⁴² Whorton, *Inner hygiene*, 77–79.

constipation as a side effect. His article in the *Journal of the American Medical Association* claimed that autointoxication was not only a bogus diagnosis (he said it may happen in rare cases), but it was in fact *counterintuitive* to think symptoms such as fever, increased heart rate, and dizziness were caused by intestinal poisoning when those same symptoms subsided immediately after a bowel movement.⁴⁴³ He was correct. He was also correct when he wrote that “I feel sure that [the typical symptoms of autointoxication] are caused by the mechanical distension and irritation of the lower bowel by the fecal masses,” noting that patients complain of the same symptoms with various suppositories or rectal plugs.⁴⁴⁴ Another American doctor, Arthur Donaldson, reported in 1922 how he replicated the symptoms of supposed autointoxication by stuffing the rectums of four healthy men with cotton “pledgets soaked in petroleum and dusted in barium”—thus proving that symptoms such as headaches, sweating, and irritability were caused by distension of the colon, and not chemical poisoning.⁴⁴⁵ Judging by the advertising for products that remained on the market for several decades longer, the verdict determined by Alvarez, Donaldson, et al. took quite some time to trickle down to the masses. To make matters more confusing to patients of intestinal ills, those who profited from keeping the fear of intestinal autointoxication alive branded themselves as experts as well.

⁴⁴³ Walter Alvarez, “Origin of the So-Called Autointoxication Symptoms,” *Journal of the American Medical Association* 72, no. 1 (January 1919): 8. He gives credit to fellow skeptics Alonzo Taylor and Adami.

⁴⁴⁴ *Ibid.*, 11.

⁴⁴⁵ Arthur Donaldson, “Relation of Constipation to Intestinal Autointoxication,” *Journal of the American Medical Association* 78, no. 12 (March 1922): 884–888. Originally found referenced in *Inner Hygiene*, 78-79.

It should be noted that constipation is not entirely incapable of causing severe health problems. Coprostasis, or fecal impaction, is a serious affliction that can even in very rare cases be fatal if left untreated. In a normally functioning bowel, the “bolus” is propelled through the intestines by peristaltic waves. But in some cases due to use of certain medications, nervous disorders, or a very rare illness called Hirschsprung’s Disease, the bolus simply does not move through the intestines. One such sufferer of Hirschsprung’s Disease was a 29-year-old man known only as the “balloon man.” He toured in freak shows and circuses until he died one day on the toilet. His autopsy revealed that his death was due to pressure exerted on the heart by his massive distended colon, which weighed 47 pounds at death.⁴⁴⁶ After his death in 1892, his colon was put on display at the College of Physicians in Philadelphia where one can still view it. But cases such as that of “balloon man” were extremely rare.

A look at the percentage of books mentioning certain key terms indicates that constipation was on a steady rise throughout the 19th century. “Costiveness,” a term synonymous with constipation, was more common than “constipation” in 1800, but slowly fell out of favor and was very rarely used by 1900. “Constipation,” however, which replaced “costiveness” in the popular lexicon, steadily rose throughout the first half of the 19th century and spiked twice: in 1882 and again in 1912. This rise in usage indicates that it was in fact a larger perceived problem (and perhaps a larger real problem as well) beginning in 1870s and dropping off precipitously in the late 1910s, soon after

⁴⁴⁶ Alfred Stengel, ed., *American Journal of the Medical Sciences Vol. 118* (Philadelphia: Lea Brothers, 1899), 290.

doctors began to speak out against the belief that one's excrement was toxic while making its normal way through the colon.⁴⁴⁷

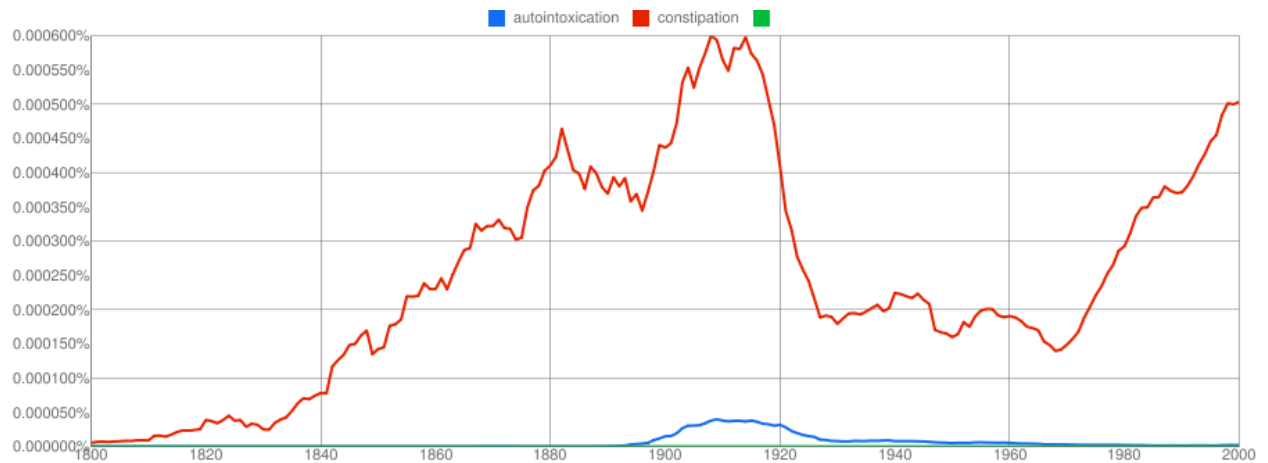


Figure 7. Occurrence of "autointoxication" and "constipation" in books and magazines from 1800 to 2000. The x-axis refers to the year, and the y-axis refers to the percentage of published material in which these terms appear.

Likewise, the use of the term “autointoxication” was used beginning just before the turn of the century and plateaued in the 1910s. After the late 1910s, its use dropped off and by 1930 it was seldom used at all. This arc coincides with the adoption of the term by doctors at the turn of the century and the decline of the term after the discussion by the Royal Society of Medicine in 1913 and the tests of Alvarez and Donaldson in 1919 and 1922, respectively. Surprisingly, frequency of the term “constipation” fell even more sharply between 1915 and 1925. Nevertheless, the appearance of these terms in print media demonstrates that the panic subsided by the 1920s.

⁴⁴⁷ These data were acquired using the “ngram” function in Google Books. It surveys the occurrence of words in a data set of several million books.

3.5 Cures

A great number of health books recommended very simple, sensible remedies for constipation. Famous gynecologist Alice Bunker Stockham's 1883 *Tokology: A Book for Every Woman*, for example, advocated patient and gentle straining, drinking cold water before breakfast, and eating whole wheat products. "A little intelligent care," she writes, "will generally secure a call for defecation at a specified time."⁴⁴⁸ She quotes James Jackson at length from his recently published *Constipation*, and she also quotes a Harvard Professor named Ephraim Cutter, who wrote in the *American Medical Weekly* that white flour is "*foolishly fashionable flour*," and that "to use flour in which the gluten (from the bran) has been removed, is *almost criminal*."⁴⁴⁹ But medical science of the late nineteenth and early twentieth century did not yet have a secure grasp on the workings of the digestive tract. Furthermore, as new media proliferated and quackery in the name of "progress" became lucrative, many new health reformers and physicians offered their own cures for constipation. All of these factors combined with the crescendo of fears regarding constipation led to scores of absurd and quite often harmful cures being shilled in magazines, books, and health journals. Some of the remedies are valid according to today's medical science standards. Many, however, were not, but serve as a testament to the lengths Americans went to rid their bodies of excrement.

⁴⁴⁸ Alice B Stockham, *Tokology: A Book for Every Woman*, Rev. ed. (Chicago: A.B. Stockham & Co, 1883), 58.

⁴⁴⁹ *Ibid.*, 61-2. Emphases in original.

One treatment called Vita-Bac, produced by Bergman Laboratories in New York, sold a milk that contained *B. acidophilus*, a popular remedy in the present day.⁴⁵⁰ Another, named Clayton and Russell's Stomach Bitters, featured on its label a naked muscular man wrestling two wild dogs. It contained 35% alcohol and was popular in "a community that has recently been deprived of its saloons" according to a letter sent to the AMA Fraud division by Dr. Jay Crowley from Rock Rapids, Iowa, an area with a strong temperance union presence.⁴⁵¹ Likewise, Hufeland, the "original Swiss stomach tonic," was 25% alcohol. The AMA determined it had no medicinal value outside of its alcoholic effects.⁴⁵²

Physical exercise was of course a popular prescription for defeating constipation. Physician George Herbert Taylor encouraged his patients to engage in a number of exercises that that would speed the alimentary process along. Some of the exercise descriptions he gave, however, are difficult to decipher. He mentions 12 different movements such as "Wing legs angle backward lying, thighs rotation" and "Forward bent support standing, chin knocking."⁴⁵³ The patient should combine four or five of these movements and repeat them until a bowel movement is achieved.

Bernarr Macfadden also advocated various exercises and related physical activities. In addition to eating sand (he later changed his mind regarding Windsor's

⁴⁵⁰ AMA Fraud archive, Box 69, Folder 8, ad for Vita-Bac.

⁴⁵¹ AMA Box 156, Folder 10.

⁴⁵² AMA Box 156 Folder 10.

⁴⁵³ Geo. H Taylor, *Health by Exercise. What Exercises to Take and How to Take Them, to Remove Special Physical Weakness. Embracing an Account of the Swedish Methods, and a Summary of the Principles of Hygiene* (New York: American book exchange, 1880), 314.

method), Macfadden felt that 5-10 minutes of abdomen slapping would help.⁴⁵⁴ In his book *Constipation*, Macfadden included scores of photos of exercises one can do to flush “the great sewer of the body”⁴⁵⁵—most of these exercises involved his central idea of strengthening one’s core muscles. “The stomach and all the important organs located in the vital centers must be vigorous, must possess normal strength, or severe suffering will ensue,” he wrote in 1903.⁴⁵⁶ Although it is doubtful that one can strengthen one’s organs—as opposed to the muscles surrounding one’s organs—Macfadden’s rhetoric resonated with the readership of one of the largest publishing empires in the country.⁴⁵⁷

Though Macfadden was certainly his generation’s leading advocate for vigor and physical strenuousness as a cure for nearly all maladies, so many Americans joined him on this bandwagon. The spectacle was often part of the appeal. Physician and professor Samuel Goodwin Gant wrote that “[i]f there is anything that writers on constipation are agreed upon, it is the fact that frequency of stools may be increased by exercise.”⁴⁵⁸ Gant also recommended massage with a “*cannon- or bowling-ball, muscle-beater*, or some one of the numerous *massage-rollers*,” adding that “muscle-beaters come with a long whalebone handle, to the end of which is attached a rubber ball, and are designed with a

⁴⁵⁴ Bernarr Macfadden, *Constipation: its cause, effect and treatment* (Macfadden Book Co., 1935).

⁴⁵⁵ *Ibid.*, 391.

⁴⁵⁶ Bernarr MacFadden, “Physical Development Simplified,” *Physical Culture* (March 1903): 157.

⁴⁵⁷ Mark Adams notes that almost 50 million copies of *Physical Culture* were sold just between the world wars. *Mr. America: How Muscular Millionaire Bernarr Macfadden Transformed the Nation Through Sex, Salad, and the Ultimate Starvation Diet*, 1st ed. (New York: Harper, 2009), 5.

⁴⁵⁸ Samuel Goodwin Gant, *Constipation and intestinal obstruction (obstipation)* (Saunders, 1909), 219.

view to stimulate muscular contractions with repeated striking of the muscle with the ball.”⁴⁵⁹ In addition to a number of sports and beatings, Gant recommended “driving over a rough road.”⁴⁶⁰ One nurse’s textbook from 1909 suggested patients indulge in “electricity, gymnastics, [and the] cannon-ball massage of the abdomen,” to cure constipation.⁴⁶¹

The Zander Institute in New York, named after one of the fathers of mechanotherapy Gustav Zander, offered contraptions for aiding bowel movements in men and women. One of which, the “Circular Abdomen Kneading” machine, rotated two wheels in a circle around the user’s abdomen. This machine not only cured constipation by assumedly easing the bolus across the transverse colon, but “reduces hips and abdomen when used,” and is “invaluable to women who are inclined to stoutness.”⁴⁶² A similar device was advertised beginning in 1917 called the Kolon Motor. “By localized massage treatment and exercise of the abdomen and intestines it induces regular and natural action of the colon with none of the injurious effects of physics,” one ad claimed.⁴⁶³ The costive patient attached one end of the Kolon Motor to the wall and the other was pressed up against the abdomen. Upon turning the crank, the plate at the abdomen end turned in a circle, thus massaging the large intestines from the ascending colon to the transverse colon to the descending colon. One advertisement cloaked as an

⁴⁵⁹ Ibid., 225

⁴⁶⁰ Ibid., 221.

⁴⁶¹ Charlotte Albina Aikens, *Clinical studies for nurses: a text-book for second and third year pupil nurses and a hand-book for all who are engaged in caring for the sick* (W. B. Saunders company, 1909), 115.

⁴⁶² “Advertisement, Back Page,” *Physical Culture* 2, no. 2 (November 1999).

⁴⁶³ “Advertisement,” *Popular Mechanics*, May 1917, 177.

article in *Popular Science Monthly* claimed that the Kolon Motor helped keep “the colon sweet and clean” by “exercising the lazy muscles that cause constipation.”⁴⁶⁴

Dr. William Windsor, a professor of anthropology who also made money on matchmaking based on phrenological exams,⁴⁶⁵ marketed the “sand cure” for constipation. In one advertisement in his own book, the caption below a picture of Windsor reads “Dr. Wm. Windsor, ‘THE SAND MAN.’”⁴⁶⁶ Then the pitch reads as follows “The Fairy Tale of your youth described the “Sand Man” as the good spirit who brought sleep to your eye-lids. Dr. Windsor has brought restful sleep to thousands by producing a good digestion, without which perfect sleep is impossible.” Windsor did not simply rely on the double entendre of “sand man,” he also made this claim: “A Tablespoonful of Purified Sand taken after each meal promotes digestion, disinfects the Alimentary Canal, sweetens the Breath and positively cures Indigestion, Constipation, Chronic Diarrhoea, Summer Complaint and all disorders of the Stomach and Bowels.” The sand cure continued for more than a decade in the U.S., with advertisements and testimonials appearing as late as 1907. One alleged patient wrote in to *Physical Culture* to explain how it worked on him. He wrote that it is meant to “scour out the inside of the stomach, opening the pores that the gastric juice might come out the better and assist the

⁴⁶⁴ R.H. Sinclair, “The Lazy Muscles that Cause Constipation,” *Popular Science Monthly*, December 1917, 10.

⁴⁶⁵ Windsor penned a book titled *How To Become Rich: A Treatise on Phrenology Choice of Professions and Matrimony*.

⁴⁶⁶ From William Windsor, *How to become rich: a treatise on phrenology, choice of professions and matrimony* (M.A. Donahue, 1898), 186.

digestion.”⁴⁶⁷ After explaining which types of sand are the best for this anti-constipation treatment, Windsor also made the argument that it was the only real cure for appendicitis and other ailments. He wrote, “Unless you use sand, you cannot have clean bowels. Without clean bowels you cannot have health.”⁴⁶⁸ And for a time, Bernarr Macfadden also personally endorsed the sand cure before warning against it in 1906.⁴⁶⁹

Nonetheless, some alleged cures were relatively innocuous. Diocletian (Dio) Lewis, a prominent nineteenth-century homeopathy advocate, acknowledged the seriousness of constipation but took a lighter approach to solving the problem. He claimed that “politeness,” “good table furniture” or anything “which brings feelings of comfort and pleasure at the dinner table” would work on torpid bowels. He also suggested someone play the Aeolian harp and good conversation at the dinner table, for “a cheerful temper charm the stomach.”⁴⁷⁰ Another likely harmless remedy was the poorly named Kill-Kare Sanatorium in Armonk, New York, that offered “post-graduate remedies.”⁴⁷¹ Likewise, Pepto-Pads, cloth-like pads that adheres to one’s belly for five days, were marketed from at least 1906 to 1919 and determined to be fraudulent by the AMA in 1914. One ad for Pepto-Pads claims that they are made from “common plasters” and without opium.⁴⁷²

⁴⁶⁷ “Letters,” *Physical Culture* XVII, no. 3 (March 1907): 200.

⁴⁶⁸ William Windsor, “The Sand Cure,” *Physical Culture* 19, no. 6 (June 1908): 441–442.

⁴⁶⁹ His warning was in Bernarr MacFadden, “‘Exercises to Strengthen the Digestive Organs’,” *Physical Culture* XVI, no. 1 (July 1906).

⁴⁷⁰ Dio Lewis, *Our Digestion, or, My Jolly Friend’s Secret* (Philadelphia: Geo. Maclean, 1872).

⁴⁷¹ Ad from AMA, from NY Tribune, 3/16/13 Folder 0814-15

⁴⁷² AMA Folder 0816-06

Likewise, the Kneipp “water cure,” popularized by hydrotherapists such as Benjamin Lust, prescribed fairly innocent tasks for curing constipation. It called for a teaspoon full of water with each meal as well as a teaspoon each hour (and normal drinking when thirsty). Kneipp also wrote that one should “[wash] the abdomen vigorously with a handful of water [...] pour fresh cold water on the knees for one to three minutes (knee-gush), an excellent application for producing the moving of the bowels.”⁴⁷³ The water-cure patient might also want to consider lying on “wet sheets” a few times a week. Although many offshoots of the Kneipp Cure included Jackson’s various remedies and the enema, the original hydropathic cure was much less intrusive.

Many remedies straddled the fence between constipation curing and sexually gratifying. Dr. Young’s Rectal Dilators and Dr. Bragdon’s Sphincter Expanders, for example, appear remarkably similar to modern sex toys. While some letters were published that expressed sincerity in the effects of these tools, it is of course possible that there was a shadow market who purchased these items purely for sexual gratification. It is also quite possible that Drs. Bragdon and Young used the constipation craze to market their sex toys under the radar of Anthony Comstock. Young’s dilators were sold in packages containing four different sizes. Dr. Bragdon’s Sphincter Expanders were virtually the same, though he patented his product much later, in 1912. The idea was that the dilators worked the muscles of the rectum to the point where they could expel excrement at will. As soon as the patient masters the smallest size, he or she “graduates”

⁴⁷³ Sebastian Kneipp, *The Kneipp Cure* (Kneipp Cure Pub. Co., 1896).NYNY translated from “Meine Wasserkur.”

to the next size. “When ready to go on to the next larger size, it is best first to use for a few minutes the same size you have been using, inserting and withdrawing it a few



Figure 8, Advertisement for Dr. Young's Rectal Dilators. Image found at thequackdoctor.com

times.”⁴⁷⁴ Another brand, the Weirick Rectal Dilator, allegedly functioned in a different way: “It checks nerve waste when it is located in the rectal orifice; profoundly accelerates the capillary circulation of the blood and strengthens the action of the heart, lungs, stomach, and other vital organs.”⁴⁷⁵

Perhaps that is why Weirick’s product cured asthma and rheumatism in addition to constipation. What historian James Whorton calls the “unhappily named” Veedee vibrator

was a hand crank vibrator that bore a striking resemblance to the hand crank vibrators

created before and after it that were intended for use in curing women’s hysteria.⁴⁷⁶

Various vibrators were also on the market by the middle of the nineteenth century.

The high end Chattanooga vibrator, for example, was one type of vibrator that was intended for both external and internal use. But there was a good deal of ambiguity from

⁴⁷⁴ From an instructional insert on Dr. Young’s Rectal Dilators.

⁴⁷⁵ David Reeder, *Home Health club : Dr. David H. Reeder’s practical hygienic lectures.* (LaPorte Ind.: Reeder, 1909), 119.

⁴⁷⁶ Whorton, *Inner Hygiene*, 153.

both advertisements and from doctors' accounts as to whether the vibrator was for internal or external use, and for that matter whether it was meant to cure hysteria in women or constipation in men or women. A number of vibrators were intended specifically for women, though virtually all of them were sold under the auspices of health care improvement of one kind or another.⁴⁷⁷ One White Cross electric vibrator advertisement made the claim that in one case it "Cured Constipation of Three Years' Standing."⁴⁷⁸ Another White Cross vibrator ad claimed that "Vibration is Life," and that one could recover health through "scientific manipulation of the organs."⁴⁷⁹ Elco vibrators promised to banish constipation with their "Violet Ray, Vibration, Electricity, and Ozone" vibrators.⁴⁸⁰ Thermalaid, patented in 1920, was an electrified metal rod "attached to electric power sources."⁴⁸¹ It was inserted into the anus with the intent of curing "obesity" as well as "autointoxication" and "declining nerves."⁴⁸² This advertisement, from *Popular Mechanics* in 1920, included a section entitled "Thermalaids are ethical" claiming that this medical tool can be sold to the patient

⁴⁷⁷ For more on the history of the vibrator and its use, see Rachel Maines, *The Technology of Orgasm: "hysteria," the Vibrator, and Women's Sexual Satisfaction*, Johns Hopkins studies in the history of technology new ser., no. 24 (Baltimore, Md: The Johns Hopkins University Press, 1999) .

⁴⁷⁸ From Modern Priscilla, Dec. 1910. Found in Maines, *The Technology of Orgasm: "Hysteria," the Vibrator, and Women's Sexual Satisfaction*, 106–107.

⁴⁷⁹ "White Cross Vibrator Ad," *Popular Mechanics* (October 1915): 151.

⁴⁸⁰ "Elco Electric Health Generators," *Popular Mechanics* (October 1928).

⁴⁸¹ Carolyn Thomas de la Peña, *The Body Electric: How Strange Machines Built the Modern American, American history and culture* (New York: New York University Press, 2003), 163.

⁴⁸² "Thermalaid Ad," *Popular Mechanics* 34 (1920): 72.

because it is harmless—confirming that many of these devices did not go without scrutiny from regulatory agencies and the general public.⁴⁸³

Enemas were also a popular remedy for constipation. Most Americans did not approach the frequency of some enthusiastic enema advocates such as Kellogg, but using an enema was not a great taboo or shame during the nineteenth century. Whorton points out that Queen Victoria used them so often that “her royal druggist could hardly keep them operational.” In the U.S. enemas were also known as clysters and syringes. John Wesley’s book *Primitive Physic* was edited and updated for an American audience in 1858, and it includes a number of “clysters” with various ingredients such as milk, salt, butter, brown sugar, chamomile, and cayenne pepper.⁴⁸⁴ The most prominent enema in advertisements from the time period of this study was the J.B.L Cascade. The “J.B.L.” stood for joy, beauty, and life, perhaps a subtle acknowledgement that it could be used for autoerotic purposes.

The J.B.L. Cascade is essentially a bladder with a nozzle sticking straight up out of it. So rather than having to insert a nozzle and pump with one’s hand, the user could ease down onto the apparatus and the weight of the person on the bladder would inject the liquid into the rectum. Charles Tyrrell, a world traveler whose seemingly incurable illness was cured by an enema, began selling the Cascade in 1894, and received a medical

⁴⁸³ In fact, the AMA investigated the Thermalaid and failed to shut the company down. From Joan Jacobs Brumberg, *The Body Project: An Intimate History of American Girls*, 1st ed. (New York: Random House, 1997), 163.

⁴⁸⁴ John Wesley and H. Gifford, *Primitive physic; or, an easy and natural method of curing most diseases* (Boston: Cyrus Stone Publishers, 1858), 72.

degree from the Eclectic Medical College of New York a few years later to substantiate his authority.⁴⁸⁵ In his *The Royal Road to Health* (which has apparently had at least 260 editions), Tyrrell explains that “the preservation and restoration of health depends entirely upon cleanliness, especially *internal cleanliness*, and to attain that condition we are told is next to godliness, there is nothing equal to water—especially ‘hot water,’ which is the great scavenger of nature.”⁴⁸⁶ His J.B.L. Cascade then is the “perfect” solution because it “rids the process of injection of all its objectionable features.”⁴⁸⁷ Many advertisements for the Cascade feature pictures of the device. Many also rely on expert testimonial. Some also list the names of prominent users of the enema, including U.S. Senator A.P. Gorman of Maryland, Ex-Governor Goodell of Vermont,⁴⁸⁸ and a number of prominent judges, lawyers, and reverends.⁴⁸⁹ In another advertisement, Tyrrell claims that “there is scarcely any known disease for which the “J.B.L. Cascade” may not be confidently prescribed.”⁴⁹⁰ Tyrrell was investigated and reprimanded by the American Medical Association, who called his advertising “highly misleading” and called Tyrrell a quack. Selling a vacuum tube that creates suction on one’s eyeball in order to cure poor eyesight did not help matters for Tyrrell.⁴⁹¹ Eventually, Tyrrell would have to share the stage with other comparable enemas, including Sweet’s Colon Bath and the Dupell

⁴⁸⁵ “The Propaganda for Reform,” *Journal of the American Medical Association* LXVIII, no. 1 (January 1917): 50. Also in Whorton, 128.

⁴⁸⁶ Charles Alfred Tyrrell, *The Royal road to health or the secret of health without drugs* (Tyrrell’s hygienic institute, 1901).

⁴⁸⁷ *Ibid.*, 44.

⁴⁸⁸ Actually he was governor of New Hampshire

⁴⁸⁹ “JBL Ad,” *The Naturopath* 5, no. 4 (April 1904).

⁴⁹⁰ “JBL Ad II,” *Physical Culture* 2, no. 5 (February 1900).

⁴⁹¹ “The Propaganda for Reform,” 50–53.

Internal Bath, each of which features sketches of the product combined with text explaining the “perils of bacterial poison” and the “scientific improvements” they make on other enemas.⁴⁹² The Cascade, however, sold into the 1940s, long after Tyrrell passed away.⁴⁹³

Other remedies were more serious or even injurious than changing one’s diet or pouring water on one’s knees or even cannonball therapy. Most health experts advised against prolonged use of purgatives and laxatives, but they were still widely used in the nineteenth and twentieth centuries, and advertisements for them abounded in magazines and journals. Walter Alvarez, the physician whose 1919 article marked the point at which respectable doctors could no longer slap the label “autointoxication” on any disease, wrote that the use of laxatives and purgatives had increased significantly since public fears of autointoxication became so prevalent.⁴⁹⁴ Benjamin Brandreth (1809-1880) was among the most well-known makers of purgatives in the U.S. in the nineteenth century. His pills are even mentioned in *Moby Dick*. Marketing a product known simply as “Brandreth’s Pills,” Brandreth advertised aggressively and wrote long pamphlets extolling the benefits of his pills over other purgatives. In one 1861 advertisement for his pills is written “if the BLOOD IS PURE THE HEALTH WILL BE GOOD,” and then later “**BRANDRETH’S PILLS SECURE PURE BLOOD.**” A little further Brandreth explains just how this purgative purifies the blood: “Purging with BRANDRETH’S

⁴⁹² “Dupell Ad,” *Herald of Health* (June 1917).

⁴⁹³ Whorton, *Inner Hygiene*, 132.

⁴⁹⁴ Alvarez, “Origin of the So-Called Autointoxication Symptoms,” 8.

PILLS takes out of the body the ‘death principle.’”⁴⁹⁵ Although the term “death principle” is not technically a euphemism, it does stand in for excrement in this advertisement.

One laxative reported to the AMA was called Dr. True’s Elixir, the True Family Laxative and Worm Expeller.⁴⁹⁶ One saline-based purgative that advertised aggressively in the early twentieth century was Anti-Auto-Tox. The New York based company sent pamphlets to doctors and advertised in popular media. One advertisement from *The Medical Record* in 1911 claimed that it worked so well because the sulphates in them were radioactive.⁴⁹⁷ The late-nineteenth-century American would also have been exposed to advertisements for Harter’s Little Liver Pills, Carter’s Little Liver Pills, Analax, Warner’s Log Cabin Liver Pills, and Beecham’s Pills (“they act like ‘Magic’”), among countless more.⁴⁹⁸

Even more injurious, Arbuthnot Lane performed scores of ileosigmoidostomies—operations that removed the entire colon between the ileum and the sigmoid—in order to remove the “kinks” in the intestines that he believed to cause intestinal stasis. Lane was British and performed his operation in England, but many American doctors visited him to witness his technique. John Harvey Kellogg was among them and implied that Lane

⁴⁹⁵ State Historical Society of Iowa. and William Petersen, *The Tribune almanac and political register for 1861: a facsimile reproduction, slightly enlarged, of an 1861 almanac* (Iowa City: State Historical Society of Iowa, 1961), 74.

⁴⁹⁶ AMA Fraud Archive, Box 300, Folder 9.

⁴⁹⁷ AMA, Box 300, Folder 9. Ad clipped from *The Medical Record*, Sept. 23, 1911.

⁴⁹⁸ For a more comprehensive take on laxatives and purgatives, see Chapter 2 of Whorton. Quote from advertisement for Beecham’s in *The Records of Living Officers of the U.S. Navy and Marine Corps* (L. R. Hamersly & co., 1898), 6 of Advertisements.

performed too many of these procedures; Kellogg felt that 90% of the cases of autointoxication “may be made well and maintained in good health by the thoroughgoing and persevering application of measures of treatment which wholly exclude surgical procedures.”⁴⁹⁹ He added that the “last ten years will be known in medical history as the colectomy era.”⁵⁰⁰ Lane’s procedure certainly faced considerable opposition both in England and in the U.S. Still, by 1916 in the U.S., Charles Mayo—a very well respected surgeon and co-founder of the Mayo clinic—wrote in the *Journal of the American Medical Association* that there is “just enough truth in [Lane’s] theory and sufficient that is not true to require years to standardize the diseases and conditions between the border lines of medicine and surgery.”⁵⁰¹ While Mayo advised against colostomies for simple constipation, he and the top journal in the field of medicine were still unsure of the validity of ileosigmoidostomies in treating autointoxication. Mayo claimed that in a 17-year period leading up to the article, “the right half of the colon was resected for tumors, disease and stasis in 235 cases, with an operative mortality of 12.5%.”⁵⁰² John Bottomley, a surgeon practicing in Boston around the same time, boasted of performing ileosigmoidostomies on ten of his patients suffering from arthritis (as a result of autointoxication). Seven of the ten of his patients felt no relief from joint pain (four got

⁴⁹⁹ Kellogg, “Should the Colon be Sacrificed or May It be Reformed?” 1958.

⁵⁰⁰ *Ibid.*, 1959.

⁵⁰¹ Charles Mayo, “Removal of the Right Colon: Indications and Technic,” *Journal of the American Medical Association* LXVII, no. 11 (September 1916): 779. Incidentally, both Mayo and Kellogg found one culprit of constipation to be a poorly functioning ileocecal valve connecting the small intestine to the colon. Kellogg even created an artificial ileocecal valve.

⁵⁰² Mayo, 783.

worse), and one of the ten was effectively cured—“I wish I knew exactly why,” wrote Bottomley.⁵⁰³

While the ileosigmoidostomy was the most severe treatment administered for constipation, scores of other treatments capitalized on a nation frightened of their own excrement. Doctors routinely claimed falsehoods such as 90% of all illnesses stem from constipation, so the stakes were high for patients. If curing constipation could also cure baldness, satyriasis, hysteria, tuberculosis, etc., spending \$200 on a Zander machine or \$15 on a set of rectal dilators or a cannonball was not so absurd. Many fortunes were made on the intuitive—yet incorrect—notion that retention of excrement was poisonous. Some of the dangerous cures severely hindered the quality of life of the patients. Among the most innocuous of the cures were the ones that tapped into the spirit of the machine age and tended to treat the body as a perfectible mechanism.

3.6 The Body and Efficiency

Though Kellogg was not as convinced as Metchnikoff or Lane that the colon was “a dangerous and useless portion of the anatomy that should have been left behind thousands of years ago,” he was willing to entertain that possibility.⁵⁰⁴ As the apparent location of so much suffering and misery, the colon was an easy target for those looking to place blame on the incompletely evolved human anatomy. Plus it produced excrement—the cause of widespread disease outbreaks, the most offensive natural human

⁵⁰³ John Bottomley, “The Value of Ileosigmoidostomy and Similar Procedures in the Treatment of Chronic Multiple Arthritis,” *Journal of the American Medical Association* LXVII, no. 11 (n.d.): 784.

⁵⁰⁴ *Ibid.*

creation, and the perfect manifestation of the inefficiency of our bodies. This inescapable fact that humans produced excrement created a real psychological tension. After all, as historian Samuel Haber points out, the Progressive Era was a time when the value of efficiency permeated all significant parts of society, from personal life to bureaucracies and from businesses to government.⁵⁰⁵ He writes

The progressive era is almost made to order for the study of Americans in love with efficiency. For the progressive era gave rise to an efficiency craze—a secular Great Awakening, an outpouring of ideas and emotions in which a gospel of efficiency was preached without embarrassment to businessmen, workers, doctors, housewives, and teachers, and yes, preached even to preachers.⁵⁰⁶

Added to that list should be anyone concerned with the body and human digestion. This group would be continually frustrated by their eagerness to make digestion an efficient process and the inability to do so. The following sections detail how this tension played out. On the one hand, Americans felt compelled to move toward civilization in all moral and social matters. On the other hand, civilization expressed via inactivity and manners was clearly one of the causes of constipation and suffering. Furthermore, given the progress achieved through industrialism and the greatness of machines, it made perfect

⁵⁰⁵ Also see Robert H Wiebe, *The Search for Order, 1877-1920, Making of America* (New York: Hill and Wang, 1968), 146–7, 154, 170, 188.

⁵⁰⁶ Samuel Haber, *Efficiency and Uplift; Scientific Management in the Progressive Era, 1890-1920* (Chicago: University of Chicago Press, 1964), ix.

sense that men and women alike tried to fashion their own bodies into machines, or at the very least to look to machines as a useful metaphor for ourselves.

Heightened fear of human excrement poisoning the body was no doubt a result of the new fears propagated by germ theory as well as old fears of noxious miasmas. The belief that miasmas could cause harm to the smeller traces back at least as far as Hippocrates, but subsided in the centuries before the nineteenth century. Benjamin Franklin's flippant essays about flatulence suggest that miasmas were not considered with the same gravitas as they were in the late nineteenth century. The confluence of urbanization, industrialization and its accompanying messes, and the cholera and typhoid outbreaks led to a more serious consideration of the role of miasmas. But this exaggerated fear was also a result of the new cultural attitudes about efficiency and waste. The machine-heavy industrial revolution and the new focus on business during the Gilded Age brought about a shift of consciousness in terms of what efficiency is and what role waste plays within that paradigm. In her study of the modern American relationship with electricity, historian Carolyn de la Pena identifies the late nineteenth century as the period when the body-as-machine metaphor became ubiquitous.⁵⁰⁷ "Such human-machine comparisons were not new, but they did represent a fundamental shift in how individuals viewed their physical frames," writes de la Pena.⁵⁰⁸ This shift can be seen in the way bodies are represented in health magazines, and also in the way the body was treated by industrial revolution icons such as Frederick Winslow Taylor, who was "at

⁵⁰⁷ De la Pena, *The Body Electric*, p. 23.

⁵⁰⁸ Peña, *The Body Electric*, 24.

the very center of the efficiency craze.”⁵⁰⁹ Often considered the founder of scientific management, Taylor revolutionized the efficiency of industrial work by transforming the body of the human worker into a mechanized being. “Maximum productivity,” he wrote, could only be accomplished with “the smallest combined expenditure of human effort.”⁵¹⁰ Taylor began implementing his scientific management theories in the 1880s and 1890s, but his influence in American culture was vast, and his efficiency-based doctrines quickly spread across the spectrum of business and labor. Between 1900 and 1910 there were already hundreds of books written on business management.⁵¹¹ Frank Gilbreth used Taylor’s ideas of scientific management and more directly applied them to human motion, assuring the business class that by making employees operate more like machines, he could save them a great deal of money. And the very point of Taylorism and its many parallel projects in business, the factory, government, etc., was to eliminate waste: wasteful motions, wasteful ingredients, and wasteful employees.

Naturally, then, in this socio-cultural context, Americans reevaluated their bodies on similar grounds. Zander machines were created to build muscles more efficiently, inventions such as the bicycle were popularized in order to move the body more efficiently, and of course many Americans considered how to digest their food more efficiently, without as much waste. Many Americans grew frustrated that their bodies performed so imperfectly, producing not only waste, but a waste that was repulsive and

⁵⁰⁹ Haber, *Efficiency and Uplift; Scientific Management in the Progressive Era, 1890-1920*, x.

⁵¹⁰ Frederick Winslow Taylor, *The Principles of Scientific Management* (Harper & Brothers, 1911), 11–12.

⁵¹¹ Richard Hofstadter, *The Age of Reform: From Bryan to F.D.R* (New York: Knopf, 1965), 243.

required a great deal of resources to dispose of properly. Already in 1870 the architect and Unitarian reverend Charles Brigham wrote that “[the stomach] should be treated as a machine with nice adjustments, and not merely as a receptacle for the waste material of the satisfied palate.”⁵¹² Brigham’s metaphor would become commonplace in health manuals and books by the height of the Progressive Era.

As literature critic Cecilia Tichi notes, industrial culture was reflected in wider culture in a variety of ways. From its toys to its art to its writing, American culture in the late nineteenth and early twentieth century often imitated the aesthetics and the ideologies of the industrial world.⁵¹³ And as Rabinbach points out in *The Human Motor*, the body/machine metaphor has existed for many centuries, popularized especially by Descartes and his human machine.⁵¹⁴ Edward Bellamy’s *Looking Backward* from 1888 is an example of the utopian literature that exalts these notions of efficiency and minimized waste that became so important during this period. The rejection of waste and the elevation of efficiency as a prime social virtue was a major theme in Bellamy’s utopic future precisely because it was becoming such an important virtue in the society around him. German physicist Hermann Von Helmholtz, a father of 19th century thermodynamics theory, also contributed to Long Progressive Era attitudes on the body/machine metaphor significantly with the idea that the universe was a system inescapable destined for energy loss via entropy. George Beard, who coined the term

⁵¹² Brigham, “The Unbounded Stomach,” 116.

⁵¹³ Cecelia Tichi, *Shifting Gears: Technology, Literature, Culture in Modernist America* (Chapel Hill: University of North Carolina Press, 1987), Introduction.

⁵¹⁴ Anson Rabinbach, *The Human Motor: Energy, Fatigue, and the Origins of Modernity* (New York: Basic Books, 1990), 1–2.

neurasthenia in 1869, was among a generation of physicians in the later nineteenth century who turned to German scientists for explanation of the natural world.⁵¹⁵ His idea that neurasthenia was due to a “depletion of nerve force” was influenced by Helmholtz’s writings on entropy from a few decades earlier.⁵¹⁶ Beard found human activity such as masturbation to be essentially a non-productive and wasteful activity that sapped the human’s “nerve force.” The role of human waste in these equations of efficiency was rarely stated explicitly, but the message was clear enough—the body functioned as any other system in the natural world or machine and has a finite amount of diminishable energy. The two groups of people who were particularly vulnerable to this affliction were businessmen and women, providing an obvious reason for doctors such as David Reeder that these same groups were the most constipated.⁵¹⁷

James Whorton claims that industrialism had a profound impact on the American perception of physiology and vice versa. Therefore, proper digestion and the regular bowel movement served to assuage their fears, providing “assurance that the rapid and disturbing transformations sweeping through society could be kept under control and the process made predictable.” Constipation, then, “was grit in the gears, a jamming of the body factory’s machinery. The unrestricted operations of a laissez-faire system were as much to be desired in the animal economy of the bowels as in the marketplace.”⁵¹⁸ From

⁵¹⁵ Charles Rosenberg, “The Place of George M. Beard in Nineteenth-Century Psychiatry,” *Bulletin of the History of Medicine* 36 (1962): 246.

⁵¹⁶ *Ibid.*, 249

⁵¹⁷ David Schuster, “Neurasthenia and a Modernizing America,” *Journal of the American Medical Association* 290, no. 17 (2003): 2327–2328. Reeder, *Home Health Club*, 119.

⁵¹⁸ Whorton, *Inner Hygiene*, 38.

Whorton's perspective, then, constipation not only caused anxiety that the victim was poisoning him or herself, but that costiveness was also a reminder of the dangers the industrial age posed for the late-nineteenth century American. Excrement in this equation was all the more considered as a bodily *and* a social waste.

If the object, excrement, in our case, was determined to in fact be waste, then it made sense to eliminate it as quickly as possible, both from the human body and then from the immediate environment. Seeing as human waste was no longer being used on a large scale as a fertilizer, few had the foresight as Solomon Schindler did in his sequel to Bellamy's *Looking Backward* to make use of it somehow. Tichi explains that this social and cultural disdain for waste was reflected in literature via a popular novel called *Waste* by Robert Herrick, in poetry via Eliot's *The Waste Land* (1922) and also in modernist poetry's turn from the prolix flowing verses of Whitman to the lean, efficient lines of William Carlos Williams.⁵¹⁹

For so many Progressive Era Americans, then, disease was an effect of an inefficient system. Benedict Lust wrote in his introduction to Arnold Ehret's essay on constipation that "Disease is Nature's effort to rid the body of disease matters and eliminate waste from the system."⁵²⁰ In other words, we have "disease matters" in our systems, be it from diet or lifestyle, and the central purpose of the digestive system is to treat it as waste and evacuate the bowels of that disease/waste. And Fletcher claimed that

⁵¹⁹ Tichi, *Shifting Gears*, 63–67.

⁵²⁰ Lust, Introduction of Ehret, *Definite Cure of Chronic Constipation Also Overcoming Constipation Naturally*.

conquering the diseased state Americans were in was a matter of “teach[ing] ordinary persons how to become chauffeurs of their own corpmobiles.”⁵²¹

Many health experts used the analogy of the city or the municipal sewer systems being rapidly built at the time to understand the human body. Benedict Lust wrote that “Constipation is a blocking-up of the human ‘sewerage system’ and makes of man a ‘walking cesspool!’ Can you think of anything more repulsive than forced retention within the body of putrid, decaying, germ-laden ‘sewerage?’ Would you willingly reside beside an open cesspool? *Most certainly NOT!* And yet this is exactly what the constipated individual is doing.”⁵²² One advertisement from 1900 for the J.B.L. Cascade also made the body-as-city and alimentary canal-as-sewer analogy:

It is known that seven-tenths of all disease arises from the retention of foreign matter in the human system; also that the greatest part of this waste is held in the colon, which is Nature’s sewer. Hence the flushing of this sewer removes the greatest cause of disease. While immeasurably the best treatment for constipation, indigestion, etc. there is scarcely any known disease for which the “J.B.L. Cascade” may not be confidently prescribed.⁵²³

⁵²¹ Green, *Fit for America*, 285.

⁵²² “Overcoming Constipation Naturally,” Lust, from Ehret, *Definite Cure of Chronic Constipation Also Overcoming Constipation Naturally*, 14–15.

⁵²³ “JBL Ad III,” *Physical Culture* II, no. 5 (February 1900).

And James Jackson as early as 1868 made the same analogy to help the reader better understand their digestion:

Sewer gas in dwellings, or escaping into the streets, in quantity, is well known to have caused single cases of diphtheria, spotted fever, etc., as well as epidemics of these diseases. Should not, also, the utmost precaution be taken to secure perfect drainage and sewerage for these human temples, if we would avoid sickness and untimely death, and their attendant evils?⁵²⁴

Although the body-as-city metaphor differs from the body-as-machine metaphor, the rhetoric surrounding municipal sewerage certainly used the terminology of efficiency.

During the Long Progressive Era there were many health figures such as Dr. Alcinous B. Jamison, one of the early twentieth century's many enema enthusiasts, who advocated taking enemas at least twice daily. During this period, from roughly 1890 to 1920, when fears of autointoxication abounded and many men concerned themselves with manipulating the human body to train it to run more efficiently, more like a machine, there were several experiments attempting to make excrement odorless, and perhaps to prevent excretions altogether. Horace Fletcher was one of the first to extol his own neutral-smelling feces, attainable through his method of very thoroughly chewing each bite of food. Frequency of bowel movements is not important in Fletcher's scheme;

⁵²⁴ Jackson, *Constipation: Its Causes and Treatment*, 7.

“[t]he true test of healthy Z,⁵²⁵ is absence of odour and completeness, ease and cleanliness of delivery.”⁵²⁶ Fletcher, who was, along with John Harvey Kellogg and economist Irving Fisher, one of the founding members of the Health and Efficiency League of America (not to be confused with the Taylor Society, the Efficiency Society of New York, or *Efficiency Magazine*)⁵²⁷, also details the “economic digestion-ash,” as he calls his own inoffensive excrement, in his *New Glutton or Epicure* (1899): “There is no stench, no evidence of putrid bacterial decomposition, only the odor of warmth, like warm earth or ‘hot biscuit.’”⁵²⁸ He goes on to say that this “digestion-ash,” left for five years, simply disintegrates and is “lost” or gone. The implication of Fletcher’s claim is that if one eats properly and if the corporeal machine we use functions properly, there will be, ultimately no waste, or at least no trace left of our vulgar corporeality. The body’s digestive system nears, in other words, perfect efficiency.⁵²⁹ When excess food is taken in and remains too long, “you prostitute your stomach” for the sake of gluttony. Fletcherism’s converts was a “who’s who” of cultural elites at the beginning of the 20th century. Converts included William and Henry James, Bernarr Macfadden, John D. Rockefeller, Upton Sinclair, Henry Bowditch, and Leonard Wood, proving that

⁵²⁵ “Z” is called such because it is the “end-point of digestion” (p. 12) and also because he believes that the body’s natural position for defecating is squatting, or in a “Z” shape.

⁵²⁶ Fletcher, *The A. B.-Z. of Our Own Nutrition*, 11.

⁵²⁷ For more on these organizations, see Haber, 72-74. Haber notes that the Efficiency Society of New York was headed for a time by Melville Dewey (creator of the Dewey Decimal system) who sometimes spelled his name “Melvil Dui” to be more efficient.

⁵²⁸ Horace Fletcher, *The New Glutton, or Epicure*, A.B.C. life series (New York: F. A. Stokes company, 1903), 145.

⁵²⁹ Fletcher describes a type of perfectly efficient digestive system seen in only one member of the animal kingdom so far as this author knows. An eyelash mite called the demodex has no rectum or colon because the oils it imbibes from our eyelashes (and from the hair of some animals) is fully digested and used.

Fletcherism, though certainly a fad, was a fad that spread throughout society and had a lasting impact on the way Americans thought about food.⁵³⁰

Hereward Carrington, like Jamison an occult enthusiast and health reformer, took Fletcher's dream of odorless excrement one step further and determined that it is possible—via perfect nutrition and portioning—that defecation need not exist at all. Horrified by the images of the bowel described by Jamison as a foul sewer filled with putrefying matter and “bacterial poisons,” and troubled that our “beautiful form” is besmirched by this dreadfulness, Carrington wrote in his *Vitality, Fasting and Nutrition: A Physiological Study of the Curative Power of Fasting* (1908) that theoretically one need not produce any excrement at all!⁵³¹ As one of the many health experts (Kellogg and Macfadden among them) around the turn of the century who advocated fasting in order to cleanse the body and as a self-professed psychic, Carrington was a likely candidate for taking Fletcher's prescription for efficient dieting to an impossible level.

According to Jamison's *Intestinal Ills*, a big influence on Carrington, enemas should be incorporated into daily practice. Unlike for Fletcher, whose “ash” could be passed every 6-10 days, two or three times a day was quite normal for Jamison since “[m]an is the only creature that has formed the habit of making a fecal cesspool out of his large intestine; hence, his diseases of many varieties.”⁵³² And speaking to the potential waste of time and space hazards associated with taking two to three enemas per day,

⁵³⁰ Green, *Fit for America*, 285-303.

⁵³¹ Hereward Carrington, *Vitality, fasting and nutrition: a physiological study of the curative power of fasting, together with a new theory of the relation of food to human vitality* (Rebman company, 1908), 407–408.

⁵³² Jamison, *Intestinal Ills*, 252.

“making a reservoir of the lower bowels is not a time-saving habit, but, on the contrary a breeder of many poisons.”⁵³³ Jamison also expressed via poetry his attitude about the way excrement trapped in the colon for more than 12 hours caused the body to deteriorate. Below is one of the very few examples of poetry about excrement from this period.⁵³⁴

BEAUTY'S FALL.

It was an image good to see.
With spirits high and full of glee,
And robust health endowed ;
Its face was loveliness untold,
Its lines were cast in beauty's mold ;
At its own shrine it bowed.

With perfect form in each respect.
It proudly stood with head erect
And skin surpassing fair ;
Surveyed itself from foot to head.
And then complacently it said :
“Naught can with me compare.”

When lo the face began to pale,
The body looked too thin and frail.
The cheek had lost its glow ;
The tongue a tale of woe did tell.
With nerves impaired its spirits fell ;
The fire of life burned low.

In the intestinal canal
Waste matter lay, and sad to tell,
Was left from day to day ;
And while it was neglected there
It undermined that structure fair.

⁵³³ Ibid., 253.

⁵³⁴ Another example could be Twain's humorous poem about flatulence titled “1601.”

And caused it to decay.

The doctor's words I would recall
Who said: "Neglect precedes a fall,"
And verily 't is true;
For ye who disregard your health.
And value not that precious wealth.
Will surely live to rue.⁵³⁵

Only in the fourth stanza is it clear that Jamison's poem is about this maiden's failure to fully evacuate her bowels. At that point he makes the relatively bold step (for a poem) of identifying the excrement, as "waste matter," laying in the "intestinal canal" "left from day to day." In the fifth stanza, the constipation is simply named "neglect" and then "disregard." Ignoring the calls of nature and apparently neglecting to take enemas, according to Jamison, caused this embodiment of physical and formal perfection to wither and "decay." Dr. Jamison's theory behind autointoxication was that the feces ended up poisoning all nearby organs, and that these organs desperately attempted to perform what he called "vicarious defecation." Through vicarious defecation organs apparently simulated the flushing out of poisonous bacteria and gave the patient and the doctor the faulty impression that the organ—which is in essence experiencing a secondary poisoning—is the primary point of infection.⁵³⁶ Apparently the organs of the muse in "Beauty's Fall" were not able to vicariously defecate fast enough to recover from her constipation.

⁵³⁵ Jamison, *Intestinal Ills*, vii.

⁵³⁶ *Ibid.*, xv.

Physician William Whitty Hall took a very common-sense approach to the matter of digestion and defecation. For him, proper defecation was a matter of mathematics:

Three fourths of all our ailments occur, or are kept in continuance, by preventing the daily food which is eaten, from passing out of the body, after its substance has been extracted by the living machinery, for the purpose of renovation and growth. A healthy laboring man will eat daily two pounds of solid food, of meat, bread, vegetables and fruit; these two pounds, if brought together in one heap, would fill to overflowing the largest-size dinner-plate, and yet there are myriads of grown-up men and women to whom the idea has never occurred, that if this mass is retained in the body, day by day, inevitable harm must accrue. The question, "What becomes of it?" seems never to have occurred, or to have been definitely or intelligently answered. If a man eats two pounds daily, near two pounds daily must in some way or other pass from his body, or disease and premature death is a speedy and inevitable result.⁵³⁷

In other words, if the "living machinery" that is the alimentary canal somehow doesn't produce the same weight of food it took in, some of that food is hiding somewhere, rotting, and poisoning. When the digestive tract does not work with perfect efficiency, Hall seems to say, a person will die or be stricken with disease.

⁵³⁷ Hall, *Health and Disease*, 6–7.

Herald of Health editor and physician Martin Luther Holbrook⁵³⁸ was concerned about excremental efficiency in a slightly different way. Bothering him was the fact that analyses of excrement showed that the human digestive system was not digesting all of the food it took in. Writing in 1888, he claimed that

Good digestion is at the base of perfect nutrition. The best food in the world, imperfectly digested, will not be so useful to the animal body as the poorest food well digested. But the digestion of no animal is quite perfect. If it were, then the excrement which passes away would not contain undigested substances. Now this is not the case. The excrements of all animals furnish food for multitudes of insects, and birds feed with avidity on the dung of grain-fed horses and cattle, as farmers well know.⁵³⁹

Holbrook was very concerned with making digestion as efficient as possible. He even included a table in his book *Eating for Strength* showing a number of different foods and how much of those foods go through the digestive system intact, or as he put it, the “Amount of solid food residue passing away from the body by the alimentary canal.”⁵⁴⁰ According to his data, we should be eating mostly sugar and rice and very few vegetables. Presaging Fletcher by more than a decade, Holbrook also stated that the first method to achieving “perfect digestion” is mastication.

⁵³⁸ He named his son Dio Lewis Holbrook after Dioclesian Lewis.

⁵³⁹ Martin Luther Holbrook, *Eating for strength: or, Food and Diet in their Relation to Health and Work*, (M. L. Holbrook & co., 1888), 53.

⁵⁴⁰ *Ibid.*, 54.

If this is not accomplished much of the food is not brought under the influence of the digestive juices and so is lost. Count Rumford calculated that one-fourth less food is required if it be perfectly masticated. [. . .] It has been stated that Mr. Gladstone is so impressed with the importance of perfect mastication that he makes a practice of himself, and has taught his family to do the same, of giving each mouthful thirty-two bites—one for each tooth in a perfect mouth. It is no wonder that he is able to perform such an amount of intellectual labor.⁵⁴¹

Also to the end of perfectly efficient digestion, Holbrook was nearly a century ahead of his time in starting a not-so-efficiently named “Eat-Your-Food-Slow-Society” with his friend Professor E.F. Bacon. Holbrook was the president of the club and they emphasized the idea that “every meal should be a festival of cheerfulness and love.”⁵⁴² They did, however, fine each other when caught eating too quickly, apparently under the logic that time saved eating quickly amounted to nutrients lost during digestion.

Common among all of these authors and health reformers is the notion that the body can perform as efficiently, or nearly as efficiently as a machine, though sometimes with the aid of frequent enemas. In this calculus of nutrition and the body, a normal person’s excrement is in effect determined to be poison. The diseases of the day—cholera, typhoid, yellow fever, etc.—played a role in determining excrement to be

⁵⁴¹ Ibid., 57-58.

⁵⁴² Ibid., 60.

poisonous, but in the formulations of these popular authors and others, the influence of efficiency upon the cultural meaning of excrement is unmistakable.

One major consequence and indication of this era's focus on efficiency is that excrement was refashioned as one of the terms most commonly used for excrement today, "human waste." I have not been able to find a single usage of the term (meant to indicate excrement) before 1867. In 1885 its use spiked and remained high (though not nearly as high as "excrement") for several decades. It is clear from this fact and from the writers mentioned above that excrement went through a semantic transformation during the years of this study. Human excrement was valued at around \$35 per year per person (adjusted for inflation) in 1873, but would be worthless as a commodity by 1890. So on several different levels excrement became waste between 1860 and 1900.

3.7 On civilization

In a quote attributed to C.L.R. James, "American civilization can be summed up in one word: plumbing."⁵⁴³ Historian Martin Melosi highlights the fact that Americans in the 1890s expressed the connection between civilization and the removal of filth in several ways: "The 'White City' of the 1893 Chicago World's Fair and 'Hygeia,' the mythical Victorian city of health, were standards toward which to strive."⁵⁴⁴ Melosi also points to the progressive "City Beautiful" movement that sought to link civic virtue and a clean, pollution-free metropolis.⁵⁴⁵ The corollary to the civilization brought on by the massive

⁵⁴³ Stephen Mennell, *The American Civilizing Process* (Cambridge: Polity, 2007), 65.

⁵⁴⁴ Melosi, *Effluent America*, 41.

⁵⁴⁵ *Ibid.*

plumbing and sewerage project the U.S. was going through, however, was the fear of overcivilization. The danger of an overcivilized populace, according to some prominent Progressive Era figures, was a bunch of effete, weak, and soft Americans who were not procreating fast enough to keep the dominant American race dominant for very long. Native Americans, African-Americans, and dark-skinned foreigners, for example, were considered to live closer to nature, reproduce more, and even defecate more.

In 1899, in a letter to psychologist and social Darwinist G. Stanley Hall, Theodore Roosevelt wrote that “[o]ver-sentimentality, over-softness, in fact washiness and mushiness are the great dangers of this age and this people. Unless we keep the barbarian virtues, gaining the civilized ones will be of little avail.”⁵⁴⁶ Roosevelt was essentially agreeing with Hall, who had been warning his listeners of the dangers of “overcivilization” for some time.⁵⁴⁷ No matter if Hall’s similar critique of American society was based on Nietzsche (who did not share Hall’s racist ethos), Hall’s proclamations of the dangers of overcivilization tapped into the growing fear of neurasthenia, race suicide, and the immigrant menace among white Americans at the turn

⁵⁴⁶ Quoted in Gail Bederman, *Manliness & Civilization: A Cultural History of Gender and Race in the United States, 1880-1917*, Women in culture and society (Chicago: University of Chicago Press, 1995), 100–101.

⁵⁴⁷ See Bederman, 100-101. Hall, who was an admirer of German culture and a reader of the works of Friedrich Nietzsche, was likely influenced by Nietzsche’s parallel of Ancient Greek and German culture in the *Birth of Tragedy* from 1872. In that work, Nietzsche claims that the quality of Greek tragedy depended on the mixture of the Apollinian and Dionysian—or the realm of forms and stasis mixed with the realm of music and intoxication or formlessness. At some point, tragedy lost its Dionysian revelry and formlessness and tragedy became stale, no longer reflecting the human condition. So when Nietzsche wrote that “What did you want, sacrilegious Euripides, when you sought to compel this dying myth to serve you once more. [. . .] because you had abandoned Dionysus, Apollo abandoned you,” he was also leveling a criticism at a contemporary European culture that examined the human condition from a distance, too rationally.

of the century and resonated with people like Roosevelt. The future president embraced the expression of barbarian virtues through “manly” acts and outdoorsy vigor. Within the project of the advancement of the superiority of white civilization, however, there is an obvious contradiction in that one must first embrace certain characteristics of non-white “savages” in order to “rescue civilized manhood.”⁵⁴⁸

A very similar paradox existed for health advocates such as Macfadden and Kellogg, both of whom had fears of race suicide near the center of their health crusades. Part of the project of civilization has been the denial of the body, and specifically excrement. Americans felt that if excrement must happen, it shall be ushered away as quickly as possible with a vast network of porcelain and pipes. Furthermore, highly coded language and rules of manner forbade one from discussing excrement openly. However, as many health advocates came to acknowledge, it was precisely a problem of civilization or overcivilization (via physical inactivity, brainwork, and manners) that was constipating (and hence sickening and killing) Americans at an unacceptable rate. Therein lies the paradox. Thus it was in health journals that the tension broke and relatively open discussion of excrement and defecation took place. So the very same principles of civilization that led to a relatively candid discussion of excrement conversely led to the need to undo that civilization to the degree that Americans could produce proud bowel movements. A closer look at how this paradox played out is indicative not only of the shifting semantic meaning of excrement, but also of the central role excrement played in the turn-of-the-century attitudes toward civilization and race.

⁵⁴⁸ Ibid., 100

Both J. Ellis Barker and John Harvey Kellogg bluntly stated that “Constipation is a disease of civilization.”⁵⁴⁹ Kellogg probably does more to elucidate this paradox than any other one public figure. Here he outlines the impending danger of civilization to any set of intestines:

A stagnating sewer soon becomes an intolerable nuisance. Unfortunately, the average human colon in civilized lands, if not already a menace and a torment, is liable at any moment to become such. As a matter of fact, in the light of modern research, the colon must be held responsible for a large share of the miseries that have heretofore been charged to the account of the stomach.

At times it appeared as though Kellogg did not quite understand the civilizing process as would later be outlined by Norbert Elias: “Among civilized people a strange, false modesty has led to a strange and most harmful neglect of the colon and of proper provision for its care.”⁵⁵⁰ Elias’s 1939 work, *The Civilizing Process* (not translated to English until 1978), was the first major attempt to unpack the relationship between the body (and its attendant wastes) and centuries of shifting European social relations.

⁵⁴⁹ Kellogg, *The New Dietetics; a Guide to Scientific Feeding in Health and Disease*, 72. Barker wrote that “Constipation is *the* disease of civilization.” Emphasis mine. J. Ellis Barker, *Chronic Constipation: The Most Insidious and the Most Deadly of Diseases; Its Cause, Grave Consequences and Natural Cure* (John Murray, 1932).

⁵⁵⁰ Kellogg, *How to Have Good Health*, 396.

The fact that many health experts of the era felt that civilization was to blame for the widespread digestive torpidity is irrefutable. Furthermore, even if not stated explicitly, earlier health reformers such as James Jackson and Sylvester Graham—who blamed refined flour and white bread—implied that civilization and class concerns were at least indirectly responsible for harmful diet choices. It is also important to acknowledge that men such as Kellogg, Jackson, Graham, and Macfadden did not dismiss civilization wholesale. They simply blamed it for escalating certain diet habits and social parameters to an unhealthy degree. Kellogg, Fletcher, and many other health reformers of the early twentieth century depended on deeply entrenched notions of civilization in order to secure their places in popular culture and society in the first place, and Roosevelt certainly felt that civilization was an integral part of the matrix of values and characteristics that separated the Anglo-Saxon core of patriarchs from the masses of inferior immigrants and savages. But if they were to continue to bestow the morals of the “blessings-of-Civilization Trust” upon the rest of the worlds, they would certainly need to conquer their “ruined abdomens” first.⁵⁵¹

Kellogg was especially insistent upon linking the disease of constipation to civilization: “A stagnating sewer soon becomes an intolerable nuisance. Unfortunately, the average human colon in civilized lands, if not already a menace and a torment, is liable at any moment to become such.”⁵⁵² Alcinous Jamison, the New York proctologist

⁵⁵¹ First quote is from Mark Twain, “To the Person Sitting in Darkness,” *North American Review* (February 1901). Second quote is from Richard Wagner, found in Joachim Köhler, *Richard Wagner: the last of the titans* (Yale University Press, 2004), 301.

⁵⁵² Kellogg’s colon hygiene from *How to Have Good Health through Biologic Living*, 394.

mentioned earlier, is one of many other doctors who echoed Kellogg in yoking specifically constipation to the “civilized” world: “Too often criminal negligence or the lack of proper convenience has brought on the habit of using the intestinal canal as a storehouse for dried feces, and the glands and blood-vessels as reservoirs for the absorbed fluid poisons from the feces that have been stored and thus dried. This baneful habit is general throughout civilized communities.”⁵⁵³ And already in 1870 the Reverend Charles Brigham made the same causal connection, claiming that civilization exacerbates costiveness: “Civilization only adds to the gastric burdens of men. Those who dwell in high-ceiled houses to-day, have more cause to envy the ‘hard bowels of the reapers,’ than the satiric poet of Rome.”⁵⁵⁴ And even earlier, William Hall noted that, “[i]t is from the habitual failure to act out this almost intuitive truth [that preventing a stream from flowing is harmful], that three fourths of all the diseases arise, which torture the body, enfeeble the mind, and waste the life of civilized man.”⁵⁵⁵ Over the course of the entire long Progressive Era, then, the notion that certain trappings of the civilized lifestyle should be blamed for either causing or worsening the constipation plague was clear to many.

One natural consequence of this diagnosis was that health reformers turned to the “uncivilized” peoples for wisdom on proper defecation habits. Kellogg cited several missionaries—one in India, the other in Aden (what is now part of Yemen)—who wrote

⁵⁵³ Jamison, *Intestinal Ills*, 15.

⁵⁵⁴ Brigham, “The Unbounded Stomach,” 115.

⁵⁵⁵ From Hall, *Health and Disease*, 6.

to him to tell him that “[p]rimitive people show better sense in relation to care of their bodies and have proper respect for their natural functions.”⁵⁵⁶ The medical missionary in India wrote to say that the priestly cast is in charge of bowel movements and charges fines “in case of neglect.”⁵⁵⁷ The missionary in Aden told him that the natives there had three or four bowel movements per day and tended to “evacuate their bowels” only in the toilet—which was apparently different from other cities and towns in the area.⁵⁵⁸ Kellogg was also advised by a Dr. A.H. Browne that the vegetarian Indian in Amristar have “large, bulky, and not formed, but pultaceous stools.”⁵⁵⁹ Kellogg compares these stools to the gorilla’s, quoting another acquaintance who said that “the stools of the gorilla are large, mushy and practically odorless.”⁵⁶⁰ Odorlessness of one’s feces is most obviously linked to Fletcher and his odorless “ash,” but clearly Kellogg saw it as a virtue as well. Overall, though, the main point of these health reformers is that “primitive” people and animals have bowel habits that the “civilized” class should strive for.

But what was it about civilization that caused constipation? Kellogg blamed a wide array of modern inclinations among the civilized class. He wrote that “[t]he artificial conditions of civilized life, sedentary habits, concentrated foodstuffs, false modesty, ignorance and neglect of bodily needs, have produced a crippled state of the

⁵⁵⁶ Kellogg, *How to Have Good Health*, 396.

⁵⁵⁷ *Ibid.*

⁵⁵⁸ *Ibid.*, 396.

⁵⁵⁹ *Ibid.*, 397.

⁵⁶⁰ *Ibid.*

colon as an almost universal condition among civilized men and women.”⁵⁶¹ Barker claimed it was a matter of Victorian sensibilities, or refinement:

Civilization means refinement. Refinement decrees that it is vulgar to blow one’s nose, although that act is healthy and necessary. It is still more vulgar to cough and spit, or pick one’s teeth. Hence retiring for emptying one’s bowels is considered offensive, disgusting, unpardonable. A refined woman will confess that she would rather die than leave the room. Refined people go to stool so surreptitiously that one might think that that physiological act was a deed of shame.⁵⁶²

Both Kellogg and Barker were right. Kellogg was accurate in blaming everything from the foods they ate to their inactive lifestyles. And Barker keyed into the biggest problem: the fact that excrement was something difficult to even discuss in the first place, and that manners produced shame, especially in women. For well over a century, public spaces have reflected American culture’s unwillingness to accept that women defecate: women’s access to toilets in government buildings, schools, and public businesses has been far worse than men’s access to toilets throughout the nineteenth and twentieth century.⁵⁶³ In retrospect one can blame this disparity in the nineteenth century on the fact that women had less access to the public sphere in general, but comments such as Barker’s,

⁵⁶¹ Kellogg, *The Itinerary of a Breakfast; a Popular Account of the Travels of a Breakfast Through the Food Tube and of the Ten Gates And Several Stations Through Which It Passes, also of the Obstacles Which It Sometimes Meets*, 3.

⁵⁶² Barker, *Chronic Constipation*, 411.

⁵⁶³ *Ladies and Gents: Public Toilets and Gender* (Philadelphia: Temple University Press, 2009), 5. The American Restroom Association is still fighting for greater “potty parity.”

Kellogg's, and Ehret's below suggest a deeper problem with the female defecator. As Collins notes, the woman of status in the nineteenth century was supposed to be "virtuous," "sexless," and "beautiful," a vision starkly different from their role in the 18th century as "morally unreliable descendants of the sinful Eve."⁵⁶⁴ In other words, as the nineteenth century progressed, social pressures encouraged women to mask their bodiliness and were encouraged to live up to their "spiritual" ideals. This conundrum put women in a very difficult place in the nineteenth century: while it was impolite and uncivilized to give any indication that she might defecate by part of the population, another part was blaming her for not defecating enough, thereby producing unhealthy children.

Arnold Ehret takes a unique stance on the matter by blaming pregnant women for intoxicating the developing fetus by eating too much and being constipated. Writing in 1922, he claimed "It is a fact that man, the product of 'civilized' society of the much vaunted 'advanced' twentieth century, is born unhealthy, because his mother, is almost invariably, suffering from constipation."⁵⁶⁵ He went on to rail against civilization and compared men to animals: "On the outside, the man of today is carefully groomed, perhaps unnecessarily and over carefully clean; while inside he is dirtier than the dirtiest animal—whose anus is as clean as his mouth, provided said animal has not been 'domesticated' by 'civilized' man."⁵⁶⁶ He continued by criticizing the "swamps of

⁵⁶⁴ Collins, *America's Women*, 87.

⁵⁶⁵ Ehret, *Definite Cure of Chronic Constipation Also Overcoming Constipation Naturally*, 1.

⁵⁶⁶ *Ibid.*, 3.

civilization”⁵⁶⁷ and the “unnatural” “diet of civilization” that caused the digestive tract to be “literally glued together with sticky mucus and feces.”⁵⁶⁸ Some products catered to this line of thinking as well: Fisher’s Indian Remedy, for example, which claimed to cure everything from constipation to the Spanish flu. One of their advertisements featured a line of white people with poor posture waiting to be treated by an upright Native American in front of a teepee. The headline read “Come back to nature.”⁵⁶⁹

Elias’s 1939 *The Civilizing Process* is a close examination of the growth of civilization in Europe and the consequential rise of manners and taboos governing social life, from table manners to spitting to defecating. These forms of restraint of bodily functions and a willingness to play the game of manners were pathways to the upper classes and power as violence subsided. For instance, Elias tells the reader that the Wernigerode Court Regulations of 1570 announced that “one should not, like rustics who have not been to court or lived among refined and honourable people, relieve oneself without shame or reserve in front of ladies, or before the doors or windows of court chambers or other rooms.”⁵⁷⁰ As time went on and as Europe became even more civilized, however, the social rules became stricter and more refined.

Meanwhile, Dominique Laporte’s *History of Shit*, published in 1978 and translated into English in 2000, argues that the history of French excrement parallels the

⁵⁶⁷ Ibid., 6

⁵⁶⁸ Ibid., 7

⁵⁶⁹ The manufacturer eventually pled guilty to misbranding in 1921 and paid a \$25 fine. AMA. 156-10.

⁵⁷⁰ Norbert Elias, *The Civilizing Process: Sociogenetic and Psychogenetic Investigations*, Rev. ed. (Oxford, UK; Malden, Mass: Blackwell Publishers, 2000), 111.

rise of capitalism and the cleansing of language. He cites two French edicts, both handed down in 1539. One states that all Parisian citizens are responsible for cleaning up their own waste products; that is, they must stop throwing the contents of their bedpans out of their windows in an effort to make the city stink less. The other law stated that all official documents must be written in French rather than Latin. Laporte notes that the coincidence of these two laws—the cleansing of excrement and the cleansing of language in a process by which “language is liberated from excess”—implies that in the regulation of excrement, one may also find the regulation of other elements of civilization.⁵⁷¹

While the processes of civilization, according to Laporte and Elias, were active within Europe since the 15th century, the process was different in the U.S. due to different living circumstances, cultural heritages, and social forces at work. Whereas England was able to maintain enough public dialogue to build proportionately more public restrooms around the turn of the century, the U.S. was not. And whereas German culture features hundreds of nursery rhymes, poems, aphorisms, etc., revolving around excrement, American culture has not.⁵⁷² Furthermore, as later critics have mentioned, the shapes of the toilets are different in the U.S. and across Europe, the restrooms are situated differently and according to different codes, the euphemisms are entirely different, etc. Whatever social developments that occurred in Europe, American technological advances in the form of plumbing, sewerage, toilets, etc., and attitudes about efficiency and the body worked in a continuous feedback loop with the quickly paced advance of

⁵⁷¹ Dominique Laporte, *History of Shit* (MIT Press, 2002), 9. Laporte actually goes well beyond this interpretation in other playful tangents not especially useful to this work.

⁵⁷² See Alan Dundes’s *Life is Life a Chicken Coop Ladder* for evidence of many of these inclusions of excremental prose and poetry in German culture.

civilization in the second half of the twentieth century. So when Barker writes that “[w]e civilized beings are slowly tormented to death by chronic diseases of degeneration, the vast majority of which are almost unknown among primitive races, by diseases which are due in the main to faulty nutrition followed by chronic constipation and auto-intoxication,” he highlights this paradox in the logic of the turn of the century—that the very mechanisms that distinguish them from the lower ilk are the ones that are killing them.

3.8 Sinful Stasis

Even though excrement can be unhealthy in certain circumstances, it was not always thought to be so. Certain metaphysical orders deemed excrement to be holy. According to 19th century amateur anthropologist John Bourke, Buddhists venerated the excrement of the Grand Lama, collecting it “with sacred solicitude to be employed as amulets and infallible antidotes to disease.”⁵⁷³ Bourke also wrote of a small order of Christians, the Stercoranistes (from the Latin *stercus*, or feces), a small group of monks who in 831 AD posited that the Eucharist was subject to digestion like any other food.⁵⁷⁴ In the nineteenth century U.S., however, given the deadly cholera and typhoid outbreaks and the

⁵⁷³ John Gregory Bourke, *Scatalogic Rites of All Nations. A Dissertation Upon the Employment of Excrementitious Remedial Agents in Religion, therapeutics, Divination, Witchcraft, Love-Philter, Etc., in All Parts of the Globe. Based Upon Original Notes and Personal Observation, and Upon Compilation from Over One Thousand Authorities* (New York: American Anthropological Society, 1934) 42. Quoting Conrad Malte-Brun.

⁵⁷⁴ *Ibid.*, 54.

sanitation revolution, it made sense that excrement would be considered unholy if it was incorporated into religious logic.⁵⁷⁵

Deuteronomy 23:12 was used frequently during the Long Progressive Era, mostly by Protestant ministers and sanitarians, to urge Americans to rid their homes of excrement, as it is unholy and impure. Related to civilization yet articulated with different language, late-nineteenth and early-twentieth century Americans quite often used the logic of the Judeo-Christian tradition and passages from the Bible in order to transfigure excrement from something unhealthy or ungainly into something evil. As the common belief was that stagnant excrement could potentially kill someone, the leap to evil was not especially noteworthy in itself. But what was significant was that excrement was now condemned by a very powerful logical system. So if excrement in the home was “evil,” excrement in the bodily temple—even in the colon—would not sit well with some.

James C. Jackson considered the matter of treating an illness to be beyond simple medical treatment. In order to truly recover from ailments such as constipation, or hemorrhoids, one must “partake of His vitality” by becoming “imbued with His spirit, and live as He did.”⁵⁷⁶ In other words, Jackson’s own Protestant beliefs permeated his medical knowledge to the point that he felt illness was a result of lifestyle choices, which were in turn resultant from impure thoughts. He believed strongly in the notion of “bodily

⁵⁷⁵ In a letter Fletcher wrote to Kellogg, he claims that “it may be a good thing to preach religion from a physiological standpoint.” Harvard. Letter November 10, 1919.

⁵⁷⁶ James Caleb Jackson, *Christ as a Physician* (Our Home Pub. Dep’t, publishers, 1882), 15.

holiness,” correcting the common 19th century problem (as he saw it) of giving one’s soul to Jesus and one’s body “over to Satan.”⁵⁷⁷ The extension of this rationale as it applies to excrement is relatively consistent with what the medical professionals of the nineteenth and early twentieth centuries thought anyway: that excrement pollutes the body and is unholy. Elsewhere, Jackson wrote that “This evil [constipation] is allowed insidiously to gain possession and finally to undermine the general health, because of the ignorance of the majority of the people in regard to its dangerous consequences.”⁵⁷⁸ Furthermore, excrement is not something to be “passed” or “excreted” for Jackson. He prefers instead to use a more religious term, writing “This indigestible residue from the food, together with certain elements of waste from the body—the product of excretory functions—constitutes the feces. The office of the colon and rectum is to receive and cast out this material by act of defecation.”⁵⁷⁹ He also describes the body as “the human temple,” further supporting his position regarding “bodily holiness.”⁵⁸⁰ Also consider Alcinous Jamison, who wrote that “Idle substances, like idle minds, have decomposition and the devil for companions” regarding the threat of autointoxication.⁵⁸¹ Jamison implied that excrement withheld in one’s body was the devil’s matter. However, Jamison was not the only one to link body and spirit in this way.

The consideration of excrement as something unholy or even evil is congruent with the abundant use of the passage of Deuteronomy 23:12 in that the body is holy and

⁵⁷⁷ Ibid., 5-6.

⁵⁷⁸ Jackson, *Constipation: Its Causes and Treatment*, 3.

⁵⁷⁹ Ibid., 4. Emphasis mine.

⁵⁸⁰ Ibid., 7.

⁵⁸¹ Jamison, *Intestinal Ills*, 3.

the body's waste products, specifically excrement, are offensive to god. The implication in both examples is that excrement should be evacuated from the body as swiftly as possible and that it should be removed from the vicinity of the body and the home as quickly as possible as well. This religious policy, along with the scientifically justified social policy developing in the late nineteenth century that excrement is best kept out of sight and out of mind via toilets and municipal sewer systems, effectively functioned as a powerful combination in eradicating not only the unhealthy practices using the backyard as a cesspool and letting privy vaults leech into groundwater, but also in ending any hope for the use of excrement as fertilizer on a large-scale level, or, for that matter, of simply a less wasteful system of excrement removal.

This passage from *Home Health Club: Dr. David H. Reeder's Practical Hygiene Lectures* is worth quoting at length for its metaphors alone, but also for the way he brings "God" into his biology lesson and for how he represents excrement as turning harmful and ungodly as soon as it reaches the colon:

The peristaltic motion of the canal, distended and further weakening the membranes until all power is nearly or quite lost. This accumulation of food and death-dealing matter is filled with bacilli, which may be taken up by the lymphatics and conveyed to any part of the system, and wherever microbes are found the tissue in some way suffers from their presence....God in his infinite wisdom has created everything beautiful and good. The clear and limpid waters flow from the mountain stream,

traverse the valleys, and join the sea. The rose and the sweet-scented violet open their petals and shed their fragrance on the air, The majestic oak towers toward the sky and yields a cool shade for the weary traveler. The lower animals, guided by instinct, live naturally fulfilling the laws of their destiny, and are seldom sick. They attain the age allotted to their species and lay down the physical burden, while it may be that even their inner being awaits a higher development. The first principle of life is purity, of whatever kingdom.

How shall the body be kept clean inside? Some writers say that the food becomes refuse and in a bad state of corruption after leaving the stomach and duodenum. But this is a mistake. The absorption of life-giving properties continues through the jejunum and ileum. The content of the colon is refuse matter.⁵⁸²

His larger point is that the body, as created by a Christian god, is beautiful and right because it is pure. Incorporating the logic of Kellogg, Barker, and Ehret, regarding the need to emulate the animals in their defecatory habits, Reeder argues that as soon as the bolus or excrement passes into the colon, it is no longer pure. It must be evacuated immediately lest it corrupt the body.

In case the equivocation between constipation and sin is unclear, Dr. Frank Crane, a Presbyterian minister, clarified the issue. Crane said this in 1916: "Colonics [he means

⁵⁸² Reeder, *Home Health Club*, 35.

people who are constipated] break up happy homes as much as do alcoholics.”⁵⁸³ He goes on to compare constipated people to “whiskey soaks” and then explains how some good-intentioned men go wrong:

A great deal of what we call Sin is due to what the physician calls stasis—an imperfect movement of the intestinal contents. A person may have the highest ideals, the purest aspirations, the noblest intentions; he may be a devotee of uplift literature, he may be instant in prayer and earnest of spirit, and yet wonder why gloom, depression, and fear constantly assail him, and he often as not does not realize that his trials are due to a clogged colon and not to any spirit of evil. If he would get the colon bacilli out of his system his terrible temptations would disappear. If you would know why domestic friction exists, why children are bad, why boys run away from home, why girls seem sometimes possessed of the evil one, why business relations become intolerable, why workmen cannot get along together, why there is dissension in the church, why perfectly sane and sober folks suddenly develop the most outrageous cantankerousness, the cause is not in original sin nor the influence of psychic currents; it is more

⁵⁸³ Quoted in an advertisement for Charles Tyrrell’s products in Edward Shaw, “What is a Colonic and Why?” *American Review of Reviews* 53 (1916). Originally published in the *New York Evening Globe*.

likely to be found in the vicious company of militant bacilli in the colon.⁵⁸⁴

Even though the result is the same, Crane insisted on a theological difference between constipation and sin, but not everyone saw it the same way.

A different James Jackson, one who taught medicine at Harvard for many years in the early 19th century and who wrote a very popular book for medical students called *Letters to a Young Physician just Entering upon Practice* (1855), often referred to constipation as “evil.” “Constipation of the bowels is among the most common evils, as respects health, among the inhabitants of cities,” he wrote in a chapter dedicated to it.⁵⁸⁵ In the first five sentences of this chapter he uses “evil” as a modifier for constipation four times.⁵⁸⁶

In an article called “The Unbounded Stomach,” the Reverend Charles Brigham discussed the misery constipation foists on “the noblest of God’s creations.” Brigham also uses several references to biblical passages that reference digestion:

The stomach is the arbiter of the quality of faith, if not of its quantity. We are not to expect any ‘bowels of compassion,’ [this phrase is from the King James and the American King James versions of 1 John 3:17] when

⁵⁸⁴ Ibid.

⁵⁸⁵ James Jackson, *Letters to a Young Physician Just Entering Upon Practice* (Phillips, Sampson, 1855), 271. Oliver Wendell Holmes Sr. was an admiring student of Jackson’s

⁵⁸⁶ Although the term “evil” was used relatively liberally in the nineteenth century, it is notable that more than half of the time Jackson used the term in his book it was in reference to digestion.

the peristaltic harmonies are too swift or too slow. Dyspepsia stands in the way of a bright gospel, but predisposes to a faith that finds joy in the terrors of the law. Paul was a radical preacher in telling his younger brother to take a little wine for his stomach's sake, more radical than if he had condemned Timothy for his self-distrust. For he knew that many of his own spiritual fears and fightings had come from gastric pangs.⁵⁸⁷

While it was not at all unusual to use the Bible as justification or inspiration for curing constipation and eliminating excrement, Brigham turned to passages others did not. For instance, in the passage below he suggests that the Jonah and the whale parable is a metaphor for costiveness:

A stomach that is made to offend will bring more ready and more pungent convictions of sin, and send the soul to cry out more passionately for speedy salvation. From the inward parts the cry for deliverance comes; and it may be that Jonah's prayer from the fish was an allegory of a soul suffering from the misery of enteritis.⁵⁸⁸

It is also notable that Brigham refers to excrement as "pungent convictions of sin" and to voiding the bowels as "speedy salvation."

Although excrement appears many times throughout the Bible as a metaphor for filth, it is also used as a fuel and a fertilizer in several parts. Notably, the sanitarians and

⁵⁸⁷ Brigham, "The Unbounded Stomach," 114.

⁵⁸⁸ *Ibid.*, 114-115.

health authorities chose only those passages that condemn excrement as evil. To a Christian audience, these declarations amounted to a powerful indictment of one's own excrement in a time when—due to the already existing social conditions and taboos—Americans felt shameful enough of their excrement. It was one thing to feel unclean or unworthy of certain social statuses based on one's bodilyness, and it was another to feel sinful for harboring such evil in one's anus. And that message was just for a Christian audience. Those who were outside of the Judeo-Christian tradition were subject to an even more severe prescriptive excremental narrative that clearly demarcated a racial or ethnic boundary.

3.9 Conclusion

Writing in 1912, one prominent medical textbook stated that “we have been for some years on the crest of a colonic wave, and intestinal toxemia has been held responsible for many of the worst of ills that flesh is heir to.”⁵⁸⁹ But, the authors concluded, “the fad is passing.”⁵⁹⁰ And although it took at least another five to ten years for mainstream medicine to be relatively certain that constipation was not in fact “the most fruitful cause

⁵⁸⁹ Sir William Osler, *The Principles and Practice of Medicine: Designed for the Use of Practitioners and Students of Medicine* (D. Appleton and Company, 1892), 547. This passage appears in the 1912 edition of his book, but not in the 1909 edition. In making this assertion so early, Osler was almost a decade ahead of the rest of mainstream medicine. Osler was a prominent skeptic of the theory of autointoxication, writing early on in his career that “a pipe or a cigar after breakfast is with many men an infallible remedy.” From Michael Bliss, *William Osler: A Life in Medicine* (Oxford; New York: Oxford University Press, 1999), 187.

⁵⁹⁰ Osler, *The Principles and Practice of Medicine*, 547.

of disease among the civilized,” as J. Ellis Barker wrote even as late as 1927, the skeptical strain eventually won out for the most part.

The well-established Progressive Era trends of civilization, efficiency, and Christianity combined with the sanitation movement to significantly alter the status of excrement. In the overall economy of the body and goods in this era, excrement was demoted to not only a waste, but a waste that was considered sinful, poison, and dangerous—even considered dangerous long before it left the body. Although public sanitation, civilization, efficiency, and Christianity were all factors in this shift, the panic was expressed vividly in medical journals, health magazines, advertisements, and in doctor’s offices through the form of “autointoxication.”

The significance of excrement’s social devaluation is two-pronged. First, it justified and made permanent an enormous system of sewerage that has led to the energy-intensive, water-wasting system we use today. The United States has over 2 million miles of sewer pipes buried under ground and uses trillions of gallons of water per day. At the very moment when American engineers, politicians, and bureaucrats were making the decision to spend enormous amounts of money to tear up streets and build expansive networks of sewerage, the matter this sewerage was being constructed to eliminate was cast as sin, poison, and a manifestation of the body’s inefficiency. This chapter has clarified the ways that the constructed body differed from the physiological body and the consequent meanings attached to excrement.

As the next chapter describes, American expansionist bureaucracies used excrement in the late nineteenth and early twentieth century to subjugate people.

Excrement was also racialized in dealing with Native Americans who were adjusting to life on reservation, and it was racialized in dealing with the peoples of the insular acquisitions after 1898. These facts are testament to how deeply racial prejudices permeated Progressive Era society in addition to how important and overlooked excrement has been in this process.

Chapter Four—“Benevolent Civilizers”: Race and Sanitary Imperialism from Native Americans to the New Insular Subjects⁵⁹¹

4.1 Introduction

In 1898, after a long career marketing earth closets, designing municipal sewer systems, consulting on scores of sewer and drainage projects, celebrity sewerman Col. George Waring had lost his job as the Commissioner of Street Cleaning of New York City when Tammany Hall regained power with the election of Robert Van Wyck.⁵⁹² Within a few months, however, the U.S. had defeated Spain and began plans to “civilize” their new territories. The first matter at hand in Cuba was to devise a plan for cleaning and sewerage Havana: outbreaks of cholera and yellow fever prevented Havana from realizing its full potential as a trading port, so the U.S. occupying forces sought to remedy the problem immediately. The logical choice to head this commission was Waring. Even though he’d seen the worst of conditions in nineteenth-century U.S. cities, the Colonel was shocked by what he witnessed in Havana that October. The city had an adequate water supply, but “the surroundings and customs of domestic life are disgusting beyond belief.”⁵⁹³ One specific problem he had with the Cuban domestic life was the cesspit underneath the kitchen that “belches forth its nauseous odours throughout the house.”⁵⁹⁴ Waring offered to solve Havana’s sanitation problems for \$10 million, but contracted

⁵⁹¹ Term “benevolent civilizers” comes from “The Week,” *The Nation*, November 30, 1899, 403.

⁵⁹² James Cassedy, “The Flamboyant Colonel Waring: An Anti-contagionist Holds the American Stage in the Age of Pasteur and Koch,” *Bull History Med* 36 (1962): 173.

⁵⁹³ Robert P Porter, *Industrial Cuba, American business abroad* (New York: Arno Press, 1899), 154.

⁵⁹⁴ *Ibid.*, 155

yellow fever during his stay and died. Although his life and career ended in sad coincidence—succumbing to one of the diseases he sought to eradicate—Waring’s path from domestic celebrity sewerman to sanitary imperialist⁵⁹⁵ is symbolic of the country’s excremental policies during the same period and after Waring’s death. Over the course of the next two decades, the U.S. went to great lengths to investigate, interrogate, and eradicate the excrement and filth of their new colonial subjects.

Similarly, during the late nineteenth and early twentieth century, Anglo-Americans negotiated their own status with those of the Native Americans and the people of the new insular territories. In the middle of the sewerage revolution, great strides in the sanitary sciences, and in the grips of fears about autointoxication, excrement became a central point of conflict and friction as the American health officers immediately sought to reform the defecation practices of the people they encountered. One consequence of these reformations was that the colonial subjects became associated with excrement and filth in the minds of the colonizers, thus reinforcing many of the nativist racial theories popular at the time. Many Progressive reformers felt that these habits could be broken and these people could be civilized, but it was an uphill battle given their “natural” association with filth. Consider this excerpt from an 1899 article in *The Nation* regarding American efforts to reform the Cuban sanitary practices during the post-Spanish-American War occupation:

⁵⁹⁵ The term “sanitary imperialism” was first used in 1927 by political scientist Parker Thomas Moon in reference to the U.S. policies in Cuba and Puerto Rico after 1898.

Reluctance to be civilized and put in sanitary condition appears in various places in Cuba. People are objecting to having their houses entered by health officers, and stand aghast at all the scrubbing and deodorizing and sterilizing that is going on, with themselves as chief victims. They prefer to be left alone with their filth and their deathrate. This seems madness and ingratitude to us benevolent civilizers.⁵⁹⁶

The author's incredulity toward the notion that another country may not be receptive to having their feces inspected and scrutinized points to one of the defining features of sanitary imperialism. Some of the efforts to change the way Cubans related to their excrement even involved fines, prison time, destruction of existing privies, and in some cases public corporal punishment. With very few exceptions, this reformation did not strike the occupying forces as overly invasive, condescending, or motivated by racism—sentiments often manifest by the colonized. Naturally, when someone from an occupying force appears at one's door with a bar of soap, a bucket of lime, and the intention of "civilizing" the home's occupants, those efforts might appear to the occupants as something less than benevolent. As such, the sanitary imperialism that took place from the 1890s through the 1910s is one of the indelible social and cultural legacies of American exceptionalism.

Just as their level of civilization was scrutinized, the morality of these foreigners with different bathroom habits was brought into question. In 1896, on the cusp of the

⁵⁹⁶ "The Week," 403.

American imperial projects, the *Ladies Home Journal* editor Edward Bok acknowledged the existence of American sanitary imperialism while reinforcing the connection between civilization, morality, and proper sanitation. He wrote “Greater strides have been made in sanitary plumbing than in any part of the domestic machinery. The influence with us has been for good, and it is extending to other nations.” He went on to claim that the presence of American tourists in Europe has sped up the European adoption of the bathroom. Of course, none of this would be important if it was not for the consequential proliferation of good morals. “It is very easy to find a direct connection between the cleanliness of a people and their moral standard,” Bok continued.⁵⁹⁷ This popular sentiment was indeed reflected in various newspaper articles, advertisements, and letters written by sanitation officers.

This chapter details the efforts of the American occupying forces in Cuba and the Philippines—and to a much lesser extent Puerto Rico, Hawaii, the Panama Canal Zone—to regulate, reform, and control the excrement of the new colonial subjects. I begin by situating these acts within larger domestic arguments regarding race during this time. I then show how the regulation of Native American defecation habits served as a bridge between the acts of the USSC during the Civil War and those of the health and sanitation forces abroad. As historian Andrew Rotter contends, “The entire human sensorium was engaged in the acts of making and accommodating and resisting empire,”⁵⁹⁸ and the sight and smell of excrement were compelling forms of determining the degree of civilization

⁵⁹⁷ Edward Bok, “The Morals of the Bathtub,” *The Ladies’ Home Journal* 12 (Nov. 1896): 14

⁵⁹⁸ Andrew Rotter, “Empires of the Senses: How Seeing, Hearing, Smelling, Tasting, and Touching Shaped Imperial Encounters,” *Diplomatic History* 35, no. 1 (January 2011): 2.

of the Native Americans and insular subjects. I intend to show that these efforts to control the excrement of “less civilized” peoples constituted a peculiar but potent form of cultural diplomacy. Americans exported, often clumsily, their anxieties regarding the toxic effects of excrement alongside their coarse attitudes on race and civilization. I also wish to show that although history books have tended to ignore or downplay excrement’s role in race relations and imperialism during the Long Progressive Era, it was in fact at the forefront of the minds of those involved.

4.2 Race

The anthropologist Alan Dundes was one of the first academics to connect excrement and race within culture. In *Life is Like a Chicken Coop Ladder*, Dundes closely examines the role of scatological folklore in German culture. It presents scores of excremental poems, songs, riddles, and rhymes, some that go back several centuries. Dundes connects the German obsession with excrement to the nature of German attitudes toward Jews. However, as Dundes point out, filth has often been used by dominant forces to denigrate those deemed less civilized.⁵⁹⁹ Jacob Riis’s *How the Other Half Lives*, itself a model of Progressivism, contains many such examples of a well-meaning person making essentialist claims about how certain cultures are more inclined to filth than others. Whereas the “Chinaman” tends toward “stealth and secretiveness,”⁶⁰⁰ Italians are

⁵⁹⁹ Alan Dundes, *Life is Like a Chicken Coop Ladder*.

⁶⁰⁰ Jacob A Riis, *How the Other Half Lives: Studies Among the Tenements of New York*, Bedford series in history and culture (Boston: Bedford Books of St. Martin’s Press, 1996), 78.

“content to live in a pig-sty.”⁶⁰¹ The Italian will “make his home in the filthy burrows where he works by day, sleeping and eating his meals under the dump, on the edge of the slimy depths and amid surroundings full of unutterable horror.”⁶⁰² Riis’s Progressivism can be found in the fact that he intended his journalism to result in tenement reform. And he believed that people could change; that although a cultural or ethnic group tends to be filthy, they can be educated and uplifted out of their complacency. This same ethos guided those who sought to reform the Native Americans and the colonial subjects. And in those particular instances, excrement is often the most extreme form of filth—and the most potent insult—one can use against another race. In one sense, we can try to understand this imposition of defecation practices by Anglo-Americans onto Native Americans and other dark-skinned colonial subjects as a matter of etiquette, which, as Thomas Beidelman writes, “creates culture through bodily discipline, through modulation and repression of our appetites.”⁶⁰³ Cultivation of this practice—new in many ways to Anglo-Americans who, in the Civil War commonly defecated by the nearest tree and back home in an outhouse that may or may not have leached into well water—produced a new standard of civilization for a culture already eager to distinguish itself from other races on the basis of other types of civilization.

For the Anglo reformers, then, all that would be necessary to solidify their preferred hierarchy of civilization was to bestow their wisdom to the other races as if they

⁶⁰¹ Ibid., 43

⁶⁰² Ibid., 44.

⁶⁰³ T. O Beidelman, *Moral Imagination in Kaguru Modes of Thought*, African systems of thought (Bloomington: Indiana University Press, 1986), 61.

had always done it this way. Anthropologist John Hartigan explains how this process works regarding matters of etiquette:

Social hierarchies rest on the perception that unshakable rules for behavior both derive from and support a “natural” order of relations [. . .] The ritual forms of etiquette that guide routine forms of socializing are profoundly changed with notions of how racial, class, and gender identities are to be recognized and respected. This assures their reproduction in the most unconscious dimensions of social relations.⁶⁰⁴

It is this “naturalization” of the social hierarchy and the reproduction of it through repeated association between the colonial subjects and excrement that makes this particular episode in American history fall short of benevolence. After all, the logic of civilization and sanitation that was imposed on these subjects that imposed the “filth taint” on them in the first place was a very recent phenomenon in Anglo-American society. While defecation is not strictly a “routine form of socializing,” every time a health officer from the Office of Indian Affairs or the Bureau of Insular Affairs wrote a report, levied a fine, or simply beat a colonial subject for transgressing the standard Anglo-American etiquette for defecation, they re-inscribed the problematic uplift model at work in the effort of benevolent civilization.

⁶⁰⁴ John Hartigan, *Odd Tribes: Toward a Cultural Analysis of White People* (Durham [N.C.]: Duke University Press, 2005), 19.

The taxonomy of proper defecators, even though the practice of “proper” defecation was in a state of transition for Americans, was clear. So while the Progressive impulse was to recognize that Native Americans, Cubans, Filipinos, etc. can effectively blend in to the mainstream Anglo-American society if they would learn to defecate properly (among other things), the behavior we see occurring in each case actually reinforces this racial divide. From the perspective of the Insular Office’s Bureau of Health and the Office of Indian Affairs, though, this act of uplift was necessary in order to maintain a hygienic, stable populace under their control, and also to train them as potential citizens. But perhaps these endeavors would have been more successful without invasive inspections, warning notes, levied fines, and public horsewhipping. These behaviors added a level of violence to the already pedantic act of uplifting the other races via defecation reform. They took an act that is already acculturative by nature and made it violent—which, as a consequence, highlighted the subjugation of the colonial body even more than was already done militarily and politically.

As historian Warwick Anderson points out, these punitive behaviors were more than just an element of the project of civilizing the potential citizens, they were about “the development of ‘republican’ virtue and self-restraint.”⁶⁰⁵ That is, the discipline was necessary to make them civilized enough so that they might one day function as proper American citizens. They were also, however, expressions of the anxiety Anglo-Americans felt about incorporating non Anglos into the country’s weft and weave. And in

⁶⁰⁵ Warwick Anderson, *Colonial Pathologies: American Tropical Medicine, Race, and Hygiene in the Philippines* (Durham: Duke University Press, 2006), 2.

that way, many of the methods used by the health officers working with Native Americans, Cubans, Filipinos, and Hawaiians alike were clearly using their excrement and their defecation practices to mark the border between the civilized and uncivilized races. During this period, as historian Mark M. Smith points out, drawing these racial borders was not merely a visual phenomenon, it was multisensory.⁶⁰⁶ Public figures such as Madison Grant, Charles Davenport, Lothrop Stoddard, and Havelock Ellis marshaled pseudo-science in order to reinforce the biological and hereditary differences among the races. Anxiety about this “passing,” supposedly occurring in the late decades of the nineteenth century and the early decades of the twentieth, was due in part to the many immigrants integrating into American society, ideas about Social Darwinism, and the imperial projects of the period.

American eugenicist Lothrop Stoddard divided the world into white and “colored,” while promoting the virtues of civilization. He subdivided the non-white category into “yellow,” “brown,” “black,” and “red,” but although each had their own different traits, they were equally non-white. He saw the uncivilized “under man” attempting to create chaos and oppose order—precisely what the Cubans, Filipinos, and Native Americans were accused of doing in with their “promiscuous defecation”—where

⁶⁰⁶ Mark M Smith, *How Race Is Made: Slavery, Segregation, and the Senses* (Chapel Hill: University of North Carolina Press, 2006), 2.

the white man tried to create order.⁶⁰⁷ The chaotic “under men” are essentially conservative, adhering to their old ways:

a mere clinging to things as they are, with no discrimination between what is sound and what is unsound or outworn. A mere blind aversion to change just because it is change. This is sheer *bourbonism*. And bourbonism is dangerous because it blocks progress, prevents reform, perpetuates social evils, breeds discontent, and thus engenders revolution.⁶⁰⁸

Oddly, for Stoddard, those who were content to continue their traditional way of doing things were the ones engendering revolution.

Havelock Ellis, the British sexologist and eugenicist also writing in the late nineteenth and early twentieth century, who had widespread influence in the U.S., was concerned about what he termed “social hygiene.” In *The Task of Social Hygiene*, he wrote that “it is the task of this hygiene not only to make sewers, but to re-make love, and to do both in the same large spirit of human fellowship, to ensure finer individual development and a larger social organization.”⁶⁰⁹ This dual rhetoric, saying on the one hand that sewer building is an act of love and on the other hand supporting eugenics, should reinforce the suspicion we might have when learning of the BIAs’ sanitation campaigns. Yes, on the one hand, one can say that these projects were quite successful in

⁶⁰⁷ Lothrop Stoddard, *The Revolt Against Civilization; the Menace of the Under Man* (New York: C. Scribner’s Sons, 1922), 224.

⁶⁰⁸ *Ibid.*, 226.

⁶⁰⁹ Havelock Ellis, *The Task of Social Hygiene* (London: Constable, 1927), viii–ix.

lowering disease rates and cleaning up the cities and camps. That perspective should not be lost in all of this. But on the other hand, the progressive impulse to educate and edify the Native Americans and colonial subjects by policing their defecation habits should also be understood within the larger context of race relations in that time.

Prescott F. Hall, another American eugenicist who co-founded the Immigration Restriction League in 1894, compared non-white races to bacteria:

Just as we isolate bacterial invasions, and starve out the bacteria by limiting the area and amount of their food-supply, so we can compel an inferior race to remain in its native habitat, where its own multiplication in a limited area will, as with all organisms, eventually limit its numbers and therefore its influence.⁶¹⁰

There are two significant points in Hall's passage here. First, the comparison of non-white races to bacteria is not far from a comparison to excrement. Second, contrary to the Progressives who dictated policy in the insular areas, Hall was content to see them die. Presumably, men such as Hall would have opposed any efforts to reform the colonial subjects or prepare them for possible citizenship. Indeed, many anti-imperialists of the era were compelled to speak out against it simply out of fear that these foreign peoples might one day be integrated into American society.

⁶¹⁰ Prescott F. Hall, "Immigration Restriction and World Eugenics," *Journal of Heredity* 10 (March 1919): 125–126.

Many of these men fought against the inclusion of other races in the American mainstream. They formed eugenics clubs and wrote warnings about the potential fall of western civilization if interbreeding were to occur. Some, however, disagreed that all of these differences amounted to the need to limit immigration or to sterilize non-whites. Some felt the Progressive impulse that it was the “white man’s burden” to prepare non-white races for inclusion in American society. Part of that project, then, was improving their level of sanitation. Progressive journalist Jacob Riis, for example, blamed something seemingly innate within certain cultures as well as the tenement system for the filth and disease found in it in the late nineteenth century. For men such as Riis and the reformers who comprised the occupational forces abroad, a culture can be remade, cleaned up.

As expressed by a Pears Soap advertisement from *McClure’s Magazine* in 1899, “The first step towards lightening The White Man’s Burden is through teaching the virtues of cleanliness.” The ad features Admiral George Dewey, the hero of the capture of the Philippines from Spain a year earlier, washing his hands at his sink. And in the corners of the graphic are scenes of benevolent imperialism: in the top corners we see a battleship and a cargo boat; in the third corner the cargo boat has docked and unloaded boxes of soap; and the last one is a white man giving soap to a grateful, crouching, dark-skinned man. And at the bottom, the copy reads “Pears Soap is a potent factor in brightening the dark corners of the earth as civilization advances, while amongst the cultured of all nations it holds its place—it is the ideal toilet soap.”⁶¹¹ In 1899, the U.S. was newly in possession of the Philippines, Puerto Rico, Guam, and also occupied Cuba.

⁶¹¹ “Pears Soap ad” *McClure’s* (February 1899).

The advertisement clearly tried to appeal to the new American projects of benevolent civilizing. It also insinuated that the occupations of these new territories was going more smoothly than was the case. In the Philippines, a long and bloody rebellion was under way, and in Cuba, most of population was still bitter about being left out of the Treaty of Paris and losing their sovereignty yet again.

Pears was not the only company to use Dewey as a metaphor for hygiene and cleanliness in the conquest of the Philippines. During a parade in New York City in 1899 to celebrate Dewey's accomplishments, Abbey's Effervescent Salts "thoroughly billed" New York City with posters featuring Dewey's face and the slogan "The 'Salt' of Salts." Effervescent salts, as indicated in the last chapter, were used for laxative purposes. In a naval parade on the Hudson, Abbey's also plastered a tugboat with the posters and tossed out free samples to the crowds watching the parade from passenger boats.⁶¹² Here the cleanliness Dewey stood for was internal. As many health reformers of the day claimed, regular bowel movements aided a man's strength and vigor. But like the Pears ad, the Abbey's campaign drew on the Admiral's success in the Philippines in defeating Spain and threatening the radical Filipinos who were calling for sovereignty.

There is no doubt that sanitation was an enormously important issue of the day, and management of a society's excrement was central to solving that problem. Justus von Liebig, a prominent nineteenth century German chemist wrote that "The preservation of the wealth and welfare of nations, and advances in culture and civilization depend on

⁶¹² "Abbey's advertisement," *Printer's Ink* 29, no. 8 (November 22, 1899): 36.

how the sewage question is resolved.”⁶¹³ Already in the 1850s, when von Liebig wrote this, many western countries agreed and began to find solutions to their sewage problems. And by 1903, American political scientist William H. Allen wrote that by then the science of proper sanitation was understood and practiced fully in some places. But the fact that some places still suffered from sanitary neglect was an entirely social phenomenon, as opposed to a scientific one. Allen determined that all societies go through seven stages in the evolution of “public-health administration.”⁶¹⁴ The first of these stages is “that of racial tutelage, of pain economy, when the primary lessons of personal hygiene are learned.”⁶¹⁵ Allen referred to a long history of sanitary reforms in Egypt and Arabia, culminating in the ones the Anglo-Americans were engaged in. It conveniently ignored the lessons Anglo-Americans and white Europeans learned just in the previous few decades.

Throughout the end of the nineteenth and beginning of the twentieth century, race and sanitation were pinned together in an effort to justify the type of nativist measures limiting immigration from certain areas of the globe and naturalizing some races as inferior because of their supposed “filth.” Labor unions in San Francisco during this period focused on the Chinese because of the threat they posed to “white jobs.” One effective way to rally public opinion against the Chinese laborers was to make them a sanitary threat. The United Garment Workers Union advertised for their suits that

⁶¹³ Quoted in Vijay Prashad, *Untouchable Freedom: A Social History of Dalit Community* (Oxford University Press, 2000), 46.

⁶¹⁴ William Allen, “Sanitation and Social Progress,” *The American Journal of Sociology* 8, no. 5 (March 1903): 634.

⁶¹⁵ *Ibid.*

“insures the buyer against contagion.” Another encouraged the buyer to “discriminate against inferior unclean sweat-shop clothing.” It also promised that their own garments were made by workmen in “sanitary” shops.⁶¹⁶ Public health became a matter of keeping the less sanitary races out of, or at least apart from, mainstream society. Or in the cases of the Progressive treatment of excrement, it was a matter of reforming the defecation practices of those races.

It is worth noting, however, that the advanced level of sanitation practiced by the U.S. military at the turn of the century was very much a recent phenomenon. Only a few years earlier the standard system of excrement disposal was into an unlined cesspit with soil or lime thrown on top, easily contaminating a nearby water source. Munson writes of the forts that only two years earlier were pockmarked with dirt-covered shallow holes “honeycombing” the landscape to the point where “it was difficult to find a site for a new one.”⁶¹⁷ Many posts, especially those on the frontier, still used open privy pits, pails, or the dry-earth system even after the turn of the century.

The Progressive Era was an age of intense racial anxieties, a new stage of American imperialism, and an impulse for cleanliness. These three trends formed the backdrop to the acculturative defecation lessons various government bureaucracies imposed on their non-white subjects. It is an undeniable fact that these sanitation campaigns went a long way in abating diseases and improving the health and the health consciousness of these

⁶¹⁶ Nayan Shah, *Contagious Divides: Epidemics and Race in San Francisco's Chinatown*, American crossroads 7 (Berkeley: University of California Press, 2001), 158–170.

⁶¹⁷ Edward Lyman Munson, *The Theory and Practice of Military Hygiene* (New York: William Wood and Co, 1901), 533.

societies. However, if we are to understand the full dimensions of the civilizing project undertaken in the Progressive Era, we need to see the prominent role excrement played in it. Likewise, if we are to understand how Americans considered excrement during this period, we need to understand the way it was racialized—the way excrement figured into this constructed colonial body. As the following section details, Native American sanitation policies formed the blueprint for the policies the U.S. enforced with its new (and also non-white) colonial subjects following the Spanish-American War.

4.3 Captain John G. Bourke and the Native Americans

Native Americans were subjected to a variety of forced cultural regimens during the nineteenth century for the explicit purpose of “civilizing” them. Native American children were sent to boarding schools founded in order to better integrate Native Americans into an Anglo-American society. They were taught English, Christianity, and Anglo-American manners. Already five years before the Bureau of Indian Affairs was created, the U.S. Congress passed the 1819 “Civilization Fund Act,” stating that money would be set aside for benevolent societies to set up institutions to uplift and educate Native Americans. Specifically, the act called for “introducing among them the habits and arts of civilization,” and “for the regulation of their conduct.”⁶¹⁸ As a result, the number of boarding schools for Indians grew considerably throughout the nineteenth century. One of these, the Carlisle Indian Industrial School, was founded by Richard

⁶¹⁸ “Civilization Fund Act,” *Documents of United States Indian Policy*, Editor, Francis Paul Prucha. p. 33.

Pratt, who firmly believed that an Indian could adopt the ways of the Anglo-American culture and society. Carlisle students were forbidden to practice the religions they grew up with, had to have their hair cut, and could only communicate with each other in English. In 1892, Pratt quipped that “A great general has said that the only good Indian is a dead one. In a sense, I agree with the sentiment, but only in this: that all the Indian there is in the race should be dead. Kill the Indian in him and save the man.”⁶¹⁹ In other words, an Indian can be civilized and assimilated into mainstream American society so long as his or her habits and customs are replaced by Anglo-American habits and customs. As regards sanitation, this meant forcing the Indian to adopt the new defecation customs.

Not all Americans were as optimistic as Pratt that Native Americans could or would be friendly to the assimilationist policies put forth by the BIA and various missionaries. Dr. A.B. Holder argued in 1892 that the transition period for Indians between “savage” and “civilized” presented some tangible difficulties regarding their sanitation.

[T]he laws of sanitation were easily lived up to [in the teepee]; when the surroundings became uncomfortably dirty, the teepee was removed to some clean spot. But since the advent of the log-house among them, things have changed; it is not practicable to move the house, and not being the

⁶¹⁹ Fergus M Bordewich, *Killing the White Man's Indian: Reinventing Native Americans at the End of the Twentieth Century*, 1st ed. (New York: Doubleday, 1996), 282.

most thrifty and industrious people in the world, the filth remains about the house.⁶²⁰

Holder pointed out a noteworthy problem with the government's scheme to "civilize" the Native Americans. While the Dawes Act of 1887 diminished the land used by Native Americans by almost a third and forced thousands of Indian families into individual land parcels, it also had the intended effect of abruptly abandoning ending collective tribal ownership and replacing it with allotment and fixed habitation. And as Holder explained, this fixed habitation meant that defecation would quickly become a sanitary problem. Holder continued to write that the full transition to civilization could not occur unless the Indian adopted proper sanitary practices. "The most powerful facts toward proving the sanitary benefit of civilized surroundings are to be seen in the case of children brought from the camp to the boarding-schools, where they are at once placed in correct hygienic conditions."⁶²¹ Ideally then, the student would return to the reservation and impart these new hygienic standards to their families. This is the same pattern the USSC wished for as the Civil War soldiers returned to their own unhygienic homes.

It was within this cultural climate that Captain John G. Bourke, a self-described amateur anthropologist, wrote *The Scatalogic Rites of All Nations*.⁶²² Following many

⁶²⁰ Dr. A.B. Holder, "Half-Civilization Worse than None," *The Sanitary Era* 9, no. 114 (July 1892): 192.

⁶²¹ *Ibid.*, 192.

⁶²² Bourke's spelling of "Scatalogic" is a mystery, as the accepted spelling is "scatologic." Louis Kaplan, editor of a revised version of the book called *The Portable Scatalog* believes that it is a play on the word "catalog." More likely, in my estimation, Bourke simply misspelled it. His *Diaries* are full of spelling errors, and one of his main sources for the *Scatalogic Rites* is the

years of research, both in books and from his expeditions—especially in the American Southwest—Bourke published his tome, almost 500 pages long, that details excrement-related rituals practiced by Native Americans and ancient and medieval cultures. The ultimate purpose of the book, according to Bourke in the Preface, was so that “the progress of humanity upward and onward may best be measured.”⁶²³

Throughout the *Scatologic Rites*, despite aligning himself with former eminent authors who wrote about excrement and thanking prominent figures such as Havelock Ellis, Franz Boas, and James G. Frazer, Bourke’s rhetoric straddles the line between disgust and fascination with the practices in question. When he narrates stories of Native Americans using excrement or urine in a religious ritual, he is quick to qualify what he witnesses as “disgusting.” Yet his interest, albeit coded under the guise of serious anthropological “study,” is no doubt sincere. He also notes in the “Preliminary Remarks” that the rites he describes are “distinctly religious in origin.”⁶²⁴ This point is an important one; for the book consists of pairing rites that were either practiced by Native Americans or by predecessors to the Judeo-Christian tradition he is clearly a part of. And then he contrasts those “disgusting” traditions with the proper defecation practices of his contemporary Americans. To that end, the book is a paean to the progress of the Judeo-

anonymously penned French work, the *Bibliotheca Scatologica*, which he consistently spells “Bibliotheca Scatologica.”

⁶²³ Bourke, *Scatologic Rites of All Nations. A Dissertation Upon the Employment of Excrementitious Remedial Agents in Religion,therapeutics, Divination, Witchcraft, Love-Philter, Etc., in All Parts of the Globe. Based Upon Original Notes and Personal Observation, and Upon Compilation from Over One Thousand Authorities.*, iii.

⁶²⁴ *Ibid.*, 2.

Christian people and their high degree of civilization. Bourke highlights that notion with the following passage from the “Preliminary Remarks:”

Hebrews and Christians will discover a common ground of congratulation in the fact that believers in their systems are now absolutely free from any suggestion of this filth taint, every example to the contrary being in direct opposition to the spirit and practice of those two great bodies to which the world’s civilization is deeply indebted.⁶²⁵

In other words, Bourke tells the reader to read on from the perch of Judeo-Christian civilization, in utter disgust at the practices of the savage and filthy Indians.

As a Captain during the Apache Wars in the 1870s and 1880s, Bourke had the opportunity to live alongside several different Native American communities and know them well. Bourke was an aide to General George Crook and was mired in the logic of “Indian taming” that governed their mission in the Southwest. Bourke heroicized Crook for maintaining stoicism while being in charge of the “savage-infested” Arizona territory.⁶²⁶ Part of their assignment was to train the Apaches in the “Caucasian” lifestyle—and that included sanitation practices. “The [Apache] scouts retained in service as a police force were quietly given to understand that they must be models of cleanliness and good order as well as of obedience to law,” wrote Bourke in his book about life in the

⁶²⁵ Ibid., 3.

⁶²⁶ John Gregory Bourke, *On the Border with Crook*, Classics of the Old West (Alexandria, Va: Time-Life Books, 1980), 108.

Southwest with Crook.⁶²⁷ Furthermore, one of Crook's strategies in "taming" the Apache was to force individualization upon them by pitting them against each other in moneymaking schemes; "By the Crook method of dealing with the savage he was, at the outset, de-tribalized without knowing it; he was individualized and made the better able to enter into the civilization of the Caucasian, which is an individualized civilization."⁶²⁸ They were also forced to farm for themselves, rather than sharing the crops with their tribesmen. After these missions, Bourke commended Crook for "all the efforts which he so successfully made for the elevation of the red man in the path of civilization."⁶²⁹ In general then, the logic of race relations between the Anglo-American and the Native American Bourke learned in his years in the Southwest was in line with the ethos of the Office of Indian Affairs and the boarding schools. Through Crook, Bourke learned that the Indian was just as capable as the white man, but it would take a considerable effort to educate and Christianize them enough so that they too can participate in Anglo-American civilization.

As adaptation to mainstream Anglo sanitary standards was part of the civilizing process, it is likely that Crook, Bourke, and the other cavalries in charge of settling the Apaches into their new reservation life taught the Native Americans how to set up latrines. The soldiers either modeled the reservation latrines after their own camp latrines or taught them to construct something more permanent. By the 1870s and 1880s, the notion that bacteria (as opposed to miasmas) caused disease was not yet mainstream, so

⁶²⁷ *Ibid.*, 221.

⁶²⁸ *Ibid.*, 225

⁶²⁹ *Ibid.*, vi.

standards for the placement of latrines were still based on proper ventilation and avoiding air contamination, but some regard was already given to not contaminating the water supply.⁶³⁰ For example, rule #666 states that “Sinks should be placed so as not to be in the course of prevailing winds to camp, and must be so that they cannot pollute the water either directly or by soakage.”⁶³¹ Further, in a section dealing with the use of toilets, Woodhull says that gases from “fresh and healthy faecal matter” is not dangerous; “they are only hurtful when bearing specific germs, or after putrefaction.”⁶³²

The type of latrine used by the soldiers in camp depended on how permanent the camp was (a more permanent camp may have had outhouses), if there was running water (if so, there may have been indoor privies with “soil pipes” leading to a cesspool near the barracks), the rank (the officers usually enjoyed separate and sometimes more sophisticated accommodations), and the climate the camp was located in (in the Dakota Territory, it was normal for the latrines to be housed⁶³³). It is likely, however, given that Bourke makes no mention of water supply pipes, that the latrines for the soldiers were the standard trenches, dug 4-6 feet deep, 2 feet wide, 150 paces from their camp, and however long was necessary based on the number of soldiers.⁶³⁴ Temporary camps would

⁶³⁰ Based on a comparison of Military Hygiene manuals. Alfred Alexander Woodhull, *Notes on military hygiene, for officers of the line: a syllabus of lectures at the U.S. Infantry and Cavalry School* (John Wiley & Sons, 1890) makes consistent mention of how to avoid poisoning via miasma (“air contamination”).

⁶³¹ *Ibid.*, 97

⁶³² *Ibid.*, 107.

⁶³³ Carla Kelly, “‘The Buffalo Carcass on the Company Sink’: Sanitation at a Frontier Army Fort,” *North Dakota History* 69, no. 2 (2002): 54.

⁶³⁴ Based on dimensions given in Woodhull, *Notes on military hygiene, for officers of the line*, and Munson, *The Theory and Practice of Military Hygiene*. Munson, and manual from Civil War.

have a pole (“preferably one from which the bark has been removed”⁶³⁵) across the trench to lean on, and more permanent camps would have an angled board as a seat and a wooden backrest. Soldiers were instructed to then toss dirt or lime, if available, on top of the excrement to prevent a noxious smell and the accumulation of too many flies.⁶³⁶ Notably, Edward Munson’s *Theory and Practice of Military Hygiene* from 1901 states that “[a]s a general rule, the old Mosaic law requiring each individual to cover his own faecal discharges should be enforced.”⁶³⁷ Nevertheless, as noted in Chapter One, these trench latrines were repulsive to those who used them and were not especially sanitary. Medical records from Fort Buford in the Dakota Territory show that when it got too cold, the soldiers would toss their feces out the door, left to thaw in a terrible, swampy mess come springtime.⁶³⁸ Author Carla Kelly writes that in 1890 Fort Buford filled in its old trenches and built “four single sets (thirteen by twenty feet), and two double sets (thirteen by forty feet), of dry-earth latrines. Each double set contained twelve individual compartments.”⁶³⁹ The climate quickly exposed problems with earth closets in the winter at such a large scale.

By 1901, military researcher Edward Munson was quite satisfied with the level of civilization displayed by the privies of the American military posts. He wrote that “the

⁶³⁵ Ibid., 383.

⁶³⁶ Woodhull, *Notes on military hygiene, for officers of the line*, 97.

⁶³⁷ Munson, *The Theory and Practice of Military Hygiene*, 384. Referring to Deuteronomy 23:12.

⁶³⁸ Kelly, “‘The Buffalo Carcass on the Company Sink’: Sanitation at a Frontier Army Fort,” 55. John Shaw Billings, a medical inspector during the Civil War and future creator of the Library of the Surgeon General’s Office, wrote in his 1870 *Report on Barracks and Hospitals, With Descriptions of Military Posts* that he favored the use of the earth closets that were found at many camp hospitals, and advocated a more widespread use of them.⁶³⁸

⁶³⁹ Ibid., 56.

great majority [of the military posts are] provided with thoughtfully planned, carefully built and thoroughly efficient systems of sewerage.” He continues “As a whole, our methods of disposing excreta and refuse compare very favorably with those of foreign armies, particularly in those of France, Russia, Italy and Spain.”⁶⁴⁰

Given that the Apaches were separated into their own parcels of land, it is possible that the soldiers taught them to dig individual privy holes, and perhaps even outhouse structures to cover them. Nevertheless, despite the fact that the Anglo-American norms for dealing with excrement were in a state of flux during the late nineteenth and early twentieth century, men like Bourke had little tolerance for alternative ways of defecating. And writing from the perspective of an anthropologist, Bourke argued that the way Native Americans used excrement aligned them with primitive civilizations of many centuries earlier.

In a tone that expresses his reluctant-but-noble “duty” to report these practices, Bourke wrote, “Repugnant, therefore, as the subject is under most points of view, the author has felt constrained to reproduce all that he has seen and read, hoping that, in the fuller consideration that all forms of primitive religion are now receiving, this, the most brutal, possibly, of all, may claim some share of examination and discussion.”⁶⁴¹ Adding to this attitude that some scholars must suffer through learning these vile acts in order to

⁶⁴⁰ Munson, *The Theory and Practice of Military Hygiene*, 532.

⁶⁴¹ Bourke, *Scatalogic Rites of All Nations*, 3.

more acutely see the progress of western civilization, he added on the title page of the book the phrase “Not for general perusal.”⁶⁴²

Scatalogic Rites begins, after the introduction, with a chapter called “The Urine Dance of the Zunis,” a first person account of a ritual he witnessed at a meeting of a secret order of Zunis called the Nehue-Cue. Bourke imagined himself to have appeared to the Zunis like one of the “pictures of saints hanging upon the walls of old Mexican churches,” with his “stained glass attitude” and “in the halo diffused by the feeble light.”⁶⁴³ He recounted how the Zuni audience laughed as the dancers parodied the rituals from a Catholic church for them. Later, the “filthy brutes” drank from a bowl full of urine and then tried outdo each other in “feats of nastiness.”⁶⁴⁴ Bourke then tried to link this dance to old rituals that Jews and Arabs had long since left behind in their path to civilization. He also included fragments from letters sent to him by colleagues claiming to have seen various Indians eating excrement and drinking urine.

In the next chapter, Bourke linked the Zuni dance to the Feast of Fools, which was a ritual with pagan roots performed in Europe in the Middle Ages. In fact, Bourke claimed that the rituals are so similar that the Zunis may have been influenced by the Feast of Fools, perhaps brought over by the Catholic missionaries from centuries earlier.⁶⁴⁵ However, one of the theses of the *Scatalogic Rites* is that the ingestion of

⁶⁴² Perhaps this was a clever marketing ploy in a time when Comstock Laws were still being enforced.

⁶⁴³ *Ibid.*, 5

⁶⁴⁴ *Ibid.*, 6.

⁶⁴⁵ *Ibid.*, 12.

excrement and urine happened in festivals all over the world; though Christianity, democracy, and the civilization that accompanied them eventually eradicated the practice. He explained the presence of such debauchery in Medieval Christian tradition as a matter of the necessity of compromising with other cultures in order to gain initial acceptance.⁶⁴⁶ Puritans, however, were especially effective at rejecting these heathen traditions:

The Puritan may have made himself very much of a burden and a nuisance to his neighbors before his self-imposed task was completed, yet it is worthy of remark and praise that his mission was a most effectual one in wiping from the face of the earth innumerable vestiges of pre-Christian idolatry.⁶⁴⁷

One chapter is titled “Human Excrement Used in Food by the Insane and Others,” followed by another titled “The Employment of Excrement in Food by Savage Tribes.” For these chapters, Bourke culled travel journals, anthropological treatises, an arcane French work called the *Bibliotheca Scatologica*, excerpts from Lewis and Clark’s journey, and encyclopedias in English and French. Another prominent source for Bourke was letters he received from various military personnel stationed with different native tribes around the world.

⁶⁴⁶ Rites, p. 15.

⁶⁴⁷ Ibid., 21.

Later chapters chronicle excremental rituals performed overseas by “East Indian fanatics,”⁶⁴⁸ Mongolians, Tibetans, and others. Bourke, upon learning that Tibetans considered the excrement of the Dalai Lama to be sacred, had a pill allegedly containing the holy excrement examined by a Dr. Mew of the U.S. Army. Dr. Mew responded with the news that after careful analysis of the Lama’s excrement, there was “nothing at all remarkable in it,” and that the wheat residue was coarse “and probably not made in Minnesota.”⁶⁴⁹

Bourke also reported on a Medieval Christian sect called the Stercoranistes. This group posited that the sacrament, what Christians believe to be the “Lord’s body,” goes through the normal process of human digestion and eventually becomes excrement. According to Bourke, this scandal began in 831 by a monk named Paschasius Radbert, though may have also been a theological issue even earlier. Bourke also detailed the poor sanitary practices and conditions of many cultures around the globe, including the Persians, the Chinese, various South American cultures, the Indians, and several different African peoples.

The social and cultural climate in America was ripe for Bourke to publish a large volume detailing the excremental depravities of Native Americans, ancient civilizations, and “primitive” foreign cultures. The sanitary advances of the previous few decades in the U.S —specifically the sewer-building boom and the incorporation of the toilet— provided Bourke the moral high ground he needed to posit the Judeo-Christians higher on

⁶⁴⁸ Ibid., 40.

⁶⁴⁹ Ibid., 53.

the ladder of civilization than virtually everyone else (outside of Europe, at least). It is unknown how many copies of the *Scatalogic Rites* were published, but it was popular enough to be translated into German in 1913, with a Foreword written by Sigmund Freud, who proclaimed that the book contains “the major part of what is known of the role played by excretions in human life.”⁶⁵⁰ It was also republished in 1934 by the American Anthropological Society, and again in 1994. The 1994 version, however, was pared down considerably and published as a novelty volume of toilet humor called *The Portable Scatalog*. However, the fact of its existence is of interest to this particular research in that it expresses “scientific” rationale for the excrement-regulation practices that had begun just one year before *Scatalogic Rites* was published.

In the Conclusion, Bourke insisted that his contribution is an important one to science. He writes that “by integrating the equation of man’s development between the limits of zero, in which these disgusting practices had full sway, and the limit of A.D. 1891, the precise extent of his advancement in all that we call civilization can be better understood.”⁶⁵¹ The absence of excrement, then, in Bourke’s world, is an accurate indicator of progress and civilization. It follows then that *Scatalogic Rites* is powerful “scientific” evidence for Pratt’s “kill the Indian, save the man” ethos—a notion that was popular among Progressives of the era.

Merely months before the publication of *Scatalogic Rites of All Nations*, and the same year as the Wounded Knee massacre (1890), the BIA instituted the field matron

⁶⁵⁰ “Foreword” 9, of 1934 version of *Scatalogic Rites of All Nations*.

⁶⁵¹ Bourke, *Scatalogic Rites of All Nations*. 467.

program. The Dawes Act was probably the largest step toward “civilizing” the Indians. But the field matron program was significant in its own right in its attempts to “crush tribalism that dominated American Indian affairs after the Civil War.”⁶⁵² Under the program, the OIA/BIA hired thousands of young women to travel from home to home in the reservations and give instructions to the families in matters of domestic science. Central to these instructions were matters of hygiene and proper sanitation.

The U.S. government had taken action to fight some diseases among the Indians earlier in the century. Smallpox vaccinations were provided to tribes near military outposts on the frontier, but that act was more for the health of the soldiers than the Indians.⁶⁵³ Through the Civil War years, Congress apportioned funds for the education and health of Indian tribes, but these funds were not adequate enough to effectively prevent large-scale cholera and smallpox outbreaks.⁶⁵⁴ It is unlikely that any instruction was given to them regarding defecation practices since most Americans adhered to miasma theory and were not aware that their own water supplies were often contaminated by bacteria from upstream or from leaky privy vaults. In 1873, however, the OIA created the Division of Medicine and Education in order to begin providing meaningful health care to the Indians.⁶⁵⁵ These responsibilities were handed over to the Civilization

⁶⁵² Lisa Emmerich, “Marguerite Laesche Diddock: Office of Indian Affairs Field matron,” *Great Plains Quarterly* (Summer 1993): 163.

⁶⁵³ David H DeJong, “*If You Knew the Conditions*”: *A Chronicle of the Indian Medical Service and American Indian Health Care, 1908-1955* (Lanham, MD: Lexington Books, 2008), 2.

⁶⁵⁴ *Ibid.*, 2-6.

⁶⁵⁵ *Ibid.*, 7

Division four years later, and by 1888, 200,000 Indians had the services of 81 doctors.⁶⁵⁶

It is unclear if any assessment or instruction of defecation practices existed before the field matron program.

Hundreds of field matrons worked for the OIA in the 1890s and 1900s. Until 1895, all of these matrons were white. In 1895, however, the first Native American, Julie Kocer, was hired.⁶⁵⁷ The agent responsible for her hiring claimed that “she appeared to personify the ‘certified civilizer’ reformers and OIA policy makers hoped to attract to the program.”⁶⁵⁸ The OIA’s field matron Program was essentially an extension of the assimilationist policies of the Office of Indian Affairs during the 1880s. Field matron Emily Cook summed up the problem with reservation housing in 1892 when she said that when you move an Indian family from a teepee into a one-room house with a leaky ceiling, a single window, and poor sanitation, “the improvement of the house over the teepee is not all manifest.”⁶⁵⁹ In fact, the Meriam Report of 1928, a three-year comprehensive study of the conditions of the reservation, stated that “From the standpoint of health, it is probably true that the temporary, primitive dwellings that were not fairly air-tight and were frequently abandoned were more sanitary than the permanent homes that have replaced them.”⁶⁶⁰ Lewis Meriam, a government researcher and expert

⁶⁵⁶ Ibid., 8

⁶⁵⁷ Lisa E. Emmerich, “‘Right in the Midst of My Own People’: Native American Women and the Field Matron Program,” *American Indian Quarterly* 15, no. 2 (April 1, 1991): 201-216.

⁶⁵⁸ Ibid., 201.

⁶⁵⁹ Emily Cook, “Field Matrons,” in *Proceedings of the Tenth Annual Meeting of the Lake Mohonk Conference of Friends of the Indian*, 1892, 57.

⁶⁶⁰ Brookings Institution, *The Problem of Indian Administration: Summary of Findings and Recommendations* (Washington: the Institute, 1928), 4.

on government administration, also added that toilets were hardly ever found in the Native American dwellings, and “[e]xcept among the relatively few well-to-do Indians, the houses seldom have a private water supply or any toilet facilities whatever. Even privies are exceptional.”⁶⁶¹ Seeing as Meriam felt that the primary role for government in the welfare of the Indians was to increase their level of civilization, it made sense that he came back to the topic of defecation throughout his report.⁶⁶² The lack of sewer systems or adequate water delivery systems on reservations did make the widespread use of toilets impossible.⁶⁶³ Depending on the climate, which varies greatly between Alaska, the Great Plains, and the Southwest, it is likely that those on the reservations dug shallow holes to defecate in or built simple outhouses covering a privy pit. Given the poor economic conditions on the reservations, very few could afford to pay for supplies for anything better. Furthermore, given that the inspections and advice of the field matrons occurred within the context of other efforts to “kill the Indian,” the Indian likely put up some resistance to changing their mode of defecation.

⁶⁶¹ Ibid., 4

⁶⁶² *The Problem of Indian Administration*, 673. Meriam discusses privies, sewage, and defecation practices of the Indians a number of times throughout the report: e.g., pp. 4, 272, 318, 338, 554, 683,

⁶⁶³ Public Law 86-121, which called for a broad-scale sanitation overhaul, was passed in 1959. Specifically, it “authorized [the U.S. Public Health Service] to take direct action in resolving the dire sanitation conditions on AI/AN reservations by authorizing the use of federal funds to design and construct water, wastewater, and solid waste facilities for AI/AN homes.”

<http://www.ihs.gov/dsfc/documents/SFC50thAnniversary.pdf> P. 13.

The Snyder Act of 1921 provided more funds for the health of the Native Americans than they had previously had, but Meriam’s 1928 report indicates that little was accomplished by way of funding for toilets.

There is some precedent to the field matron regarding sanitation. Military officers, who oversaw the Reservations occasionally, inspected them for proper sanitation. For example, Captain W.W. Wotherspoon oversaw a settlement of Apaches taken to Alabama after Geronimo was captured. He overhauled their sanitary practices and inspected the sanitary conditions of their homes on a weekly basis. He claimed in 1892 that they are “tending toward civilization, although they made great havoc in Arizona only a few years ago.” He reported that the grounds surrounding their dwellings are clean, and that the “refuse” is taken away and burned. Assumedly, since burning excrement was a standard alternative in the military, refuse means excrement as well as garbage.

Thomas Morgan took over the position of the Commissioner of Indian Affairs in 1889 and quickly set about implementing more of the assimilationist civilizing programs.⁶⁶⁴ About the field matron program, Morgan wrote that “[t]he position of the field matron has been created in order that Indian women may be influenced in their home life and duties, and may have done for them in their sphere what farmers and mechanics are supposed to do for Indian men in their sphere.”⁶⁶⁵ Now that the privies were part of the women’s sphere, the matrons would be responsible for their upkeep. In this same memo, Morgan goes on to specifically charge the field matrons with giving Indian women “counsel, encouragement and help in [. . .] [c]leanliness and hygienic

⁶⁶⁴ Frederick E. Hoxie, “Redefining Indian Education Thomas J. Morgan’s Program in Disarray,” *Arizona and the West* 24, no. 1 (April 1, 1982): 5–18.

⁶⁶⁵ “Thomas J. Morgan, Commissioner of Indian Affairs, on Field Matrons,” in *Annual Report of the Commissioner of Indian Affairs, 1900* (Washington, D.C: Government Printing Office, 1901), 101–102.

conditions generally, including disposition of all refuse.”⁶⁶⁶ And a 1912 Congressional Report on the Indian Appropriations bill stated that “[m]ost of the actual work of enforcing the sanitary regulations of the office falls upon these women [the field matrons].”⁶⁶⁷

Still in 1930, field matrons filled out reports on the sanitary conditions of the houses they visited. In addition to noting the name, race, and occupations of the residents, the matrons paid special attention to the “excreta disposal” system used at the house. One question asked if the dwelling had an outdoor privy. Another if “pits” were used. Another asked if the excrement was protected from flies. The fourth asked if there was evidence of soil pollution from the privy. And the final question requested further remarks regarding the privy. Many of the matrons used this slot to note what was used to cover the excrement, be it lime, ash, just dirt, or nothing at all. On the back of the form, a score was assigned to assess the sanitary condition of the house. The categories of “screening” and “general cleanliness” were each worth 10 points. “Water supply” was worth 30 points. And “excreta disposal” was worth 50.⁶⁶⁸

The matrons also filed weekly reports detailing their daily activities and the miles they travelled. It is clear that they spent a good portion of their time instructing the families (mostly the women of the families) on matters of sanitation and cleanliness, but

⁶⁶⁶ Ibid.

⁶⁶⁷ United States Congress, House Committee on Indian Affairs, *Indian Appropriation Bill: Hearings before a subcommittee of the committee of Indian Affairs of the House of Representatives* (Govt. print. off., 1912), 33.

⁶⁶⁸ “Study of Health of Indians—Pottawatomie Reservation, Hayetta, Kansas,” RG 75, Entry 783. NARA.

manners and space prevented them from detailing the specifics of these instructions. Some of the matrons also organized work crews of men to clean debris from camps, dig trenches for new plumbing lines, and build roads.⁶⁶⁹ Nevertheless, as “excreta disposal” was worth half of the sanitation scores they assigned to households, one can assume this was also part of the instruction. One nurse reported her hours spent in the following way: “nursing and care—9, inspection—5, advised at office—7, treated—4, friendly visits—2, helped doctor with patients balance of time.”⁶⁷⁰

Indian boarding schools were also seen as a locus for the civilizing process. As the Board of Indian Commissioners stated in 1880, “If the common school is the glory and boast of our American civilization, why not extend its blessings to the 50,000 benighted children of the red men of our country, that they may share its benefits and speedily emerge from the ignorance of centuries.”⁶⁷¹ Learning about proper bathroom technology and etiquette was a part of that education. Part of the process of “killing the Indian” and “saving the man” was educating the Indian schoolchildren on how to defecate in a civilized manner using proper flush toilets. One student, Don Talayesva, said that his first exposure to a flush toilet was at a boarding school in Arizona. It was “like a spring, and flushed. I was uneasy at first and expected the bowl to overflow; but I

⁶⁶⁹ Field Matron’s Weekly Report. Winnie Holcomb, Jan 13, 1934; Sarah Chapin, Feb 10, 1934. RG 75 Entry 782.

⁶⁷⁰ Ibid, “Field matron Weekly Report”

⁶⁷¹ Quoted in David Wallace Adams, *Education for Extinction: American Indians and the Boarding School Experience, 1875-1928* (University Press of Kansas, 1995), 18.

caught on quickly and like it—although it was a waste of water.”⁶⁷² By 1920, the girls, who were trained mostly in the domestic sciences, were on track to potentially be chosen as field matrons.⁶⁷³ Although the field matrons were originally only white, more and more Indian women were hired on after the turn of the century.⁶⁷⁴ It is likely that very few of the Indian boarding schools originally had flush toilets given that they were often located in areas outside of the range of standard municipal plumbing. P. Flor. Digmann, superintendent of the St. Francis Mission School in Rosebud, South Dakota, reported that the school received flush toilets in 1899, though it is unclear and unlikely that a sewer system was used to usher the sewage away.⁶⁷⁵ By 1928, most of the boarding schools and mission schools had toilet facilities in the basement, which were, “as a rule poorly lighted and ventilated and are rarely sufficiently heated,” according to the Meriam survey.⁶⁷⁶ Furthermore, almost half of the schools visited by Meriam’s team lacked toilet paper altogether.⁶⁷⁷ Although children at the boarding schools and their families at home were subjected to frequent inspections, many boarding schools did not see fit to provide the students with adequate toilet paper.

⁶⁷² Don Talayesva, quoted in David Wallace Adams, “Beyond Bleakness: The Brighter Side of Indian Boarding Schools, 1870-1940,” in *Boarding School Blues: Revisiting American Indian Educational Experiences*, ed. Clifford Trafzer, Jean Keller, and Lorene Sisquoc (Lincoln: University of Nebraska Press, 2006), 46.

⁶⁷³ Linda Eisenmann, *Historical Dictionary of Women’s Education in the United States* (Greenwood Publishing Group, 1998), 153.

⁶⁷⁴ Emmerich, “Right in the Midst of My Own People.”

⁶⁷⁵ P.Flor. Digmann, “Report of the Superintendent of the St. Francis Mission School,” in *Annual Report of the Department of the Interior, Part I* (Washington, D.C: Government Printing Office, 1899), 344.

⁶⁷⁶ Brookings Institution, *The Problem of Indian Administration*, 317.

⁶⁷⁷ *Ibid.*, 318.

The U.S. Indian Inspection Service also inspected buildings on reservations, including boarding schools, and made special note of the state of the privies. The inspectors noted the size of the bathrooms, the number of water closets, their distance from the school if in a separate location, and the general condition of the privies.⁶⁷⁸ Occasionally the inspectors included evidence of their personal sentiments toward the Indians or the process of civilization. One report on a Zuni boarding school from January 11th, 1904, read, “trying to educate hungry pagans, along the line of modern civilization, has been, and is likely to be up-hill business.[...] iliterate[sic] pagans----with so little knowledge of books and English, that their trainig[sic] was well nigh wasted.”⁶⁷⁹ Another from Yakima, read that “many are intelligent, industrious and progressive, while many are of the long-haired, savage, blanket type.”⁶⁸⁰ The inspectors’ tendency to editorialize their biases in the inspection reports leaves a poignant indication of the manner in which these inspections were carried out.

Excrement as a locus of dissent and rebellion has a broad history in culture, especially among those who are subjugated or imprisoned. One specific example of defiant excreta came from students at the Keams Canyon boarding school in Northeast

⁶⁷⁸ NARA, RG 48, Department of the Interior, Office of the Secretary, Indian Division Inspection reports, 1901-1907, Box 2. They used forms called “descriptive Statement of Government Buildings.” The Colorado Boarding School, investigated in 1902, noted 3 water closets, outside, 12x5, 12x5, and 5x4. “A good closet, in good repair” From a separate report, October 1st, 1903: “The Sewage is conducted to a sink hole in a sandy flat two hundred yards east of the main buildings, and is very unsatisfactory.” And in a report on Feb. 19th 1902 from Colville, WA, “Drainage and water facilities could not easily be better.” And later: “New out-door closets are absolutely necessary, some to be connected with the sewer.” James Jenkins, Inspector.

⁶⁷⁹ NARA, RG48, Department of the Interior, Office of the Secretary, Indian Division, Inspection Reports, 1901-1907, Box 18 letter jan 11, 1904

⁶⁸⁰ Ibid. Yakima, Box 18.

Arizona in 1895. The school's superintendent locked the Indian boys in their rooms at night against their will; they wanted to be able to use the bathroom at night. Their only available agency being their bodily functions, the boys defecated on their floor in protest. In the words of Edmund Nequatewa, "So it was quite a large number of good-sized boys—practically young men—that decided they will just crap all over the floor, which they did."⁶⁸¹ When their supervisor found the surprise, the boys told him "If you don't like that mess, take the padlock off the door."⁶⁸² Shortly thereafter, the Keams Canyon superintendent gave them buckets to use, but their point was made.⁶⁸³ This form of protest was used in prisons both before and after the Indian boarding schools.⁶⁸⁴ Whether a protest is performed by defecating on the floor at a boarding school or simple refusal to upgrade to a "civilized" method of defecation and excreta disposal on a reservation (or, for that matter, one's own home in the case of the insular subjects), the excrement is not put in its proper place, according to the inspectors, superintendents, etc. Anthropologist Mary Douglas, who popularized the term "matter out of its place"⁶⁸⁵ to describe dirt and

⁶⁸¹ Edmund Nequatewa, Ed. P. David Seaman. *Born a Chief: The Nineteenth Century Hopi Boyhood of Edmund Nequatewa, as told to Alfred Whiting*. (University of Arizona Press: Tucson, 1993), 91.

⁶⁸² Ibid.

⁶⁸³ Adams, *Education for Extinction*, 232.

⁶⁸⁴ During the "Dirty Protest" in Northern Ireland in the 1970s, prisoners refused to shower and smeared their feces on the wall to protest attacks by guards. It was also used in Semer in England during the nineteenth century. See *Social Unrest and Popular Protest in England 1780-1840* (Cambridge University Press, 2000), 25.

⁶⁸⁵ Mary Douglas, *Purity and Danger: An Analysis of Concept of Pollution and Taboo*, Routledge Classics (London; New York: Routledge, 2002). The phrase can be found much earlier in an essay called "Cleanliness Next to Godliness" published in Rev. William Arnot, *The Family Treasury*, 1871, 112. It is especially notable because the discussion is specifically about excrement as fertilizer: "What is dirt? The late Lord Palmerson happily answered, 'Matter out of its place.' Cleanliness consists in putting every particle of matter—be it a grain of dust or a dust heap—in its own place. Cleanliness is a part of the system of the God of law and order. That

its inherent subjectivity, also connected dirt with disorder and chaos. Lothrop Stoddard used the same terminology in his description of the non-white “under man.” For him, those who resist a transformation of values are guilty of undermining society with chaos, or “bourbonism,” as he calls it. Therefore, by defecating where one is told not to defecate, the subject mockingly affirms his supposed savagery. In fact, it is doubly transgressive in that the act both defies the orders of the authority (resisting what Foucault calls the “chief function of the disciplinary power”: to train the prisoner⁶⁸⁶) and creates a lurid trace of dirt, or disorder, for the authority to behold. This transgression occurred when the Keams Canyon boys defecated on the floor of their dormitory, and it also occurred when the Indian families refused to upgrade their privies and, as described below, when the Cuban soils the road. The nature of the disciplinary reaction to this transgression depended entirely upon the limits of authority. Unlike the field matron whose role was advisory and investigatory, the superintendent and the BIA officer had the authority to administer punishment.

It is not possible to determine how many families did not upgrade their privies to the new Anglo normative kind, but field matron data and the Meriam Report suggest that number is significant. Lack of sufficient funds may have been one of the major reasons to eschew the advice of the field matron, but another reason that cannot be discounted is

which, spread on our gardens and fields, turns to fresh beauty, life, and fruitfulness, out of its place becomes the cause, not only offence, but of disease and death to man and beast.” Earlier in this section the author writes that his god acted as “scavenger-in-chief” for bestowing Deuteronomy 10-14 on the Israelites. Sometimes the phrase is attributed to Lord Chesterfield.
⁶⁸⁶ Michel Foucault, *Discipline and Punish: The Birth of the Prison*, 2nd ed. (New York: Vintage Books, 1995), 170.

simple rebellion. Refusing to adopt the new system of defecation imposed upon them was one of the few ways an Indian family could contravene, or at least express discontentment with, the new order. The Indians, as well as the new colonial subjects as we shall see, were urged to conform to a system that implicitly and explicitly (via Bourke) told them that they are uncivilized. As was the case with so many regulatory policies applied Indians, they were repeated on the global stage when the U.S. became an imperial power in the years following 1898.

4.4 Sanitary Imperialism

As historian Louis Perez notes, 1898 is traditionally understood “as a watershed year.” He rightly claims that “[m]ost U.S. historiography commemorates 1898 as the moment in which the nation first projected itself as a world power.”⁶⁸⁷ However, colonialist policies toward the Native Americans provided an important precedent for the way American insular officials dealt with their new overseas colonial subjects. Historian Richard Drinnon claims that racism, not class or economy, “defined natives as nonpersons within the settlement culture and was in a real sense the enabling experience of the rising American empire.”⁶⁸⁸ Indeed, the rhetoric applied to the new colonial subjects often used the same racist tone as that which was used by Bourke and Pratt. Legally, the status of the Indians was remarkably similar to that of the insular territories. Whereas the Cherokee were found in 1831 to be a “domestic dependent nation,” *Downes v. Bidwell* (1901), the

⁶⁸⁷ Perez, *1898*. P. iv.

⁶⁸⁸ Richard Drinnon, *Facing West: The Metaphysics of Indian-Hating and Empirebuilding* (Minneapolis: University of Minnesota Press, 1980), xxvii.

most famous of the “insular cases,” the Supreme Court ruled that the Puerto Ricans were “foreign [...] in a domestic sense.” Justice White, who was likely conditioned by racial prejudices and fears of the day, wrote in his concurring opinion that “the immediate bestowal of citizenship on those absolutely unfit to receive it” was not a wise course of action. In other words, Puerto Ricans, like the Cherokees, did not have to be dealt with as a sovereign nation with sovereign rights. Nor, however, would its people be afforded protection under the Constitution as U.S. citizens were. Justice Brown, also concurring, wrote that in a land “inhabited by alien races [. . .] the administration of government and justice, according to Anglo-Saxon principles, may for a time be impossible.” This liminality made the application of policies to modify the behaviors of the respective groups possible.⁶⁸⁹

The Bureau of Insular Affairs implemented defecation policies in the U.S.’s newly acquired territories. Puerto Rico, Cuba, the Philippines, Hawaii, and the Panama Canal Zone were all under various types of control by the U.S. But one thing remained in common between these territories—sanitation reform preceded other meaningful infrastructural or societal development. This meant that defecation had to be regulated, and these regulations had to be enforced. Almost across the board, the first act of

⁶⁸⁹ Oddly the notion of insular territories upon which the BIA was created came from the Guano Acts of the 1850s. At a time when fertilizer was extremely valuable, sailors began to discover relatively barren islands in the Pacific Ocean with huge mountains of bird excrement accumulated over the centuries. This guano was a rich fertilizer and was also used for gunpowder. Through the Guano Acts, the U.S. authorized explorers to claim these properties as U.S.-owned properties, creating a new situation in which appropriated land was not settled and lived in, but used solely for its natural resources. The Guano Acts continued the precedent set by *Cherokee vs. Georgia* that a people or a place could be relegated to this liminal status, devoid of actual rights, or in the case of the islands, any formal responsibility.

civilizing the new colonial subjects of the new American empire was a reformation of their defecation habits. And in this sense, the hegemonic relationship the U.S. had with the insular territories continued in many ways the relationship it had with the Native Americans. As Drinnon notes, the Bureau of Insular Affairs was established “to deal with the natives in our new island possessions. 11,000 miles away, the men in Washington naturally extrapolated from their cumulative experience in dealing with the natives on the continent.”⁶⁹⁰

There are many subtexts to the debate about whether 1898 marked a distinct turn in U.S. foreign relations or if it was a continuation of policies already in place for dealing with the Native American population. One of those subtexts insists on the importance of relations with Native Americans in the 19th century. Another involves the importance of culture in foreign relations. So while those historians concerned with geographical boundaries are correct to identify 1898 as a distinct turning point, fundamentally different than the period before it, historians looking at the social and cultural side of foreign relations are also correct in maintaining continuity in terms of the socio-cultural tendencies informing those relations.

The Spanish-American War lasted between April 25th and August 12th of 1898, culminating with the Spanish being ousted from the island and the American forces occupying it for the next several years. Although the Teller Amendment, passed by the U.S. Congress in April, promised "control of the island to its people," the U.S. occupied

⁶⁹⁰ Drinnon, *Facing West*, 286.

Cuba from 1899 until 1902. And then, based on the Platt Amendment, which placed the onus of the island's stability on the U.S., American occupational forces returned from 1906 to 1909. During these periods, 1898 to 1902 (the "military occupation") and 1906 to 1909 (the "provisional occupation"), the U.S. instituted several important sanitary reforms aimed at spreading American civilization to the country that would either be a neighboring country or at some point part of the U.S. Albert Shaw wrote that all the suffering, death, and debt incurred from the Spanish-American War will have been worth it if only to "establish a regime of cleanliness in the Cuban seaports."⁶⁹¹ Also indicative of the American government's cleanly intentions is the fact that McKinley appointed the surgeon Leonard Wood to the governorship of the island. Although McKinley was referring to the Filipinos when he said he got a message from god that told him to "take them all, and to educate the Filipinos, and to uplift and civilize and Christianize them," he might as well have been talking about the Cubans as he tapped in to a popular expansionist sentiment.⁶⁹² Furthermore, within a month and a half of the end of hostilities, and before the peace treaty was signed in December of 1898, the U.S. sent the celebrity sanitarian George Waring to Cuba to research and report on the sanitary conditions of the island. Waring died shortly after returning, but notes from his trip were compiled into a report nevertheless. In it, he wrote "The surroundings and customs of domestic life are disgusting almost beyond belief." And after describing several rooms in the front and middle of the typical Cuban house, "Beyond these, on another court, are—I

⁶⁹¹ Albert Shaw, "Col. George E. Waring Jr.," *The American Monthly Review of Reviews* 18 (December 1899): 682.

⁶⁹² Drinnon, *Facing West*, 279.

might say is—‘the kitchen stable and privy, practically all in one.’”⁶⁹³ Waring’s revulsion with the sanitary and hygiene of the Cuban people is clear in his prose. He went on to describe the Cuban customs in more detail:

There is no ordinance—at least none in force—requiring a householder to empty his privy vault. He uses it until it threatens to overflow; then he hires a night-scavenger, who comes with a cart, carrying the requisite number of barrels. These are filled through square holes at the top, and discharged through a plugged orifice at the bottom.

The workmen use tub-like ladles with long handles, with which they scoop up the filth. These they carry, dripping as they go, through kitchen, dining-room, reception-room, and hall to the street. When the barrels are filled, the cart starts, ostensibly for the prescribed place of disposal; but often, in a dark street, the plugs come out, and, before the waggon[sic] has gone very far, the barrels are empty.⁶⁹⁴

Havana had an old system of about 35 miles of storm sewer—though some buildings, such as the prisons, also connected lines to these sewers—lined by coral rock.⁶⁹⁵ But by 1898, these sewers were no longer usable. The floor of the channels allowed sewage to seep through to the water table, and potentially contaminate the water supply.

⁶⁹³ Quoted from Porter, *Industrial Cuba*, 154–155.

⁶⁹⁴ *Ibid.*, 155-6.

⁶⁹⁵ Charles Minor Blackford, “An Object Lesson in Hygiene: The Work of the Sanitary Department of the Provisional Government of the Province of Havana,” *The Medical Fortnightly* (December 10, 1901): 3.

Notably, however, Waring did not see the situation of the Cubans to be beyond repair. He recommended an eight-step process to remedy Havana's sanitation woes; before draining marshes or establishing a solid-waste service, Waring's first three steps involved instituting a civilized method for dealing with excrement. He proposed constructing a modern city-wide sewer system and sewage-treatment system so that raw effluent wouldn't be discharged into the bay. And he also proposed filling in every house's cesspit with dirt and supplying each home with a modern toilet that would not be "liable to damage from ignorance and carelessness."⁶⁹⁶ The benefits of the dummy-proof toilets, Waring claims, would far outweigh the costs. As Waring passed away, however, so did his ambitious plan to provide every Havana home with a new toilet.

Among the very first acts by the U.S. forces when the charge of the country officially shifted from the Spanish to the Americans on January 1, 1899, was "the disinfection of the officers' barracks and hospitals."⁶⁹⁷ Shortly thereafter, all public buildings were inspected, and then "cleaned, fumigated, and disinfected."⁶⁹⁸ And already on January 16, 1899, inspections of the homes of Havana had commenced. According to the reports of the military government, "not a single house in Havana was provided with the plumbing of a modern system."⁶⁹⁹ Offenders, which included most of the homes, were sent letters of instruction on how to update their toilet and sewage system. The scavengers, or nightsoil men, replaced their ladle-and-barrel outfit with newer equipment

⁶⁹⁶ Porter, *Industrial Cuba*, 158.. 158.

⁶⁹⁷ Blackford, "An Object Lesson in Hygiene: The Work of the Sanitary Department of the Provisional Government of the Province of Havana," 5.

⁶⁹⁸ *Ibid.*

⁶⁹⁹ United States. War Dept, *Annual Reports of the Secretary of War*, 1899, 271.

resembling the “odorless excavators” popularized in the late-19th century U.S. for cities that had not yet upgraded to comprehensive sewers. The sewage was then taken to scows and dumped out at sea. The remaining empty cesspits, or pozos negros (black pits), were treated with electrozone⁷⁰⁰ and burning sulphur.⁷⁰¹

William C. Gorgas was appointed the Chief Sanitary Officer in Havana in 1898, but much of the actual sanitation work was performed by the Army engineers and Havana’s Department of Public Works, headed by Jose Villalón.⁷⁰² Major W.M. Black was put in charge of all of the island’s engineering work. The American officers in charge deemed the old Spanish system of public works to be antiquated, so they organized and ran the public works in Cuba based on the American model.⁷⁰³

In the same spirit as the USSC inspectors from several decades earlier and the field matrons who started their inspections only a few years earlier, a team of American doctors and both Cuban and American inspectors—described later by the American

⁷⁰⁰ Electrozone was a relatively new product popularized for its antiseptic qualities widely used in Havana by the Department of Sanitation for cleaning the streets, the sewers, and the floors, and cesspits of homes. It is essentially seawater that has gone through electrolysis and is mixed with chlorine. Walter Reed investigated its use at the behest of the Adjutant General’s Office in March or April of 1900. Although it functioned to kill the foul smell of the sewers, he found it to be practically useless as a germicide for killing fecal bacteria unless the chlorine content was unusually high. From Walter Reed, “Report from Walter Reed to the Surgeon General, April 20, 1900.” <http://etext.lib.virginia.edu/etcbin/fever-browse?id=02010001>. Found at the Philip S. Hench Walter Reed Yellow Fever Collection, Historical Collections & Services of the Health Sciences Library, University of Virginia

⁷⁰¹ Blackford, “An Object Lesson in Hygiene: The Work of the Sanitary Department of the Provisional Government of the Province of Havana,” 6.

⁷⁰² James H. Hitchman, “Unfinished Business: Public Works in Cuba, 1898-1902,” *The Americas* 31, no. 3 (January 1, 1975): 337.

⁷⁰³ *Ibid.*

provisional governor of Cuba Charles Magoon as having a great deal of zeal⁷⁰⁴—set out to fix how and where Cubans defecated. Havana’s Department of Sanitation performed initial inspections from January to March of 1899, and then continuous inspections for the remaining years of the military occupation. Inspectors were given metal badges and letters proving they were from the Sanitary Department.⁷⁰⁵ Havana contained around 20,000 households, so it took some time for each one to be reached by a sanitary inspector. In the initial inspection, a form was filled out answering basic questions regarding the basic condition (number of rooms, number of people living there) of the dwelling.⁷⁰⁶ The second page of the form included a detailed questionnaire—to be filled out by the inspector—regarding the excremental details of the home. Questions included if a “fosa mora” or “pozo negro” (cesspit) existed, when it was last cleaned, if there was a sewer pipe, what it was made of, where it went to, etc. The existence of a cesspit or a sewer line that was defective (nearly all were since the main sewers were few and even those tended to be clogged or dysfunctional) meant that a notice was to be sent to the homeowner. Letters were written to the homeowners alerting them that the work—in most cases, cleaning out the cesspit and sanitizing it—needed to be done within seven days. At that point an inspector visited the home, and if the homeowner did not do the work within that time, another notice was sent to show “cognizance has been taken of the default.”⁷⁰⁷ Ten days later, if the work has still not been done, a \$10 (\$258 in 2010) fine

⁷⁰⁴ Report of the Provisional Administration, 108.

⁷⁰⁵ “Public Order 157.” Dated June 12, 1901. NARA RG 350, Box 62, Entry 5, Doc 360.

⁷⁰⁶ Letter from the Office of the Chief Sanitary Officer to the Adjutant General, September 17, 1901. RG 140, Box 1, Entry 107. NARA

⁷⁰⁷ *Ibid.*, 2

was issued to the homeowner. If they still did not do the work, the engineering corps and the Nightsoil Department (within the Public Works Department) did the work and charged the homeowner for it. Part of the disinfection process a house typically went through was a thorough scrubbing of the “floors, ceilings, and walls” with “a powerful solution of bichloride of mercury.”⁷⁰⁸ The \$10 fine alone was likely unaffordable to the average Havana resident at the time. Occasionally, homeowners received letters notifying them that they were to install water closets and connect them to the sewer when in fact there was no sewer near them.⁷⁰⁹ Usually, though, since the existing sewer was not extensive or for that matter usable, and since the comprehensive sewer could not be built during the occupation, the “pozo negros” had to suffice in the meantime. The extent of the forced upgrades varied depending on the condition of the house. But many “modern materials”—it is not clear if these were toilets or simply pipes—were ordered from the U.S.⁷¹⁰ Likely, the Cubans were left to use normal outhouse-style privies as they were accustomed. The buildings occupied by the military government throughout the country, however, were outfitted with modern water closets.⁷¹¹

⁷⁰⁸ “REPORT OF BRIG. GEN. WILLIAM LUDLOW, COMMANDING DEPARTMENT OF HAVANA AND MILITARY GOVERNOR OF THE CITY OF HAVANA, Headquarters Department Of Havana, August 1, 1899,” in *Annual Reports of the War Department for the Fiscal Year Ended June 30, 1899* (Washington, D.C: Government Printing Office, 1899), 242.

⁷⁰⁹ Marial Iglesias Utset, *A Cultural History of Cuba During the U.S. Occupation, 1898-1902*, Latin America in translation (Chapel Hill: University of North Carolina Press, 2011), 23.

⁷¹⁰ Elihu Root, *Annual Report of the War Department for the Fiscal Year Ending June 30, 1899* (Washington, D.C: Government Printing Office, 1899), 271.

⁷¹¹ *Ibid.*, 275.

The scavengers were put on the government payroll and worked in the Night Soil department under American William Kennedy.⁷¹² Existing documents of the work done refrain from specificities, but the intent of the Sanitary Plumbing and House Drainage Department under the Department of Sewers was essentially to update the plumbing so that when the sewer was built, all that would be necessary would be to connect the house to the sewer line. In the meantime, the sewage would be directed back to the pozos negros.⁷¹³ Between June 1899 and June 1900, the Night Soil Department inspected only 1,414 homes, but emptied 3,597 cubic yards of excrement from Havana's cesspits. All of this information was carefully documented by the Night Soil Department.⁷¹⁴ Meanwhile, the Maintenance and Improvement of Old Sewers Department removed 15,338.8 cubic meters of sewage from the existing clogged lines.⁷¹⁵ Previously, the night soil men carried the casks of sewage to outlying farms for fertilization, but under the system of the U.S. forces, they were required to take it to the city dump in some circumstances, or the ocean in others.⁷¹⁶ Outside of Havana, where no sewers existed at all, the U.S. occupying forces reported that the residents of smaller towns typically defecated "on the public streets and byways," whereas in larger towns such as Matanzas, homes usually had outhouses built over cesspits—both lined and unlined. Some had no toilet facilities at all.

⁷¹² Cuba. Military Governor (1899-1902 : Wood) and Leonard Wood, *Report of the Military Governor of Cuba on Civil Affairs* (G.P.O., 1901), 163.

⁷¹³ *Ibid.*, 171–172.

⁷¹⁴ *Ibid.*, 173.

⁷¹⁵ Root, *Annual Report of the War Department for the Fiscal Year Ending June 30, 1899*, 88. Interestingly, though this section of the report stayed on the record, a large section concerning the sewage is marked as "omitted."

⁷¹⁶ *Ibid.*, 88.

In just over a year, from January 1899 to April of 1900, the U.S. spent more than \$4 million on sanitation measures.⁷¹⁷ And that number does not include building a comprehensive sewer system. The U.S. Military government clearly wanted to build a comprehensive sewer system for Havana, but legal wrangling with Mike Dady of New York prevented them from completing the task. Dady's various lawsuits—against Havana's mayor and then against Wood—claimed that he had a contract to sewer Havana since 1895, but was prevented from doing so by the war. The military government's consulting engineer, Samuel Gray, found his bid to be full of engineering miscalculations, and had other problems in terms of price and quality, so they refused to honor the contract after the war had ended.⁷¹⁸

Naturally, some homeowners and business owners did not cooperate with the new system of dealing with excrement. Reports attribute this dissent to both "poverty" and "avarice," without mention of possible displeasure of being occupied. Either way, defecating in an unsuitable manner was still clearly not acceptable to the American occupying forces. In addition to the fines levied against some offenders, there is some evidence that others were punished more severely. While it is not clear if those who could

⁷¹⁷ Root, *Annual Report of the War Department for the Fiscal Year Ending June 30, 1899*, 283. The U.S. was very careful to not spend any of their own money beyond the presence of the occupying forces. Measures such as these were paid for mostly through customs fee

not pay the fines were incarcerated or sent to debtors prisons, it is clear that some were beaten for “recalcitrance.”⁷¹⁹

In 1902, when the U.S. military government left the country and handed the reins over to Cuban Moderate Tomás Estrada Palma, they left the country in better sanitary condition than when they began their occupation. President Roosevelt declared in 1904 the following:

If every country washed by the Caribbean Sea would show the progress in just and stable civilization which with the aid of the Platt Amendment Cuba has shown since our troops left the island, and which so many republics in both Americas are constantly and brilliantly showing, all questions of interference by this Nation with their affairs would be at an end.⁷²⁰

However, the Platt Amendment (1901) gave the U.S. the right to re-occupy Cuba in the event it displays internal instability. In fact, Section 5 of the Platt Amendment “required the Cuban government to complete the sanitation measures already started.”⁷²¹ This provision caused some friction between the two nations, as the U.S. reminded Cuba of its obligation under Section 5 in 1905.⁷²² And in 1906, after a period of civil and political

⁷¹⁹ Elihu Root, “Annual Report of Brig.Gen. William Ludlow, Commanding Department of Havana and Military Governor of the City of Havana,” *Annual Report of the War Department for the Fiscal Year Ending June 30, 1899*, 271.

⁷²⁰ Quoted in David A Lockmiller, *Magoon in Cuba; a History of the Second Intervention, 1906-1909* (New York: Greenwood Press, 1969), 26.

⁷²¹ *Ibid.*, 23.

⁷²² *Ibid.*, 23-24.

strife in which Estrada Palma requested U.S. assistance, Secretary of War Taft became the provisional governor of Cuba for two weeks until American diplomat Charles Magoon arrived to take over. Magoon found himself negotiating between the two rival political factions, Zayas and Gomez, and by most recent accounts he administered the government fairly and softly (though many Cubans at the time and shortly thereafter thought him to be corrupt).⁷²³

By the time Magoon took office in 1906, there was still no sewer in Havana. Legal wrangling with Mike Dady and then another American company, McGivney-Rokeby, stalled sewer construction indefinitely. The Magoon administration still planned to carry out the task of sewerage Havana. The \$13 million⁷²⁴ necessary for the project was well beyond what the municipal government could afford, so the federal government planned to cover a substantial portion of that sum.⁷²⁵

Magoon felt that a new sewer and proper sanitation were keys to a thriving Cuba. He found the sanitary inspections of homes and businesses to be the “greatest and most beneficent influences exercised since the beginning of the Provisional Government.”⁷²⁶ Indeed, Magoon nearly tripled the number of inspectors already working in Havana from

⁷²³ Hugh Thomas, *Cuba: The Pursuit of Freedom*, Rev. and abridged ed. (London: Picador, 2001), 483–486.

⁷²⁴ Letter to Magoon from Public Works Dept. Advisor W.M. Buck. April 5, 1907. NARA RG 199, Box 103, Entry 3.

⁷²⁵ Letter from Magoon to Secretary of War Taft dated August 10, 1907. NARA, RG 199, Box 105, entry 9. The State Department under Elihu Root leaned heavily on Magoon to honor the McGivney-Rokeby contract. See Letter from Root to Magoon, March 12, 1907. NARA RG 199, Box_, entry 35

⁷²⁶ “Report of Executive Officer of the Sanitary Department,” Oct. 31st, 1907. Report of the Provisional Administration, 480.

20 to 55 the same month he took office. Dr. Jose Lopez, head of the local Sanitary Office in Havana, claimed that they “endeavor to strictly enforce what is required in the Sanitary Ordinances, in both private houses as well as in public establishments.”⁷²⁷ Chief Sanitary Inspector Jefferson Kean also had these inspectors equipped with special uniforms, not unlike Waring’s strategy with the streetsweepers in New York.

All of this disturbance regarding the Cubans’ excrement must be understood within the era’s social context. First, the measures taken by the U.S. military and provisional governments to clean up Cuba and reduce the death rate from cholera, typhoid, and yellow fever worked.⁷²⁸ And though Cuban attitudes toward their restless and brutal neighbors to the north (to paraphrase Jose Martí) are mired in more than a century of duplicitous and destructive policies coming from both countries, many are still thankful for the sanitary reforms instituted in the post-1898 era. From this important perspective, it makes good sense that Cuban excrement was one of the most significant targets of the Progressive health reformers within the occupation forces. In suggesting that outside military force is necessary to “clean out the bandits” in the tropics and Mexico to make “orderly self-government” possible, American diplomat Walter Hines Page summed up American efforts in Cuba more directly, “What we did in Cuba might thus be made the beginning of a new epoch in history, conquest for the sole benefit of the

⁷²⁷ Ibid., 480

⁷²⁸ In part due to the war, Cuba had a very high death rate in 1898: 140 per 1000 in Havana, according to Robert Porter, *Industrial Cuba*, 110. Out of an estimated 61,000 Spanish soldiers who died in Cuba between 1895 and 1898, 13,000 died from yellow fever, and 40,000 died from other diseases, according to Hugh Thomas, *Cuba: The Pursuit of Freedom*, 414.

conquered, worked out by a sanitary reformation.”⁷²⁹ This sanitary reformation was appreciated by many Cubans, and was also considered by many Americans to be our great gift to the Cuban people.

On the other hand, this fixation with Cuban excrement also needs to be understood within the context of how the Cuban figure was constructed by American media and how the Cuban colonial subject was treated by the American forces. At roughly the same time Theodore Roosevelt and other Americans touted masculinity and warned of peacetime creating “effeminate tendencies in young men,”⁷³⁰ newspapers were painting Cubans as lazy, immoral, and effeminate, “incapable of by nature and experience of fulfilling the obligations of citizenship in a great and free republic.”⁷³¹ This same article in the *Philadelphia Manufacturer* also stated that “Our only hope of qualifying Cuba for the dignity of statehood would be to Americanize her completely, populating her with people of our own race.”⁷³² Statements like these did not go unnoticed by Cubans. Jose Martí responded to the *Manufacturer* article very defensively, writing that “We are not the people of destitute vagrants or immoral pigmies that the *Manufacturer* is pleased to picture,” also noting that these “effeminate” Cuban soldiers, upon hearing of Lincoln’s assassination, wore an armband in tribute to the U.S.

⁷²⁹ Walter Hines Page, quoted in Reinhold Niebuhr, *Moral Man and Immoral Society: A Study in Ethics and Politics*, Scribner library, SL28 (New York: Scribner, 1960), 98–99.

⁷³⁰ Maurice Thompson, “Vigorous Men, Vigorous Nation,” *The Independent*, September 1, 1898, L, no. 2596 edition, 610–611.

⁷³¹ Quoted in Emilio Bejel, *Gay Cuban Nation* (Chicago: University of Chicago Press, 2001), 11. From “Do We Want Cuba?” in the *Philadelphia Manufacturer*, 6 March 1889.

⁷³² *Ibid*, quoted in *Gay Cuban Nation*, 12.

President.⁷³³ Other Americans, such as publisher Walter Hines Page, wrote that any course other than the one taken by the U.S. in Cuba would be “silly, sentimental, flabby—immoral. Any other course would mean a plain shirking of our obligation to civilization. There is nothing in our demands that is humiliating to the Cubans.”⁷³⁴ The gulf between the image of the Cuban perpetuated in the American media and the image the Cubans had of themselves was seldom bridged as the policies of the provisional government were implemented.

Furthermore, that the decades-long battle for Cuba Libre from vicious Spanish domination was co-opted by the Americans in 1898 did not sit well with the Cubans.⁷³⁵ And the subsequent manner in which the Cubans were cut out of peace negotiations and the American military occupation of the country were surprises and insults that made imperial intentions all the more clear to the Cubans. In 1899, Cuban General Máximo Gómez wrote that

None of us thought that [the U.S. intervention] would be followed by a military occupation of the country by our allies, who treat us as a people incapable of acting for ourselves, and who have reduced us to obedience,

⁷³³ José Martí, *José Martí: Selected Writings*, Penguin classics (New York: Penguin Books, 2002).

⁷³⁴ Walter Hines Page and Arthur Wilson Page, *The World's Work: A History of our Time* (Doubleday, Page & Company, 1901), 571.

⁷³⁵ Louis A Pérez, *The War of 1898: The United States and Cuba in History and Historiography* (Chapel Hill: University of North Carolina Press, 1998), 18–19.

to submission, and to tutelage imposed by force of circumstances. This cannot be our ultimate fate after years of struggle.⁷³⁶

From the dominant U.S. perspective, the military occupation was necessary to help these “untrained”⁷³⁷ Cubans stabilize their country—it had to “pacify” (to use Senator Orville Platt’s phrase) the tiny island. Clearly some of the language—intentional or not—tended to portray the Cubans as children, a position vehemently opposed especially by soldiers that had been fighting the Spanish occupation for decades. Therefore, the American efforts to reform the defecation practices of their new subjects were not welcomed by much of the country no matter how healthy it ended up making the populace.

Cuban historian Marial Iglesias Utset writes of a cartoon from the *Literary Digest* in 1901, depicting “Leonard Wood, surrounded by cases of soap, bleach, and disinfectant, energetically scrubbing Cuba, represented by a little black boy, sitting in a bathtub and crying forlornly.”⁷³⁸ Utset also connects domestic virtue and imperialism to underscore the importance of race in the U.S./Cuba equation:

fetishistic praise of soap and toilets as ‘vehicles of civilization’ was based on a racist association linking the ‘whiteness’ of the colonizers with the cleanliness and purity typical of correct hygiene practice, in stark contrast

⁷³⁶ Quoted in Pérez, *The War of 1898*, 23.

⁷³⁷ From an April 1902 article in the *North American Review*, quoted in *Ibid.*, 24.

⁷³⁸ Iglesias Utset, *A Cultural History of Cuba During the U.S. Occupation, 1898-1902*, 24. Also found in Louis A Pérez, *Cuba Between Empires, 1878-1902*, Pitt Latin American series (Pittsburgh, Pa: University of Pittsburgh Press, 1982), 324–328.

to the dark skin color of natives who lived amid the filth and pollution characteristic of ‘backward’ societies.⁷³⁹

Racist stereotypes about Cubans undoubtedly complicated the U.S. mission to sanitize the island. Less than forty years after slavery was abolished in the U.S., less than five years after *Plessy v. Ferguson*, and in the middle of the Jim Crow era and lynching, it is practically impossible to disentangle race from the civilizing mission of the occupying forces. Indeed, it may be no surprise then that the more severe punishments doled out for defecating outside of the Anglo-designated location occurred in the Santiago on the eastern side of the island, which has historically been the black and mulatto region of Cuba.

One author, Robert Porter—the superintendent of the 1890 census who “promulgated the idea of the ‘end of the frontier’”⁷⁴⁰ that Turner seized upon—neatly compared the American sanitation campaign in Santiago to the legendary Roosevelt-led charge up San Juan Hill: “the campaign against dirt and disease has been as sharp and hot as the charge of San Juan Hill. The resistance on the part of the native population was even more stubborn than the Spanish soldiers to our forces around Santiago.”⁷⁴¹ Unlike the difficult, though methodical, system used by the sanitary officers in Havana and its surroundings, the tactics used to control the excrement in Santiago were brutal by comparison. Porter reported of doors being smashed down, and “people making sewers of

⁷³⁹ Iglesias Utset, *A Cultural History of Cuba During the U.S. Occupation, 1898-1902*, 23–24.

⁷⁴⁰ “U.S. Census Bureau / History / Directors” found at www.census.gov.

⁷⁴¹ Porter, *Industrial Cuba*, 63.

the thoroughfare [being] publically horsewhipped in the streets.”⁷⁴² Porter’s tone suggests tacit approval of these methods geared supposedly towards uplift and civilization. The successes of the sanitation campaigns, particularly in the eastern provinces that Santiago is a part of, demonstrate the potency of American civilizing forces.

Furthermore, this more aggressive punishment was not reserved for the poorer, rough-and-tumble citizens. In Porter’s own words, “Eminently respectable citizens were forcibly brought before the commanding general and sentenced to aid in cleaning the streets they were in the habit of defiling.”⁷⁴³ A thirty-day sentence cleaning the streets with the all-white clad sanitation teams was the standard punishment for fouling the streets with one’s excrement if one somehow escaped being horsewhipped in public.⁷⁴⁴

Porter described the foul condition American occupying forces found Cuba to be in as the Spanish left. In the words of one former Confederate soldier who was then an officer in the military occupation, the yellow fever outbreaks were so bad “You cannot even raise an old-fashioned rebel yell.”⁷⁴⁵ Nevertheless, due to efficiency, humbleness, and the “American character,” the occupying forces were able to bring real progress to the island:

In this province of Cuba may be seen in full operation the work which the Government of the United States has been impelled to undertake, and here

⁷⁴² Ibid.

⁷⁴³ Ibid.

⁷⁴⁴ Ibid., 62-63.

⁷⁴⁵ Ibid., 29.

may be studied the character of the forces upon which the people of the United States must rely in the work of reconstruction now in progress. The machinery of government is running with a fair degree of smoothness, and the men responsible for it, from the humblest official to the capable commander of the province, understand their business and are masters of the situation. It is a striking illustration of the marvellous [sic] adaptability of the American character.⁷⁴⁶

Controlling the defecation habits of the Cubans through corporal punishment was not only moral and justifiable; in Porter's view it was a glorious demonstration of what it meant to be an American in the new, interconnected world.

Porter's views on controlling the subjects of the new U.S. empire were common at the time. For example, President McKinley claimed to not have wanted the Philippines, but decided that it was the American's duty—the "White Man's Burden," in Rudyard Kipling's words—to "uplift and civilize and Christianize them."⁷⁴⁷ Or, as McKinley's policy was named, the Filipinos would be civilized in this way not by force, but by "benevolent assimilation." One can make a strong argument that tightly controlling the Filipino defecation practices is indeed benevolent; that to the end of eradicating deadly diseases, proper sanitation was paramount. However, in the context of the bloody war

⁷⁴⁶ Ibid., 62. This passage was written in the middle of his section on sanitation. Coming from the man who planted the idea in Frederick Jackson Turner's mind that the frontier was an integral part of the American character and that a future of imperialism would somehow open new frontiers and restore that character, this statement is indeed remarkable.

⁷⁴⁷ Quoted in Susan K. Harris, *God's Arbiters: Americans and the Philippines, 1898-1902* (Oxford University Press, 2011), 14.,

fought with the Filipino insurgents and the toll this fighting and occupation took on the people of the Philippines (some reports suggest over a million Filipinos died as a result of the war), it is also easy to see how the Filipinos construed the American concern with their excrement as intrusive.

Already by 1901, the provisional government in the Philippines passed a series of laws detailing how and when ectopic excrement is illegal. Essentially, if someone found anyone else's excrement to be problematic (i.e. smelly), even if it was kept in one's own home, it would be declared a "nuisance injurious to health."⁷⁴⁸ The same went for any excrement in the street or any home that was sewerred improperly—from unsanitary privies to toilets connected to the sewer but without proper ventilation.⁷⁴⁹ Even fecal matter that was not sufficiently deodorized or disinfected in one's privy vault was deemed a public nuisance. This ordinance, passed in November of 1901, was comprised of 23 circumstances that either directly or indirectly dealt with excrement, essentially outlawing any excrement that was kept or left anywhere outside of one's colon. Previous to this ordinance, some of Manila's upper class houses had water closets on the second floor overhanging the yard. After evacuation, the excrement would simply drop into the yard below "where it was finally scraped up and carried away." Other wealthier houses had stone vaults with outhouses built on top of them. All of these systems were declared

⁷⁴⁸ "Report of the Philippine Commission," in *Annual Reports of the War Department for the Fiscal Year ended June 30th, 1903* (Washington, D.C: Government Printing Office, 1904), 315.

⁷⁴⁹ *Ibid.*, 315-316.

to be health nuisances by the sanitary inspectors and were replaced by the pail conservancy system.⁷⁵⁰

The project of inspecting houses in the Philippines—given its population, size, and geography—was a much greater task than it was in Cuba. For example, in just the month of May in 1902, 262,500 houses were inspected by sanitary inspectors and 85,000 gallons of excrement was removed.⁷⁵¹ According to the Bureau of Health’s detailed reports, typically fewer than 1% of the houses inspected required the cleaning of cesspools. It is unclear if this is because it was not a big problem or because so few houses had cesspools. Anderson writes that the Philippine people were labeled “promiscuous defecators” by Dr. Thomas Marshall because of their custom of defecating in a shallow hole near their home and then covering it up with dirt again.⁷⁵²

At the same time that defecation processes were regulated in the Philippines, the brothels were regulated by the Bureau of Health as well.⁷⁵³ Both were considered “source[s] of contagion.”⁷⁵⁴ From a Foucauldian perspective, any act of promiscuity—in the broad sense, the failure to comport one’s actions in their designated places—functioned as a threat to the order imposed by the occupying forces. Though the

⁷⁵⁰ Ibid., 330

⁷⁵¹ “Monthly Report of the Board of Health for the Philippine Islands and the City of Manila.” May, 1902. RG 350, Entry 5, Box 726, file 3465.

⁷⁵² Anderson, *Colonial Pathologies*, 128.

⁷⁵³ Paul Kramer, “The Darkness That Enters the Home: The Politics of Prostitution during the Philippine-American War,” in *Haunted By Empire: Geographies of Intimacy in North American History*, ed. Ann Laura Stoler (Durham [N.C.]: Duke University Press, 2006), 374.

⁷⁵⁴ Paul Kramer writes that “the first principle of the system [of inspection] was that the prostitute was the perpetual and exclusive source of contagion.” From Ibid.

metaphor of “promiscuous defecation”⁷⁵⁵ not only adds a level of scandal to the practice of defecating in a hole, but also links it directly with the “racialized sexual norms and practices” imposed by the colonizers that were integral to their goal of creating order out of chaos.⁷⁵⁶ Sexual promiscuity was one of the key ways men such as Herbert Spencer elevated the white European/white-American over any other race. They often referred to promiscuity as “hetaerism,” and professed that it was a relic of primitive cultures often still practiced in islands of dark-skinned people.⁷⁵⁷ As it was difficult to morally condemn one’s method of defecation, tingeing it with sexuality put it in the realm of morals. It also suggested that the colonized person did not have control of his or her body the way a civilized Anglo-American did.⁷⁵⁸ These two dimensions taken together—the sexual and moral—furthermore suggest that the occupied citizens did not exhibit the type of restraint and virtue that was necessary for self-government. Linking sex and defecation also altered the way the social body of the colonized person was constructed and perceived. Whereas sexualizing defecation added a prism of morality through which it could be seen, linking defecation with sexuality added a dimension of carnality and primitivism to the social body of the colonized person.

⁷⁵⁵ The actual term used by Marshall. Quoted in Anderson, *Colonial Pathologies*, 104.

“Promiscuity” has had a sexual connotation since at least the mid-19th century.

⁷⁵⁶ Eileen Findlay, *Imposing Decency: The Politics of Sexuality and Race in Puerto Rico, 1870-1920*, American encounters/global interactions (Durham, NC: Duke University Press, 1999), 9.

⁷⁵⁷ See, for example, Herbert Spencer, *The Principles of Sociology* (D. Appleton and company, 1882), 662–671.

⁷⁵⁸ This lack of control fit the narrative often used to describe the islanders before and during the occupation. One such example is the *Philadelphia Manufacturer* article that called Cubans “helpless, lazy, deficient in morals, and incapable by nature and experience of fulfilling the obligations of citizenship in a great and free republic.” *Philadelphia Manufacturer*, March 16th, 1889.

Such practices were the target of Bureau of Health officers trying to reform the Filipinos. Although the local health boards enforced the sanitation laws and prosecuted violators, most of the sanitation laws during the occupation were written by the Bureau of Health (it was called the Board of Health until 1905 and became the Philippine Health Service in 1915), spearheaded mostly by Americans.⁷⁵⁹ And evidence suggests that at the very least, the Filipino professionals inside the Department of Sanitation resented the disrespect to Filipino customs shown by the American bureaucrats and doctors in the department. One letter written by two Filipino doctors and a pharmacist sent to the Secretary of War in 1912 complained that the policies and actions of the Insular government with regards to the Department of Sanitation proved that the idea of “Philippines for the Filipinos” was a “myth if not a dead letter in the branch of sanitation.”⁷⁶⁰ And a press release dated December 12, 1912, claimed that up until that point, the sanitation measures taken by the Bureau of Health in the provinces were met with “opposition or complete apathy.”⁷⁶¹

While the sanitary officers had other duties besides just policing excrement, they were given orders that “special stress shall be laid upon the proper disposal of fecal matter.”⁷⁶² Furthermore, each house was to maintain and renew when necessary a “sanitary card,” issued to them and filled out each time the house was inspected by a

⁷⁵⁹ Anderson, 50-51, 251.

⁷⁶⁰ Letter to Secretary of War Dickinson, 1912. RG 350, Entry 5, Box 726, File 3645.

⁷⁶¹ “Sanitation and Health in the Philippines,” RG 350.

⁷⁶² “Manual of the Bureau of Health for the Philippine Islands.” Department of the Interior, 1911. 74,

sanitary officer.⁷⁶³ The sanitary officers wore a uniform of a khaki collared coat with four outside pockets and a special metallic badge displaying their rank and number. These badges distinguished between “sanitary inspector,” “assistant sanitary inspector,” “chief sanitary disinfecter,” and “assistant sanitary disinfectors.” They also wore office “Bureau of Health” pins and had “BH” buttons for their coat pockets.⁷⁶⁴

In an act dating from 1904, the Bureau of Health was given broad-ranging powers to regulate the bathrooms and other defecation habits of the Filipinos. The sanitary police and sanitary inspectors were essentially authorized to enter any building or home at a reasonable hour to inspect the “plumbing systems, drains, trappings, water-closets, vaults, latrines, urinals, cesspools, and sanitary fixtures and appliances” of the home or business.⁷⁶⁵ They were also permitted under this law to destroy any structure deemed unsanitary. This authority and the way that the actions of the sanitary inspectors were carried out—both before and after the abovementioned law—naturally led to some resentment from the Filipino populace. In a letter to Governor Taft, one Filipino complained that “The sanitary laws enacted by the Board of Health are unfortunate and absurd. The people of Manila have never hated the Americans as at present, and the anti-american [sic] sentiment has never been so deep as that provoked by the attitude of the

⁷⁶³ *Bureau of Health Manual*, 43. Entries 169-170.

⁷⁶⁴ *Ibid.*, Entry 554 and 566.

⁷⁶⁵ “An act further defining the powers and duties of the board of health for the Philippine Islands and of the Municipal Board of the City of Manila in Connection with the Preservation of the Public Health of that city, and repealing certain provisions of law relative thereto.” RG 350 Entry 5, Box 726, File 3645. Act no. 157 from 1901 provided for the initial sanitation rules

Board of Health and its employees.”⁷⁶⁶ The Bureau of Health was not the only bureau instructing citizens how to defecate. The educational curriculum established by the U.S.-led Bureau of Education also decreed that young girls receive three years of education regarding housekeeping skills. As part of that training, they were to be specifically taught “care of the drains, sinks, and closets.”⁷⁶⁷ Boys, meanwhile, were educated in agriculture and toolwork.⁷⁶⁸

Excrement was such a focus of the occupying government that by 1906 they passed a law banning the use of excrement for fertilizer in crops grown for human consumption. Oddly, though many laws enacted by the occupying government were based on U.S. laws, the fact that Americans created such a law in the Philippines suggests that they felt Filipino excrement was somehow more dangerous. The 1906 Philippine law is worth reprinting here for its exhaustiveness alone.

No farmer, market gardener, or other person or persons shall use any human excreta, excrement, dejecta, or the contents of any water or earth closet, privy, vault, cesspool, latrine, or pail, or other receptacle for human feces or urine, as a fertilizer for any land on which is grown any article or product intended for human food or human consumption, or allow any human excrement, excreta, or dejecta to be sprinkled on or applied in any

⁷⁶⁶ Letter from T.H. Pardo de Tavera to Governor Taft, May 5th, 1902. RG 350, Entry 5, Box 726, File 3645

⁷⁶⁷ “Report of the General Superintendent of Education,” in *Annual Reports of the Secretary of War: Vol XIII Report of the Philippine Commission* (Washington, D.C: Government Printing Office, 1905), 916.

⁷⁶⁸ *Ibid.*, 869.

manner or for any purpose to any crop, product, or vegetation growing on said land.⁷⁶⁹

Violators could be sent to jail for up to six months. And as much as excrement was legislated and prosecuted, even more of it was collected by the Bureau of Science and Army Board for the Study of Tropical Diseases.

Warwick Anderson writes of the inordinate attention paid to Filipino (though not white) excrement during the American occupation. In 1914, the Manila Bureau of Science collected 126,000 jars of feces, mostly from the Filipinos, for inspection for dangerous pathogens. As one can imagine, the act of collecting these specimens was one that likely created some tension between the Filipino populace and the scientists.

Anderson quotes Edward Munson, the author of *The Theory and Practice of Military Hygiene* who was a medical officer in Manila for several years during the occupation, regarding his thoughts on the process: “The work meant invasion of the accepted rights of the home and of the individual on a scale perhaps unprecedented for any community. The collection of the fecal specimens necessarily might fairly be regarded as repulsive to modesty.”⁷⁷⁰ Despite this clear imposition on the privacy of the Filipinos, the Bureau of Science felt it necessary to collect and test these specimens.

Anderson’s more general argument is that in the Philippines, the concern with Filipino excrement exceeded what was rational given the common disease outbreaks to

⁷⁶⁹ “An Act for the Prevention and Suppression of Asiatic Cholera,” RG 350, Box 726, Entry 5, File 15048.

⁷⁷⁰ Anderson, *Colonial Pathologies*, 108.

the point that excrement was racialized: “Racial type was manifested in bodily function and pathological potential, on which medicos put a gloss of civilizational status. If they wanted recognition from the public health department, Filipinos were expected to confess their uncleanliness, to voice their barbarity, and to make themselves available for hygienic salvation.”⁷⁷¹ In other words, the Filipino had to conform to the social body of the Filipino constructed by the American occupiers (which was in turn fed by narratives in the media in the U.S. both before and during the occupation) or else the health department did not validate it. Excrement out of its proper place—be it in jars or in a hole beside one’s house—confirmed the notion that Filipinos needed to be civilized and occupied.

Since the sewers of Manila were not comprehensive and did not service the poor majority in Manila and elsewhere, the Bureau of Health initially promoted what they called the “pail conservancy” system. Neighborhoods were provided with a number of pails to defecate in. These pails were wooden and only held 1.5 cubic feet.⁷⁷² These pails were emptied and the contents eventually taken to a scavenger barge called the Pluto, which could hold up to 285 tons of “cargo.” The Pluto would take the excrement far out into the bay before dumping it overboard. This method was considered to be an improvement over the prior system in which scavengers would haul the excrement to a

⁷⁷¹ *Ibid.*, 106.

⁷⁷² “Report of the Philippine Commission,” *Annual Reports of the War Department for the Fiscal Year ended June 30th, 1903*. Washington: Government Printing Office. 1904, 314.

ship on the Pasig River, where it would be dumped.⁷⁷³ As in Cuba, the Bureau of Health imported many “odorless excavators” from the U.S. to clean out the cesspools, privy vaults, and pails. In one month, September of 1905, 328,500 gallons of excrement were cleaned from Filipino vaults by the odorless excavators.⁷⁷⁴

Victor Heiser, director of health in the Philippines, made essentially the same arguments about American work and character in the Philippines that Porter did about American work and character in Cuba. In a 1913 report he wrote for Congress, he mentioned that what was expected of the sanitarian was that he disinfect everything in his own surroundings but not try to reform the “oriental”:

The task which confronted the American sanitarian seemed indeed impossible of accomplishment. With a population that was fully satisfied with the conditions as they were [...] and with the determination to resist any change in their personal habits and the conditions that surrounded them [...] [it was the accepted knowledge that] It was impossible to reform the oriental, and that it was effort wasted that could be used more profitably in other directions. [...] But the American sanitarian was not daunted by these obstacles and set to work resolutely. [...] It was learned that the passive resistance of the oriental is very much more difficult to

⁷⁷³ “Ibid., 10. B.H. Burrell, the man in charge of starting the pail conservancy system, was replaced in 1903 by Major G. M. Barbour, the sanitation official in charge of Santiago when the offending defecators were beaten. From Ibid., 87.

⁷⁷⁴ “Monthly Report of the Board of Health for the Philippine Islands and the City of Manila, September, 1905.” RG 350, Entry 5, Box 726, File 3645

overcome than the active opposition which is so frequently encountered in the Temperate Zone.⁷⁷⁵

Heiser went on to explain that the Americans auspiciously changed their tactic from “using actually force” to convincing them that it was in their best interest by educating just a few of the Filipino leaders on the merits of the taught techniques: “In other words, it became apparent that the sanitary regeneration of the Philippine Islands had to be brought about, not in spite of the Filipino people, but with their assistance.”⁷⁷⁶ The Progressive spirit displayed by both Heiser and Porter demonstrates their profound belief that the American colonizing forces uniquely have both the capability and the will to effectively reform the sanitary and hygienic practices —and specifically the excremental ones—of the uneducated colonial subjects. Heiser stated in the same report that it is impossible to determine the more widespread influence of American sanitary successes in the Philippines, but went on to take credit for the visits of sanitarians from “Japan, China, Hongkong, Indo-China, the Straits Settlements, Java, India, the Federated Malay States, Australia, Ceylon, Siam,” and others, and the construction of sewer systems in some of those countries.⁷⁷⁷ Heiser reinforces the point by writing “Many of the countries of the Orient no doubt feel themselves compelled to join the van of modern sanitation because public opinion, which is being slowly crystallized throughout the world, demands it more and more, as the results which America has accomplished in the Philippines becomes

⁷⁷⁵ Clipping from a newspaper titled Congressional Record. Article titled “Sanitation in the Philippines,” archived in RG 350, Entry 5, Box 726, file 3465.

⁷⁷⁶ Ibid.

⁷⁷⁷ Ibid.

more widely known.”⁷⁷⁸ In other words, the widespread reform of the excretory habits of the Filipinos had by 1912 become an important American cultural export.

This Progressive reform, which was initiated by the USSC during the Civil War, which was then applied to the Native Americans before the frontier “closed” and was extended to the Cubans, the Puerto Ricans, the Hawaiians, the Panamanians near the canal zone, and the Filipinos, was eventually spread mainly via Cuba and the Philippines to large portions of the rest of the world. The proliferation of proper defecation habits spread as byproducts not only health, but supposedly greater civilization. In Porter’s words, the “liberty-loving people” of America have “undertaken to clean Spain’s Augean Stables in Cuba.”⁷⁷⁹ And in doing so, they have uplifted a people who “live because they are too lazy to die.”⁷⁸⁰ L. Marvin Maus, the Commissioner of Public Health for the Philippines, trumpeted the successes of the American occupiers, in particular the sewer system and overall sanitation in Manila, calling it “the pride of Oriental cities.” He even went so far as to say these measures have caused a “new race” to be born in the Philippines “whose progressive and civilizing influences are destined to permeate the darkened corners of the Orient and make the name of America blessed for centuries to come.”⁷⁸¹

⁷⁷⁸ Ibid.

⁷⁷⁹ Porter, *Industrial Cuba*, 408

⁷⁸⁰ Ibid., 121.

⁷⁸¹ L. Marvin Maus, “Sanitary Problems in the Philippines on American Occupancy,” *The American Practitioner* XLVII (1913): 369.

The sanitary systems—the rules, laws, decrees, and practices of the sanitary department—in Cuba were popular enough that they were exported to other locations at the request of foreign governments. One such request came from the government of Costa Rica, which sought to implement a similar system. Perhaps this phenomenon had something to do with the Pan-American Sanitary Congress being held in Havana in 1901. The American governor of Hawaii also requested reports relating to “sanitation in Panama [the canal zone], Havana and other places which would probably be of assistance to the government of this Territory in the matter of sanitation in the city.”⁷⁸²

The efforts to build sewers in Puerto Rico and to reform the sanitary practices there were much slower than in Cuba or the Philippines, primarily because it was far more difficult for Puerto Rico to raise the funds for new sewers than it was in Cuba—a more successful trading country at that time.⁷⁸³ Upon U.S. control of Puerto Rico, out of 150,303 dwellings, just over a thousand had toilets, about 35,000 had the Spanish-style brick-lined cesspools, and the rest had nothing whatsoever to defecate in.⁷⁸⁴ Despite claiming that “sewerage in Porto Rico is a dream of the future,” in 1901, the island’s governor, Charles Allen, did intend to reform the way Puerto Ricans dealt with their excrement in other ways immediately, despite the fact that the establishment of a sanitary

⁷⁸² Letter from Hawaiian governor Walter Frear to Secretary of War from June 17th, 1911. NARA RG 350 (Bureau of Insular Affairs), Box 261, Entry 5.

⁷⁸³ First Annual Report of Charles Allen, Governor of Porto Rico, 1901. Washington: Government Printing Office, 341.

⁷⁸⁴ First Annual Report of Charles Allen, Governor of Porto Rico, 1901. Washington: Government Printing Office, 32.

department was tabled by the Puerto Rican legislature.⁷⁸⁵ He intended to pass on sanitary education to the people through the department of education.⁷⁸⁶ By 1913, only San Juan and a few other small towns had sewers, and those were not adequate by the standards of the American governor.⁷⁸⁷ Attempts were made to reform the laws so that municipalities could secure funds from the territorial government in order to build sewers, but the laws were deemed problematic.⁷⁸⁸

By 1931 in Puerto Rico, a team of 75 sanitary inspectors from the Insular Department of Health patrolled the island and checked the homes for proper facilities. If a latrine did not exist, they were taught how to build and use one. Then the sanitary inspectors returned after an undefined period to make sure that the latrines were being used properly. If the latrines were not built to the specific dimensions written in the codes, they were torn down. This practice had apparently been routine since at least 1912. One resident of Humacao retained a lawyer and sent a letter to Secretary of War Henry Stimson in 1912 complaining that the sanitary service officials were ready to tear down her newly built water closet and cesspool and charge her for building new ones that met the proper specifications.⁷⁸⁹ In 1927, a year before Hurricane Felipe destroyed over half

⁷⁸⁵ Ibid., 338-340.

⁷⁸⁶ Ibid., 339.

⁷⁸⁷ Report of the Governor of Porto Rico to the Secretary of War. 1913. Washington: Government Printing Office, 90.

⁷⁸⁸ Ibid., 80

⁷⁸⁹ Letter to Henry Stimson from S. Abella Baston Corton, January 26, 1912. NARA Record group 350, Entry 5. No 789.

of the island's latrines, more than 20,000 of them were inspected and approved.⁷⁹⁰ The report noted that "the poverty and the ignorance of many of the rural people makes [sic] the work of the Bureau exceedingly difficult."⁷⁹¹

Reform in Hawaii took place more quickly. Disease due to fecal contamination was less common in Hawaii than other places, it was thought, because of the nature of the bedrock,⁷⁹² "though it is to be feared immense areas of the city are more or less saturated" with excrement, according to one report in 1896.⁷⁹³ Less than six months after Hawaii was formally annexed by the U.S., the provisional government had established contracts for the sewerage of the largest city, Honolulu.⁷⁹⁴ Almost 34 miles of sewer were constructed by 1901. After an outbreak of the bubonic plague in Honolulu's Chinatown, health inspectors determined that the filth was too "revolting," with overflowing cesspools and rats, that the neighborhood simply had to be burned down, leaving over 5000 Japanese-Hawaiians, Chinese-Hawaiians, and native Hawaiians homeless.⁷⁹⁵

William Gorgas, the chief health officer of the military government of Cuba from 1899 to 1902, was appointed to a similar position for the government of the Panama Canal Zone (PCZ). The conditions in the PCZ were considered to be terrible by Gorgas.

⁷⁹⁰ *Porto Rico: An Inquiry as to the Health of the Children*, Bureau of Insular Affairs, 1931 NARA 19-20.

⁷⁹¹ *Ibid.*

⁷⁹² Specifically, the coral rock covered by sand was thought to provide extra layers of filtration.

⁷⁹³ "Report of Maj. CE Mann Concerning Conditions, Sanitary and Medical, in Honolulu and the Hawaiian Islands," *Report of the Surgeon-General of the Army to the Secretary of War, 1896* (Washington, DC, 1896), 518.

⁷⁹⁴ *Report of the Governor of the Territory of Hawaii, 1901* (Washington: Government Printing Office, 1901), 87.

⁷⁹⁵ *Ibid.*, 54-55.

But with that same zeal described by Porter and Heiser, Gorgas set about reforming the system. One of the biggest factors leading to the French failure to build an isthmian canal was the high number of losses of French builders to diseases like yellow fever. Gorgas thought that by applying some of the sanitary measures to the PCZ, he could help make the American effort successful. So he requested to be transferred to the project and was named the Chief Sanitary Officer for the Canal Zone.⁷⁹⁶ By 1904, when Gorgas assumed his position in Panama, it was clear that yellow fever was the overwhelming culprit. Gorgas had spent considerable time in Cuba working with Walter Reed and knew quite well that yellow fever was transmitted by mosquitoes. Therefore, most of the initial sanitary work in the PCZ went toward building screens, draining and clearing wetlands, and fumigation.⁷⁹⁷ However, the PCZ was divided into 25 sanitary districts, with a sanitary officer in charge of between 20 and 100 men to patrol their respective districts.⁷⁹⁸ Gorgas replaced all of the buckets in the hospitals with functioning toilets connected to a sewer.⁷⁹⁹ By 1911, the cities of Colon and Panama had functioning sewers, in addition to those built in the smaller towns. The PCZ's Division of Public Works used convicted criminals for much of the manual labor required to build the sewers and public latrines within the zone.⁸⁰⁰ The process of equipping and connecting houses to the sewers took years. So in the meantime, the occupying forces launched an extensive force of inspectors to maintain the existing facilities in suitable order. Though

⁷⁹⁶ William Crawford Gorgas, *Sanitation in Panama* (Appleton, 1915), 139.

⁷⁹⁷ *Ibid.*, 159-166.

⁷⁹⁸ *Ibid.*, 182.

⁷⁹⁹ *Ibid.*, 230.

⁸⁰⁰ *A Trip, Panama Canal ...* (Avery & Garrison, 1911), 162.

the main culprit for the spread of disease was mosquitoes, and a large portion of the inspections dealt with treating and eliminating standing water, water closets were carefully checked as well. Just in 1914, the board of health inspected more than 33,000 water closets and disinfected more than 68,000 in the PCZ. Insofar as arrests indicate severity of treatment of the violators, the PCZ residents had it easy, with only 39 arrests and 36 convictions.⁸⁰¹ Enforcement Like Cuba and the Philippines, the PCZ was considered by some to be “a model demonstration in tropical health,” and showcased its sewers and systems of inspection for anyone else in the world to see.⁸⁰² The PCZ boasted a fine enough sanitary system that sanitarians came to study from many Latin American countries, the British and Dutch East Indies, and Japan.⁸⁰³

4.5 Conclusion

Building on the excremental police work begun by the USSC and continued by the OIA via the field matron program, the health and sanitation officials working in America’s new overseas frontier found new subjects whose excrement needed a safe and civilized place of rest. As anthropologist Michael Taussig writes, “The frontier provides the setting within which the problem of discipline magnifies the savagery that has to be

⁸⁰¹ Charles Mason, “Report of the Health Department of the Panama Canal,” in *Annual report of the Governor of the Panama Canal* (Washington, D.C: Government Printing Office, 1915), 51.

⁸⁰² Leigh, *Federal Health Administration in the United States*, 268.

⁸⁰³ Ibid.

repressed and canalized by the civilizing process.”⁸⁰⁴ These brown-skinned bodies provided ideal subjects on which the Progressive expansionists could test their hypothesis that civilization was not necessarily limited to just white Americans. And given the confluence of two crucial phenomena—the cholera and typhoid outbreaks as well as a revolution in toilet and sewer technology—excrement became the perfect object of discipline and in many cases punishment.

Excrement was an ideal target during the imperial incursions additionally because it represented what Bourke called the “filth taint,” which reaffirmed the mindset the colonizers brought with them: that the native Cubans, Hawaiians, Panamanians, Filipinos, Puerto Ricans were more bodily, dirtier, and therefore less civilized. The colonizers’ attitudes regarding native excrement were also intertwined with their attitudes regarding the sexual “indecent” of the natives. The sanitary officials in the cases of Cuba, Puerto Rico, and the Philippines felt that controlling and containing the bodies of the native citizens was a prerequisite to civilizing them and controlling the respective societies. Concurrent with the attempt to contain Puerto Rican excrement was the U.S.’s attempt to control the Puerto Rican sexual mores by more firmly instituting a traditional marriage.⁸⁰⁵ Defecation reforms, like the marriage reforms—legalizing both divorce and civil marriages—instituted by U.S. authority, were part of a larger effort to civilize, stabilize, and thus, Americanize, Puerto Rican society at the onset of its colonial rule. As historian Eileen Suarez Findlay writes, “U.S. colonial officials insisted that the push to bring the

⁸⁰⁴ Michael T Taussig, *Mimesis and Alterity: A Particular History of the Senses* (New York: Routledge, 1993), 156.

⁸⁰⁵ *Imposing Decency*, 132.

island out of an inert, disordered state of nature and into civilized ways of life had to begin within the home.”⁸⁰⁶

In the matrix of excrement, germs, race, and colonialism of the 1890s and 1900s, American colonizers played out their most significant anxieties on the world stage, inadvertently creating a form of cultural diplomacy that still resonates more than a century later. In an attempt to be “benevolent civilizers,” the American occupiers awkwardly and sometimes brutally imposed new customs, practices, codes, and laws on peoples who never asked for it. The sanitary result was inarguably beneficial for those lands, but the prejudiced assumptions they brought and the inelegant process they impressed on their subjects in this episode of excremental acculturation created a discord that may have been avoidable. Sanitarians visited American territories from the Caribbean, Latin America, China, Japan, Hong Kong, India, Australia, and many more countries in order to study the sanitary systems the U.S. occupying forces implemented. And though taboo has prevented much dialogue regarding these matters, American attitudes regarding excrement nevertheless became one of the most important cultural exports of the era.

⁸⁰⁶ Ibid., 120.

Conclusion

Attitudes toward excrement have come a long way since the Long Progressive Era. Jokes about excrement can be found strewn throughout the popular culture landscape in the present day. *South Park*'s Mr. Hankey (the moralizing, talking "Christmas Poo"), Nutty the Friendly Dump (another fecal cartoon character from the makers of *Ren and Stimpy*), a proliferation of outhouse calendars, websites such as PoopReport.com, are all evidence that excrement has secured a place in the American imagination, even if the discourse in American popular culture is more or less restricted to comedy. Even John Bourke's *Scatologic Rites of All Nations* was trimmed from 512 pages to 191 and marketed as a toilet humor book called *The Portable Scatolog*. Excrement has a presence elsewhere in contemporary society as well. Mehmet Oz, the television personality known as Dr. Oz, for example, frequently discusses the bowels and how to achieve healthy digestion on his program. Commercials for fiber-rich foods and foods that promote growth of healthy intestinal bacteria are becoming slightly more clear about their purpose than in the past few decades. Both Activia yoghurt and Dr. Oz have been parodied by *Saturday Night Live* for talking about defecation—perhaps indicative that American society's acceptance of excrement has not yet been fully realized.

And in the past two decades, excrement has become a fashionable topic and even medium in the world of art. In 2001, Belgian artist Wim Delvoye unveiled what appears to be his magnum opus, a 33-foot-long, digestion-mimicking apparatus named *Cloaca*,

that is fed several meals per day by museum workers and 22 hours after the meal produces one or more pieces of excrement. *Cloaca* debuted in the U.S. in 2002 at the New Museum of Contemporary Art to generally positive reviews, and Delvoye refined and reinvented *Cloaca* several times in the ensuing years. Andres Serrano, the controversial creator of *Piss Christ*, debuted *The Triumph of Shit* in New York in 2008. This exhibition is a collection of high-resolution photographs ostensibly of excrement from various animals in different settings and poses. John Stoney, sculptor at the University of Texas, has used “cast cow dung” to create a “disaster” series of vehicles in some stage of distress. And art “terrorist,” Alexander Brener represented the potential of using excrement as a form of rebellion when he stood in front of a Van Gogh self-portrait chanting “Vincent, Vincent” while defecating in his pants.⁸⁰⁷

Several important books have been written about excrement as well. Dave Prager’s *Poop Culture* (2007) is a light-hearted and comedic look at excrement in pop culture. Rose George’s *The Big Necessity* (2008) takes a global look at the 21st state of excrement and the ways taboo has affected sanitation policies. UNICEF helped fund *The Last Taboo* (2008) by Maggie Black and Ben Fawcett. It focuses on the 2.6 billion people around the world who don’t have access to a toilet and the sanitation crisis that has resulted. *The Culture of Flushing* (2007) by Jamie Benidickson is a rich legal history of effluent in Canada, the UK, and the U.S. All of these works acknowledge that there is a

⁸⁰⁷ Goran Dordevic and the art collective IRWIN, “Letter of Support,” February 11, 1997. Archived at <http://web.archive.org/web/20070116125615/http://www.ljudmila.org/embassy/brener.htm>. Accessed October 20, 2011.

distinct taboo attached to our perceptions of excrement and that it needs to be shed—at least if we can address our significant infrastructural and humanitarian problems resulting from our uncomfortable relationship with our excrement. And the very existence of these works indicates that the taboo is in fact beginning to be shed, in the U.S. as well as the rest of the world.

On a global scale, excrement recycling has become a widespread practice in some areas and a burgeoning one in others. China, which has used excrement for farming for centuries, now has over 800,000 medium to large biogas projects currently in use in addition to more than 40 million personal-use biogas digesters.⁸⁰⁸ These devices use methane produced by excrement and other wastes as cooking fuel or sometimes to create electric power. In 2001, a Singaporean man named Jack Sim started the World Toilet Organization, dedicated to improving toilet technology and access in the developing world. Each year it sponsors the World Toilet Summit and holds World Toilet Day every November 19th to spread awareness of those without adequate sanitation and the fact that 1.5 million children die every year from diarrhea acquired through unclean water. And in July of 2011, the Bill and Melinda Gates Foundation announced that it was sponsoring a competition to develop the Toilet 2.0, a toilet that effectively recycles excrement for us as fertilizer rather than using precious drinking water to flush it away. The foundation vowed to spend \$41 million dollars to help bring an inexpensive, usable, and sanitary

⁸⁰⁸ Frank Rijbersman, head of Gates Foundation's Toilet Team

toilet that will help stop the spread of disease through contaminated water.⁸⁰⁹ SOIL, a U.S. non-profit organization dedicated to providing public toilets in places where none exist, has been active in Haiti since 2006. They have supplied toilets to dozens of communities, many of which had no toilets after the earthquake of 2010. They collect the excrement and mix it with sugar cane byproduct. Composted this way, the excrement is heated to the point that the bacteria are killed and it can be used for new farms to feed Haiti's poor.⁸¹⁰

Even though important differences exist between defecatory attitudes from culture to culture, excrement is truly a transnational matter. Pioneering American sanitarians such as Ellis Chesbrough and George Waring, who had profound influences on the course of sewerage in the U.S., both learned a great deal from sanitarians in Europe, the UK in particular. And of course the U.S. spread its sanitation systems (from the newly built sewers to the odorless excavators to the pail conservancy system used in the Philippines) to its insular territories, which in turn attracted sanitarians from around the world seeking a successful model to base their own sanitation systems upon. These changes undoubtedly saved countless lives and, with the exception of the Native American reservations, made these territories safer for commerce. But the process of investigating the excrement of the non-white insular citizens and reforming their customs was invasive, peculiar, and at times brutal. Furthermore, the process was heavily coded in terms of

⁸⁰⁹ <http://www.examiner.com/headlines-in-seattle/gates-foundation-s-new-approach-to-world-s-poop-problem-toilet-2-0>

⁸¹⁰ Christine Dell'Amore, "Human Waste to Revive Haitian Farmland?," *National Geographic*, n.d., <http://news.nationalgeographic.com/news/2011/10/111026-haiti-waste-poop-fertilizer-farms-soil-science-environment/>.

civilization and race, exacerbating standard colonial tensions and adding to excrement's stigma.

The stigma attached to excrement continues to carry considerable social weight. Cultural commentators still often connect excrement to those they wish to relegate to a level of low civility, a lack of values, or even debauchery. For example, at the nascent stages of the Occupy Wall Street movement, a man who was never identified, who may or may not have been part of the movement, was caught by cameras pulling his pants down and defecating while leaning against a police car. The initial Daily Mail report on the story claims that people who may have been part of the movement immediately reported the incident to the police.⁸¹¹ Still, the headline on the Fox News's website was "OCCUPY WALL STREET PROTESTER DEFECATES ON POLICE CAR."⁸¹² The first line of the story reads "This are [sic] the shocking scenes that have led some people to accuse the Occupy Wall Street protesters living rough in New York's financial district of creating unsanitary and filthy conditions."⁸¹³ Nearly one month later, after riots in Oakland, an Iraq War veteran getting his skull fractured by police, many counts of vandalism and theft, and this defecation incident has remained a defining one for the

⁸¹¹ Hannah Roberts, "Stinking up Wall Street: Protesters accused of living in filth as shocking pictures show one demonstrator defecating on a POLICE CAR," <http://www.dailymail.co.uk/news/article-2046586/Occupy-Wall-Street-Shocking-photos-protester-defecating-POLICE-CAR.html#ixzz1cf01HD1F>

⁸¹² <http://nation.foxnews.com/occupy-wall-street/2011/10/08/occupy-wall-street-protester-defecates-police-car>. Accessed 11/3/11.

⁸¹³ Ibid.

Occupy movement according to more conservative news outlets.⁸¹⁴ One Examiner article used it for evidence that a “serious criminal element” is emerging at the Occupy protests.⁸¹⁵ And Karl Rove used the incident to argue that the Tea Party movement exhibits civility and a love of the Constitution while the Occupy movement is filled with dirty “Larouchies.”⁸¹⁶

Clearly, despite an increase in attention to excrement in the past several years, the stigma remains strong. Excrement undoubtedly had a reputation as something foul and even dangerous before the years this study considers. It has always had an unpleasant odor, and prior to the late nineteenth century it was thought to transmit diseases through its miasmas. But between 1860 and 1920, several new layers of meaning were added to the construction of excrement. It became a waste and a poison to the body, but it also became entangled with religion, class, and race. Domestic manuals marshaled Mosaic Law in order to deem excrement not only unhealthy but evil as well. A home with an indoor toilet and the appearance of an excrement-less existence meant a higher degree of both morality and civilization to the Victorian American. And as the U.S. expanded

⁸¹⁴ Andrew Breitbart’s conservative website BigJournalism.com reported on the incident for three straight days after it happened, and Breitbart himself was tweeted about it incessantly spanning several weeks. <http://www.journalstandard.com/opinions/guestcolumns/x1321418790/AT-THE-CAPITOL-Redistribution-of-wealth-won-t-work>, accessed 11/3/11; <http://www.thesunchronicle.com/articles/2011/10/29/opinion/10365096.txt>; <http://www.dakotavoice.com/2011/10/occupationists-create-more-unemployment/>; <http://biggovernment.com/jhart/2011/10/31/ohios-union-fat-cats-try-to-fool-voters-on-issue-2-public-sector-reform/>

⁸¹⁵ <http://www.examiner.com/crime-in-norfolk/serious-criminal-element-now-emerging-occupy-movement>

⁸¹⁶ Karl Rove, “Democrats Court Wall Street Protesters,” Wall Street Journal, October 13, 2011. http://online.wsj.com/article/SB10001424052970203914304576626622453375758.html?mod=googlenews_wsj

westward and overseas, proper defecation and excrement disposal became an important marker to distinguish the Anglo-American from those they deemed inferior. Beginning with the field matron program of the 1890s and continuing through the imperial years following 1898, American health officers and military personnel reinscribed their own racial prejudices and anxieties on the cultures they encountered. With the new Anglo-American defecation habits on display on the global stage, the flush-and-forget method of sewage disposal became associated with the triumph of civilization and the white man's burden of ridding savages of their excrement.

Many sanitation activists believe that if the wasteful system of sewerage is going to change, the stigma needs to be removed, unpacked, or at least lightened in order to be able to engage in rational public discussion.⁸¹⁷ The 19th century conditions and culture explained in this work contributed to the moment when excrement acquired several layers of the stigma—when the appearance of an excrement-less existence became tantamount to civility. And although we should never lose sight of the fact that excrement can transmit diseases if not properly managed, keeping it yoked to incivility (and discreetly connected to race and class) carries enormous costs—both socially and environmentally.

A fundamental step in unpacking excrement's stigma is revealing when and why it began to be treated as a "waste." One might respond that it is natural to think of it as "human waste," as it is literally the by-product of our digestive process. But that alone

⁸¹⁷ World Toilet Organization press release titled "World Toilet Organization Won Gates Foundation's Support of USD270, 000." http://www.worldtoilet.org/WTD/gates_foundation.pdf. Accessed 10/23/11. Also Rose George, *The Big Necessity: The Unmentionable World of Human Waste and Why It Matters*, 1st ed. (New York: Metropolitan Books, 2008).

does not make it waste. After all, we do not refer to oxygen as “plant waste.” Considered in the context of the nutrient cycle, one step’s byproduct is the nourishment of the next step in the cycle. “Waste” only becomes part of the equation when that cycle is fundamentally broken. It is significant, then, that the term “human waste” in reference to excrement, one of today’s most common euphemisms for excrement, only began to appear in print after 1867 and peaked in popularity in the 1880s. This period follows the moment when the USSC began a tradition of instruction on how to defecate properly. It was the same period when it was more common for a home to be built with a bathroom and toilet than without one. It was the same historical moment when American cities were constructing massive sewer projects at a rapid rate. It was also the period when excrement lost its worth as a commodity and when Americans began taking to drastic measures to rid their bodies of excrement. This transformation of excrement from a commodity into a waste has left an indelible—yet ultimately reversible—mark on American homes, landscapes, laws, agriculture, foreign relations, and everyday activities.

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