LONDON'S TERMINI: FINDING A BALANCE BETWEEN CONSERVATION AND REDEVELOPMENT

he story of Britain's railway termini, from their origins to current plans relating to the Channel Tunnel, is dominated by two characteristics: pragmatic decisions and the domination of commercial over broader public interests. The British pioneered the Industrial Revolution and the development of main line railways; but they largely failed to use this new form of transport and its stations to create any order out of the chaos characteristic of most Victorian cities. Privatisation of our railways and the abolition of an overall planning authority for London has resulted in recent and current proposals perpetuating many of these traits.

In this context – of piece-meal planning and minimum cost rather than *grand project* engineering – conservationists should have an important role to play, ensuring that best use is made of our railway inheritance both in operational and environmental terms. As we will see, most have found it difficult to grasp and contribute to the key debates about reworking these great urban interchanges for the age of Eurostars and high speed commuter services. All too often conservationists have become preoccupied with minutiae or peripheral issues.

Historical Context: Competition and Confusion

Most of the early British termini were half-hearted affairs – companies were pre-occupied with lucrative freight traffic, and their funds were exhausted by the time that they had reached the suburban fringe of most cities. The earliest city termini was Liverpool Road, Manchester opened in 1830. It was located away from the city centre, surrounded by a maze of canals and murky rivers and was soon dominated by huge warehouses and market halls.².

As the major companies approached London over the next two decades, they initially managed with temporary termini in the suburbs; early revenue could be used to finance the expensive works that would bring their lines as close as possible to the city centre. Apart from buying out property owners, the engineers had to overcome specific obstacles – the River Thames if approaching from the south, and the Regents Canal and relatively harsh gradients from the north. Most companies tried to reduce costs by locating their stations and the approaches on slum property that could be purchased cheaply. Luckless tenants were evicted without compensation or alternative homes.³

The key feature of London's railways is that there is no major central station, to allow for long distance trains to pass through the city. Shortages of finance had forced the earliest arrivals, the London & Birmingham at Euston (1837) and the great Western at Paddington (1838) to locate on the edge of high value land. Several plans for central termini were devised during the Railway Mania of the 1840s. The government responded to the threat of a railway line

straight through Westminster by appointing a Royal Commission in 1846. The report defined a boundary ring which no company should breach. This ring is seen most clearly on the northern side of central London, resulting in a line up of stations from Paddington in the west to Liverpool Street in the east. To the south, termini were allowed no closer than the banks of the River Thames. Passengers were and still are forced to conclude their travels with a time wasting and congested transfer to underground or bus, or to stagger across London before re-boarding at another station.

The areas surounding many of these stations drifted into tattiness or even sordity. Most had been built over or adjoining slums and the combination of even worse overcrowding, soot, horse stabling, warehousing, cheap hotels and public houses pushed these areas further downmarket. Viaducts and cuttings, and goods stations with their boundary walls, became social barriers creating virtual ghettos renowned for their crime and prostitution.

Order out of Chaos

Each of the termini had eccentric features that became sources of serious congesting as levels of traffic rose. The modest sheds of Euston were set out of line with the Doric portico to allow for a possible second station, but comprehensive passenger facilities were never provided. King's Cross was planned for a segregation of arriving and departing passengers and has never had adequate space for passengers to circulate at the head of the platforms. Liverpool Street (1874-5) was given platforms of unequal length forcing passengers to cross over narrow bridges to get from one side to the other.

A major series of extensions and reconstructions were undertaken in the early years of this century – Paddington gained a fourth shed in 1909-16, Victoria was rebuilt by the two companies that used it in 1908-9, Waterloo was reworked over 1909/22. Plans to rebuild the most outmoded of all London's termini, Euston, were shelved due to the Second World War.

Modern Visions

The only period when Britain's city stations were to be completely rebuilt for the age of electric trains on uncompromised modern lines was the 1960s. The needless destruction of the Doric portico at Euston and the soulless nature of the replacement building alienated most travellers from modern station architecture and encouraged conservationists to fight for more pragmatic, sensitive approaches. This decade also saw extensive rationalisation of the network, leading to the closure and rebuilding of Broad Street

in London and several major provincial termini, such as Central Station in Manchester. The latter became a dramatic example of adaptive re-use when work commenced on converting it into an exhibition centre in 1982.

The combination of the listing of most stations and a boom in the market for office space resulted in several London termini being transformed by 'air rights' developments. This very British compromise, whereby façades were retained but offices built over the platforms, resulted in the clearance of the overall roofs at Charing Cross, Cannon Street and Fenchurch Street. Victoria and Liverpool Street have also lost part of their trainsheds.

Liverpool Street

It is worth considering the transformation wrought at Liverpool Street in some detail, because the combination of remodelling, new development and conservation is broadly acclaimed for turning an endearingly atmospheric but hopelessly inconvenient Victorian relic into an efficient and



Ill. 1. The interior of the trainshed at Liverpool Street Station, London, designed by E. Wilson, 1874-5, following its refurbishment by Nick Derbyshire.

highly attractive station: Liverpool Street was a relatively late railway development, being built 1874/75. Its prime architectural quality is the soaring Gothic roof, supported by pairs of tall, slender columns and curved ties. Its frontage buildings were a motley collection of brick buildings, that suffered partial demolition following bomb damage. Liverpool Street came to epitomise the character and failings of London's termini – smoky, richly evocative and with an image totally alien to the new age of electric InterCity trains. Initial plans presented in 1975 and rejected after a public inquiry involved building a new office block in front of the station, which would only further confuse and obscure the complex in both architectural and operational terms.

A second scheme produced by Peter Foggo shifted the focus of office development onto the adjoining site of Broad Street terminus, northwards over the station throat, and above the latter eastern section of the station, which was demolished for artificially-lit platforms and another office block above. These schemes permitted and funded a conservation-oriented re-planning of the original terminus. A new master plan defined a deep east-west concourse

fronting platforms of equal length. To achieve this the train shed was extended, the form of the Gothic ironwork being carefully replicated. The extended trainshed was faced by new brick elevations and towers, drawing their form from existing walls or sections that had to be demolished. As the station was re-worked, any worthwhile but redundant elements were carefully dismantled, carved brick lunettes, war memorials and a panel entitled the 'Great Eastern Railway' being re-located. While the new structural and masonry elements replicated the Victorian design, the transparent entrance canopies, information screens and glass trading units were designed in an overtly modern form, aiming to "capture the boldness and vigour of the original", but with acknowledged debts to Copenhagen Central and the Paris Metro.⁵

The New Railway Age?

Liverpool Street has been widely acclaimed by passengers and critics alike. It took a public inquiry into earlier more destructive proposals to create a carefully judged compromise. The end result its the best possible vindication of conservationists being involved in such major architectural and planning projects, assuming they can take a broad perspective and accept major changes to a historic structure.

Current railway projects in London are trying to build on the success of Liverpool Street in terms of being sympathetic to historic architecture but introducing new design of real efficiency and visual quality. Waterloo has gained a major modern extension, pending completion of the new link to the Channel Tunnel. The rather bland steel sheds at Waterloo form an ideal backdrop for Nicholas Grimshaw's snaking asymmetrical arch, which provides a suitably distinct and futuristic image as a gateway to France and the new age of European high speed rail travel. The view through the end screen shows off both the dynamic wave form of the canopy. Custom controls and car parking are set below, so allowing a virtually self-contained station to fit into a narrow urban site. This is railway station rather than surrogate airport architecture, though with the fitted carpets, polished granite and stainless steel appropriate to international trav-

Paddington is also the subject of major alterations for new services. The new link to Heathrow Airport now runs into the central section of Brunel's Victorian trainshed, the major alterations being simply the installation of overhead wires. More dramatic changes would come with the development of CrossRail which would take commuters directly from the western suburbs to the city. Consulting engineers hope the extensions can set underground to the south of the existing station, allowing the square on this side to be replanned and so create a formal plaza, as befitting a major termini and providing a key arrival point for those flying into Heathrow.⁷

King's Cross and St Pancras

Developments at Liverpool Street and Waterloo provide a backdrop to the drawn out an yet highly topical debate concerning the most important termini complex in Britain. King's Cross and St Pancras or not just neighbours. They have long been contrasted as exemplifying the two key strands of Victorian design: the former representing honest but bland engineering while the hotel for St Pancras is a high point in Victorian architectural bravura. The Midland Hotel, now St Pancras Chambers became seen as a symbol of bad taste but fortunately there were enough aficionados of its rich polychromy and soaring skylines to save the building when it was threatened in the 1960s. Meanwhile the shed behind has become acknowledged as the culmination of the iron trainshed roof, with its span measuring 240 feet uncluttered by any tie-rods.

St Pancras suffered from a rationalisation of train services, the closure of the hotel in 1935 (partly due to its lack of en suite facilities), and general urban decay across this part of London. The hotel was converted to offices, with the insertion of false ceilings and plasterboard divisions but was vacated in the early eighties when it lost its fire certificate. Meanwhile King's Cross was given a poor quality frontage building, which partly obscured the screen windows and



Ill. 2. The trainshed at St Pancras Station, London, by W.H. Barlow, 1868 shortly to become the terminus for Eurostar trains.

has proved completely inadequate for the station's Anglo-Scottish traffic.

This downward spiral reached rock bottom in 1987 with a major fire in the underground station at King's Cross, which highlighted the problems of poor management and outdated infrastructure on London's transport system. The first sign of any upturn came with the decision to locate the new British Library on the site of St Pancras goods shed. Delays to this project mean that its completion will now coincide with early works on the stations and initiatives to regenerate the King's Cross area as a whole.

Channel Tunnel Rail Link, King's Cross and St Pancras

The strength of the conservation lobby and effects of rail privatisation can be seen with stark clarity by reviewing progress to make St Pancras the terminus for the high speed rail link from the Channel Tunnel. Most agreed that London's finest and yet most severely underused terminus was architecturally the ideal choice, but there are continu-

ing doubts over the logicality of bringing extra passengers into a heavily congested interchange that already handles 98 000 people a day. A secondary concern felt more keenly by conservationists is whether the largely unaltered form of St Pancras can be effectively doubled in size and given customs, security and other passenger facilities while retaining its majestic and so, strongly Victorian qualities.

A high speed rail link from London to the Channel Tunnel was first proposed in 1974. An unwillingness to commit public funds and concerns about its environmental impact on heavily populated suburbs led to a fundamental rethink and catastrophic delays, with the result that the link will be open almost a decade later than the tunnel itself. The Secretary of State for Transport insisted that private funds must be drawn into the project and local communities in Kent were incensed by plans showing that their houses were slated for demolition – all it turned out because a project manager had slipped his greaseproof paper when tracing the route on his kitchen table.

The CTRL was revised to reduce costs, in response to local lobbying and as environmental standards have advanced. The cost was cut back from £4.5 million to £2.5 billion. There would not be a full tunnel from Stratford to St Pancras, the route largely using existing track through Hackney and Islington.⁸ From 1993 a grade-segregated approach was adopted to allow full use of the capacity of St Pancras. Thameslink 2000, a planned upgrade of north-south Cross-City links, was been put on hold, though the concrete shell of a new underground station would be fabricated as part of the works. Various detailed changes, most in response to environmental concerns, were made following petitions to the House of Commons Select Committee.⁹

It would now cost £ 3 billion to erect the 108 km line, and construction was due to commence in September 1997, track laying in October 2000 with the opening planned for March 2003. LCR managed to achieve government support at around £ 4 million through high speed commuter trains from Kent also using the line. The line was to be built by London & Continental Engineers, a consortium of four consultants, Bechtel, Systra, Arup and Halcrow.\(^{10}\) The Act for the rail link gained Royal Assent on December 18 1996.\(^{11}\)

The Planning Context and the Goods Yard Area

There have also been dramatic changes to the Link in relation to King's Cross and St Pancras. A report of October 1993 had confirmed the economies of running Eurostar trains into St Pancras compared with creating a new low level station at King's Cross. The original scheme by Norman Foster dating to 1987 had proposed a new terminal building set between St Pancras and King's Cross, on the assumption that the Eurostar trains would approach from the south. At the same time the area of largely derelict land to the north became the subject of Europe's largest urban renewal project. Foster's steel and glass triangular structure was killed off by the expense and complexity of bringing channel trains in underground, and the brave new vision of huge office blocks to the north by the recession and opposition from local councils and community interests. The to-

tal scheme would have involved the demolition of five listed buildings and the loss of ninety buildings protected by being in conservation areas. Islington Council was openly opposed and Camden Council spent three years "shadow boxing" with the London Regeneration Consortium which had put in an outline application for a more modest scheme of commercial development in April 1989. Camden eventually gave the London Regeneration Consortium (property companies Roshaugh and Stanhope and the freight group NFC) planning permission for 5.25 million square feet of offices on condition that the new low level station was built, only for all these plans to be thrown back into the melting plot when the St Pancras alternative was adopted.

The Channel Tunnel Rail Link Bill was opposed by English Heritage, largely because this national conservation agency was to be denied influence over changes affecting listed structures in an attempt to streamline development.¹⁵ Amidst such controversy the most fundamental change went un-noticed by most commentators. Much of the development potential of the area, totalling 1134 acres, has been wiped out by the spaghetti-like maze of connecting railway lines which will connect the CTRL to main lines to the north. Nevertheless London & Continental still appear to believe that their rail link can have a comparable effect that Heathrow has on Hammersmith and attract hotels and businesses onto the lands to the north of St Pancras.

Meanwhile consultants, conservationists and the community have achieved a complete volte face from the dramatic plans for tower blocks and plazas to gain the retention or reconstruction of almost every historic feature across the King's Cross railway lands. A conservation-oriented firm of engineers, Alan Baxter and Associates, produced proposals showing how the goods yard, coal drops and granary could be retained and form the basis of proposals more in keeping with London's urban fabric, in the words of one critic giving "an electrified whiff of Victorian bravura, Gresley Pacifics and (the film) 'The Ladykillers'."14 It is worth looking at this part of London, including the goods yard area in some detail. King's Cross is dirty and chaotic - a focus for tatty shops, prostitution and low grade industries such as scrap metal merchants. But it also has a major appeal to historians, ecologists, industrial archaeologists and film

English Heritage commissioned a survey that highlighted the importance of the old industrial structures on the site: a granary of 1850/51 with a cast iron frame and designed for canal/rail interchange, a series of coal drops also dating back to 1851, and several transit sheds. The Regent's canal opened in 1820 is not only used for recreation but is an important wildlife corridor.15 Ecological factors have become a central issue. Camley Street Natural park was created on an old coalyard by the Regent's Canal in 1983 and is vociferously defended by ecologists and the local community. A position statement produced by English Heritage in March 1997 on the King's Cross Railway Lands highlighted the strength and range of the conservation agenda: "English Heritage believes that the unique character and quality of the historic built environment provides a clear framework for change and, in many parts of the area, it should provide a catalyst for regeneration. King's Cross is 'a Victorian city

in microcosm' ... (new architecture) should be disciplined by the wider context and a clear understanding of hte qualities that make the area special and unique ... bollards, parish markers and gaslamp brackets ... wherever possible they should be retained".¹⁶

The CTRL line will sweep round from the east necessitating removal of the gas holders, also listed Grade I and a Gothic styled locomotive watering point. English Heritage have convinced London & Continental to relocate the structures nearby. The firm of engineers, Alan Baxter and Associates have put forward three possible future uses for the gas holders, drawing on the precendent of the adapted gas holders at Athens, one of which has been converted into a theatre. The suggested uses are a dry sports centre, a wet sports centre or an 11 screen cinema complex. The watering point is likely to be relocated to the rear of St Pancras churchyard where it could have a future as part of the Coroners Court, as an information centre or as a viewing point.

Discussion of these structures has run in parallel but some would say largely divorced from the broader issue of the regeneration of the appealing but rundown area of King's Cross. Kings Cross Partnership have gained major funding through a successful Single Regeneration Bid by Camden and Islington Councils for £ 37.5 million, and the Partnership are now working on an urban design strategy for the area. The total spend on the regeneration of the area is likely to be around £ 250 million. Despite the scale of money available and the fact that conservation is seen as an unifying key, the various councils and groups involved are struggling to find much consensus between themselves let alone with London & Continental who are building the rail-way.

St Pancras Station and Hotel

London & Continental are now pre-occupied with the challenge of fitting the quart of 400 metre Eurostar trains into the inflexible pint pot of the grade I listed St Pancras station. Designs became simplified once it was accepted that the traditional Midland services from Leicester and Sheffield would still be able to run into St Pancras, taking three platforms to the nine to be dedicated to Eurostars, rather than having to be diverted into King's Cross. The platforms for the international services have to be lengthened some 250 metres beyond the end of the trainshed. By extending the new shed eastwards three platforms could be provided for domestic services from Kent and one extra for the Midland route.¹⁷

As well as extending the length of the platforms and their number, there is the need to provide international booking and customs facilities and a direct interchange with King's Cross station. The front of both stations are too constricted so attention is focusing on the triangular space in between, with a number of listed structures to be incorporated, rather than cleared as in the Foster's proposals. The German Gymnasium, with its laminated timber roof, may become a secondary ticket hall. One section of Stanley Buildings will need to be demolished along with the Gas Works cottages and the Simon Community Centre and the Odu Dua Housing Association.

Meanwhile the key issues remain the shed and the hotel. LCR insisted on the new length of platforms being straight and having a full canopy. Other issues are security and the need to segregate international and domestic traffic. Various designs have been produced, but first sketches of a new abutting overall roof compromise the sweeping, gable end of the single span shed.

All agree that St Pancras Chambers should have a new use to suit its now restored external façade and its location at the gateway to Europe. £ 10 million has already been spent on the exterior; since 1993 the roof has been stripped and re-slated with finials and zinc decoration being re-instated on the clock tower. Inside, water had caused serious damage to the main staircase with its dramatic curves and bridges. Paintings were peeling and large holes had been bored into decorative plasterwork to allow false ceilings to be carried. A competition will find a developer and a new use, eight teams being short-listed to generate ideas. The obvious and ideal use for St Pancras Chambers is its original one as a hotel but there are likely to be conference, restaurant and residential components – all this depends on completion of the rail link.

Conclusion

Following presentation of this papaer, plans for the channel rail link and the reworking of St Pancras have descended into chaos and had to be rescued by the gouverment. Early in 1998, London and Continental Railways appealed for an extra £ 1.2 billion of public money. In June, after four months of negotiation, a new package was agreed. The first section of high-speed line, to be completed by 2003, will only run from tunnel as far as Ebbsfleet in North Kent. Eurostar trains will then trundle into Waterloo. The second phase will provide a tunnel under the River Thames, an interchange station at Stratford in East London and make St Pancras into an international terminus in 2007. Railtrack, who own Britain's existing rail infrastructure, will manage construction of the first, and, possibly, both stages. If all goes to this latest plan, St Pancras will be re-ordered to accommodate Eurostars, expresses to Heathrow Airport and Kent Express trains as well as those traditionally running north to the Midlands. It remains unclear whether the project to upgrade the important, but hardly prestigious northsouth commuter service, Thameslink, will be incorporated into the project. The design for the new trainshed will be finalised not by Norman Foster, but as a design-build scheme and refurbishment of the hotel must await completion of basic railway engineering works. Railtrack, London & Continental and the King's Cross Partnership are likely to dictate much of what happens to the area, the locally elected council and, to some degree, English Heritage having been pushed aside by the spirit of privatisation and commercially-driven planning.

Railway lines in Britain are being built and stations adapted in the spirit of the Victorian age and despite the added levels of both bureaucracy and uncertainty created by the British approach to privatisation. Away from the channel tunnel link and St Pancras, the privatised companies are looking to rework the structures and facilities that they have inherited from a public railway. The Great North Eastern

Railway are committed to introducing upmarket departure facilities at King's Cross and other key stations along their route to Edinburgh. In the words of their chief executive, stations have always been "the poor relation on Britain's railways". His aim is to match the standards offered by air travel, providing enclosed lounges and enclosed concourses within the historic fabric.²⁰

Hunter and Thorne decry the lack of any sustained civic vision in the re-planning of King's Cross.21 But maybe pragmatism and a juggling rather than a major rethinking of the urban fabric is now deeply in-bred into British culture, as witnessed by the strength of the conservation mentality and pressure groups. Liverpool Street has shown the potential richness of the eclectic mixture of old and new that can emerge out of this spirit of compromise. Will King's Cross and St Pancras and the surrounding landscape emerge appropriately enlivened and enriched in the early decades of the new Millennium. Or will the developers, regeneration consortia and ultimately the government bulldoze through this finely-balanced and tortuous process creating an interchange that doesn't work properly and that damages the best station architecture in Britain and an unique vestige of the Victorian city?

Footnotes

- 1 I am grateful for help from Zoë Croad, Nick Derbyshire, the National Railway Museum and Robert Thorne in compiling this paper.
- 2 See G. Biddle, Victorian Stations, Newton Abbot 1973.
- 3 See J. R. Kellett, Railways and Victorian Cities, London 1979.
- 4 A. A. Jackson, London's Termini, Newton Abbot 1969.
- 5 N. Derbyshire, 'The Liverpool Street Station Story', in: P. Burman, M. Stratton, Conserving the Railway Heritage, London 1997, p. 175-186.
- 6 B. Edwards, The Modern Station: New Approaches to Railway Architecture, London 1997, p. 131-133.
- 7 R. Thorne, Major Termini, Problems of Conservation and Urban Design, in: P. Burman, M. Stratton, Conserving the Railway Heritage, London 1997, p. 187-196.
- 8 'Daily Mail', 18 March 1993.
- D. Loosemore, N. Shepherd, "Planning High Speed Railways into Europe: an Update", in: "The Arup Journal", 1, 1996, p. 3-5.
- 10 'Railway Gazette International' April 1996, p. 191.
- 11 'Railway Gazette International' February 1997, p. 73.
- 12 Union Railways, Report of the Independent Reviews of King's Cross and St Pancras Terminus Options, October 1993.
- 13 The consortium for the CTRL, include Virgin and National Express with their marketing experience. Warbergs giving financial advice, and Ove Arup, Halcrow and Sistra as engineers and Vector to lead management of the project.
- 14 .Independent', 20 November 1991.
- 15 Union Railways, London Terminus and routes: Environmental Appraisal, October 1993.
- 16 English Heritage, King's Cross Railway Lands: English Heritage Position Statement, March 1997.
- 17 'Independent', 17 February 1993.
- 18 M. Binney, Light at the End of the Tunnel, in: 'Times Magazine', 10 December 1994, p. 38-44.
- 19 P. Davies, All Change at St Pancras, in: 'Conservation Bulletin', 30 November 1996, p. 12-13.
- 20 Livewire, February/March 1997, p. 6.
- 21 M. Hunter, R. Thorne, Change at King's Cross, Historical Publications, London 1990, p. 7-8.