Another late mailing this month, owing to much needed R&R after completing a major project, (see below). With barely enough space here to fit everything in, let’s get straight to the newsletter …

Dates for your diary

• **Peter B. Lloyd** will be presenting a paper on the joint Universities of Kent–Essex research into the effects of colour-coding on map usability, titled *Metro Map Colour-Coding: Effect on Usability in Route Tracing*, to the *Diagrams 2018* conference on 19th June, 16:00, at Edinburgh Napier University.

• **Elizabeth J. Newton** will be presenting a paper on the joint University of Essex–London South Bank University research into the effects of design on objective measures versus subjective ratings of usability, titled *Concentric Circles Maps: Data and Implications*, to the *Diagrams 2018* conference on 20th June, 11:25, at Edinburgh Napier University.

• A *Transit Mapping Symposium* has been organised by Jug Cerovic and Richard Archambault in Montreal, Canada on June 28th-29th 2018. I won’t be attending, but reports back will be welcome.

• Some readers will recall the successful *Schematic Mapping Workshop* of 2014 hosted by the University of Essex and co-organised with the University of Kent. We finally have a follow-up scheduled for 11th/12th April 2019, co-organised with, and hosted at, TU Wien, Vienna, Austria. Details next month.

In the media, on the web

• My *Vignelli Circles map*, created to mark my 50th edition newsletter, was featured by the resurrected *Gothamist* at the beginning of the month.

• The joint Universities of Kent–Essex research into the effects of colour-coding on map usability was covered by a number of outlets, including the *Daily Mail*, *Science Daily*, and *Intelligent Transport*.

• My *Chicago El map*, inspired by the stained glass work of Frank Lloyd Wright, and chosen for inclusion in the forthcoming *North American Cartographic Information Society Atlas of Design*, got a mention in *CBS Chicago local news*, along with a brief television appearance.

• The Brexit Maps in this month’s newsletter have appeared in an article on the BBC News website.

Web page news

The joint work on mapping Brexit for business (see below) has its own brand new web-page, www.brexitmapping.com with more details of the project, including exhibition venues once finalised.

Maps of the Month: Mapping Brexit

Irrespective of your own views on Brexit, and whatever the outcome, there are turbulent times ahead for business. With the complexity of the issues, strategic planning is vital, and any organisation not ahead of the game will inevitably lose ground to its competitors. So, how can the people concerned be encouraged to plan ahead, and how can they be assisted with this process?

The tube map metaphor has been applied to many different domains, with mixed success. It is a good way to show interconnected networks, but the logical status of what comprises a line is often mis-construed. For a journey by Underground, lines are physically distinct. To change from one line to another, you have to leave one vehicle, search for another, and board it. Colour-coded tube map-styled road maps (or cycle route maps) do not work well because (1) the twists and turns of reality, and the physical shape of road junctions, are useful for cues navigation; and (2) drivers do not swap cars to transfer between, for example, the A12 and the M25. On the other hand, if the lines on a tube map-style diagram really do
indicate distinct entities that occasionally share ‘stations’, then the metaphor could be an effective way of making an abstract structure more salient and easier to think about.

The UK has many business sectors, differently distributed around its regions. Each sector faces unique obstacles in charting a Brexit plan, but some are common between sectors, and there may well be opportunities to share expertise and experience. A tube map-style diagram seems to be a good way to highlight the key Brexit issues faced by each sector, along with the interconnectedness of these and, crucially, an attractive, colourful and well-understood representation should engage attention and persuade the people involved to think strategically about the issues. There are twelve Brexit maps, each highlighting the key business sectors for one of the UK regions.

The challenge in creating these maps was to represent the lines so that the viewer could follow them effortlessly and understand the underlying network structure. This meant simple line trajectories, a balanced coherent design, bundling lines together appropriately if they shared common features, and stacking them in the right order so that crossings were minimised. Grouping the issues into zones helps structure the concepts, but within each zone the order of stations is arbitrary. I attempted to avoid lines crossing other lines between sequences of stations within zones to prevent arbitrarily disconnecting them, but this was not always possible. There is no topography in which to embed the maps, and this makes laying out the structure much more difficult; too much freedom and too many options can make for hard work! Creating diagrams such as these appears to be an ideal project for researchers into automated computerised map design, the requirements are easy to specify.

The Brexit maps are a joint venture, with research by Sietske de Groot, director of TradePeers Ltd. My input was to translate her original matrices into effective visual representations. Creating them was an interesting new challenge, and these are the “very different” maps alluded to in my April newsletter. Normal Map of the Month services are expected to be resumed in June. Subscribe to my newsletter at www.tubemapcentral.com to find out what is in store.

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