

REPORT OF SOCIETY MEETING UNDERGROUND MAPS UNCHARTED: A PARALLEL UNIVERSE OF UNOFFICIAL DESIGNS

by Dr. Maxwell Roberts

**A report of the LURS meeting at All Souls Club House
on Tuesday 10 April 2018**

Our speaker began the meeting by informing the audience that his talk was about the underground maps that most of us don't get to see because we're busy using the official Underground map. His interest started in the early 2000s, when he was working on his first book, and he visited the map collector Peter Lloyd to look at his collection of official Underground maps. Peter also had in his collection a map produced by a company called Streetwise. This design turned Max's world upside down. He was so used to the Underground map being designed by London Transport that it had not occurred to him anybody else might create something that was different and go ahead and publish it. This made him think about what else was out there and how to go about designing things in different ways. Max then showed the map in question. Max said he would be showing his collection that he had acquired over the years in various towns and cities and on the internet. These were maps that turn up in guide books overseas and were intended for tourists to navigate the Underground in London. He would be looking at original maps, not parodies or repurposed, but maps that were intended to be substitutes for the official design. He added that there was a long history of alternatives to the official version. In fact, the history of unofficial underground maps was longer than the history of official ones.

The talk was divided into seven parts:

PART 1: JOSTLING FOR POSITION

In the early 20th century there were lots of rival railway companies who highlighted their own services showing a very fragmented view of London. Independent cartographers created unified London maps but what brought everything together was the marketing/fares agreement that led to the first official Underground map of 1908. This wasn't the perfect solution and other railway companies were squeezed out.

The following maps were shown:

- The Central London Railway 1902.
- The Hampstead Tube 1907.
- The District Railway 1908.

In each case the line was given prominence but although other railways were on the maps they were not shown in a useful way to navigate. This gave a fragmented view of services. Third parties started to try and put things together to give a more integrated map.

- Evening News of 1907 (taken to be the first to show different colours).
- Harrods Pocket Guide of 1908.
- Anonymous Postcard of 1908.

In each case the tube lines were shown in different colours but not the same colours, there was no standardisation. This didn't happen until the late 1930s.

- Underground 1908. This was produced as a result of the marketing/fares agreement. The lines have now agreed through ticketing and joint publicity. Tramways were shown but the main line railways were shown as a very thin grey line. This wasn't an ideal map and not everybody was convinced that it was a good way of simplifying the network.
- Underground 1911. The only main line shown was the South London line from London Bridge to Victoria, all other main lines have vanished.

What do you do if you're a railway company that's been squeezed off the Underground map? The underground is useful as it helps your company connect with the rest of London. Max then showed the maps of three different railway companies' solutions to the problem:

- GNR 1911 just showed their terminus at King's Cross and all the tube lines that could get you everywhere else, except the ones competing with GNR.

- LBSCR 1912 said we are the network and showed some of the tube lines that connected to their stations at London Bridge and Victoria.
- LNWR 1914 which showed every railway company in London except the Underground lines. They suggested that the best way to get from Euston to Waterloo was to take a bus.

None of these were comprehensive solutions and weren't terribly helpful for travellers, that's why you go to tourist guides and newspapers to get integrated maps of London.

- The Blue Guide 1918. This showed everything on one map with colour coding for the tube lines.
- The Daily Telegraph 1918. This also showed the underground lines, other railways and tramways.

The official map in the meantime is relentless in getting rid of other railways and by the 1920s is just the Underground lines only.

- Macdonald Gill 1921. This was shown to illustrate this.
- Kennedy North 1924. Max's favourite unofficial map of the 1920s for the British Empire Exhibition. This was a very innovative map showing you how to get to Wembley Park for the exhibition.

PART 2: SWIMMING AGAINST THE TIDE

1930s onwards. The Underground gradually came up with something more practical and iconic. From the 1930s we get the introduction of Beck's famous diagram driven out of necessity as the Underground was expanding into the suburbs and scale maps weren't possible. Beck's map set the standard. If the Beck map was to be rejected there must be a very good reason especially as it was available free to print in any publication. So why would anyone want to do something different? Not everyone favoured the diagrammatic approach. Stingemore, Beck's predecessor, famously didn't. Also, London's other railways were still absent, along with other reasons for not accepting the official design. The following maps were displayed:

- Henry Beck's 1933. Max commented on its clean, sweeping, glorious, modernistic imagery.
- Bacon 1933. A map of 'Underground Railways' which was very Victorian in appearance. It was a geographical map with all of London's railways on it.
- Blue Guide 1952. A tourist guide in French. This was also a geographical map with a cutaway of the central area.
- Bartholomew 1951. This was Max's favourite map of this era. It was a scale distortion map where the extremities had been pushed together.
- F.H. Stingemore 1925. This was shown to highlight the similarity between his designs and the Bartholomew.
- Michelin 1975. French tourist guide with the extremities boxed and a cutaway of the central area.

Beck's wasn't the only diagrammatic map. There were imitations, impersonations and downright copies.

- Millers Mutual 1937. If permission had not been given this was the earliest copyright violation that Max was aware of. This was a leaflet produced by the British Flour Association for the Coronation.
- Grieben Reisefuhrer 1938. A German tourist guide that was the first international copyright violation.
- Henry Beck 1949. As Beck's design evolves other people are making use of it for their own ends.
- Travel Association 1948. Tourist attractions have been added, with Johnston font for the station names.
- Jehovah's Witnesses 1951. A reduced version based on Beck's design with details of how to get to Wembley Stadium.
- Foldex/Miniplan 1950s-1976. Foldex were a French company who appropriated the Underground map and did strange things to it in terms of colours. While the Underground map was changing they stubbornly kept updating their first map. There were angry exchanges between London Transport and Foldex about the plates that L.T. had supplied. Foldex were saying that L.T.'s plates weren't good enough so they made their own.
- Henry Beck 1954. The famous rectangular map which had its own impersonations.
- Falk 1950s. A German map that has been redrawn from Beck's original. The station tick marks are thicker and it was a clunkier design. Max thought it was probably redrawn because of the printing process used.
- Falk 1971. The Victoria Line has been added.
- Paul Garbutt from 1963. Official Underground map.

- Stern 1968. Another redrawn German map. Not Johnston font with black dots for stations. (White dots on the Northern Line).
 - Polyglott 1972. Another German tourist map. Not a close copy at all. A wacky map, very cramped.
- This was the era of hand drawn maps and in the 1980s things start to change.

PART 3: WINDS OF CHANGE.

1980s onwards. Two things happen. In 1981 London Transport start charging for the map and new technology simplifies the map design process. In 1984 the Apple Macintosh computer is introduced and in 1985 Pagemaker software offers the potential for vastly reduced costs of book production. Also in 1987/88, Illustrator and Freehand make vector graphics available to everyone. Anyone can now create their own maps. The following maps were shown:

- FWT from 1984. Last official hand drawn map.
- Thames Cartography from 1987. First official computer created map.
- Polyglott from 1982. Still hand drawn. Competent looking map.
- Hayit 1984. Believed to be from a Dutch tourist guide. Not pleasing to the eye with different angles and square corners. Black and white with different shadings to denote the lines.
- Frommer 1985. Although published in 1985 it is obviously based on a 1940s map.
- Delft University 1985. A hybrid map which was geographical for central London with the stations close together and compacted for the suburbs.
- Kakokawa Travel 1987. A Japanese map of the Underground. The earliest in Max's collection. It looks hand drawn with bold, brash colours.
- Shobunsha 1988-2009. Another Japanese map with transliteration of some station names.
- Escudo 1990. From a Spanish tourist guide. Probably the ghastliest map in Max's collection. A rip off of the Underground diary map with much thicker lines drawn over the originals. The Jubilee Line still hasn't opened on this map. Bakerloo Line to Stanmore in 1990!

PART 4: THE DAM BURST ...

1990s onwards. Two events fuel massive increase in demand for travel and hence travel guides and the maps that go inside them:

- The demise of communism in Eastern Europe, suddenly people can travel easily for the first time.
- Deregulation of European airways and establishment of low cost airlines. People can now travel cheaply.

Unofficial maps were everywhere. Max showed a small fragment of his collection as follows:

- Lovell-Johns from 1991. The official 1990s map, the base-line.
- Frommer 1992–2002. A clunky looking map with big interchange circles. The map could be torn out of the guide book so it went in your pocket.
- Jitsugyo No Nihon Sha 1993. A Japanese map with Japanese station names on it.
- Merien from 1994.
- Let's Go 1994-1997. A geographical map with 'frog spawn' clusters for interchanges.
- Polyglott from 1996. Everything precise and orderly as you would expect from a German map although they've struggled with the addition of the Jubilee Line.
- Assimil 1998. From French travel guide, a copy of the official map.
- Diamond Big 1999. Japanese, very colourful with the travel zones.
- Regenbogen 1999. From German travel guide.
- Freytag & Berndt 1999. Austrian cartographers.
- Clockwork 2001.
- Marco Polo 2000.
- Jitsugyo No Nihon Sha 2002-2012. No Japanese station names on this version.
- Autrement 2003.
- Nelles 2007. French with red interchange stations.
- Geoglobe 2007. Max's first Chinese map.
- Petit Fute 2011. French map where the Gospel Oak to Barking line zigzags madly over the top of the map. A lesson in how not to add a new line without re-designing the map.
- De Dios 2011. Smart looking Spanish map with lozenges for the interchange stations.

- China Railway Publishing House 2011.
- BOKPYR CBETA 2012. Russian.
- Momedia 2013. French.
- Marco Polo 2018.
- Express Map 2017. The first unofficial map Max has seen with Crossrail on it.

PART 5: CAMOUFLAGE OR CREATIVITY?

There is lots of variety out there, showing information in different ways, but most independent maps are obvious copyright violations. They have been copied from the official London Underground map, no question about it. Why aren't they prosecuted? International copyright claims are difficult to pursue and it is a very expensive process. There are designs that go that little bit further in different ways. Are they innovative designs or attempts to deflect London Underground's copyright lawyers? Max then showed some of these designs:

- RATP: Cosmetic. This is the Paris transport authority violating TfL intellectual property. This is what the Underground map would look like if the corners were a bit smoother and more graceful. There is a different typeface and the colours are a bit more muted.
- Giunti: Shape. An Italian map which has been squashed inwardly horizontally. You get angles that are much steeper than 45° and in the process you lose the extremities. The shape has been compressed to disguise the fact that you've copied it.
- Rand McNally: Colour, angles. An American map where all the lines have different colours to the official map. What could be more confusing than that when you get to London? After receiving a letter from London Transport they didn't do in-house maps again.
- Everest: Shape, extra railways. A Spanish publisher who has bizarrely added extra railways in North London, where there is lots of Underground anyway, but nothing south of the river.
- Shobunsha: Language. Max's favourite Japanese map because there's no English on it whatsoever.
- ADAC: Curves. This German map was deeply inspirational to Max and made him experiment with curve linear maps. Another way to try and hide the origin of the map is to make everything curvy. This map has all sorts of curves, not just gentle sweeping curves but also seasick inducing curves, with very few straight lines. Again there are extra railways with the four major airports shown.
- Zero-per-Zero: Curves, attractions. A South Korean map which in Max's opinion is the most designed and least copied of the Underground maps. One of the maps that goes a bit further than the official design. There are other railways, trams and tourist attractions shown. No longer available in the UK as they received a stern cease and desist letter from London Transport.
- Streetwise: Angles, attractions, chaos. Max found this map visually disturbing. Very hard to make sense of with crazy angles, lettering across the lines and all compressed together.
- Freytag & Berndt: Useless. How else can you protect yourself from a copyright violation? Make it useless like this map. This famous Austrian cartography company has squashed everything together so it doesn't make sense. To add insult to injury the Northern Line has become lime green!

PART 6: PUSHING THE ENVELOPE

Henry Beck's original design used horizontal/vertical lines and 45° angles. Eighty years and over 100 stations later, official and unofficial designs cling to the old ways. There are plenty of other ways of designing a schematic map. Few people have ever explored whether breaking the rules might improve designs. Max showed the official map by Pulse Creative in 2009 which removed the river and met with widespread condemnation and was re-instated later that year. Some maps were then shown that have broken the rules:

- Curvilinear: Max Roberts. A curves only diagrammatic map which has polarised opinion over the years.
- Hexalinear: Max Roberts. A hexalinear diagrammatic map using only horizontal and 60° diagonal lines. A map for the geometrical purist.
- Smoother: Quickmap. A central area map with sweeping curves to improve the flow of the design.
- Multi-Linear, Geographical: Mark Noad. This map uses multiple angles and straight lines to make it more geographically accurate.
- Multi-Linear: Andrew Smithers. Also using multiple angles.
- Multi-Linear: Max Roberts. A multiple angles map with all unnecessary corners eliminated by using 18 different freely chosen angles.

- Concentric Circles: Jonathan Fisher. When the Overground was completed a lot of people were interested in the orbital connectivity. This map was based on that with circles, 45° diagonal and straight lines.
- Concentric Circles: Jonny Farrow. Similar to the previous map.
- Concentric Circles: Max Roberts. A map based on concentric circles, spokes and tangents, with smooth corners.
- Anti-Geography: Jug Cerovic. A map where the lines are straightened out at all costs with lots of verticals.
- Anti-Geography: Max Roberts. As Max has written on the map 'A map of the London Underground to challenge Londoner's expertise'. An experiment in distorting people's spatial perception. Very popular in Epping as it is in the right place at the top of the map!
- Weird: Johomaps. Canadian publishers. Not really geographical or diagrammatic, just weird.
- Weird: Sameboat. A Chinese designed map.
- Bonkers: Francisco Dans. A Spanish map of loops and circles with no straight lines.

PART 7: PURELY DECORATIVE

Max commented that there probably more maps on people's walls than in their pockets. He finished with three of his decorative maps intended to soothe rather than for planning journeys:

- An Art Nouveau map based on the network of the early 20th century.
- A Charles Rennie Mackintosh inspired map also based on the early 20th century network.
- An Art Deco inspired map based on the aspirations of the 1920s and 1930s.

AFTERWORD

We have the history of the official Underground map but we also have, at the same time, this wonderful fascinating parallel universe of everyone else's attempt at creating Underground maps from all round the world. There will never be a comprehensive picture of all the unofficial maps. Guide books etc. are soon out of date and publishers come and go. Max has managed to salvage quite a lot of material, some are terrible with bad mistakes and some are gems. There's too much incentive to create unofficial designs. TfL will never be able to catch all the copyright violators, they haven't got the staff. In London Max recommended Foyles, Stanfords and J.P. Books for the foreign language publications containing unofficial maps. If you're travelling, Germany, Italy and Spain are the best for unofficial maps. Also there is a good travel bookshop in Brussels that has a good cross section of French and Dutch publications. It will be interesting to see how Crossrail is added to these maps. Two books of Max's are available, 'Underground Maps After Beck' which includes unofficial designs and 'Underground Maps Unravalled' which includes his own design work.

Appreciation was given to Max in the usual manner for the fantastic presentation of his amazing collection.

Questions were then invited from the audience.

Q. *The official Underground map over recent years has become more and more cluttered with fare zones, step free access stations taking prominence over interchanges and more and more non-Underground railways being added. Most of these things aren't useful for tourists. Do you think that if the Underground map went back to basics more publishers would use the official map rather than designing their own?*

A. *Some of the violators copy over the clutter onto their maps. The Japanese just do it because it's easier than negotiating with somebody 6,000 miles distant and they know they won't be pursued. There's a sort of unofficial TfL policy that as long as it's not for sale on British bookshelves you can do what you like in terms of the Underground map. It's an interesting question but I've never spoken to anyone who's created these maps. Perhaps I should track them down to ask them why they did it.*

Q. *Is anybody archiving these maps?*

A. *Just me. As far as I know nobody else in the world has this hobby.*

Q. *If I found some spare ones would you accept them as part of your collection?*

A. *Delighted to.*

- Q. *I'm rather envious of your students. What is it they are actually learning? Is it cartography, writing a travel guide or graphic design?*
- A. *It's multi-disciplinary but it's information design. My background as a psychologist is how people represent and interpret information. So if you give them a problem-solving task with information, how do they interpret the information. Do some ways of presenting that information let them do it quicker? Do other ways lead to mistakes? It's a course focussing on general issues of information design, the psychology of how people think about information and people's limitations that lead them to make mistakes. We can put all that into creating better maps. It needn't be about maps it can be applied to other design items.*

Maurice Lees