# The Channel Railway: Reverberations of a Fictional Line and Thomas Hardy's $\boldsymbol{A}$

# Laodicean (1881)

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Word count (incl. footnotes): 8172 Word count (excl. footnotes): 7543 **Abstract:** 

This article couples debates about building a Channel Railway between Britain and France in the 1880s with Thomas Hardy's novel, *A Laodicean* (1881), to investigate how fiction interrogated the material and imagined limits of British railway infrastructure. By examining 'reverberation', that is the unintended and noisy oscillation of the tracks, it teases out subtle yet significant links between technology, interpretation, and control that underpin Hardy's novel, and the Channel Railway project more broadly. In doing so, it argues that imaginative writing provided a testing ground for exploring political and practical risks raised by the prospect of a railway connection between Britain and France in the late nineteenth century.

**Keywords:** infrastructure, technology, fiction, Hardy, Europe, reverberation

Although planned and plotted, one highly sought-after European transport link remained unbuilt during the nineteenth century: the Channel Railway. Debates about the possible construction of a direct line between England and France came to a head in the 1880s, bringing the physical and imagined reach of Britain's railway networks into stark relief. Increasing likelihood of such a connection lent urgency to the question: what, other than traffic, passengers, luggage, and freight, could railway lines put into motion?

Imaginative writing provided a forum for testing out abstract concerns about ambitions for the proposed Channel Railway. Thomas Hardy's 1881 novel, *A Laodicean: A Story of To-Day*, was published in *Harpers New Monthly* in the months preceding the Channel Railway debates, when the scheme attracted a flurry of attention

in British periodicals. Earlier imaginative responses to cross-Channel journeys, including Charles Dickens's essay, 'A Flight' (1851), emphasise how shifting between different modes of transport can orientate and disorientate a traveller's sense of momentum and safety. While Dickens's work was produced in a decade when a railway link to France was a desirable but unfeasible ambition, Hardy's was written at a time when the project seemed viable, if not imminent. Each author explores how errant sounds transmitted along railway lines and related infrastructures can undermine public confidence in the security of a potentially transnational system. In *A Laodicean*, however, Hardy invokes subterranean reverberations, exploring the connective and – at times – destructive potential of a more direct link between Britain and France.

This article is not about the shocks and jolts of railway travel as felt by bodies in transit, or the regular rhythm of a train in motion. It is about reverberation: sounds carried by the tracks themselves. By fictionalising such reverberation in a novel concerned with cross-Channel communication, Hardy offers a way into understanding interpretive problems posed by the phenomenon. Even as a proposal, the Channel Railway raised the stakes of misinterpretation in a diplomatically tense Europe, with potential risks ranging from diplomatic embarrassment to invasion and war.

Understanding reverberation and its significance to railway cohesion sheds new light on arrangements for crossing the Channel that were in place from the mid-century onwards, as vibrantly narrated in Dickens's 'A Flight'. If Dickens describes the rail and ferry journey's interruptions with imaginative flair, the Channel Railway debates of the 1880s built on such creativity, offering almost fantastical solutions to an infrastructural problem. From the hermeneutic parameters of the 1880s Channel Railway debates, the second half of this article turns to Hardy's *A Laodicean* – a novel predicated on errant reverberations between disparate bodies, and the ways in which technological

infrastructure upset transnational communication. Reverberation might not truly mobilise the railway tracks and their environs, but it does throw the perceived fixity and neutrality of these components into question.

#### 1. Reverberation: on and off the rails

Overland speed was far from tranquil in the steam age, and nineteenth-century fiction testifies to the noisiness of the trackside. Technical error aside, the association that Tennyson identifies in his famous line 'ringing down the grooves of change', between the sonic dimensions of railway infrastructure and potentially subversive change, was an enduring one. From 'the whizz of the coming train' in *North and South* (1855), to Dickens's 'shrieks and groans and grinds invading the ear' in *Mugby Junction* (1866), or 'each separate shriek' in Trollope's *The Prime Minister* (1867), popular nineteenth-century writers agree that railway soundscapes mingle deep, earth-moving rumblings with ear-splitting 'shrieks' that connote violence, upheaval, and pain. Echoing one another, these authors produce an oddly uniform account of railway sound: one entrenched in turbulence and trauma.

Early investigations into track-based reverberation during the nineteenth century were chiefly concerned with the railway's functional efficiency rather than concerns about noise pollution. Charles Babbage designed an instrument that recorded the extent to which various stretches of railway line would 'shake' when traversed by a moving carriage.<sup>3</sup> These shakes were inscribed onto paper scrolls that were often

<sup>&</sup>lt;sup>1</sup> Alfred Tennyson Lord, 'Locksley Hall', in *The Poems of Tennyson*, ed. by Christopher Ricks, 2nd edn, 3 vols (Harlow: Longman, 1987), II, 118–30 (line 183).

<sup>&</sup>lt;sup>2</sup> Gaskell, *North and South*, ed. by Angus Easson and Sally Shuttleworth (Oxford: Oxford University Press, 1998), p. 264; Charles Dickens, *Mugby Junction*, ed. by Robert McFarlane (London: Hesperus, 2005), p. 4; Anthony Trollope, *The Prime Minister*, ed. by Nicholas Shrimpton (Oxford: Oxford University Press, 2011), pp. 458–59.

<sup>&</sup>lt;sup>3</sup> Charles Babbage, 'Railways', in *The Works of Charles Babbage*, ed. by Martin Campbell-Kelly, 11 vols (London: Pickering & Chatto, 1989), XI, 234–51 (p. 239).

several miles long, in spite of Babbage's efforts to condense the information he gathered. Since his chronometer and measurement device operated only when the train was in motion, they could only describe how the tracks moved when the carriage passed over them. Babbage did not complement this system with a trackside measuring device, meaning that the kind of reverberation central to this article remained ephemeral and unaccounted for in these early experiments.

Critical responses to reverberation on the rails often take their cue from Babbage's line of inquiry. Wolfgang Schivelbusch, for instance, argues that on the railways, 'vibration results from the exact interaction between steel rail and steel wheel, from the speed, and particularly from the distance between the rails'. While he stresses the vital contribution that gauge makes to the type of vibration encountered on the rails, Schivelbusch's emphasis on 'the *exact* interaction between steel rail and steel wheel' suggests that he approaches railway vibration as a series of isolated events rather than a modulating and complex process. Yet Schivelbusch's attention to the material impact of such shaking on iron rails themselves is more helpful. He notes that a positive byproduct of railway vibration in the nineteenth century was raised awareness that 'continuous concussion will cause iron to crystallize and finally break', a problem that engineers termed 'material fatigue'. If reverberation goes unchecked or unattended over sustained periods there is a risk of the rails cracking and the system failing. Reverberation therefore had a profound impact on the railway's operations, albeit one that was only revealed through practice rather than experiment.

Off the rails, the kinds of micro-movements that registered as reverberation were handled with almost philosophical care. In 1882, Gustav Fechner contemplated

<sup>&</sup>lt;sup>4</sup> Wolfgang Schivelbusch, *The Railway Journey: The Industrialization of Time and Space in the 19th Century* (Berkley, CA: University of California Press, 1986), p. 118.

<sup>&</sup>lt;sup>5</sup> Schivelbusch, pp. 127, 129.

the infinite resonance of sound:

Vibrations only *seem* to die out, in so far as they spread indefinitely in all directions; or, if dying out for a time, transformed into energy or tension, they are able to begin afresh, in some form or other, in accordance with the law of the conservation of energy.<sup>6</sup>

Continual yet diminishing resonance may be a universal property of sound, but Fechner considers the aftermath of noise as a variable process: 'dying out for a time', 'transformed' into 'energy' or 'tension', or 'begin[ning] afresh'. These variations depend as much on the topography traversed by sound waves as the dynamics of the sound itself; vibrations modulate as they move through different materials. Sound cannot truly be contained or preserved, but it can be manipulated. On the railways, the modification of locomotive sounds transmitted through the iron tracks registers as reverberation. While in practice, only those physically close to the tracks might detect such sonic and kinetic transmissions, in imaginative works such rumblings could reverberate further still, in a way that emphasises the infinite but undetectable resonance of distant sounds.

Unlike vibration, reverberation is shaped and modulated by the material that carries it. Form modifies content, granting the railway lines a specific quality of sound unmatched by the system's moving components. The reflexivity of reverberation is part of its potency. Although orthographically similar, vibration and reverberation have quite different etymologies and stem from separate Latin roots: *vibrāre*, meaning 'to oscillate' compared with *verberāre*, meaning 'to beat/flog'. The violent etymological inheritance of the latter delivers reverberation as a separate and vexing phenomenon. Later *OED* definitions of 'reverberate' frame this violence in terms of expansion ('to

<sup>6</sup> Gustav Theodor Fechner, *On Life After Death*, trans. by Hugo Wernekke (London: Sampson Low, 1882), p. 54 <a href="http://archive.org/details/onlifeafterdeath00fechuoft">http://archive.org/details/onlifeafterdeath00fechuoft</a> [accessed 19 August 2017].

<sup>&</sup>lt;sup>7</sup> OED Online (Oxford University Press) <a href="http://www.oed.com/view/Entry/164746">http://www.oed.com/view/Entry/164746</a> [accessed 8 May 2018].

spread throughout') and impact ('to have consequential effects'). Reverberation therefore moves through and beyond the grounded substance of the permanent way, its accompanying buildings and tributary structures. Such movement may be minute compared with the enormously weighted velocity of a train in full steam, but it could equally be much more pervasive. Like the telegraph cables that run alongside and beyond the railway, the wrought iron rails themselves could become energised, and communicate activity occurring elsewhere on the line.

But what kinds of interpretation are available to such an abstract – rather than encoded – railway phenomenon? Michel de Certeau confronts this problem in a short meditation 'Railway Navigation and Incarceration' when he suggests that:

Only the partition [between the railway carriage and the world beyond] makes a noise. As it moves forward and creates two inverted silences, it taps out a rhythm, it whistles or moans. There is a beating of the rails, a vibrato of the windowpanes – a sort of rubbing together of spaces at the vanishing points of their frontier. These junctions have no place. [...] These frontiers are illegible.<sup>8</sup>

Forming between carriage and non-carriage space, De Certeau's temporary 'partition' moves with the train. This theory does not account for this soundscape's history or future as evident in the continued reverberation of the rails. If, as Fechner has argued, sound tends towards the indefinite, then De Certeau's 'inverted silences' can only form in a temporally isolated moment, a circumstance that is incompatible with railway operations. Yet De Certeau's interest in the ephemerality of 'frontiers' that form between carriage and non-carriage space does invite us to think carefully about the territoriality of sound. Both Dickens and Hardy's works belie these interpretations of railway sound as self-contained, an event bound to a specific circumstance, or beyond inscription. The two authors bring significance of reverberation into dialogue with other

<sup>&</sup>lt;sup>8</sup> Michel de Certeau, *The Practice of Everyday Life*, trans. by Steven F. Rendall (Berkley, CA: University of California Press, 2011), pp. 112–13.

system boundaries: between railway and non-railway space, and between different national infrastructures.

Off the rails, there was a growing cultural interest in reverberation towards the end of the nineteenth century. In 1871, the problematic opening of the Royal Albert Hall increased public awareness of the reverberative dynamics of architectural forms. A notable echo marred early performances at the newly built concert hall, leading one commentator to complain:

The interest of the audience was very naturally expended rather on the building than on the talent displayed in these performances. [...] We were forcibly reminded of the peculiar undefined sound which used to proceed from far-off pianos in the Great Exhibition of 1851.<sup>9</sup>

By linking the 'undefined sound' in the Royal Albert Hall to those 'far-off pianos in the Great Exhibition', this writer emphasises the impact that any structure can have on the soundscape produced within it, while also offering a sonic link between two temporally and spatially disparate events. The Royal Albert Hall is a particularly embarrassing example of acoustics gone wrong, since the auditorium was custom designed for musical performances. Indeed, another commentator argued that music in the Royal Albert Hall 'is heard twice over'. '10 'Far-off', 'double', and 'undefined' these disruptive sounds are difficult to locate, quantify, and understand. In a concert hall such distortion can ruin a performance; on a geopolitically contested railway it could have much more serious consequences, particularly where reverberation is concerned.

If sound, as Shelly Trower asserts, 'provides a connection between the science of energies and bodies in movement', then railway reverberation pushes us to incorporate more strands into this theoretical junction.<sup>11</sup> This unintended product of

<sup>10</sup> Anon., 'Notes on Music', *Academy*, May 1871, pp. 240–41 (p. 240).

<sup>11</sup> Shelley Trower, Senses of Vibration: A History of the Pleasure and Pain of Sound (London: Continuum, 2012), p. 2.

<sup>&</sup>lt;sup>9</sup> Anon., 'Royal Albert Hall', Examiner, 15th April 1871, p. 389.

railway activity speaks as much to network infrastructure, system dynamics, and the transmission of information as it does to physical embodiment. Sarah Alexander has argued that

Nineteenth-century physics – especially dynamics, the science of force and motion – often depended on what could not be observed, and Victorian physicists were particularly at ease with non-empirical methods of enquiry and concepts such as imponderable matter.<sup>12</sup>

Fiction can engage with the intangible where observation and experiment fall short, as in Babbage's early forays into railway turbulence. We can begin to tease out cultural implications of an elusive phenomenon by examining railway reverberation as represented in geopolitical and fictional examples, rather than the dynamics of a specific site. Through literary analysis, non-empirical repercussions of railway reverberation become more conceptually defined than their physical counterparts, and, by extension, ponderable. Cultural concerns about what reverberating railway tracks could communicate and conceal were the 'matter' of such enquiries, leading to fears which had a lasting impact on international transport infrastructures such as the Channel Railway.

## 2. 'A Flight' between Britain and France?

Clarke's Railway and Steam Navigation Map of the Channel (1860) gives us a clear impression of the much needed but unforged railway link between Britain and the rest of Europe.

Figure 1 [detail] Clarke's Railway and Steam Navigation Map of the United Kingdom [...] And part of the Empire of France (1860). Reproduced

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<sup>&</sup>lt;sup>12</sup> Sarah C. Alexander, *Victorian Literature and the Physics of the Imponderable* (London: Pickering & Chatto, 2015), p. 4.

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It looks as though continuous lines have been interrupted on this map, thanks in part to the cartographer's use of the same hues of pink and red for railway lines on either side of the Channel. Black and white dotted lines, meanwhile, indicate the daily ferry routes that constantly transported cargo and passenger traffic between these lines. A more prominent black line marks the submarine telegraph cable, laid in 1852, which transmitted information along a route that the railways could not yet match. James Chalmers, an engineer campaigning for this to change, anthropomorphises the interruption of the railway line in a pro-Channel Railway pamphlet. He describes how, on the 1860s map, '[1]ines are seen drawing together apparently by some attraction, stretching out their iron arms as if they would embrace, when, lo! They have stopped'.\frac{13}{2} For Chalmers, the prospect of a continuous line between England and Northern France is very much within reach; it is the natural consequence of two separate networks operating in such close proximity. The rails, in Chalmers's vision, extend towards one another apparently of their own volition, exchanging unengineered, emotive energy.

By omission, railway timetables circulated the fiction of a seamless connection from London to Paris from the mid-century onwards. The 1860 *ABC Railway Guide*, for example, advertised a daily service running from London Bridge to Paris, with no mention of the portion of the journey undertaken off the tracks by ferry. <sup>14</sup> An imagined railway link therefore connected Britain and France on paper for over a century before the corresponding engineering was put in place. Throughout the nineteenth century, the

<sup>13</sup> James Chalmers, *The Channel Railway Connecting England and France* (London: E & F. N. Spon, 1861), p. 1.

<sup>&</sup>lt;sup>14</sup> Anon., The ABC or Alphabetical Railway Guide (London: W. M. Tweedie, 1860), LXXVI, p. 77.

railways that reverberated on either side of the Channel relied on telegraphic and naval means to transport their consignments. Loading and unloading passengers, luggage, and freight caused bottlenecks on either coast, and the notoriously queasy ferry crossing punctuated an already far-from-frictionless journey.

Charles Dickens narrates one of these broken journeys from London to Paris in great detail in his travelling sketch written for *Household Words*. In 'A Flight', Dickens contrasts the desire for open, uninterrupted, independent, and preferably airborne travel— 'I shall take a flight to Paris (as I soar round the world) in a cheap and independent manner'— with halting provisions of the South Eastern Railway Company's service from London Bridge to Paris. <sup>15</sup> He likens the train's departure from each interim station and tunnel between London and Folkestone to a bullet being fired from the barrel of a gun, and emphasises each relay with an onomatopoeic exclamation: 'Whirr!', 'Whizz!', 'Rattle!', 'Bur-r-r-r!' (p. 530). The only consistent aspect of this journey is its loudness, in contrast with the independent tranquillity that Dickens aspires to in his opening reverie. Dickens's halting journey may be noisy, but this uneven soundscape does not indicate the momentum and acceleration associated with unimpeded travel; each 'whirr' and 'whizz' registers as an interruption, a delay, or a crisis.

At every opportunity, Dickens accentuates the lack of direct, smooth, velocity of his railway-bound journey. He presents this perceived lack of onward drive at its most extreme when the train passes through a tunnel. The narrator mistakenly thinks that the train has changed direction: 'I wonder why it is that when I shut my eyes in a tunnel I begin to feel as if I were going at an Express pace the other way. I am clearly going back to London, now' (p. 530). The tunnel distorts and upsets the narrator's sense

<sup>&</sup>lt;sup>15</sup> Charles Dickens, A Flight', *Household Words*, 30<sup>th</sup> August 1851, pp. 529–33 (p. 529). All further references to this edition will be made within the text.

of trajectory. Without a visual frame of reference, sonic and kinetic dimensions of railway travel leave this traveller confused rather than well orientated. Reverberation may contribute to the overall impression of a railwayscape, but it does not necessarily convey apprehensible information. The narrator's swift transition from conditional suspicion ('I begin to feel as if'), to present-tense certainty ('I am clearly going back'), illustrates how quickly one could arrive at the wrong conclusion based on such sensory dissonance. It also reveals the precariousness of Dickens's trust in the railway; a few seconds within the tunnel are enough to convince him that the entire system has been thrown into reverse. While the railway journey from London to Paris might have been advertised as a direct route, passengers remained hyperaware that they were travelling in a much less stable system than the inland railways.

Throughout 'A Flight', railway officials attempt to placate passengers with a cacophony of bells and announcements, constantly reminding crowds that they are within the London and South Eastern company's safe hands. On arrival at Folkestone, a disembodied voice distracts passengers from the delay in transferring from train to boat with the announcement: '[r]efreshments in the Waiting-Room, ladies and gentlemen. No hurry, ladies and gentlemen, for Paris. No hurry whatever' (p. 531). Such hospitality slows passengers down during 'twenty minutes' pause, by the Folkestone clock' (p. 531). 'All this time', Dickens notes, 'there is a very waterfall of luggage, with a spray of dust, tumbling slantwise from the pier into the steamboat' (p. 531). Stopping points during this high-speed London-to-Paris journey require much greater social control than mechanical control. The 'waterfall' of luggage needs little management compared with the restless crowds, who require near-constant verbal instruction.

If de Certeau's 'illegible frontiers' are the product of vector-like movement through apparently fixed space, then these boundaries become particularly unstable when those moving through the system lose momentum. Passengers, being far more vagrant than luggage, posed a particular challenge. The longer spent outside a moving carriage, the greater risk that the fiction of a continuous railway line between London and Paris would lose coherence. Between disembarking at Folkestone and boarding a new train at Boulogne, passengers have been jostled, sickened, led astray, and reassembled in a quite different composition on the French railway platform. To draw attention to this breach in an almost complete network would be to expose the railway's limits when compared with what the railway network *could* be. 'Now, the fact is,' notes a journalist describing a similar journey to Dickens's, 'there is no time to spare, and in all probability, if you attempt to dine at Boulogne, you lose the train'. 16 In the final, present-simple turn, 'you lose the train', conditionality strips away. This writer travels rapidly down his line of thought from probability to certainty. In lieu of a tunnel connection, companies wanted to funnel travellers through the non-railway steps of the journey, and prevent them from being exposed to opportunists' attempts to siphon them out of what they were trying to present as a complete system.

But the Channel did not interrupt a continuous network. British and French railway networks were two separate systems built on very different social principles. Whereas British railways comprised of numerous private profit-driven companies, French railways were nationalised 1842.<sup>17</sup> Were these two vastly different systems connected by a permanent way, it would be difficult to determine how the line between them should run. The anonymous journalist notes that in France there are fewer bridges

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<sup>&</sup>lt;sup>16</sup> Anon., 'To Paris in Twelve Hours', p. 455.

<sup>&</sup>lt;sup>17</sup> See Micheline Nilsen, Railways and the Western European Capitals: Studies of Implantation in London, Paris, Berlin, and Brussels (Basingstoke: Palgrave, 2008), p. 22.

and tunnels than in Britain, concluding that 'the engineering has been carried out with a view to the saving of expense, rather than to the performing of apparent impossibilities'. 18 Without directly pointing the finger, this writer implies that British, rather than French railway engineers, would be more likely to seriously contemplate the 'apparent impossibility' of tunnelling through the Channel – the unspoken logistical proposal at the heart of this article. Diplomatic posturing aside, the qualitative differences noted here between British and French railway infrastructures raise the question: how compatible would these systems be if joined, and which ideology would define activity on the tracks? Could international reverberation lead to cultural fracturing over time similar to that the Schivelbusch describes of the rails themselves? The nineteenth-century arrangement, involving a tentative but inconstant transfer of passengers and goods from one railway network to the other by frequent Channel ferries preserved cultural and operational differences underpinning these distinct networks. As the boat approaches the French coast in Dickens's 'A Flight', the narrator observes a shift in manner among the passengers depending on their country of origin: 'now I find that all the French people on board begin to grow, and all the English people begin to shrink. The French are nearing home, and shaking off a disadvantage, whereas we are shaking it on' (p. 531).

## 3. Channel Railway Debates

Debates on the construction of a tunnel came to a head in 1882 after several decades of the route running as described in *Household Words* and *Leisure Hour*. The 1882 special 'Channel Railway' issue of *Nineteenth Century* begins with an acknowledgement: 'the public are beginning to recognise the fact that the difficulty attending its construction

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<sup>&</sup>lt;sup>18</sup> Anon., 'To Paris in Twelve Hours', p. 458.

and working have [sic] been much overrated'. 19 Despite the physical plausibility of a Channel Tunnel, schemes designed to circumvent a permanent line continued to proliferate through the 1880s. One of the most popular and bizarre suggestions among anti-tunnel campaigners was proposed by John Fowler, whose contribution 'may be, perhaps, shortly described as a project for the establishment of huge floating railway stations, which could traverse at a high speed the distance between the English and French coasts'. 20 As a solution, this proposal presents substantial challenges. It is unclear to what extent ferrying the train itself might circumvent the inconvenience of unloading and reloading passengers and freight. Moreover, such enormous stations would further congest an already busy shipping thoroughfare, and locomotives used would have to be compatible with the railway tracks on either side of the Channel. Crucially, though, this proposal would prevent railway networks on either side of the Channel from merging into a continuous line. This rather steampunk vision of highspeed floating stations gives us a sense of how strongly Fowler and his supporters objected specifically to the prospect of an unbroken railway line between England and France.<sup>21</sup> Since, from an engineering point of view, at least, the tunnel project was now deemed viable, the debate turned to probe a more unsettling question. If built, what would such a connection actually mean?

A submarine telegraph cable had conducted messages between Britain and Continental Europe since the 1850s, so what was it about a railway connection by tunnel that posed such a threat? Laura Otis has argued that nineteenth-century scientists approached communication networks as 'a complex circuit of thought – a system of

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<sup>&</sup>lt;sup>19</sup> Fred Beaumont, 'The Channel Tunnel', ed. by James Knowles, *Nineteenth Century*, March 1882, pp., 305–12 (p. 305).

<sup>&</sup>lt;sup>20</sup> John Fowler, 'The Channel Passage', ed. by James Knowles, *Nineteenth Century*, March 1882, pp. 337–45 (p. 341). No stranger to ambitious engineering, Fowler is perhaps best known for his work on the iconic Forth Rail Bridge, which he had been commissioned to co-design in 1881.

coils, cross-links, and loopings in which a fluctuation at any point instantly becomes a property of the entire system'. <sup>22</sup> This understanding of networks puts the Channel Tunnel debate into perspective. Pervasive physical 'properties' that would permeate and define both networks once joined are incompatible with the notion of railways as 'property', subject to ownership and control. There was a risk, then, that the extensive railway networks already stretching across Britain would be othered by the link because they would share and relay reverberations originating from another nation. In other words, once a tunnel connected British and French railway networks, they would cease to operate as separate entities. While this fear is not sustained by physical composition of railway infrastructure (what appeared continuous was actually replete with breaks and stops), it nevertheless held imaginative salience. If the transmissions and emissions of part of a network could define the whole, then how could Britain and France retain national control of their own lines?

British isolationism and fear of invasion were the main impediments to the Channel Tunnel being realised during the late nineteenth century. As one supporter of the railway line bemoaned, '[t]he only obstacle that I see – speaking for myself – is to be found in our prejudices; and I think that our grand-children, if not our nearer descendants, will [...] wonder how it was that the people who preceded them were so full of fear.'<sup>23</sup> In the absence of a physical railroad connecting Britain and France, literature gave voice to concerns about what a direct, permanent transport link potentially *could* carry. To expand on such an abstract threat, we need to return to reverberation, and think about railway infrastructure as it was invoked in fiction on either side of the Channel. If the Channel separates 'frontiers' between British and

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<sup>&</sup>lt;sup>22</sup> Laura Otis, *Networking: Communicating with Bodies and Machines in the Nineteenth Century* (Ann Arbor, MI: University of Michigan Press, 2001), p. 13.

<sup>&</sup>lt;sup>23</sup> William Boyd Dawkins, *The Channel Tunnel* (Salford: Manchester Geological Society, 1882), p. 13.

French railway systems, then how would a continuous permanent way linking the two interact, physically and figuratively?

# 4. A Laodicean: Insulation and Interpretation

While it is a relatively quiet novel, *A Laodicean* nevertheless buzzes with locomotive and telegraphic activity, and is replete with transcontinental transactions that resonate with concerns about the construction of a tunnel between the English and French coasts. Initially set in rural Wessex, the novel depicts an inconsistent romance between George Somerset, an architect, and Paula Power, an heir to a railway fortune and owner of Stancy Castle. Its ensemble of characters, including Somerset, Power, and members of the formerly aristocratic Stancy family, journey and transmit scores of messages between the South of England and France. Disjuncture, between those who establish a line and those who control it, impedes the frictionless integration of technology in *A Laodicean*. This applies to bloodlines and much older structures as well as relatively new technologies.

Railway and telegraph lines parallel one another very closely in this novel written during the decade of railway electrification as well as the Channel Tunnel debates. <sup>24</sup> From a lay perspective, railway lines looked likely to become more telegraphic in their operations, and by extension, potentially more deeply encoded. Hardy introduces the telegraph through his protagonist and architect's attention to the sound of its buzzing lines, rather than its receiver: Somerset was 'attracted to the other side of the way by a hum as of a night-bee, which arose from the play of the breezes over a single wire of telegraph running parallel with his track' (p. 16). On the whole, critical engagement with technology in *A Laodicean* tends to pursue the telegraphic

<sup>&</sup>lt;sup>24</sup> Electric railways, first exhibited in Berlin by their inventor Dr W. Siemens, were showcased in Paris and London in 1881. See Anon., Electric Locomotion', *Chambers's Journal*, 16<sup>th</sup> May 1885, pp. 316–19.

line, exploring what Clare Pettitt has described as 'the treachery of new media that reproduce the immediacy of direct contact, fatally disjunct from actual presence'. Yet recoupling the telegraph with the railway and the interpretive problems that its reverberations and dead silences raise belies the prospect of imaginatively insulating either system.

Hardy introduces the novel's landscape through an exercise in echolocation as Somerset pauses to take stock of his surroundings:

Coming to a stile, Somerset mounted himself on the top bar, to imbibe the spirit of the scene and the hour. The evening was so still that every trifling sound could be heard for miles. There was the rattle of a returning waggon, mixed with the smacks of the waggoner's whip: the team must have been at least three miles off. From far over the hill came the faint periodic yell of kennelled hounds; while from the nearest village resounded the voices of boys at play in the twilight. Then a powerful clock struck the hour; it was not from the direction of the church, but rather from the wood behind him; and he thought it must be the clock of some mansion that way (pp. 6-7).

Resonant from the outset, *A Laodicean* is as concerned with information and how it travels as it is with the characters and plotlines running through the text. This sonic description of 'the spirit of the scene and the hour' conflates spatial and temporal attention to detail. Through alliteration, ('rattle' 'returning', 'waggoner's whip'), assonance ('yell', 'kennel'), and sibilance ('voices of the boys'), Hardy constructs a soundscape from the properties shared between the cause and the expression of sound. The architect discerns the waggon's distance and direction of travel, perceives that the barking dogs are 'kennelled', and that the boys' voices resound from the 'nearest village'. Hardy qualifies this description by including details of how these sounds reverberate, and has the language of the text embody, and therefore replicate, the sounds. In other words, he enriches the soundscape in a way that contrasts with

<sup>&</sup>lt;sup>25</sup> Clare Pettitt, *Patent Inventions: Intellectual Property and the Victorian Novel* (Oxford: Oxford University Press, 2004), pp. 297–98.

Dickens's uneven commentary in 'A Flight'.

Yet Hardy's specificity slips in the final, separate turn: '[t]hen a powerful clock struck the hour'. 'Clock' and 'struck' only half rhyme, and unlike the previous sounds, Somerset struggles to locate this chime precisely. He vaguely and inaccurately muses that 'it must be the clock of some mansion that way'. As Hardy later reveals, the clock is a new electrical installation at the Castle Stancy, superimposing new technology onto an old structure. If the 'spirit' of a place can be detected through its soundscape in A Laodicean, then Hardy initially dissociates such 'spirit' from technologically produced sounds. Designed and engineered elsewhere, this clock's chimes do not harmonise with this text's rural setting. Kate Thomas has argued that in A Laodicean, the 'castle, like a railway or a telegraph wire is part of a national infrastructure [...] Hardy shows us an England in which these infrastructures do not disrupt the landscape, but become an organic, almost invisible part of it'. 26 Yet attending to the sonic, rather than the visible evidence of technology in the novel's opening pages exposes the partial extent of this integration. The clock chime interrupts rather than sustains the passage's sonic topography. Hardy signals technology's intrusive potential in A Laodicean, even while introducing its ubiquity.

The connective capacity of telegraph cables, railway lines, and electric clocks associates these systems with an unseen and often uncertain 'elsewhere'. Hardy emphasises this during a tableau of trackside encounters in the first book of *A Laodicean*. He links the railway infrastructure running through Wessex with Continental Europe long before any of the characters travel beyond the English Channel. At some distance from the rails, the railway heir, Paula Power, questions

<sup>&</sup>lt;sup>26</sup> Kate Thomas, *Postal Pleasures: Sex, Scandal, and Victorian Letters* (Oxford: Oxford University Press, 2012), p. 130.

Somerset about his knowledge of her father's involvement in railway engineering:

'Did you know that my father made half the railways in Europe, including that one over there?' she said, waving her little gloved hand in the direction whence low rumbles were occasionally heard during the day (p. 79).

Hardy introduces the rural stretch of line at hand in a subordinate clause, 'including' it as the closest point of reference to a more extensive network of European railways 'made' by Mr Power. He subordinates this railway to distant lines run by unknown companies. This railway line may not be physically connected to those operating across Europe, but Hardy nevertheless asserts a strong material link between the Outer Wessex railway and its counterparts beyond the Channel through their shared industrial architect. When Hardy turns to railway reverberation in this passage he uses the passive voice: 'low rumbles were occasionally heard'. Together with the electrical clock, this passivity contributes to the impression that technologically produced sound can only be vaguely and partially apprehended in this novel. 'Low' in both pitch and position, these sounds suggest subterranean activity. While these railway lines contribute to and extend the novel's soundscape, they indicate but provide no clear insight into distant events.

As the scene continues, the vast European networks referenced in the previous passage give way to the local activity of a nearby passing train.

Curiously enough, or perhaps naturally, since it was a main line of railway, with his words there came through the broken windows the murmur of a train in the distance, sounding clearer and more clear. It was nothing to listen to, yet they both listened; till the increasing noise suddenly broke off in the dead silence.

'It has gone into the tunnel,' said Paula. 'Have you seen the tunnel my father made? The curves are said to be a triumph of science. There is nothing else like it in this part of England (p. 79).

Hardy's narration of this scene oscillates like the nearby tracks. He replaces 'curiously' with 'naturally' as an appropriate epithet for the gathering murmur almost at once, and

immediately undermines his statement that 'it was nothing to listen to' by noting how the sound attracts both Paula and Somerset's attention. Although the significance of railway reverberation remains unresolved in this passage, but Hardy nevertheless narrates the phenomenon with care and deliberation. While the train passes with a noisy crescendo, in its aftermath the soundscape becomes an impossibly mute 'dead silence'. Paula bases her assertion that the train 'has gone into the tunnel' on aural rather than visual information; she combines the sudden lack of sonic reference with local knowledge. The sudden contrast between noise and silence indicates that Somerset and Paula can no longer perceive the reassuring 'low rumble' that indicates a wider railway network. Enda Duffy has argued that '[m]odernist writing, as it developed forms (each writer in her or his own way) to transmit this somatic data to the reader or viewer, became itself elastic and reverberative'. 27 Hardy may be interested in the somatic dimensions of this 'reverberative' episode, but his integration of the railway soundscape into this scene feels far from 'elastic'. Rather, Hardy's narration of the somewhat distant passing train and the silence that follows is halting, uncertain, and abrupt. By awkwardly avoiding the phrase 'clearer and clearer', Hardy registers his aversion to introducing any rhythmic regularity to this scene. Far more concerned with friction than flux, Hardy emphasises the unnerving impact of railway reverberation cut short. A 'triumph of science', the fictional tunnel insulates sound absolutely, operating as an unobserved and unaccountable space. Given A Laodicean's publication in the months preceding the Channel Railway debate, such unaccountability could have particularly disconcerting repercussions.

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<sup>&</sup>lt;sup>27</sup> Enda Duffy, 'High-Energy Modernisms', in *Moving Modernisms: Motion, Technology, and Modernity*, ed. by David Bradshaw, Laura Marcus, and Rebecca Roach (Oxford: Oxford University Press, 2016), pp. 83–97 (p. 84).

A silent railway can be much more dangerous than a reverberative one, as Hardy demonstrates in the trackside scenes of this railway tableau. Somerset visits the tunnel on Paula Power's recommendation, and narrowly avoids an oncoming train while inspecting the railway builder's handiwork. From within the tunnel he apprehends the train approaching:

In the middle of the speck of light before him appeared a speck of black; and then a shrill whistle, dulled by millions of tons of earth, reached his ears from thence. It was what he had been on his guard against all this time, – a passing train (p. 82).

This time, Somerset sees the train before he hears it. Hardy extensively punctuates this passage, prolonging the interval between visual and aural apprehension. He overstates the cause of the train's quiet approach in parenthesis: 'dulled by millions of tons of earth'. This detail further extends the delay between the 'shrill whistle' sounding and the moment this information physically 'reached' Somerset's 'ears'. The whistle works its way through the tunnel's sound-muffling dimensions with difficulty, and there is no evidence of the rails reverberating at all. It almost sounds in the 'millions of tons of earth', but does not quite carry. Absence of reverberation does not denote safety or isolation from railway activity. Somerset steps into a recess to avoid a collision, but Hardy ascribes this response to the architect being 'on his guard', suggesting that a less visually attentive person would have perished.

In the immediate aftermath of this scene, Hardy depicts Somerset considering the tunnel's design, 'mentally balancing science against art', while Paula Power worries about the architect's fate from outside (p. 82). She asks Somerset for his opinion of the structure, but another train interrupts the couple before he can respond:

'What do you think of the tunnel?'

They were crossing the railway to ascend by the opposite path, Somerset keeping his eye on the interior of the tunnel for safety, when suddenly there arose a noise and shriek from the contrary direction behind the trees. Both knew in a moment what it meant, and seized the other as they rushed off the permanent way. The ideas of both had been so centred on the tunnel as the source of danger,

that the probability of a train from the opposite quarter had been forgotten (p. 83).

The unreliable soundscape for this stretch of line shifts depending on the listener's position; proximity to the tunnel and the depth of the railway cutting both distort and impede sound transmission. In their concern about the tunnel as a source of danger, Hardy's characters neglect the possibility of threats approaching from closer to home. While the train that passes in this final railway episode follows exactly the same route as the earlier service heard by Somerset and Paula in the first scene, it does not resonate with the same growing clarity. Paradoxically, distant locomotive sounds resonate much more clearly along this particular stretch of railway line than those close at hand. Hardy exploits the immensely variable properties of railway reverberation to stage this climactic scene in an otherwise indifferent narrative. Since reverberation is an unmonitored by-product of railway activity, rather than a regulated outcome, it is far from consistent or reliable as a source of information. Yet whether animated by reverberation or not, all railway tracks must be treated as 'live'.

Hardy's invocation of the railway soundscape in *A Laodicean* differs immensely from earlier fictional engagement with locomotive noise. In *Victorian Soundscapes*, John Picker explores Charles Dickens's early forays into railway writing of the 1840s, arguing that

what really seems to matter in these scenes is the unique impact of their particular combination of image and text, the railway and those of his rhetoric, or to put it another way, between the power of the express and that of his expression'.<sup>28</sup>

Picker limits his analysis of Victorian railway soundscapes to those representing the technology while it was relatively new: *Dombey and Son* and Babbage's experiments.

<sup>&</sup>lt;sup>28</sup> John M. Picker, *Victorian Soundscapes* (Oxford: Oxford University Press, 2003), p. 28.

Hardy, by contrast, is much more concerned with mediation and remediation than expression. Unconcerned with finding a suitable 'rhetoric' to articulate the railwayscape, Hardy interrogates it. He attends to the perlocutionary effects of railway sound, placing much greater emphasis on the anticipation and reception of vibrations than the sounds themselves. For Hardy, reverberation need not necessarily express a retrievable, readily interpreted signal. The kinetic energy associated with sound does not vanish in Hardy's novels; the author, 'balancing science against art', channels it towards other purposes, beginning with an individual character's perceptions.

Speculation about what a silent line means can be as generative and subversive as the receipt of bad news in *A Laodicean*. Later in the novel Somerset's anxieties about a lack of telegraphic contact with Paula Power lead to his drastic decision to follow her to France, where she is travelling with friends, family, and her new love interest, Captain de Stancy. Hardy describes Somerset's expedition in peculiarly cable-like terms:

Between him and Paula stretched nine hundred miles by the line of journey that he found it necessary to adopt, [...] by the time that nine o' clock sounded next morning through the sunless and leaden air of the English Channel coasts, he had reduced the number of miles on his list by two hundred, and cut off the sea from the impediments between him and Paula (p. 246)

Although Somerset follows a similar line from England to France to that taken by Dickens, Hardy does not dwell on his passenger's experiences. His description of the clock chime, which 'sounded' 'through the sunless and leaden air of the English Channel coasts', transports this novel from Britain to France. Such odd imagery recasts airborne vibration as reverberation through a solid, 'leaden' substance, and the open sky as an unlit and oppressive space. While this leg of the journey is therefore less narratively insulated than the miles traversed by train, Hardy maintains a degree of containment by describing the passage 'through' rather than 'over' the Channel.

Somerset follows as proximate a 'line of journey' as possible to the existing telegraphic connection between Britain and France, but reverberation rather than a railway line, a steamship, or an electric current carries the narrative.

Throughout A Laodicean, English travellers in France are obvious, exposed, and easily intercepted. Yet their actions are less easily understood. Somerset tracks down Paula Power and the Stancy party by word-of-mouth, and pursues them by rail, but does not consider his own vulnerability to pursuit. As a consequence, he loses control of how his journey to the Continent signifies to the group he seeks. The novel's villain, William Dare, subverts the established line of communication between Somerset and Paula to his own means by sending a forged telegram requesting money from the former to the latter (p. 254). Although 'she could not comprehend it', Paula believes the message to be genuine, and responds by further distancing herself from Somerset (p. 256). Richard Menke, like Pettitt, has used this episode as an example of the duplicity of mediation, arguing that 'when a forged telegram and an altered photograph condemn the novel's blameless hero, it becomes clear that however modern these technologies are, they may be as likely to mislead as to extend our "direct vision" and our understanding'.<sup>29</sup> By ascribing the capacity to 'mislead' or 'direct' to nineteenth-century technologies, Menke risks overstating the agency of such media in their misuse, and shifting responsibility away from those transmitting and receiving messages and onto the system itself. Yet if we resituate this subverted telegram with reference to the unevenly insulated status of European railway and telegraphic infrastructure throughout A Laodicean, an altered, if still cautionary perspective emerges. Even those most familiar with a particular infrastructure in this text consistently fail to account for that system's

<sup>&</sup>lt;sup>29</sup> Richard Menke, *Telegraphic Realism: Victorian Fiction and Other Information Systems* (Stanford, CA: Stanford University Press, 2008), p. 214.

errant reverberations. Paula Power extends greater trust in the security of communication infrastructures than such systems merit. Hardy contrasts Somserset's mistrust in the telegraph as a reliable medium with Paula's confidence in its infallibility, and suggests that either extreme poses a risk. Hardy's depiction of telegraphic communication in *A Laodicean* therefore advises interpretive rather than structural caution. It is not the structure but its use that poses a risk, and links between Britain and France are not as used as wisely as they should be in this novel.

Hardy does not need to directly invoke the Channel Tunnel debates, nor state a specific position on the scheme in *A Laodicean*. Like its namesake, this 'story of today' remains lukewarm where the future of contemporary infrastructure is concerned. A lack of railway link connecting Britain and France does little to impede frequent passenger transactions between the two countries throughout the novel. Nevertheless, attention early in the text to the 'low rumbles' and reverberations of the railway and the telegraph alerts us to the unsettling potential of subterranean infrastructure. Seldom correctly interpreted, reverberation plays the role of physically and figuratively connecting Britain and France throughout *A Laodicean*. He demonstrates that nationalist isolation is as impossible as absolute silence, and that mediated actions will always be open to scrutiny and consequences, later down the line.

#### 5. Conclusion

Despite determined efforts by those supporting the scheme, plans to tunnel beneath the Channel and install the railway remained stubbornly unfulfilled during the remainder of the nineteenth and most of the twentieth century. The breach in an otherwise sprawling Continental railway network remained, exposing the practical and

<sup>&</sup>lt;sup>30</sup> Hardy's title references the ancient church of Laodicea implored in the Book of Revelations for its indifference. The term 'Laodicean' became synonymous with lukewarm feeling during the early modern period. See 'Laodicean, Adj.', *Oxford English Dictionary* (Oxford: Oxford University Press) <a href="https://oed.com/view/Entry/105687">https://oed.com/view/Entry/105687</a> [accessed 2 December 2019].

imaginative limits of European railway engineering. While Hardy, like Dickens before him, avoids resolving concerns about national security that underpinned the Channel Railway debates, he does offer multi-sensory insight that enriches our understanding of Victorian hopes, fears, and frustrations with transit between Britain and France. Hardy's railway and telegraphic soundscape speaks to the dangers of overreliance on a single line of communication. *A Laodicean* warns us that even a silent line carries a risk of conflict if coupled with existing biases or suspicions about distant activities.

It was not until 1994 that a Channel Railway opened for public use between Britain and France, more than a century after the debates examined in this article. While European conflict and a long period of diplomatic and infrastructural repair separated the late twentieth-century project from that envisioned and imaginatively interrogated in the 1880s, some resonances remain. When the connection's operator, 'Eurotunnel' rebranded to 'Getlink' in the immediate aftermath of Britain's contentious referendum on EU Membership, the *Guardian* noted 'the admirably Anglo-Saxon' name as evidence of continuing anxiety over who controls the line. Well into the twenty-first century, then, language surrounding the Channel Railway has remained a source of friction, albeit with reference to a physical rather than an imagined structure.

#### **Funding**

This research was supported by the AHRC under grant numbers AH/K503071/1 and AH/M000893/1; and by the Leverhulme Trust under grant number ECF2019-573.

### Acknowledgements

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<sup>&</sup>lt;sup>31</sup> Gwyn Topham, 'Eurotunnel Renamed Getlink in Preparation for Post-Brexit Era', *The Guardian*, 20 November 2017, <a href="https://www.theguardian.com/business/2017/nov/20/eurotunnel-rebrand-getlink-brexit-channel-tunnel">https://www.theguardian.com/business/2017/nov/20/eurotunnel-rebrand-getlink-brexit-channel-tunnel</a> [accessed 14 January 2019]

I am grateful to The Bodleian Library for permission to use *Clarke's Railway and Steam Navigation Map*. Thanks also to Grace Egan, Ruth Livesey, Clare Pettitt, and John Plunkett for their generous advice during the course of this work, and to the *Journal of Victorian Culture* Graduate Essay Prize Panel for their insightful feedback on the submission.