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Don't Breathe:

An Analysis of the Factors of the Victorian River Thames' Restoration

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The fastest bill to ever be signed into law by Parliament was created, signed, and passed in a record of eighteen days: “The Metropolis Local Management Amendment Act.”¹ This rapid legislation was enacted for the refurbishment of London’s River Thames in the year 1858 after a hot season had revealed the pressing issue of the river’s pollution. From an ecologically diverse river, flowing with clear water and a number of aquatic species, to a river that was virtually dead, the Thames suffered the effects of Industrialization like no other. In 1858 the pollution of the River Thames was at its pique, and the stench was exacerbated by the severe heat of the summer, reaching every corner of the city, from the pristine House of Parliament to the slums. The pollution of the Thames had been worsening over the years, inspiring a plethora of paintings, cartoons, and literature surrounding topics such as the drawbacks of industrialism, the pitfalls of policy, and the environmental and sanitary problems that permeated Victorian London. People feared the physical consequences of the filth, such as illnesses, but also the significance of the pollution in terms of what it reflected about the growing and changing city of London. In effect, the horrific pollution of the Victorian River Thames prompted a surge of imagery and rhetoric in popular media expressing concerns surrounding the state of the river and its health implications, creating anxieties both physical and moral about the effects of the Industrial Revolution. Such rhetoric, coupled with the widespread reach of the Thames by the Great Stink of 1858 and the continued presence of cholera, resulted in rapid and effective action in restoring the Thames through the plans of Sir Joseph Bazalgette and re-establishing clean drinking water for the London masses.

In the course of mere decades, the River Thames transformed from a body of water that was thriving and full of biodiversity to one that was polluted beyond imagination. Prior to the

¹ William A. Cohen and Ryan Johnson, *Filth: Dirt, Disgust, and Modern Life*, (Minneapolis: University of Minnesota Press, 2005), 107.

nineteenth century, the river was the shining jewel of London and the source of the city's prosperity in commerce, trade, and economic power. Paradoxically, as London grew with the help of the Thames, which was ideally situated for the accessible movement of people and things, the river subsequently declined.² The Industrial Revolution weighed heavily on the river as the once pristine ecosystem was spoiled by the waste from slaughterhouses, untreated sewage, and other industrial factories that were rapidly increasing on the river's edge.³ London's original sewer system was structured in such a way that concealed streams, designed solely for rain water, would flow directly into the Thames. However, as the city quickly industrialized, the modern day toilet was introduced and rapidly received by residents. The increasing population of the city, coupled with this new utility, pushed the cesspools that were originally subject only to outhouses past capacity. This overwhelm experienced by the cesspools forced officials to retract the enduring prohibition against connecting the cesspools with the streams of the sewer system in 1815.⁴ The subsequent linkage of the two entities resulted in the exponential increase of fecal matter in the Thames. The Thames suddenly became an epicenter of waste as all of the sewage was sent directly to the river along with the excess of other industries such as tanners and soap manufacturers, as well as the newly introduced production of coal gas for energy purposes.⁵

As the state of the river continued to decline, the public grew increasingly concerned with the pollution and its health implications, which impacted the impoverished the most. Influential

² Alison Byerly, "Total Immersion: Navigating the Thames," In *Are We There Yet?*, (University of Michigan Press, 2012), 87, <https://ebookcentral-proquest-com.proxy.lib.pdx.edu/lib/psu/reader.action?docID=3415113&ppg=94>.

³ Srujan Chada Chada, "London's River Thames: From Filthy, Foul-Smelling Drain to One of the World's Cleanest Rivers," *The Logical Indian*, May 17, 2017, <https://thelogicalindian.com/environment/river-thames/>.

⁴ Jonathan Ribner, "The Thames and Sin in the Age of the Great Stink: Some Artistic and Literary Responses to a Victorian Environmental Crisis," *The British Art Journal* 1, no. 2 (2000): 38-46, <https://www-jstor-org.proxy.lib.pdx.edu/stable/pdf/41614963.pdf?refreqid=excelsior%3A6ec40f5307198c4a8ab2ffe80df72380>.

⁵ M. J. Andrews, "Thames Estuary: Pollution and Recovery," in *Effects of Pollution at the Ecosystem Level*, (John Wiley & Sons, 1984), 201, https://scope.dge.carnegiescience.edu/SCOPE_22/SCOPE_22_2.2_Andrews_195-228.pdf.

figures such as scientist Michael Faraday warned policymakers of the severity of the issue and further exhorted them to act before they were faced with the unpleasant reality during a hot season.⁶ In the summer of 1858, this reality was in fact brought to a gruesome light. Accurately referred to as the Great Stink, London faced a season of record-breaking heat, dropping the oxygen in the river to unsurvivable levels.⁷ The build-up of sewage in the Thames, that had produced a swirling stream of refuse and sludge, was rapidly decomposing in the heat, and bearing a smell that sent the city into chaos and protest.⁸ The smell not only forced people to recognize the austerity of the contamination, but also produced severe concerns regarding its health ramifications. In 1832, London experienced its first of three cholera outbreaks that would continue until 1854, claiming an estimated thirty-five thousand lives.⁹ Medical knowledge at the time originally claimed that miasma, foul air, was the cause of the disease. However, in 1854, John Snow proved that cholera was waterborne by removing the water handle on a communal water pump and finding that the area was not infected; this theory was not readily accepted by politicians nor the city, as it was rejected by the Committee of Scientific Inquiry.^{10 11} Poor communities were at most risk from the river's pollution. Mudlarks, or river finders, were individuals who scavenged the banks of the Thames, or even the sewers, in search of valuables. Looking for items such as copper, iron, and woodchips, they often worked shoeless and waded waist-deep through the sludge.¹² Additionally, according to Charles Booth's poverty map, the

⁶ Peter Kandela, "The Thames," *The Lancet (British Edition)* 353, no. 9166 (1999): 1809, <https://www.sciencedirect-com.proxy.lib.pdx.edu/science/article/pii/S0140673605759225>.

⁷ Chada Chada, "London's River Thames: From Filthy, Foul-Smelling Drain to One of the World's Cleanest Rivers."

⁸ Michael Brooks, "Dale H. Porter, The Thames Embankment: Environment, Technology, and Society in Victorian London," *Nineteenth-Century Prose* 26, no. 1 (1999): 150, *Gale Literature Resource Center*, <https://link.gale.com/apps/doc/A188966805/LitRC?u=s1185784&sid=googleScholar&xid=71da236d>.

⁹ Chada Chada, "London's River Thames: From Filthy, Foul-Smelling Drain to One of the World's Cleanest Rivers."

¹⁰ Miriam Bibby, "London's Great Stink," *Historic UK*, accessed December 14, 2021, <https://www.historic-uk.com/HistoryUK/HistoryofBritain/Londons-Great-Stink/>.

¹¹ Stephen Halliday, preface to *The Great Stink of London: Sir Joseph Bazalgette and the Cleansing of the Victorian Capital*, (Thrupp, Stroud, Gloucestershire: Sutton Pub, 1999), xii.

¹² Geri Walton, "Mudlarks or River Finders of the 1700 and 1800s," *Geri Walton: Unique Histories from the 18th and 19th Centuries*, January 7, 2014, <https://www.geriwalton.com/child-mudlarks/>.

land among the river was predominantly inhabited by poor individuals, who were also subject to devastating floods that destroyed the communities being built along the floodplains as a result of inadequate embankments.^{13 14} Furthermore, while being directly exposed to the river effluent, the poorer communities often lived in filthy conditions without adequate access to drains or sewers. The wealthier members of London society could afford their own cesspools that were periodically cleaned. As the population of London rapidly increased, slum lords would rent separate rooms in a house to individual families who all shared a cesspool that no one cared to empty.¹⁵ In 1842, Edwin Chadwick, an influential sanitary reformist, released his *Report on the Sanitary Condition of the Labouring Population of Great Britain*. This monumental publication revealed a connection between poor living conditions and the spread of disease, which led Chadwick to his exhortation of the government to improve sanitary conditions in the form of clean water and improved drainage systems in order to improve the efficiency of the laboring class.¹⁶ Thus, the river pollution became more than a bad smell; it became a physical threat. This threat was particularly evident in the changing depictions of the Thames in popular literary works.

The imagery of the Thames in works of art and literature prior to the 1800's starkly contrasted the imagery during the pique of the river's pollution, suggesting that the decaying Thames was becoming more and more noticeable to people throughout the city. Poetry and novels of the 1700's and prior reflected an admiration and love for the Thames' beauty and

¹³ Charles Booth, "Map: Charles Booth's London," Map: Charles Booth's London, accessed December 3, 2021, <https://booth.lse.ac.uk/map/16/-0.0383/51.5103/100/1>.

¹⁴ "Flooding on the Thames River," *Upper Thames River Conservation Authority*, May 31, 2021, <https://thamesriver.on.ca/water-management/flooding-on-the-thames-river/>.

¹⁵ Ian Angus, "Cesspools, Sewage, and Social Murder: Environmental Crisis and Metabolic Rift in Nineteenth-Century London," *Monthly Review*, July 1, 2018, <https://monthlyreview.org/2018/07/01/cesspools-sewage-and-social-murder/>.

¹⁶ Stephen Halliday, *The Great Stink of London: Sir Joseph Bazalgette and the Cleansing of the Victorian Capital*, (Thrupp, Stroud, Gloucestershire: Sutton Pub, 1999), 37.

superiority. In James Thomson's poem *Autumn*, one of four in his collection, *The Seasons* (1746), he admired the Thames for its significant role in the industrialization of London and appreciated how the flow of the river supported such abundant commerce.¹⁷ Similarly, John Fisher Murray quoted Sir John Denham in his work, *A Picturesque Tour of the River Thames in its Western Course: Including Particular Descriptions of Richmond, Windsor, and Hampton Court*, when describing the Thames as, "...deep, yet clear, though gentle, yet not dull, strong without rage, without overflowing full."¹⁸ ¹⁹ Quoted from his poem, *Cooper's Hill* (1642), Denham esteemed the river for being of such a balanced nature that it could be both "gentle" and "strong" as well as both "deep" and "clear." The river was essentially a symbol of perfection, embodying valuable qualities to a degree that was neither excessive nor lacking. However, a noticeable transition in depictions of the Thames occurs in the 1800s, which was met by darker connotations of the once adored river. In Charles Mackay's, *The Thames and Its Tributaries: Or, Rambles Among the River, Volume I* (1840), Mackay takes the reader along a tour of the Thames, describing in depth the grim setting: "After a time, the manufactories and gas-works, belching out volumes of smoke, will darken all the atmosphere."²⁰ Mackay's description of the Thames' surroundings is an explicit comment on the effects of industrialism, which he takes further by illustrating the, "steam-boats plying continually to and fro [that] will add their quota to the general impurity of the air...form[ing] that dense cloud which habitually hangs over London, and excludes its inhabitants from the fair share of sunshine to which all men are entitled."²¹ Many

¹⁷ Byerly, 88.

¹⁸ John Fisher Murray, *A Picturesque Tour of the River Thames in Its Western Course: Including Particular Descriptions of Richmond, Windsor and Hampton Court* (United Kingdom: H.G. Bohn, 1845), 64, https://www.google.com/books/edition/A_Picturesque_Tour_of_the_River_Thames_i/dgtbAAAAQAAJ?hl=en&gbpv=1.

¹⁹ Byerly, 89.

²⁰ Charles Mackay, *The Thames and its Tributaries: Or, Rambles Among the River, Volume I* (R. Bentley, 1840), 38, <https://books.google.com/books?id=j0Y9AAAAQAAJ&printsec=frontcover#v=onepage&q=belching&f=false>.

²¹ *Ibid.*

writers mourned the transition from nature to industrialism, an idea that is clearly depicted in the lack of “sunshine” that Mackay exemplifies in the previous excerpt. However, while lamenting the past natural world, writers also qualified their claims about the filth of industrialization with the subsequent recognition that it allowed for Britain to move up in the ranks of imperial power. Thus, individuals were caught in a paradoxical state of both longing for the past while also recognizing the importance of progress.

Alongside the shift in literary depictions of the Thames came an influx in media publications, such as *Punch*, *The Times*, and *The Lancet* that commented on the pollution through means such as political cartoons and letters from scientists in order to emphasize the severity of the contamination and bring it to the public’s attention. At the height of the Thames pollution in the 1800’s, *Punch* magazine was well-known around London for its political satire that put politicians in the spotlight and social issues on a pedestal. The magazine came out with a plethora of cartoons that commented on the rapidly deteriorating Thames, reaching a wide audience because of the popularity of their work, the accessibility of the information through art, and the entertainment it brought through humorous mockery. “Dirty Father Thames,” a cartoon released by *Punch* in 1848, personifies the river through a caricature named “Father Thames.”²² In the image, the caricature is depicted with disheveled hair and soiled clothing, picking up the numerous waste that accumulates in the river. Miscellaneous items, such as liquor bottles and boots, are pictured floating around in the water, and Father Thames is picking up the debris collecting in the muck. Similarly, in “The London Bathing Season” (1859), another caricature of the Thames, with a dead cat on his back, rotting teeth, and an overgrown beard, beckons a poor chimney sweeper to bathe in the filthy river.²³ In the background, dead animals are depicted

²² “Dirty Father Thames,” *Punch*, October 7, 1848, <https://punch.photoshelter.com/image/I0000sIEpJtzA7iw>.

²³ “The London Bathing Season.” *Punch*, June 18, 1859, https://punch.photoshelter.com/image?&_bqG=0&_bqH=eJwz9iksNU32KLFMcYk08ywKK_dyCi73MfcuTHK1Mj

floating on their backs and drifting through the dirty water. Commenting on the recent relocation of the new Houses of Parliament to an area near the river, *Punch* created the cartoon, “Father Thames Introducing His Offspring to the Fair City of London” with the subtitle, “A Design for a Fresco in the New Houses of Parliament.”²⁴ In this cartoon, the Thames comes to life in the form of decrepit, gaunt, and demon-like beings that rise from the surface of the river to greet the contrastingly neat and orderly queen that symbolizes Parliament. The beings, that are depicted as the children of the Thames, are named “Cholera,” “Scrofula,” and “Diphtheria;” all illnesses that people were terrified of contracting because of the Thames pollution. The illustrator thus symbolically brings the members of Parliament into the sphere of everyday life for the common people. In the background, dark factories are shown emitting smoke and polluting the sky, criticizing industrialism. The subtitle, “A Design for a Fresco” further adds to the comedic effect of this illustration by mocking Parliament’s high status with the reality of a polluted metropolis.

In addition to the abundance of political cartoons, other magazines spoke of the Thames pollution adopting a more factual, and sober tone. The *Journal of Public Health and Sanitary Review* proclaimed the presence of increasing “stories flying of men struck down with the stench, and of all kinds of fatal diseases, upspringing on the river’s banks.”²⁵ Scientist Michael Faraday sent a letter to *The Times* in 1855, in which he referenced his own experiment dropping white pieces of paper in the water, describing the river as an “opaque, pale brown fluid” that swallowed the paper in an instant.²⁶ Faraday hoped that his letter would influence people in

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²⁴ “Father Thames Introducing His Offspring to the Fair City of London: A Design for a Fresco,” *Punch*, July 3, 1858,

[https://punch.photoshelter.com/image?&_bqG=2&_bqH=eJxNjk0LwjAMhv_NboKCCgo91LbOTNdK2sI2CnMO59w8qCd_ve0QFfLxvIG8yZxP.60qFOi5JyPN3KE_a3q4NpOl5OxjyF9BZJWsGdT9vUjGgRxLdnTswBXMN.t404FECbTDgsCa4IES6h2iIsIP3L_rw2C0n4VjB5cDDqGXG89Z1YhgWRZeKFN2ssMj7cOzhGJFYG38fc_mH0R1z9MA3Lh2KMu71UTxcEtDm7VKz6lypSHvIhEmL4BGLVPWQ--&GI_ID=.](https://punch.photoshelter.com/image?&_bqG=2&_bqH=eJxNjk0LwjAMhv_NboKCCgo91LbOTNdK2sI2CnMO59w8qCd_ve0QFfLxvIG8yZxP.60qFOi5JyPN3KE_a3q4NpOl5OxjyF9BZJWsGdT9vUjGgRxLdnTswBXMN.t404FECbTDgsCa4IES6h2iIsIP3L_rw2C0n4VjB5cDDqGXG89Z1YhgWRZeKFN2ssMj7cOzhGJFYG38fc_mH0R1z9MA3Lh2KMu71UTxcEtDm7VKz6lypSHvIhEmL4BGLVPWQ--&GI_ID=)

²⁵ Halliday, preface, ix.

²⁶ *Ibid*, x.

power to take action against the “fermenting sewer” that flowed through all of London, impacting all those within the city.²⁷ Echoing Faraday’s concerns, *Punch* released a cartoon titled, “Michael Faraday presenting his card to Father Thames.” In the cartoon, Faraday is depicted plugging his nose and handing a card to the monstrous Father Thames caricature. Similar to many other cartoons depicting the Thames pollution, “Michael Faraday presenting his card to Father Thames” also illustrates the dead bodies of animals and industrial factories dirtying the atmosphere in the background. The overlapping themes and motifs in these cartoons emphasizes the widespread and enduring concern of the London people. Evidently, their fears were persisting and continued to arouse public interest and anxiety. *The Lancet* also published articles that voiced the same sentiments of *Punch* and *The Times* surrounding the state of the river. Angered by the continued lack of action in the Thames restoration and blaming the pollution on the pursuit of profit, on July 14th, 1855, the journal declared, “The Thames bears upon its buoyant tide riches for the merchant, whilst its waters are swollen with the feculence of the myriads of living beings that dwell upon its banks.”²⁸ While recognizing the contamination of the river, the journal also exposed a culprit of the pollution: the want of money. This desire ties directly into the prominent theme of rapid industrialization. *The Lancet* exposed how the Thames was used to obtain “riches” yet its health was disregarded to the point that it became “swollen with...feculence.” Thus, the journal plainly revealed that the decline of the river was a result of unhindered, unfettered progress and industrialization that placed financial gain above all else. Edwin Chadwick painted another sorrowful image in *The Illustrated London News* of the Thames’ current condition by contrasting it with the past:

²⁷ Ibid, xi.

²⁸ Peter Kandela, “The Thames,” *The Lancet (British Edition)* 353, no. 9166 (1999): 1809, <https://www-sciencedirect-com.proxy.lib.pdx.edu/science/article/pii/S0140673605759225>

The Thames, which, fifty years ago, ran through London in a clear and limpid stream, over whose current it was a pleasure to be rowed, in whose waves it was delightful to bathe, and of whose pure waters it was wholesome to drink, has, by sheer neglect on the part both of the people and the Government, become a foul sewer, a river of pollution, a Stream of Death.²⁹

As an influential sanitary reformist, Chadwick's inclusion of the "Stream of Death" metaphorically refers to the disease that sprung from the polluted banks of the Thames. He directly calls upon both the Government and the London citizens to take responsibility for their part in its contamination, plainly revealing that they had, out of their own ignorance and neglect, allowed the river to transform from a "clear and limpid stream" to a "foul sewer." Obviously, the London people could see the increasing deterioration of the river for themselves by simply looking outside or taking a stroll. However, as a result of the countless media sources that featured prominent figures, satirical illustrations, and appeals for much needed changes in regards to the pollution of the Thames, people throughout the city were overtly shown that the pollution was not only present, but that it was a problem; a problem that needed to be fixed.

As accounts of the worsening state of the Thames increased, the pollution started becoming symbolic of a plethora of other social ills, and developed into a moral problem that reflected the poor conditions of London. The physical pollution of the sewage-ridden water of the Thames became synonymous with moral corruption and fault within London society. John Roddam Spencer Stanhope's painting, *Thoughts of the Past* depicts this idea by comparing a lost woman, or prostitute, with the water of the Thames.³⁰ Prostitution had been a topic of heated discussion since the 1840's.³¹ Many Victorian reformists and writers associated the physical filth of the Thames with the moral impurity considered of prostitutes, additionally suggesting that the

²⁹ Edwin Chadwick, "The Purification of the Thames (1858)," *The Victorian Web*, transcribed by Phillip V. Allingham, <https://victorianweb.org/periodicals/iln/thames.jpg>.

³⁰ Ribner, 38.

³¹ *Ibid*, 40.

two types of pollution should be cleaned up in the same manner.³² The religious undertones of prostitution as moral wickedness coincides with other popular notions that associated the filth of the river with sin. Reverend Charles Kingsley was an avid sanitary reformist, believing that disease was punishment for “sins of filth.”³³ Similarly, the Earl of Shaftesbury’s address to the Social Science Congress of Liverpool in 1858 declared:

If St. Paul, calling our bodies the temples of the Holy Ghost, said that they ought not to be contaminated by sin, we also say that our bodies, the temples of the Holy Ghost, ought not to be corrupted by preventable disease, degraded by avoidable filth, and disabled for His service by unnecessary suffering.³⁴

The Earl of Shaftesbury suggests that by allowing the condition of the Thames to deteriorate without intervention, the government is willingly sanctioning the moral and physical corruption of all the people of London, and thus neglecting them the proper conditions to worship and subjecting them to unnecessary ailment. Looking at the pollution of the Thames through a religious lens further motivated moral imperatives for the river’s restoration, as it forced politicians and everyday citizens alike to understand the contamination as something greater than a foul smell, but as a reflection of the conditions of London as well.

However, there was another result of the Thames pollution that played a significant role in the river’s restoration: the cholera epidemic. In the early 1800’s, the water companies of London were riddled with corruption. In 1817, eight separate water companies held a monopoly over their respective regions, consistently increasing rates and providing infected drinking water that came directly from the Thames.³⁵ Even though John Snow had proven that cholera was waterborne, by the time of the Great Stink, not everyone was ready to give up their beliefs in

³² Ibid, 41.

³³ Ibid, 40.

³⁴ Ibid, 38.

³⁵ Ibid, 40.

miasma as the cause of the disease.³⁶ However, many had correctly associated cholera with tainted water before John Snow had even proven his hypothesis.³⁷ In 1832, George Cruikshank illustrated John Edwards, owner of the Southwark Water Source, atop a toilet with a trident impaling a dead rat. In the background, the crowd protests: “Give us Clean Water... We shall all have the Cholera.”³⁸ Fears of cholera were at the foundation of the sanitary movement that permeated London society. Individuals associated poor living conditions and filth with disease, thus promoting the restoration of the Thames as a means of eliminating illness.³⁹ In Edwin Chadwick’s *Report On the Sanitary Condition of the Labouring Population of Great Britain*, he approached the sanitary crisis through the lens of productivity. He suggested that the people who were incapable of work because of cholera, and those orphaned as a result of cholera, were hindering the economic progress of Britain through their lack of contribution.⁴⁰ Though a harsh assessment of the effects of the disease, Chadwick’s analysis did satisfy an increasingly capitalistic society as it focused on aspects of economics and production. However, Chadwick’s development of a metropolitan sewer system in 1848, charging individuals to eliminate cesspools and connect drains to sewers, actually made the Thames pollution much worse.⁴¹ Similarly, John Simon, another sanitary reformist and steadfast believer in the miasmatic orthodoxy, advocated reform that was more concerned with eliminating foul smells from houses than the pollution of the river.⁴² However, the widespread (and incorrect) belief in the miasmatic theory that persisted

³⁶ “Cholera Epidemics in Victorian London,” *The Gazette*, February 1, 2016, <https://www.thegazette.co.uk/all-notices/content/100519>.

³⁷ Ribner, 40.

³⁸ George Cruikshank, *Salus Populi Suprema Lex* (illustration) in “The Thames and Sin in the Age of the Great Stink: Some Artistic and Literary Responses to a Victorian Environmental Crisis,” *The British Art Journal* 1, no. 2 (2000): 40, <https://www-jstor-org.proxy.lib.pdx.edu/stable/pdf/41614963.pdf?refreqid=excelsior%3A6ec40f5307198c4a8ab2ffe80df72380>.

³⁹ Halliday, 38.

⁴⁰ *Ibid.*, 37.

⁴¹ Dale H. Porter, *The Thames Embankment: Environment, Technology, and Society in Victorian London*, Technology and the Environment, (Akron, Ohio: University of Akron Press, 1998), 261.

⁴² Halliday, 134.

into the year of the Great Stink ironically motivated unusually rapid legislative action, as even the Houses of Parliament were panicked about the air they were breathing.

As the smell during the summer of the Great Stink spread rapidly throughout the city, politicians knew that they had to employ more than just temporary solutions to combat the pollution and its effects. Parliament was forced to experience firsthand the issues that the people of London had been protesting for years.⁴³ Initial solutions to rid their quarters of the stench included soaking the curtains with chloride of lime and pouring carbolic acid and chalk lime into the river.⁴⁴ ⁴⁵ However, they soon realized that the only way to truly purge the city of the awful odor was to enforce drastic government measures and to do so immediately. Legislators who would normally be opposed to large-scale state expenditures were so affected by the stench that they agreed to do whatever it took to restore the health of the metropolis.⁴⁶ Notable members of Parliament raised concerns about their experiences with the polluted river, which were received by other influential individuals because of their high status. Mr. Mangles asked the Chief Commissioner of Works about whether or not he planned on taking action against the odor of the river, declaring that: “One of the noblest rivers has been changed into a cesspool, and I wish to ask whether Her Majesty’s Government intend to take any steps to remedy the evil?”⁴⁷ Likewise, Mr. Brady, a member of the House of Commons, consulted the Chief Commissioner of Works about how “honorary” men could not sit in the “Committee Rooms” nor the “Library” because of the river stench. Echoing this reality, other media sources reported accounts of Parliament members in distress because of the smell. *The Times* published a letter from a member of Parliament describing his affliction: “A member went over to the window near him, and flung up

⁴³ Cohen and Johnson, 106.

⁴⁴ Ibid.

⁴⁵ Bibby, “London's Great Stink.”

⁴⁶ Cohen and Johnson, 107.

⁴⁷ Ribner, 39.

a portion of it; but no sooner had he done so than he retreated as if he had received a blow in the face.”⁴⁸ Parliament virtually came to a standstill as meetings ceased to be held because of the severity of the stench.⁴⁹ Benjamin Disraeli, Chancellor of the Exchequer, declared, “That noble river, so long the pride and joy of Englishmen, which has hitherto been associated with the noblest feats of our commerce and the most beautiful passages of our poetry, has really become a Stygian pool, reeking with ineffable and intolerable horrors.”⁵⁰ In 1855, the First Commissioner of Works Sir Benjamin Hall replaced the Metropolitan Commission of Sewers (MCS), headed by Edwin Chadwick and tasked with creating a sewer system, with the Metropolitan Board of Works (MBW). A month after the dawn of the Great Stink, Benjamin Disraeli, leader of the House of Commons, introduced a bill that empowered the MBW to commence a sewage project of unparalleled magnitude.⁵¹ On August 2nd, 1858, just eighteen days after its introduction, “The Metropolis Local Management Amendment Act: An Act to alter and amend the Metropolis Local Management Act and to extend the powers of the Metropolitan Board of Works” became law.⁵² The law finally provided the MBW with enough funds and resources to carry out chief engineer Sir Joseph Bazalgette’s plans. Bazalgette’s proposal involved the construction of eighty-three miles of sewage outlets that would connect to hundreds of miles of smaller sewers, effectively sending the sewage far downstream, away from the London metropolis to the outfalls at Beckton and Crossness.⁵³ ⁵⁴ Pumping stations were built at Chelsea, Crossness, Deptford, and Abbey Mills to collect sewage from low-areas and an extensive construction of embankments

⁴⁸ Steve Bruce, “The Great Stink of 1858,” *Exploring the Slum*, November 30, 2016, <https://slumexplorers.wordpress.com/the-great-stink-of-1858/>.

⁴⁹ Cohen and Johnson, 106.

⁵⁰ Metropolis Local Management Act Amendment Bill, 151, *UK Parliament*, (July 15, 1858), <https://api.parliament.uk/historic-hansard/commons/1858/jul/15/first-reading>.

⁵¹ Cohen and Johnson, 106.

⁵² *Ibid*, 107.

⁵³ *Ibid*.

⁵⁴ Andrews, 198.

also ensued, which accelerated tidal flows and made the London riverfront much more pleasing to the eye.^{55 56} In 1875, six and a half million pounds later, the sewage system and construction of the embankments was finally complete.⁵⁷ Of course, as technology advanced and new solutions presented themselves, some changes had to be made to Bazalgette's original plan. For example, with the introduction of sewage treatments, works were established at Beckton and Crossness to chemically treat the sewage that had accumulated from Bazalgette's structure.⁵⁸ Nonetheless, Bazalgette's scheme remains at the foundation of London's sewer system today.

With the help of literature, popular media, a deadly epidemic, moral outcry, and finally the direct impact of an olfactory crisis on the members of Parliament, the Thames transformed from a filthy, fermenting sewer to the cleanest metropolitan river in the world.⁵⁹ With the completion of Bazalgette's plan came an end to the cholera outbreaks in London for good, as people were no longer plagued with infected drink, and the stench withdrew from the city. While some historians maintain that the cause of such rapid and effective legislation was solely because of the direct involvement of Parliament in the crisis, the political pressure had in fact been mounting for years before the Great Stink as a result of the increasingly angry media publications calling attention to the crisis, reflecting immense public outcry. This pressure was amplified by the thousands dead as a result of cholera, and even more so by the belief that foul air caused the disease while the city was enveloped in stench. Furthermore, the idea that the physical pollution was directly related to moral pollution, an idea associated with the sanitary

⁵⁵ Emily Mann, "Story of cities #14: London's Great Stink Heralds a Wonder of the Industrial World," *The Guardian*, April 4, 2016, <https://www.theguardian.com/cities/2016/apr/04/story-cities-14-london-great-stink-river-thames-joseph-bazalgette-sewage-system>.

⁵⁶ A. G. Cockner, "Pollution and the Thames," *Metropolitan Pollution Controller*, accessed December 12, 2021, <https://journals-sagepub-com.proxy.lib.pdx.edu/doi/pdf/10.1177/146642408110100409>.

⁵⁷ Cohen and Johnson, 107.

⁵⁸ Andrews, 198.

⁵⁹ Halliday, preface, xi.

movement, further motivated politicians to restore the city to uphold its superiority as one of the greatest in the world. It was not one event or factor that transformed the Thames; it was a blend of many. Research on this topic was limited by an inability to access certain parliamentary records, and a greater understanding of Parliament's role in pollution control would be acquired through unlimited access to Parliament's meetings and discussions regarding the environment and sanitary aspects of London society. Today, the Thames is faced with a new threat: global warming. As climate change ravages the present world, individuals across the globe are experiencing the same frustrations that the people of London felt in the 1800's when Parliament was hesitant to enforce any drastic measures against the Thames pollution. Covers of *The New York Times* are plastered with melting icebergs and sinking villages. Conferences such as COP-26 continually produce disappointing and minimal results. What will it take for the governments of today to finally take the drastic action necessary to help save the planet? Is another Great Stink necessary to wake politicians up to the crisis that the world faces? If not an unbearable smell, what horrific event will finally open their eyes?

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