

The Nose Knows: The Sense of Smell in American History

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Most Americans live in a very different olfactory world from that of Americans in the past. In many nineteenth-century cities, raw sewage flowed in nearby waterways, garbage was piled high in the streets, horses left immense amounts of manure in their tracks, and numerous factories engaged in the odorous slaughtering and processing of animals. In rural areas some farmers used human feces—known as night soil—imported from city privies and cesspools as fertilizer for crops sold back to urbanites.¹ Smells that many people today would consider intolerable were once unavoidable and ubiquitous. It is not that most Americans now inhabit an odorless world; rather, technology can now eliminate or mask odors deemed unpleasant and engineer aromas deemed agreeable. Supermarkets are stocked with deodorants and air fresheners, while department store cosmetic counters overflow with perfumes in any scent imaginable, from delicate florals to spicy musks. Although industrial odors, like those from chemical plants or oil refineries, are difficult to disguise, people have the power to change the smell of their bodies and many indoor areas almost instantaneously by simply spritzing fragrance stored in a bottle or plugging a deodorizer into an electrical outlet.

What does the changing scent of the air tell us about the American past? The sense of smell, while often overlooked as a topic of historical inquiry, holds an important key to understanding historical change generally and reconfigurations in cultural attitudes specifically. Smell's power lies in its subjectivity. While the senses seem to indicate objective truth, data from the senses are open to interpretation and influenced by individual and group preferences. Smell is especially subjective. A smell deemed unbearable by one person might seem hardly noticeable to another. And because we lack a reliable, widely known instrument or system for the measurement and documentation of smell—whereas sight and hearing can be recorded with cameras and digital recorders—it is also fleeting and incredibly elusive.² As a result, people can project their fears, desires, and prejudices

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¹ Joel A. Tarr, *The Search for the Ultimate Sink: Urban Pollution in Historical Perspective* (Akron, 1996), 293–308, 323–33; Clay McShane and Joel A. Tarr, *The Horse in the City: Living Machines in the Nineteenth Century* (Baltimore, 2007); William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York, 1991), 207–59; Ted Steinberg, *Down to Earth: Nature's Role in American History* (New York, 2002), 157–72.

² Concentration of odors can be measured with an olfactometer. The olfactometer processes an air sample, which is presented at different dilution levels to a panel of trained odor assessors. The panel then determines its detection threshold. But the measurement is still subjective because the threshold at which an odor can be detected can vary among panelists. See St. Croix Sensory, Inc., “A Detailed Assessment of the Science and Technology of Odor Measurement,” June 30, 2003, *Minnesota Pollution Control Agency*, <http://www.pca.state.mn.us/publications/p-gen2-01.pdf>. Even when an empirical measure is available, objectivity is also socially constructed and does not

onto smells. These deeply emotional possibilities make the sense of smell a valuable tool in cultural analysis.

Whenever Americans evaluated odors, they revealed something about their culture and their communities at that moment. In deciding what smelled good and what smelled bad, they were making decisions about what activities and people they valued. Asserting that a particular odor was offensive sometimes meant marginalizing a specific social group. Racial and ethnic minorities and the working class often suffered the most from the negative connotations associated with the smells of their bodies, homes, and labor; those odors became yet more markers of social difference. But the nose also indicated that social history was never completely predictable. Context mattered, as elites' presumed power was not absolute.

As my research on the fishing and tourism industries in late nineteenth- and twentieth-century Monterey, California, suggests, the study of smell also reinforces the reciprocal links between social and environmental history. Odors were physical phenomena that often signaled larger environmental transformations, but their meaning and significance were socially constructed. Not surprisingly, the social and material dimensions of odors became inseparable. The second half of this essay will demonstrate how the smell of Monterey's air stood at the center of a community conflict over how the coastline should be developed. As residents debated whether certain smells constituted a nuisance, they were also trying to assert control over the coastline and its inhabitants. To exercise power over the natural world was also to exercise power over other people.

Ultimately, smell's subjectivity has allowed Americans to construct odors to suit their particular needs and to reflect their changing values over time. Indeed, because most smells were subject to interpretation, they were incredibly malleable and could be used to advance several agendas, whether concerning the social makeup of a community or the development of its natural environment. Since a consistent empirical method of measuring odors was lacking, smells also registered people's raw, even irrational sentiments.³ Using their noses, Americans thus developed an alternative way of understanding the world and of wielding power, one that responded quickly to variable circumstances and emotions.

Scholars outside American history have led the way in exploring ways the sense of smell shaped past societies. Alain Corbin's pathbreaking *The Foul and the Fragrant* traces concerns about smell in French public and private life during the eighteenth and nineteenth centuries and examines its role in the development of class consciousness. Beginning in the mid-eighteenth century, medical discourse helped lower "thresholds of tolerance" for stench, particularly the odors of excrement and decaying human and animal corpses that pervaded public spaces and were thought to be signs of miasmas, dangerous airs that caused putrefaction and disease. But by the nineteenth century, reformers became more interested in the social implications of odors, turning to the private spaces of the poor. A distinction emerged between "the deodorized bourgeoisie," whose sensitivity to smell was

stand in simple opposition to subjectivity. See Linda Nash, "The Changing Experience of Nature: Historical Encounters with a Northwest River," *Journal of American History*, 86 (March 2000), 1602–3.

³ Mark M. Smith similarly argued that the senses "facilitated the rule of feeling" and, in the case of white southerners, relieved them of "the discomfort of thinking." See Mark M. Smith, *How Race Is Made: Slavery, Segregation, and the Senses* (Chapel Hill, 2006), 4.

an indication of refinement, and “the foul-smelling masses,” who both reeked and were indifferent to their own odors.⁴

In *Aroma* Constance Classen, David Howes, and Anthony Synnott took a broader, eclectic approach and explored the power of smells to shape cultural practices, social hierarchies, and commodity markets in the Western and non-Western worlds, from ancient to modern times. According to the authors, odors “are invested with cultural values and employed by societies as a means of and model for defining and interacting with the world.” For example, Andaman Islanders who live in an Indian territory off the coast of Burma maintain that smells are “vital energies” that bring changes in human and nonhuman life cycles. This belief is reflected in their calendar, which is structured around the successive blooming of fragrant flowers. For others, smells are commodities. By buying perfumes and other fragrant products, some consumers believe that they can exude beauty, wealth, or power.⁵

Building on this work, Susan Ashbrook Harvey’s *Scenting Salvation* demonstrates how the sense of smell helped create “a distinctive religious epistemology” in the ancient Mediterranean world. Through olfactory experiences, she argues, Christians “posit[ed] knowledge of the divine and, consequently, knowledge about the human.” During baptismal rituals, for instance, the nostrils were anointed with myron, a scented oil. Anointing provided the initiate with both a sweet external odor and an internal “sweetening.” As Harvey explains, “the myron’s fragrance granted perceptible yet invisible form to a transformation (new birth) and an encounter (the human with the divine) that could not be seen.” Smells also had the power to reveal identities in both human and divine realms. God, angels, and believers smelled good, while Satan, demons, and sinful people smelled bad. In other words, Christians believed they could determine moral conditions from odors.⁶

A recent anthology, *The Smell Culture Reader*, also features smell’s ability to reveal the intricate workings of human culture. Spanning several disciplines across the humanities and social sciences, the essays in the anthology tackle a diverse array of topics, from sexuality and identity to place and “odorophobia.” Collectively, the authors ask readers to consider “how the attention to scents can rethink the idea of what constitutes culture.” Erik Cohen’s essay, for example, examines the “broken cycle” of smell in Bangkok during the 1980s. According to Cohen, rural areas in Thailand developed a closed cycle of smell in which the foul smell of garbage decomposing eventually became the earthy smell of fertilizer, a process familiar in nineteenth-century American cities before the advent of modern sanitation. In contrast, zoning laws in contemporary Western cities have created “domains of smell” that separate industrial and residential areas and their respective scents. However, neither scenario existed in Third World cities such as Bangkok. There, Thais developed an “olfactory dualism” in which the public stench of refuse was not bothersome, but body odors were. Because the “personalistic” nature of Thai society required the utmost consideration for the individuals with whom one was in contact, those smells

⁴ Alain Corbin, *The Foul and the Fragrant: Odor and the French Social Imagination* (Cambridge, Mass., 1986), 55–56, 134–35, 141. See also Mark S. R. Jenner, “Civilization and Deodorization? Smell in Early Modern English Culture,” in *Civil Histories: Essays Presented to Sir Keith Thomas*, ed. Peter Burke, Brian Howard Harrison, and Paul Slack (New York, 2000), 127–44.

⁵ Constance Classen, David Howes, and Anthony Synnott, *Aroma: The Cultural History of Smell* (New York, 1994), 3–5, 95–96, 186–97, esp. 3 and 95.

⁶ Susan Ashbrook Harvey, *Scenting Salvation: Ancient Christianity and the Olfactory Imagination* (Berkeley, 2006), 100, 125–34, and esp. 3 and 71.

were unacceptable and brought a loss of face. Cohen thus showed how Thais' responses to different smells exposed their cultural values and mores.⁷

In short, scholars of smell seem to agree that their specialty can help uncover the complexities of human culture and its development over time. The very subjectivity of this sense makes it instructive. As Cohen elaborated, "the impressions coming from nature are ultimately filtered—and such filtering, in turn, determines human reactions." How a smell was filtered depended on the particular historical context, as David S. Barnes's study of public health and disease transmission in late nineteenth-century France suggests. Beginning and ending his study with disgusting stench that overwhelmed Paris in 1880 and 1895, he argued that at both times foul odors provoked scorn among residents. But whereas observers in 1880 decried the "pestilential emanations" that were turning Paris into "a locus of infection" and warned that "an epidemic could break out any day," in 1895 they rejected claims that odors caused disease. Germ theory, which had gained currency in the intervening fifteen years, explained this change in perspective. Nonetheless, Parisians still recoiled from the smells because of their enduring cultural concerns about filth and cleanliness. As Barnes explained, "No longer life threatening, the odors of Paris remained a threat to a way of life—the civilized urban life." In short, Parisians' responses were filtered through shifting ideas about the health hazards of odors and more fixed notions about their cultural significance.⁸

Despite scholarship pointing to the pervasive importance of the sense of smell, efforts by historians of the American experience to historicize odors have been limited in scope. Such studies have typically come from social history, with an emphasis on odors' role in constructions of race, ethnicity, and class. Mark Smith's *How Race Is Made* is an excellent example. Focusing on the American South from the colonial era to the 1954 *Brown v. Board of Education* decision, he examines how sensory stereotypes reinforced racial categories. As it became increasingly difficult to distinguish between black and white through sight alone by the end of the nineteenth century—some light-skinned blacks passed as white—the other senses, especially smell, became central to constructing racial difference. Segregationists repeatedly called attention to a supposedly intrinsic, foul stench emanating from blacks and their neighborhoods, suggesting that the nose could detect and thereby define blackness.⁹

Even scholarship not explicitly about odors emphasizes how smells marked specific people and places as degraded. Nayan Shah's study of epidemics in San Francisco's Chinatown analyzes numerous city reports and observer accounts that pointed to the neighborhood's rank smell as an indication of Chinese inferiority. While "fresh breezes . . . purify the air of our streets and our houses," one newspaper editor remarked in 1885, "foul and disgusting vapors" were left to gather in Chinatown. At that time many San Franciscans believed that dense, dirty, and smelly living quarters bred diseases and thus marked Chinatown as dangerous. Shah concluded, "The representation of the Chinese inhabitants was that of a race and culture apart and unaffected by the forces of modernity." Natalia Molina found similar rhetoric in her study of public health and race in Los Angeles. In

⁷ Jim Drobnick, "Introduction: Olfactocentrism," in *The Smell Culture Reader*, ed. Jim Drobnick (New York, 2006), 6; Erik Cohen, "The Broken Cycle: Smell in a Bangkok Lane," *ibid.*, 118–27. On a similar transition from closed to open systems of waste disposal in American cities, that is, from scavenging and reuse to the discarding and burying of waste, see Susan Strasser, *Waste and Want: A Social History of Trash* (New York, 1999), 14–16.

⁸ Cohen, "Broken Cycle," 127; David S. Barnes, *The Great Stink of Paris and the Nineteenth-Century Struggle against Filth and Germs* (Baltimore, 2006), 17, 20, 237.

⁹ *Brown v. Board of Education*, 347 U.S. 483 (1954); Smith, *How Race Is Made*, 96–109.

1879 the chief health official called that city's Chinatown, "that rotten spot [that pollutes] the air we breathe and poisons the water we drink." In both studies odors from certain neighborhoods stigmatized minority groups as a public health threat.¹⁰

Like most other American historians, environmental historians have been slow to recognize the potential of a smell-centered analysis. Since one of the field's fundamental goals is to uncover what places once *looked* like, it has been all too easy to privilege visual changes to nature. A denuded hillside once covered with trees, a barren prairie once populated with bison, and a polluted river once teeming with salmon—all are observations based on sight. Drawing on the accounts of explorers, scientists, engineers, and other observers, as well as probate records, tax assessments, fire insurance maps, and scientific data, environmental historians have tried to envision such changes to the natural world, and they have recently begun to employ Geographic Information Systems (GIS) technology to create visual representations of historic land uses.¹¹

Despite an emphasis on vision, some environmental historians have taken an interest in what the past once smelled like. Many of their studies explore how people tried to avoid, mitigate, and regulate odors deemed unpleasant or dangerous. For instance, Conevery Bolton Valenčius recounted how nineteenth-century westward migrants, looking for places to claim as their new homes, relied on their noses to reveal whether lands were healthy or full of miasmas. Urbanites were especially attuned to the portents of rank smells, living as they did among heaps of refuse and horse dung. According to Martin V. Melosi, a connection between miasmas emanating from sewers and the water supply and epidemics prompted sanitation reform in nineteenth-century American cities.¹² In the mid-nineteenth century, industrial "stench nuisances" also pervaded urban areas, leading to lawsuits that shaped modern nuisance regulations. Christine Meisner Rosen explored this litigation and suggested that the courts rarely applied common-law nuisance principles to the "new" smells of the industrial revolution, such as those from mines, smelters, sawmills, and textile factories.¹³ The costs of living in a malodorous world in contemporary times have also attracted environmental historians' attention. In her study of hydrogen sulfide odors emitted by a Lake Huron chemical plant from the 1970s to the 1990s,

¹⁰ Nayan Shah, *Contagious Divides: Epidemics and Race in San Francisco's Chinatown* (Berkeley, 2001), 43. For a similar analysis of Chinatown odors, see Mary Ting Yi Lui, *The Chinatown Trunk Mystery: Murder, Miscegenation, and Other Dangerous Encounters in Turn-of-the-Century New York City* (Princeton, 2004), 27–32. Natalia Molina, *Fit to Be Citizens? Public Health and Race in Los Angeles, 1879–1939* (Berkeley, 2006), 1. See also Michael Bliss, "‘Something Terrible’: The Odour of Contagion, Montreal 1885," *Beaver*, 71 (Dec. 1991–Jan. 1992), 6–13.

¹¹ The best example of the integration of Geographic Information Systems (GIS) into environmental history is Brian Donahue, *The Great Meadow: Farmers and the Land in Colonial Concord* (New Haven, 2004). The book's color-coded maps (a rarity in historical monographs) delineate changing patterns of land ownership and usage. See also Lynne Heasley, *A Thousand Pieces of Paradise: Landscape and Property in the Kickapoo Valley* (Madison, 2005).

¹² Conevery Bolton Valenčius, *The Health of the Country: How American Settlers Understood Themselves and Their Land* (New York, 2002), 114–22. See also Peter C. Baldwin, "How Night Air Became Good Air, 1776–1930," *Environmental History*, 8 (July 2003), 412–29; and Linda Nash, *Inescapable Ecologies: A History of Environment, Disease, and Knowledge* (Berkeley, 2006). Martin V. Melosi, *The Sanitary City: Urban Infrastructure in America from Colonial Times to the Present* (Baltimore, 2000), 12–13, 47.

¹³ Christine Meisner Rosen, "Noisome, Noxious, and Offensive Vapors, Fumes, and Stenches in American Towns and Cities, 1840–1865," *Historical Geography*, 25 (1997), 49–82; Christine Meisner Rosen, "'Knowing' Industrial Pollution: Nuisance Law and the Power of Tradition in a Time of Rapid Economic Change, 1840–1864," *Environmental History*, 8 (Oct. 2003), 565–97. On urban industrial pollution, see David Stradling, *Smokestacks and Progressives: Environmentalists, Engineers, and Air Quality in America, 1881–1951* (Baltimore, 1999); Adam W. Rome, "Coming to Terms with Pollution: The Language of Environmental Reform, 1865–1915," *Environmental History*, 1 (July 1996), 6–28; and Daniel Johnson, "Pollution and Public Policy at the Turn of the Century," in *Land of Sunshine: An Environmental History of Metropolitan Los Angeles*, ed. William Deverell and Greg Hise (Pittsburgh, 2005), 78–94.

Joy Parr considered the industrial regulatory regime in conjunction with “how human bodies understood the sensuous changes in their dwelling place” through their noses. She argued that “the historically specific sensing body is, as much as policy and technology, a useful category of analysis in environmental history,” and she urged environmental historians to move beyond vision to embrace the other senses.¹⁴

While both social and environmental historians have begun to pay closer attention to odors, they have not used studies involving the sense of smell to bridge the two fields. Several scholars have long called for their integration. In 1990 William Cronon noted that environmental historians had failed to examine social history’s “classic categories” of race, ethnicity, class, and gender and to consider how those social divisions affected environmental change. In 1996 Alan Taylor voiced a similar concern while also criticizing social historians for not investigating the impact of nonhuman nature on human affairs. Many environmental historians have since addressed these critiques. Much like the social historians who have studied the classic categories, they have cast nature as a human construction in order to demonstrate how different groups shaped, evaluated, and perceived the environment over time.¹⁵

Social historians, however, have been slow to reciprocate. For instance, social historians’ studies of public health, such as those by Shah and Molina, demonstrate how odors were used to racialize certain social groups, but they do not explore the environmental inequalities that pervaded urban areas. Racial minorities and the poor routinely lived in neighborhoods that were exposed to disproportionate levels of pollutants and that lacked proper sanitation; both circumstances caused the offensive smells and health problems that reinforced their perceived social inferiority. Andrew Hurley, an urban and environmental historian, described these social and environmental inequities in his work on late nineteenth-century St. Louis. In response to complaints about odors and other pollutants from the growing industrial sector, city officials found that the easiest and fastest solution was to locate the malodorous businesses in neighborhoods “where political opposition was weakest, property values were lowest, and residents were poorest.” Hurley concludes, “the late nineteenth-century approach to industrial pollution had less to do with abating emissions than with allocating social costs.”¹⁶

Hurley’s close attention to the social complexities of odors has not been fully adopted by other environmental historians. Christine Meisner Rosen’s work on odor litigation,

¹⁴ Joy Parr, “Smells Like? Sources of Uncertainty in the History of the Great Lakes Environment,” *Environmental History*, 11 (April 2006), 270–72, 290. For a similar call for an environmental history of sound, see Peter A. Coates, “The Strange Stillness of the Past: Toward an Environmental History of Sound and Noise,” *ibid.*, 10 (Oct. 2005), 636–65. For a fascinating exploration of odors in recent times, see Ellen Stroud, “Dead Bodies in Harlem: Environmental History and the Geography of Death,” in *The Nature of Cities: Culture, Landscape, and Urban Space*, ed. Andrew C. Isenberg (Rochester, 2006), 62–76.

¹⁵ William Cronon, “Modes of Prophecy and Production: Placing Nature in History,” *Journal of American History*, 76 (March 1990), 1129; Alan Taylor, “Unnatural Inequalities: Social and Environmental Histories,” *Environmental History*, 1 (Oct. 1996), 6–19.

¹⁶ For a plea that social historians integrate environmental history into their work, see Stephen Mosley, “Common Ground: Integrating Social and Environmental History,” *Journal of Social History*, 39 (Spring 2006), 915–33. Andrew Hurley, “Busby’s Stink Boat and the Regulation of Nuisance Trades, 1865–1918,” in *Common Fields: An Environmental History of St. Louis*, ed. Andrew Hurley (St. Louis, 1997), 145–47. For other studies on the historical dimensions of environmental injustice, see Andrew Hurley, *Environmental Inequalities: Class, Race, and Industrial Pollution in Gary, Indiana, 1945–1980* (Chapel Hill, 1995); Ellen Stroud, “Troubled Waters in Ecotopia: Environmental Racism in Portland, Oregon,” *Radical History Review*, 74 (Spring 1999), 65–95; Harold L. Platt, *Shock Cities: The Environmental Transformation and Reform of Manchester and Chicago* (Chicago, 2005); and Angela Gugliotta, “Class, Gender, and Coal Smoke: Gender Ideology and Environmental Injustice in Pittsburgh, 1868–1914,” *Environmental History*, 5 (April 2000), 165–93.

for example, details the confrontations between citizens, stench-producing businesses, and municipal governments, yet we learn little about the cultural values embedded in the plaintiffs' complaints. While she noted that the poor often suffered the most from noxious odors, it is unclear if race and ethnicity also factored into the location of foul-smelling businesses. To her credit, Rosen explored the connections between nature and culture in her later essay on common law and industrial odors. There she argued that urban Americans of the mid-nineteenth century did not object to the then-new industrial odors because "the notion of a legally actionable material nuisance becomes a cultural construct that has relatively little to do with objective measures of environmental harm and a great deal to do with American society's environmental cultural traditions and folk wisdom." Rosen suggested that societal values did not initially define the industrial smells as offensive.¹⁷

Rosen's work points to a smell-related topic with the potential to integrate social and environmental history: the transformation of Americans' attitudes toward odors. What prompted changes in Americans' olfactory perceptions? What do these evolving attitudes reveal about American society and Americans' relationship with the natural world? My work on Monterey begins to answer those questions and suggests the analytical power of historicizing the sense of smell. Two key conflicts about odor demonstrate how residents' interpretations of odor changed over time and how campaigns against smells became a means to promote certain activities and groups. The scent of the air first stimulated debate in the late nineteenth century, when the tourism industry and the fishing industry both began to develop in earnest. While hotel owners and tourists valued the fragrant scents of Monterey pine and cypress trees mixed with the salty sea air, in processing squid and sardines, the fishing industry produced distinctive smells that many visitors and residents deemed repulsive. Since tourists, fishermen, and canners shared the same coastline—and the same air—the contrasting scents could not be isolated from one another. Many local boosters believed that the overpowering fish odors undermined the tourist business even as participants in the fishing industry associated such smells with economic prosperity.¹⁸

The first odor debate emerged in the 1890s, when local residents and officials at the Pacific Improvement Company, which owned and operated the Hotel Del Monte, one of the grand railroad hotels of the late nineteenth-century American West, complained about the "abominable stench" of drying squid emanating from the Chinese fishing village at nearby Point Alones. The open-air drying of squid, which took two to three days, created a smell that many residents and investors found both hazardous to health and at odds with the burgeoning tourist trade. Since they did not eat dried squid, the odor was all the more foreign and objectionable. As one local journalist remarked, the stench repelled visitors, who "must surely have been kept away by the smell of the squid drying in the fields and stored at the wharf awaiting shipment by steamer." The Pacific Improvement Company, which leased the land to the Chinese, decided to evict the offending fishermen, but its plans never materialized because Point Alones went up in flames on May 16, 1906, in a fire of mysterious and unknown origins.¹⁹

¹⁷ Rosen, "Noisome, Noxious, and Offensive Vapors, Fumes, and Stenches in American Towns and Cities"; Rosen, "Knowing' Industrial Pollution," 587.

¹⁸ See Connie Y. Chiang, "Monterey-by-the-Smell: Odors and Social Conflict on the California Coastline," *Pacific Historical Review*, 73 (May 2004), 183–214.

¹⁹ *Monterey New Era*, May 26, 1892, p. 3; "Chinese Must Cease the Drying of Squid," *ibid.*, May 14, 1902; "Picturesque Chinatown Only a Memory," *Pacific Grove Review*, May 18, 1906.



This 1906 photograph shows Hotel Del Monte guests or churchgoers walking past drying fish nets on their way toward the center of Monterey, California, after visiting Booth's cannery. The fishing industry could be a tourist attraction, but odors from the sardine plants also sparked numerous conflicts between labor and leisure. *Courtesy Monterey Public Library, California History Room Archives.*

Rather than face the odious task of removal, the company now simply had to forbid the Chinese to rebuild their village. As J. P. Pryor, the company's general agent, explained, "If [the Chinese] should gain possession of this land for only a temporary period, they would at once erect their old shacks and accumulate considerable dirt and filth, all of which would have to be cleared up again after we had regained possession of the land." To protect the company's property from potential spoliation, its executives hired guards to stand watch, built a fence around the site, and shut off most of the water supply. The efforts were effective, and the Chinese resettled at McAbee Beach, east of Point Alones. Still, many residents did not believe that the new site was distant enough from white residential neighborhoods. As a local journalist sarcastically concluded, "Pungent odors from the new Chinese quarters mingled with the sea breeze ought to make a lively advance in the price of real estate." Labor and leisure—and their associated smells—did not mix.²⁰

Ultimately, concerned citizens succeeded in eliminating the squid odors. A 1907 ordinance prohibiting the drying of squid within city limits forced the Chinese to move their operations to the outskirts of town. Production declined, and the number of Chinese fishermen at McAbee Beach dropped from 18 in 1910 to 7 in 1911.²¹ The outcome

²⁰ J. P. Pryor to A. D. Shepard, June 26, 1906, box 60/53, Pacific Improvement Company Records, Special Collections JL001 (Department of Special Collections and University Archives, Stanford University Libraries, Stanford, Calif.); *Pacific Grove Review*, May 25, 1906; Pryor to Shepard, May 17, 26, 1906, box 60/53, Pacific Improvement Company Records; Shepard to John Penney, May 21, 1906, box 60/55, *ibid.*; Penney to Shepard, May 22, 1906, *ibid.*; "The New Monterey Chinatown," *Pacific Grove Review*, Nov. 16, 1906.

²¹ For the antisquid legislation, see Ordinance no. 140, June 27, 1907, Ordinance Book 1, Monterey City Clerk's Office (Monterey, Calif.); and Ordinance no. 148, June 9, 1908, *ibid.* For the Chinese population at McAbee Beach, see Sandy Lydon, *Chinese Gold: The Chinese in the Monterey Bay Region* (Capitola, 1985), 377, 380;

was hardly surprising. Against the backdrop of federal laws excluding further Chinese immigration, violence directed at Chinese laborers had spread throughout the American West in the late nineteenth century. While the Monterey Chinese were not victims of similar uprisings, they stood at the margins of local society and had little power to convince people that their operations were not an olfactory nuisance. By defining pungent squid odors as deleterious to human health and the local economy and an affront to their cultural sensibilities, white residents and boosters tapped into existing anti-Chinese sentiment. Montereyans' noses confirmed what they already believed and could see with their eyes: Chinese fishermen were racial inferiors who had no place on a coastline that many believed was meant to blossom into a premier seaside resort and residential community for elite and middle-class whites.

But Montereyans would not get a long respite from fishy odors. The city's first sardine cannery opened in 1901, and during World War I, which increased demand for canned fish, the number of plants multiplied. Taking advantage of robust agricultural markets for fish meal, used as animal feed and fertilizer, canners also began to install reduction equipment, which dried and ground whole sardines and sardine offal into those valued products. The machinery often malfunctioned, burning the fish waste and sending pungent fumes into the air. By the 1920s hotel owners and real estate developers began to voice their discontent, charging that the odors deterred potential investors from buying property and caused many guests to cut their visits short. According to one hotel manager, tourists could not reconcile the contradiction between the beautiful coastline and the "terrible stench."²²

Although the City of Monterey enacted several antiodor ordinances, these efforts did not abate the smells. The situation deteriorated, and in 1934 the Del Monte Properties Company, which now owned the Hotel Del Monte, Pebble Beach, and other properties on the Monterey Peninsula, filed for an injunction against all twelve canneries in Monterey County Superior Court. The company claimed that the fish fumes left employees and guests "nauseated and physically distressed" and that the value of its property was in danger of depreciation. The attorney for the canners countered that the odors constituted only a "fanciful annoyance to . . . persons having no true relation to the public welfare of said community" and that plant closures would have a devastating impact on the local economy, particularly since the nation was in the throes of the Great Depression. Despite those impassioned defenses, the canners agreed to a settlement that required odor mitigation. The canneries had to install temperature regulation devices and hoods to catch gases, which had to be heated and conveyed through a system that eliminated odors. In addition, the plants could not process or keep any spoiled fish or fish that had been caught more than forty-eight hours earlier, nor could they discharge water that contained any solid material. But legal action did not end there. In 1935 the neighboring city of Pacific Grove considered its own lawsuit against Monterey, blaming the municipality for not doing enough to minimize the fish smell. Mayor Sheldon Gilmer of Pacific Grove explained that the canneries were the "enemy" of the region's "pre-destined purpose" to be a place "suitable for fine homes and vacation attractions." Realizing the canneries' con-

and *Directory of Monterey, New Monterey, Del Monte Grove, Seaside, Vista Del Rey, Del Monte Heights, 1911* (n.p., 1911).

²² H. D. Severance, "Control of Cannery Odors at Monterey," *Sewage Works Journal*, 4 (Jan. 1932), 152–53; "Fish Stench Drives Many Away, Think Hotel Heads," *Monterey Peninsula Herald*, Oct. 14, 1929, pp. 1, 7.

tributions to local commerce and employment, however, Pacific Grove dropped its plans to sue Monterey in 1937.²³

This second conflict offers an interesting twist on the conventional story of elite triumph. Whereas affluent individuals who vacationed in the region or owned residential or tourist property there easily won the first battle against the Chinese, they lost the second battle against sardine processing plant owners and their working-class employees. Filtered through the hardships of the Depression, sardine odors were acceptable because the fishing industry brought financial stability to much of the community. Boosters and real estate developers, moreover, could not employ the racialized claims used against the Chinese at the turn of the century because the fishing and fish-processing industry comprised workers from several ethnic and racial backgrounds and it was dominated by Sicilians. Power relations inverted, and the interests of the fishing industry prevailed. Most Montereyans recognized that the coastline was a place devoted to extractive industry and tolerated the associated smells. Meanwhile, city officials grew impatient with the repeated odor complaints and insisted that it was impossible to eliminate all sardine fumes.²⁴

As these two conflicts demonstrate, context matters when analyzing the changes in Americans' attitudes toward odors. When the Chinese set up their squid-drying fields in the late nineteenth century, the city's first cannery was still several years in the future, and most fishermen were shipping their catch fresh, which limited fishy odors. Dried squid, moreover, was not a food that most white residents consumed. Thus, the Chinese produced a completely alien stench. Prevailing anti-Chinese attitudes compounded the odor problem and made the squid smells—and the Chinese fishermen—even more disagreeable. By the 1930s, however, Montereyans had become dependent on the industrial economy and more accustomed to its attendant pollution. Particularly as the canneries proliferated after World War I, it became difficult for people to isolate themselves from sardine odors. City ordinances affirmed that odors from the canneries and reduction plants constituted a nuisance and forced the factories to adopt mitigation measures. While most industry leaders complied willingly, they also deflected odor complaints by pointing to their economic contributions. Whereas sensitivity to *squid* odors was obvious and logical, sensitivity to *sardine* odors could undercut the community's prosperity at a time of widespread uncertainty.

In the end, the sense of smell proved powerful in what was fundamentally a battle over Monterey's identity. Was this coastal community an industrial town with a predominantly immigrant, working-class population or a tourist destination for elite and middle-class whites? Could Monterey support labor and leisure simultaneously? Smell became key to the debate because of its inherent subjectivity combined with its perceived

²³ *Del Monte Properties Co. v. F. E. Booth Company, Bay View Packing Company, California Packing Corporation, Carmel Canning Company, Custom House Packing Corporation, Del Mar Canning Corporation, E. B. Gross Canning Company, K. Houden Company, Monterey Canning Company, San Carlos Canning Company, San Xavier Fish Packing Company, Sea Pride Packing Corporation, First Doe Corporation, and Second Doe Corporation*, no. 14568, Feb. 6, 1934, Records of the Monterey County Superior Court (Monterey County Courthouse, Monterey, Calif.). "Odor Suit Ends in Compromise," *Monterey Peninsula Herald*, Feb. 6, 1934, p. 1; "Cannery Payroll Poor Argument for Problems to City, Says Gilmer," *Pacific Grove Tribune*, Jan. 11, 1935; "'Drop Odor Suit,' Plea of Citizens," *Monterey Peninsula Herald*, March 15, 1937, pp. 1, 2.

²⁴ On Monterey's Sicilian community, see Carol Lynn McKibben, *Beyond Cannery Row: Sicilian Women, Immigration, and Community in Monterey, California, 1915–99* (Urbana, 2006). The odors did not end until the fishery collapsed and the plants began to shut down in the 1950s. On postindustrial Monterey, see Connie Y. Chiang, "Novel Tourism: Nature, Industry, and Literature on Monterey's Cannery Row," *Western Historical Quarterly*, 35 (Autumn 2004), 309–29; and Connie Y. Chiang, *Shaping the Shoreline: Fisheries and Tourism on the Monterey Coast* (Seattle, 2008).

objectivity. There was an assumption that the sense of smell—like the other senses—held objective truth, but odors were difficult to quantify or measure. Unable to provide proof, people could present their subjective interpretations of odors as fact, absent empirical evidence. For instance, it was impossible to determine exactly when fish odors became a nuisance—obviously, this depended on who was doing the smelling—yet hotel owners made such claims outright, using only their guests' reactions as proof. Likewise, sardine canners dismissed the odors by stating that they bothered only tourists. With relative ease, Montereyans could interpret odors to further their own agendas. By deciding what reeked and what did not, participants in the fishing and tourism industries could discredit their opponents and assert control over the coastline. As a result, they became deeply invested in the kinds of scents that filled Monterey's air and what they signified.

Through their interpretations of squid and sardine odors, residents could also express their visceral attitudes toward the fishing industry and its sweeping impact on the human and nonhuman world. In the process they revealed the inner workings of their culture and community at a particular moment in time—what they valued, who they included and excluded, and how they believed the natural world should be transformed. The conflicts over odors became so galvanizing partly because they symbolized something much more profound than the smell of the air, and they allowed residents to debate pressing issues with their untempered emotions on the surface.

This is not to say that Montereyans were oblivious to the other sensory changes that the fishing industry instigated. Monterey's aural world also changed, filling with the sounds of machinery clanging, immigrant workers speaking their native languages, and sardine plants blowing distinctive whistles to call them to their shifts at all hours of the day and night. Of course, the visual changes along the coastline were the most obvious. By the end of World War II, over twenty fish-processing plants crammed the length of Ocean View Avenue, the street that became known as Cannery Row, and they began to put pressure on the sardine stocks along the Pacific coast. After the war, fishermen clearly saw their nets come up with fewer and fewer fish. That was for the most part a quantifiable environmental problem, so people had to try to discuss it objectively, even though it was never clear who (or what) was responsible. Because such objective measures of olfactory changes were lacking, claims about changing smells were arguably the most responsive to and reflective of Montereyans' shifting values.

Monterey's experience with odors, then, suggests the interpretive rewards of a smell-centered analysis. First and foremost, the sense of smell lays bare the complex relationship between materiality and culture, further demonstrating that the natural world plays an integral role in shaping society. Humans' encounters with nature are as historical as their manipulations of it, and following smell through time can underscore the contingency of both.²⁵ As Monterey's history reveals, squid and sardine odors were material phenomena, but human interpretations of those odors were cultural and stood for larger community conflicts. Because of the subjectivity of smell, residents could construct odors, invest them with meaning, and use them as a tool to wield power over the coastline and other groups of people. That reactions to squid and sardine odors were so different suggests smell's malleability and capacity to reflect changing circumstances and values. And results were not completely predictable, as when elites failed to shut down the canneries in the 1930s. The dominant industrial culture made the sardine plants' material impact on the

²⁵ On ways culture shaped perceptions of nature, see Nash, "Changing Experience of Nature."

air acceptable, showing elites that cultural capital and class superiority were not always as powerful as real capital.

Examining the material and cultural dimensions of smell also underscores larger changes in American society: the rise of consumer culture in the post–World War II era and the increasing separation of production from consumption. While most historical studies have focused on the cultural and political manifestations of consumption, the sense of smell reminds scholars that changes in consumption also had a material component. Unlike earlier generations who tolerated the odors of animals that roamed the street or of canneries that burned fish offal, most modern Americans have little knowledge of the labor and resources required to fabricate consumer goods, let alone the physical impacts of their purchases. With global outsourcing, towns dominated by a single industry, like Monterey in the first half of the twentieth century, are fewer and farther between. Many odorous industries are now located in rural areas, city outskirts, or halfway across the world in Latin America or Asia. Production has been rendered invisible to most Americans, who do not have to put up with industrial odors because their livelihoods and consumer life-styles do not directly depend on it. But just because they have come to understand their world by the *absence* of such smells does not mean that the odors—and the worldwide social and environmental implications of American consumption—have actually disappeared.²⁶

Thus, a smell-centered analysis can be widely applied to large changes in American culture, including Americans' shifting relationship with the natural world. Rather than dismissing the smells that filled the American past, historians might find it productive to analyze moments when people exercised power and obtained knowledge through their noses. One recent example is the aftermath of Hurricane Katrina. Many victims and observers came to remember and understand the storm by the stomach-turning stench of putrefying bodies floating in flooded streets, rancid meat rotting in refrigerators, and musty mold growing on walls and floors. Their vivid olfactory descriptions spoke to the tremendous emotional, economic, and environmental devastation that befell Gulf Coast residents.²⁷ In reacting to the smells that filled the air, then, Americans were often providing commentary on a much broader set of issues concerning their social *and* physical surroundings. Historians cannot re-create the aromas of earlier times, but they can follow the scent to a more complex and nuanced understanding of the past.

²⁶ For a comprehensive study of postwar consumer culture that focuses largely on political and cultural themes, see Elizabeth Cohen, *A Consumer's Republic: The Politics of Mass Consumption in Postwar America* (New York, 2003). On the social and environmental implications of consumption, see Mosley, "Common Ground," 927–28; John Soluri, *Banana Cultures: Agriculture, Consumption, and Environmental Change in Honduras and the United States* (Austin, 2005); Richard P. Tucker, *Insatiable Appetite: The United States and the Ecological Degradation of the Tropical World* (Berkeley, 2000); Strasser, *Waste and Want*; and Matthew W. Klinge, "Spaces of Consumption in Environmental History," *History and Theory*, 42 (Dec. 2003), 94–110.

²⁷ See, for instance, Jennifer Medina, "In New Orleans, the Trashman Will Have to Move Mountains," *New York Times*, Oct. 16, 2005, p. A1; Andrei Codrescu and Nils Juul-Hansen, "If These Refrigerators Could Speak," *ibid.*, Jan. 29, 2006, p. D17.