

Construction and cataclysm: the railway in nineteenth-century London

Ralph Harrington, University of York

The railway was the most profoundly transformative innovation of the nineteenth century, and was recognized as such by contemporaries.¹ It was widely suggested from the 1830s and 40s that the coming of the railway marked a new age, and by the 1850s the extent and influence of the railway system was such that the development of the railway was seen as marking the beginning of a distinctive, modern, epoch. It was the railway, claimed the economist and journalist James Jeans, which distinguished the modern age most strikingly from all the eras which had gone before: ‘If we analyse the comparative circumstances of ancient Rome and modern London, — of ancient Babylon and modern Babylon, — what single characteristic can we point to as “toeing the line” of division so marked, so palpable, so essential, as that of the railway?’² The railway tracks marked the divide between the old, rural, small-town, slow-moving Britain and the modern industrial nation of great towns and cities, factories, and constant rapid travel and communication. The novelist W. M. Thackeray wrote with feeling in 1860 about the ‘gulf’ which the railway had opened up between the old world and the new:

Stage-coaches, more or less swift, riding-horses, pack-horses, highwaymen, knights in armour, Norman invaders, Roman legions, Druids, Ancient Britons painted blue, and so forth — all these belong to the old period. I will concede a halt in the midst of it, and allow that gunpowder and printing tend to modernize the world. But your railway starts a new era . . .³

There was a continuity, Thackeray suggested, between the distant age of ‘Ancient Britons painted blue’ and the early nineteenth century, the period of his own youth. The railway had, in a few short years, destroyed that continuity. Permanence, tradition and stability were replaced by transience, innovation and uncertainty. The historian, social critic and polemicist Thomas Carlyle shared the view that the railways were transforming the world with a quite bewildering rapidity. His 1850 essay ‘Hudson’s Statue’ was addressed to the great railway promoter and manager George Hudson, whose business empire had collapsed the previous year; but his words were aimed not at that ‘big swollen Gambler’ alone but at the whole of railway-obsessed society when he expressed the wish:

That you had made your railways *not* in haste; that, at least, you had spread the huge process, sure to alter all men's mutual position and relations, over a reasonable breadth of time! For all manner of reasons, how much could one have wished that the making of our British railways had gone on with deliberation; that these great works had made themselves not in five years but in fifty-and-five!⁴

Carlyle’s perception of railway construction as frantic and disruptive was widely shared. The transformation wrought by the railway on both rural and urban landscapes left contemporaries alarmed and bewildered; nothing quite like it had been seen before. No other civil engineering project, whether for the canal system, road building, mining, urban development, dock construction or military fortification, equalled railway works for their scale, the speed with which they were carried out, or the level of disruption they caused.

The average rate of railway construction in Great Britain between 1830 and 1870 was approximately 365 miles per year,⁵ but much of the network was built in brief concentrated periods following the periods of hectic promotion and speculation – the so-called investment ‘manias’ – of 1837-40, 1845-7 and 1862-5. Thus, while there were only 400 miles of route open at the end of 1836, there were 1,500 miles open only four years later.⁶ During these spells of intensive activity it must have appeared to many contemporaries that the whole world was being dug up for railways, and it is important to note that these periods of construction were not limited to the early years of the ‘railway age’ but extended into the second half of the Victorian age. In urban areas the level of disruption caused by this railway construction and the high visibility of such works intensified the impression of chaos and turmoil associated with the extension of railways. In London in particular railway construction of one kind or another was going on almost continuously from the 1830s to the 1890s, if the construction of main and suburban lines and underground railways, and the extension, improvement and rebuilding of railway facilities, is taken into account.

The building of a railway, particularly in an urban area, involved demolitions, excavations, the diversion of streets, rivers, canals, the erection of vast structures; railway works were so extensive that unprecedentedly vast areas were disrupted. The only analogies people could draw when faced with the destruction and turmoil involved in the building of a new railway line were drawn from warfare, or used the imagery of natural disaster. The acquisition of land by railway companies and the construction of lines was referred to by contemporaries as the railway ‘invasion’ of the land,⁷ and the peripatetic and often undisciplined bodies of railway construction workers — ‘navvies’ — were commonly seen as invading and occupying armies.⁸ A notable instance of the use of natural disaster imagery is Charles Dickens’s account in his novel *Dombey and Son* (1848) of the building of the railway through Camden Town in north London, renamed by him ‘Staggs’s Gardens’:

The first shock of a great earthquake had, just at that period, rent the whole neighbourhood to its centre. Traces of its course were visible on every side. Houses were knocked down; streets broken through and stopped; deep pits and trenches dug in the ground; enormous heaps of earth and clay thrown up . . . Hot springs and fiery eruptions, the usual attendants upon earthquakes, lent their contributions of confusion to the scene. Boiling water hissed and heaved within dilapidated walls; whence, also, the glare and roar of flames came issuing forth; and mounds of ashes blocked up rights of way, and wholly changed the law and custom of the neighbourhood.

In short, the yet unfinished and unopened Railroad was in progress; and, from the very core of all this dire disorder, trailed smoothly away, upon its mighty course of civilisation and improvement.⁹

This is the railway as transforming power, a symbol of the future but a highly ambiguous one; for all the claim that the railway is associated with ‘civilisation and improvement’ its effect upon the city, itself a focus of modernity and progress, has been to drag it backwards, to degenerate primitiveness.

The poet John Davidson (1857-1909) wrote extensively on urban themes and railways are a potent presence in his work. In 1909 he wrote a description of London Bridge station in central London which drew on earthquake imagery, and sought to

explain the famously disorganized and chaotic character of that terminus by supposing that it had emerged from the bowels of the earth. In doing so, he re-interpreted the upheaval associated with the great era of railway construction (which by the time he was writing the poem was more than fifty years before) into a new industrial mythology of creation, viewed not in terms of progress but of atavistic regression to an era of formless chaos. The sprawling station and the tangle of tracks, bridges and viaducts which surrounded it, suggested Davidson, arose from some violent primeval cataclysm:

. . . no idea minifies its crude
And yet elaborate ineptitude,
But some fancied cataclysmal birth:—
Out of the noubles of the martyred earth
This old, unhappy terminus was hurled
Back from a day of small things when the world
At twenty miles an hour still stood aghast . . .
. . . Divulged now by an earthquake in the night,
This ancient terminus first saw the light . . .¹⁰

Railway construction was indeed very often cataclysmic for the communities and landscapes it affected. It brought unprecedented turmoil, involving both physical and social disruption on a huge scale. Thousands of people — the great majority of them poor — were evicted from the vast tracts of urban land the railways required;¹¹ some 37,000 were displaced in London during the railway building boom of 1859-1867 alone. Misery, poverty and overcrowding were produced on a huge scale by railway construction, as health officers and social commentators were quick to point out,¹² and the legacy of such construction contributed importantly to the association of railways — particularly in urban areas — with poverty and social deprivation. And once the railways had built their viaducts and embankments and intersecting lines, the districts they enclosed, dismembered and overshadowed were, in the words of the historian J. R. Kellett in his *Railways and Victorian Cities* (1969), ‘fixed in dereliction.’¹³ The arches of railway viaducts attracted the refuse of urban society: criminals, alcoholics, prostitutes, the poorest of the poor. The railway arch became symbolic of human degradation. The unfaithful wife whose story is told by the English artist Augustus Egg in his ‘Past and Present’ paintings of 1858 falls from her comfortable bourgeois home to the ultimate misery and squalor of life beneath a railway arch.¹⁴ The contrast between the arteries of modern civilization which were carried upon the great viaducts and bridges and the misery huddled beneath was commented on by many contemporaries; as in *The Railway Accident: A Tale*, a moral tale with an evangelical Christian agenda, published around 1860: ‘Right over and right through this labyrinth of wretchedness, straight, high, unbending, runs the line of railway . . . carrying aloft its passengers and its traffic over many an acre of want and misery below.’¹⁵ The railway cut off streets and courts, sealing them into wretchedness; rather than connecting the various organs of the social body, facilitating circulation and enabling them to function more efficiently, the lines isolated areas, denied them healthy circulation, condemned them to become diseased and degenerate.

When under construction, railways were associated with disorder, confusion and upheaval; once completed, their viaducts, embankments, tunnels, buildings, bridges and other facilities dominated the landscape. The turmoil of railway construction, the ugliness of the completed structures, the scale and arrogance of their intrusion, their

association with the lowest elements in society, all contributed to the perception of the railway as a disruptive, destructive, degenerative force.

When the railway exercised its territorial imperatives, it disregarded existing geography and imposed its own. The lines followed their own rules, and vast alignments of pitiless, inhuman railway geometry were imposed on town and country alike, seemingly regardless of natural topography and pre-existing street patterns. A system of curves and straight lines, of tunnels, junctions, loops and yards, stations and viaducts was laid across the land; streets which once led somewhere became vestigial stumps, previously productive property was carved into useless fragments of waste.

The unease and discontent this process provoked in smaller urban communities as well as great cities is illustrated in George Eliot's great novel *Middlemarch*, written in the early 1870s but depicting a English small-town community in the 1830s. Among the innovations viewed with alarm and anxiety by many in the town is the construction of a railway. Dislike and fear of the railway itself underlies this reaction; the new form of transport is viewed as undermining the social structure of the community, as well as threatening life and limb: 'Women both young and old regarded travelling by steam as presumptuous and dangerous'.¹⁶ Others claimed that cows would cast their calves and mares their foals at the approach of the railway — a further illustration of the perception of the railway as an unnatural eruption into the established order, disrupting the age-old natural cycle of birth and renewal.

The large landowners of the area around Middlemarch were determined to secure substantial compensation for any incursion of the railway into their domains; but among the local smallholders such questions were of less importance than was the effect of the railway on the division of the land itself. The coming of the railway is seen in terms of a shattering impact on the complex network of legal and customary relationships which sustains the local structure of landholding. Locals meet and talk with alarm of 'what it would be to cut Big Pasture in two, and turn it into three-cornered bits, which would be "nohow;"'¹⁷ the railway will 'cut Lowick Parish into sixes and sevens'; it will tear apart the very economic and social structure of daily life:

'Why, there'll be no stirrin' from one pla-ace to another,' said Hiram, thinking of his waggon and horses.

'Not a bit,' said Mr Solomon. 'And cutting up fine land such as this parish! Let 'em go into Tipton, say I. But there's no knowing what there is at the bottom of it. Traffick is what they put for'ard; but it's to do harm to the land and the poor man in the long-run . . . some say this country's seen its best days, and the sign is, as it's being overrun with these fellows trampling right and left, and wanting to cut it up into railways . . .'¹⁸

That the agricultural quality of the 'fine land' of the parish — for many in Middlemarch, the *only* true estimate of its value — is suddenly rendered irrelevant by the railway's imposed scale of values symbolizes a world turned upside down. The arrival of the railway in the district and its imposition of its own geography is thus seen not merely in terms of its physical impact on the landscape. Its arrival threatens the fundamental economic and social bases of the community; it can be seen as a sign of a degenerate age, in which time-honoured values and standards are torn up and sacrificed to the remorselessly encroaching railway.

This sense that the railway is importing and imposing an alien set of values on the landscape is an important component in many mid-nineteenth-century responses to its

presence in the environment. This was true of both rural and urban landscapes, but particularly significant is the way in which the railway became intrinsically associated with the urban. Thus, in a rural setting, the railway was seen as embodying the urban 'other.' This was true in the physical sense that the coming of a railway encouraged building and development, assisting in the material expansion of towns and cities,¹⁹ but it was also the case that in less tangible ways the railway brought the conditions of the city — hurry and bustle, crowds and congestion, noise and pollution, cultural vulgarity — into the countryside.

In 1850, Thomas Carlyle wrote that 'at Crewe, and other points, I see new ganglions of human population establishing themselves, and the prophecy of metallurgic cities which were not heard of before.'²⁰ Carlyle was referring to the new settlements created entirely by the railways to house their own workforces and serve their own systems, the most notable examples being Crewe, which was in effect created by the London and North Western Railway when they established their main works there in 1841, and Swindon, the small town which the Great Western Railway transformed into their central engineering works in 1840. His use of the term 'ganglion' suggests that he saw these railway towns as unnatural and unhealthy growths, but such places were often in many ways model towns, carefully planned, well-built and provided with modern amenities.²¹ Generally speaking, where railway companies constructed purpose-built housing for their workforces, they had a reputation for housing their employees well and furnishing them with good recreational and educational facilities. Less successful were the places which had existed before the coming of the railway and had greatly expanded with its arrival, losing their character amid tracks and works and the speculative housing always attracted to such locations. To many observers, such districts had an unfinished, transitory quality; they were neither town nor country, old or new. One such place is 'Hopkinsville', an imaginary district on the fringes of east London, which features importantly in Anne Manning's 1860 novel, *Town and Forest*. Described as 'the very worst suburb on the borders of London', its name provokes one character to exclaim with disgust, 'What a name! Such a mixture of low and fine.' The district is insalubrious, jerry-built, and dominated by the railway:

'Yes, one of the chief results of railway enterprise; and run up, chiefly, for the accommodation of railway people. But what accommodation! Only one entrance-door and passage to every four houses — neither drained, paved, nor lighted. These houses form numerous small streets, and contain the families of about a thousand men employed in the factory, at the stations, and on the lines.'²²

The term 'factory' here refers to railway workshops. It is interesting to note that the book is set in and around Epping Forest and east London, and 'Hopkinsville' is probably a version of Stratford New Town, built by the Eastern Counties Railway from 1847 in just this area to house the workforce of its huge Stratford locomotive and rolling stock works. The district was originally called 'Hudson Town' after George Hudson, then chairman of the railway company, and by the 1860s Hudson's name was firmly connected in the public mind with the financial chicanery of railway speculation.

Another fictional example of this phenomenon is 'New Shelfington', from *The Railway Accident: A Tale*. The old town of Shelfington, two miles from the main line of the 'Great Summerford Railway', is solid, permanent, rooted in the past, 'a quiet, respectable, sombre county town', the character of which is embodied in the figure of its

parish clerk, Solomon Foster: a man of the old order, ‘of the generation when parson and clerk joined in a duet, and the rest of the congregation looked on or listened in mute attention.’²³ By contrast, New Shelfington ‘is one of those places which have sprung up around the first-class stations of our great railways, and of which one wonders what the future destiny will be. At present it looks like a slice of Lambeth, or Walworth, or Bermondsey let down into a ploughed field.’²⁴ In style, the town is characterless and mass-produced; in execution, it is slipshod and slovenly:

all the houses having been designed by the celebrated architects Hobbs, Nobbs, and Co., . . . were cast in exactly the same mould. The shops had the same bow-windows, the inns the same passages, drawing-rooms, dining-rooms, best and second-best bed-rooms . . . [the town’s streets] look altogether like a child’s card erections, that the next breath of wind would sweep away.²⁵

For Solomon Foster, not only is New Shelfington ugly and dreary, it is also culturally vicious and degenerate: “I call the people down at New Shelfington barbarians, if you like,” growled Solomon: “there are twenty-three beer shops within a mile of the station; and only that one new church, which they built twenty years ago, before ever the railway was thought of”.²⁶

As this suggests, for many, the presence of the railway was associated with social degeneration and cultural vulgarization. John Ruskin²⁷ criticized railway development as a new barbarian invasion, destroying in a few short years the great civilised European culture which was the legacy of centuries: ‘the railroad and the iron wheel have done their work, and the characters of Venice, Florence, and Rouen are yielding day by day to a lifeless extension of those of Paris and Birmingham’,²⁸ he lamented in 1849; while in 1876 he warned of ‘the certainty . . . of the deterioration of moral character in the inhabitants of every district penetrated by the railway’.²⁹ The novelist George Gissing, writing in the early 1900s, asserted that anybody wanting to see an England unaffected by ‘our modern pre-eminence in the creation of ugliness’ and ‘untouched by the baser tendencies of the time’ should visit ‘one of those old villages in the midlands or the west, which lie at some distance from a railway station’.³⁰ Gissing saw the railway as the agent of the increasingly vulgar mass civilization which he saw around him, and detested;³¹ it is associated in his novels with the ugliness and viciousness of the great city, the idiocy of mass entertainment, the immorality and vulgarity of advertising and cheap literature. In his 1894 novel *In The Year of Jubilee*, he describes King’s Cross underground station in London. The walls of the station are plastered with lurid advertisements, the visual hubbub which they create acting as an appropriate counterpart to the noise of trains and people which fills the station, and echoing the chaos and turmoil of the city streets above:

High and low, on every available yard of wall, advertisements clamoured to the eye: theatres, journals, soaps, medicines, concerts, furniture, wines, prayer-meetings — all the produce and refuse of civilization announced in staring letters, in daubed effigies, base, paltry, grotesque. A battle-ground of advertisements, fitly chosen amid the subterranean din and reek; a symbol to the gaze of that relentless warfare which ceases not, night and day, in the world above.³²

It is not merely that Gissing despises this base, ugly world of the masses and of mass culture; he fears the seething energy with which its diverse forms expand and multiply. This commercial fecundity echoes the uncontrollable breeding of the “baser” orders and “ignoble” types,³³ who constitute unclassed, working class and lower-middle class urban society and whom Gissing depicts in *In the Year of Jubilee* and elsewhere. In the face of the boundless, elementary energies of urban, commercial, cynical, vulgar, mechanized modernity, all the nodes of resistance which Gissing identifies — the countryside, high culture, human love — are, he fears, forced into submission and doomed to destruction.³⁴ The railway, with its constant ‘smoking traffic’³⁵ extending into every corner of the land, its urban, commercial character, its ugliness, its role as an agent of mass transit and mass entertainment, is nothing less than the primary conduit for this process of social and cultural degeneration.

Perceptions of the railway in the city as a negative presence – degenerative and threatening – as well as a positive, civilised, progressive force, are often reflected in the use of biological metaphor to describe them. The use of biological metaphor is a long-established feature of accounts of communications and transport networks. As a cultural phenomenon it parallels, and is frequently found in association with, a more generalized application of biological imagery to machinery, and a tendency to describe human communities – and particularly cities and other urban communities – in organic terms, as living bodies. The railway, like roads and canals before it, lent itself easily to the biological imagery of blood vessels, nerves, and circulatory systems and fitted into the established discourses of biological metaphor applied to towns and cities.

The railway in the city expressed metaphorical and ideological dimensions of regulation, progress, improvement, but these adaptations developed a complex and unstable life of their own, not always subject to interpretation according to prevailing ideas of rationalization and modernity. Railway networks signified the increasingly managed and controlled urban circulation of people, resources and ideas and underpinned the process of disciplined movement between places of residence, work and leisure essential to bourgeois capitalist society; but the principle of connectedness also permits unregulated, unexpected encounters, a loss of control, a releasing of transgressive and destructive energies.

Endnotes:

¹ For an interesting survey of perceptions of change and innovation in the Victorian era, and the role played by the railway in nineteenth-century conceptualizations of modernity and transformation, see David Newsome, *The Victorian World Picture* (London: John Murray, 1997), pp. 27-38.

² J. S. Jeans, *Railway Problems: An Inquiry into the Economic Conditions of Railway Working in Different Countries* (London: Longmans, Green & Co., 1887), p. xix.

³ W. M. Thackeray, ‘De Juventute’, from *Roundabout Papers* (1860); in *The Oxford Thackeray*, vol. 17, p. 424.

⁴ Thomas Carlyle, ‘Hudson’s Statue’ (1850), from *The Collected Works of Thomas Carlyle* (30 vols., London: Chapman & Hall, 1870-1), vol. 13, p. 230.

⁵ T. R. Gourvish, ‘Railways 1830-70: the formative years’, in Michael J. Freeman and D. H. Aldcroft, *Transport in Victorian Britain* (Manchester: Manchester University Press, 1988), p. 57.

⁶ Gourvish, ‘Railways, 1830-70’, p. 58.

-
- ⁷ See R. W. Kostal, *Law and English Railway Capitalism 1825-1875* (Oxford: Oxford University Press, 1994), p. 144.
- ⁸ For examples, see Terry Coleman, *The Railway Navvies* (London: Allen Lane, 1976), pp. 93-114, and Rolt's account of the 'Battle of Mickleton', when rival forces of navvies clashed at Mickleton Tunnel on the Oxford, Worcester and Wolverhampton Railway in July 1852: Rolt, *Brunel*, pp. 207-8.
- ⁹ Charles Dickens, *Dombey and Son* (1848; Harmondsworth: Penguin, 1971), chap. 6, pp. 120-1.
- ¹⁰ John Davidson, 'Railway Stations. I: London Bridge', in *The Poems of John Davidson*, vol. 2, p. 343.
- ¹¹ See J. R. Kellett, *Railways and Victorian Cities* (London: Routledge, 1979), pp. 340ff.; Gareth Stedman Jones, *Outcast London* (Oxford, Oxford University Press, 1971), pp. 162-3, 168; H. J. Dyos, 'Railways and housing in Victorian London', *Journal of Transport History*, vol. 2 (1955), pp. 11-21, 90-100; H. J. Dyos, 'Some social costs of railway building in London', *Journal of Transport History*, vol. 3 (1957-8), pp. 23-31.
- ¹² See Jones, *Outcast London*, pp. 162-3.
- ¹³ Kellett, *Railways and Victorian Cities*, p. 343.
- ¹⁴ *Ibid.*, p. 345; Julian Treuherz, *Victorian Painting* (London: Thames & Hudson, 1993), pp. 112-4.
- ¹⁵ Anon., *The Railway Accident: A Tale* (London: John Henry & Jas. Parker, c.1860), p. 2.
- ¹⁶ George Eliot, *Middlemarch* (1871-2; Oxford: Oxford University Press, 1988), book VI, chap. LVI, p. 451.
- ¹⁷ *Ibid.*
- ¹⁸ Eliot, *Middlemarch*, book VI, chap. LVI, p. 453.
- ¹⁹ See Kellett, *Railways and Victorian Cities*, *passim*.
- ²⁰ Carlyle, *Latter-day Pamphlets* (1850), from *Collected Works*, vol. 30, p. 229.
- ²¹ See Frank McKenna, *The Railway Workers 1840-1970* (London: Faber & Faber, 1980), pp. 50-5.
- ²² Anne Manning [published anonymously], *Town and Forest* (London: Richard Bentley, 1860), p. 25. On George Hudson and Stratford, see Brian Bailey, *George Hudson: the Rise and Fall of the Railway King* (Stroud: Alan Sutton, 1995), pp. 80-1.
- ²³ *The Railway Accident*, pp. 13-14.
- ²⁴ *Ibid.*, p. 12.
- ²⁵ *Ibid.*, pp. 12-13.
- ²⁶ *Ibid.*, p. 17.
- ²⁷ There is as yet no adequate discussion of Ruskin's attitude to the railways. Jeffrey Richards's essay 'The role of the railways', in Michael Wheeler (ed.), *Ruskin and Environment: The Storm-*

Cloud of the Nineteenth Century (Manchester & New York: Manchester University Press, 1995), is rather superficial, but is a start.

²⁸ John Ruskin, 'Samuel Prout' (1849), in *Works*, vol. 12, pp. 314-5.

²⁹ John Ruskin, *Railways in the Lake District* (1876), in *Works*, vol. 34, p. 141.

³⁰ George Gissing, *The Private Papers of Henry Ryecroft* (1903; London: Phoenix House, 1953), p. 194.

³¹ See John Carey, *The Intellectuals and the Masses: Pride and Prejudice among the Literary Intelligentsia, 1880-1939* (London: Faber & Faber, 1992), pp. 93-117, for a penetrating — if partial — critique of Gissing's attitudes. For a more nuanced view, see John Sloan, *George Gissing: the Cultural Challenge* (Basingstoke: Macmillan, 1989), pp. 131-4, 138-40.

³² George Gissing, *In the Year of Jubilee* (1894; Hassocks: Harvester, 1976), part 5, chap. 2, p. 309.

³³ The phrase is H. G. Wells's, discussing Gissing in his *Experiment in Autobiography* (2 vols., London: Gollancz, 1934), vol. 2, pp. 571-2.

³⁴ See Sloan, *George Gissing*, p. 131.

³⁵ Gissing, *In the Year of Jubilee*, part 2, chap. 4, p. 109.