Introduction

How did the novel come to be entangled with large-scale public infrastructure in nineteenth-century Britain? Sixteen years after the first purpose-built passenger railway opened in 1830, an anonymous writer for *Chambers's Edinburgh Journal* pondered the formal compatibility of railways and fiction. 'One half of the romantic stories of the country are more or less connected with stage-coach travelling', the author muses, 'but the railway, with its formal lines and prosaic punctuality, appears to be almost entirely given up to business'.[1] By claiming (however hyperbolically) that 'one half' of 'romantic' stories in the 1840s work through stagecoach infrastructure, this author puts the untapped potential of railway travel under the spotlight. Yet the exact proportion of fictional references to popular transport is less important than public perception of plotlines and travel as closely intertwined modes. There was an inevitability about novelists exploring the possibilities of passenger railways in fiction. The *Chambers's* author optimistically looks forward to such a point in the future: 'by and by, when our ideas get time to adapt themselves into the hurry-skurry of the rail, adventures, we have no doubt, will be picked up at every station, and denouements found at every terminus'.[2] Yet the creative entanglement of railway infrastructure and fiction involved more than a waiting game for 'ideas . . . to adapt themselves'. And on the page and in practice, railways are more than 'modes of getting along', vehicles for adventures, or platforms for staging denouements. As public-facing industrial systems, enlivened by public use, they developed in multifaceted ways with long-standing implications for literary culture. Redeveloping novel form in the railway age was an imaginatively ambitious and demanding project.

Railway Infrastructure and the Victorian Novel investigates how novels adopted, adapted, and redirected railway infrastructure as it developed during the steam age. From the 'dire disorder' of the 'unfinished and unopened railroad' in Charles Dickens's *Dombey and Son* (1848), to

residents' concern that the railways were 'going to cut Lowick parish into sixes and sevens' 'in the absence of any precise idea as to what railways were' in George Eliot's *Middlemarch* (1872): many of the most memorable railway episodes in nineteenth-century novels were more concerned with infrastructure than locomotion.[3] Why, then, do canonical authors including Dickens, Gaskell, Trollope, Eliot, Hardy, and Forster go to such lengths to incorporate detailed depictions of trackside space into their works? Finding formal synthesis between railway and novel infrastructure required imaginative labour, and an understanding of common ground between fictional and technological logistics. Indeed, as I trace through the early chapters of this book, it took time and public engagement for the social infrastructure of railways to take root. In 1849, Thomas De Quincey complained that 'the crowds attending at a railway station have as little unity as running water, and own as many centres as there are separate carriages in the train'.[4] While coherence and predictability may have been an ambition for track-bound activity, public-facing elements of railway infrastructure were collaboratively negotiated. Fictional invocations of railway space, I suggest, became gradually imbricated into railway construction and operation as the nineteenth century wore on. Beyond deepening parallels between railways and narrative, throughout this book I uncover how print infrastructure – production and circulation, periodical publication timetables, public discussions concerning plotlines, and terminus bookstalls – entered into a feedback loop with novel form. Literature shaped public infrastructure, which in turn shaped the way stories could be told.

Many of the authors featured here share an interest in the railways beyond that of an occasional traveller. Dickens's recovery from a railway accident at Staplehurst in 1865, during which he 'worked for hours among the dying and the dead' has been well documented, as has Anthony Trollope's Post Office work, particularly to expedite mail in Ireland via railways.[5] George Eliot's investments in domestic and international railway infrastructure are central to Nancy Henry's incisive analyses of the author's significance.[6] Thomas Hardy was an apprentice architect between 1866 and 1867, tasked with removing human remains from St Pancras Old Church to clear the way for a railway line.[7] Each of these trackside encounters exposes dimensions of the railwayscape that cannot be perceived while journeying, and each of the authors studied here imaginatively employs such perspectives in fiction.

In my pursuit of the ways in which formal aspects of railway infrastructure become integrated into and eventually shape novel infrastructure, I am

more interested in the habitual than the exceptional in print and railway culture. With the exception of E. M. Forster's *Howards End*, each of the novels examined here was first released serially, whether in self-standing parts or within a periodical magazine. It would be an overstatement to say that the nineteenth-century periodical press parallels railway infrastructure directly, but they do share some key similarities. Each channels different kinds of information – factual or imaginative – through largely predetermined infrastructural routes and each engages an ever-shifting public. Incidental readers would be more likely to depend on signposts within a magazine when perusing an issue than those already well adjusted to the rhythm and tone of a particular title.[8] Such textual orientation corresponds to the relative competence of frequent passengers compared with those making a one-off journey on a particular stretch of railway line. In both instances indexes and timetables might both aid and confuse navigation, though it is much easier to correct one's course in a periodical than when lost on the railways. Serial titles were published at timetabled intervals, though, as with the railways, the release of a new issue did not always correspond to the advertised time.[9] For Mark W. Turner, the 'periodicalness of periodicals' produces 'distinct and overlapping temporalities in print media [that] suggest and construct different socio-cultural understandings about time'.[10] Regular periodicity, like a regular train timetable, was a fiction that took work to sustain, and public expectations that a new instalment of a magazine would arrive on time contributed to editors working to ensure its timely release. Railway infrastructures in serialised fiction might introduce even further temporal confusion, even amidst the depiction of apparently standardised time. On the railways and in print culture, adhering as closely as possible to prescribed standards depended on collaboration though quite complex 'live' networks, and standardised operations were often precariously maintained.

Increasing popularity of multiplot fiction by the mid century, and the consequent restriction of plotlines in later works, mirrors the railway mania of the 1840s and more modest expansion in later years. Whereas Dickens produced lengthy multivolume works including *Dombey and Son* and *David Copperfield* around the mid century, and Trollope carried his characters through multigenerational series, by the 1880s, Hardy distilled the novel into something less universalising. Peter K. Garrett's argues that 'by elaborating and refusing to resolve ... incompatible meanings, multiplot novels ... come to "mean" themselves, to present not a direct vision of the world but a dramatization of the process and problems of making sense of it'.[11] Self-referentiality aside, this emphasis

on 'process and problems' resonates with systemic aspects of railway infrastructure under consideration here. A single narrative line might tell us a little about how intricate novel mechanisms can become, but in running several concurrent plotlines, multiplot novels provide insight into the capacity of the form. Multiplot novels and railway networks are complex systems, and both, I suggest, can be better understood by exploring the relationship between the two. Different genres put new technologies to different creative uses, and particularly rich scholarship has explored the relationship between railways and sensation fiction on the premise that such travel opened up a new sensorium that complemented the thrilling pace of sensation plots.[12]

To read infrastructurally is to interrogate the imaginative groundwork that underpins the macro and micro machinations of fiction through the steam age. My ambition throughout this book is therefore to move beyond direct thematic connections, and to show how thoroughly infrastructures of the railways shaped the Victorian and Edwardian literary imagination.[13] *Railway Infrastructure and the Victorian Novel* therefore explores fiction concerned with the machinations of daily life in a railway age, whether this concern is directed towards industrial, social, or political circumstances. This means straying beyond novels plotted directly around railway space, or works where the railway looms large in even figurative terms. For that reason, I set aside works where track-bound mobility serves as a central conceit in a fantastical narrative that is in all other respects set far from the thoroughfares of nineteenth-century life. To cover sufficient ground in understanding novel infrastructure, I also set aside a rich corpus of poetry, except to evaluate the structural impact of their reverberation through long-form fiction as the century wore on. Works excluded on these bases are James Anthony Froude's allegory, 'A Siding at a Railway Station' (1879), Nathaniel Hawthorne's *The Celestial Railroad* (1846), and Samuel Butler's dystopian fantasy, *Erewhon: Or, Over the Range* (1872). In their plodding regularity, novels such as Anthony Trollope's Palliser series are far more fitting for this study of infrastructure than the jolts and starts of sensation fiction and what Matthew Beaumont has described as 'railway phantasmagoria'.[14] One exception to this approach, is my inclusion of Dickens's co-authored 'Mugby Junction' (1866) for its entanglement with questions of multiplot logistics both in terms of distinct yet notionally intersecting plotlines, and the conversion and diversion of different authorial styles. As Jonathan Grossman notes in *Charles Dickens's Networks*, 'narratological complexities' brought into focus through passenger transit invite logistical attention to the multiplot temporality of 'meantime'.[15]

I approach multiplot slightly differently to Grossman here, exploring it in terms of system management, rather than converging individual itineraries, and adopt a wide critical lens to understand how and why apparently 'fixed' conventional plots change over time.[16] For this reason, I have also included infrastructural analyses of works that are relatively fleeting in their attention to railway engineering, but intensely engaged with structural change in how stories can be told. What can we learn from George Eliot's shaking up of novel infrastructure in *Daniel Deronda*, for instance, about the adaptability of seemingly fixed trackways for characters in realist novels? If multiple railway lines provide a greater range of connectivity, and produce greater revenue than a single track, then what is to be gained by dispersing a story across different narrative strands? Why, in a system that enables mass mobility, should certain plotlines matter more than others and what alerts us to their status? What does narrative concurrency offer that concentration cannot?

Through nineteenth-century literature, and subsequent scholarship, railway infrastructure has come to serve as a critical touchstone for understanding the mechanisms of novel form. Fredric Jameson adopts railway terminology in *Antinomies of Realism* when he argues that there are: 'two chronological end points of realism: its genealogy in storytelling and the tale, its future dissolution in the literary representation of affect. A new concept of realism is then made available when we grasp both these terminal points firmly at one and the same time'.[17] Jameson's initial distancing of storytelling and representation of affect oversimplifies literary development, but his imaginative framework does highlight the imbrication of infrastructure into critical theory. He mixes metaphors and short-circuits a linear, end-to-end conceptualisation of realism that corresponds to the railway when he invites us to critically 'grasp both these [now electrical] terminal points' at once. For Jameson, exposing the infrastructural mechanisms that conceptually underpin literary production makes new creative critical responses to form possible. Novel infrastructure might be understood with reference to components both internal and external to each novel, including plot and multiplot, narrative trajectory, and setting from within; and serialisation, print culture, and circulation from without.

Before the mid century, the shape of Britain's merging and emerging railway networks remained to be seen. In practical terms, the tracks had to be imagined, drawn up, and constructed before the railways could carry any traffic. Similarly, to integrate a new mode of transport in literature, writers would need to be reasonably certain that readers would recognise some of that system's processes, and that their own grasp was secure. Technical details of

these infrastructures could be lost in transit from the physical to the figurative, resulting in, for example Tennyson's famous misconception of the iron railway lines as the 'ringing grooves of change'.[18] Yet such imprecision remains powerful in affective terms, conveying that, for Tennyson, the soundscape was more fascinating than physical specifications. On the other hand, constructing social elements of such infrastructure was in part a textual enterprise. Detailed descriptions appeared in railway guides and journalism, preparing new travellers for the formalities of railway travel, and these could circulate well beyond the physical limits of any given line. For example, news of an engineer's death on the 1830 opening of the Manchester and Liverpool line travelled much further than the tracks themselves.[19] Fictional and journalistic accounts could frame public perception, and a traveller undertaking a railway journey for the first time might do so with an already-mediated, varyingly accurate notion of what to anticipate on arrival at the station. My object in separating infrastructure from moving trains in this book is to demonstrate how seemingly fixed components framed nineteenth-century experiences of and responses to locomotive mobility. Each of the railway structures that I interrogate here is a recognisable part of public-facing operations, rather than behind-the-scenes arrangements. From new to established termini, each structure helps shape the railway imaginary – a shared set of cultural associations and metaphors opened up by this transport mode – both in and beyond the nineteenth century. Speculation about the consequences of railway development also serves as a historicising touchstone in fictional representations of life in the 1830s and 1840s. Benjamin Disraeli dramatises such emphasis on historicism in *Sybil* (1845), with one character declaring that 'the railway will do as much for mankind as monasteries ever did'.[20] Railway architecture left diverse impressions, particularly among those preoccupied with the moral implications of public aesthetics. Stations, which for John Ruskin represent 'the very temple of discomfort' in *The Seven Lamps of Architecture*, were to be lauded by Théophile Gautier as 'cathedrals of new humanity . . . the meeting points of nations'.[21] Not one of these poignant reflections features a moving train but each enriches our understanding of how a sense of the railway imaginary developed in the nineteenth century. Railway stations share traits with seaports, customs houses, and post offices, but in their merging of public and industrial space, mobility and fixity, stations quickly develop into architectural genre in their own right in the mid nineteenth century, whose closest parallel, I suggest, could be found in realist fiction.

Realist novels often put stations, lines, and junctions to uses only obliquely related to travel. Whether directly or indirectly, the literary works I explore here offer sustained engagement with railway infrastructure.

Such works can provide a much richer sense of the relationship between railways and culture than pithy but relatively isolated observations made by Tennyson and Ruskin. Imaginative representations of railways provide a starting point for this investigation, but my main concern is how novels think *through* and theorise railway infrastructures. Do the social and procedural dynamics of waiting rooms, ticketing systems, interim stations, and junctions open up new affective dimensions in literature? Are any fictional processes inhibited by railway infrastructure? Do railway infrastructures in fiction enhance or restrict the kinds of stories that can be told? How attentive are writers to the specifics of railway infrastructure, and why? To address any of these questions we need to look at depictions of operational railways in literature: systems that carry passengers *and* plots, raise logistical dilemmas, and persist throughout the novel.

Scaling an Infrastructure

In the 1840s, railway construction across Britain was piecemeal. Industrial non-locomotive railways had operated for some time in mines and timber mills, but these had little widespread impact on the way that people moved and met in daily life.[22] Prior to passenger railways, stage and mail coaches formed the main modes of public transport within Britain, complemented by urban omnibuses, river ferries, and, to a lesser extent, canals. Many of these continued to operate in practice and in the public imagination throughout the railway age, as Ruth Livesey has stressed.[23] Indeed, in the nineteenth century, as today, a single journey could often involve a range of different modes of mobility: a traveller might walk a short distance before taking a horse-drawn hackney cab to the station, join a train to another town, then board a mail coach onwards to a destination beyond the railway's reach. My investigation of relatively fixed railway components – the trackside, station buildings, and junctions – therefore entangles my discussion with parallel and competing infrastructures as passengers and goods transferred from one mode of movement to another. On the other hand, there was much to distinguish railway culture from other transport logistics systems. The permanent way built to facilitate locomotive travel obstructed horse-drawn traffic: it could impede long-established lines of communication even as it expedited others. In my emphasis throughout this book on trackside perspectives, I explore how writers harness tension between connectivity and controlled access when staging a scene just off the rails.

Despite prevailing associations between railways and industrial rationality, the railways were far from homogeneous. Since I investigate imaginary engagement with an emergent technology, I bring 'the railway' as a concept into dialogue with the mosaic of systems built during the period. Lines erected by different companies were designed to different specifications, so there was no guarantee that different networks would be mutually compatible. For example, it was a matter of contention that Great Western Railway ran on a wider gauge than other networks operating throughout Britain, meaning that traffic from other networks could not use these lines as through routes.[24] This difference in gauge is perhaps the most prominent example, but throughout Britain micro-incompatibilities between different companies and diverging interests prevented disparate lines from merging into something resembling a national network. Established in 1842, the Railway Clearing House sought to counter this. This organisation undertook the logistically gruelling task of encouraging different railway companies in Britain to begin to work together.[25] The Clearing House brokered a series of reciprocal arrangements between companies operating lines in similar areas to better facilitate through traffic. By doing so, they began to unpick operational monopolies on particular routes that undermined the railway's physically connective capacity. Gradually improved (if somewhat forced) cooperation between companies simplified journeys for passengers. Thanks to the Clearing House, passengers stopped having to buy multiple tickets for routes that ran on tracks belonging to more than one company.[26] While the Clearing House's formation may not have nationalised the railways, it did help the travelling public begin to perceive the railways as a continuous system. I begin this study with Charles Dickens's *Dombey and Son* (1848), which was published just as the Clearing House's efforts took effect and contemplates how far the new technology uprooted other modes of social connection. As the century progressed, the sense grew that one could join the railways at any station and travel to any other node on a national grid. The railway was not a continuous network but imaginatively it was often treated as such.

The physical extent and imagined potential of Britain's railway networks inform this book's geographic scope. Although railways could physically link distant Scottish villages with civic and industrial centres, they did so unevenly, converging around large cities like London and Manchester, and embedding particular routes between ports including Liverpool, Glasgow, and Bristol and industrial hubs. The novels I examine in *Railway Infrastructure and the Victorian Novel* provide similarly uneven access to Britain's topographies, and as a result urban and

suburban space feature much more prominently than rural localities. While Ireland was part of the United Kingdom during the nineteenth century, Irish railways do not form part of this study, since they did not physically link up with the networks that ran between disparate localities in mainland Britain. This was not for want of trying. Ambitious work on a line from Chester to Holyhead began in earnest as a strategic measure to reinforce the Act of Union that had passed at beginning of the nineteenth century by securing routes to and through Wales.[27] From Holyhead, passengers could cross the Irish Sea by ferry and continue to Dublin. And the engineering principles that shaped railways could travel much further than the physical lines, with British engineers and logisticians contributing to Irish railway construction and the development of lines in Continental Europe.[28]

British railway investment of the period also extended to imperially driven projects overseas. The ideological and social impacts of such ventures are best understood through a culturally specific critical lens. Marian Aguiar makes a persuasive case for such practice in her monograph on India's railways when she argues that 'the rhetoric of colonial modernity depended on stasis' and points out that Michel de Certeau's conceptualisation of the railway carriage as a 'rational utopia' cannot be reconciled with colonial railway practice.[29] While such railways in practice fall beyond the scope of *Railway Infrastructure and the Victorian Novel*, I do examine how British print culture framed such projects within imperialist discourse as a means of defining the imaginative extent of British railway infrastructure. Within Europe, geography inhibited the physical expansion of British railways; on an island the tracks could only stretch so far. Yet ambitious engineers sought to overcome this in the late nineteenth century by developing plans to connect Britain and France through a Channel Tunnel. If built, such a link would physically connect French and British railway infrastructure and blur distinctions between different systems built out of quite different ideologies. However visionary, such projects could be curbed by questions of compatibility, and I investigate literary and artistic perspectives on British and French railway lines to understand how nationally determined imagined railway infrastructure could be.

Railway Paratexts

Novels represent and think through aspects of railway infrastructure that are difficult to articulate in short-form media, but they were and are also textually

entangled with printed and written matter that supported railway operations. Tickets, timetables, printed guides, and luggage labels all circulated with and contributed to the circulation of traffic. Companies produced printed regulations, gathered logbooks of activity on the lines, and kept minutes of planned developments.[30] Workers' associations circulated material of their own on professional standards, temperance unions, and educational pursuits.[31] Posters, trade cards, and printed advertisements sought to monopolise passengers' containment in railway space by vying for their attention.[32] Railway and literary commerce were entangled further in the form of station bookshops, with the best known of these, W. H. Smith, selling newspapers, popular fiction, pamphlets, and other literary works from 1848 onwards.[33] Since my focus throughout *Railway Infrastructure and the Victorian Novel* is the entanglement of railway and novel form, I interrogate railway paratexts that convey a sense of narrative, including maps, timetables, and illustrations. Cartographers struggled to produce maps that suited railway companies' needs. Philip S. Bagwell documents this in his account of the Railway Clearing House's selection between a *Bradshaw's* 'skeleton map' (that only offered distances for the most direct route), and a 'highly satisfactory' offering from clerk, Zachary Macaulay (that was too expensive to print in bulk).[34] Producing such maps was a process of trial and error, and one complicated by the formal limits of cartography. Junction diagrams produced by John Airey for the Railway Clearing House shed light on the operational control of particular nodes in Britain's entangled railways, and I weave these into my analysis of fiction by Gaskell, Dickens, and Trollope in Chapters 2 and 3. Timetables, meanwhile, both describe and dictate activity on the railway networks, forming their own kind of fiction, and putting pressure on characters' movements through each of the novels examined throughout this book.

In many ways, timetables pose the opposite challenge to maps; columns of destinations and times bear very little resemblance to corresponding routes and suppress mediating distance or topography. Charles Dickens satirises the disorientating experience of using a *Bradshaw's* timetable in an 1851 story for *Household Words*. He depicts the travelling Mr Lost's confusion when confronted with the sole information in a railway guide pertaining to his chosen destination:

> They encountered the following mysterious characters:
> WARE TU 6
> No farther information could be obtained.[35]

No amount of further scrutiny can wrestle 'farther' meaning from the timetable; these hieroglyphs can only be understood with reference to

other sources of orientation. Dickens's satire is not far removed from the realities of nineteenth-century timetable use, according to transport historian Mike Esbester, who draws on an archive of annotated timetables to explore how travellers filled in essential information themselves to aid navigation.[36] Both Dickens and Esbester present railway timetables as alienating infrastructures that mystify rather than clarify how to catch the right train. Often such documents need to be brought into dialogue with either the corresponding railway lines or a person's local knowledge of the lines to be fully understood. Tina Young Choi, meanwhile, argues that more deeply descriptive railway guides offer 'an alternative history of nineteenth-century cartography, one shaped not so much by the ideals of science as by an emphasis on readerly experience and desire'.[37] The imaginary and affective were therefore as important as the material in nineteenth-century experiences of railway space.

Practical representations of railway infrastructure in printed media aside, paintings also played an important role alongside literature in disseminating a notionally collective railway imaginary. Although sustained analyses of the narrative capacity of such paintings fall beyond the scope of this book, there is one touchstone work worth highlighting in this introduction for its multifaceted imaginative entanglement with novel infrastructure: William Powell Frith's 1862 painting, *The Railway Station* (Figure 1). Frith used a departure platform at London's Paddington terminus as both model and stage for this piece.

Divided between a study of a crowd, and a study of Paddington station's architecturally impressive train shed, this image depicts a crush of different passenger groups in front of a chain of carriages, preparing to board a train. The crowd is far more organised than De Quincey's 1848 vision of such spaces having as little unity as 'running water'. Frith stage-manages this painting with precision and detail, drawing on logistical principles that underpin terminus design in the mid nineteenth century.[38] From right to left, passengers assemble outside first- to third-class carriages, with the second class depicted most prominently in the centre of the painting. The crowd has neither the disunity of running water nor the rigidity of systematic engineering; it is a carefully disorganised composition. *The Railway Station* has been lauded among railway historians as a work of 'meticulous realism', 'one of the great Victorian icons', and 'a valuable record of Paddington's appearance when it was newly built'.[39] As George Revill argues, '*The Railway Station* (1862) has all the qualities of a Victorian novel with its wealth of characters and incidents, plots and subplots'.[40] For Revill, passengers flow through termini like characters flow through

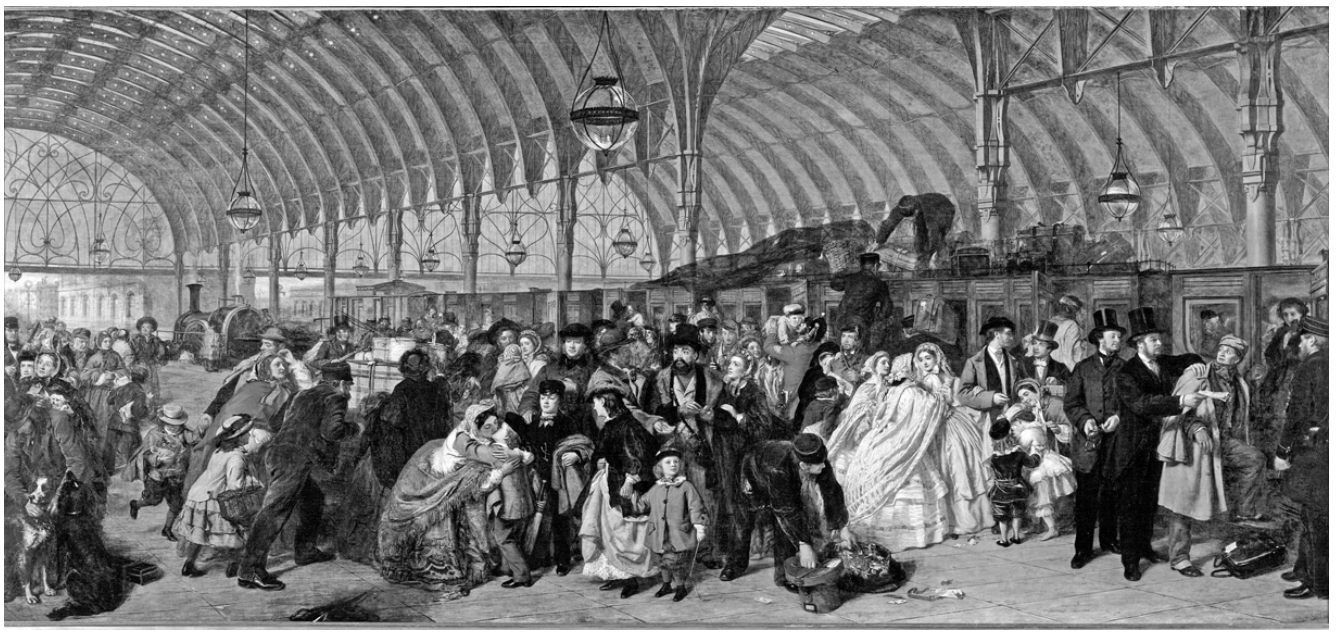

Figure 1 William Powell Frith, *The Railway Station*, 1862, oil on canvas, 54.1 × 114.0 cm. © Royal Holloway and Bedford College, University of London.

novels: unaware that they are being plotted. Like the novels sold on platform bookstalls, railway paintings and engravings were part of the cultural infrastructure that paralleled Britain's networks.[41] Comparing prose and painterly depictions of railway infrastructure can shed a light on the practical limits of both forms in articulating the experience of traversing from road to rail. Narrative painting can present detailed scenarios and depict a trainload of passengers as individuals, whereas prose can move through imagined railway space, and explore and specify shifting figurative dimensions of such sites. As Clive Bell later reflected on the work: 'many a weary forty minutes have I whiled away disentangling its fascinating incidents and forging for each an imaginary past and an improbable future'.[42]

There is a vital distinction between outlining a space set aside for a notional purpose and understanding the processes underpinning that space where railway infrastructure and narrative structure are concerned. Revealing such processes at work, Caroline Arscott has cogently articulated Frith's codification and classification of the crowd in *The Railway Station*, drawing on the artist's use of phrenological typology in his study. Arscott argues that distinctions between different passenger physiognomies 'encourage . . . the viewer to make discriminations on the basis of appearance and this classificatory activity has its analogue in the pictorial motif of the neat and efficient stowing of luggage'.[43] Such attention to 'classificatory' detail therefore invites the viewer to make similar value judgements of this crowd to those demanded by the railway terminus on the purchase of a ticket. Scattered luggage tags at the foot of the painting highlight the ephemerality of labels attached to passengers that pass through the station; such metadata is single-use and easily discarded. While Frith's careful typology of his crowd may mirror the care and attention that the station attendants give to the luggage, these mutable bodies cannot be as securely stowed as their inanimate cargo. Frith and his critics may not be focused directly on *The Railway Station*'s terminus-specific dimensions, but the setting does meaningfully contribute to the painting beyond providing a stage for his carefully curated narratives. By assembling a crowd on a departure platform, narrators (whether working with paint or words) can harness both the potential energy bound up in an anticipated journey and the associated predictability of passenger movement engineered into the site. Whereas on canvas, Frith can gesture towards likely destinations, the page affords imaginative time and space to pursue and evaluate such possibilities both through machinations of the plot, and narrative projection and reflection on potential routes.

Annihilation of Time and Space?

A persistent refrain that railways effected 'the annihilation of time and space' has echoed alongside the railways since the 1830s.[44] Indeed, Collette Colligan and Margaret Linley have argued that 'the double move of spatial appropriation and temporal erasure cannot be overstated'.[45] Where railways are concerned, however, some redress is in order. In both the 'annihilation of time and space' refrain and Colligan and Linley's gloss on it, abstract nouns describe the railway's impact: annihilation, appropriation, and erasure. While abstract nouns conceal agency, they also obscure any sense of whose perception of time and space is being annihilated. This universalising phrase excludes a broad range of railway perspectives that did not travel with the train. Time and space would be keenly felt, for example, by anyone living alongside an active railway line whose lives were regularly interrupted by passing traffic. Whether active or not, railways leave an enduring mark on the landscape, and the infrastructures built up around them often slow down those moving between railway and non-railway territory.[46] It may be poetic, but if we become critically carried along by the argument that railways annihilate time and space, we are at risk of leaving alternative perspectives under-discussed. Most critical responses to the railway imaginary take as their foundation Wolfgang Schivelbusch's *The Railway Journey* (1977), which asserts that 'annihilation of time and space' looms large as *the* most salient product of steam travel. Infrastructure, for Schivelbusch, is best understood as a 'machine ensemble' formed of 'wheel and rail, railroad and carriage, [which] expands into a unified railway system'.[47] Such components, he argues, are 'merely an expression of the rail's technological requirements, and the rail itself is a constituent part of the machine ensemble that the system is. . . . The traveller perceives the landscape as it is filtered through the machine ensemble.'[48] A set of principles defines and dictates the railway's material form, scope, and operations, but Schivelbusch's intriguing term, 'expression', highlights a gap for further interpretation between the ideal and the realised railway. By this reckoning, early railway engineers worked as translators, striving to work natural, urban, and suburban environments into the right configuration.

In Schivelbusch's study of railways as a velocity-defined system, track-side infrastructure becomes dual-aspect, with stations serving as a 'transition from the city realm to the railroad realm'.[49] Such an approach forecloses any discussion of stations as complex infrastructures in their own right and downplays their function as well as their prominence in

nineteenth-century culture.[50] Schivelbusch's seminal work's separation between station and system has limited subsequent scholars' attention to infrastructures in cultural railway studies. *Railway Infrastructure and the Victorian Novel* therefore plays an important corrective role by thinking carefully and imaginatively about the infrastructural framework built to enable the machine ensemble's operation. Philosopher of speed Paul Virilio voices a similar set of requirements but pushes the kind of abstraction indicated by Schivelbusch to its extreme when he argues that:

> Absolute speed necessitates the absolute void . . .. After having contributed to straightening, then to scraping bare the surface of the route (roads, railways), the locomotive vehicle still demanded an airtight course, the production of a perfect void.[51]

Virilio's description of the conditions needed to realise a technically perfect railway line expose its impossibility and incompatibility with social accessibility. While I use the term 'machine ensemble' throughout *Railway Infrastructure and the Victorian Novel*, my definition is broader than Schivelbusch's, stressing the importance of social and para-industrial structures in sustaining railway networks to avoid the kind of techno-determinism that Virilio proposes. For all their speed, railways are driven by social connectivity. Rails could only be animated by travel intermittently, and, paradoxically, they became more visible in absence of a train. I investigate how fiction theorised the macro structures that both supported railway travel and defined the limits of its reach, and expose an alternative range of coordinates that enrich our understanding of the imaginative implications of nineteenth-century railways.

It is tempting to overstate the speed with which nineteenth-century railway expansion impacted British daily life, and many prominent studies on the intersection between railways and nineteenth-century fiction begin with the premise that the railways had a revolutionary effect on the nineteenth-century world, and that culture had to respond accordingly. A pattern emerges in the opening paragraphs of a selection of railway studies, and while the following works vary in nuance, they echo one another when introducing the railway's transformative effect. 'The railroad', Laurel Ann Kornhiser begins her fascinating transatlantic study, 'was a prominent transformative force of the nineteenth century'.[52] 'Railroads', Mitchell Schwarzer asserts, 'swept across the world like a tempest'.[53] 'By turns exhilarating and terrifying, in the mid-nineteenth century one had to be confident that railways' onrushing modernity would infuse and transform British cultural understandings', writes Ian Carter.[54] Matthew

Beaumont and Michael J. Freeman describe how 'rapidly spreading networks of rail lines, increasingly on an inter-continental scale, functioned like conduits of some giant machine'.[55] While compelling, such introductions downplay the extraordinary effort involved in designing and constructing these lines. Moreover, they overstate the railway's impact on the daily lives of many, who remained contentedly disconnected from mechanised mobility, or ambivalent about the prospect of railway travel even where it was available. Jonathan Grossman begins to reconceptualise space-time annihilation in *Charles Dickens's Networks* (2012), when he argues that 'only the public transport system takes as its essential element and aim the collective coordinating of people's individual interconnected journeys in time and space'.[56] By the 1850s, the novelty of railways was beginning to subside, the rails gradually became markers of disembodied authority, continuity, and standardisation rather than change.

A growing body of work has developed in this vein outside of literary studies, particularly in the aftermath of Marc Augé's anthropological work that begins with an airport terminal, *Non-Places* (1992). 'A space which cannot be defined as relational, or historical, or concerned with identity', Augé argues, 'will be a non-place'.[57] This twentieth-century concept is slightly askew from my purpose here, since in fiction, railway stations often remain stubbornly networked to other settings, however much characters hope to distance themselves from society at large. Fiction contributed to the perception of railway stations as important social places in their own right, the new 'centre of town life' as Sue Bridehead affectedly declares in Thomas Hardy's *Jude the Obscure* (1895).[58] More recently, expanding interest in mobility studies has attended to material, and cultural engagement with public transport, with Kevin Hannam, Mimi Sheller, and John Urry, arguing that 'mobilities cannot be described without attention to the necessary spatial, infrastructural and institutional moorings that configure and enable mobilities'.[59] While I maintain terminology used in the nineteenth century for railway infrastructure rather than those widely adopted in mobility studies, I hope to shed light on the ways in which relatively immobile structures configure and enable nineteenth-century imaginative mobility. Outside of picaresque fiction, novels often elide journeys, but not necessarily time spent preparing to travel. At stations, junctions, termini, and on the lines, time spent waiting in railway space might be felt profoundly, by the minute, by the second. What does it mean to wait, anticipate, and reflect within space so bound up in motion? How do the delineated, fixed railway tracks permeate literature even when moving trains do not animate them?

A recent upsurge in infrastructure studies reflects growing concern with the multifarious ways in which large-scale systems shape culture, lived experience, and the stories that can be told. To date, this field has largely examined twentieth and twenty-first century systems and the fiction that engages with them, with Rubenstein, Robbins, and Beal arguing in a seminal essay on 'Infrastructuralism' that 'infrastructure is supposed to go unnoticed when it works; destroying it is simply one strategy for making it appear – representing it in a way that can hold our attention and converting it into a proper spectacle'.[60] Such a claim might hold for recent technologies aligned conceptually with digital abstraction and wireless communication, but where nineteenth-century infrastructure, and particularly railways were concerned, spectacle and material presence were integral. Even in J. M. W. Turner's *Rain, Steam and Speed* (1844), which all but occludes a steam train in its efforts to cross a Great Western Railway bridge in a storm, the darkest and most definite lines connote infrastructural solidity in an otherwise diffusive skyscape. Caroline Levine's interdisciplinary, *Forms*, meanwhile, approaches infrastructure as a live network: 'To capture a moment, one must struggle to grasp the multiple systems of interconnection – constantly unfolding and expanding and overlapping – that constitute local instantiations of the social.'[61] In *Railway Infrastructure and the Victorian Novel*, I bring Levine's compelling reminder that there is no such thing as a rigid system into dialogue with historical approaches to negotiating the most protean, social articulations of railway infrastructure. I demonstrate that while railway infrastructure was never homogeneous, its iron rails, set routes, and looming architecture nonetheless connoted a fiction of rigid predictability.

Nineteenth-Century Literature and Infrastructure

Railway Infrastructure and the Victorian Novel provides an innovative analysis of railway infrastructure within a field where other aspects of transport and communications technology are well represented. Matthew Beaumont and Michael J. Freeman's *The Railway and Modernity* (2007) includes contributions that treat railways neither 'exclusively as a transport system nor merely as some floating signifier for the spirit of modernity'.[62] Such a flexible approach provides imaginative space for productive interplay between the railway ensemble's imaginary and material components and highlights the important role that print plays in shaping railway experience. I go beyond railway infrastructure's utility for transport and explore metaphorical implications that do not fit with a teleological,

modernising narrative. Anna Despotopoulou's attention to 'women's occupancy of the liminal and ephemeral spaces of the railway' reminds us that experiences of railway space shift depending on the demographic background of the user, and invites us to question whose version of railway infrastructure these fictional examples offer.[63]

Critical insights into parallel nineteenth-century systems, such as the Post Office,[64] electric mediation,[65] and steam-powered machinery, enrich the way I approach railway infrastructure here, as does[66] Ruth Livesey's *Writing the Stage Coach Nation* (2016), which embraces heterogeneity and contingency in its treatment of literary depictions of nineteenth-century stage- and mail-coach infrastructure.[67] Mobility theories developed by cultural geographers such as Tim Cresswell are brought into the conversation by Charlotte Mathieson when she argues that a 'critical nexus of body-space-mobility emerges in this period as a consequence of the changes effected by the transport revolution of the phenomenology of travel'.[68] This inclusive critique of nineteenth-century journeying – undertaken with reference to both realist and sensation fiction – reminds us that no transport system operates in isolation from others. David M. Henkin's attentiveness to the incremental in his study of the US Postal Service resonates with my own resistance to reading the railways as rapidly transformative.[69] If it takes time for any infrastructure to settle into familiar, socially embedded patterns, it takes longer still for authors to feel confident that a wide readership will understand what, beyond novelty, a new technology may connote. Telegraph studies similarly share much common ground with this book, particularly in their interrogation of hermeneutic problems bound up in a shifting media scape, but the capacity to transport passengers physically sets railways apart from information systems that transmit other media and matter.[70]

Metaphor remains the most pliable critical vehicle for making sense of conceptually tricky systems. Laura Otis's study of the telegraph, *Networking* (2001), maps the communication network onto nineteenth-century understandings of the central nervous system. 'In nineteenth-century accounts of the interfaces between living and technological information systems', Otis explains, 'one can hear our own anxiety about where "we" end and our networks begin'.[71] Passengers physically and imaginatively integrate themselves into the railway, and, examining stations and termini, which mediate between the technological system and the localities it connects, we can delimit the network and understand its processes. Tamara Ketabgian more optimistically raises a similar point to Otis in her study of the industrial imaginary, *The Lives of Machines*. She argues that 'industrial networks and narratives serve as exciting sites of possibility, both shaping and challenging

the limits of human identity'.[72] Railways are notably absent in her study of the steam engine's enlivened depiction and impact in industrial and realist fiction, but her sense of the necessarily networked status of even relatively immobile forms of machine-powered production is imaginatively suggestive. While passengers and information are different qualitatively (human/inhuman) and quantitatively (many/mass), fictional passengers work across these boundaries in productive ways. David Trotter's sleight of hand in approaching transport as a telecommunications system and passengers as information rather than bodies is a helpful reminder of how fictionality confuses even obvious categorisation.[73] To varying extents, each of these books tries to make sense of a particular system by drawing comparisons with parallel networks, especially when confronting the system's most abstract dimensions. It might then be tempting to describe each of these works as network studies, like that proposed by Bruno Latour in *Reassembling the Social* and to situate *Railway Infrastructure and the Victorian Novel* among them.[74] Yet Latour's work is much more suited to the study of intricate live networks than fictionalised ones, and such an approach would undermine the extent to which resonances of imagined railway infrastructure permeate multiple cultural forms. The broad framework of a network might underpin such a wide range of nineteenth-century technologies and communications systems, but each system has its own particularities. Macro, delineated, visible, iron railway networks left a specific impression on nineteenth-century literary and cultural landscapes.

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Chapter 1 introduces the complexities of weaving railway and narrative infrastructure together in the 1830s and 1840s. At the beginning of these decades, train travel was a novelty available to relatively few communities, with many encountering railways on paper and in public discourse long before they had the opportunity to see them at work in person. This chapter examines what preceded the slow integration of railway infrastructure into narrative infrastructure: fantastical and far-flung visions of techno-modernity that did not fit well into established plots. Documenting efforts by railway companies, journalists, and cartographers alike to articulate steam-powered transit exposes how widely authors across genres struggled to find a fitting form for railways on the page. From this range, this chapter turns to Charles Dickens's false starts in weaving railway imagery and mobility into prose, via *The Pickwick Papers* (1836–37) and *Martin Chuzzlewit* (1843–44). By changing track to explore the notion of 'fellow passengers' at a safe distance from the mechanisms of daily life in

A Christmas Carol (1843), and taking time and space away from writing on the move to develop a more deliberately engineered structure for his 1848 novel *Dombey and Son*, Dickens manages to substantially adapt his approach to plotting long-form fiction in the steam age. Reading such attempts to bring railways into a workable scale for the page in dialogue with Charles Dickens's halting attempts in the 1840s to deliver structurally cohesive multiplot work reveals the importance of carefully laying groundwork – or infrastructure – for large-scale shifts in novel form.

Railway infrastructure defines the narrative parameters of two texts by Elizabeth Gaskell: *North and South* (1854–55) and 'Cousin Phillis' (1863–64). With a focus on small-scale interim stations, and the construction of new lines, Chapter 2 traces the kinds of logistical options that even dormant or projected railway infrastructure can bring to stories that are otherwise concerned with being-in-place. Beyond physically linking close-knit localities with a wider world, such infrastructure invites us to interrogate local investment, regional identity, and the consequences of national mechanisms (e.g., judiciary) operating through otherwise isolated communities. My infrastructural re-reading of Gaskell's *North and South* focuses particularly on a key scene set at Outwood station, a small but well-connected hinge between North and South. Proximity to physically iterated railway infrastructure, I argue, reconnects the narrative to a broad system of global exchange and mobility. In 'Cousin Phillis', meanwhile, Gaskell's civil engineer narrator lays both railway lines and plot lines but neither endeavour quite coheres into a functioning, connective system. Similarly, characters in this text meet and briefly share trajectories, but do not forge meaningful or lasting connections with one another. Yet the four-part narrative of the novella, 'Cousin Phillis', remains unresolved and impressionistic when compared with Gaskell's faster-paced earlier novel. Linking transport systems to print infrastructure, I trace the uneven degrees of narrative integration in Gaskell's works back to their differing publication intervals, with *North and South*'s weekly serialisation providing far greater opportunity to situate its local plot within global circulation than the monthly release of 'Cousin Phillis'.

Fictional junctions developed in parallel complexity to those operating on the rails in the 1860s and 1870s as multiplot novels expanded into multiplot series. Chapter 3 examines Dickens's co-authored collection *Mugby Junction* (1860) and Anthony Trollope's Palliser novels (1864–79), in dialogue with traffic management systems operating on railways of the period. Trollope's description of Tenway Junction in *The Prime Minister* (1876) as 'unintelligible to the uninitiated' draws attention to broader

concerns about the complexity of railway infrastructures in in the 1860s and 1870s.[75] As I demonstrate, Dickens and Trollope both puzzle over the most effective way to 'read' or write the intricacies of a major railway junction, while also navigating print periodical infrastructures that presented a similarly confusing interfaces to authors and readers alike. Charles Dickens, along with *Mugby* co-authors Charles Collins, Amelia Edwards, Andrew Halliday, and Hesba Stretton, scrutinise the junction from a distance, allowing non-passengers' investigations of the surrounding lines to deliver an accumulative perspective of Mugby as a whole. This chapter therefore provides a cohesive reading of a short story collection whose significance to railway culture is usually determined with reference only to Dickens's contributions. The chapter examines how form complements content in *Mugby Junction*, as each short story in the collection examines a different branch or mainline. Anthony Trollope, by contrast, offers relatively little direct contemplation of the railway aside from the brief but memorable scene set at Tenway Junction, but he does use railway logistics to manage his plotlines. What emerges from this long-form multiplot work is Trollope's tendency to return repeatedly to certain narrative configurations over the course of the series (love triangles, political problems, and financial troubles), with very minor adjustments each time. Through this, we can begin to understand how even the most apparently rigid systems change over time.

If literary form and railway infrastructure do not neatly align in nineteenth-century novels, then what is the significance of their close, inconsistent entanglement? Chapter 4 examines George Eliot's 1876 novel *Daniel Deronda*, which takes full advantage of transport and communications infrastructure in its two mainline plots. Throughout, Eliot associates markers of such systems – 'dusty waiting rooms', unconsulted *Bradshaw's* railway guides, and telegrams relaying old news – with stasis and regression. Even where they advance the plot, they draw the narrative back in time. This chapter parallels communication infrastructure and novel form to interrogate how and why Eliot reconfigures established and well-traversed form in her final novel, which pushes against the margins of literary realism. By offering an upset chronology and a refusal to drive plotlines to a conventional resolution, to what extent does Eliot reconceptualise systems rooted in timeliness and destination in *Daniel Deronda*?

Chapter 5 ventures beyond Britain's established railway lines, examining late nineteenth-century ambitions to build a railway tunnel between England and France. It provides literary insight into debates surrounding

the proposed Channel Railway line (1880–82), showing how fiction exacerbated fears about what (other than trains, passengers, and freight) such a line might carry. Thomas Hardy's 1881 novel *A Laodicean* depicts a range of transport and communications infrastructures that enable and undermine cross-Channel understanding. By linking *A Laodicean* to the Channel Railway debates, this chapter reveals the political stakes of connection in a text that has attracted critical attention for its treatment of telegraphy and the postal service.[76] Going beyond visible infrastructure, this chapter picks up on Hardy's rich railway soundscape of subterranean rumblings, and distant disturbances, and taps into late nineteenth-century preoccupations with the reverberative qualities of industrial architecture. A by-product of the machine ensemble, reverberation could be heard and felt both within and slightly beyond railway space. In this chapter, I interpret reverberation as evidence of the leakiness of a supposedly rational system, and I explore how such errant sounds worked against the railway's vector-like ideal.

The final chapter traces railway infrastructure's lasting impact on novel form. It closely examines the structural and affective dimensions of the railways in E. M. Forster's 1910 novel *Howards End*, a text poised in a transitional period in transport and literary history. Forster's novel passes through termini and local stations, across platforms, and through tunnels. Drawing on conclusions concerning the infrastructures examined in previous chapters, I discuss the extent to which Forster entangles railways with shifting social perspectives. This chapter provides a much-needed railway reading of a novel critically framed to date through its representation of motor cars and their attendant geographies.[77] I explore how characters personalise public infrastructure in *Howards End* by unpacking the parallels Forster establishes between domestic space (the house at Howards End) and railway termini. While hypermobility via the motorcar affords a new kind of freedom of movement, it cannot match the established infrastructure in enabling imaginative mobility. Characters with a social outlook entrenched in railway infrastructure move less but see more than those who prefer the motorcar. I argue that this work's enigmatic instruction to 'only connect' is rooted in infrastructural railway poetics.

Railway Infrastructure and the Victorian Novel concludes with a brief analysis of Arthur Conan Doyle's 'The Adventure of the Norwood Builder' (1903), crystallising its argument that infrastructure reshapes narrative form across genres. It asserts the critical value in maintaining dialogue between railways as built and railways as imagined in fiction and other

narrative media in light of the constant interplay between engineering and authorship demonstrated throughout the book. From the midst of the 'Infrastructural turn', the afterword asserts the value of understanding conceptual groundwork – or conceptual infrastructure – laid during the nineteenth century when interrogating contemporary understanding of this politically, socially, and indeed historically complex term.