

The False Logic of Miasma:

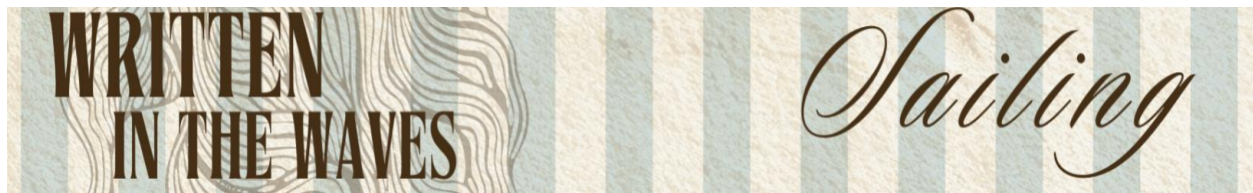
Epidemics, Imperialism, & the Spread of Xenophobia Throughout the Atlantic

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The 19th century witnessed the devastating rise of cholera, one of the deadliest and most feared diseases of its time. Also known as *Vibrio cholerae*, cholera emerged as a global pandemic, striking in multiple waves that began in the early 1800s and persisted throughout the century. These outbreaks had catastrophic effects across Europe and the Americas, with rapid transmission due to poor sanitation, overcrowded living conditions, and a general lack of understanding of disease prevention. The highly infectious nature of cholera led to widespread panic, which in turn shaped not only medical advancements but also social and political perceptions, particularly toward immigrants.¹ Fear, misinformation, and pseudoscientific beliefs contributed to growing xenophobia, as immigrants were often scapegoats for allegedly bringing in and spreading the disease. Examining the connectedness between public health crises and discriminatory policies during this period reveals how epidemics can reinforce existing negative prejudices and create even greater societal divisions throughout the world. Thus, this article aims to answer the question of how cholera outbreaks in 19th-century Ireland contributed to the rise of xenophobic attitudes. By examining the miasma theory of disease, the reinforcement of negative stereotypes about immigrants during these epidemics can be broken down and understood as having a lasting imprint on the societal perceptions of “other”.

How we talk about disease matters: in order to understand cholera and why it became

¹ White, Alexandre I. R. “Historical Linkages: Epidemic Threat, Economic Risk, and Xenophobia.” *The Lancet* 395, no. 10232 (2020): 1250–51. p.125



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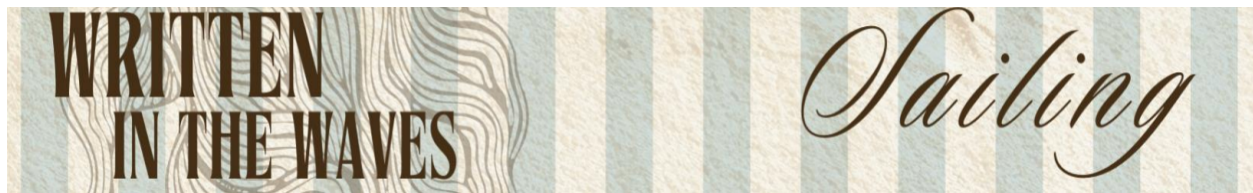
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more than a medical crisis, transforming into a tool of social sorting, we must first understand the origins of the illness and why it became so lethal. Cholera is an acute diarrheal illness caused by the bacterium *Vibrio cholerae*, which infects the intestines and, without treatment, can cause severe dehydration and death.² It primarily spreads through contaminated food or water, thriving in areas with poor sanitation and unsafe drinking water. While biologically, its origins lie in interaction between humans, water systems, and bacteria, its social impact has always extended far beyond that: in the 19th century, as cholera swept across the globe in a series of deadly pandemics, it didn't just reshape public health systems and urban planning; it also intensified xenophobic attitudes, particularly toward immigrants, the poor, and racialized communities. Fear of the malady quickly became entangled with fear of the foreign. The first cholera pandemic began in 1817 in India, spreading through Southeast Asia and the Middle East along British colonial trade routes, especially those operated by the East India Company.³ These were regions the British Empire deemed both strategically important and civilizationally inferior, a framework that conveniently justified both occupation and shame. As cholera moved westward, its association with colonized and non-European populations continued. The second pandemic, from 1829 to 1837,⁴ brought the disease into Europe and then travelled via trade and military routes, where outbreaks exploded in densely packed, poorly sanitized industrial cities like London and Manchester. By 1832, cholera had crossed the Atlantic, devastating North American cities like New York, Montreal, and Philadelphia. At every stage, the disease followed the paths of proliferation and trade: rivers, railways, ports, while the public, faced with mass death and poor medical understanding, sought out someone to blame, rather than something. Moreover, lacking

² Mandal, Shyamapada, Manisha Deb Mandal, and Nishith Kumar Pal. "Cholera: A Great Global Concern." *Asian Pacific Journal of Tropical Medicine* 4, no. 7 (2011): p.573.

³ Arnold, David. "Cholera and Colonialism in British India." *Past & Present*, no. 113 (1986): p.120.

⁴ Underwood, E. A. "The History of Cholera in Great Britain." *Proceedings of the Royal Society of Medicine* 41, no. 3 (1948): p.165.

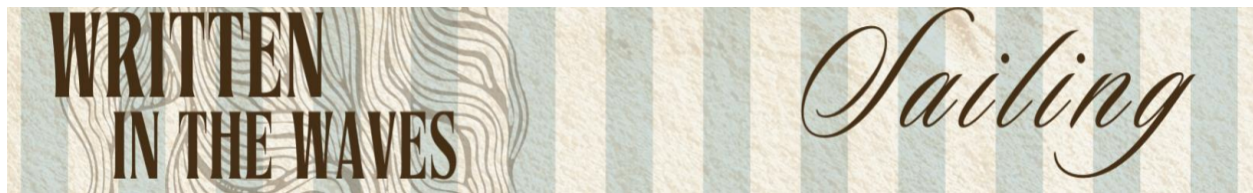


a clear understanding of how cholera actually spread, most authorities clung to the miasma theory, believing the illness came from “bad air” rather than contaminated water. This misunderstanding led to performative sanitation measures; more than just ineffective, these policies often reinforced class and racial divides. Immigrants and the urban poor were blamed for the disease’s spread - in this context, the spreading of cholera triggered not just panic, but punitive responses that layered onto pre-existing prejudices. Those most vulnerable to infection were also the most likely to be demonized. Thus, the history of cholera in the 19th century is not just about the rise of modern public health, but also about how disease was weaponized to reinforce social hierarchies and justify exclusion. Understanding this dynamic is essential to seeing how fear of infection so easily transforms into the fear of the other.

Beyond the immediate discriminatory policies put in place as a reaction to the sickness, cholera’s impact on xenophobia shaped long-term attitudes toward public health and immigration. The association of disease with foreign populations contributed to the development of restrictive immigration policies in the late 19th and early 20th centuries, which came into place as an attempt to restrict entry to people deemed “unwell” or “undesirable.”⁵ Examples of these policies include the Nuisances Removal Act of 1846 and the Public Health Act of 1848 in England, and the Maritime Quarantine Laws targeting immigrants in 1832 and 1866 United States.⁶ Even as scientific understanding of disease transmission improved with the acceptance of germ theory, the fear-based narratives surrounding cholera left a lasting imprint on societal perceptions of immigrants. In England and the United States, cholera outbreaks often reproduced high levels of hostility toward Irish and Eastern European immigrants in particular. In Britain,

⁵ Fee, Elizabeth. “The Public Health Act of 1848.” *Bulletin of the World Health Organization* 83, no. 11 (2005): p.866.

⁶ Fee, Elizabeth. “The Public Health Act of 1848.” *Bulletin of the World Health Organization* 83, no. 11 (2005): p.866.



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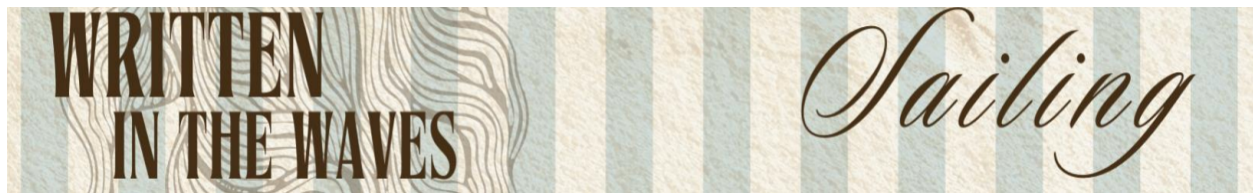
Irish immigrants, who lived in densely packed urban slums, were labelled as carriers of disease, reinforcing negative stereotypes that framed them as dirty, uncivilized, and dangerous to public health.⁷ Similarly, in the United States, anti-immigrant sentiments became deeply restrictive and used the cholera epidemic to justify vile exclusionary policies. Public health measures were sometimes weaponized against newcomers, with quarantines and forced evictions disproportionately targeting foreign residents hoping to immigrate.⁸ Some political leaders and newspapers openly supported these measures, using fear of disease to argue for stricter immigration laws and greater control over “undesirable” populations. Taking this into consideration, one of the primary reasons cholera intensified xenophobic attitudes was the widespread belief in the miasma theory of disease, which argued that illnesses were caused by “bad air”, or environments that produced foul odours.⁹ Before germ theory gained acceptance in the late 19th century, many people believed that cholera was transmitted through the smells of decaying waste and unclean living spaces, rather than through contaminated water or milk.¹⁰ Since many immigrants lived in crowded, unsanitary conditions due to poverty and systemic neglect, they were frequently accused of bringing disease into cities and infecting what colonial governments believed to be the “native” population. The association between disease and settler communities led to harsh public health policies, discrimination, and even violence from both sides. Citizenship quickly became weaponized against migrants, with legal status being used as a tool for exclusion, reinforcing an “us versus them” mentality where migrants were blamed for economic or social problems rather than addressing systemic issues such as inequality,

⁷ Dunglison, Robley, and Paul Fritz. *Human Health* : New edition with many modifications and Additions. Philadelphia: Lea & Blanchard, 1844: p.115.

⁸ Dunglison, Robley, and Paul Fritz. *Human Health* : New edition with many modifications and Additions. Philadelphia: Lea & Blanchard, 1844: p.121.

⁹ Kannadan, Ajesh. "History of the miasma theory of disease." *Essai* 16, no. 1 (2018): p.42.

¹⁰ Steere-Williams, Jacob. "The Perfect Food and the Filth Disease: Milk, Typhoid Fever, and the Science of State Medicine in Victorian Britain, 1850–1900." Order No. 3465146, University of Minnesota, 2011: p.17.



underfunded public services, or poor government policies.

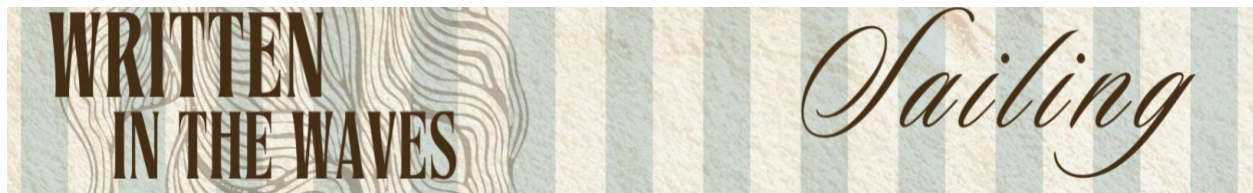
Fundamentally, Cholera thrived in unsanitary urban environments, which were common in cities that had experienced rapid urbanization,¹¹ such as London and New York; they lacked what we believe to be the norm of modern sewage systems. Waste disposal was primitive at best, and contaminated drinking water, particularly from public wells and rivers, helped the rapid spread of the disease. The symptoms of cholera were often described as consisting of severe diarrhea, dehydration, and an alarmingly high mortality rate that scared urban communities in the early 1800s. This made it a terrifying and unpredictable threat as, unlike other diseases that primarily affected specific social classes, cholera seemed indiscriminate, affecting the wealthy and poor alike without an end in sight.¹² However, its deadliest impact was felt in lower-income neighbourhoods where overcrowding and poor sanitation made people particularly vulnerable and less likely to be cared about. Many immigrants lived in these impoverished areas, and they quickly became the blame for outbreaks; the nineteenth century equally saw the rise of the “doctor-hero” motifs,¹³ entrusted with moral leadership and the treatment of once incurable ailments, now treatable inconveniences.¹⁴ Growing resentment and discrimination against foreign populations moving to larger cities became hip and drastically affected how governments could manipulate populations, suppress discontent within the nation, and create unrecognizable citizens who lacked political power and legal protections. Legal status quickly became a political weapon and laid the groundwork for new ways in which human rights abuses, institutionalized discrimination, and long-term societal divisions could thrive. The

¹¹ Duglison, Robley, and Paul Fritz. *Human Health* : New edition with many modifications and Additions. Philadelphia: Lea & Blanchard, 1844: p.115.

¹² Duglison, Robley, and Paul Fritz. *Human Health* : New edition with many modifications and Additions. Philadelphia: Lea & Blanchard, 1844: p.128.

¹³ Shaw, Amy J., and V. Lynn Kennedy, eds. *Fat and the Body in the Long Nineteenth Century: Meanings, Measures, and Representations*. Toronto: University of Toronto Press, 2025. p.32.

¹⁴ Shaw, Amy J., and V. Lynn Kennedy, eds. *Fat and the Body in the Long Nineteenth Century: Meanings, Measures, and Representations*. Toronto: University of Toronto Press, 2025. p.32.



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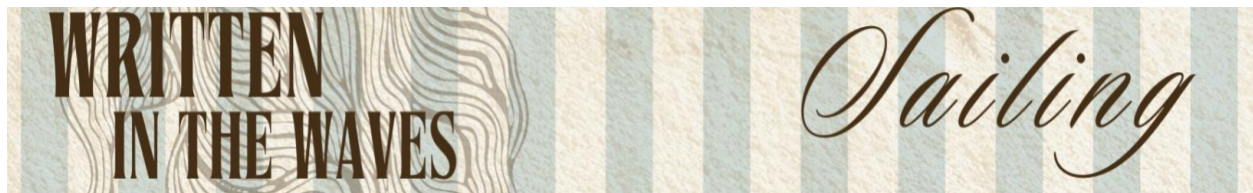
weakening of quickly urbanized cities fostered heavy inequality and prevented societies from fully benefiting from the diversity and contributions of migrant populations. Echoes of this discrimination can still be heard to this day, as civil discontent never seems to truly go away.

Beyond its mere scientific understanding, one specific case study emerged during the summer of 1832, devastating the Irish town of Sligo and killing about one in four residents. Dr. Henry Irwin, a local physician and Deputy Inspector-General of Hospitals, recorded the outbreak in his report *A Record of Cholera Asiatica as it Occurred in Sligo*.¹⁵ Published on September 30, 1832, Irwin's account is more than medical - it's a snapshot of a society battling fear, class tension, and xenophobia. Denial was Sligo's first defense: when Dr. Coyne reported a case on July 29 in Langford, locals threatened him and insisted there was no outbreak. Acknowledging cholera meant quarantine, stigma, and even less access to already scarce resources, while hiding the disease became a way to survive. The unnamed normative prototype of upper-class citizens was on the rise, meaning that the collective well-being of humanity was viewed as endangered by surrounding contagion. On top of this, on July 31, a homeless woman died of cholera after arriving from Westport, another infected town.¹⁶ Her death should have set off alarms. Instead, silence. Irwin noted no official cases for ten days, though several were likely concealed. This wasn't ignorance; it was damage control in a town already drowning in poverty and shame. Sanitation became a weapon of class, and thus the Board of Health ordered the homes of the poor to be scrubbed and whitewashed.¹⁷ Framed as compassion, the real goal was to make poverty less visible. Authorities tried relocating the poor into temporary shelters to curb the disease but met violent pushback. Irwin described protestors, armed with clubs, resisting cholera hospitals

¹⁵ Irwin, Henry. *A Record of Cholera Asiatica, as It Occurred in Sligo, during the Months of August and September 1832*. Sligo: Printed at "The Sligo Journal," 1832.

¹⁶ Irwin, Henry. *A Record of Cholera Asiatica, as It Occurred in Sligo, during the Months of August and September 1832*. Sligo: Printed at "The Sligo Journal," 1832: p.2.

¹⁷ Irwin, Henry. *A Record of Cholera Asiatica, as It Occurred in Sligo, during the Months of August and September 1832*. Sligo: Printed at "The Sligo Journal," 1832: p.2.



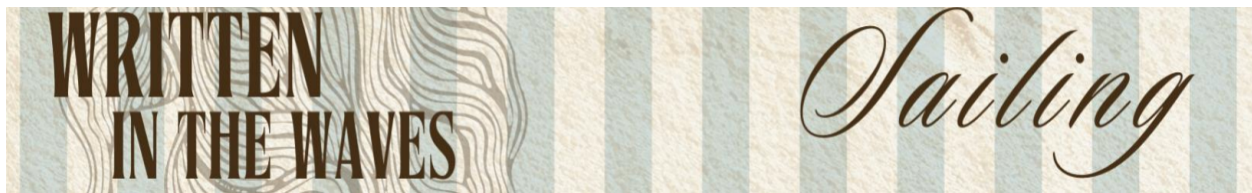
and public health boards. These were not irrational mobs; they were people rejecting interference from officials who neither understood nor respected them. Beneath this was a belief that the poor were both victims and causes of disease. Robley Dunglison's 1844 treatise *Human Health* highlighted shocking disparities: life expectancy was 20 years for Manchester tradesmen, 41 for rural Rutlandshire residents.¹⁸ He blamed not just the environment, but the "gross intemperance" of poor immigrants, especially the Irish; sickness, in this view, was a moral failure. Dunglison and others drew direct lines between poverty and urban overcrowding, combined with disease. In the United States, Philadelphia's cramped alleys became proof of moral decay.¹⁹ Reformers like Dr. Gouverneur Emerson pushed for housing laws not just to protect health, but to control behaviour. Public health became a tool of social control: cleanliness, sobriety, and submission were the new prescriptions. This moral lens further hardened itself in literature: for example, in the 1874 book *The Causes & Cure of Intemperance*, Dr. B. J. Clarke blamed immigrant "liquor-lovers" for spreading vice and disease. His rhetoric wasn't about medicine; it was about blaming outsiders. Instead of tackling structural issues like housing, labour, or hunger, reformers targeted immigrants and the poor as enemies of progress. During epidemics, this thinking turned cruel.

Clarke and others painted poverty not just as unfortunate, but as deserved. The "cure" wasn't aid; it was moral re-education. The goal wasn't just survival, but conversion to a "noble Christian standard."²⁰ Health reform became social engineering, but the real tragedy in Sligo wasn't just the death toll; it was how fear fractured the community. Irwin described widespread

¹⁸ Dunglison, Robley, and Paul Fritz. *Human Health* : New edition with many modifications and Additions. Philadelphia: Lea & Blanchard, 1844: p.115.

¹⁹ Dunglison, Robley, and Paul Fritz. *Human Health* : New edition with many modifications and Additions. Philadelphia: Lea & Blanchard, 1844: p.115.

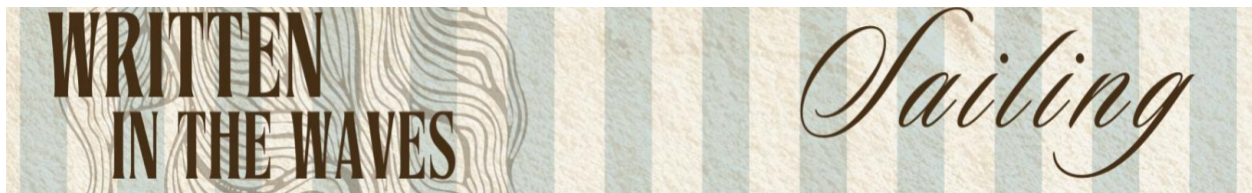
²⁰ Heywood, John H. (John Healy). *The Causes and Cure of Intemperance*. Place of publication not identified: [publisher not identified], 1874: p.9.



horror and abandoned children,²¹ hospitals were overrun, the poor were told to die quietly at home, and even Dr. Coyne, who tried to help, died of the disease. His death felt like a cruel joke, someone who gave everything, only to be hated for it. When the outbreak ended, cholera had done more than kill: it had exposed how society punishes the vulnerable and favours the continuing propensity of upper-class citizens. The poor, the immigrant, the addict: these were the scapegoats, even though the real culprit was a system built on inequality. The 1832 cholera epidemic shows that disease is never just about biology. It's a mirror that reveals who we value, who we blame, and how far we'll go to protect the status quo. In Sligo, cholera didn't just infect people, it infected social order itself.

To fully grasp the injustice endured by the poor during the cholera epidemic in Sligo, we need to move beyond surface-level narratives of disease and disaster, and instead engage with the critical framework outlined by anti-imperialist frameworks. Most notably, Ariel Azoulay argues that the way we write, teach, and remember history, especially histories shaped by empire, is profoundly influenced by the institutional structures that upheld and continue to sustain imperial rule. This includes not only political and legal systems but also academic disciplines, archives, and the visual record. Demanding that we rethink the very foundations of historical knowledge and resist the sanitized narratives that erase or depoliticize suffering is the first step to comprehension. In the context of Sligo in 1832, the poor were not just victims of disease, they were victims of a deeply fractured social order that left them to seem disposable. The outbreak of cholera revealed this clearly: while wealthier citizens had some means to flee or isolate, the poor were confined to overcrowded housing, forced to rely on public hospitals that quickly collapsed under the weight of demand, and often left to die at home, unattended. Official records like Dr.

²¹ Irwin, Henry. *A Record of Cholera Asiatica, as It Occurred in Sligo, during the Months of August and September 1832*. Sligo: Printed at "The Sligo Journal," 1832: p.7.

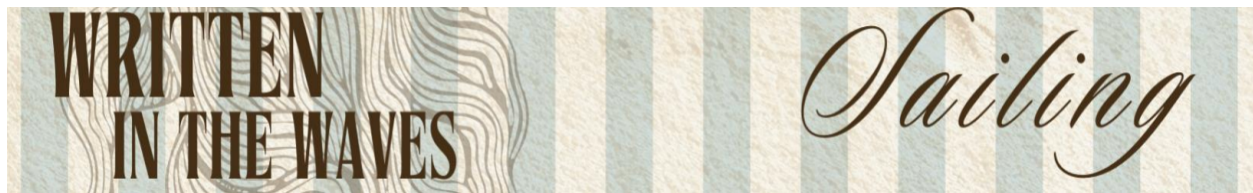


Irwin's *A Record of Cholera Asiatica* provide valuable documentation, but they also reflect the limited perspective of the professional class. The lives and deaths of the poor were often reduced to numbers, symptoms, or social problems rather than being treated as individual tragedies rooted in systemic failure. Azoulay's critique of how citizenship is institutionalized is particularly relevant here: she argues that modern states have reduced the concept of citizenship to a legal status, something granted or withheld by sovereign power, rather than a lived social relationship. In the case of Sligo, the poor were legally part of the British Empire, but in practice, they were denied the protections and recognition that citizenship is supposed to guarantee. Their civil status was conditional, and their inclusion in the body politic was highly scrutinized. When cholera struck, their rights to care, to be heard, or even to be buried with dignity were not upheld. Instead, their bodies were treated as threats, their homes as sites of contamination, and their protests as irrational or dangerous. This institutional dehumanization was reinforced by the academic and governmental regimes of the time and by those that followed it. Thus, historians and political thinkers often ignore or downplay the violence of imperial rule, choosing instead to speak in terms like "the age of liberation" or "reconstruction."

²² This framing obscures the centuries of displacement, denial, and domination that characterized imperial power, and it prevents us from seeing events like the Sligo epidemic as part of that broader continuum.

Even contemporary studies of public health often treat historical outbreaks as isolated biological events rather than as reflections of deeply entrenched social inequalities shaped by empire, capitalism, and class control. The dangers in how visual and textual archives are constructed and consumed are also cardinal here: critiquing the way photography, for instance, institutionalized power dynamics between subjects and those who recorded them, often

²² Azoulay, Ariella Aïsha. *Unlearning Imperialism*. Translated by Lorna Scott Fox. London: Verso, 2022: p.337.

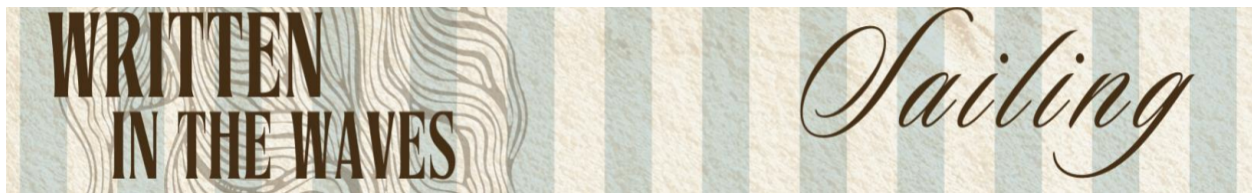


enforcing categories like “citizen,” “immigrant,” “refugee,” or “terrorist” in ways that denied people the complexity of their own lives. While photography was not yet institutionalized in 1832, a similar process occurred through medical reports, government documents, and public health records. The poor were observed, described, and categorized, but rarely given a voice. Their resistance, whether it took the form of protesting forced relocations or refusing to acknowledge illness, was documented only in terms that reinforced elite narratives of ignorance and disorder. What was interpreted as fear or superstition may in fact have been a rational distrust of a system that had never served them. To engage ethically with the history of the cholera epidemic in Sligo, then, we must unlearn the imperial frameworks that still shape how such stories are told. We must challenge the separation of disciplines that Azoulay criticizes: the division between medical history, political history, and social theory that allows injustice to hide in the gaps.²³

The poor of Sligo were not passive victims. Many were people seeking, as Azoulay describes in other contexts, to “carve out a place for themselves”²⁴ in a world that had excluded them. Their labour, their families, and their neighbourhoods were all shaped by attempts to reclaim some measure of autonomy and dignity, even under conditions of extreme hardship. When disease came, the denial, resistance, and concealment must be read not as irrational, but as political acts shaped by experience and necessity. Ultimately, pushing others to reconsider what it means to write history is not just about gathering facts or citing sources; it’s about interrogating the system that has determined whose voices are preserved, whose suffering is acknowledged, and whose lives are worth grieving. If we are to do justice to the memory of those who died during the cholera outbreak in Sligo, we must resist the impulse to frame their deaths

²³ Azoulay, Ariella Aïsha. *Unlearning Imperialism*. Translated by Lorna Scott Fox. London: Verso, 2022: p.337.

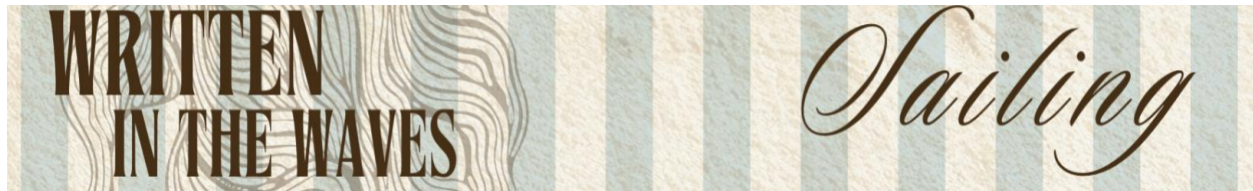
²⁴ Azoulay, Ariella Aïsha. *Unlearning Imperialism*. Translated by Lorna Scott Fox. London: Verso, 2022: p.337.



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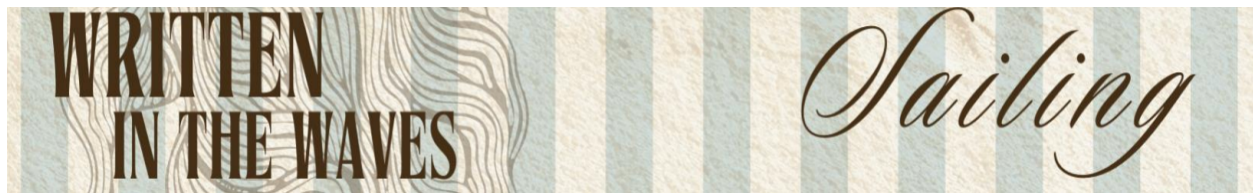
as natural or inevitable. Instead, we should recognize them as casualties of a broader imperial and social order that rendered certain lives expendable. To unlearn imperialism is to refuse to look away. Thus, the cholera epidemic in Sligo was not simply a health crisis: it was a rupture that exposed both the fragility of society, and the deepened fractures embedded in imperialism. The disease moved through the town quickly, but it wasn't random; it followed the lines that were drawn by poverty, class, and power. The poor suffered the most, not because they were biologically more vulnerable, but because they were already living under conditions of systemic neglect. Their overcrowded housing, lack of access to care, and the social stigma they carried made them easy targets for both the disease and the blame that followed. Historical records, such as those written by Dr. Irwin, offer crucial documentation but reflect the perspectives of those in power. Professionals and state-aligned experts who, intentionally or not, upheld narratives that distanced the suffering of the poor from the decisions and structures that created it. This is where questioning the very foundations of historical knowledge, how it's constructed, who it serves, and what it excludes, critiques the very institutionalization of citizenship and is especially relevant when examining who was allowed to be seen, heard, and protected during the Sligo outbreak. The poor may have been legal subjects of the British Empire, but in reality, they were treated as expendable. Their inclusion in the community was conditional; their status closer to managed populations than to fully recognized citizens. Moreover, this analysis also sheds light on how modern disciplines such as public health, history, and political science have each helped sustain imperial frameworks by segmenting knowledge and discouraging cross-disciplinary, critical analysis of structural violence. If we view the cholera epidemic through this lens, the response of the poor, such as denying illness, resisting relocation, and mistrusting authorities, ceases to look like ignorance. Instead, it becomes a form of political resistance. It was a refusal to participate in a system that had long excluded them. Their strategies of survival, however



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imperfect, were acts of autonomy under siege, and yet, history has rarely given them credit for this. The poor of Sligo have been remembered primarily as victims, sometimes as nuisances, but rarely as agents. Their lives and deaths have been filtered through frameworks that depoliticize their suffering and detach it from the imperial and capitalist systems it was produced within. To study cholera, or any crisis, without unlearning the frameworks of empire is to miss the point. It is to continue a pattern of erasure, of turning injustice into tragedy and systemic violence into unfortunate circumstances. We must be asked to do more; to look at the archives and see what's missing. To ask who had the power to record and who was denied it. To see that citizenship, health, memory, and history within the Atlantic are not neutral, they are structured by the same forces that shaped Sligo in 1832. The epidemic did not just infect bodies: it revealed how deeply inequality had infected the social order, and that, above all, is what must be remembered.



Bibliography

- Arnold, David. "Cholera and Colonialism in British India." *Past & Present*, no. 113 (1986): 118–51. <http://www.jstor.org/stable/650982>.
- Azoulay, Ariella Aïsha. *Unlearning Imperialism*. Translated by Lorna Scott Fox. London: Verso, 2022.
- Dunglison, Robley, and Paul Fritz. *Human Health: Or the Influence of Atmosphere and Locality, Change of Air and Climate, Seasons, Food, Clothing, Bathing and Mineral Springs, Exercise, Sleep, Corporeal and Intellectual Pursuits, &c. &c. on Healthy Man: Constituting Elements of Hygiène*. New edition with many modifications and additions. Philadelphia: Lea & Blanchard, 1844.
- Fee, Elizabeth. "The Public Health Act of 1848." *Bulletin of the World Health Organization* 83, no. 11 (2005). <https://www.scielosp.org/pdf/bwho/v83n11/v83n11a17.pdf>.
- Heywood, John H. (John Healy). *The Causes and Cure of Intemperance*. Place of publication not identified: [publisher not identified], 1874.
- Irwin, Henry. *A Record of Cholera Asiatica, as It Occurred in Sligo, during the Months of August and September 1832*. Sligo: Printed at "The Sligo Journal," 1832.
- Kannadan, Ajesh. "History of the Miasma Theory of Disease." *Essai* 16, no. 1 (2018): 18.
- Mandal, Shyamapada, Manisha Deb Mandal, and Nishith Kumar Pal. "Cholera: A Great Global Concern." *Asian Pacific Journal of Tropical Medicine* 4, no. 7 (2011): 573–80. [https://doi.org/10.1016/S1995-7645\(11\)60149-1](https://doi.org/10.1016/S1995-7645(11)60149-1).
- Shaw, Amy J., and V. Lynn Kennedy, eds. *Fat and the Body in the Long Nineteenth Century: Meanings, Measures, and Representations*. Toronto: University of Toronto Press, 2025.
- Steere-Williams, Jacob. "The Perfect Food and the Filth Disease: Milk, Typhoid Fever, and the Science of State Medicine in Victorian Britain, 1850–1900." Order No. 3465146, University of Minnesota, 2011. <http://libaccess.mcmaster.ca/login?url=https://www.proquest.com/dissertations-theses/perfect-food-filth-disease-milk-typhoid-fever/docview/882911676/se-2>.
- Underwood, E. A. "The History of Cholera in Great Britain." *Proceedings of the Royal Society of Medicine* 41, no. 3 (1948): 165–73. <https://doi.org/10.1177/003591574804100309>.
- White, Alexandre I. R. "Historical Linkages: Epidemic Threat, Economic Risk, and Xenophobia." *The Lancet* 395, no. 10232 (2020): 1250–51. [https://doi.org/10.1016/S0140-6736\(20\)30737-6](https://doi.org/10.1016/S0140-6736(20)30737-6).

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