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Smelling Contagion: The Sensory Experience of Plague in  
Seventeenth-Century London and the Covid-19 Pandemic

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# Smelling Contagion: The Sensory Experience of Plague in Seventeenth-Century London and the Covid-19 Pandemic

Holly Dugan  
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## Abstract

This paper came out of our reflections on the sensory experiences during the Covid-19 lockdowns in the US and UK, particularly around smell, or its absence. As early modernists, we wondered how seventeenth-century people experienced the plague: how did their smellscape change? Miasma, or foul air, was thought to be a cause of plague outbreaks. But the urban smellscape also changed during an outbreak: vinegar to cleanse money, burned rosemary to purify the air, and bodily odors to indicate infection. Focusing on London, we consider the overlap between the sensory and emotional experiences during an outbreak. We argue that the smells of plague outbreaks shifted people's ways of being within collective spaces by emphasizing the presence of disease, sharpening social class distinctions, increasing isolation and fear, and requiring specific types of essential labor.

**O**lfaction—the perceptual sense of smell—is a powerful tool in a pandemic; it indexes both the possible spread of disease as well as the social shifts and changed habits of everyday life. The sensory experience of Covid-19 included a strange *mélange* of scents for many: spring flowers and sourdough starter, hand sanitizer and bleach wipes, or sweat and sunscreen, all inhaled through masks. In urban areas, the air was suddenly fresher, given the sudden decline of traffic.<sup>1</sup> For those living in cramped quarters, outdoor scents were only available through access to public parks, which was more important—and more contested—than ever.<sup>2</sup> For many, there was also the disconcerting diminished sense of smell (anosmia) for months after being ill. Covid-19 has the possibility to not only enter the body through the nose but also to affect the mechanisms of smell and taste, rendering these senses inactive.<sup>3</sup>

As scholars of early modern England, our sensory experiences of quarantine led us to wonder about those living through times of plague: what did London smell like during the plague, and how did a heightened awareness of olfaction shape

everyday experiences of their pandemic? In the ancient world, Hippocrates and Galen associated disease with smell and miasma, a concept that continued well into the nineteenth century.<sup>4</sup> Many early modern descriptions of the plague—the topic of this essay—focused on the dangerous presence of foul air. Pleasant smells, by contrast, were associated with protection against disease in general and plague in particular. Where early modern plague was defined by “noisome” smells, the anosmia of Covid-19 is almost the opposite effect. For those who experienced Covid-19 and remained quarantined, the loss of taste and smell (two senses linked to quotidian pleasures of everyday life) sharpened the psychological impact of infection, social isolation, and pandemic. The smells of plague, whether noxious or perfumed, would have reminded early modern people of an uncanny presence of an invisible disease, alerted them to the dangers of sharing air with others, and intensified the sense of isolation during quarantine.

Epidemics are dramaturgic, as historian Charles Rosenberg has described, and they can begin with seemingly minor events. Public and dramatic, an epidemic’s unity of place and time enables us to look at

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- 1 I. Wagner, “Traffic reduction in selected cities amid coronavirus crisis 2020,” *Statista*, October 20, 2020. Harrison A. Parker, Sina Hasheminassab, John D. Crounse, Coleen M. Roehl, Paul O. Wennberg, “Impacts of Traffic Reductions Associated With COVID-19 on Southern California Air Quality,” *Geophysical Research Letters* 47, no. 23 (2020). <https://doi.org/10.1029/2020gl090164>. We would like to thank Andy Kesson for inviting us into conversation; editor Jacob Remes for encouraging our submission; and the reviewer for their detailed and helpful suggestions. For the *A Bit Lit* video series, see Holly Dugan, Andy Kesson, Marissa Nicosia, and Lisa Smith, “Literature meets the plague, smells & cookery,” *A Bit Lit*, July 21, 2020.
  - 2 Lynsey Hanley, “Lockdown has laid bare Britain’s class divide,” *The Guardian*, April 7 2020.
  - 3 Xiangming Meng, Yanzhong Deng, Zhiyong Dai, and Zhisheng Meng, “COVID-19 and anosmia: A review based on up-to-date knowledge,” *American Journal of Otolaryngology* 41, no. 5 (2020): 102581, doi 10.1016/j.amjoto.2020.102581.
  - 4 See, for example, Jouanna Jacques and Allies Neil, “Air, Miasma and Contagion in the Time of Hippocrates and the Survival of Miasmas in Post-Hippocratic Medicine (Rufus of Ephesus, Galen and Palladius),” in *Greek Medicine from Hippocrates to Galen: Selected Papers*, ed. Van Der Eijk Philip (Leiden and Boston: Brill, 2012), 119-36; Erin Spinney, “Environment,” in *A Cultural History of Medicine in the Enlightenment*, ed. Lisa Wynne Smith (London: Bloomsbury Academic, 2021), 13-28.

a moment. The narrative begins with ignorance and revelation, followed by attempts to control the disease and calls for collective action, ending with a return to normality and obscurity.<sup>5</sup> And yet, disease outbreaks haunt popular memory for centuries, creeping out when least expected, with local, national, and global concerns that shape an epidemic's meanings over time.<sup>6</sup> Epidemics engender uncertainty, making people confront the foundations of society suddenly made visible through the crisis. An epidemic is more than a disease; they are created by social structures, value systems, politics, medical practices, and storytelling.<sup>7</sup> Historical reflection can help us to understand a pandemic, from government responses to vaccine hesitancy and social inequalities. In turn, as Kevin Siena suggests, the pandemic stories historians tell are shaped by our own experiences.<sup>8</sup>

Plague functions as both a noun and a verb; it refers to the communicable disease and the perception of epidemics by those experiencing them. For this reason, plague is often compared to other communicable diseases. Such comparisons can risk ignoring the complexity of experience or repeating errors of the past, but also offer a chance to

rethink historical narratives about plague.<sup>9</sup> Our experiences with Covid-19 instigated us to reflect on the embodied, sensory aspects of everyday life during plague - specifically smell. This essay argues that the experience of plague was demarcated by particular smells of healing and illness, both real and imagined. Specific smells demarcated the time of plague for those living through it, emphasizing the oppressiveness of quarantine and the challenge of defending against an unseen contagion.<sup>10</sup>

## I. Plague

Like Covid-19, the plague was a complex and baffling disease that engendered widespread speculation as it circulated in the early modern world. New research has shown that the plague's origins were earlier than historians had assumed, as it was spreading through Central Eurasia as early as the thirteenth century, linked to conquest and trade.<sup>11</sup>

It has much to teach us about contemporary outbreaks and pandemics. We now know that plague is a zoonotic disease,

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5 Charles Rosenberg, "What is an epidemic? AIDS in historical perspective," *Daedalus* 118, no. 2 (1989): 2.

6 Richard Vinen, Claire Langhamer and Kevin Siena, "The 2020 Historical Research lecture: Writing histories of 2020: first responses and early perspectives," *Historical Research* 93, no. 262 (2020): 786-806; Erica Charters and Richard McKay, "The history of science and medicine in the context of COVID-19," *Centaurus* 62, no. 2 (2021): 223-233.

7 Charters and McKay, "The history of science and medicine," 225, 227.

8 Vinen et al., "Writing histories," 19-20.

9 We echo Monica H. Green's warning about too-easy comparisons between contemporary pandemics and medieval and early modern as well as her argument that there is value in thinking of plague as a "protagonist" in history. See Monica Green, "Preface: Black Death and Ebola: On the Value of Comparisons," in *Pandemic Disease in the Medieval World*, ed. Monica H. Green (Kalamazoo and Bradford: Arc Press, 2015): x.

10 The concept of urban smellscape and its relation to sense of place and time comes from J. Douglas Porteous, "Smellscape," *Progress in Physical Geography: Earth and Environment* 9, no. 3 (1985): 356-78; Victoria Henshaw, *Urban Smellscapes: Understanding and Designing City Smell Environments* (London: Routledge, 2013).

11 Monica H. Green, "The Four Black Deaths," *The American Historical Review* 125, no. 5 (2020): 1601-1631.

caused by bacteria spread through the bite of an infected flea that lives on rodents. It often attacks the human lymphatic system, causing sudden illness, and then moving to infect the blood and lungs. But As Monica H. Green has pointed out, the symptoms we have long associated with plague, such as buboes, were not the only symptoms. For example, the bubonic plague could also be ingested or inhaled, resulting in severe gastro-intestinal distress, including abdominal pain, nausea and vomiting, and severe diarrhea.<sup>12</sup> Premodern people understood plague in terms of being a scourge from God, an airborne disease, and a foreign contaminant. The plague pandemic decimated European populations in the mid-fourteenth century and remained a constant, if mysterious, threat for the next four hundred years.

During five major epidemics of plague in London between 1565-1665, historians estimate that approximately 200,000 people

died from plague.<sup>13</sup> In London, plague years brought five to six times the usual number of deaths.<sup>14</sup> Contemporary writers observed that the young were more vulnerable than the old; the poor were more vulnerable than the rich.<sup>15</sup> In contrast to medieval outbreaks, early modern patterns of contagion usually began in spring, spiking in the summer months.<sup>16</sup> Those who could afford to flee populated urban areas during those months did so, yet not everyone could.<sup>17</sup> Plague outbreaks went hand-in-hand with the administrative management of death in urban spaces; as Siena notes, plague orders point to a tremendous need for laborers to enforce them, including the arduous and grisly task of searching for and burying the dead. The poor were most likely to take such jobs, even with the threat of exposure to disease.<sup>18</sup> Records document, for instance, that during the 1602-1603 outbreak in London, there were far fewer deaths from plague in wealthier parishes inside the city

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12 Green, "Four Black Deaths", 1627. See also Lars Walløe, "Medieval and Modern Plague: Some Clinical Continuities," *Medical History Supplement* 27 (2008): 59-73.

13 Vanessa Harding, "Plague in Early Modern London: Chronologies, Localities, Environments," *Plague and the City*, eds. Lukas Engelman, John Henderson, Christos Lynteris (London: Routledge, 2019), 39; Ernest Gilman, *Plague Writing in Early Modern England* (Chicago: University of Chicago Press, 2009), 255; Jane Stevens Crashaw, *Plague Hospitals: Public Health for the City in Early Modern Venice* (Abingdon: Routledge, 2016). The population of London in 1600 was 200,000 and the ill were not isolated into hospitals or specific urban areas.

14 Vanessa Harding, "Housing and Health in Early Modern London," *Environment, Health and History*, eds. Virginia Berridge and Martin Gorsky (New York: Palgrave Macmillan, 2012), 31; Neil Cummins, Morgan Kelly and Cormac Ó'Gráda, "Living Standards and Plague in London, 1560-1665," *Economic History Review* 69, no. 1 (2016), 13.

15 See John Moore's letter to his brother, 19 June 1665, Wellcome Library MS 7382/3.

16 See Thomas Birch, *A Collection of the Yearly Bills of Mortality, From 1657 to 1748* (London: Printed for A. Millar, 1759). See also Mark R. Welford and Brian H. Bossak, "Validation of Inverse Seasonal Peak Mortality in Medieval Plagues, Including the Black Death, in Comparison to Modern *Yersinia pestis*-Variant Diseases," *Plos One*, December, 22 2009.

17 For an analysis of urban migration due to Covid see: "Life is precious,' say Indian migrants fleeing cities hit by Covid-19," *The Straits Times*, April 28, 2021.

18 Kevin Siena, "Epidemics and 'essential work' in early modern Europe," *History and Policy*, March 25, 2020.

than those just outside (see Figures 5 and 6).<sup>19</sup> Such numbers are inconclusive, but they raise questions about how the plague was experienced in hyperlocal ways, a phenomenon brought home for us by the reporting of Covid-19 deaths by zip codes in the United States. The disparities in global access to vaccines also highlight the localized effects of a pandemic experience. At the time of writing, more than 3 million people globally have died from Covid-19.<sup>20</sup> Such a devastating statistic speaks to the widespread impact of the disease worldwide, but it does not show specific impacts on communities. Statistics alone, of course, never capture the impact of the disease for the sufferers or bereaved, nor do they mitigate the economic effects.

For early modern people, plague transmission was invisible but traceable through smell; this is linked to their understanding of the humoral body. Humoral theory—a medical theory derived from ancient traditions, which remained dominant in the early modern period—explained health and illness as a balance between the four humors of the body: blood, phlegm, yellow bile, and black bile. These humors defined one’s natural

temperament, with an imbalance causing illness. Crucially, humors could be affected by the six non-naturals: food/drink, exercise, sleep, excretions, emotions, and air—which included weather and environment. Porous and changeable, the humoral body was intimately intertwined with the world around it.<sup>21</sup> Miasma, then, was more than a bad smell; it was a threat to one’s health. The usual description of plague focused on corrupted air, evoking an atmosphere of death and decay.<sup>22</sup> Plague orders emphasized that any foul air was dangerous, even if emanating from “ponds, pooles, and ditches” in the city. Such “stinking and noysome smels” should be “scoured and cleaned” lest they produce “an evuill and unwholesome aire” that further polluted London’s environments.<sup>23</sup> Humoralism, however, was not the only explanation for disease. Since antiquity, physicians had been aware that diseases like plague or fever could spread among groups of people. Galen, for example, described this in terms of invisible seeds that could spread through the air. The problem for medical practitioners was that invisible seeds were harder to trace than the odor of miasma or physical symptoms.<sup>24</sup> By the 1660s, physicians were increasingly

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19 The Worshipful Company of Parish Clerks, *A true report of al the burials and christnings within the cite of London and the liberties thereof, from the 23. of December, 1602. to the 22. of December, 1603* (Printed by John Windet, Printer to the Honourable Citie of London, 1603), in *The Map of Early Modern London*, ed. Janelle Jenstad.

20 Johns Hopkins University, “Coronavirus Resource Center”; Jacqueline Wernimont has written about how practices early modern practices for counting the dead that emerged during times of plague are connected to our contemporary data dashboards. Jacqueline Wernimont, *Numbered Lives: Life and Death in Quantum Media* (Cambridge, MA: MIT Press, 2018), 19-49; More recently, in conversation with Rebecca Onion, “When 194,000 Deaths Doesn’t Sound Like So Many,” *Slate*, September 13, 2020.

21 On humoral theory and the porousness of humoral bodies, see Barbara Duden, *The Woman Beneath the Skin: A Doctor’s Patients in Eighteenth-Century Germany*, trans. Thomas Dunlap (Cambridge, Mass.: Harvard University Press, 1991), 11, 34-5, 109.

22 Holly Dugan, *The Ephemeral History of Perfume: Scent and Sense in Early Modern England* (Baltimore: Johns Hopkins University, 2011), 86, 100-1.

23 Thomas Thayre, *An Excellent and Best Approved Treatise of the Plague* (London, 1625), Sig. Br.

24 Vivian Nutton, “The Seeds of Disease: An Explanation of Contagion and Infection from the Greeks to the Renaissance,” *Medical History* 27 (1983): 1-34.

interested in contagion theory as a way to explain the rapidness of plague and smallpox transmission within areas or the success of quarantines and smallpox inoculation.<sup>25</sup> Bad air—whether through seeds on the breath or from miasma—was downright dangerous.

Although it seems clear what constitutes a good and bad smell, such distinctions quickly break down in practice.<sup>26</sup> Smell is inherently a social sense and scientists have only very recently identified how the brain perceives smells.<sup>27</sup> In normal life, both historically and today, there is always a trade-off, a willingness to find that the benefits of city life outweigh the stink of urbanization. The complexities of olfaction created profound anxiety about the meaning of “bad” air during times of plague.<sup>28</sup> Smells can waft, moving away from their source, challenging direct links between cause and effect. Any and almost every kind of smell might inspire worry. Mary Douglas’ work on the taboos of dirt is useful here; just as dirt is “matter out of place,” any smell out of place poses a threat.<sup>29</sup> This is not unlike the sensory shifts we are currently experiencing with Covid-19—a disease that we know is transmitted through the air and enters

the body through the mouth and nose. For most of us, olfaction is synchronous with respiration; it is a sensory modality that we cannot shut off.<sup>30</sup>

When a plague outbreak reached the busy French port of Marseilles in 1720, the globally connected world was apprehensive and drew on historical memory to try to prevent a pandemic. Although there had been no major outbreaks in England since 1665, the older generation still remembered it. Daniel Defoe (aged five in 1665), for example, drew on treatises, pamphlets, and first-person accounts to write *A Journal of a Plague Year* (1722).<sup>31</sup> Eighteenth-century physicians also drew on past and current accounts, attributing it to contagion spreading between people or by objects. Physicians advising the British government in 1720-22 (Richard Mead, Hans Sloane, and John Arbuthnot) made their recommendations for public health on the basis of the evidence that people and objects spread plague, suggesting quarantine of individuals, identification of goods that might carry the plague, and destruction of infected ships.<sup>32</sup> Mead explained contagion in terms of the patient’s

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25 Margaret DeLacy, *The Germ of an Idea: Contagionism, Religion, and Society in Britain, 1660-1730* (New York: Palgrave Macmillan, 2016).

26 Henshaw, *Urban Smellscape*, 68; Emily Cockayne, *Hubbub: Filth, Noise and Stench in England* (New Haven: Yale University Press, 2007), 242-3.

27 See William Tullett, *Smell in Eighteenth-Century England: A Social Sense* (Oxford: Oxford University Press, 2018); A.S. Barwich, *Smellosophy: What the Nose Knows* (Cambridge, Mass.: Harvard University Press, 2020).

28 Mary Dobson, *Contours of Death and Disease in Early Modern England* (Cambridge University Press, 2003), 15.

29 Charters and McKay link Douglas’ argument to epidemics more broadly, as “disease out of place.” Mary Douglas, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo* (London: Routledge, 2002 [1966]), 44-5; Charters and McKay, “The history of science,” 227.

30 On the neurology of smell, see Barwich, *Smellosophy*, 156-57.

31 Other contemporary writings also compared past and present, such as an anonymous sixteen-page pamphlet from 1721 on *The Late Dreadful Plague at Marseilles Compared with that terrible PLAGUE in London, in the Year 1665* (London: H. Parker, 1721). The Defoe edition used throughout this essay is “A Journal of the Plague Year,” in *Romances and Narratives by Daniel Defoe*, ed. George A. Atkins, Volume IX (London: J.M. Dent & Co., 1895).

32 Philip Rose to Hans Sloane, British Library Sloane MS 4046, ff. 175-176, 8 January 1721/2; *Daily Journal*, 4 October 1721.



blood putrefying and corrupting to create an infectious matter that might spread into the environment.<sup>33</sup> But older medical explanations, centered on smell, remained common. Miasma, or bad air, was associated with anything perceived to be malodorous (including clouds, rotten meat, body odor, and crowded urban spaces) and was an important index of public health. Just as porous bodies might admit external threats, they could also emit threats to the outside world.<sup>34</sup>



## 2. Rosemary and Sensory Shifts

Any strong scent was a reminder of the body's vulnerability and exposure to the air around it, although sweet smells had long been thought to protect against the plague. A widely disseminated fourteenth-century treatise on the plague, for example, drew on classical theories to recommend smelling "roses, violets, lilies, white and red sandalwood, musk or camphor if the weather is misty or the air quality is bad."<sup>35</sup> In the mid-sixteenth century, Andrew Boorde prescribed sprinkling powdered myrtle and rose petals over bedsheets to ward off plague and sweating sickness.<sup>36</sup>

Early modern recipe books also include numerous plague preventatives composed of aromatic ingredients. The smells that surrounded you mattered: perfumes offered an important way to protect the body from dangerous air, creating a physical barrier between the nose and the world. Rosemary, alongside other aromatic herbs and woods, was a common preservative against plague.

Widely available, the fragrant, evergreen needles of rosemary were often used in medicinal and culinary recipes. Herbalist John Gerard, for example, noted that the English used it in hedges and it grew wild in many parts of Britain. It was used on a daily basis to sweeten breath, treat memory loss, and prevent household vermin.<sup>37</sup> Ordinarily, it was relatively inexpensive in the cities. Dekker noted in *The Wonderful Yeare* (1603) that although rosemary usually sold for twelve pence an armful, during the 1603 outbreak it cost six shillings per handful, an expense that few could afford.<sup>38</sup> Dekker's striking image of Londoners hunching down into their collars—"miching and muffled," herbs stuffed in their orifices, "looking like so many Bores heads stuck with branches of Rosemary, to be served for Brawne at Christmas"—captures not only the economic effects of plague on the cost of aromatic preventatives, but also the sensory shifts in

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33 Kevin Siena, *Rotten Bodies: Class & Contagion in 18th-Century Britain* (New Haven: Yale University Press, 2019), 54. DeLacy also discusses the advice of Arbuthnot, Mead and Sloane: *Germ of an Idea*, 154-57.

34 Tullett, *Smell in Eighteenth-Century England*, 43-44.

35 John of Burgundy, "Treatise on the Epidemic," in *Medieval Medicine: A Reader*, ed. Faith Wallis (Toronto: University of Toronto Press, 2019), 424. For more on medieval medical treatises and plague, see Julie Orlemanski, *Symptomatic Subjects: Bodies, Medicine, and Causation in the Literature of Late Medieval England* (Philadelphia: University of Pennsylvania Press, 2019). See also Melissa Reynolds, "'Here Is a Good Boke to Lerne': Practical Books, the Coming of the Press, and the Search for Knowledge, ca. 1400-1560," *Journal of British Studies* 58, no. 2 (2019): 259-288.

36 Andrew Boorde, *The Breuiarie of health* (London, 1587), sig. D5.

37 John Gerard, *The Herball or Generall Historie of Plants*, t. 3 (London: John Norton, 1597): 1110-1111.

38 The National Archives Currency Converter indicates that 12 pence (or 1 shilling) was one day's wage for a skilled tradesman in 1600.

maneuvering city life.<sup>39</sup>

Rosemary's dominance as a plague preventative shifted its symbolic meanings. The long-lasting needles symbolized loyalty and remembrance—and untimely death. For instance, in William Shakespeare's *Romeo and Juliet* (1597), a play that features an outbreak of plague in its plot, rosemary is both an image and prop. Juliet's nurse teases her: "does not rosemary and Romeo both begin with R?"<sup>40</sup> Rosemary may have even been used as a prop during the play's final scene when mourners strew "bridal flowers" before the family's tomb. Ophelia also reminds her brother Laertes in *Hamlet* (1603) that rosemary is an herb used "for remembrance" (4.5.200) right before she drowns from madness and grief. Such literary allusions demonstrate how certain

smells could quickly become associated with plague and death. Those in the audience likely had firsthand experience of the smell of rosemary, allowing Shakespeare to draw on visceral experiences of contagion for dramatic effect.

Rosemary featured prominently in medicines to treat plague and prevent infection. Early modern households gathered medical knowledge in recipe books, handwritten manuscripts containing primarily culinary and medicinal recipes. Sometimes households solicited recipes through their social networks during periods of acute illness. But most often, recipe book compilers anticipated that they would need medical formulas to combat common illnesses and maladies: eye and tooth pain; wound care and animal bites; complaints



Figure 1. To make Plague water. English cookery and medicine book, [manuscript]. Folger Shakespeare Library, Call Number V.b.380, 141.

39 Thomas Dekker, *The Wonderfull Yere* (London: Printed by Thomas Creede, 1603), Sig. D3.  
40 William Shakespeare, *Romeo and Juliet*, 2.4:209-210. All quotations from Shakespeare's plays are from Shakespeare, *Shakespeare's Plays, Sonnets and Poems*, eds. Barbara Mowat, Paul Werstine, Michael Poston, and Rebecca Niles, accessed May 25, 2021.

related to fertility, pregnancy, and childbirth; fevers and chills; digestive ailments; and, of course, plague.<sup>41</sup> Remedies like this one, “To make Plague water” suspended fragrant herbs, including rosemary, in alcohol and distilled their essences into a healing water that could be used to inure the healthy and treat the sick.<sup>42</sup>

55 To make Plague water.  
Take Rue, Agremony, Wormwood,  
Selandine, Red Sage,  
Balm, Mugwort, Dragons, Fetherfew,  
Burnett, Sorril,  
Tormentil, Scordium, Cardus-Benidictus,  
Dittanter, Bittany, Mary-  
-golds, Scabius, Peniroyal, of Each half a  
pound, Rosemary

one pound, a quarter of a pound of  
Angellico leaves, a good  
quantity of Elingcompane roots:  
Cowslips, Marygolds, Buraige  
Clovegilly flowers, of each a good  
quantity, Anniseeds & Corrande  
of each 2 ounces, strip and pick all your  
herbs, then cut them  
very small and put them in a vessell close  
cover'd, put to them  
3 Gallons of sack or white wine and 2  
quarts of Brandy  
stirr it 2 or 3 times a day for 2 or 3 days  
together, then  
distill them in a Cold Still or Limback.

This recipe called for a whole pound  
of Rosemary, the dominant herb in the



Figure 2. Eucharius Rösslin, *Kreuterbüch, von natürlichem Nutz, und gründtlichem Gebrauch der Kreutter, Bäum, Gesteud, unnd Früchten, fürnemlich Teutscher Lande. Deszgleichen der Gethier, edlen Gesteyn, Metal, und anderer Simplicien und Stucken der Artzney. Mit aller deren fleissiger Beschreibung, und leblichen Abconterfeytungen. Distillierns Bereydtschafft, und Bericht, kostbarliche Wasser zubrennen, abziehen, halten, und zugebrauchen* (Getruckt zu Franckfurt am Meyn: Bei Christian Egenolffen, 1550).

41 This paragraph uses Elaine Leong’s framework for thinking about the household and its social networks. Elaine Leong, *Recipes and Everyday Knowledge: Medicine, Science, and the Household in Early Modern England* (Chicago: University of Chicago Press, 2018).

42 For more on this recipe see Marissa Nicosia, “Plague Water,” *Cooking in the Archives*, April 2, 2020.

mixture.<sup>43</sup> Despite the use of herbs grown in gardens and meadows throughout Britain, this remedy included expensive imported brandy and white wine or sack (Spanish wine). The “Cold Still or Limback”-- an alembic flask--was required to prepare the healing water, but it was a kitchen tool only found in elite households (Figure 2). Access to home remedies was thus delineated by class status. In many ways, the history of plague preventatives is a material history of domestic life for the very wealthy: spices, luxuries, expensive tools.

Specialized equipment also helped to protect medical practitioners in infected spaces. Small and portable, pomanders were designed to hold powerful aromatics that could serve as a prophylactic against diseased air. Worn from chains around the neck or from the waist, pomanders

enabled health practitioners—and the elites who could also afford them—to protect themselves at a moment’s notice. Not unlike eerie seventeenth-century images of plague doctors wearing elaborate protective gear, pomanders emphasized the need to protect the nose and mouth from contaminated air. The iconic plague doctor’s mask, for example, was intended to keep miasma away from the eyes, while the beak could be filled with fragrant, protective herbs.<sup>44</sup>

The poor resorted to different remedies. Thomas Cook suggested an emetic of warm water and salt, blistering plasters, and staying warm in bed, while Stephen Bradwell recommended a face wash of water, vinegar, and rue water.<sup>45</sup> The wealthier were enjoined to practice medical charity by providing remedies to the poor, as per *A Directory for the Poore, against the Plague and Infectious*



Figure 3. Three pomanders. 17th Century. Wellcome Collection.

43 Many recipe books from the period century include multiple, even contradictory, recipes for treating plague, which attests to a widespread fear of contracting the disease and prevalence of infection. This single page of this seventeenth-century manuscript (Folger Shakespeare Library, E.a.5, 184r) includes four recipes for plague preventatives. Medical miscellany [manuscript], ca. 1634. Folger Shakespeare Library, Call Number: E.a.5.

44 As described, for just one example, by the anonymous author of *The Late Dreadful Plague at Marseilles*, 13.

45 Thomas Cock, *Advice for the poor by way of cure & caution* (London, 1665), 2-3; Steven Bradwell, *A Watch-man for the Pest* (London, 1625), 18.

*Diseases* (1665).<sup>46</sup> The preferred treatment here, too, was to protect oneself from contaminated air. Aromatic herbs and rushes might be an affordable alternative, so much so that Dekker described 1603 London as a charnel house: its streets “strewed with blasted Rosemary...and fatal Cipresse and Ewe, thickly mingled with heapes of dead men’s bones.”<sup>47</sup> Print advice recommended that the poor clean their pestiferous homes by burning rosemary or other aromatics on their fires. This assumed, of course, that a family even had a hearth and could afford the cost of rosemary. Cleansing the home took precedence over grieving.



### 3. Diseased bodies and “noisome smell”

The physical symptoms of plague smelled unpleasant. The pus from buboes or fetid sweat and breath, vomiting and diarrhea, were strong—and ubiquitous—smells. Seventeenth-century Dutch physician Diemerbroeck noted that diarrhea was a bad prognostic, with “hardly one in a hundred escaping” death; bloody stools were mortal.<sup>48</sup> The pus from bodily ulcers was notoriously foul. In *A Treatise on Venereal*

*Disease* (1774), N.D. Falck distinguished between types of buboes, from venereal and scorbutic to plague, but the differences were in physical appearance, not smell.<sup>49</sup> The “ichor from a phagedaenic ulcer [one that eats away at the flesh], or from a sphacelus [lump of mortified tissue], is not only more offensive in smell, but sharper than any thing from the most putrid cadaver.”<sup>50</sup> Or as Physician Nathaniel Hodges, writing in the late-seventeenth century, described it, bubo pus was “so extreemly fetid, as not to be endured by the Nose.”<sup>51</sup> Other plague smells, such as “extreemly fetid” feces, vomit “so fetid, that a Person cannot endure the Room without holding his Nose,” and sweat with “a cadaverous smell,” were bad prognostics that indicated “certain fatality.”<sup>52</sup> “Fetid” seems imprecise but suggests the scent’s ability to overpower spaces and the smeller’s reaction. Dutch physician Jan Baptist van Helmont (1580-1644) reported that during an outbreak in Ostend, he could identify infected people by their odor: it “is wont a little to smell of the soales of shooes burnt.”<sup>53</sup>

A visual representation of plague from the sixteenth century emphasizes the role played by the smell of death during quarantine (Figure 4). In the image, medical practitioners cover their noses and mouths while navigating a room filled with the

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46 Roger Dixon, *A directory for the poor, against the plague and infectious diseases. : Published for the common good...* (London, 1665).

47 Dekker, *The Wonderfull Yeare*, Sig C3 v.

48 Peter Shaw provided a long list of plague symptoms, which included these. Peter Shaw, *A New Practice of Physic*, 4th edition (London, 1735), 166; Isbrand van Diemerbroeck, as excerpted in John Allen, *Synopsis Medicinae: or, a Summary View of the Whole Practice of Physick*, vol. 1, 3rd edition (London: W. Innes, W. Meadows, R. Manby, H.S. Cox and the Executor of H. Pemberton, 1749), 87.

49 N.D. Falck, *A Treatise on the Venereal Disease in Three Parts*, 2nd edition (London, 1774), 197-200.

50 Falck, *Treatise*, 78.

51 Nathaniel Hodges, *Loimologia: or, an Historical Account of the Plague in London in 1665* (London: E. Bell, 1721): 116. The book was first printed in Latin in 1671. There were five reprints in 1720-1, according to the *English Short Title Catalogue*.

52 Hodges, *Loimologia*, 106, 143-4, 192.

53 Van Helmont, *Works*, trans. J.C. (London: Lodowick Hoyd, 1664), 1123.



(Fig. 4). — *La Peste*. Gravure sur bois d'Hans Weiditz pour le *Trostspiegel im Glück und Unglück* de Pétrarque, édition d'Augsbourg 1535. — Deux personnages s'approchent d'un pestiféré en se masquant le nez et la bouche avec un linge. Remarquer les cadavres d'animaux victimes de l'épidémie : chien, chat, coq, rat, etc.

Figure 4. Hans Weiditz the Younger, for Francesco Petrarca's *Trostspiegel im Glück und Unglück* (Augsburg, 1535).

dead and dying, including animals. On the bed, one sufferer had a leaking bubo—that smell worse than death.<sup>54</sup> But what of the inhabitants of such households? Although the disease's impact and effect were virulent and swift, the infected were required to shelter in place for at least a forty-day period. It is easy to imagine how the stench of ill family members—diarrhea, vomiting, sweat, pus—overwhelmed the cramped spaces of quarantined families, trapping them for what must have seemed an eternity. It would be difficult to witness any plague symptoms (such as fear, delirium, and convulsive twitching), but the pervading stink made death's proximity inescapable. In *Romeo and Juliet*, for instance, Juliet imagines death through what sounds like tales of plague, her imagery eerily similar to how Dekker would later describe London

during times of plague: “Or hide me nightly in a charnel house,/ o'ercovered quite with dead men's rattling bones,/ With reeky shanks and yellow chapless skulls./ Or bid me go into a new-made grave/ And hide me with a dead man in his shroud/ (Things that, to hear them told, have made me tremble)” (4.1:80-85).

For modern sensibilities, the vagueness of such descriptions—of Juliet's “reek” bones or of Hodges' term “cadaverous smell”—is frustrating, though Hodges' phrase was meaningful to early modern medical writers who frequently used it to describe the smell of bodily excretions when death was imminent. The smell “of mortality,” to quote King Lear (4.6.148), was carrion-like—or (as explained to lay readers in 1745) was “as of rotten Flesh.”<sup>55</sup> There is a very real smell of death, composed of

54 Hans Weiditz the Younger, for Francesco Petrarca's *Trostspiegel im Glück und Unglück* (Augsburg, 1535).

55 Dennis De Coetlogon, *An universal history of arts and sciences* (London, 1745), 460.

distinct odors caused by microbes altering the body's organic matter and initiating decarboxylation of amino acids releasing molecules such as cadaverine, putrescine, indole, skatole, and spermidine. These molecules provide an olfactory warning (or enticement) to other creatures nearby. Thomas Lodge warned that plague could remain in households even after the sick were removed, especially in any clothing and bedding exposed to "the breath, sweat, spittings, or vapor that issueth from the sick."<sup>56</sup> These smells lingered, fostering connections between olfaction, plague, and death in the general population. Fear and suspicion lingered even after these measures were taken; households marked by plague were viewed suspiciously by city officials and neighbors long after quarantine ended.<sup>57</sup>

Hodges, however, was suspicious of those who claimed they could smell plague entering a region, either as "the Stench of a Rotten Carcase" or "the Fragrance of Flowers in May."<sup>58</sup> That said, the smell of death was in the air but as the effect of plague, not its cause. And it was feared: plague orders required that the dead be buried in separate places to churchyards and covered in quicklime, not to be exhumed for at least a year "less they infect others."<sup>59</sup> The scale of the plague led to mass burials wherever there was space. Such sites remained a source of unease into the 1720s. Despite

the need for space to accommodate rapid urban growth, authorities thought that the health risk of building on old plague pits was too great.<sup>60</sup> Perhaps with good reason. Bioarcheological evidence from the excavation of London's East Smithfield emergency burial site from the plague in 1348/49 shows that some of the victims of plague were buried long after the time of death.<sup>61</sup> Though data is limited, it is likely that other emergency burial sites will reveal similar evidence. At the very least, bodies in mass pits were often buried too close to the surface, allowing smells to creep out. Defoe described how a massive "gulph" intended to last a month—and far larger than a regular mass burial pit—was filled with 1114 bodies in two weeks (September 6-20): "the Bodies being then come to lie within six Foot of the Surface."<sup>62</sup> Plague spiked in the summer months, increasing the speed of bodily decay. Simply put, the smell of death was a reality of London during a plague outbreak.

Plague orders from London outbreaks in 1583 and in 1603 connected plague with poverty and disorder. The poor were seen as a source of pestilence, with social commentators blaming the high infection rates among the impoverished on inadequate hygiene. By linking plague with immorality, bad smells, and uncleanness, seventeenth-century physicians inscribed disease on the bodies of the poor. Dekker

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56 Thomas Lodge, *A treatise of the plague* (London, 1603), chapter XVII.

57 On stigma and quarantine in the 1636 London outbreak, see Kira S. Newman, "Shutt Up: Bubonic Plague and Quarantine in Early Modern England," *Journal of Social History* 45, no. 3 (Spring 2012): 809-834.

58 Hodges, *Loimologia*, 34.

59 *Orders for the Plague, 1666*, National Archives, Ms. Sp SP29/155, f. 102.

60 Lisa W. Smith, "Hans Sloane and the Pit," *The Sloane Letters Project*, March 15, 2013, <http://sloaneletters.com/hans-sloane-and-the-pit/>.

61 Sharon N. DeWitte, "The Anthropology of Plague: Insights from Bioarcheological Analyses of Epidemic Cemeteries," in *Pandemic Disease in the Medieval World: Rethinking the Black Death*, ed. Monica H. Green (Kalamazoo and Bradford: Arc Humanities Press, 2015), 97-124.

62 Defoe, *Journal of a Plague Year*, 67-68.

describes how the urban poor congregates in “unsought Allies and unholosome places” and in “shamble-smelling roomes.”<sup>63</sup> In 1604, plague orders penalized anyone found in public spaces with a plague sore with whipping and - if found in the company of others - hanging.<sup>64</sup> Searchers in 1603 were directed to look both for outbreaks of plague and for vagrants, who were whipped, banished, or sent to Bridewell.<sup>65</sup> Plague and the poor alike threatened the body politic in early modern accounts.<sup>66</sup>

But the poor really did suffer more from plague, which was endemic in London— even during ordinary years—well into the eighteenth century. Plague deaths in 1603 were exponentially higher in neighborhoods (or “liberties”) just outside of London than in those inside the city; these were crowded

areas populated mostly by the working poor and by people who were prohibited from legally working in the city.<sup>67</sup> These areas were outside of the city’s jurisdiction, but close enough for traffic from the city, to allow licit and illicit industries to thrive, including entertainment industries.<sup>68</sup> In Southwark, an area of London known for its theatres (including the Rose, the Swan, the Globe, and the Hope theatre), was particularly hard hit: the highest number of plague-related deaths in London in 1603 was recorded in St. Olave Parish in Southwark: 2383 people died of plague out of the 2541 deaths recorded in the parish that year.<sup>69</sup>

Though such statistics offer only a snapshot of how plague impacted London’s population, the correlation between mortality and areas associated with poverty



Figure 5. Parishes with over 1,000 plague-related deaths in 1602-1603.

63 Dekker, *The Wonderfull Yeaere*, sig. B3 v.

64 Margaret Healy, *Fictions of Disease in Early Modern England*, 93.

65 Margaret Healy, *Fictions of Disease in Early Modern England: Bodies, Plagues, and Politics* (New York: Palgrave Macmillan, 2001), 93.

66 See Tullett, *Smell in Eighteenth-Century: Andrew Wear, Knowledge & Practice in English Medicine, 1550-1680* (Cambridge: Cambridge University Press, 2000), 284-5; Siena, *Rotten Bodies*, 22, 45.

67 Beth Norris, “London Alien,,” *The Map of Early Modern London*, ed. Janelle Jenstad, accessed September 15, 2020.

68 The Worshipful Company of Parish Clerks, *A true Report*, 1603.

69 The Worshipful Company of Parish Clerks, *A true Report*, 1603.



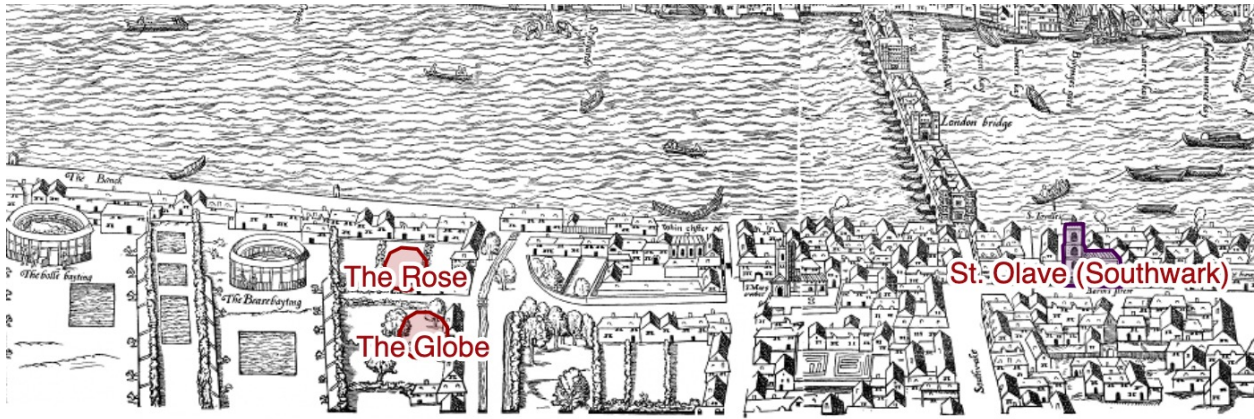


Figure 6. Church of St. Nicholas Olave in Southwark, an area known for its entertainment industries including bear-baiting arenas and playhouses.

reveals how marginal many plague victims were. Wealthier parishes had less crowded residences and stone building materials, thought to protect inhabitants from rats, fleas, and lice.<sup>70</sup> In this context, smell was used as an index of hygiene and disease, justifying ordinances throughout the British Atlantic world that targeted the poor, foreign, itinerant, enslaved, and vulnerable.<sup>71</sup> In his *Survey of London* (1598), antiquarian John Stowe describes Bishopgate Ward, especially the area near Bedlam Hospital, as “too much pestered with people (a great cause of infection).”<sup>72</sup> Though smell doesn’t factor largely into Stowe’s *Survey of London*, most of his references to the smells of London focus on malodorous smells associated with filth and poverty.<sup>73</sup>

#### 4. Gender, Smell, and Essential Work

Most people remained in London out of economic necessity, providing essential labor at high risk to themselves and their families. Plague treatises, however, tend to represent the city as empty. In August 1665, diarist Samuel Pepys observed that two-thirds of the shops were closed.<sup>74</sup> A couple of months later, he described the streets as empty and melancholy, filled only with stories about the sick and the dead.<sup>75</sup> Unemployment went up during times of plague, making it harder to survive. Defoe, for example, described how “all trades being stopped,

70 Cummins, Kelly and Ó Gráda, “Living Standards,” 8-9, 16-17, 30.

71 On links between smell, plague, and racism, see Andrew Kettler, *The Smell of Slavery: Olfactory Racism and the Atlantic World* (Oxford: Oxford University Press, 2020); for links between smell, plague, and debased labor industries, see Carol Rawcliffe, *Urban Bodies: Communal Health in Late Medieval English Towns and Cities* (Woodbridge, Suffolk: Boydell and Brewer, 2013), 106.

72 John Stow, *A suruay of london contayning the originall, antiquity, increase, moderne estate, and description of that citie, written in the yeare 1598* (London: [Imprinted by John Windet for] Iohn Wolfe, 1598), sig. D.

73 Holly Dugan, “London Smellwalk around 1450: Smelling Medieval Cities,” in *The Oxford Handbook of Later Medieval Archeology in Britain*, eds. Christopher Gerrard and Alejandra Gutierrez (Oxford: Oxford University Press, 2018), 736.

74 Wednesday 16 August 1665, *The Diary of Samuel Pepys: Daily Entries from the 17th Century London Diary*.

75 Monday 16 October 1665, *The Diary of Samuel Pepys: Daily Entries from the 17th Century London Diary*, <https://www.pepysdiary.com/diary/1665/10/16/>, accessed June 11, 2021.

employment ceased: the labor, and by that the bread, of the poor were cut off”; it was only through “charity their misery that way was greatly abated.”<sup>76</sup> The people most likely to be in the streets, however, were the poor; as Defoe pointed out, they were the ones who needed to buy their food daily, as they could not store provisions.<sup>77</sup> Defoe directly asks his readers to “consider what must be the miserable condition of this town if, on a sudden, they should be all turned out of employment, that labour should cease, and wages for work be no more.”<sup>78</sup> While many early modern writers associated the poor with disease, many towns and cities also felt obligated to provide additional resources for those hardest hit. London’s guildhall records from 1665-1666 show substantial expenditures on food and medical supplies, as well as money given to poor parishes, documenting the essential labor required to deal with plague.<sup>79</sup>

Business did not stop altogether, though. Defoe also suggested how people’s behavior changed to accommodate their continued need to move around the city. People walked in the middle of the street to avoid getting close to others; to be beyond another’s breath was safer. Those bringing food to London remained at the entrances of the city to sell it, which shifted marketplace scents, while customers

carried exact change that butchers placed into bottles of vinegar—evoking the sharp tang of acid hitting metal.<sup>80</sup> Quarantine of infected houses might have been an effective measure, but it also drove people to flout it. It was considered a punishment, especially to those who were impacted economically; evidence from the 1636 outbreak suggests that those most likely to disobey orders were tradesmen—coachmakers, fishmongers, grocers, innholders, and tailors, willing to pay fines in order to continue doing business.<sup>81</sup>

Dealing with plague on a city-wide level required specific workers with expertise in what was typically thought of as domestic labor. Early modern women performed much of the work of caretaking for the ill inside the home; the culinary and medicinal knowledge developed through everyday household tasks allowed them to be effective nurses during plague epidemics.<sup>82</sup> Their skills were also useful to local authorities attempting to quantify the effects of the disease.<sup>83</sup> Parishes often hired women, especially widows, as “searchers” of the dead. The widows were likely poor, willing to take on the risk of infection for economic compensation.<sup>84</sup> Searchers would have been a familiar sight to early modern Londoners, though their role in fighting plague (and indeed in quantifying and corroborating

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76 Defoe, *Journal of a Plague Year*, 110.

77 Defoe, *Journal of a Plague Year*, 110.

78 Defoe, *Journal of a Plague Year*, 110.

79 A. Lloyd Moote and Dorothy Moote, *The Great Plague: The Story of London’s Most Deadly Year* (Baltimore: Johns Hopkins University Press, 2006), 252.

80 Defoe, *Journal of a Plague Year*, 90.

81 Newmann, “Shutt Up,” 823.

82 See Rachel Clamp, “Plague nurses, cleansers, and searchers: the female key workers of seventeenth-century Newcastle,” Early Modern Quarantine Conference, June 26, 2020.

83 Richelle Munkhoff, “Reckoning Death: Women Searchers and the Bills of Mortality in Early Modern London,” in *Rhetorics of Bodily Health and Disease and Health in Early Modern England*, ed. Jennifer C. Vaught (Burlington, VT: Ashgate, 2013), 119-135, 121.

84 Munkhoff, “Reckoning Death,” 121.

the bills of mortality that provide much of our historical evidence of plague) has been largely forgotten.<sup>85</sup> Essential health workers, searchers were on the front lines of plague as they entered the households of the infected to confirm plague before wardens would require all inside to quarantine.<sup>86</sup> They were valued for their ability to identify, among other indicators, smells that indicated the presence of illness.

The gendering of caretaking responsibilities also led (in some instances) to higher mortality rates among women.<sup>87</sup> High infant mortality rates during the Renaissance meant that women were often pregnant during much of their child-bearing years. In recent scientific studies of plague and pregnancy, the virus was shown to increase maternal and neonatal mortality substantially.<sup>88</sup> Though maternal-neonatal transmission rates were low, respiratory symptoms (especially of septicemic plague) impacted fetal health, leading to strangulation in the womb. For those who just gave birth, quarantine disrupted lying-in, a period of time about the same length as quarantine though defined as a respite from household norms.<sup>89</sup> Smells also were

believed to directly affect maternal health: in her book of midwifery (published in 1671), Jane Sharp warns of “vapours that arise from stinking things” that could “defile the spirits contained in the parts of generation,” especially for those already infected with “ill humors.”<sup>90</sup>

For the uninfected, quarantines involved caretaking in a dangerous, enclosed environment. Punishment for violating quarantine was severe; those found with symptoms of plague in public spaces were punishable by hanging.<sup>91</sup> Urban homes were cramped and smelly—even at the best of times. Those lower down the social scale tended to live in shared spaces, such as alehouses or lodging houses, but townhouses in general typically had several tenants and workshops, with shared entrances and staircases.<sup>92</sup> The outside urban space itself must have felt like it was encroaching. More than metaphors, Defoe described the overwhelming smellscape of quarantine: a hot, smoky, heavily-scented environment, especially for the mourners confined with their dead. Burning rosemary and other aromatics produced high heat and lots of smoke; so, too, would the burning

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85 Clamp, “Plague Nurses,” June 26, 2020.

86 Richelle Munkhoff, “Searchers of the Dead: Authority, Marginality, and the Interpretation of Plague in England, 1574-1665,” *Gender and History* 11, no. 1 (April 1999): 1-19; *Orders for the prevention of the plague 1666*.

87 Daniel Curtis, “The Female Experience of Epidemics in the Early Modern Low Countries,” *Dutch Crossings: Journal of Low Country Studies* 45 (2021): 5.

88 Shannon Fleck-Derderian, Christina A Nelson, Katharine M Cooley, Zachary Russell, Shana Godfred-Cato, Nadia L Oussayef, Titilope Oduyebo, Sonja A Rasmussen, Denise J Jamieson, and Dana Meaney-Delman, “Plague during Pregnancy: A Systematic Review,” *Clinical Infectious Diseases* 70, no. 1 Supplement (May 2020): S30-S36.

89 Elaine Hobby, “Introduction,” in Jane Sharp’s *The Midwives Book: Or the Whole Art of Midwifery Discovered*, ed. Elaine Hobby (Oxford: Oxford University Press, 1999), xvi.

90 Jane Sharp, *The Midwives Book: Or the Whole Art of Midwifery Discovered*, ed. Elaine Hobby (Oxford: Oxford University Press, 1999), 99.

91 James I’s plague act of 1604 also justified the use of violence: See *An Acte for contynewing and revyving of divers Statutes, and Repeale of dyvers others*, Statues of the Realm, 21 Jac 1 c. 28).

92 Amanda Flather, “Gender and Home,” in Amanda Flather, ed. *A Cultural History of the Home in the Renaissance (1450-1648)*, vol. 4, ed. Amanda Flather (London: Bloomsbury, 2020), 132; Vanessa Harding, “Space, Property, and Propriety in Urban England,” *Journal of Interdisciplinary History* 32, no. 4 (2002): 559.

of contaminated linens. While we might assume that burning rosemary is aromatic, it is easily overburnt, becoming ordinary smoke.<sup>93</sup> The sensory presence of plague was smoke from the hearth as well as the windows. To prevent the plague, King Charles, for example, ordered in 1665 that fires in moveable pans be placed in all public meeting settings like churches and the Lord Mayor of London ordered that fires be lit in city streets, as Pepys described on 6 September 1665.<sup>94</sup>

Defoe captured the emotional and economic effects of quarantine for city-dwellers and laborers, with quarantine presenting serious challenges for those shut in the household while they cared for the ill and attended to their own grief. Clergyman Richard Kephale underscored the horror of the situation in 1665. He recounted how one poverty-stricken family died within the space of three days, trapped in their tiny, hot room. When the child died suddenly, neighbors refused to help, fearing it was the plague. The husband, who had been ill—and therefore unemployed—a long time died next, followed by the pregnant wife who died of grief.<sup>95</sup> Pepys witnessed the case of a sadler who was shut in with his wife, and all but one of their children had died of the plague. Anticipating certain death, the sadler lowered the child out of

the window to a friend.<sup>96</sup> The Justices of the Peace compassionately allowed the sadler's friend to keep the child without also being quarantined. Defoe, too, described the mental health effects of the plague on families: “distressed Mothers, raveing and distracted, killing their own Children,” people committing suicide or falling into “lunacy,” and streets filled with grievous cries.<sup>97</sup> To be quarantined during the plague was, effectively, to be trapped within one's home, surrounded by the fetidity of plague buboes, the sour stench of diarrhea, and the smoke of herbs on the fire.

The sensory and emotional experience of quarantine was likely overwhelming, shifting the rhythm of home life and intensifying dynamics of power in family systems. Domestic spaces were potentially violent spaces during ordinary times. A responsibility of the master of a household was to maintain the obedience of his family, including servants and apprentices, through physical correction; but so, too, did the mistress of the household use violence. Correction could easily cross into abuse. Domestic violence was not just one-way; male servants, for example, sometimes physically attacked the women in the household, including its mistress.<sup>98</sup> Then, as now, preventative safety measures for plague increased the threat of violence for those

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93 Phil Frost, “How to get a good fragrance from burnt rosemary?” Seasoned Advice discussion board, June 28, 2019, <https://cooking.stackexchange.com/questions/99820/how-to-get-a-good-fragrance-from-burnt-rosemary>.

94 Orders for the prevention of the plague 1666; Wednesday 6 September 1665, *The Diary of Samuel Pepys: Daily Entries from the 17th Century London Diary*, <https://www.pepysdiary.com/diary/1665/09/06/>, accessed June 11, 2011.

95 Wear, *Knowledge & Practice*, 284-5.

96 Sunday 3 September 1665, *The Diary of Samuel Pepys: Daily Entries from the 17th Century London Diary*, <https://www.pepysdiary.com/diary/1665/09/03/>, accessed June 11, 2021.

97 Defoe, *Journal of a Plague Year*, 132, 93.

98 Flather, “Gender and Home,” 131, 136, 138, 145.

facing abuse in the home.<sup>99</sup>



## 5. Return to normal?

It can be difficult to mark the endpoint of an epidemic: is it when businesses re-open? When we stop wearing masks? When a person is vaccinated? When the majority of the population is vaccinated? When and how does life return “to normal”? When will our daily experience of the cityscape smell normal? Following Rosenberg’s dramaturgic reading of epidemics, the return to normality is marked by a forgetting: the point when we no longer have to consider the disease as part of our daily life or feel a need to take collective action. The long-term effects of Covid-19 include a diminished sense of taste and smell; for those suffering from Long Covid or grieving the dead, it will be a long time before that happens. For many others, Covid-19 and its symptoms have emphasized the importance of smell to everyday life.

Rosenberg’s analogy, though, also points to another important index of a return to normalcy. Entertainment industries were strongly associated with the threat of smell in the early modern period. Theatres were repeatedly described by commentators as noisome. Though they remained open in 1603, when 30,000 Londoners died of plague, they closed for three years in 1606, when the plague returned. In his 1606

pamphlet describing the *Seven Deadly Sinnes of London*, Dekker suggests why, lingering on the stench of the playhouses, “smoakt every afternoon with the Stinkards who were so glewed together in crowds with the steames of strong breath that their faces lookt as if they had been per boyled.”<sup>100</sup> Dekker’s image of a space defined by the breath of masses is evocative, pointing to the trade-off for thriving city life: it made it all the more striking that they reopened in 1609.

Much was made of this theatrical hiatus in the early days of our pandemic, with optimistic commentators noting that Shakespeare wrote many of the plays seen to be his very best during this time. Over a year into the pandemic, however, it is the return to theatres by playgoers in 1609 that intrigues us. Given the sensory memories of plague we’ve outlined above—the ways it shifted almost every way of being in social space collectively—what made the young and vulnerable return to packed and crowded theatre venues? The desire for entertainment and financial opportunities offset the risks, including bad smells.<sup>101</sup>

Our pandemic is not over, as our smellscapes also reveal. We remain tied to the localized odors of our home neighborhoods, rather than following our usual scent trails into city centers. As Nükhet Varlik reminded us in October 2020, the history of diseases shows that few completely disappear: “Whether bacterial, viral or parasitic, virtually every disease

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99 For an example of abuse within the early modern home, see Lisa W. Smith, “Gender and Family Trauma in Eighteenth-Century England,” *Gender and History* 32, no. 1 (2020): 30-53. See also Caroline Bradburry-Jones and Louise Isham, “The pandemic paradox: The consequences of COVID-19 on domestic violence,” *Journal of Clinical Nursing* April 22, 2020.

100 Thomas Dekker, *The seuen deadly sinnes of london drawne in seuen seuerall coaches, through the seuen seuerall gates of the citie bringing the plague with them* (London: Printed by Edward] Allde and S. Stafford] for Nathaniel Butter, 1606), sig C2.

101 Cockayne, Hubbub, 243.

pathogen that has affected people over the last several thousand years is still with us, because it is nearly impossible to fully eradicate them.”<sup>102</sup> At the time of writing, theatres in London’s West End are beginning to re-open, hinting at the possibility of a return to normality. And yet, despite the rapid vaccine rollout, the emergence of dangerous Covid-19 variants leaves us to wonder: at what point will people enthusiastically share air with others again?

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102 Nükhet Varlik, “How Do Pandemics End?” *The Conversation*, October 14, 2020.

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