Underneath the Arches: The Afterlife of a Railway Viaduct

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The Great Eastern Railway Company’s viaduct in East London was one of the earliest, and most substantial, railway structures in London, transporting huge quantities of goods and people entering and leaving central London. Rather than considering the official use of the viaduct, however, this chapter will focus on the unofficial, parallel uses of the spaces underneath the arches, long used as a sanctuary and shelter, a series of secluded places where independent businesses and illicit activities thrived.

INTRODUCTION

Understanding the history of London’s earliest railways would be one way of assessing the significance of the former Great Eastern Railway Company’s viaduct in Pedley Street and Grimsby Street, situated to the east of Brick Lane, in the London Borough of Tower Hamlets. One could consider the linkages between the increasing importance of London as a world commercial centre during the 19th century and the expansion of the railway network, and technological advances in locomotives and railway infrastructure. One might also wish to examine the architectural qualities of the brick and stone viaduct and its elliptical arches. However, this chapter moves away from these more pragmatic considerations to examine the non-railway-related use (with the exception of the Great Eastern Railway’s Horse Infirmary) of the railway viaduct and the arches underneath.

The mainly non-railway uses of the viaduct has been chosen as a theme for this discussion in the hope that it will demonstrate the potential for an holistic approach to industrial sites, which looks beyond the context of intended function, and examines the role that such a structure can have in everyday life. An increasing body of literature has been concerned with the importance of thinking about the social significance of aspects that have been traditionally associated with industrial archaeology,¹ and this chapter is a contribution to that debate.

CONTEXT OF THE PROJECT: THE EAST LONDON LINE TUBE EXTENSION

The East London line of the London Underground, coloured orange on the well-known ‘tube’ map, was closed in November 2007 to allow for its extension northwards, and its integration into the London Overground rail network. When the line reopens in 2010,
trains will serve the area from Crystal Palace in the south to Highbury and Islington in the north. The construction works involved with the extension of the East London line have involved excavation and standing building recording along its route, from New Cross in the south to Dalston in the north. The brief for archaeological fieldwork for this project was set by English Heritage, which in London provides advice on archaeological matters to planning departments in most of the London boroughs. A full drawn and photographic survey of the Pedley Street/Grimsby Street viaduct was required, with a specific condition that the full history and use of the structure be recorded and analysed prior to its demolition and the construction of a new bridge and ramp, which will direct the extended railway line below ground and onto the tracks of the existing East London line (Fig. 24.1).

The viaduct formed part of the Eastern Counties Railway line from Romford in Essex to the Bishopsgate terminus in Shoreditch High Street, outside the jurisdiction of the City of London, and was constructed between 1836 and 1840. Much of the railway line passed through land that was occupied by large mansions or estates, or was under cultivation, but once the railway line entered the crowded core of east London, it was mostly carried on a brick viaduct. This structure was costly to build; it was a mile and a quarter in length and comprised 160 arches, but had the advantage of minimising the number of buildings that would have to be demolished, raising the railway line above adjacent properties in a
congested district and providing a source of income for the railway company. To that end, many of the arches underneath the viaduct were let out as warehouses and workshops (Fig. 24.2).

The Eastern Counties Railway merged with a number of smaller companies in 1862 to form the Great Eastern Railway Company. At around this time, the viaduct was widened to provide additional capacity for trains and the opportunity was taken to convert the arches into usable spaces, where previously they had been open to the street. The ends of the arches were closed off, with doors and windows inserted in the walls at either end. The arches subsequently housed the Great Eastern Railway Company’s Horse Infirmary; the standing
building survey showed evidence for the stalls, tethering rings and farriers’ workshops that the railway company erected (Fig. 24.3). The viaduct was further modified in the 1870s when the railway terminus was relocated to Liverpool Street, in the City of London; a tunnel and ramp was cut through the viaduct to direct trains to the new station, and the former terminus in Shoreditch High Street was demolished and rebuilt as a goods yard.

Mapping from the 18th century, such as John Rocque’s map of 1746 (Fig. 24.4), shows how the site of the viaduct was situated on the edge of the city, the yards and alleys leading off Shoreditch High Street and Bishopsgate to the west, market gardens and pasture to the east. An archaeological evaluation on the site of the southern side of the viaduct in Pedley Street showed that the deposits relating to the earlier use of the site had been heavily truncated in order to make up the ground level for the construction of the viaduct; however, a higher level of preservation was found on the site of the arches in Grimsby Street. Water-lain deposits suggested boggy ground in the area during the earlier post-medieval period, and a ‘raft’, mostly comprising lumps of chalk and containing some residual Roman material, was deposited to provide a stable building platform. The site contained the remains of two cellars, probably early- to mid-18th century in date, which belonged to buildings on the southern side of St John Street, later renamed Grimsby Street.

Figure 24.4 Extract from John Rocque’s Map of London of 1746, showing the future site of the viaduct
THE SPATIAL FORM OF POVERTY

Edward Stanford’s *Library Map of London and its Suburbs* of 1862 (Fig. 24.5) was the earliest widely available map that showed the Eastern Counties Railway line. Bishopsgate Railway Station (which had changed its name from Shoreditch in 1847) was located to the west of the site, and Brick Lane goods depot, which opened along with the rest of the railway line in 1840, was situated immediately to the east. The railway had cut through a number of streets and alleys; the construction of the Eastern Counties Railway viaduct through Shoreditch necessitated the demolition of homes and workshops in courts on either side of Brick Lane.

In 1886, Charles Booth, philanthropist and social campaigner, began a survey of living and working conditions in London, a project that continued until 1903. The results of the fieldwork undertaken by Booth and his team of researchers was expressed in his *Descriptive Map of London Poverty*, which used a system of colour coding residential properties to identify the economic and social make-up of each street in London. Booth’s study indicated that in 1889 the area through which the railway viaduct passed was mainly occupied by poor and very poor households. More economically and socially mixed households, some financially comfortable and others poor, were concentrated along the main roads, including Brick Lane.
Lane. Booth’s maps of poverty in London were presented as an objective statement, yet can be seen as embodying the subjective attitudes of a middle-class, evangelical social reformer. The information contained in the maps and accompanying reports was gathered by a team of investigators who were recruited largely from Toynbee Hall, a university settlement in Whitechapel. The investigators accompanied School Board Visitors, who had a detailed knowledge of families with children, and policemen on their beats. The notebook of the investigator who accompanied Sergeant French from the Commercial Street Police Station on 22 March 1898 commented on the dirty appearance of the children in Fleet Street (now the western end of Pedley Street) and that he saw one child who was wearing only one shoe. Thieves and prostitutes who operated in Boundary Street, in the Old Nichol area, congregated at the eastern end of Pedley Street; the Old Nichol was located further west, to the north of Bishopsgate Goods Station, and was presented in contemporary newspaper accounts and thinly disguised in fiction, as a notorious slum.

The effect that the insertion of linear features such as roads and railways has on the functioning of a landscape and the people who populate it has been researched by several authors. Urban historian David Reeder pointed out how Charles Booth’s *Descriptive Map of London Poverty* provides information on the impact that spatial forms in London had on the location of economically poor areas. He noted that the map points to the significance especially of innumerable dead ends, closed up vistas and backwaters in the layout of streets … a more careful reading indicates how some new addition to the ground plan – a dock or canal, for example, a gas works or waterworks, a railway line, or just the alignment of a new street – seems to have served to reinforce slum tendencies.

Booth and his team were repeatedly to draw attention in later volumes to the importance of physical barriers. For example, to the north of Shoreditch ‘another dark spot of long-standing poverty and extremely low life … is wedged in between the Regent’s Canal and the gas works’.

The effect of linear barriers on the functioning of the modern landscape has also been a subject of research. Sefryn Penrose’s study of the contemporary landscape beneath and surrounding Junction 3 of the M32 motorway in Bristol, the construction of which bisected the inner city suburbs of St Pauls and Easton, analysed the experiences of those who try to negotiate it: ‘our experience of the city is dependent on its layout, and more and more often in the contemporary urban setting, severe alterations have been enacted on this landscape which in turn alter our experience’. The altered landscape is ‘not passive and reflective but can act back upon us in different ways’. The motorway flyover and the pedestrian subway beneath it ‘fulfil a function for users of the motorway in its routing of traffic from the motorway onto city roads, but for pedestrians, local residents who wish to move between St. Pauls and Easton, it is a problem to be negotiated’. How was the population of 19th-century Shoreditch able to negotiate the railway viaduct?
While the construction of the railway viaduct created a physical barrier, the structure provided a refuge too, in the spaces underneath the arches. There were few restrictions on the activities that could be carried out underneath them (and the few restrictions that were in place were difficult to enforce), and they provided large spaces at little or no financial cost.

The railway arches, particularly those in Grimsby Street, provided shelter for the East End’s homeless, and across London, railway arches and vaulted spaces afforded shelter for the city’s vagrants. For many years, the bridges across the Thames served as what were called ‘Dry Arch’ Hotels for the city’s vagrants, and the arches under the Adelphi Buildings, a late-18th-century speculative residential development between the Strand and the Thames, was described as ‘a little subterranean city’, where ‘no sane person would have ventured out to explore them without an armed escort’. Closer to our site, Arthur Harding, a reformed petty criminal and contemporary of the Krays, recalled vividly the nights spent sleeping under the Brick Lane bridge as a child (Fig. 24.6):

We got slung out of Drysdale Street because we were three children, and a fourth coming, and there wasn’t supposed to be any at all. I remember that quite well. It was rainy, a January day. The first night we were homeless and settled down under Brick Lane arch for the night. There were others laying there, with sheets of newspaper on the pavement and old coats to cover them. It was a common thing both at Brick Lane arch and Wheler Street, the two railway arches. The Wheler Street arch was more crowded because it was longer and bigger. The police walked down the right-hand side, the people slept on the left.

Figure 24.6 The railway bridge over Brick Lane, c. 1976 (© J. E. Connor)
Railway arches also provided a refuge on a more formal, organised basis, such as during the Second World War, when many were converted to act as air-raid shelters. Railway arches were not indestructible, however, and when the air-raid shelter in an arch in Stainer Street, on the approach to London Bridge railway station, suffered a direct hit in February 1941, over sixty people were killed. None of the arches at Pedley Street or Grimsby Street were ever officially used as air-raid shelters. Instead, they provided more permanent accommodation. The close proximity of the Brick Lane Goods Depot and Bishopsgate Goods Yard made Pedley Street the ideal location for the Great Eastern Railway Horse Infirmary, which cared for some of the 6,000 horses the railway company owned in London in 1890.

THE SHOREDITCH FURNITURE TRADE

Industry in London has had a complex geography, with some industries concentrated in specific areas, and others more widely distributed across the city. There was a diverse range of industries in London, and none predominated, unlike metal-working in Birmingham and Sheffield, or textile milling in Lancashire and West Yorkshire. London was a centre for the furniture trade, however, and by the end of the late 18th century the City of London and the West End were home to many bespoke manufacturers. During the late 19th century, as the mass market for cheap goods emerged, Shoreditch, on the eastern fringe of the City, became a focus for the trade in low-priced, ready-made furniture. While a few large furniture factories were constructed to meet the need for cheap furniture, manufactured on something approaching a production line, the character of the trade required a larger number of small workshops, which carried out specialised tasks. This smaller-scale manufacturing could meet fluctuations in demand and was more responsive to changing fashions and forms. The various processes involved in production were broken down into stages, each undertaken by a specialised firm. This resulted in a kind of assembly line that ran through the streets of Shoreditch, supplied by a host of ancillary trades that contributed raw materials, machinery, accessories, finishes and warehouses for distribution.

The Second World War brought great disruption to the East End, and the furniture trade went into further significant decline in the 1980s. Firms were unable to keep up with the import of cheaper furniture from overseas, and most of the businesses associated with the Shoreditch furniture trade closed, or relocated to cheaper premises. The few small firms that have remained in the area are run by designers, many of whom are graduates of the London College of Furniture in Whitechapel, or specialise in high-quality reproduction furniture, such as Barley Reproduction, based in one of the railway arches in Pedley Street until January of 2007 (Fig. 24.7).

ILICIT BEHAVIOUR

The railway arches in Pedley Street and Grimsby Street have had a long history as a place of relative safety and shelter, but their seclusion has also attracted illicit behaviour. Grimsby Street was described by the graffiti artist Banksy as ‘a bulletin board for a community’, albeit a ‘slippery, elusive anonymous one’, mainly for reasons of illegality.
In New York and Philadelphia there was a proliferation of graffiti writing on the subways and trains in the late 1970s and early 1980s. The sides of trains made excellent canvases for graffiti, and their mobility meant that graffiti could traverse the city. This ‘tagging’, a seemingly simple act of spraying one’s name, usually takes the form of a stylised signature or logo, which forms a language for those who undertake it, with its own grammar and syntax. By the mid-1980s, most major European cities, notably Berlin, Paris and Amsterdam, had their own flourishing street art movements, while graffiti emerged from indigenous art forms in South America, particularly Brazil, and later south-east Asia. Other forms of street art emerged. In 1981, a French graffiti writer named Blek le Rat began to use the utilitarian method of spraying through stencils, and his spray-painted black rats began to appear on the streets of Paris.

The anthropologist Nancy Macdonald has studied the syntax and grammar of tagging, and found, perhaps not surprisingly, that graffiti attracts graffiti. ‘As writers’ names hit the wall a form of interaction begins to develop, one which mirrors, on the wall, the activities that might occur in front of it.’ Placing one’s tag near someone else’s is a means of saying ‘hello’, but writing over the top of another person’s tag is a cardinal sin, a violent act. Macdonald suggests that little attention has been paid to the divides that operate within the ‘graffiti subculture’ – a fractured group that offers its members a diversity of standpoints and realities; its main division centres on how it should present itself to the world. Much
of the graffiti in Grimsby Street was more complex than seemingly simple tagging, and involved much larger pieces of contemporary art. During her fieldwork among graffiti writers in London and New York, Macdonald found that professionally undertaken pictorial or abstract work was often discredited for sacrificing the traditional essence of graffiti, as expressed by the graffiti writer Teck:

I made a fair amount of work doing legal art for TV commercials and other film endeavours. In actuality, all of this paled to the thrill of being chased through back streets and narrowly [sic] escaping the beam of police headlights. Living precariously against the grain took precedence in my daily routine.23

The artworks in Grimsby Street transcended traditional graffiti methods, and towards the end of the structure’s life it was used as a canvas by a wider range of artists, beyond the more ‘traditional’ spray painters. Many of the artistic interventions took the form of stickers, posters and collages, undertaken within the safe (and legal) confines of a studio and then fixed to the walls in Grimsby Street. Some graffiti writers disapprove of such ‘non-conformist’ activities. Nancy Macdonald’s interviews with graffiti writers in New York showed there was significant antipathy towards Adam Cost and Revs, two graffiti writers who began producing slogans on stickers and posters, which they pasted on walls and street furniture in New York throughout the late 1980s and 1990s. Such measures, which minimise the amount of work one has to undertake, or which offer a shortcut to fame, are frowned upon, unless the graffiti writer has considerable experience.24 Despite this, Grimsby Street remained a popular canvas for local and visiting artists (Plate 8).

Grimsby Street continued to be appropriated for commercial artistic endeavours; the street and those around it became a popular place for fashion photography shoots and film-makers, and with so many works by famous (or notorious) contemporary artists covering its walls, Grimsby Street was a regular stop for organised walking tours of London’s graffiti, and a key site to visit in published guides to east London.25

The top of the viaduct, conversely, functioned as a different kind of space. The railway line that used the viaduct was closed following a fire at Bishopsgate Goods Yard in 1964 and the closure of the Brick Lane Goods Depot in 1967.26 Appropriation and illicit use of the top of the viaduct was limited to one highly visible structure. Erroneously called a signal box on the various websites devoted to this building, and to other derelict structures in London, the structure was an inspection tower, or ‘sludge house’ for the water softening plant that was constructed next to the viaduct in the 1930s (Fig. 24.8).

The Office for Subversive Architecture (OSA) is a loose collective of architects who are exploring the ways in which people use and interact with public spaces, and address issues relating to urban regeneration by provoking debate and creating awareness of the structures in the built environment. The OSA focuses on areas that tend to be overlooked, forgotten or abandoned; one such project undertaken by the OSA was a refurbishment of the sludge house, which commenced in 2004. The structure reminded the OSA of a stereotypical country cottage, so they decided to restore it as one, painting the exterior of the structure, wallpapering and furnishing the interior and installing window boxes in time for London Open House weekend in September 2006. The popularity of the project was such that a short film was made for broadcast on Channel 4.27
CONCLUSION

There is, then, a long history of appropriation of the Great Eastern Railway Company viaduct in Grimsby and Pedlar Streets and of the spaces beneath the structure. It offered a place of relative safety and shelter for the homeless, for struggling independent businesses and for illicit activity. The seclusion offered by the arches was subverted by a wider artistic community, using Grimsby Street in particular as a billboard. These parallel uses, both official and unofficial, run throughout the history of the viaduct, and include common, persisting themes. The construction of the railway viaduct in the 1830s divided streets and communities, but the spaces underneath the arches were successfully reclaimed. Yet this London viaduct is not unique, and it is hoped that this research project will encourage others to look at the ways in which similar structures can be appropriated and subverted for uses for which they were not intended but which then become part of the life of a local community. As David Gwyn has said elsewhere in this book, ‘there is no archaeology that is not social archaeology and that recognition of this may open the way to a more holistic understanding of the ways in which industrial archaeologists can contribute to understanding the world as it has evolved from the 16th century’. This investigation underneath the arches of a railway viaduct is another contribution to that debate.
ACKNOWLEDGEMENTS

The author would like to express her gratitude to Jon Colclough and Transport for London, Balfour Beatty Carillion Joint Venture, David Divers of English Heritage and Steve Haynes of Arup. The staff of the London Metropolitan Archive, Essex Records Office and the Tower Hamlets Local History Library (in particular Malcolm Barr-Hamilton) provided access to historic maps, plans and photographs. The author is especially grateful to the National Railway Museum and Jim Connor for granting permission to reproduce the images in Figs 24.3 and 24.6. George Dennis, Nick Elsdon and Nicky Powell provided project management and invaluable advice, and Andrew Westman and an anonymous reviewer made helpful comments on the text. The geomatics survey was undertaken by Eamonn Baldwin, Mark Burch, Neville Constantine, Simon Davis and Catherine Drew, the photography was carried out by Maggie Cox and the figures accompanying this text were produced by Sandra Rowntree. The standing building recording was undertaken by the author and Al Telfer.

NOTES

5. Morrison 1896.
12. Miller 1852, 207.
24. ‘Revs used to get up on the trains and he did some nice pieces [labour-intensive graffiti paintings]. Cost never really did trains, the little bit he did was considered a toy [an incompetent artwork] by the older generations.’ Interview with graffiti writer ‘Smith’, Macdonald 2001, 132.
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