Finally we reach the end of a productive year, and now it is time to reveal everything about my last project. But, before I do, I have a dozen B/C grade copies of *Airline Maps: A Century of Art and Design* — that’s only minor damage. While stocks last, order a copy of *Underground Maps Unravelled* from my online store for delivery to anywhere in the world and get a free copy of *Airline Maps*. Email me to confirm how to order and also that copies are still available.

**Book news**

I can finally say more about my other new book. *Tube Map Travels* explores the twilight world of unofficial versions of the London Underground map; some are creative explorations but all too many are brazen examples of intellectual property theft. The book also charts the history of TfL intellectual property protection, and then discusses the ins and outs of copyright. This has been a project very close to my heart: I have been collecting examples of these maps internationally for many years. The book is in the warehouse and heading for shops, just in time to order for Christmas.

**Launch Event, Tube Map Travels**

*Stanfords*, the London travel bookshop at Covent Garden has generously offered to host my launch event. This will be on Tuesday 17th December at 19:00. There will be an exhibition of maps from the book and also a collectible gift for people who purchase a copy of *Tube Map Travels* on the night. I have spaces for newsletter subscribers but numbers are strictly limited, if you would like to come along, then email me.

**Date for your diary**

The third *Schematic Mapping Workshop* will be held on 15th/16th April, 2021, at Universität Würzburg, Germany. The basic workshop website is complete and includes the full scope and submission timetable. The portal for submissions opens on Thursday 9th April 2020, and we are happy to take questions about these at submissions@schematicmapping.org. Reports on all aspects of schematic map research are most welcome.

**In the media, on the web**

An interview about the *Airline Maps* book was published in the *Columbus Dispatch*. The book also got a mention in the *Creative Factor* blog and *Home School Life*. We were delighted to feature in the Smithsonian Museum *Ten Best Books About Travel of 2019* and Christmas gift guides from the *New York Times*, *The Map Room* blog, *Engineering & Technology*, *BC Globe and Mail*, and *Open Letters Review*. There is still time to win a copy in a competition at *InsideFlyer*.

**Map of the Month: How to avoid intellectual property theft**

What aspects of a map are copyright? One way to answer this question is to think about where all the hard work went. Not in the choice of colours, or the
symbols used to show the stations and interchanges – unless these were uniquely creative and themselves subject to copyright. Instead, most of the effort (I hope) went into configuring the lines, finding really good solutions for difficult parts of the design and fitting in all the station names. If a map is heavily derivative of another work, it is the replication of the configural hallmarks of the original will be its copyright downfall.

However, there is a complexity in judging originality: *naturally converging solutions*. The constraints of working with design rules such as traditional octolinearity, the need to place station names, and priorities such as trying to simplify line trajectories without distorting topography, mean that some locations will have few feasible solutions – there are only two ways to lay out Oxford Circus, for example. Hence, two independent designers could create similar maps without seeing each other’s work. There would be no copyright breach, this requires a causal connection from an original to the questionable work. Of course, much of a map is less constrained: two independent identical versions would be an impossible coincidence.

Above is a map that cannot be alleged to be plagiarised. It was designed by something that has never visited London nor seen an Underground map before. It does not even know about schematic maps. A computer was given the GPS co-ordinates of stations, the lines that served them, and general rules for creating layouts, alongside heuristics for determining configuration quality. This is its creation.

Or half of its creation. It couldn’t place the station names, I had to do that, and this was a massive job, taking me much longer than if I had designed my own map. But computers will get better at this task and their non-derivative solutions are immune to allegations of plagiarism.

*There are are at least four map books in my head waiting to be written. I hope to start on the next one in the summer. In the meantime, wishing a Merry Christmas and a prosperous new decade to all my readers. Map of the Month for January remains in London, perhaps just as well given the recent controversies concerning the official map. To find out more, subscribe to my newsletter at* [www.tubemapcentral.com](http://www.tubemapcentral.com).

Max Roberts, mjr@tubemapcentral.com