Introduction

MARTIN DAUNTON

(i) Circulations

In 1850, Charles Dickens received a gruesome gift from his brother-in-law, Herbert Austin – the Report on a General Scheme for Extra-Mural Sepulture. This nauseating account of densely packed urban graveyards exuding noxious gases, secreting foul fluids, turning the soil ‘black and pitchy’ and making the boundary wall ‘damp, glutinous and spongy’ led Dickens to dream of putrefaction. But his imagination had been stimulated even before reading Austin’s sickening report, for his novels were obsessed with graveyards and slaughterhouses, sewers and cess pits, their textures and secretions, described in the same language as the reports of sanitary reformers. Dickens portrayed early Victorian London as permeated with notions of decay, corruption, stench and stickiness. The city of Dickens and the sanitary reformers, at the beginning of the period covered by this third volume of the Cambridge Urban History, was rotten, stagnant, putrefying – a place of blockage where the frustration of circulation resulted in secretions and miasmas. The language of Dickens and sanitary reformers provided imaginative force to a real and alarming crisis in British towns and cities at the opening of Victoria’s reign, bringing a variety of problems together into a single frame of reference and uniting otherwise disparate issues in a way which justified action and intervention. As Christopher Hamlin has remarked, the monumental infrastructure of sanitation inserted into Victorian towns was ‘even more remarkable as an achievement of public persuasion than one of bricks and mortar’.2

The physical form of cities prevented circulation, and led to both ill-health


and crime. William Strange was one of many writers who expressed concern about the lack of circulation of air in ‘the dense and intricate masses of buildings inhabited by the poorer classes . . . The atmosphere of these places is charged with the exhalations from the persons and dwellings of the crowded population, and is rendered still more infectious by the effluvia from the cesspools, dunghoops, pigsties, etc., which abound therein.’ The inhabitants of these districts were themselves ‘immortal sewerage’. In 1853, the Reverend S. G. Osborne expressed his alarm at the ‘living nastiness and offensive living matter which we have been content to allow to accumulate in streets, a very small distance from our doors; matters not only offensive, repulsive, and pernicious when viewed in detail, but in their aggregated masses acting to the deep permanent injury of mankind in general’. People were refuse or sewerage with a difference: they had souls and immortality. But the problem was the same: how to purify stagnation and pollution which led to disease and moral contamination? As Osborne commented, ‘there are moral miasmas just as there are physical. The mind – the soul of man – can be just as polluted as to its springs of healthy life by external, removable causes, as can the human physical constitution; – there is a mental typhus.’

The metaphor extended to administrative reform and economic policy. The trade monopolies of the East India Company or the navigation laws giving preference to British ships were restrictions on circulation which created inefficiencies and corruption. The outmoded practices of the law courts and government – the legal cases festering in the court of Chancery and the administrative decisions delayed in the Circumlocution Office – were linked together in a single frame of reference.

The ecology of the large cities – the handling of flows of wastes and pollution – was breaking down. In the conclusion to Volume II of the *Cambridge Urban History*, Peter Clark commented that the urban system was facing crisis. In provincial cities of 100,000 and above, life expectancy at birth dropped from twenty years in the 1820s to twenty-nine in the 1830s, a marked break in the previous trend of improvement of life expectancy in towns and cities. Here is a theme explored in Bill Luckin’s chapter on pollution, and commented on in


Introduction

Simon Szreter and Anne Hardy’s discussion of mortality at the beginning of our period. As Szreter and Hardy point out in their chapter, life expectancy in the slums of the 1830s and 1840s was the lowest since the Black Death. Although cities grew rapidly in the late eighteenth and early nineteenth centuries, with a larger proportion of an ever increasing population, investment in the urban infrastructure did not keep pace. British urbanisation in the late eighteenth and early nineteenth centuries was undertaken ‘on the cheap’. The grim consequences were apparent in the 1830s and 1840s, with blockages in the circulation of water and wastes, stagnation of foul cess pits and graveyards, and densely packed courtyards.

In the late eighteenth and early nineteenth centuries, the number of houses more or less kept pace with the rapid increase in the urban population, but only by subdividing property and packing more houses into courtyards and alleys, creating a maze of dead-ends and blockages where sanitary reformers feared that crime and disease flourished. In Liverpool in 1841, for example, about a quarter of the population lived in courts entered through a narrow passage, with houses packed around a tiny open space containing a common privy and ashpit ‘with its liquid filth oozing through their walls, and its pestiferous gases flowing into the windows’. The installation of water closets might simply transfer the problem elsewhere, and possibly make things worse by pouring excrement into the water supply, as happened in London in the early nineteenth century. Indeed, many people scarcely had a water supply: the Royal Commission on the Health of Towns of 1843/5 found that only 5,000 people out of 130,000 in Bristol had piped water. The recycling of waste products was a major problem


11 S. Halliday, The Great Stink of London (Stroud, 1999), pp. 33, 35–47. The problem arose from a change in policy, to permit householders to connect to sewers, which were designed to discharge storm water into the Thames; the interests of the water companies in increasing their income clashed with those of the commissioners of sewers, who did not have the financial resources to increase the capacity of the system.

Figure 1.1 Courts in Nottingham 1844. The plan shows the internal, shared space with communal privies, a lack of privacy and an absence of through circulation.

Source: PP 1844 xviii, First Report of the Commissioners for Inquiring into the State of Large Towns and Populous Districts.
for the Victorian city, as materials came in to sustain the urban economy and were transformed into goods and waste products. Animals were slaughtered for meat, leaving blood, bone and hides to be converted into leather, glue and tallow – processes of overpowering stench which were located in ‘dirty’ areas of the city. The livestock market at Smithfield, with its noise, dirt and smell, horrified Dickens, and as Pip remarked in Great Expectations ‘the shameful place, being all asmear with filth and fat and blood and foam, seemed to stick to me’. The tanning yards and glue works on the south bank of the Thames at Bermondsey, where hides and bones were processed, were even worse. Coal for domestic fuel and industrial processes created a pall of smoke which led to bronchial problems and blocked out the sun, so contributing to rickets as a result of vitamin deficiency. In the major industrial cities, raw materials were imported on a vast scale and often poisoned the landscape and the people, most notoriously the chemical and copper industries around Swansea and St Helens where ‘the landscape of Hell was foreshadowed’. What could be done about these problems, which raised major issues of how to prevent one party imposing costs on another, and required large-scale investment in the infrastructure?

The initial concern of sanitary reformers was water-borne pollution, and their solution was simple: ‘continuous circulation’. As Edwin Chadwick put it, ‘the main conveyance of pure water into towns and its distribution into houses, as well as the removal of foul water by drains from the houses and from the streets into the fields for agricultural production, should go on without cessation and without stagnation either in the houses or the streets’. A constant flow was essential so that putrefaction did not set in before the wastes were removed from the city. This was also a statement of what was not part of public health – adequate food or healthy working conditions, a sense of the economic causes of disease and the political rights asserted by the radicals and Chartists. The public health movement, as defined by Chadwick, was also about political stability, moral reform and control. Courts and alleys should be opened up to circulation by driving new roads through the worst slums to bring air and the light of civilisation into

---

13 On one such flow – the use of ashes from London to mix with clay for brick production in Middlesex, which were then returned to London, see P. Hounsell, ‘Cowley stocks: brickmaking in west Middlesex from 1800’ (PhD thesis, Thames Valley University, 2000; and below, p. 234.
15 On Bermondsey, see G. Dodd, Days at the Factory; or The Manufacturing Industry of Great Britain Described (London, 1843), p. 175.
their gloomy depths, so dispelling both physical and moral miasmas. The same process would contribute to the health of the nation as to the wealth of the nation: its effluent could be turned to profitable use, and blockages in the free circulation of trade could be removed by repealing the corn laws and navigation laws, sweeping away the corporate privileges of the East India Company and regulating the circulation of bank notes by the Bank Charter Act of 1844. Circulation of information and knowledge would be improved by the cheap and efficient carriage of mail by the penny post, by the construction of railways and telegraphs, by itinerant lecturers and circulating libraries. The notion of ‘continuous circulation’ implied a particular vision of urban life. Arteries should be kept free of blockages or the city – like an individual – would suffer apoplexy:

the streets of London are choked by their ordinary traffic, and the life blood of the huge giant is compelled to run through veins and arteries that have never expanded since the days and dimensions of its infancy. What wonder is it that the circulation is an unhealthy one? That the quantity carried to each part of the frame is insufficient for the demands of its bulk and strength, that there is dangerous pressure in the main channels and morbid disturbance of the current, in all causing daily stoppages of the vital functions.

The street was not a place to loiter, but to move. In Paris, the great boulevards of Baron Haussman combined movement and parade: the centre of the street was dedicated to fast, cross-town traffic; at the side, separate lanes catered for slower, local traffic; and wide, tree-lined pavements allowed pedestrians to stroll or sit at cafés. Here was the Paris of Baudelaire, of people displaying themselves before a parade of strangers and watching others as a spectacle. As a British visitor to the Paris exhibition of 1867 remarked, the Frenchman ‘lives in his streets and boulevards, is proud of them, loves them, and will spend his money on their beauty and decoration’. By contrast, Londoners lived indoors or in more private spaces, and streets were ‘simply and solely a means of transit from one point to another’. The aim of urban improvements was to create free movement of goods and people. When Joseph Bazalgette constructed the Embankment along the Thames, it was not as a place to saunter or sit; it was an artery rather than a public space, with a road above and a railway below, alongside gas mains and sewers.

The metaphor of illness led to a negative response to street life. Reformers looked for clots and infection; movement of sewage or traffic had priority over multiple uses as a source of vitality. And reform of the fabric of the city was linked to reforming the culture and morals of the people; the health and care of the city was at one with the health and care of the body.24

The process of creating free movement of people and air in the city led to a growing concern for the layout of towns, in order to prevent the continued construction of courts and dead-ends. From the 1840s, Liverpool town council started to impose regulations on the construction of courts so that they were more easily cleaned and open to inspection, with individual backyards and separate sanitation for each house. Nationally, the Public Health Act of 1875 led to the development of ‘by-law’ housing, with open grids of streets, and separate yards and sanitation for each house.25 This change in the form of the city was not simply a result of public regulation, but also of falling land prices after the Napoleonic wars, the onset of gains in real income around the middle of the century and a slow improvement in urban transport. In addition to a greater concern for the layout of streets and the internal structure of housing, steps were taken to prevent pollution and nuisances. Landowners attempted to limit offensive trades on their urban estate developments through clauses in leases, in an effort to maintain the amenity and value of their property. Their efforts were usually in vain, for it was difficult to contain wider processes within the urban economy.26 Public controls were also introduced. The Public Health (London) Act, 1891, for example, gave the London County Council (LCC) power to regulate slaughterhouses, cow-houses and knackers’ yards, and to prevent nuisances. From 1896, even dogs were not immune, and the LCC slaughtered 32,000 strays within a year.27

More difficult was control over the quality of air, beyond ensuring that expensive developments were up-wind from the worst pollution. The first legislation against smoke in 1821 dealt with the limited case of steam engines. In 1852, smoke emissions in London were controlled, and in 1875 all local authorities were given power to adopt anti-smoke measures. They had little effect, for domestic coal was not covered until the clean air legislation of 1956. The pall of


25 See Errazurez, ‘Some types of housing’, and Taylor, ‘Court and cellar dwelling’.


coal hanging over British towns and cities was bad enough; even worse were the so-called ‘noxious vapours’ from industrial processes. Polluters could be taken to court under the private or public law of nuisance. Property owners might take factory owners to court on the grounds that they were committing a nuisance, such as the aggrieved owners of Park Square, Leeds, who were offended by the smoke from Mr Gott’s factory.\textsuperscript{28} In some towns, local landowners took action against the urban authority itself for causing a nuisance by polluting the river, and so forced an improvement in sewage treatment.\textsuperscript{29} But actions against industrial pollution were rare, limited by cost and the realisation that the industries involved were vital to the prosperity of the local economy. The courts adopted the notion of ‘reasonableness’, accepting that a degree of discomfort was acceptable given the economic benefits to the community and the nature of the area involved. After all, as one judge remarked, ‘what would be a nuisance in Belgrave Square would not necessarily be one in Bermondsey’. When legislation was introduced against noxious vapours in the Alkali Acts of 1863, 1874 and 1881, the worst pollution from copper was still excluded. Essentially, legislation covered only processes where regulation was economically feasible – a narrow definition which did not place a cost on the damaged health of the inhabitants.\textsuperscript{30} The issue continues with the problems of petro-chemical pollution in cities and the difficulties of taking political action against car owners.

Urban spaces were increasingly controlled, and Dickens’ concern for circulation gave way to a new interest in surveillance and observation.\textsuperscript{31} Medical officers of health inspected insanitary housing, mapping ‘plague spots’ in order to excise them from the urban fabric.\textsuperscript{32} They inspected individuals, who could similarly pollute the city with their physical and moral contamination. The power of doctors over the bodies of urban residents increased in the mid-nineteenth century, with compulsory vaccination of children by poor law medical officers.\textsuperscript{33} They monitored infectious disease, isolated individuals and disinfected their


\textsuperscript{31} Trotter, \textit{Circulations}, pp. 112–18.


\textsuperscript{33} Hardy, \textit{Epidemic Streets}, ch. 5; the use of compulsion was contentious – see R. M. Macleod, ‘Law, medicine and public opinion: the resistance to compulsory health legislation, 1870–1907’, \textit{Public Law} (1967), 107–28, 189–211.
homes, clothes and possessions to prevent its spread. The Contagious Diseases Acts of 1864–9 gave power to inspect and confine women with sexual diseases, to prevent them from polluting the soldiers and sailors of garrison towns. Cities were divided into ‘beats’ for the police, inspected by school board visitors, anatomised in statistical tables and maps. In his chapter, Douglas Reid shows how fairs and pleasure gardens, with their mixing and moral dangers, or recreations of bull running and street football, were attacked by the movement for the reformation of manners, the Royal Society for the Prevention of Cruelty to Animals and the temperance movement, often with the support of businessmen and council-lors eager to create an orderly workforce and urban environment. Public spaces previously used for demonstrations and meetings – Spa Fields and Kennington Common in London, for example – were built over or turned into parks. Tyburn, the site of public executions and their associated crowds, became merely another part of Hyde Park. In 1868, hangings retreated behind the walls of prisons, away from the passion of crowds and the threat to urban decorum. As Mark Harrison points out, the trend was away from the city as an open stage for the enactment of civic rituals and disputes, to a controlled set of enclosed spheres.

However, as Colin Pooley remarks, the transition from a chaotic early nineteenth-century city to a controlled twentieth-century city was never smooth. Travel itself entailed social collisions and dangers. The horse omnibus produced

---


36 On school board visitors, who provided the data for Charles Booth’s detailed mapping of poverty, arises eager to create an orderly workforce and urban environment. Public spaces previously used for demonstrations and meetings – Spa Fields and Kennington Common in London, for example – were built over or turned into parks. Tyburn, the site of public executions and their associated crowds, became merely another part of Hyde Park. In 1868, hangings retreated behind the walls of prisons, away from the passion of crowds and the threat to urban decorum. As Mark Harrison points out, the trend was away from the city as an open stage for the enactment of civic rituals and disputes, to a controlled set of enclosed spheres.

37 However, as Colin Pooley remarks, the transition from a chaotic early nineteenth-century city to a controlled twentieth-century city was never smooth. Travel itself entailed social collisions and dangers. The horse omnibus produced 38 Hardy, *Epidemic Streets*, pp. 194–5, 207, 273, 277–8; S. Szreter, ‘The importance of social intervention in Britain’s mortality decline, c. 1850–1914: a reinterpretation of the role of public health’, *Social History of Medicine*, 1 (1988), 1–37.


40 On school board visitors, who provided the data for Charles Booth’s detailed mapping of poverty, arises eager to create an orderly workforce and urban environment. Public spaces previously used for demonstrations and meetings – Spa Fields and Kennington Common in London, for example – were built over or turned into parks. Tyburn, the site of public executions and their associated crowds, became merely another part of Hyde Park. In 1868, hangings retreated behind the walls of prisons, away from the passion of crowds and the threat to urban decorum. As Mark Harrison points out, the trend was away from the city as an open stage for the enactment of civic rituals and disputes, to a controlled set of enclosed spheres.

---


56 On school board visitors, who provided the data for Charles Booth’s detailed mapping of poverty, arises eager to create an orderly workforce and urban environment. Public spaces previously used for demonstrations and meetings – Spa Fields and Kennington Common in London, for example – were built over or turned into parks. Tyburn, the site of public executions and their associated crowds, became merely another part of Hyde Park. In 1868, hangings retreated behind the walls of prisons, away from the passion of crowds and the threat to urban decorum. As Mark Harrison points out, the trend was away from the city as an open stage for the enactment of civic rituals and disputes, to a controlled set of enclosed spheres.

---


unwelcome intimacies (see Plate 39), and railway companies tried to avoid the embarrassments of social mixing by the provision of carriages for different classes, and separate trains for workmen. Even so, dirty, uncouth workers might loiter at stations waiting for their cheap train, and offend respectable passengers.\footnote{Below, p. 441. J. Richards and J. M. MacKenzie, \textit{The Railway Station} (Oxford, 1986); W. Schivelbusch, \textit{The Railway Journey} (Oxford, 1980).} The process of ‘sterilising’ the street, creating neutral or ‘dead’ spaces, was contested. The police, local by-laws and the Metropolitan Traffic Act of 1867 sought to clarify the use of the street and remove ambiguities but one person’s freedom was another person’s nuisance, and the policing of the streets remained controversial.\footnote{Winter, \textit{London’s Teeming Streets}, pp. 42–9.} When Lord Montagu defended the motorists’ freedom to use the king’s highway, claiming that ‘the right to use the road, that wonderful emblem of liberty, is deeply ingrained in our history and character’,\footnote{Ibid., p. 9.} he was continuing a battle waged by costermongers with their barrows, hawkers selling their wares, heavy drays unloading, itinerant musicians entertaining and annoying in equal measure, omnibuses picking up passengers, or women soliciting men and vice versa. Streets were contested in terms of class: a top hat invited deference at one place and time, ridicule at another. They were contested in terms of gender: a lady commanded respect here and importunity there, the lines shifting between day and evening. Streets changed their identity over the day, as they were appropriated by different social groups for a variety of purposes – for male commuters rushing to work, for women shopping, or (as Reid notes) young men and women in the ‘monkey parade’, walking and bantering to attract attention.\footnote{Ibid., passim; and below, p. 762.} Men – or at least bourgeois men – were privileged spectators, urban explorers who could ‘stroll across the divided spaces of the metropolis’, a subjectivity reflected in literature and in social surveys by Henry Mayhew and Charles Booth.\footnote{Ibid., pp. 177–89; Nord, \textit{Walking the Streets}, pp. 1–3; Walkowitz, \textit{City of Dreadful Delight}, p. 16.} By the 1880s, women were starting to claim greater access to public spaces of the city, so triggering alarm at their transgressions of boundaries. As Judith Walkowitz points out, the ‘imaginary landscape’ of London shifted ‘from one that was geographically bounded to one where boundaries were indiscriminately and dangerously transgressed’. The murders committed by Jack the Ripper in 1888 became a cautionary tale for women, ‘a warning that the city was a dangerous place when they transgressed the narrow boundary of home and hearth to enter public space’.\footnote{Walkowitz, \textit{City of Dreadful Delight}, pp. 3, 11, 29; see also Nord, \textit{Walking the Streets}, ch. 6.} For all the efforts of control and surveillance, the city still remained a place for imagination, encounters and collisions, with new possibilities for freedom and self-expression.

Transport within towns was only slowly transformed, as John Armstrong shows in his chapter. At the beginning of the period, the only method of transport for most people was walking, and the destruction of inner-city housing for