

My Museum Tour

The Birth of the Electric Tube

By Carol Bramble

I have chosen this subject because I was intrigued by the way the electric Tube was made. It is perfect – tailor-made and truly British. It's still here today intact and it served the people of London tremendously well. It was the pioneering flagship of the Underground as we know it today.

This tour has been produced by a client of St. Mungo's, through the HLF-funded 'All Our Stories' project.



A. City & South London Railway 'Padded Cell' coach No.30, 1890

This carriage began its journey in November 1890. The world's first electric underground railway, it ran from Stockwell to King William Street in the City of London. The twin circular tube tunnels ran directly under the street about 18m (60ft) below ground. There were only six stations on the line in 1890, and passengers reached the platforms by hydraulic lifts. The railway was extremely busy during the rush hours and acquired the nickname 'sardine-box railway'.

The coaches were small and cramped, and it became known as the padded cell because of the high-backed bench seats and lack of windows.

These cars were withdrawn in 1924 when the line was modernised. The new trains had automatic air-operated doors.



B. 'Milestones of progress' poster, by unknown artist, 1913

This poster was first published by the Underground Electric Railway Company Ltd in 1913. The pictures in this poster depict how Londoners travelled from the 1700s to the early twentieth century, and they show the different modes of travel in London.

Posters became popular on Tube stations, promoting and advertising travel by rail, and promoting the new era of London life.

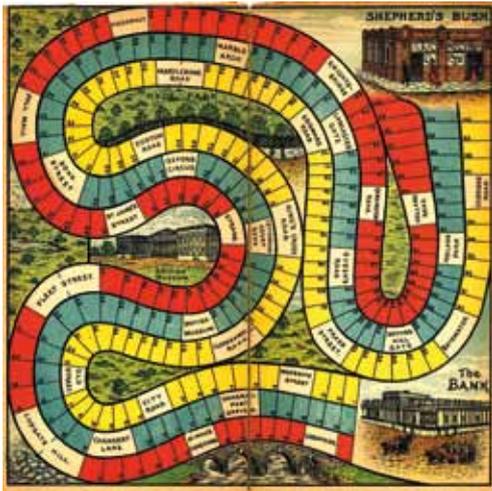


C. The Great Bear, by Simon Patterson, 1992

Harry Beck's famous diagram of the Underground was introduced in 1933. In 1992 artist Simon Patterson adapted this map, and named it after the constellation Ursa-Major – the Great Bear.

The title is a witty reference to Patterson's collection of the stars that repopulate his version of the map. It was also exhibited at the Tate Gallery. There were only 50 copies made of this artwork.

Posters also promote London – they have become so artistic and modern and graphic, and Transport for London encourages artists to exhibit their work on the Tube.

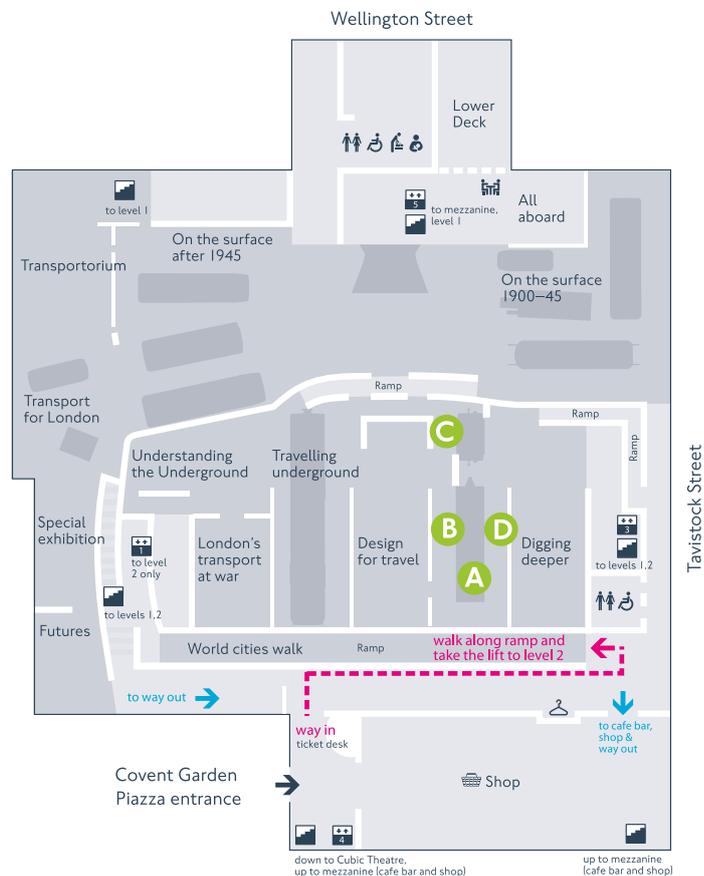


D. Board game, The Twopenny Tube, c1903

Games, postcards and souvenirs also cashed in on the popular appeal of the new Tube. To play this board game the players have to get from Bank to Shepherd's Bush in the shortest time. The Tube is shown in blue, and bus and train routes are yellow.

The Central London Railway opened in 1900. In the beginning all journeys were at a flat rate of 2d, and Londoners called it the 'twopenny tube'. This flat rate made it popular with Londoners. The first connection of the Twopenny Tube was from Shepherd's Bush to the West End and City, and later it was extended to White City, West London and Liverpool Street.

Ground floor



My Museum Tour

Building the Underground

By John Crawford

I chose this topic because it drew my attention most, more than anything else in the London Transport Museum. Actually building a tunnel to reduce congestion on the pavements must have been a huge task; how did they do it? That's what caught my interest, how we actually dig a tunnel underground, lay the tracks and put a train on them.

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A. Cut and Cover model, 1854 – 1863

Solicitor Charles Pearson saw the advantages of building an underground railway. His idea was to relocate people to new suburbs, outside London. They would be much cleaner, and people would be able to get to work in town on the new underground railway.

The underground railway ran beneath existing main roads, to minimise demolishing buildings. It was scheduled to be completed in 21 months, but took 3 years.

The line was built using a technique called cut and cover. A trench about 10m wide and 6m deep was dug. The sides were temporarily shored up, then brick walls were constructed and the cutting was roofed over. A 2m layer of topsoil was laid and the road rebuilt.



B. Tunnelling 'Greathead' Shield

The first tunnelling shield was used in 1825, developed by civil engineer Mark Brunel to protect workers as they excavated and built tunnel walls. The Thames Tunnel was the first to be built this way.

In 1870 another tunnel was opened under the Thames: the Tower Subway. Engineer Peter Barlow and his apprentice James Greathead used the cast-iron cylindrical shield seen here, which was an improved version of Brunel's original.

The tunnelling shield was 7ft in diameter. Behind a small water-tight door, two miners could remove the soil by hand. The entire shield was forced forward into the space by huge screw-jacks. Then the newly-dug section of tunnel was lined with cast-iron segments.

Greathead's tunnelling shield was still used a century after its invention – a testament to the efficiency of the technology.



C. Model of McAlpine tunnelling machine, as used on construction of the Victoria line,

London did not see many tunnelling projects during the war years. The next major tunnelling project came with the development of the Victoria line between 1964 and 1966.

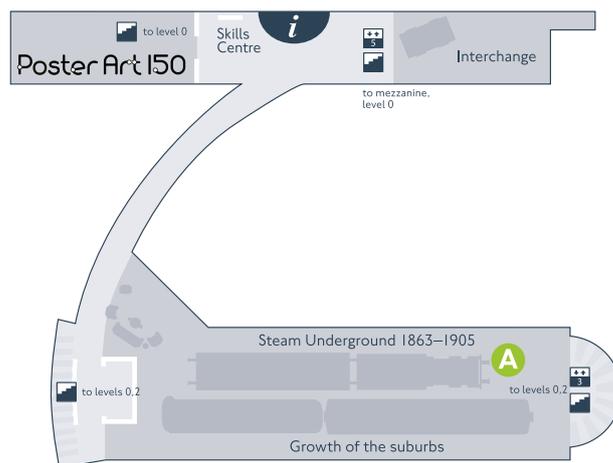
The Victoria line project was a challenging operation, owing to the maze of subway tubes and existing infrastructure installed in the 60 years since the last major tube construction. To navigate this, an advanced tunnelling method was needed.

The answer was the McAlpine tunnelling machine. It was capable of excavating 600 feet per week and equipped with larger drill mechanisms. Powerful hydraulic rams pushed the rotary cutter forward inside the shield. The platform carries curved concrete segments to line the tube tunnel behind the digger.

Ground floor



Level 1



Level 2



Some text in this tour is taken from London Transport Museum collections online.

Thanks to students from the Worcester Polytechnic Institute for use of their research text in this leaflet.

My Museum Tour

London Buses

By Matthew Robinson

Buses are an essential part of the transport industry. Buses have developed through the years and have been modernised. I am interested in how they have developed over time.

This tour has been produced by a client of St. Mungo's, through the HLF-funded 'All Our Stories' project.



A. Reconstruction of Shillibeer horse bus of 1829, built 1929

George Shillibeer began his career as a coach-builder and a stable keeper. His first omnibus service operated two vehicles. The fare was one shilling. The bus was very popular, and Shillibeer's fleet grew to 12 vehicles. The design was based on buses in Paris.

This is a single deck bus. In 1847 a new type of bus was introduced which allowed people to sit on the roof. As the number of bus routes increased across London, passenger numbers grew and there was competition between rival operators.

In 1979 it was the 150th anniversary of the Shillibeer horse bus – it was fully refurbished for this parade.

The only difference between the 1829 original and this 1929 reconstruction is that this one has brakes.



B. Leyland Cub single-decker motor bus, bonnet number C94, 1936

This bus was operated by a driver only (there was no conductor). This kind of bus was suitable for light traffic and routes which were unsuitable for larger buses.

97 of these vehicles were purchased by London Transport and the bus ran for 20 years.

The bus was used in both central and country areas.



C. K2-class trolleybus No.1253, registration mark EXV253, 1939

This is a trolleybus, powered by electricity through cable wires. There were over sixty trolleybus routes in London.

The seats were very comfortable.

The disadvantages were that trolleybuses could not steer around roadworks and other obstructions in the streets.

The trolley numbers were displayed in three-digit route numbers in the 500s and 600s to distinguish them from tram routes which had only two digits.



D. Pre-decimal Gibson A14 ticket machine, serial No. 28741, 1950s

Manufactured in 1946, these machines came into operation in 1953, using roll tickets. It was used in central areas on buses and trolleybuses.

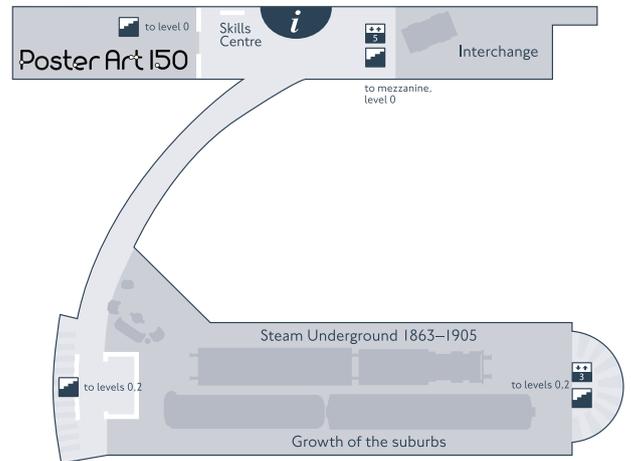
The Gibson replaced bell punch machines, which had coloured tickets different for each fare value. Prices depended on distance travelled.

There was a change over to different machines in February 1971, and it was phased out in 1980s.

Ground floor



Level 1



Level 2





My Museum Tour

The Routemaster Bus

By Paul Bogalski

My subject is the Routemaster bus. I chose it for reasons of nostalgia – it is the first bus I ever travelled on, and to this day I am still travelling on it on the heritage routes.

This tour has been produced by a client of St. Mungo's, through the HLF-funded 'All Our Stories' project.



A. RM-type Routemaster double deck motor bus, bonnet No. RM1737, registration number 737DYE, built 1963

The Routemaster was commissioned in 1954 and came into service in 1956. The driver sits in a half cab at the front, and the engine occupies the other half. In more recent vehicles it's at the back, as I found out to my cost the other day – I was sitting on top of the engine complaining that the heater was on!

The entrance was open at the rear; it had a conductor/conductress who was there to collect fares and to ensure safety. The last Routemasters were withdrawn from regular service in 2005.

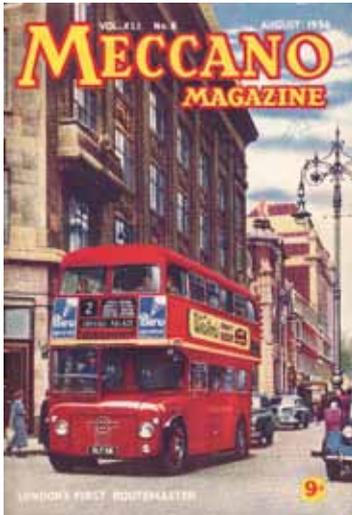
Routemaster buses are still being used on the 9 and 15 heritage routes in London. They are also still in use in Edinburgh and Macedonia, amongst other places.



B. Wright Gemini double deck bus cab, 2006

The Wright Gemini double-decker is the most modern bus on display in the museum. It was introduced in 2006.

You may have seen the new 'Routemaster' on your journeys around London. It is not actually a Routemaster, it is known as the New Bus for London. It was commissioned by Mayor Boris Johnson to replace the bendy buses. It was introduced in February 2012, and Route 24 was the first one where the bus was fully implemented in June 2013.



C. Meccano magazine, August 1956

The Routemaster bus is one of (if not THE) most iconic images of London. Just around the corner in Covent Garden and all over London, you will see souvenirs for sale showing Big Ben, Houses of Parliament etc, but nearly all will show a red bus, usually a Routemaster. This Meccano magazine shows it has been iconic since its introduction in 1956.



D. NN type front and rear destination blind for D and DMS type buses from Merton garage, 1987

Outside the bus the destination blinds were displayed to show people where the bus was going. How do you think the driver knew he had the right destination out front? He had a viewfinder where he could see from the driver's seat.

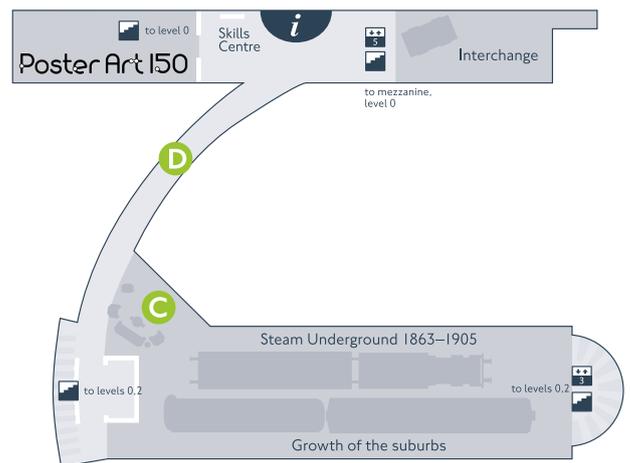
What else was inside the bus? Who collected the fares? Who drove the bus?

Do you have any family who worked on the buses? My father was a bus driver, he ended up driving the Airbus to Heathrow. My father-in-law was a conductor.

Ground floor



Level 1



Level 2

