The Beauty of Transport

Sections

Grand Central Terminal

Warren & Wetmore, 1913
New York
New York, USA

Grand Central Terminal is that rare thing, a 'must see' which lives up to expectations. Threatened with demolition in the 1960s, it has since been exquisitely restored to its original splendour. It was the loss of nearby Penn Station – the grandeur of which Grand Central's Beaux Arts splendour was a (successful) attempt to emulate – which prompted the station to be given protected status as a New York Landmark.

It is not just Grand Central's mind-boggling size (it has more than 40 platforms) which impresses, but the sheer sumptuousness of its finishes. Around every corner is some new piece of dazzling decoration. In the main concourse a gilded (if not entirely accurate) star map is painted on the turquoise ceiling. Marble flooring shines underfoot, and enormous chandeliers glow above. Of course, the famous four-faced brass clock sits atop the information booth in the centre of the concourse, as much a landmark of Grand Central as Grand Central is of New York itself.

The information booth is multi-level. Internal stairs connect to a second booth below. Under the main concourse, originally designed for express railroad services, is a separate concourse for suburban trains. The expresses are long gone, the station now serving as a hub for Metro-North's commuter trains on both levels. Downstairs is also the location of Grand Central's Oyster Bar, its vaults clad in Gaustavino tiles.

Outside, even this huge station is dwarfed by more recent skyscrapers that now hem it in, built on the back of the economic forces that Grand Central helped unleash. The station's grand external clock is topped by a sculpture called The Glory of Commerce. How very New York.

Surbiton Station

James Robb Scott, 1937
Surbiton
London, UK

Surbiton station is an overlooked Inter-war Modern classic which proves that the Underground doesn't have a London monopoly on great Modernist stations. But while Transport for London relentlessly reminds travellers of the history and quality of its stations, the franchised operators of London's mainline train services make much less fuss of their equivalents, and seem to take rather less care of them. It's hard to imagine London Underground tolerating Surbiton's leaky roof and the plants growing from its stonework.

Surbiton station was designed by James Robb Scott, chief architect for the Southern Railway. At least, we think it was. Scott, who had earlier designed the stuffily Edwardian Waterloo station, subsequently had an apparently Damascene conversion to the joys of stripped down Modernism. One of his junior architects, Maxwell Fry, later claimed that he and like-minded colleagues were responsible for this new wave of architecture emanating from the Southern, which covered not just stations but signal boxes, control rooms and station furniture.

The ticket halls, one on each side of the tracks, are pure, white-rendered International Style with tall glass windows and bronze uplighters inside, while the platform buildings have the rounded ends so typical of Art Deco railway stations. Yet the canopies above the platform buildings are curiously traditional in design with metal girders and wooden valances. No concrete canopies mirroring the curves of the platform buildings for Surbiton, unlike its Underground equivalents. Scott would have to wait until the opening of the Chessington branch line before he was able to fully extend his (was it his?) Modern vision to the Southern Railway's platforms as well as ticket offices.

Vauxhall Bus station

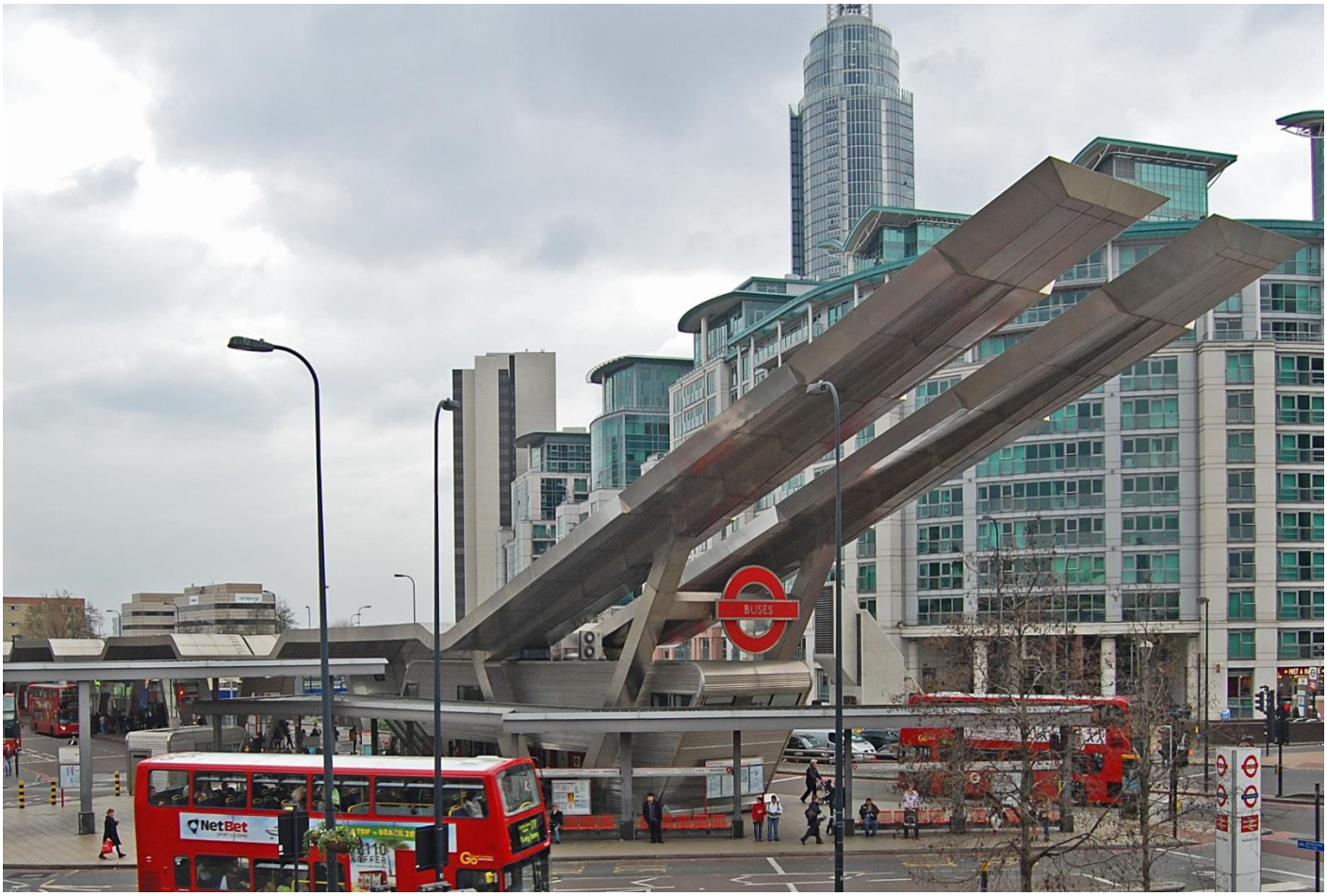
Arup Associates, 2005
Vauxhall
London, UK

Can there ever have been a high quality piece of public transport infrastructure that its original sponsors have been so keen to get rid of so quickly?

Vauxhall bus station was the faster, cheaper alternative to the Vauxhall Pod. The Pod was a scheme to improve interchange and integration between bus, train and Underground, as well as making pedestrian routes safer through the notoriously busy and noisy Vauxhall Cross road junction. When the Pod proved unaffordable, Transport for London commissioned Arup Associates to develop a practical alternative.

The bus station has quickly become a landmark of Vauxhall. It collects together all the local bus stops with a convenient walk down into the Underground station, all just outside the entrance of the National Rail station. Its gleaming stainless steel exterior is all angles and lines, its ribbon-like roof dropping down to the ground and up again along the bus station's length in a physical echo of lines on the London Underground map. The bus station's open structure responds to concerns about personal security, and the height of the roof allows passengers on the top deck of double-decker buses to look down onto the waiting areas, further enhancing personal security. Its two huge prongs represent one of the earliest attempts to integrate solar photovoltaic panels into a transport building's design, rather than being added as an afterthought.

Yet now, local authority Lambeth Council and Transport for London are progressing a scheme to demolish the bus station, allowing for a commercial development, and the proposed replacement will be of lesser quality and convenience. Catch it while you can.



Nils Ericson Terminal

Neils Torp, 1995
Gothenburg
Sweden

One of the finest and most civilised bus/coach stations in the world, the Nils Ericson Terminal is positioned right next to Gothnburg's main railway station, and is connected to it. It's exactly the sort of public transport integration you would expect in Sweden, where railway ticket machines will sell you tickets for journeys which also include legs by long-distance coach, themselves timetabled to connect with trains.

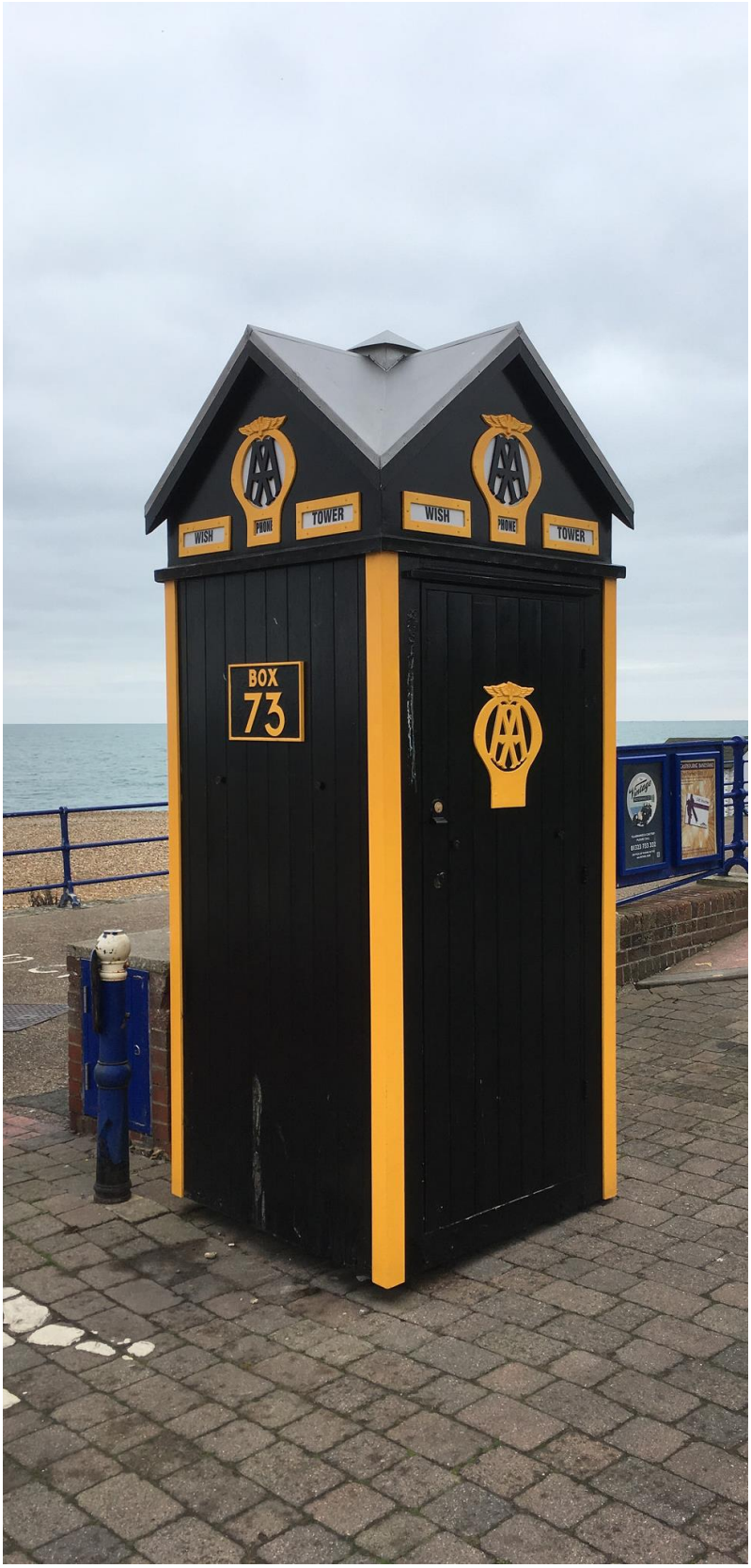
There is a hint of Grimshaw's Waterloo International Terminal in the asymmetric roof and its supporting trusses, but what's going on underneath is rather different. Instead of trains being sheltered, the roof of Nils Ericson Terminal protects passenger facilities only. Buses and coaches wait outside, accessed through impressive wooden sliding doors, placed alongside fair-faced concrete plinths which support the roof and feature cast-in gate numbers.

The inside of the terminal is laid out like a pedestrianised street. Along one side are the shops and facilities that every civilised bus station ought to provide for its passengers. In the middle is the main walking route, and on the other side are large waiting areas by each gate.

The inside-outside feel of the street is enhanced by the presence of trees, and beautiful lamp standards. There's plenty of space. The terminal is some 150m long, but is so well laid out, with such well-designed signage, that it is all but impossible to get lost in. At one end, the terminal opens onto a modern hotel entrance which sits at the end of the platforms at Gothenburg Central railway station. Passengers changing between coach or bus and train (or vice versa) can do so without ever having to venture outside.

AA Emergency Telephone Box

Designer unknown, 1927
19 locations
UK and Channel Islands



The roadside emergency telephone boxes of motoring organisations the AA and RAC were once a common sight at the side of roads the length and breadth of Britain. They were of immense importance to motorists suffering mechanical breakdowns, and Prime Ministers who needed to launch a nuclear strike, alike.

The emergency telephone boxes were the descendants of earlier sentry posts for RAC and AA patrolmen (whose failure to salute their members was an indication of trouble down the road, usually a police speed trap). The best known examples are those of the AA, and the box design introduced in 1927 has come to be the most famous. The RAC had its own boxes, although they were less attractive and less numerous. AA and RAC members were issued with keys, which would open boxes of either organisation. In the event of car trouble, an AA or RAC member could then access a telephone which connected to the control room of the AA or RAC, and soon after, a repair officer would be dispatched. Each box was individually numbered so a motorist only needed to know the number of the box, not their exact location. Only 19 or so AA boxes now remain in their original locations, many of which are listed.

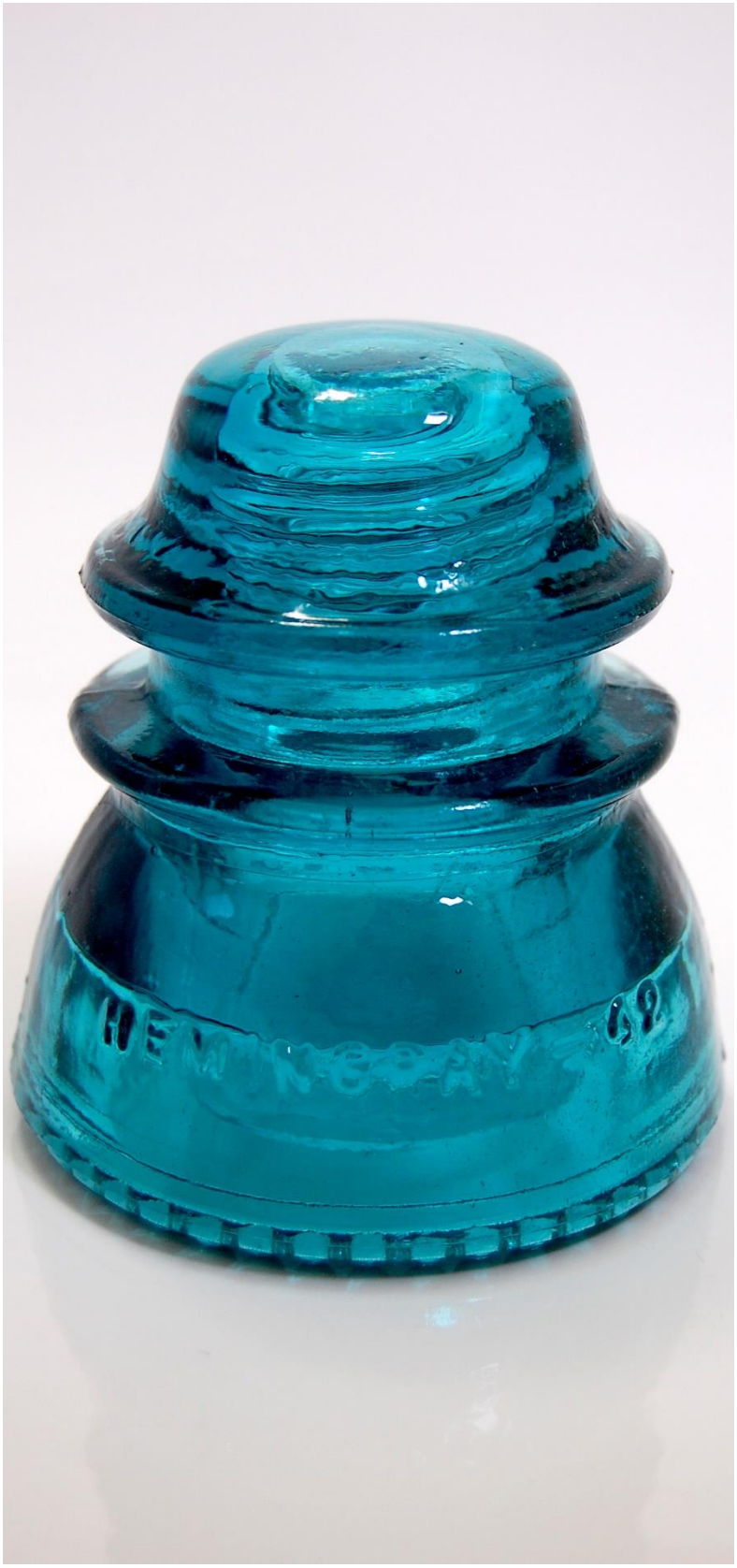
The widespread ownership of mobile phones has rendered roadside emergency phones all but redundant. But in the days before mobiles, they were a vital means of communication. In the 1960s, the AA's national radio network, used by the patrolmen based at its boxes, was better than the government's. Prime minister Harold Macmillan made arrangements to be able to communicate nuclear attack orders to Whitehall via the AA radio network if he was outside London and the need occurred. Emergency boxes indeed.

Railway Telegraph Insulators

Designers unknown

Mid-19th to 20th Centuries

Worldwide



The telegraph is the younger sibling of the railway and their histories are intertwined. Early on, railway companies realised that they needed to be able to control the movement of trains along their tracks. The tracks were divided into short sections, each controlled by a signal box, which allowed only one train into their section at a time. But how to tell when the train left that section and moved into the one under the control of the next signal box? The answer was the railway telegraph, a system which sent information between signal boxes about where trains were. It used electrical signals, transmitted along copper wires.

Before long, it was realised that the same technology could be used to transmit more general messages, allowing swift communication between people at great distances (the final part of the message was taken from the telegraph office to the recipient in the form of a written 'telegram'). The new public telegraph companies needed corridors along which they could string their wires, and the railways were perfect. For years, the railway and public telegraphs ran side by side along poles at the side of the tracks. To stop the current earthing at those poles, the wires had to be insulated, and this was done by insulators. Clever designs with skirts and air gaps minimised the possibility of accidental earthing. In Britain, white porcelain was the preferred material. In America, coloured glass was favoured, with additional innovations like 'drip points' to encourage rain to drain off the insulator faster.

Many redundant telegraph poles and their insulators still line the tracks of American railroads, their coloured insulators glowing in the sun, as if demanding that their role in facilitating the world's first information superhighway be recognised.