OLFACTORY APPROACHES TO HISTORICAL STUDY:
THE SMELLS OF CHICAGO’S STOCKYARD JUNGLE, 1900-1910

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To my father, who taught me why the past matters, and my husband, Dan, with whom I enjoy the present and look forward to the future
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Chapter 1

Scents of History

One fundamental objective of historians is to interpret change over time and explain how and why change occurred. In addition, interpretive perspectives change and affect the ways in which historians see history unfold. As historians have expanded their interests from focusing on great men and groundbreaking events to perspectives that explore everyday experiences or ordinary people, odor emerges as an important interpretative lens. Understanding the olfactory history of communities, especially what types of odors were present and how people perceived and reacted to them, enlarges historians’ understanding of the life experiences and behaviors of people in the past. The historical study of odor provides insights into how quality of life and standards of living have changed over time. Understanding how people of different times reacted to odors suggests how they perceived the sensory world around them, including people living close by.

In this thesis, I examine the olfactory conditions of the neighborhood surrounding the Union Stockyards and associated meat processing facilities on Chicago’s south side in the first decade of the twentieth century. During this period, an overpowering combination of putrid odors characterized this neighborhood, known as Back of the Yards. Various factors contributed to this malodorous “smellscape,” and it impacted the quality of life of the predominantly immigrant communities that made up the workforce and residents of that neighborhood. More generally, odor plays a significant role in the perception of group identity and the marginalization of others. Therefore, my study also considers how outsiders viewed the olfactory phenomena manifest in Back of the Yards,
and demonstrates why this particular smellscape was considered exceptionally objectionable, not only to residents who lived with it on a daily basis, but also to observers from the outside.

Despite its sensory, social, and cultural significance, odor often receives less attention from historians than the study of sights, events, and people of former times. It is likely that olfactory studies remain relatively rare because odor is ephemeral and hence difficult to analyze using conventional methods of historical analysis. Since the most outstanding characteristic of odor is its transience, olfactory studies are problematic because odors cannot be preserved as artifacts. Historians cannot recreate odors from any archive in ways similar to the use of documentary evidence. Additionally, odors can only be studied retroactively by way of the descriptions of those humans who experienced them. These descriptions of olfactory experiences are often by analogy (it smells like gasoline), or vague (it smells sweet), and perhaps most problematically for the historian, subjective (it smells bad). Humans also use words typically associated with other senses to describe odors. For example, people frequently refer to smells as sour, fresh, or dark. Qualifying odor is also difficult because olfactory organs in humans are complex. Sensitivity to scents varies from person to person. Furthermore, individuals experience fluctuations in their own olfactory sensitivity from day to day. Humans also adapt to aromas, and the nose adapts more quickly to the smell of some substances than others. Finally, the problem of describing odors is compounded when one attempts to qualify scents from the past, because subjectivity in the expressions that characterize odors varies from period to period and culture to culture.
Nevertheless, it is possible to construct olfactory histories by analyzing the sources of odors of a particular time and place, and by examining contemporary written testimonies to discover how people of that period and location described these odors. A study of Back of the Yards in the early years of the twentieth century is well suited to the application of this methodological approach. In the first decade of the 1900s, the neighborhood contained sources of strong odors, including four city dumps, the Union Stockyards, and associated meatpacking and byproduct plants. The stenches that permeated the yards often drifted to other parts of the city, generating numerous complaints that were published in the press. Contemporary observations, penned primarily by outsiders, provide insight into the smellscape of Back of the Yards. A number of observers, including physicians, sociologists, and laypersons testified to the presence of foul odors in the neighborhood.

Additionally, significant developments involving sanitary practices, cleanliness, hygiene, and public health took place in the early twentieth century, and the resulting literature provides insight into practices that shaped the olfactory environment or smellscape. Domestic, municipal, and personal hygiene practices are all relevant to the study of odors. This is because people largely perceive many sources of dirt, including human and animal excreta, decaying food, and industrial waste, as malodorous. Prior to the discovery of the germ theory of disease, most public health officials, scientists, and physicians thought that foul smells were linked to disease. This concept, referred to as miasmatic theory, held that disease arose from the putrefying air, often characterized by its odor, which emerged from decaying organic matter and sewer gases. Removing foul odors thus served as a public health measure. The introduction of the germ theory had
ramifications for the linkage between odor and dirt because it proposed that not
everything that smelled bad was harmful. Bacteria often lived amongst smelly things, but
as often they did not, and bacteria did not always cause foul odor.

The transient nature of odor means that the pursuit of it as an object of historical
study requires reliance on various types of historical literature that deal with the sources
of odors as well as human perceptions of them. These include the small but growing field
of sense history, as well as the more widely examined environmental and industrial
history of the city of Chicago, especially of Back of the Yards. In addition, one needs to
consider the findings of authors who have written on how popular notions regarding
cleanliness have shifted over time, for filth, in the minds of many, begets odor. The
public health movement played a significant role in this evolution, and the history of
related subjects, including sanitation and personal and domestic hygiene, emerge as
significant sub-specialties to the history of odor.

Anton Corbin’s *The Foul and the Fragrant: Odor and the French Social
Imagination* is a groundbreaking work on odor and its repercussions on society that
paved the way for other olfactory studies. It has served as a reference for subsequent
sense histories and remains an important text for anyone attempting to construct a
smellscape and examine its repercussions. Corbin examines the physiological and
psychological implications of odor in both the private and public spheres. In addition to
the information this book provides on the role odor played in various cultures, it provides
an excellent methodological example for a sense history. Corbin uses a multidisciplinary
approach, examining odor’s significance in science and literature. Constance Classen,

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David Howes, and Anthony Synott examine odor’s impact on past cultures in *Aroma: The Cultural History of Smell*. ² *Aroma*’s authors trace the cultural and social impact of smell in various cultures throughout history. They look at historical scents and explain how smellscapes change over time. They explore the notions of other and difference with regards to smell, and how perceptions of odor vary from culture to culture. They also look at the political and commercial ramifications of smell.

David S. Barnes further contributed to olfactory history in his book about the impact of olfactory events, *The Great Stink of Paris and the Nineteenth-Century Struggle Against Filth and Germs*.³ Barnes examines two occurrences of an olfactory phenomenon and considers the different ways in which the public responded to these crises and why. He posits that a particular perception of sanitation and disease emerged during this time, a paradigm he terms the Sanitary Bacteriological Synthesis (SBS). For society at large, as well as the scientific community, the SBS served as a form of reconciliation between the emerging new bacteriological-based etiologies with formerly accepted concepts of disease causation based on miasma theory. Barnes reveals the complex relationship that existed between public concepts of sanitation and disease, and how the views on one influenced perceptions concerning the other. This is significant, for it reveals that although the discovery of bacteriological etiology occurred in the 1880s, it did not displace old theories overnight or completely. Barnes shows that while some argued that not everything that stinks kills, and vice versa, many people, influenced by former perceptions of miasma, continued to equate bad odor with disease. In this context Barnes

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examines how and why new thresholds of disgust emerged within France. His analysis of the conditions that led citizens to expect and even demand their governments to exert agency in rectifying the olfactory unpleasantness that filled the city of Paris demonstrates the impact odor had on human expectations and behaviors.

It would be imprudent to undertake an olfactory history without a basic understanding of the physical and psychological nature of human olfaction. In *Smell: The Secret Seducer*, Piet Vroon examines the historical, psychological, and physiological aspects of the human sense of smell. He clarifies the scientific research available that pertains to odor perception. What separates this volume from the other works on olfactory perception is the author’s examination of how individuals describe odors. Trygg Engen has also contributed valuable information about this field with *Odor Sensation and Memory*, in which he explores odor preferences as learned experiences.

My particular olfactory study concerns a neighborhood located in a city with a rich and complex history. Therefore, a broad understanding of the history of Chicago is necessary. The historiography concerning Chicago is vast, which led me to focus on works that interpret the broad trends and phenomena that directly relate to the city’s olfactory conditions. These include Perry Duis’s *Challenging Chicago: Coping with Everyday Life, 1837-1920*, a work that examines the social, cultural, and political features of early Chicago. The Back of the Yards neighborhood in particular has served as an important case study for historians interested in the history of immigration, the environment, labor, and industry. James Barrett’s *Work and Community in the Jungle*:

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Chicago’s Packinghouse Workers, 1894-1922, Robert A. Slayton’s Back of the Yards: The Making of a Local Democracy, and Louise Carol Wade’s Chicago’s Pride: The Stockyards, Packingtown, and Environs in the Nineteenth Century examine how diverse ethnic elements combined to create a unique community. These scholars emphasize odor as a significant feature of the community, but do not make it their primary focus of the studies.

The historiography concerning late nineteenth- and early twentieth-century movements towards cleanliness at the municipal, domestic, and personal levels is an important element in my study. Martin V. Melosi’s Garbage in the Cities: Refuse, Reform, and the Environment is a significant work in the field of sanitation history. He emphasizes logistical forces, such as population density and urban growth, as significant factors in the development of municipally delivered refuse removal. Melosi describes the early roots of sanitation measures in the colonial and early national period. Melosi notes that filth reached proportions which could no longer be ignored in the mid-nineteenth to early twentieth centuries, when the Industrial Revolution transformed the urban environment. One effect of the Industrial Revolution was a surge in urban population density that began in the mid-nineteenth century. Melosi argues that preventative public health action originally was not taken because cities lacked the scientific knowledge necessary to implement such actions. However, by the late nineteenth century, the loss of life from a series of successive epidemics, the generally unbearable living conditions of

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the age, and an evolving etiology of disease motivated many, including sanitarians, sanitary engineers, and reform groups, to call for the implementation of sanitary services. In *Shock Cities: The Environmental Transformation and Reform of Manchester and Chicago*, Harold Platt examines the environmental impact that industrialization and the resulting influx of people had on the urban environment. In his case studies centered on Manchester and Chicago, Platt regards human agency as the dominant contributing factor in the development of municipally sponsored sanitary services. While he acknowledges that human waste expanded enormously because of population growth, he points out that heavy industry also created sanitation problems. Platt and Melosi both acknowledge a major growth in population and industry had a tremendous environmental impact on urban centers. For example, they point out that urban growth contributed to a surge in equine population density, which in turn generated a major source of waste. Manure and the offal of dead horses contributed heavily to the waste problem because horses played critical roles in personal and mass transit and served as sources of energy for factories.

The perception of the relationship between changing social attitudes and the evolution of hygienic technologies is critical to my study of the human-generated odors of Back of the Yards. In “The Private Side of Public Health,” Nancy Tomes shows the effects the widespread dissemination of public health ideas had on private life. She describes the popularization of germ theory as rapid. Tomes argues that during this period the emotional attachments of family grew, hardening the emotional devastation of losing children. This led middle and upper classes to pursue public health measures more

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vigorously. A surge of prescriptive domestic hygiene literature, including advice books, magazines, newspaper articles, and health department circulars emerged in the 1870s and 1880s. Tomes considers the importance technology played in this process, and argues that the provision and marketing of sanitary products serve as evidence that demand existed for personal care products. In *Chasing Dirt: The American Pursuit of Cleanliness*, Suellen Hoy traces the American cultural obsession with cleanliness.\(^{11}\) She considers public health concerns as central to the formation of this trait. As a cultural trait, Hoy argues, cleanliness was increasingly idealized and, in the late nineteenth and early twentieth centuries, became an important facet of Americanization. In *Soft Soap, Hard Sell*, Vincent Vinikas considers the significant transformation in grooming habits that took place in the twentieth century.\(^{12}\) Vinikas identifies the 1920s as the period of greatest change, because that is when personal hygiene products were first advertised in great numbers. Prior to the beginning of the twentieth century, bathing was done weekly at the most, and toothbrushes were rare. Vinikas acknowledges that new technologies altered ideas about health, and economic prosperity played a role in this transformation, but above all he focuses his attention on the marketing of personal hygiene products. He analyzes how manufacturers and advertisers generated a demand for toiletries. Soap was a desirable product to sell because of its high profit margin. Vinikas argues that advertisers and sellers marketed their items in such a way as to consciously generate demand for hygienic products.


In “Submerged Sensuality: Technology and Perceptions of Bathing,” Jacqueline S. Wilkie traces the growth of the trend of regular bathing. Public perceptions about the effects of bathing on health changed drastically in the nineteenth and early twentieth centuries. Wilkie emphasizes the role technology played in this change among the middle classes. Yet technology alone did not stimulate the trend of bathing. Wilkie argues that a synthesis existed between technology and social perceptions, and this dialectic relationship led to the trend of more frequent bathing. Changing perceptions of the link between filth and disease also played an important role. While the middle classes prioritized bathing facilities in their own homes, they did not concern themselves with ensuring that the homes of the poor contained such provisions. That this community was not exposed to the technological developments Wilkie associated with the new emphasis on bathing is an important distinction. It allows me to distinguish the personal hygienic conditions of Back of the Yards in the absence of written testimony of neighborhood residents concerning their own personal hygiene habits.

The same studies also acknowledge the importance of women’s history to this subject, since cleanliness was an issue often drawn along gendered lines. As Tomes, Vinikas, and others point out, women played important roles not only as housekeepers and reformers, but also as consumers of personal and domestic cleaning products. Women’s magazines offered advice on cleaning and food preparation and advertisements of products to facilitate these activities. *Magazines for the Millions: Gender and*

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Commerce in the Ladies Home Journal and the Saturday Evening Post, 1880-1910 by Helen Damon-Moore examines this phenomenon.¹⁴

The obsession with cleanliness carried over into concerns about the food industry, which transformed it into a social issue. In “One Man’s Meat is Another Man’s Poison: Imagery of Wholesomeness in the Discourse of Meatpacking from 1900-1910,” Leslie A. Levin examines the media discourse surrounding public concerns about the meatpacking industry’s lack of cleanliness. She shows how people tried to expose the unsanitary conditions and practices of the packers, and also how the packers used the media to enhance their public image.¹⁵ Levin argues that an obsession with cleanliness emerged by the time The Jungle was published and that this obsession involved notions of physical, mental, and moral health. Levin’s research shows that the muckraking journals documenting the meatpacking scandal very often sided with Sinclair and portrayed the packinghouses and the men who ran them in a very negative light. This portrayal showed the packers with sinister motives in their maintenance of unsanitary conditions. These journals included Century Magazine, McClure’s, and Collier’s. James Harvey Young also devotes attention to the public debate that emerged concerning food safety as a result of publication of The Jungle in “The Pig That Fell into the Privy: Upton Sinclair's The Jungle and the Meat Inspection Amendments of 1906.”¹⁶ He shows how public outrage led to the creation of legislation designed to keep food safe. He also explains that what constituted sanitary or unsanitary practice was open to interpretation.

Many members of the public viewed the immigrant workers who labored in the meatpacking industry as having lower hygienic standards than native-born Americans. Books and articles that examine immigrant populations and how the wider public viewed those newcomers to America play an important role in this study. Alan I. Marcus argues that the rapid development of municipal services that began in the mid-nineteenth century occurred because established citizens believed that social problems, including criminal activity, inadequate fire protection, and filth, stemmed from the behaviors of individuals unaccustomed to the mores and customs that determined the American way of life. This “plague of strangers” included immigrants, African Americans, Catholics, former farmers, and any group whose practices and mores differed from those of established citizens. Many long-term residents believed that the rapid influx of strangers intensified public ills, and this perception caused citizens to clamor for the creation of municipal services such as those provided by police, fire, and public health departments. In “Hunkies: Stereotyping the Slavic Immigrants, 1890-1920,” Karel D. Bicha argues that a Slavic stereotype developed in the period from the late eighteenth century to the First World War, despite the fact that those grouped as Slavs were actually from quite diverse ethnic backgrounds. Certain aspects of this stereotype are particularly relevant to my work, as they concerned the housekeeping and hygienic habits of Eastern European immigrants. There is some evidence that the packers did try to scapegoat the workers in their defense of unsanitary conditions in the plants. The common practice of boarding, born out of economic necessity, disturbed many of the nativists, who claimed that the

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practice threatened accepted and acceptable family structure. Although other groups boarded, many thought that the Slavs cornered the market on the practice. Bicha explains why the boarding system was such a necessity for so many Slavs. Nativists viewed this as a negative trait, without considering, Bicha notes, that it was a way of bettering the quality of life. Dominic Pacgya has written a great deal on the Polish communities in Chicago. For example, in “To Live Amongst Others: Poles and Their Neighbors in Industrial Chicago, 1865-1930,” he provides a great deal of information about the living and working conditions the Poles endured, who comprised a large segment of Back of the Yard’s population. Pacgya explains some of the causes of the strained relationships Poles historically had with their neighbors in Europe, to show that Poles were very wary of outsiders and their ideals.

In “Immigration and Modernization: The Case of Slavic Peasants in Industrial America,” John Bodnar scrutinizes the dichotomous model usually employed by historians when studying the impact of modernization on communities. This model completely distinguishes modernized societies from traditional ones, leaving little or no room for overlap. Bodnar does not minimize the magnitude of the effects of modernization on human life. Instead he emphasizes the need for a model that makes room for both persistence and change. His more differentiating approach provides a more nuanced context for how Slavic immigrants maintained common practices and beliefs while living and working in newly industrial areas.

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Foul odors often disgust humans. Perceptions of stench involve notions of revulsion and aversion, and a number of scholars have made strides in tracing how disgust has and continues to develop. Mary Douglas considers humanity’s relationship with dirt in *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo*.\(^{21}\) Douglas identifies dirt as subjective, and posits that whatever is perceived as dirt is simply that which is symptomatic of disorder. She sees attempts to eliminate dirt as efforts to create order. She discounts the hypothesis that cleanliness stems from the flight from danger. In “A Perspective on Disgust,” Paul Rozin and April Fallon argue that a strong connection indeed exists between disgust and danger.\(^{22}\) They posit that disgust is a food-related emotion and that it is characterized by the revulsion of oral incorporation based on the concept of food rejection. In their study, the psychologists distinguish between distaste and disgust, the latter of which stems from the fear of contamination. Of particular significance to my work is their consideration of the questions of why objects of disgust are so often animal in origin, and why decay plays such a strong role in disgust. Rozin and Fallon identify feces as ultimate objects of disgust, which is especially significant for my study because feces have a connection to animals and decay—all of which were abundant in Back of the Yard. William Ian Miller considers the role the senses play in various manifestations of disgust in *Anatomy of Disgust*. His observations on the role the sense of smell plays in the manifestation of disgust serves as an important research guide for olfactory historians. He reminds his readers of the connection that exists between odor and morality, and the consistently low rank smell holds in the typical hierarchy of the senses.


In my study I relied on different kinds of primary sources. Some of the most significant include government reports, newspaper accounts, popular magazines, and the observations of sociologists working in a local settlement house. A sanitary infrastructure existed in Chicago in the form of the Department of Public Works, the Bureaus of Streets and Sewers, and the Department of Health. The annual reports of these agencies are critical to my study. The Bureau of Streets contains information on the garbage problem in the city at large, detailing the problems of refuse, ash, and dead animals. The Department of Health Annual Report for the years 1904-1905, released in 1906, contains a special section on the stockyard stenches. Additionally, because I examine how people perceived odors in part based on how they attempted to regulate them, the ordinances that existed regulating offensive odors are very useful. The effectiveness of these ordinances in regulating odor can be gauged by examining other sources. For example, the Chicago Department of Health records show that these ordinances were not enforced often and strongly enough to be effective.

Additionally, the neighborhood drew national attention in 1906 with the publication of Upton Sinclair’s *The Jungle*, a book that revealed the unsanitary conditions present in Chicago’s meatpacking industry. The book’s release occurred during a period of increasing public preoccupation with sanitation and hygiene on the local and national levels. Further testimony of the conditions can be found in the Neill-Reynolds report. Public outrage over the revelations in Sinclair’s book led the federal government to dispatch two commissioners, Charles P. Neill and James B. Reynolds, to evaluate sanitary conditions of the yards. The pair spent two weeks investigating the packinghouses. In their report, published in newspapers nationwide, Neill and Reynolds
commented extensively on the olfactory conditions of the yards and the plants, and on the sources of the odors. Their report corroborated much of Sinclair’s olfactory fiction. The packers responded to both the book and the report with vigorous public denials. In this they received the support of commercial organizations. A vigorous public debate ensued, played out in the press. Contemporary newspaper accounts also document local responses to odors and air quality in general. These expressed opinions ranging from concern to outrage about odors and smoke pollution. Articles and editorials about these topics appeared regularly in the Chicago Daily Tribune. Additionally, articles from the New York Times, World’s Work, Science, and the Lancet reveal the national and international attention Chicago’s olfactory problems received.

The prescriptive and instructional literature published in women’s magazines provides insights into the changes in expectations of cleanliness that occurred within the upper and middle classes that comprised their readership. Ladies Home Journal and Good Housekeeping in particular were instrumental in shaping middle class housewives’ ideals of cleanliness. It is worth noting that the members of the Back of the Yards community did not access these materials due in large part to a lack of disposable income and English literacy. Therefore, new ideas and standards regarding domestic cleanliness and personal hygiene promoted by the middle class did not reach them as quickly and in the same way as more affluent members of society.

I focus on an examination of how the smellscape of this community affected the views outsiders formed of Back of the Yard residents. The written results of contemporary sociological studies conducted by the University of Chicago, which maintained a settlement house in the area, provide ample evidence of the malodorous
conditions. The sociology department considered Back of the Yards an important area of study and wrote a great deal about the neighborhood’s living and working conditions. The sociologists provide unique insight, because although many lived within the neighborhood and were often sympathetic to the problems the residents faced, they remained outsiders to the immigrant communities. They were thus close enough to the olfactory realities to testify to their pungency, but remained fundamentally outsiders. Their viewpoints reflected as much. The written observations of other sociologists, anthropologists, and economists allowed me to map broader national opinions Americans formulated about industrial slums and their inhabitants. Their perspectives were further removed and thus provide alternative outlooks.

In the following chapter I describe the sources of odor that pervaded the yards and the meatpacking plants. This chapter includes descriptions of the matter and processes that generated the odor for which the neighborhood was especially notorious. Workers contended with a daily barrage of odors generated by the stockyards, packing plants, animal byproduct factories, and the south branch of the Chicago River known as “Bubbly Creek,” a moniker that highlighted the effects of the large amounts of organic matter dumped in the waterway.

The third chapter explores olfactory conditions present in the neighborhood outside of the yards and plants. Residents contended with the stench generated by four city dumps, overcrowded living conditions, and a lack of sufficient sanitary systems. Tenements and homes were crowded with the workers, their families, and their lodgers. Their means of disposing of waste and wastewater were inadequate. All of these features contributed to a pungent smellscape. To show why living in Back of the Yards involved
exposure to odors outside as well as inside the home I examine these factors, and show how considerations impacted these trends.

In chapter four, I detail the implications the smellscape of the neighborhood had for residents and outside observers. Olfactory associations often play a role in shaping how human beings perceive others. A person can experience disgust upon smelling another’s odor, but it is also true that a person can assign a foul odor to something to which he or she is already disposed to dislike. The dominant class in a society often posits itself as pleasant or neutral smelling, while interpreting marginal groups as malodorous. Constance Classen, Worlds of Sense: Exploring the Senses in History and Across Cultures (New York: Routledge, 1993), 79-105.

My research on the olfactory conditions of Back of the Yards allowed me to formulate conclusions about the effects this smellscape had on residents in terms of how it affected their quality of life, and how outsiders perceived them.

My findings reinforce the idea that historical odors can tell us a great deal about the lives of people of the past. In this study of the sources and repercussions of foul odors in Back of the Yards, the early twentieth-century smellscape clearly was central in determining the character of the neighborhood and the quality of life of its residents.
Chapter 2
A Fetid Jungle

The turn of the nineteenth century was a malodorous time in urban areas. The Industrial Revolution and the consequent population surge in cities like Chicago generated an unprecedented amount of human, industrial, and domestic waste. The fact that Back of the Yards was an exceptionally malodorous part of this malodorous city was due in large measure to the meatpacking industry. The massive Union Stockyards and the meatpacking and byproduct factories that surrounded it generated an inescapably strong odor, a fetid mixture of the smells of smoke, blood, dung, rotting offal, boiling bones and fat, fertilizer, and hair that penetrated the neighborhood, and often wafted into other parts of the city.

People of Chicago identified the odors as a problem, one worthy of extensive public discourse. Written testimony concerning the community’s odors exists in Chicago city ordinances and departmental reports and the published observations of community outsiders, including physicians, sociologists, and laypersons. Visitors like Paul Bourget, Rudyard Kipling, University of Chicago sociology students, and federal government inspectors testified to the odor as a characteristic of the yards. Olfactory patterns, particularly periods of putridity, generated scores of newspaper articles about the menacing stench, which soon became an indelible characteristic of the metropolis on the prairie. Contemporary fictional literature also documented the odors of Back of the Yards, and cast a national spotlight on the neighborhood.

24 Melosi, Garbage in the Cities; Platt, Shock Cities.
General Map of Chicago – showing the Park System, principal transportation lines and points of Mechanical Interest. Chicago (Ill), 1904. Courtesy, Chicago History Museum (ICHi 34343).
The neighborhood known as Back of the Yards was located in the northeast corner of the twenty-ninth ward on the south side of Chicago. The district extended south to 51st Street, west to Garfield, north to the Chicago Junction railroad, and east to Halsted Street. While a number of factors generated a pungent smellscape of Back of the Yards, the meatpacking industry clearly was predominantly responsible for the neighborhood’s smelly reputation. In 1905, the area was home to some twenty-four slaughtering, rendering, glue-making and fertilizer plants, and thirty-five tanneries and wool-pulling facilities.26 The massive Union Stockyards and the meatpacking and byproduct factories that surrounded it generated an inescapably strong odor.

The Union Stockyards opened in 1865, designed to consolidate the city’s various yards into one central location near the railroad lines. At this time, the district lay not within Chicago city limits, but within the boundaries of Town of Lake, which the city annexed in 1889. The centralized location made it easier for those involved in buying, selling, slaughtering, and distributing both livestock and packaged meat. The introduction of refrigerated rail cars profoundly changed the dressed beef industry. It enabled packers to dominate the market, because of the capability to ship nationally and internationally, and to further centralize their location. Meatpacking emerged rapidly as the city’s leading industry. The larger firms swallowed the smaller butcher shops and local independent packing concerns, with five or six firms dominating the industry at any given time. For example, by 1903, Armour, Swift, Morris, National, and Schwarzchild and Sulzberger

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slaughtered 98.5 percent of the Union Stockyard livestock. Mergers and acquisitions altered the specific companies involved in this arrangement, although Armour & Company, Swift & Company, and Nelson Morris & Company consistently remained firmly entrenched in the industry.

![General View of Chicago Stockyards](image)

The Union Stockyards covered 207.25 acres, or approximately one sixth of the district. The yards themselves could accommodate 75,000 head of cattle, 300,000 hogs, and 80,000 sheep per day. The animals arrived via railroad lines that surrounded the yards. In 1905 the livestock that entered the yards numbered approximately 16,963,000. This included 8,409,000 head of cattle, 7,710,000 hogs, and 4,726,000 sheep. This tremendous volume of animals, combined with their excreta and feed, generated pungent

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27 In 1903 the city’s three largest packing concerns, Swift, Armour, and Morris, created a holding company, the National Packing Company, which folded in many of the independent firms. For the purposes of this study I utilize the term, “the packers” to refer to these major meatpacking firms located in Chicago.


29 *Chicago Daily Tribune*, December 31, 1905.
fumes. Only the sheep’s pens were covered, while the cattle and hog sheds were wide open. Animal droppings littered the floors of the pens and dead animals lay throughout the area until they could be retrieved. In 1900 the streets, pens and ramps were still wooden, and this exacerbated the stench because the porous wood absorbed and preserved the stockyard odors.  

“...The wood has decayed, and saturation of the offals was responsible for the stenches during the heated term, against which even the residents of the yards, accustomed to them as they are, rebelled.”

In October stockyards officials repaved the area with vitrified brick, and the Commissioner of Health seemed confident that this action would greatly curb the odors. This pavement did not resolve the issue, however. Manure and refuse settled into the grooves between the bricks, generating foul smelling dust clouds of odor under dry conditions, and a putrid ooze when wet.

The animal pens and plant buildings went up rapidly, with no regard to the quality of the construction concerning the design of state of the art hygienic facilities. Drovers herded the animals down dirt paths and wooden platforms to their wooden pens. Inside the plants, the walls, joists, floors, and worktables were constructed of wood. These wooden interiors were often caked with grease and blood, and they absorbed the odors generated by the slaughtering process.

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31 *Chicago Daily Tribune*, October 5, 1900.


Map of Union Stockyards of Chicago showing railroads and connections; Chicago (Ill), 1891. Courtesy Chicago History Museum (ICHi-27741).
The packers slaughtered the animals systematically, utilizing an early assembly line process that relied on human labor rather than intensive mechanization. A description of this process reveals a number of sources of odor. In the case of the hogs, the animals were placed on an elevated conveyer, and then attached to a large wooden wheel, where skilled butchers stuck them. The runoff of blood went into drains in the floors, to be dried for animal feed. Prior to their dissemination by various workmen, the hogs were placed in a vat of hot water, to make it easier for automatic scrapers to remove the bristles, which certainly intensified the odor emitted. Cattle were killed with a blow to the head before they were suspended from overhead trolleys to bleed out.\textsuperscript{34} By the turn of the century, Chicago packers slaughtered an average of 6,125 cows, 23,140 hogs, and 9,780 sheep per day.\textsuperscript{35} This figure fluctuated throughout the year, however, because the industry was seasonal. From October to January, and again in the spring, packers experienced a massive influx of livestock. During the slack periods, fewer animals were slaughtered, but during the busy seasons, the daily numbers were much higher.\textsuperscript{36} Especially during the busy season, the packinghouses contained enormous amounts of blood, innards, and carcasses.

Once all usable meat was removed from the carcasses, what remained, including hooves, hair, bones, and grease, was made into sausage, pickled meats, and various byproducts such as glue and tallow. The hides were sent to the tanneries. The byproducts industry allowed the packers to generate more profit from every animal. The packers

These figures are calculated from the data provided by Bushnell for the year 1900. The plants operated six days a week, fifty-two weeks a year. Therefore the average daily number is calculated by dividing the yearly figures by the 313 days the plants were in operation in a single year.
\textsuperscript{36} Pacgya, \textit{Polish Immigrants}, 75; Charles J. Bushnell, “Social Aspects: Chapter III,” 442.
harvested every possible portion of the animal for food and household products. They
extracted sausage casings, pepsins, wool, hair, glycerin, lard, and tallow from the
animals. These byproduct industries contributed greatly to the putrid odor of the district.
They exemplified efficiency because the utilization of the entire animal made
meatpacking profitable. A 1,500-pound steer typically provided 825 pounds of beef, with
675 pounds of material destined for the sausage rooms and byproduct facilities.37
Byproduct extraction and manufacture was a malodorous business. The facilities used
acid to facilitate the pulling of wool and boiled offal for various products, including soap,
 glue, and tallow. In the case of the hogs, the packers spread the freshly scraped hair in the
fields surrounding the yards, letting the elements drive away the rotting flesh that
remained, to obtain bristles for brushes, generating horrible smells.38 The boiling of
bones emitted what one observer of British abattoirs described as, “an offensive steam
possessing a musty ammonical odour” that traveled far and wide.39 Tanneries boiled the
hides for leather, storing and processing a large volume of flesh-ridden hides.

The byproduct industry also included the manufacture of fertilizer. The
Department of Health listed the total number of tanks in the licensed rendering plants at
248 in its annual report for the years 1904-1905; with the majority located in the
stockyards district. The existence of a Department Health ordinance regulating the
emission of odors from these facilities indicates that they produced malodorous fumes.40

38 Mary McDowell and Municipal Housekeeping: A Symposium, ed. Caroline Hill (Chicago: White Lion
 Press, 1938).
39 A detailed description of the byproduct industry and the smells it emitted can be found in A. Wynter
Blyth, A Manual of Public Health (London: MacMillian, 1890), 241-283, and Thomas Stevenson, A
40 City of Chicago Health Ordinance – 1211. “All offensive odors arising from the handling of meat or
other animal matter, melting or rendering, and the treating of and caring for offal, blood, or any other
material stored or manufactured shall be destroyed by combustion, condensation, or other means equally
Three large firms engaged in a process of drying “stick” or the residuals of rendering tank water sludge. The odors generated from this process traveled long distances. In a 1901 article for the *American Journal of Sociology*, Charles Bushnell described the aromatic elements that went into the process of fertilizer production: “The blood and the tankerage (the residue left after extracting the grease and tallow from meat scraps), and all waste of a nitrogeneous or phosphatic character are taken to the fertilizer works and are converted into fertilizers.”\(^{41}\) The odors the workers in these plants had to endure seem unimaginable today. Many found it too much to take. In one week in 1900, 126 men began work in a single plant but by the end of the week only six remained.\(^{42}\) This statistic seems especially remarkable since finding steady employment, a matter of life and death for Back of the Yards residents, almost always proved extraordinarily difficult.\(^{43}\) The slaughterhouses emitted great clouds of black smoke that enveloped the neighborhood and blackened all of the surrounding buildings. The problem stemmed from the widespread use of soft, bituminous coal. When burned, this fuel emits a thick, sooty, greasy smoke that deposits ash on anything it touches, including buildings, clothing, and marketable items. Smoke pollution by the end of the nineteenth century was pervasive enough to motivate local businessmen to form an organization that aimed to persuade business leaders to take measures against the problem.\(^{44}\) The *Chicago Daily Tribune* devoted much column space to the smoke problem, stating that it contributed to the overall filthy conditions of the city. The paper reported on the economic cost of the

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\(^{41}\) Bushnell, “Social Aspects: Chapter I,” 162.


smoke dirt, pointing out that the cost of cleaning was passed on to the consumer. It charged that the city itself was one of the worst offenders because its public schools utilized bituminous coal. The smoke problem outside impacted the olfactory conditions within buildings because many people kept their windows closed in an effort to escape the smoke and its sooty deposits. Many businessmen found that the only way they could protect their goods from smoke damage was to keep their windows closed. In hot weather, this practice stifled the people working inside who, of course, had no air conditioning.

Further, it is highly possible that the smoke affected how individuals perceived odors generally. Olfactory expert Trygg Engen argues that the presence of pollution makes people perceive ambient odor as being stronger. Therefore, the pollution present in Back of the Yards exacerbated the pungency of the neighborhood’s other odors.

In 1905 a federal judge upheld the city’s right to enforce smoke ordinances. A smoke board was consulted to fix the problem but it had limited powers, a fact recognized by one of the city’s most prominent citizens, Daniel Burnham. “The city authorities cannot be relied upon. They will not enforce the ordinances.” In 1906, the Western Society of Engineers argued that the city’s ordinances were insufficient, and that the implementation of more stringent regulatory measures would improve air quality in the city without over-burdening businesses. Nevertheless, the problem continued, and the smoke inspector John C. Schubert and his department regularly found themselves on the

46 Rosen, “Businessmen Against Pollution,” 353.
47 Trygg Engen, Odor Sensation and Memory, 47.
48 Chicago Daily Tribune, January 31, 1904.
defensive. The *Chicago Daily Tribune* reported regularly that citizens thought an excess of discussion about the problem existed but generated few tangible results.

In addition to contributing greatly to the smoke problem that plagued the city, the packers further contributed to the foulness of the smellscape with their role in the creation of a phenomenon known as “Bubbly Creek.” They did so by dumping the blood, waste, and offal that remained after all byproducts were extracted into the south branch of the Chicago River. A 1901 report published by the City Homes Association stated, “The south branch of the Chicago River is really a ditch which accumulates a great deal of sewage from the stockyards, and fills the air with poisonous odors.”⁴⁹ These odors came from the bursting bubbles of noxious gases that rose to the surface of the water. The river was so polluted that that it caught fire more than once, and some even reported seeing chickens walking across it. The Department of Health estimated that “upwards of 2,000,000 gallons of sewage and slaughtering and rendering wastes” entered Bubbly Creek on a daily basis and identified it as a substantial olfactory nuisance in its biannual report for 1905-1906.⁵⁰ The *Chicago Daily Tribune* described Bubbly Creek as one of the worst sources of odor and repeatedly referred to it simply as a sewer: “The slimy water, filled with decayed matter, falls from the sewer to the level of the creek, keeping up an incessant boiling and steaming, which rises to the street, enveloping the crossing on damp days and wafting into the residence districts on dry days.”⁵¹

The city’s impetus to halt the environmental devastation the industry created was mitigated by the fact that it owed much of its wealth and growth to meatpacking. The

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⁴⁹ Robert Hunter, *Tenement Conditions in Chicago* (Chicago: City Homes Association, 1901), 182.
⁵¹ *Chicago Daily Tribune*, November 20, 1905.
stockyards butchered and packaged 90 percent of the beef sold in the United States between 1900 and 1910. With this prosperity came horrific odors. Initially, “nuisance” industries, or those that emitted heinous odors, were constructed on the outskirts of the cities beyond the noses of residential areas. As urban populations grew, however, residential expansion clashed frequently with areas occupied by objectionable industries. By 1900, complaints about the stench of the rendering facilities located in the fifth ward, just north of the stockyards district, filled the *Chicago Daily Tribune* for some time. The city council responded by ruling that all rendering and fertilizer plants must lay south of Thirty-ninth Street, which happened to be the northern border of the stockyards district. This ordinance did not go undisputed, but it did reflect the widely held view that nuisance industries should be segregated from prominent residential neighborhoods. This act did little to curb odors and the complaints about the stockyards continued because winds from the south and southwest carried the stench to other parts of the city.

Public discourse about the stockyards stench ebbed and flowed in its intensity. From late September to mid November 1900, a dramatic increase occurred in the number of articles concerning odor complaints published in the *Chicago Daily Tribune*. In the numerous articles and editorials the *Tribune* printed about the stockyards stenches, it laid much of the blame on the Department of Health for not enforcing the ordinances regulating nuisance industries. The paper suggested that the health commissioner, Reynolds, underestimated the problem because he lived in an area not exposed to the

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winds from the stockyards.\textsuperscript{53} The existence of city ordinances written specifically to curb odors demonstrates that the city regarded odors as an offensive enough nuisance to warrant government regulation. Nevertheless, the existence of sanitary ordinances and penalties does not provide an adequate indication of how the area smelled, because the city lacked the ability to enforce all of the ordinances.\textsuperscript{54} Enforcement fell under the auspices of the Department of Health’s Bureau of Sanitary Inspection. In 1905, the Bureau consisted of one chief, one assistant chief, eight inspectors of complaints, fourteen plumbing inspectors, six clerks, and one rendering plant inspector.\textsuperscript{55} Despite the concern displayed by some civil servants, the fact remained that limited staff and resources hampered the enforcement of sanitary regulations. In the Department of Health report for the years 1905 and 1906, city officials seemed confident that change was underway because the packers at this time were increasing their cleaning staff. Yet the same report confirms the possibility that sanitary regulations were not enforced by the department, when it indicates that the enforcement was hampered the city’s size, the department’s limited staff, and a lack of adequate transportation.

Despite the inherent limitations of language to express the magnitude and scope of particular odors, the stench generated by the Union stockyards drove many to make the attempt. The odor frequently inspired literary flourish in its description. The \textit{Tribune} described the odor as “a plague in comparison with which the twelve which came upon Israel were mild and inoffensive,” and concluded, “The smoke and the stenches have

\textsuperscript{53} Slaughterhouses and rendering plants found to be in violation of Article XX of the Health Ordinance of Chicago in 1905 could incur a fine not exceeding two hundred dollars, but not less than twenty-five dollars for each offense. Chicago Department of Health Ordinance, 1905.


\textsuperscript{55} This is excepting October 16, 1905 to January 1, 1906, when the City Council authorized a temporary increase of eleven inspectors, three clerks and one stenographer. Biannual Report of the Department of Health, 1905-1906, 183.
destroyed Chicago as a summer resort. If not suppressed they will soon make it impossible as a winter resort.”

Complaints fell off with the onset of winter, but the following June and July and again in November and December the topic was back on the Tribune’s pages. The newspaper described the odor as “pale green, shading into yellowish.” Although complaints in the newspaper subsided somewhat in 1902 and 1903, they returned in full force in early 1904 and continued into 1905. On November 12, 1905, the Tribune wrote of

“An odor that was

—Contaminating,

Nauseating,

Loathsome,

Abominable,

Malodorous,

Detestable,

Disgusting,

Putrescent,

Abhorrent,

Putrefying,

Execrable,

Sickening,

Offensive,

Vitiating,

Horrible,

Polluting,

Defiling,

Stinking,

Infected,

Tainted,

Hateful,

Impure,

Odious,

Fætid,

Putrid,

Foul,

Vile”

56 Chicago Daily Tribune, October 4, October 27, 1900.
57 Chicago Daily Tribune, November 7, 1901.
58 Chicago Daily Tribune, November 12, 1905.
The paper reported that odors from the stockyards district had traveled far enough to reach the noses of north side residents. With its graphic presentation of the text, in which each adjective was printed on its own line, the paper emphasized the strength of the stench. The Tribune challenged to Board of Health to act upon the situation. The following week the police department dispatched over 2,000 officers to investigate the malodorous conditions generated by the yards. Armed with pads of paper and compasses, the policemen, upon observing a foul stench, were to record the time, place, and wind direction of the offending olfactory event. The chief of police evaluated these reports and he concluded that the “the vicinity of Halsted and Thirty-ninth Streets is entitled to the decision as the most ill-smelling locality in Chicago.”

The chief noted that a combination of persistence and variety of bad smells in this area earned it this unfortunate distinction. In its report about the patrolmen’s findings the Tribune provides a detailed olfactory description of the neighborhood. The decayed refuse from the butcher shops and stockyards traveled to a tallow refinery located at 3927 Halsted Street, where it was boiled, resulting in wrenching odor in the early mornings; Henry Guth’s packing house odor surpassed it as the morning goes on; in the evening the packinghouse of Hoff & Brennan emitted terrible odors. In addition a nearby brewery added a “Malty” odor to the “already sickening atmosphere.”

The unprecedented efficiency of Chicago’s meatpacking industry earned it a reputation that attracted visitors from far and wide to inspect this industrial wonder. The odors generated by Chicago’s leading industry, however, left a rank impression on visitors, who reported that the smell generated by the meatpacking industry was

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59 Chicago Daily Tribune, November 29, 1905.
60 Chicago Daily Tribune, November 29, 1905.
insidious. Following a 1902 visit to the Armour plant, Grand Duke Boris Vladimirovich of Russia declared, “I never smelled such an awful smell, but the stockyards are greater than my imagination conceived.” Sophonisba Breckenridge and Edith Abbott, two University of Chicago sociologists who surveyed the neighborhood and worked in various other parts of the city, stated, “No other neighborhood in this, or perhaps in any other city, is dominated by a single industry of so offensive a character.” W.K. Jacques and Thomas H. McKee both wrote about the stockyards odor for The World’s Work. The Lancet contributor Adolf Smith, a member of the Social Democratic Federation, visited from England, and wrote a four-part series on the stockyards of Chicago for the medical journal. Smith’s piece inspired a young writer named Upton Sinclair to explore the industry’s working conditions. For his research into the subject Sinclair donned work clothes and carried a lunch pail and immersed himself for seven weeks in the life of the yards. He did so to gain access to the portions of the plants that were ordinarily closed to the throngs of visitors who toured the facilities and marveled at the efficiency of

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61 Chicago Daily Tribune August 19, 1902.
62 Sophonisba Breckenridge and Edith Abbot, “Housing Conditions in Chicago III: Back of the Yards,” American Journal of Sociology 16, no. 4 (1911), 433-468. The date of this article is telling, since it demonstrates that even five years after the publication of The Jungle raised public consciousness about the meatpacking industry, offensive odors still permeated the neighborhood. Breckenridge and Abbott also wrote extensively about the decrepit and overcrowded housing conditions found in the district. Indeed, the domestic sources of odor had an enormous impact on the smellscape of Packingtown, but as they go beyond the scope of this paper, I have set them aside for further study.
64 Barrett, Work and Community, 1.
Chicago’s meatpacking industry. The publication of *The Jungle* in 1906 cast an even more brighter light on the industry and the neighborhood.\(^{65}\)

It is worth examining how Sinclair’s descriptions compare to the olfactory realities of Back of the Yards. James R. Barrett argues that although Sinclair did not offer the most appropriate view of the behavior of the neighborhood residents, the picture he painted of the neighborhood conditions was very accurate.\(^{66}\) In his novel, Sinclair poignantly described the odors of the stockyard community in tremendous, and at times, excruciating, detail. Sinclair’s descriptions of the olfactory landscape of the neighborhood are vivid: his stockyards were a malodorous hell on earth. Although the author’s true aim was to expose the horrendous living and working conditions of the working poor, readers responded most strongly to Sinclair’s descriptions of unsanitary food processing, and the novel is often noted for its influence on the passing of the Pure Food and Drug Act. *The Jungle*’s publication resulted in a public outcry over the filthy conditions of the yards and the associated packing and rendering plants.\(^{67}\) Outrage over Sinclair’s book led the federal government to dispatch two commissioners, Charles P. Neill and James B. Reynolds, to evaluate sanitary conditions of the yards. The pair spent two weeks investigating the packinghouses.\(^{68}\) In their report, published in newspapers nationwide, Neill and Reynolds commented extensively on the olfactory conditions of the

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\(^{65}\) Sinclair refers to the neighborhood as Packingtown in *The Jungle*.


\(^{67}\) At this time five major packing firms dominated the industry: Armour & Co., Swift & Co., Nelson Morris & Co., Libby, MacNeil & Libby, and Schwarzchild, Sulzberger, & Co. For the purposes of this study I utilize the term, “the packers” to refer to these major meatpacking firms located in Chicago, for they operated as a large trust.

\(^{68}\) Neill-Reynolds Report.
yards and the plants, and on the sources of the odors. Their report corroborated much of Sinclair’s fictional account. It begins in the yards, where they comment on the odors emanating from the wet brick pavement. “Such pavement cannot be properly cleaned, and is slimy and malodorous when wet, yielding clouds of ill smelling dust when dry.”

They also reported the presence of dead animals in the yards. Neill and Reynolds described in detail the filthy and unsanitary conditions in the plants. They reported the odors of putrefying blood and meat, and “indescribably filthy” aprons, and stated that they saw men expectorating on the floor.

Sinclair also noted the odors emitted from the cooking rooms and the byproduct industries. According to Sinclair, the process of scraping intestines clean to prepare sausage casings was particularly revolting:

Here came the entrails, to be scraped and washed clean for sausage-casings; men and women worked in the midst of a powerful stench, which caused the visitors to hasten by, gasping. To another room came all the scraps to be ‘tanked,’ which meant boiling and pumping off the grease and lard; below they took out the refuse, and this, too, was a region in which the visitors did not long linger.

Dr. Edward Ballard, a British public health official familiar with the process of sausage casing production, confirmed that it was a putrid process:

Within the workshops the stench is inconceivably horrible; few persons unaccustomed to it could bear to remain for a single minute in some scraping rooms that I have visited[,] I myself have had sometimes a difficulty to restrain vomiting and to carry on inquiries I was bent upon. The stench, after I have been in some of them for twenty minutes or half an hour, has so pertinaciously attached itself to my clothing and hair, that only repeated ablutions have removed the odor from my hair; my clothing has retained the stench for days. It spreads from the workshop and yard all around the neighborhood …

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One aspect of the book that particularly horrified the readers was that of the doctoring of spoiled meat in the sausage making and canning areas. Sinclair accused the packers of injecting chemicals into spoiled meat to hide their odor. During the whirlwind of the publicity from his book and the Neill-Reynolds Report, Sinclair spoke to the *New York Times*, and described the odors of this putrid food. “In Armour’s establishment I saw with my own eyes the doctoring of hams so putrefied that I could not force myself to go near them.” For his part, the *Lancet*’s Adolf Smith cast some doubt on the stories of doctored food but acknowledged that such practices were not inconceivable, especially considering the strong profit motive extant in the industry. The packers did in fact operate under an exceptionally thin profit margin. This was due for the most part to the labor intensity of the work. Refrigerated railcars made shipping dressed meat across the country possible, but if meat did happen to spoil, it would have provided the packers with a strong motive to salvage it.

Sinclair claimed that the workers, after toiling in this olfactory inferno all day, six days a week, absorbed this odor and carried it with them.

The men who worked on the killing-beds would come to reek with foulness, so that you could smell one of them fifty feet away; there was simply no such thing as keeping decent, the most careful man gave it up in the end, and wallowed in uncleanness. There was not even a place where a man could wash his hands, and the men ate as much raw blood as food at dinnertime.

The packers denied that this was a hazard. “Fresh grease in this case does not offensively soil clothing or hands, or even faces.” Again, this contention is predicated

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on the freshness of the grease. The Neill-Reynolds report confirms the absence of washing facilities. Noting the absence of lavatory facilities close to the killing rooms, Neill and Reynolds concluded that the men urinated on the floor. “Hence, in some cases the fumes of the urine swell the sum of nauseating odors arising from the dirty, blood-soaked rotting wooden floors, fruitful culture beds for the disease germs of men and animals.” 75 Blood and tissue are organic substances. As exsanguinated blood clots, it emits a foul odor. 76 When the process of life ceases in an animal, the tissue, aided by bacteria, decays in a malodorous process. In the case of the slaughterhouses, this foul air had nowhere to go; Neill and Reynolds noted the absence of ventilation as one of their chief complaints. Putrefied animal and tissue, mixed with notes of human sweat and urine, made the slaughterhouses wells of stench.

The packers responded to both the book and the report with vigorous public denials. Debate raged over the actual olfactory conditions in the yards. Complicating the matter was the simple fact that meatpacking was accepted as a smelly business. No one, including the packers, denied this fact. Regardless of whether or not the animal matter was allowed to putrefy, the huge amounts of hot blood and tons of innards created a strong odor in any case, intensified by entrapment in a closed space, as Rudyard Kipling attested after a visit to the slaughterhouses. “I could smell the salt reek of blood before I set foot in the place.” 77 Blood was everywhere, and that blood emitted a pungent odor. The debate centered on the point of how much odor should be tolerated as an unpleasant but necessary result and at what point this odor was unacceptable to workers, Back of the

75 Neill-Reynolds Report.
Yards residents, and greater Chicago residents. The packers claimed that the blood and
offal that existed on the killing floor and throughout the plants did not actually smell foul,
even if it was not particularly pleasant. “There is blood, there is unappetizing odor in the
rooms where the animals are killed or dressed, but this is not dirt and the odors are not
putrid.” City statistician Hugo Grosser agreed that by necessity slaughterhouses
contained “animal matter, blood, fat, grease, and scraps of meat.” He admitted that if
allowed to putrefy, these objects produced a powerful “stench that cannot be confused
with any other smell that ordinarily denominated a packing house smell.”

The packers engaged two University of Illinois professors, a chemist and a
bacteriologist, to conduct their own inspection. Professors Burrill and Grindly denied
witnessing any of the unsanitary conditions Neill and Reynolds found at the plants. Yet
as a New York Times article pointed out, in making these claims, Burrill and Grindly did
not draw on their expertise as scientists to deny that the filthy conditions were
unsanitary. Rather, they simply denied that filthy conditions existed. It therefore was a
question of who was telling the truth. Since the packers solicited Burrill and Grindly, it is
reasonable to conclude that these professors were biased in favor of the packers.

Additionally, at least one of the government inspectors suspected that he and his
partner did not see the whole picture. On August 12, 1906, the New York Times published
a letter from Reynolds in which he argued that the packers had tried to clean up before
his and Neill’s arrival. It is conceivable, then, that the smelly conditions the two

78 Commercial organizations supported the packers during this time. “The directors of the Illinois
Manufacturers’ Association and of the Chicago Commercial Association denounced the Neill-Reynolds'
report of conditions at the stock yards as highly colored, and criticized President Roosevelt for sending it to
80 Ibid.
government inspectors experienced were actually not quite as bad as during the time when Sinclair conducted his research. Additionally, University of Chicago Settlement House worker Mary McDowell, in a letter she wrote to President Theodore Roosevelt that was excerpted in the *New York Times*, testified that the packers undertook massive cleaning procedures immediately after Neill and Reynolds left the yards. MacDowell denied the packers’ contention that she merely witnessed annual repairs, stating that in all her time in the yards, she had never seen any *annual* repairs such as these. This massive cleanup on the part of the packers may account for why, upon his later inspection, Chief City Sanitary Inspector Perry L. Hendrick found conditions at the plant to be somewhat better than those described in the Neill-Reynolds report.  

The packers based their declarations that the slaughter rooms were not putrid on the assertion that the slaughter rooms were cleansed frequently and consistently. City statistician Hugo Grosser agreed. Sinclair saw things differently:

> All day long the rivers of blood poured forth, until, with the sun beating down, and the air motionless, the stench was enough to knock a man over; all the old smells of a generation would be drawn out by this heat — for there was never any washing of the walls and rafters and pillars, and they were caked with the filth of a lifetime.  

In their original report and in subsequent congressional testimony, Neill and Reynolds corroborated Sinclair’s contention that the rooms were not washed regularly. The packers, through their representative Thomas E. Wilson, denied these claims in a meeting before the House Committee on Agriculture, but Neill held fast to his assertions. “I take issue with Mr. Wilson directly on his statement that rooms were all washed out daily. We saw rooms that plainly had not been washed out that day, and apparently had not been

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washed for several weeks.”

Sinclair’s claim, corroborated by Neill and Reynolds, means that the packers violated Chicago’s Department of Health ordinance 1158, which governed disposal procedures in the slaughter of animals. It ordered that “all offal, blood, fat, garbage, refuse, and unwholesome or offensive matter is to be thereupon removed at least once in twenty-four hours after the use thereof.”

The smell of the stockyards and the meat packing industry was so pungent, and so consistent, that despite its fundamentally ephemeral nature, people viewed it almost as a tangible object. Like the skyscraper, the balloon frame house, or political corruption, it served as a defining trait of the city, taking a place next to other Chicago institutions.

“For many outsiders Chicago is typified by the Union Stockyards, at Halsted and Forty-second streets.”

While it aroused revulsion, the stench also inspired humor and creativity. One man saw in the stench a potential source of energy. Professor Frank Yount of West Jackson Boulevard proposed that the organisms present in the stockyards stench could generate “a light that will cast a shadow even on one of B.H. John’s gayest waistcoats.”

The Tribune’s humor column “A Line-O’-Type or Two” included a poem that dealt with Sarah Bernhardt’s reaction to her visit to the stockyards. Much of it focused on the stockyards’ odor:

> “Merci! Now show me zee air  
> Zee celebrated Stock-Yards smell.”  
> The guide politely showed her it,  
> And by request broke off a bit.  
> And he, by Madame’s own command,  
> He had it very neatly canned;"
And now, they say, it doth repose
Among La Bernhardt’s curios. 88

Another humorous piece in the same paper described an insane man’s projection
of what a Chicago man might look like in 2002, after years of enduring the effects of
“Chicagoitis,” a mental disorder brought on by, among other things, the stockyards
stench. Along with lengthened arms for riding in street cars and a stomach “like that of an
ostrich” for eating lunch in thirty seconds, the man would have “nostrils protected by
thick plates of cartilage, as guard against odors, dust.” 89

It is difficult to gauge the physical and psychological effects this smellscape had
on the people who lived and worked in Back of the Yards. Constant exposure to noxious
odor did not necessarily minimize its effects on health through desensitization. Much has
been written on odor psychophysics, the branch of psychology concerned with the
physical response to odor stimuli and its psychological effect. Various physical and
psychological factors affect one’s discernment and perception of odors. It is worth
examining the extent to which these factors were present in the meat processing industry
of the Stockyards district. It seems reasonable to conclude that individuals who
encountered tremendously pungent and foul odors on a daily basis processed these
stenches differently than the occasional visitors. Outsiders often concluded that the
residents of the Yards must have become used to the horrendous stenches. If this was in
fact the case, then the stenches would not be a significant factor in evaluating the how the
working conditions impacted the quality of life for the laborers. However, a closer
consideration of human responses to odors shows that the reality was more complex.

88 Chicago Daily Tribune, January 29, 1901.
89 Chicago Daily Tribune, July 6, 1902.
Human beings are in fact capable of becoming desensitized to odors, to various extents under certain conditions. Two distinct types of desensitization, adaptation and habituation, can occur, often simultaneously. Adaptation is a physical response. It occurs when the odor receptors become fatigued, resulting in desensitization to odor. A number of physical factors affect this process. Adaptation has the best chance of occurring when the odor stems from a singular source. If a stench results from multiple sources, odor receptors are less likely to adapt to it. In the case of the stockyards, the combination of blood, dung, hair, sweat, urine, and rotting carcasses minimized the likeliness of the occurrence of adaptation. Habituation is an unconscious psychological response that occurs when an individual determines that the odor may be ignored because it is insignificant, or poses no danger. Yet the stockyards and packinghouses were dangerous places. Workers were prone to injury, illness, and even death, due to frequently damp conditions, the presence of sharp knives, and the intensive pace of the work. Injury and illness had horrendous implications for Back of the Yards families, for the packers did not provide sick days or health insurance. One injury or bout of illness could drive a family to destitution. Human beings have trouble becoming desensitized to odors associated with traumatic events, and because of its intensely negative ramifications in this industry, the illnesses and injuries sustained in the meat-packing industry were very traumatic.

For Sinclair, exposing the effects of conditions in the meatpacking houses on the workers was central to his purpose. Sinclair emphasized the ravaging physical effects the plants had on the workers. In this portion of the novel he includes a description of the

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90 Engen, *Odor Sensation and Memory*, 17-27.
odors. “There were men who worked in the cooking-rooms, in the midst of steam and sickening odors." It may be argued that enduring such strident smells within an enclosed space was an occupational hazard. For Adolf Smith, the stench of the meatpacking industry had potential cognitive and physical effects. “With it comes unpleasant odours of a meaty nature and burnt animal matter, which seems to parch the throat and this helps explain the difficulty that many inhabitants of Chicago experience in articulating their words distinctly.”

Sinclair vividly described the overwhelming physical impact the fertilizer plants had on workers:

For the odors in these ghastly charnel-houses there may be words in Lithuanian, but there are none in English. The person entering would have to summon his courage as for a cold-water plunge. He would go on swimming like a man under water; he would put his hand-kerchief over his face, and begin to cough and choke; and then, if he were still obstinate, he would find his head beginning to ring, and the veins in his forehead to throb, until finally he would be assailed by an overpowering blast of ammonia fumes, and would turn and run for his life, and come out half-dazed.

Neill and Reynolds offered an opinion of the effect of the unsanitary conditions as a whole on the workers in their report. “The whole situation as we saw it in these establishments tends necessarily and inevitably to the moral degradation of thousands of workers, who are forced to spend their working hours under conditions that are entirely unnecessary and unpardonable.” This moral degradation likely perpetuated a negative view of residents by some outsiders, an outcome I explore further in chapter four.

Following the release of the Neill-Reynolds report, Chief City Sanitary Inspector Hedrick acknowledged that washing facilities were absent, but he contended that the presence of

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92 Sinclair, The Jungle, 96.
95 Neill-Reynolds Report.
such facilities would not have been used by “the class of men in some departments of the plants.” Clearly, the city inspector viewed the men as at least partially responsible for the squalor.

Yet the Neill-Reynolds report and Smith’s article demonstrate that for the workers, trying to attain cleanliness in such a filthy environment in the noxious trades was a Sisyphean effort. One factor that may have limited workers’ ability to keep clean was the pace of the work. Because of the razor thin profit margin they operated under, the packers constantly increased the pace of the work. They did so by increasing the speed of the conveyors and providing financial incentives for pacesetters responsible for meeting higher quotas. In the fast-paced world of meatpacking, it seems doubtful that either management or the labor prioritized the time consuming cleanup of massive amounts of blood and innards.

Public reaction to *The Jungle* and the Neill-Reynolds report reflect the larger shifts in notions of hygiene, cleanliness, and disgust that followed on the heels of the Industrial Revolution. This period saw the publication of a number of manuals concerned with municipal sanitation. Contemporary hygiene manuals also proliferated. These manuals tied cleanliness to health and in some cases to behavior. Public health officials, even if they did not always agree that odor was directly injurious to health, viewed

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noxious odors as unhealthy in some way. “It is no doubt possible for persons to become acclimatized to such an atmosphere, but for the average man it cannot be regarded as healthy, and sanitary regulations must be framed with a view to the average man.”

Following the publicity generated by *The Jungle* and the Neill-Reynolds report, the packers attempted to publicly remove the unsanitary conditions. Nevertheless, the odors remained an issue in 1911. “The stench from the stockyards is also present. The district is overshadowed by heavy clouds of smoke from the yards.” The consumer public was more concerned with safety of the food they bought than the working conditions of the men and women who prepared it. Once its fear on the former score was allayed, they paid little attention to the latter issue.

It seems incredible that human beings worked under such miserable olfactory conditions. Yet the men and women of Back of the Yards had to continue to battle foul smells when not at work. Their homes lay in close proximity to the yards out of necessity. The packers typically employed a large number of unskilled workers on an as-needed basis. This casual labor system compelled members of the unskilled labor pool to live close to the yards and plants to increase their odds of getting work. Additionally, these men and women had no means of affordable transportation other than walking. Residence beyond the stench of the yards and plants was not a viable option. Further, olfactory conditions inside the homes were pungent, due to overcrowding and the neighborhood’s lack of adequate sanitary systems. The next chapter explores the stenches that residents experienced beyond the plants, examining the foul odors present in the streets and their homes.

100 Stevenson, *A Treatise on Hygiene and Public Health*, 904.
Chapter 3

Pervasive Stenches

The stockyard industry did not have a monopoly on the production of wretched olfactory conditions. Odors generated by overcrowding, garbage, and saloons in the residential areas generated strong odors as well. The physical conditions of the residential buildings, combined with the large number of persons who occupied them generated tremendously bad olfactory conditions. It is important to remember, however, that these factors, too, were intrinsically linked to the meat packing industries. While the industry did not directly cause all of the odors present in the district, it generated economic, environmental, and physical circumstances that bred the adverse olfactory conditions all residents faced when they were not working. This chapter focuses on olfactory conditions outside the plants and yards themselves, but shows that the odors that existed in homes and the district’s streets and alleyways were closely related to the stockyards and meatpacking industry.

A boom in the construction of low-cost frame housing in the neighborhood that would come to be known as Back of the Yards took place in the 1880s. People employed in the meatpacking industry in one way or another almost exclusively occupied the residences. Germans and Irish were the earliest residents, but by 1900 they were rapidly replaced by an influx of eastern European immigrants, particularly Lithuanians, Poles, and Slovaks. Those who made their living in the stockyards and meatpacking plants required close proximity to the yards because of the casual labor system employed by the industry. The nature of the industry motivated employers to hire on a temporary basis. While skilled butchers typically enjoyed more regular employment, an enormous pool of
unskilled laborers competed for a limited number of jobs. During slack periods, when the industry did not require as much skilled help, the butchers usually filled the unskilled positions, making that portion of the job market even more competitive than usual. Consequently, laborers needed to be at the factory gates very early to have the best chance of getting work for that week, or even that day. Additionally, although public transportation existed, those employed the district there could not afford to take advantage of it. As a result, people settled in homes near the foul-smelling meatpacking industry.

Approximately 90 percent of the district’s residential edifices were wood frame, in contrast with the rest of the city, in which 60 percent of the houses were frame. The existence and construction of frame structures generated intense debate following the Great Fire of 1871, when the concern over preventing another conflagration conflicted with the reality that poorer families could not possibly afford brick structures. Ultimately, the original plan to impose a citywide ban on the construction of wood-frame homes failed. In 1872 the city council passed a set of fire limits that mandated brick construction only within an irregular western border. As a result, those seeking lower cost housing gravitated to districts beyond the borders imposed by theses fire limits.102 At this time, the neighborhood that would become known as Back of the Yards was a part of the Town of Lake, which would be annexed by the city in 1889. Debates over annexation were contentious, and anxiety over the extension of the fire limits was a key factor cited by Town of Lake interests opposed to annexation. Ultimately, the city vowed not to extend

the fire limits, allowing the dilapidated wooden structures that characterized Back of the Yards to remain.  

That frame structures dominated the district is significant, because such houses were more prone to dilapidation and decay than brick structures. Hastily built as the industry exploded in the late nineteenth century, the residential structures were poorly planned. By 1900, the buildings were in abysmal condition. Houses typically stood no more than two stories. Typically apartments had four rooms, with four apartments per building. These apartments were often overcrowded with lodgers and extended family members. Two particularly objectionable types of housing, rear tenements and basement apartments, were prevalent in the neighborhood. Privy vaults were often located in the back yards or basements. Rear tenements, structures located behind the homes facing the streets, looked out upon fly-ridden alleys littered with filth. As a result, their residents regularly smelled decaying food matter and fetid human waste. Chicago led the nation in the number of apartments below grade. Characterized by their dampness and darkness, basement apartments were often the worst smelling, thanks to the wastewater that drained nearby.

Housing problems troubled reformers, in Chicago and in other major urban areas. The Industrial Revolution and the massive population increase that resulted made industrial slums a pressing concern. Although altruism motivated some reformers, many feared that these areas bred not only disease, but social problems as well. In 1901, 

103 For an in-depth look at Chicago’s annexation of Town of Lake, see Wade, Chicago’s Pride, especially chapter 18.
105 Suellen Hoy, Chasing Dirt, 97.
106 For the purposes of this study, I utilize the term “reformers” to embrace the many individuals at this time who were increasingly concerned with social ills and made attempts to correct them. That is the commonality they share; however, these individuals differed greatly in their motivations, which ranged
Robert Hunter of the City Homes Association published a report that discussed the housing problems of the city. Hunter deliberately omitted Back of the Yards from the main body of his report, because the sanitary conditions of the area were so poor that he considered them to be unrepresentative of even the foulest neighborhoods of the city. Thus the descriptions that Hunter did include in the report draw the condition of the neighborhood into sharp relief, because they are quite wretched. Hunter concluded that many of the homes surveyed were “unfit for habitation.” Hunter did report on Back of the Yards in an appendix. Foul odor emerged as a dominant characteristic of the distressed neighborhood:

In many parts of the district there are no sewers and the sewage from the houses stands in stagnant pools. The south branch of the Chicago River is really a ditch which accumulates a great deal of the sewage from the stock yards, and fills the air with poisonous odors. The stench from the stock yards is also present.

The exceptionally bad conditions that existed in Back of the Yards led many individuals to conduct a number of surveys following Hunter’s report. This was due in large part to the Sociology Department of the University of Chicago, located in Hyde Park, a neighborhood that, although in close proximity to Back of the Yards, lay worlds away from it in terms of its financial, sanitary, and housing conditions. The university sponsored a settlement house in the yards. Developed and headed by Mary McDowell, the house aimed to help neighborhood residents mobilize to achieve a better standard of living. It also provided sociology students with a large number of working poor families from altruistic to paternalistic to racist, to a mix of all three. The methods they advocated differed as well. Since they could often not agree on where to cast the blame for social problems, it minimized their effectiveness at reaching a consensus on a solution. For a thorough examination on reformers and their motivations see Thomas Lee Philpot, *The Slum and the Ghetto: Neighborhood Deterioration and Middle-Class Reform, Chicago, 1880-1930* (New York: Oxford University Press, 1978), particularly chapters 3 and 4.

107 Hunter, *Tenement Conditions in Chicago.*

108 Ibid., 182.
as subjects for their documentation and study. Sociologists argued that the amelioration of social problems required accurate and meticulous documentation of the problems. They conducted many surveys of the area, describing the living and working conditions of the yards in great detail.

Filth, massive overcrowding, a lack of sanitation facilities, and bad odor characterized the neighborhood they surveyed, the result of the extreme poverty of its residents. Contemporary surveys provide a misleading portrait of the congestion of the district. In terms of numbers, the area seemed less congested than other urban slums. The area possessed a number of vacant lots, and fewer large-scale structures that typically distinguished tenement life. Although Back of the Yards had fewer structures, often built to a smaller scale, than other slums, like those found at this time in New York City, congestion and overcrowding characterized the neighborhood because large numbers of people lived in fewer and smaller homes. The housing circumstances in Back of the Yards differed from those found in other slums, such as those in New York, which were characterized by residents renting multiple flats in very large structures. Tenements in Chicago were defined as “any house or building or portion thereof which is used as a home or residence for two or more families living in separate apartments.” In Back of the Yards, residents often lived in single-family dwellings, lodging houses, and smaller tenement structures. In the case of single-family dwellings it is more appropriate to

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describe these homes as structures designed for single-family living, because in practice the structures housed multiple families and families with multiple lodgers.

In 1902 the city council passed an ordinance designed to improve housing conditions. The ordinance faced strong opposition, from builders and tradesmen, before it passed. The objectives of the ordinance were twofold. They aimed to protect the safety and the health of the residents. To accomplish the former, the ordinance set standards designed to prevent fires and structural collapse; to guard the health of residents, it demanded stricter provisions regarding ventilation, occupancy, and plumbing facilities. It banned further construction of rear tenements, the use of cellars as apartments, and limited the use of basements for residential occupancy.\(^{113}\) It required 400 cubic feet of sleeping space for each adult and 200 cubic feet for children under twelve. It mandated that every room possess at least one window that opened to the outside and equaled 10 percent of the room’s floor space. The ordinance required that every apartment contain a kitchen sink and a toilet, except for buildings that contained one or two rooms, which were only required to have one toilet for every two apartments. The ordinance established eight and a half feet as the minimum ceiling height.\(^{114}\)

Unfortunately for the residents of Back of the Yards, this ordinance did not really affect the neighborhood or improve its smellscape because much of it applied only to structures built after December 17, 1902, and not to existing buildings. After 1902, very little new construction occurred in Back of the Yards. Most residential structures were older, having been built in the 1880s as the industry grew and the need to house laborers

\(^{113}\) According to the law, a cellar referred to a story that was at least one half below the sidewalk, while a basement was less than one half below sidewalk level. Philpot, *The Slum and the Ghetto*, 101.

\(^{114}\) Philpot, *The Slum and the Ghetto*, 101-103.
swelled. Because many considered the ordinance financially unfeasible for landlords of existing structures to implement, they were held to a different set of standards. Only the provisions concerning sleeping space applied to existing buildings, and these were frequently violated. The ordinance did state that radical renovations required compliance with the new ordinance. This typically did not occur in Back of the Yards, because most owners in the district could not afford even the most basic improvements, let alone major renovations.

Reformers often blamed the landlords for dilapidated structures, overcrowding, and the overall lack of sanitary conditions, but the reality was more complex. For a residential district characterized by such considerable poverty, home ownership was surprisingly prevalent. This prevalence reflected a citywide trend, in which home ownership in the poorest neighborhoods surpassed that of the rest of the city. The particular economic conditions present in this neighborhood also affect this reality. Home ownership provided stockyard workers dependent on the casual labor market and its unpredictable wages with a way to generate income, through multiple mortgages and through the renting of space to lodgers. The wages of the heads of households did not cover the cost of living. Death, illness, and injury, all of which were prevalent, brought families to or near ruin. As a result, home ownership did not signify status or wealth. The district’s homeowners made tremendous sacrifices to own homes. The homes they owned were horribly overcrowded with lodgers needed to help with mortgage payments,

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but despite this, foreclosures occurred regularly.\textsuperscript{120} Owners often occupied the least desirable living spaces, such as damp basements, or tiny attics, because they could not rent those as easily as regular rooms. By declaring structures with two or more apartments tenements, the 1902 ordinance declared many resident-owners to be tenement landlords. Therefore, a number of tenement apartments were in miserable condition not because of any sinister profit motive on the part of a slumlord, but because the owners simply could not afford the repairs.

The presence of lodgers who boarded with families struggling to make ends meet resulted in massive overcrowding. The lodgers, typically young single men, or married men who came to the United States to earn money to send to their families back home in Eastern Europe, or to bring them to the United States, brought much-needed regular income to the families of Back of the Yards. Irregular employment in an industry where men and women faced injury and serious illness meant that families relied on lodgers to generate money for mortgage payments. This system served a purpose for the lodgers as well, who relied on the same unpredictable and dangerous industry for employment and could not afford their own private lodgings.

As I more fully explore in chapter four, reformers sharply criticized this practice, referring to it as the as the “lodger evil,” because it eliminated the privacy of individual families and exacerbated overcrowding. However, this “evil” remained a necessary one for immigrant families, and it contributed tremendously to the smellscape of the district’s interior living spaces. The large number of individuals who worked in a malodorous industry and lived in small spaces, sharing substandard plumbing and toilet facilities,

\textsuperscript{120} Garb, \textit{City of American Dreams}, 154.
created a horrific stench. Residents found themselves surrounded by vitiated air of many individuals living together without adequate ventilation.

It may seem logical, almost instinctual, to presume that such overcrowding as that found in Back of the Yards would generate not only a strong odor, but one so foul as to affect the quality of life of the individuals living with it. Sense historians instead should ask a number of questions before concluding whether or not the odors were so foul as to impact the lives of those experiencing it significantly. Does it follow that a large number of individuals living in a small space generated a foul odor? Was the aroma exceptional for the period in question? Did adaptation or habituation lessen any negative effects odors had on the people who experienced them? These questions, although impossible to answer precisely, prove important because they compel the historian to recognize that perceptions of odors, like mores, ideas, and fashions, shift over time, and are influenced by a number of different factors. This recognition allows the historian to approach the study of the scents of the past as one would other historical phenomena.

To fully understand the olfactory ramifications overcrowding created in Back of the Yards residences, one must take into account how hygienic practices there and then differed from those of today. Equally important is the consideration of how residents’ hygienic practices contrasted with the period’s standards of personal cleanliness, on a broader, national level, which were in a state of flux. At the beginning of the twentieth century, personal hygiene and grooming habits were very different than they are today. Public perceptions about the effects of bathing on health changed drastically in the late nineteenth and early twentieth centuries.\(^{121}\) Prior to that, bathing was done weekly at the most, toothbrushes were almost unknown, mouthwashes had not yet been marketed, and

\(^{121}\) Wilkie, “Submerged Sensuality,” 649.
antiperspirants and deodorants were just starting to enter the marketplace in a very limited way.

By 1900, the demand for hygienic products increased among the middle and upper classes. Prescriptive literature concerned with personal hygiene abounded. These manuals provided practical instructions for bathing, washing hair, cleansing teeth, and maintaining overall health through diet and exercise. These instructions dealt with both the method and frequency of cleaning routines. Daily bathing remained quite rare. Most cited too much bathing as taxing on the skin and hair. “The frequency of shampooing depends on the individual. With some, once a month is often enough, and others require a thorough washing once a week. Any good toilet soap will serve the purpose.”

Historians posit different theories on why this transformation in hygienic practices occurred. Nancy Tomes argues that an increase in demand for sanitary supplies and services reflected a growing concern for public health and increasingly disseminated knowledge about disease causation. She argues that at this time a cultural shift in sentiment occurred, in which the emotional attachments of family grew, hardening the emotional devastation of losing children. Tomes emphasizes the role fear of disease had on domestic hygiene. This led the middle and upper classes to pursue public health measures, which included the use of sanitary and hygienic products. In her emphasis on technology’s role, Jacqueline Wilkie argues that the availability of technology spurred interest because ownership of such products was a sign of social standing. Vinikas argues that advertisers and sellers marketed their items in such a way as to consciously generate

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122 Personal Hygiene (Chicago: The American School of Home Economics, 1907): 143.
demand for hygienic products.\textsuperscript{123} He argues, however, that the period when the most significant change took place was the 1920s, after the period in question.

These historians put forth compelling evidence to support their theories. It seems likely that all three are correct in some respect. Which of these factors had the strongest impact on middle and upper class perceptions of hygiene hold little value in determining the hygienic perceptions of the residents of Back of the Yards. The working poor living in the stockyards district had little to no access to the prescriptive literature that touted the importance of personal and domestic hygiene. The economic circumstances certainly rendered the purchase of hygiene manuals cost prohibitive, and most residents were illiterate and many did not speak English. Additionally, epidemic disease affected the poor residents of primarily Slavic descent quite differently than it did middle and upper class individuals to which Tomes refers. John Bodnar argues that Slavs often viewed the death of children as something that was part of life, to be expected.\textsuperscript{124} Finally, Vinikas’ contention that the most significant change took place during the 1920s impedes the applicability of his theory to Back of the Yards residents in the first decade of the twentieth century. In fact, this is when the changes first affected the middle and upper classes; it would have taken some time for these effects to reach the residents of Back of the Yards.

The need to distinguish between the views held by the upper and middle classes is not to suggest that the residents of Back of the Yards were not concerned with cleanliness at all. It is important to remember the tremendous divide that existed between motivation and actual practice. In attempting to determine the hygienic practices residents of Back of


\textsuperscript{124} Bodnar, “Immigration and Modernization,” 59.
the Yards engaged in, pinpointing the hygienic notions residents held seems almost irrelevan because, regardless of how they viewed bathing, residents lacked the facilities and systems needed to practice hygienic washing on even the most basic level. Putting the emerging perceptions about hygiene and sanitation into practice required considerably more effort for those who relied on hydrants and backyard pumps than those who enjoyed plumbing facilities in their homes. Living in an area that was so filthy made the simple practice of using soap cost prohibitive. Some prescriptive literature did acknowledge that hygienic practices cost money. But any solutions they posited did not apply to such economically distressed areas as Back of the Yards.

Because so many residents could neither read nor write, they left little documentary evidence about their living conditions. Had they been literate, it nevertheless seems unlikely that they would have had the time to ruminate with pen on paper on their day-to-day routines and living conditions. For actual descriptions of the olfactory conditions and the sources of smells in the homes, historians must rely heavily on the testimonies of outside observers. In addition to the surveys conducted by sociology students, census data provide information. In 1905 the U.S commissioner of labor, Ethelbert Stewart, supervised the execution of a census of selected homes in Back of the Yards. The product of this effort, Census Data of Back of the Yards, is a somewhat unusual source. The document is comprised of eight ledger sheets that contain a total of 284 entries. It is not a comprehensive study of the area, and historians know very little about the document, such as what motivated its execution and the background of the

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125 Garb, City of American Dreams, 86.
126 Hoy, Chasing Dirt, 98.
census takers. Nevertheless, despite these issues, the document is valuable because, in addition to standard census data, it includes comments on the living conditions of those surveyed. These comments reveal that some variation existed in terms of the cleanliness in different homes. While the comments included negative descriptions, such as “Very filthy, very damp, bad odors, scant furniture,” and “Small, very dirty rooms, fairly lighted, unsanitary, below average, chickens running in kitchen,” positive descriptions were also very common. These included such phrases as “House neat and clean, lace curtains, things in good order, furniture typical of laboring class” and “Clean, lace curtains, home comforts, Americanized, nice bushes and yard clean.” Most of the homes noted for their foul odors also were described as “quite damp,” which suggests a correlation between the two. One enumerator found the air in a particular dwelling overwhelmingly bad, owing to the stockyards fertilizer works.

Some of the most cost prohibitive hygienic measures involved the installation of plumbing and wastewater disposal. Chicago, like other cities during this time, was transitioning to a modern sewer system. Even in places where sewers did exist, privy vaults were still commonly used. The neighborhood possessed fewer sewage facilities than other parts of the city. Privies ranged from very simple to more elaborate, but in general they could be described as holes in the ground located near residences. They might or might not be lined, and often existed inside the actual residences, in cellars. The city enacted ordinances regulating the installation of privies and the performance of

129 Stewart, *Census Data of Back of the Yards*, entries 78 and 183.
130 Ibid., entries 91 and 69.
131 Ibid., entries 7, 35, 119, 260.
132 Ibid., entry 156.
scavenger services. It licensed scavengers and prohibited the emptying or opening of
privy vaults between six a.m. and ten p.m. and the depositing of waste within city limits.
It mandated that privy vault owners maintain their vaults to prevent unsanitary
conditions.133 However, the ordinances did little to curb troublesome issues with privy
vaults, which by their very nature were prone to malodorous problems. Unlined vaults
allowed the waste matter to permeate the surrounding soil, while lined vaults necessitated
frequent emptying by a contracted scavenger service. It was not uncommon, moreover,
for lined privy vaults to overflow or leak, spreading a horrifically fetid odor. Joel Tarr et
al. describe the process of night soil removal as “labor intensive and rudimentary.”134 As
a result, although the ordinance mandated that the work be done in an “inoffensive
manner,” the opposite was largely the case.135

Privy vaults remained a problem throughout the city. “The number of privy vaults
is estimated at 14,047, of which 5,788 are located on premises not provided with public
sewer facilities.”136 Back of the Yards possessed more than its fair share of these fetid
contraptions. In one of their surveys of the area Sophonisba Breckenridge and Edith
Abbott found that as late as 1911, 44 privies with 21 separate vaults served 46 families,
totaling 248 people who used these facilities. “On 233 premises, however, 447 yard
water-closets were found and these were used by 3,419 people.”137 Water closets that
utilized plumbing technology possessed their own problems. They often emptied into

133 Chicago Department of Health Ordinance 1185, 1905.
134 Joel Tarr, with James McCurley III, Francis C. McMichael, and Terry Yosie, “Water and Wastes: A
Retrospective Assessment of Wastewater Technology in the United States, 1800-1932,” Technology and
135 Chicago Department of Health Ordinance 1182, 1905.
cesspools that overflowed.\textsuperscript{138} In the case of Back of the Yards, so many people typically shared the private water closets within apartments that they were filthy and frequently fell into disrepair.\textsuperscript{139}

The residents also lacked adequate bathing facilities, especially considering so many engaged in such a putrid trade. Recall that landlords and lodgers worked in the very horrible olfactory conditions described in chapter two. As a result, they arrived home with their hair and clothing saturated with the smells of blood, fat, animals and their excreta, and the aromas that accompanied the process of by-product manufacture. That most families lacked convenient access to indoor plumbing and wastewater disposal meant that people found it extremely difficult, if not impossible to rid themselves of these odors.\textsuperscript{140}

The reason poorer areas like Back of the Yards lacked sanitary improvements such as indoor plumbing, decent toilet facilities, and adequate wastewater disposal lay largely in the fact that the cost of the original construction and hookups of sanitary systems fell on the residents. As a result, poorer residents throughout the city often objected to the installation of these systems not because they were not desirable but because they simply could not bear the financial burden installation entailed. Therefore systems like sewers and plumbing emerged first and only in areas where the residents could afford to pay for the installation and maintenance of such systems.\textsuperscript{141} The installation of sewer and water lines, even when they did occur, drove up housing costs, forcing residents into smaller homes and to board a greater number of lodgers.

\textsuperscript{139}Breckenridge and Abbott, “Housing Conditions in Chicago III,” 448.
\textsuperscript{140} \textit{Chicago Daily Tribune}, May 25, 1906.
\textsuperscript{141}Garb, \textit{City of American Dreams}, 87-116.
The presence of lodgers impacted the households, both socially and financially. In Back of the Yards, the lines between private and public life blurred considerably. This notably manifested in the intermingling of boarders with blood relatives. The presence of lodgers in the home thus transformed it from a place of shelter to a venue for generating income. Lodgers contributed to the family income with their rent, but they also often paid money for services, such as prepared meals and laundering. This allowed women to contribute to the household economy by cooking and cleaning for the lodgers as well as their own families. Lodgers benefited from this arrangement as well, for they were often single men without the time or skills to perform domestic services for themselves.

Wherever there is a large group of working men to whom domestic life is impossible, the rooms in which they live are inevitably dirty and ill-kept. If the groups are boarding with a woman who keeps the house and does the work, conditions are somewhat better, although in a large group the demands upon a woman leave her little time for cleaning. Therefore, the system benefited both the lodgers and the landlords, although it greatly increased the domestic burdens placed upon women.

The presence and preparation of food generated odors. The women of the district prepared foods without technological apparatuses that minimized cooking-related odors. They lacked dependable means of refrigerating perishable foods. Even residents fortunate to possess iceboxes could not rely on them to keep food fresh for more than a day or two. Most, however, did without. This required frequent trips to markets and the employment of alternative food preservation methods. One resident described the preparation of homemade kielbasa sausage. The women of the household combined pork, onion, and

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pepper, and stuffed the mixture into intestinal casings. They then placed the sausage in the attic to dry.\footnote{143}{Interview with Mary Hojnacki, transcript, Oral History Archives of Chicago Polonia, 1976-1977, Box 3, Folder 2, Chicago History Museum.}

In addition to practices in place to sustain the life in the Back of the Yards, rituals dealing with birth and death also took place within the homes. Women delivered their children at home (with or without the aid of a midwife), engaging in a process that involved bodily fluids, including sweat, blood, amniotic fluid, the placenta, and fetal membranes. This took place in conditions, which, as we have seen, were extraordinarily difficult to clean. Upon the death of a relative, many held viewings within the residences, a practice with conspicuous olfactory ramifications. Custom dictated that the dead be “laid out” for three days, four if the death occurred over a Sunday. At least one person remained with the corpse at all times, day and night, exposed to increasingly foul odors.\footnote{144}{Ibid.} The experience of these foul odors in this context, intermingled as they were with the emotional trauma of grief and the financial concerns inherent in the death of a family member, likely generated traumatic olfactory associations.

Although death visited the slum often, the population in the district and the city at large did not diminish. As the population grew and industries thrived, the city confronted problems managing its domestic and industrial waste. Because the city grew so quickly, waste management solutions could not keep up with the different types of trash the city’s residents generated. Daniel J. Zarin distinguishes between the different types of refuse that constituted municipal waste during this period. Strictly speaking, garbage included only food wastes, rubbish consisted of glass, paper, metals, and other inorganic household wastes, ash included the output from household stoves and furnaces, and street

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\footnote{143}{Interview with Mary Hojnacki, transcript, Oral History Archives of Chicago Polonia, 1976-1977, Box 3, Folder 2, Chicago History Museum.}
\footnote{144}{Ibid.}
\end{flushright}
sweepings were comprised of primarily horse manure and dirt. Food wastes and street sweepings generated the most pungent odor.\textsuperscript{145}

By the end of the nineteenth century, Chicago faced a major garbage crisis. The city sought alternatives to dumping through such methods as incineration and reduction, but all methods had certain disadvantages, and debates occurred over which course to pursue. In the meantime, the problem grew more and more intractable and alarmed the commissioner of the Bureau of Streets:

In this connection I might state that the department is greatly hampered for dumping space and it is absolutely necessary that something be done in the near future in the way of providing garbage crematories or other methods for the disposition of garbage. Within six months the City of Chicago will be without a place to dump in. In my report for the year 1901 attention was called to the urgent need of garbage destruction plants, but no action has been taken in this direction. It is imperative that something be done at once. Owing to the inability of the Police Department to furnish police officers during the past year it was almost impossible to do anything towards enforcing the clean street ordinance.\textsuperscript{146}

The city continued to struggle with the problem of how to handle a large amount of waste. In 1906, the Chicago Council, under widespread public scrutiny, faced hurdles as it attempted to award a bid to a reduction company.\textsuperscript{147} Many civic leaders throughout the country saw reduction, a process by which garbage is separated into a fertilizer base (known as tankerage), grease, and wastewater, as an answer to their cities’ refuse problems.\textsuperscript{148} It developed as a result of a widespread pursuit of disposal methods that would yield profits. In March, 1906, the council planned to create a committee to hear garbage bids after threats of litigation from other businesses, including Armour and

\begin{footnotesize}
\textsuperscript{146} Annual Report of the Department of Public Works, City of Chicago, Bureau of Streets, 1902, p. 233.
\textsuperscript{147} \textit{Chicago Daily Tribune}, March 21, 1906.
\textsuperscript{148} Zarin, “Searching for Pennies,” 212.
\end{footnotesize}
Morris, when it appeared that the council was ready to award a bid to the firm of Dowdle and Wilson. Alderman John H. Jones objected to further delay, stating that enough information had been gathered and the problem warranted quick action: “These ‘dumps’ have been endured for years and are a grave menace to the public health. Apparently we are no nearer a settlement of the problem than at the start.” The trouble started when firms charging $116,000 to $162,000 annually continued to try to receive contracts, despite the fact that Dowdle & Wilson (who also worked for other cities) offered to do the work for nothing. The objection to Dowdle and Wilson’s bid stemmed from the firm’s request for the city to pass an ordinance that would allow the police to enforce the collection of garbage, to give legal force to the efforts they were offering gratis. This ordinance would mandate householders to separate their garbage and deliver it to areas where it could be shipped to the reduction plant. The garbage would be incinerated, with the firm making a profit off of the resulting tankerage and grease. But the firm representing Armor and Morris argued that this was an unfair addition to the stakes. The Chicago Daily Tribune criticized the bickering that hampered the development of a timely solution. “In the meantime the eight fetid ‘dumps’ will continue to pollute the air and ward politics to control the irregular, and fitful collection of garbage.” Yet the idea that reduction was the holy grail of garbage disposal was unrealistic. In order to be financially profitable, reduction required the strict separation of household wastes; in this regard, Dowdle and Wilson’s demands do not seem unreasonable. Even if this separation

150 Chicago Daily Tribune, March 21, 1906. The dumps were located near Forty-sixth and Robey Streets, Wrightwood Avenue and Perry Street, Grace Street and Western Avenue, Irving Park Boulevard and the river, Twenty-seventh Street and Homan Avenue, Eighty-fourth Street and Buffalo Avenue, Eighty-fourth Street and Madison Avenue, and Eighty-first Street and Vincennes Avenue. Chicago Daily Tribune, March 22, 1906.
took place, however, reduction still encountered major problems. Profits, rather than sanitary waste disposal, motivated reduction firms, the process generated polluting wastewater, and the works themselves were prone to fires and explosions. If not implemented properly, the process also generated foul odors, which meant that, like the dumps, it too created a nuisance for nearby communities.

Four of the eight city dumps were in the northwest quadrant of Back of the Yards. The dumps were shaped by drilling huge holes dug to facilitate the manufacture of bricks. City officials agreed that the dumps generated a nuisance for surrounding residents. A 1905 report to the City Council on garbage collection stated,

> It is unnecessary to call attention to the fact that Chicago is behind the times in its methods of both collection and disposal of garbage. Nor will it be questioned that the comfort and health of the people demand immediate adoption of up-to-date and sanitary means of conducting this important work. If there should be anyone who thinks otherwise, he can easily be converted by... experiencing the insufferable stench that must be endured by the people of the neighborhood.

A large number of the people who contended with the dump odors, of course, lived in Back of the Yards. Dr. Hultgren, a practicing physician in the district at this time, offered a description of the olfactory conditions surrounding the dumps. “There one finds the areas where garbage from the entire city is dumped. These give forth terrible odors. Day and night this district is covered with smoke.” Sinclair refers to the dumps and their “strange fetid odor, which assailed one’s nostrils, a ghastly odor, of all the dead things in the universe.” In writing about the dumps, Sinclair utilizes literary flourish to craft a vibrant, if horrifying, smellscape. “Here was a great hole, perhaps two city blocks

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152 Report to the City Council on Garbage Collection, 1905.
square, and with long files of garbage wagons creeping into it. The place had an odor for
which there are no polite words.\textsuperscript{154} The dumps were located on the side of the
neighborhood directly opposite from the stockyards, and the two nuisances enveloped the
neighborhood in foul air. Nevertheless, not all of the residents bore the odor without
complaint. In 1900, a large number of stockyard residents attended a city council meeting
convened to discuss the garbage problem. An attorney for a bidding garbage reduction
company offered an assertion that every city requires a place to put “unpleasant things”
and that nearby residents of such areas became desensitized to them. The residents who
lived in proximity to the dumps responded to this with laughter, evidently finding
absurdity in such a notion.\textsuperscript{155} This seems to indicate that even for the residents of the
stockyards district, there were some smells to which one never truly became totally
accustomed.

The issue of the dumps was a complex one because although they gave off
horrendous odors, the dumps also served an economic purpose for the residents. Some
residents attempted to utilize the dumps to their advantage, scavenging for some of their
necessities. Commercial scavengers paid for the right to pick through the garbage first,
but once they were finished, women and children followed, looking for anything that the
scavengers either missed or deemed insignificant. Such items included pieces of wood for
fuel, household items, and clothing. “In spite of foul odor, heavy clouds of dust, and
dreary ugliness, women who hope to add to their meager supply of furniture and fuel are

\textsuperscript{154} Sinclair, \textit{The Jungle}, 32.
tempted to search here.” This practice required them to confront the strong odor of the refuse of others, and speaks to their extreme economic distress.

Municipal waste and the odors it emitted did not only exist in the dumps. Streets and alleyways regularly contained heaps of trash. Horse manure in this age prior to the prevalence of the automobile, also generated a putrid environmental nuisance. Horses played critical roles in personal and mass transit and served as sources of energy for factories. Consequently, manure and equine offal contributed heavily to the waste problem.

The city only swept paved roads, and in 1900, only Forty-seventh Street and Ashland Avenue were paved in the district. Since a large number of the streets that ran through Back of the Yards were devoid of sewers, dirt and manure mixed to create a fine dust in dry weather, and a stinky muck when precipitation occurred. In terms of sidewalks the district possessed very little paving, and the paving that did exist was often constructed of wood. These plank walkways absorbed dirt, moisture, and foul odors. The poorly insulated, dilapidated housing provided little protection against this appalling odor. Often in an attempt to keep out both the odors and the swarms of flies it attracted, residents kept their windows tightly shut. This resulted in the exacerbation of the stifling odors that arose because of the overcrowding in small houses.

Hygienists and sanitarians continued to view ventilation and pure air as vital to good health, even as the contagion theory continued to gain wider acceptance. They

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157 Hoy, Chasing Dirt, 96.
159 Melosi, Garbage in the Cities, 20.
160 Barrett, Work and Community, 68.
advocated the importance of green spaces to mental and physical health. It seems highly unlikely that Back of the Yards residents found much olfactory respite out of doors. The smells permeated the entire neighborhood. “The smells,” commented Caroline Hedger, a physician who lived and worked in the yards, “are not conducive to deep breathing.”

Those who worked and lived in the yards saw little opportunity to escape the neighborhood’s foul air. Practically no greenery could be found in a district so oppressed by oily smoke and intense squalor. The area lacked proximity to forms of recreation beyond crowded dance halls, and families generally could not afford transportation to other parts of the city. Additionally, the plants operated six days a week; although individuals seeking work did not always get it, they expended much time in the effort. The slack periods that provided time for such leisure activities were lean financially, so people could not afford to spend their free time engaged in recreation, especially if it involved travel beyond the district. Exceptions did exist; the Chicago Daily Tribune sponsored a sanitarium in Algonquin, located north of the city, which provided access to clean country air to a very small number of residents. Young single women who managed to secure positions in the department stores in the central business district experienced some respite from the neighborhood’s odors. Although the fumes from the meatpacking plants did travel to other parts of the city, these women at least were able to escape the smells in their most concentrated forms during their working hours. However, transit to and from the central business district where the stores were located did not smell particularly pleasant either. “If the cars are crowded the odor becomes stifling and almost unendurable. The musty smell, suggestive of the various localities through which

164 Hojnacki, Oral History, Chicago Polonia.
165 Chicago Daily Tribune, June 26, 1908.
the cars pass, clings to them, and probably nothing short of disinfection would remove it." 166 Living in the smelliest part of a smelly city meant that Back of the Yards residents found few opportunities for olfactory relief.

When not at home or at work, men spent time in the approximately five hundred saloons that operated in the area. 167 Saloons performed an important function in the yards; they served as a place for men to gather and share grievances and cash their checks. Saloons also provided cheap meals and a clean place to eat them. Yet saloons, by their very nature, were olfactory hot zones, filled with a mixture of the aromas of beer, whiskey, and tobacco smoke. The saloons remained the domain of men; women only encountered this particular olfactory experience if fumes chanced to escape as they passed by the saloons on their way to the shops or on return trips from work. 168

The residents of the yards endured unimaginable odors out of necessity, but it is worthwhile to examine the toll this had on these individuals. Any discussion of odor and quality of life must include the possible variable of adaptation to even horrendous conditions. The occurrence of adaptation lessens when smell arises from multiple sources. In the residences of Back of the Yards rooms served multiple functions; it was not unusual for people to people cook, sleep, and eat in the same room. 169 As a result, the smellscapes of individual apartments were not segregated; they commingled to create a multi-layered miasma, the very kind the human nose has trouble adapting to. The large numbers of different individuals living in a small space also generated a multi-faceted

166 Chicago Daily Tribune, November 28, 1901.
169 Garb, City of American Dreams, 162-166; Hojnacki, Oral History, Chicago Polonia.
aroma. This overcrowding had an additional effect on odor perception. As the amount of carbon dioxide in the air increases, so too does the perceived strength of odors. In other words, the more carbon dioxide present in a room, the stronger the odors seem to individuals experiencing it.\textsuperscript{170} In Back of the Yards, men, women, and children crowded into small rooms that possessed very little ventilation, and generated large amounts of vitiated air.

Furthermore, odors over which one has little or no control inhibit adaptation.\textsuperscript{171} Economic realities hindered residents’ attempts to control their olfactory environments. They lacked the sanitary infrastructure necessary to combat the malodorous filth and grime so many inhabitants brought home from the stockyards. The casual labor system in place in the industry forced workers to live close to its insufferable stenches. The fact that few opportunities for relief existed meant that residents experienced a constant barrage of intense, multifaceted odors. This constant, excessive exposure to foul odors is significant, because excess plays an important role in the generation of disgust, a reaction that is frequently connected to the perception of foul odors. Consider the overcrowded conditions that characterized the neighborhood’s homes. Researchers contend that body odors at high concentrations repel, rather than attract. “When strong enough to be noticeable, body odors are repulsive and motivate avoidance, but at lower concentrations they are said to be attractive aphrodisiacs.”\textsuperscript{172} Even in the case of pleasant odors, excess can generate disgust.\textsuperscript{173} Therefore, the foul stenches the residents endured, including body odors, human waste, and decaying organic matter present in the garbage that filled

\textsuperscript{170} Engen, \textit{Odor Sensation and Memory}, 48.
\textsuperscript{171} Ibid., 16-28.
\textsuperscript{172} Ibid., 65.
\textsuperscript{173} Miller, \textit{Anatomy of Disgust}, 75, 110-125.
the dumps and littered the streets, likely impacted the residents’ quality of life negatively.

The conclusions drawn thus far raise interesting questions. How did outsiders view the smellscape of the neighborhood, and what conclusions did they formulate about its inhabitants? The next chapter considers these questions, by situating the neighborhood in a broader national context. In it, I examine the link reformers established between notions of hygiene and morality, and how it shaped outsider perceptions of industrial slums like Back of the Yards.
Chapter 4
Scents and Censure

The period between the late nineteenth and early twentieth centuries is well suited to olfactory study because many notions about odor and hygiene, and their connection to both physical disease and social problems, shifted greatly during this time. Views about the implications of odor evolved significantly. Prior to the introduction of the germ theory of disease, most people, including health officials, associated foul odor with disease. New public health policies emerged as the population multiplied and scientists made discoveries about the role bacteria played in disease. Reformers connected public health issues with social problems. They believed that physical improvements generated moral uplift. These reformers placed a new premium on hygiene, which they tied to concerns about both physical disease and moral decay. Urban centers became a target for study and rhetoric, because they housed large concentrations of immigrant populations. The immigrant groups that congregated in cities challenged reformers’ emerging priorities.

Reformers viewed dirt as a corollary to immorality, and odor very often accompanied dirt. They applied these concerns to the immigrant population, a group they often associated with dirtiness, and subsequently, foul odor. This dovetailed with the common societal practice of isolating, identifying, and judging the smell of the other. Cultural groups often formulate and ascribe olfactory stereotypes to other cultural groups. Qualifying odors is highly subjective, with many factors affecting whether a person perceives an odor as foul, pleasant, or neutral. Certain odors may excite disgust almost

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175 Hoy, *Chasing Dirt*, 87-89.
universally because they arise from biological sources; consider, for example, the smell of excreta and odors related to animals. Yet psychological and cultural factors still play a role in judgments humans make regarding all odors, even those that are almost universally reviled. The variations that exist between the bodily odors of members of different cultural groups may stem from different dietary and hygienic practices, but those very practices are rooted in culture.  

Reformers often connected their standards of cleanliness with Americanization. They surmised that the unsanitary conditions in which many immigrants lived were rooted in their cultural backgrounds, rather than the economic realities that made the implementation of emerging hygienic mores and practices highly difficult for working class immigrants. Further, the lower status of smell in the hierarchy of the senses encouraged many to utilize olfactory metaphors and similes when describing negative traits or behaviors. Many people negotiated their societal anxieties about the increased presence of immigrant groups by associating perceived negative effects with olfactory consequences.

There are a number of reasons why hygiene emerged as a reform priority when it did. By the late nineteenth century the loss of life from a series of successive epidemics and the generally unbearable living conditions of the age, along with an emerging etiology of disease based on germ theory, motivated urban residents, including sanitarians, sanitary engineers, and reform groups, to call for the implementation of sanitary services. Recall that early public health ideas were founded on the principle of miasmatic theory. Miasmatic theory held that disease arose from the foul smelling

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putrefying air that resulted from decay, excreta, and sewer gas. Miasmatic theorists resisted the theories of the bacteriologists, practiced an out-of-smell, out-of-mind approach to disease prevention, and focused their efforts on eliminating sources of the noxious gases from the environment. They recognized an airborne nature of disease, but refuted the claim by germ theorists that the bacteria residing in the air, water, and on surfaces actually bred disease. The miasmatic theorists’ focus on the removal of waste to prevent disease practice was not misguided altogether, since germs often resided in the filth. In the late nineteenth century the contagion theory of disease slowly began to supplant miasmatic theory in acceptance. As a result, reformers and municipalities focused their public health measures on getting rid of bacteria laden dirt.

Additional factors contributed to prioritization of personal hygiene and public sanitation, including the medical ramifications of unsanitary conditions that occurred during the Civil War, and the introduction of new hygienic and sanitary technologies. While poor immigrants like Back of the Yards residents lacked access to these technologies, the middle and upper classes embraced them, and prioritized cleanliness as achieving it became more practicable. “Just as the vacuum changed expectations concerning housekeeping, the availability of tubs altered attitudes about dirt and odor. The same health advisors who outlined the regenerative benefits of bathing also cited social pressure to be sweet smelling and clean as a major factor in enticing the unwashed to bathe.”

In other words, the outcome was cyclical; the connection between technologies and social prestige led people to accumulate hygienic technology, the use of which further bolstered social prestige. Members of the middle and upper classes raised

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178 Melosi, Garbage in the Cities, 60.
their own standards of cleanliness with the increasing availability of these hygienic technologies in addition to hygienic literature that proscribed hygienic values. Alan I. Marcus and Martin Melosi have shown through contemporary press accounts that the ideas promulgated by sanitarians made their way into the public consciousness. Melosi also cites the activities of national and local citizen reform groups as another indicator of public awareness of the need for sanitation.\textsuperscript{180} Private citizens approached waste management as an aesthetic issue, and argued that better sanitary practices were the mark of a more civilized society. These groups lobbied local and state governments and published meeting minutes and periodicals to create an impact. By positioning sanitation and hygiene as aesthetic and moral issues, citizens groups obviated the need to involve themselves in the scientific debate between miasmatic and contagion theorists. Publications such as \textit{Ladies Home Journal} and home economics tracts purveyed rapidly emerging information. The branding of hygienic products and their advertisement in prescriptive literature also contributed to the change that took place regarding perceptions of personal cleanliness.\textsuperscript{181}

For a variety of reasons, Yard residents could not implement all of the practices associated with changing hygienic priorities. As I have shown in chapter three, they lacked the economic resources and the time to conform to and keep abreast of and apply evolving hygienic ideals. Yet many reformers placed the blame for the filthy and malodorous conditions in immigrant neighborhoods on the residents who populated them. Views of Back of the Yards proved no exception to this national trend. By the turn of the

\textsuperscript{180} Melosi, \textit{Garbage in the Cities: Refuse, Reform, and the Environment}, 28; Alan I. Marcus, \textit{Plague of Strangers}.

century, primarily eastern and southeastern European immigrants populated Back of the Yards, replacing the German and Irish residents who by this time had managed to gain more economic stability and the capacity to move to improved neighborhoods. Contemporaries typically grouped these new residents together, often referring to the different groups collectively with the monikers “Slavs” or “Hunky” although in actuality the population was more diverse than outsiders understood. It included Poles, Slovaks, Slovenes, and Lithuanians, who were not linguistically Slav but were nevertheless categorized as such because of the geographic proximity of their homeland to Slavic areas in Europe. Karel D. Bicha argues compellingly that between 1890 and the outbreak of World War I, a strongly defined Slavic stereotype developed. It embraced many national groups, including ethnic Slavs, Hungarians, and Lithuanians, reflecting widespread anxieties about the influx of eastern and southeastern European immigrants in the late nineteenth century. Bicha shows the variations in culture, religion, and languages that actually existed among these groups. Certain elements of the Slav stereotype relate to olfactory prejudices held by outsiders. The Slav stereotype held that Slavs did not possess enlightened views about personal and domestic hygiene. Outsiders blamed the residents for a lack of knowledge, and unwillingness to learn hygienic practices. Regardless of the root cause, many in the United States found the increase in immigration of southeastern Europeans a contaminating force that threatened the elevated status of hygienic principles.

When considering the importance hygiene played in early twentieth century reform, it is important to clarify exactly what that term meant to reformers. The term

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incorporated modern facets of the term, including the prioritization of personal and
domestic cleanliness as important elements of good physical health and social standing.
For example, as the shift from miasmic theory to germ theory occurred, fresh air
maintained its position as necessary for good health, although the reasons for its
importance shifted. All vitiated air, regardless of how it smelled, continued to be viewed
as dangerous, for its capacity to bear dangerous pathogens. Thus, health reformers
persisted in emphasizing the importance of fresh air. 183 “Of ventilation or fresh air there
can be no question of our need. We must have it, and plenty of it.” 184 Overcrowding in
areas like Back of the Yards meant that ventilation was in short supply. Therefore
reformers viewed the practice of bordering lodger as a threat to physical health. However,
“hygiene” at the turn of the nineteenth century had broader, more sweeping implications
for the physical and moral character of the nation. Reformers embraced the word
“hygiene” to include proper moral behavior and the stability of wholesome family units.
This view led to a rise in concern about personal hygiene that reformers correlated to the
increasing prioritization of personal and family privacy. This new perspective that linked
the necessity of family privacy to strong moral and physical health led many to condemn
the practice of boarding lodgers. The “lodger evil” resulted in the breakdown of family
privacy, and made maintenance of “decency” impossible; reformers were horrified. 185 It
blurred the lines between public and private spheres. This threatened widely held notions
about of separate spheres and the implications they had for gender roles. These notions

Nursing* 4, no. 12 (1904): 918.
held that women belonged in the private space, not the public sphere occupied by men.\footnote{Damon-Moore, \textit{Magazines for the Millions}, 38-39, 84-85; Garb, \textit{City of Dreams}, 170-171.}

The home served an economic function as women provided domestic services for boarders, and non-relatives enjoyed domestic intimacy with family units.\footnote{Louise Montgomery, \textit{The American Girl in the Stockyards District} (Chicago: University of Chicago Press, 1913), 21.} In other words the presence of lodgers publicized private home life.

The “lodger evil” as we have seen, was a necessary one in the economic climate of the yards, for both boarders and landlords. The arrangement made sense to single men and men who came to the United States to send money home. Unable to support wives in the yards, the men benefited from the domestic services the landladies provided. In turn, landlords received the income they needed to fulfill one of their most important priorities— to own their own home. Those who vilified the practice of boarding seemed insensible to these factors. Even if purveyors of the stereotype had realized the important connection between the practice of boarding lodgers and the goal of home ownership it is unlikely that they would have taken a more positive view of the practice, because the Slav stereotype also included the perception of Slavs’ wanton materialism.\footnote{\textit{Chicago Daily Tribune}, December 8, 1907.} Critics were appalled that immigrants prioritized home ownership over what they considered more important values, values that they tied to the moral health of the nation. “The early immigrants had been so stirred by the opportunity to own real estate, an appeal perhaps to the Slavic land hunger, and their energies had become so completely absorbed in money-making that all other interests had apparently dropped away.”\footnote{Jane Addams, \textit{Twenty Years at Hull House} (The MacMillan Company, 1910), 234.} In fact, John Bodnar has shown that Slavic immigrants held anti-materialistic views. Religious values motivated

\begin{footnotes}
\footnotetext{Damon-Moore, \textit{Magazines for the Millions}, 38-39, 84-85; Garb, \textit{City of Dreams}, 170-171.}
\footnotetext{Louise Montgomery, \textit{The American Girl in the Stockyards District} (Chicago: University of Chicago Press, 1913), 21.}
\footnotetext{\textit{Chicago Daily Tribune}, December 8, 1907.}
\footnotetext{Jane Addams, \textit{Twenty Years at Hull House} (The MacMillan Company, 1910), 234.}
\end{footnotes}
This anti-materialism. They equated materialism with idolatry.\footnote{Bodnar, “Immigration and Modernization,” 47.} Homeownership was driven by necessity. The stereotype that held that Slavs were materialistic ignored the economic realities Slavic residents like those in the Yards faced; rejecting home ownership would have meant eliminating a key source of income. The desire for this income was motivated by need rather than greed.

Nor were reformers necessarily sympathetic to the obstacles to hygiene imposed by poverty that many immigrants faced. It is interesting how readily reformers often connected the filthy slum conditions in immigrants’ homes to their foreign background, rather than their economic status.\footnote{Philpot, The Slum and the Ghetto, 90. Reformers who held this view included Jacob Riis and Jane Addams, who stated, “One of the most discouraging features about the present system of tenement houses is that many are owned by sordid and ignorant immigrants.” Addams, Twenty Years at Hull House, 232.} Despite the difficulties poor working-class immigrants faced, including a lack of time, energy, money and sanitary facilities, they were frequently criticized for not meeting the hygienic standards reformers saw as vital to the process of Americanization. This is not to say that reformers did not recognize the hardships many immigrants faced in maintaining hygienic practices. Rather, reformers who prioritized hygiene thought that people could and should overcome any obstacles to cleanliness. Outside observers did not comprehend why the poor immigrant classes might not be able to follow the lead of the middle and upper classes in observing rapidly evolving hygienic standards and practices.\footnote{Jacob Riis, “The Slum Part IV: A Pre-election Sermon for Chicago,” Chicago Daily Tribune, April 1, 1900.} This expectation, in addition to being quite unrealistic, placed responsibility for hygiene squarely on the shoulders of the people living in unsanitary conditions over which they had little control. As chapter three has shown, the casual labor system in place in the yards, coupled with the sanitary...
infrastructures operating at the time, greatly impacted the conditions under which the immigrant residents were forced to live.

Reformers tied hygienic practices to Americanization, a concept they viewed as necessary for the good of the nation.193 Cleanliness was a key component of patriotism, one that was highly gendered. Women, as guardians of domestic cleanliness and instructors of hygienic values to their children, bore much of the burden for crafting a physically (and consequently morally) pristine nation.194 Reformers identified the lack of or resistance to Americanization as a problem, intensified by what they perceived as an influx of nationalities growing rapidly in number and less capable or willing to become Americanized.195 “Formerly the bulk of immigrants came from northern European countries; now they come more and more from southern and southeastern Europe, where the capacity and willingness for Americanization is not as great.”196 James Barrett has shown, in fact, that efforts to Americanize residents through instruction in English and naturalization in Back of the Yards were largely unsuccessful. Because immigrants resisted these particular facets of Americanization, reformers may have deduced that they rejected all aspects of Americanization, which increasingly included the prioritization of cleanliness.

Thus, a stereotype developed that the immigrants who populated the slums and worked in abhorrent conditions were of a culture that did not prioritize cleanliness. This placed the blame for the foul conditions they experienced on the immigrants themselves.

193 Hoy, Chasing Dirt, 87-117.
195 Chicago Daily Tribune, November 2, 1902.
For example, Chicago’s chief sanitary inspector in 1906 indicted the workers as perpetuators of the uncleanliness found in the plants. “The trouble is with the class of men in some departments of the plants. They won’t use modern sanitary appliances unless they are forced to do so. They must be threatened with dismissal.” Despite the obstacles they faced, there is substantial evidence that yard residents made their best efforts to be as clean as they could. “At least they arrived at their work entirely fit. They cannot be the dirty lot some sensationalists have pictured them.” The enumerators who conducted a census of a sampling of the neighborhood commented that many of the homes they visited were very clean. Often, in their descriptions of clean homes, the census takers utilize the term “Americanized.”

Odor played an important role in the relationship between Americanization and hygiene manifested because, for many cultural groups, odor serves as an identifying characteristic of the other. While humans generally characterize members of their own cultural group as inodorous, it is not uncommon for people to affix olfactory stereotypes to other cultural groups. There is strong evidence that scent plays a strong role in the formulation of group identities and group preservation. Solidarity among groups is often forged through the identification of the other, to define the group by what it is not. The construction of olfactory stereotypes has a long history, one very much in place at the beginning of the twentieth century. The reporting of olfactory stereotypes in newspapers and scientific journals provided it with a kind of legitimacy. Article after article reported

198 Chicago Daily Tribune, August 11, 1906.
199 Stewart Manuscript Census, 1905.
olfactory theories people formulated on the basis of race. In this paradigm, foul odor and moral degeneracy were intrinsically linked, to the point where they fed off of one another. “…The more a culture degenerates into corruptions, the stronger it is scented. It is as though it were intent on hiding the odor of corruption by strong scents.”

The act of smelling is a biological and personal experience. The identification of the other in the form of his or her scent is biological and visceral in a way that allows groups to legitimize exclusion. One may attempt to argue that odor repulsion lies beyond one’s control, therefore one bears no responsibility for the repugnance one feels towards the members of a different group. This rationalization situates odor as a perfect scapegoat for one group’s avoidance of another. However, olfaction is not merely a biological response; it is embedded with cultural values. As a result, the biological and cultural forces govern one’s perception and evaluation of scent.

Odor theorists argue that odor antipathy may follow and thus result from contempt, rather than merely precede it. Constance Classen argues, “Therefore, while we may feel an antipathy towards something or someone because its or their odor offends us, we may equally ascribe an offensive odor to something because we feel an antipathy for it, or indeed the two elements may operate simultaneously so as to reinforce one another.” In other words, people may have found immigrants malodorous because they were un-American; conversely, they may have considered foreigners un-American because they were malodorous.

202 Chicago Daily Tribune, June 10, 1900.
204 Classen, Worlds of Sense, 81.
This is not to argue that the foul odors emanating from Back of the Yards were not genuine, or the figment of overzealous nativists’ imagination. The preceding chapters have shown that a number of factors indeed made the neighborhood a hot zone of odor. Rather it implies that outsiders may have seen the odors as intrinsic to the nature of Yard residents because of their ethnicity and class, rather than resulting from economic factors over which residents had little control.

In addition to ethnicity, outsiders formulated their olfactory notions about the people who lived and worked in Back of the Yards on the basis of class. The laborers often shouldered the blame for most of the odors that the yards meatpacking firms generated. “It is an old story how the indolent workmen neglect their business to the discomfort of the people of a large city.”205 One sociologist argued that amongst the working class, olfactory adaptation took place. “Persons from inferior social and economic conditions are less sensitive to odors and require more drugs to produce anaesthesia. In many districts where they live, odors are such that they must become insensible to finer discriminations.”206 She further linked the diminution of the sense of smell with immorality.207 An association between odor and the working classes has a long history. This may in part be due to the fact that these classes engage in manual labor that results in perspiration, but there are social connotations present as well. These relate to odor’s power to situate a person as the other, a role ascribed to the laboring masses by the middle and upper classes.208 In the late nineteenth and early twentieth centuries, more

205 Chicago Daily Tribune, October 26, 1900.
207 Ibid, 56-57.
and more Americans began to rely on foods that were mass-produced and shipped long distances. They enjoyed produce grown in far off lands, instead of their own localities, beef slaughtered and prepackaged uniformly, rather than cut to order by a local butcher, and foods that were canned in factories, not their own cellars. As a result, a disassociation occurred between the middle classes and food processing. The act of taking the raw materials of food and turning them into something edible became increasingly foreign, and as a result they became increasingly unfamiliar with the odors associated with food production. The odors that accompanied food processing assumed a connection with foreigners, an element of society.

Others blamed women. Women bore the responsibility for maintaining clean homes, and many thought that women should translate their housekeeping skills beyond their front doors. This concept packaged women’s responsibility for clean cities as “municipal housekeeping,” and, in a time before women had the vote, provided an acceptable way for women to participate actively as citizens. It also shifted responsibility for unsanitary conditions, despite the fact that women did not have the direct political power to implement more efficient and affordable sanitary systems. The *Chicago Daily Tribune* editorialized, “It is women who create and maintain the worst sanitary conditions in the city. It is women who, through laziness, neglect, and indifference, allow their back yards and alleys to become heaps of refuse, old papers, worn out shoes, rags, tin cans, and ashes. Every housekeeper has, right in her own domain, the means of doing more to ‘keep the city clean’ than has any Alderman or official.”

That woman whose domains lay in the filthiest parts of the city, had limited access to those means, was a fact that evidently did not occur to the *Tribune*’s editor. Newspapers and periodicals placed the

209 *Chicago Daily Tribune*, March 24, 1902.
burden of cleanliness on women in another less direct way; they targeted women as the consumers of domestic and personal hygiene products.

Not all reformers blamed the poor for the unsanitary conditions in which they lived. Some understood the complexity of the issue, acknowledging the malodorous state of the slums without resorting to generalizations about the ethnicity of the inhabitants.\textsuperscript{210} Mary McDowell, who ran the University of Chicago Settlement House, evinced more sympathy for the Yard residents that many reformers displayed for slum residents. Edith Abbott identified the exploitation of immigrants as a huge part of the housing problem, arguing that new arrivals paid high rents for despicable housing.\textsuperscript{211} The reality is more complex, for as we have seen, landlords in the yards struggled financially themselves.

Odor served as a metaphor for immorality and criminality. To understand why this occurred, it is necessary to consider the space the sense of smell historically held in the hierarchy of the senses. Olfaction is perceived as less valuable than the other senses, and it holds greater potential for negative association.\textsuperscript{212} Consider the connotation of the verb “smell.” An object may smell good or bad, yet if someone makes the statement “it smells,” with no qualifying adjective, the presumption is that the thing in question smells bad. The sense of smell is much less developed in humans than are other senses, such as sight and hearing. This may account in part for smell’s lowly status. Yet olfaction’s poor standing can also be traced historically. The literary tradition of utilizing scent as a metaphor for the objectionable is longstanding. Consider the Bard’s use: “O, my offense


\textsuperscript{212} Howes, Classen, and Synnott, \textit{Aroma: The Cultural History of Smell}, 2-3; Miller, \textit{Anatomy of Disgust}, 75.
is rank, it smells to Heaven.”

During the Enlightenment, scholars prioritized reason, which they associated with sight. They formulated the opposite opinion with regards to smell, characterizing it as irrational and savage in nature. This sealed smell’s association with the irrational, the frightening, and the uncontrollable. This situated odor as a perfect metaphor for anything that bore those characteristics to outside observers. “Even on those rare occasions when it is the subject of popular discourse — for example, in certain contemporary works of fiction — it tends to be presented in terms of its stereotypical association with moral and mental degeneracy.” The relationship between morality and scent, particularly bad scent, cannot be denied.

Mary Douglas argues, “Some pollutions are used as analogies for expressing a general view of the social order.” She cites the avoidance of sexual fluids, for example, as an indicator of sexual prohibitions. Perceiving odor means that an encounter has occurred, whether it is with the thing itself, or the space it formerly occupied. Therefore an olfactory encounter with that which one fears can elicit contempt and elevate anxieties. Metaphors can serve to approximate encounters. “Through metaphor, smells, tastes, touches, and sounds broke free of their physical space, slipping into the social and cultural realm. In this way, the construction of, for example, sensory otherness became independent of immediate interaction and physical encounter.”

In other words, people formulated olfactory stereotypes about members of a particular group regardless of whether or not they had actually ever physically encountered them.

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Foul odor signifies that pollution is present in the encounter. The nature and depth of this pollution varies from society to society, however. People shrink from what they consider foul odor, but what, in fact is the root of that disgust? Different schools of thought exist on the nature of disgust. Paul Rozin and April E. Fallon argue that disgust is primarily a food-avoidance response and an attempt to retreat from our animalistic origins. They find that objects of animal origin incite the most disgust.  

This may explain why people experienced the odors of Back of the Yards as foul, because the sources in many cases were animalistic in origin. Other foul scents derived from the decaying vegetable matter present in the dumps and the streets, and certainly one would consider such matter unfit for consumption, an idea confirmed by new a understanding of bacteria’s role in disease pathology. The nearly universal revulsion towards the scent of human excrement explains why ideas about what constituted pollution changed during this time. Just as a widespread reduction in people’s threshold for disgust occurred, the circumstances in place in urban centers, made reaching new hygienic standards all the more difficult. For outside observers, the disgust they experienced towards the neighborhood’s foul odors translated into contempt for the residents. “A typical moral sentiment is that the people or behaviors we find disgusting have a will to offend.”

Many outsiders equated a lack of hygiene with the absence of the will to be clean, a deficiency they associated with residents’ ethnicity.

The foul odors of immigrant industrial slums echoed middle class anxieties about what many saw as an unstoppable influx of foreigners within the geographical and social boundaries of the United States. Odor has the power to elicit physical disgust in a way

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that is visceral. Scent is dangerous because it does not respect boarders; it invades of its own volition, and the person experiencing it possesses limited avenues to block its influence. Many Americans viewed immigrants just as they perceived bad odors, as an irrepressible force that signified poverty, disease, and a threat to evolving American hygienic standards.

A connection did exist between foul odor and the massive population surge, but this connection did not hinge on negative characteristics of the incoming population. The olfactory aftermath manifest in urban areas at the start of the twentieth century resulted from an enormous population surge, which led to the generation of huge amounts of bodily waste and domestic garbage that cities were unprepared to handle. The olfactory conditions of industrial slums were inextricably tied to its economic circumstances. In the case of Back the Yards, the presence of an intensely foul-smelling industry augmented the foulness of the neighborhood’s smellscape tremendously. The most dominant methods of earning income involved the endurance of awful odors. Those who found work in the meatpacking industry endured the smell of blood, sweat, excreta, fat, hair, and spoiled product. Despite the extreme poverty, home ownership was prevalent in the neighborhood, for a number of reasons. Home ownership generated income in the form of rental payments from lodgers. Through the provision of domestic services like laundry and food preparation, women augmented the family income, more so than they would have had they found worked in the Yards, although many women certainly did so. Yet bodily odors in small spaces accompanied the income lodgers provided. Odor affected the neighborhood’s economic world in smaller ways as well. Workers cashed their check

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in saloons pungent with the aromas of alcohol and tobacco smoke. Residents scavenged the horrid-smelling dumps for items that brought in extra pennies. The neighborhood’s economic conditions, in turn, affected its olfactory conditions. Work in the meatpacking industry was not only smelly, it was irregular, and wages did not cover the living expenses of Yard residents. Homeowners did not have the money to pay for hook-ups to sanitary infrastructures that would have resulted in more efficient and effective means of waste disposal.

Yard residents confronted olfactory conditions that were so pungent and foul, that they should be considered when examining the history of the neighborhood and its primary industry. A highly centralized, extraordinarily malodorous industry dominated the neighborhood. This meant that resulting odors combined in a centralized location as well. The use of physical structures ill suited to enormous amounts of reeking biological materials exacerbated the foulness of the work. Neighborhood residents encountered other sources of odor in addition to those of the meatpacking industry. The lack of an adequate sanitary infrastructure meant that malodorous excreta were not disposed of efficiently, thus allowing its odors to pervade the area. The lack of conveniently located plumbing also hampered residents’ efforts to remove foul smelling soil, debris, and sweat from their persons. Overcrowded living conditions meant that the bodily odors of many different individuals commingled in small spaces devoid of sufficient ventilation. Garbage from the city at large ended up in huge heaps in Back of the Yards.

People recognized the odors as a significant problem, one that warranted extensive coverage and debate in the press. Residents and visitors commented on the atrocious odors generated by the meatpacking industry, but it is important to remember
that people lived with the horrific stenches on a daily basis. They did so because of the complicated economic structure. The constant presence of foul odors thus speaks volumes to the historian about the quality of life of the residents of the Yards. The residents bore foul odors out of necessity. The odor therefore directs one to the exigencies generated by the poverty and residents’ extreme commitment to survival.

Foul odors characterized the neighborhood known as Back of the Yards, impacting the quality of life of its residents. Because odor was such a dominant characteristic, any historical interpretation of the area deserves close examination. The study of odor as an historical agent opens the door to many opportunities for historical study. The relatively untapped subject of odor histories provides historians with countless opportunities for historical inquiries. Other neighborhoods, although not dominated by such an offensive industry, nevertheless contended with tremendously foul odors. The causes of many of Back of the Yards’ foul stenches, including the absence of effective sanitary services, and overcrowding, affected other urban areas during this period. For example, between 1890 and 1900 New York City experienced a 37 percent population increase, Cleveland, 46 percent, and Philadelphia, 23 percent.221 These cities all had to negotiate the odors produced by the growing population and the wastes they generated, and they did so in ways that were alternately similar and very different. Another worthwhile area of study includes neighborhoods that stood in stark economic contrast to Back of the Yards. Hyde Park, an affluent community that lay just east of Back of the Yards, provides such an opportunity. Historians should consider olfactory conditions a significant part of understanding people of the past and the choices they made, as

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individuals and as members of communities. Historical studies are rarely, if ever, conducted within an olfactory context. By virtue of this omission historians neglect a huge portion of the sensory perception of human beings of the past.
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Maps

General Map of Chicago – showing the Park System, principal transportation lines and points of Mechanical Interest. Prepared for the American Society of Mechanical Engineers and the Institution of Mechanical Engineers Joint Meeting, May 31, June 1-3, 1904. Chicago (Ill), 1904. Courtesy, Chicago History Museum (ICHi 34343).


Map of Union Stockyards of Chicago showing railroads and connections; Chicago (Ill), 1891. Creator unknown. Courtesy Chicago History Museum (ICHi-27741).
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Curriculum Vitae
Christine McNulty

Education
2005 – 2009 Indiana University Purdue University Indianapolis (IUPUI) Indianapolis, Indiana
- Master of Arts in Public History
- Thesis: “Olfactory Approaches to Historical Study: The Smells of Chicago’s Stockyard Jungle, 1900-1910”
- Received instruction and practical training in relevant areas, including archival theory and practice, exhibition design, and documentary editing
- Served as Vice President of the Graduate Student History Association 2005 – 2006

- Bachelor of Arts in Film and Video
- Wrote, produced, and edited several short films
- Studied and researched the history of cinema, video art, and digital media

- Associate of Arts

Employment History
- Research backlogged acquisitions and update the collections management database
- Facilitate temporary custody of materials under acquisition consideration
- Issue deeds of gift to secure transfer of title of donated materials
- Coordinate the return or transfer of declined materials
- Handle, clean, and mark historical artifacts
- Track and order department supplies
- Prepare materials for acquisition consideration
- Catalogue three-dimensional artifacts in the museum’s custom database

- Conceived and designed the project’s current website
- Created project website utilizing Dreamweaver software
- Selected and edited graphics for the website utilizing Photoshop and ImageReady
- Conducted secondary research on George Santayana
- Collated published works for variants
- Proofread collation sheets

2006 – 2007  Graduate Assistant
The Frederick Douglass Papers, Indianapolis, Indiana
- Proofread published works by Frederick Douglass against later editions and printings
- Researched and verified events described by Frederick Douglass in his autobiography
- Composed historical annotations
- Assisted in grant proposal preparation

2005 – 2006  Intern, Exhibitions Department
The Indiana Historical Society, Indianapolis, Indiana
- Scripted and storyboarded a short film about the life of Carole Lombard
- Coordinated the use rights for images used in the Carole Lombard film
- Assisted in the design and execution of a Carole Lombard object theater presentation
- Wrote label copy for the exhibitions *Hoosiers in Hollywood* and *Faces of the Civil War*
- Designed layouts for photographic and photographic reproduction exhibitions
- Researched exhibition topics and themes
- Coordinated the development of exhibition elements
- Researched, purchased, and arranged props for exhibitions

**Professional Development**

2008  National Center for Preservation Technology and Training Cemetery Basics Workshop

2007  American Association of State and Local History Furniture Preservation Workshop

2006  “Issues of Representation and Stewardship”: A Workshop Sponsored by IUPUI

2005  “Grant Proposal Writing”: A Workshop Sponsored by IUPUI

**Awards**

2008  Winner, History Department of Indiana University Purdue University Indianapolis Graduate Student Paper Award
2003 Second place, *The Creativity With a Conscience Alexandroff Exhibit*,

1998 Illinois Community College Journalism Association Competition,
- First Place, Weeklies and Bi-Weeklies, Editorials
- Third Place, Weeklies and Bi-Weeklies, Editorials