Welcome to 2017 and another year of Tube Map Central newsletters. 2016 was very busy, with several publications on map usability appearing in print, and the successful first run of my design module; Transit Maps: Past Present and Future. Together with Geoff Marshall, we conducted an entertaining workshop at the London Transport Museum on creating maps. And, of course, selections of my work were exhibited at the Sign Design Society in London in July, and are now on show in Vienna at the Volkstheater information centre as part of a very stylish display.

Before we say farewell to the 2016 festive season once and for all, readers might enjoy the Christmas e-card sent out by Andrew Smithers of Project Mapping. Inspired by the early LB&SCR decorative map in my November newsletter, the concept of a mistletoe map is brought nicely up to date!

On the web
• A nice decorative map was brought to my attention via Mapping London. The station names were replaced with Christmas events but the designer took a more creative approach than usual. My Art Nouveau London map also gets a mention.

Date for your diary
• Last call for my talk Transit Maps: The Good, the Bad, and the Ugly at the University of the Third Age Hillingdon branch, Monday 9th January 2017, 11:00 at the Winston Churchill Hall, Ruislip, HA4 7QL.

Map research
• Another paper is now available in its final version formatted for publication: Preference versus performance: Investigating the dissociation between objective measures and subjective ratings of usability for schematic metro maps and intuitive theories of design. For a limited time, the published manuscript can be downloaded from here. After January, you can either download a pre-print of the article direct from my publications webpage, or email me for a copy of the typeset document.
• Readers may be aware of a somewhat controversial article that has a substantial focus on my work. My response has been submitted for review to The Cartographic Journal and a copy of the submission can be downloaded here. It takes a much more positive stance, and attempts to make the case for scientific approaches to usability testing and systematic approaches to design.

Map of the Month: Coping with Adversity
As someone who enjoys creating and using maps, I probably have a head start in interpreting them when I see one for the first time. I am familiar with the visual language, the diversity of techniques of information design used, and many of the cities depicted by them. Very very occasionally, however, I come across something that has me flummoxed, and I need to study it carefully to get any sense out of it at all.

Train maps can be difficult to configure whenever a panel shape is a poor match for actual topography. Often, the panel is wide and low, so that a reasonable strip map of a single line can be created, even if the orientation is wrong, but as soon as a second dimension is required, the skills of the designer are tested. The results include some of the earliest examples of schematisations, pre-dating Henry Beck’s London Underground network diagram by up to twenty years. With so much distortion necessary to squeeze a
network into the available space, attempts to depict topography became meaningless and, as a result, as early as the first decade of the 20th Century, lines were straightened and stations were distributed evenly.

As an occasional user of the London Overground network, I have glanced at the train map (above) from time to time, shaken my head in bemusement, and relied on my memory of the system for navigation. The network is extensive and the space available must result in compression, so that a design is never going to be ideal. However, other people are also disturbed by this, and a recent attempt to produce a better version caught my attention. Taking a closer look, the source of my discomfort with the original map is obvious. The design might be balanced in terms of a nice even station density, but the result is shapeless, and the topographical distortion is horrible: Shoreditch and Liverpool Street are a few minutes apart in terms of walking distance, but on the map the gap between them is absurdly stretched out. The original design omits information that might be helpful to train passengers (and revenue protectors): the fare zones, and it’s not hard to see why. When these are added, a succession of simple rings around the centre are bizarrely squeezed, stretched and twisted, reflecting a terrible parody of the shape of London.

So, here is my own attempt (below), keeping to the original design parameters (line thickness, font size and supplementary information) compressing London, but not abusing it, trying to highlight the Overground circle, and also its core spine through Shoreditch, and of course trying to keep the Line trajectories simple. To add to the challenge, I decided to include Crossrail in its entirety: the Overground in East London makes a lot more sense when the connections with Crossrail are explicitly shown. Of course, the payback is now that the design is a lot less balanced than before, but this mirrors reality, with the Overground presence focused in certain parts of London. The topography is inevitably distorted, but at least now it has not been mutated into something freaky. The fare zones now make a lot more sense, and stations that are nearby in topographical reality are now in close proximity on the design itself.

No claims whatsoever are being made about the ‘correctness’ of this map, or its usability, especially in comparison with other versions I have seen, but the example here does show that, even with a less-than-ideal working space, different design priorities can shape a map in different ways, and that even when topographical distortion is inevitable, it needn’t be so severe as to result in a design that warps reality so much that there are significant and insurmountable conflicts with people’s mental models of a city.

It would be gratifying if TfL occasionally paid attention to the points that I make. The current Overground train diagram is not fit for purpose, but with some care it could be improved a lot. If there are interesting developments, I will mention them in future newsletters. To make sure that you see them, subscribe to them at my web pages, www.tubemapcentral.com.

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