Book Review

- Title. Author(s). London: Particular Books (Penguin), 2014. 240 pages. Hardcover, £18.75. ISBN-10 1846148472.
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The geographer James Cheshire has teamed up with designer and former Senior Design Editor of *National Geographic* magazine Oliver Uberti to produce a fantastic book of interest to a wide audience with different backgrounds. Brief in words but incredibly rich in message and insight, *The Information Capital* will of course be of interest to fans of the British capital and any kind of the newly-bred map/data geek, for whom the book is full of treats. But this review will argue that regional scientists –both with and interest in cities and not necessarily–should also pay attention to some of its features.

The book is composed of around one hundred maps or visualizations that cover several aspects of what makes London a particularly interesting city. Each of these is accompanied by a brief description, as well as the sources of the data and, in some cases, the authors of the original idea. After a brief introduction, the book is divided in five sections of roughly the same length that group graphics by their content. "Where we are" explores several aspects of the location of London. From its Roman influence spanning even towards today, to the patterns of commuting that connect where people live and where they work, the chapter draws on several sources of both static, flow, contemporary and historical data to create a portrait of the place London inhabits. "Who we are" speaks to the character, personality and demographics of the city. This section includes a larger number of non-geographic maps and infographics, covering themes such as professional networks and guilds, population trends (official and from alternative sources), or voting patterns. "Where we go" contains a list of beautiful visualizations relating to several flows that are overlaid within londonese boundaries. From the tube's heartbeat, to the Boris' bikes, to plane detailed GPS logs to trips measured using tweets, this section is a fantastic lecture on displaying dynamic data in the static canvas of printed paper. "How we're doing" showcases all kinds of metrics about the performance of both the city as a whole and its inhabitants. This includes graphics about the main causes of death, the latest trends in tobacco addiction, obesity or crime. But the section also gives us a glimpse into aspects of the city we might not think about very often: the team in charge of police helicopters, or the patterns of 999 calls are good examples. Finally, "What we like" is a fun tour around some of the things Londonists like best. From the Tate's treasures to football preferences or the most photogenic features of the city, this section reminds us that cities today thrive not only because of the economic opportunities they provide, but because of the leisure and culture they are able to offer.

Throughout its pages, it is very apparent the authors have put an incredible amount of care and detail in crafting the book. In a time where paper is really a secondary form and everyone produces with digital in mind, to simply print it on paper afterwards, it is remarkable that a book that relies so much on digital data and technology is specifically designed for paper. There is no ebook version. The reason behind it becomes clear once you open the hardcover. The authors use all the possibilities the form affords to create effective visualizations that also look simply beautiful. A perfect example is the use of translucid pages to build different layers into a map (a reminiscence of the first analogue GIS?), while allowing the reader to shift through the changes each of them represents. A particularly compelling example of this is the superposition of the 2010 Index of Multiple Deprivation over the late XIXth Century poverty maps of Charles Booth.

Something that kept striking me as I was flipping the pages and discovering visualization after visualization is how, despite the obvious sophistication of most of the maps, very few have a legend and, still, they are unusually intuitive. Every design choice almost feels natural and effortless. As someone whose part of his day job is making maps and communicating complicated results, I painfully know this could not be further from reality. Instead, the apparent ease and simplicity of each map rather reflects the style, craft and effort put by the authors in pushing the boundaries of cartography. This, if anything, is an aspect of the book that makes it useful for most regional scientists and that the discipline could do with taking on board. How much nicer (and effective) would maps and visualizations in journals like *Papers*.. would look if some of the principles laid out in the book were included?

Another defining characteristic that striked me was how important the availability of open and new forms of data, as well as open source software (Cheshire is well known for his predilection for the R statistical platform) are for the book, to the point it would not exist in this form without them. From Census demographics, to Open Street Map geometries, or other open sources such as crime statistics, the book shows how much is possible today with readily available data and free software. Additionally, it is also striking how much of the book could simply not have been produced just a few years ago. Twitter was created in a now seemingly distant 2006; Strava, the fitness social network whose data powers the morning runs and bike riding maps in the book was initially released in 2009; the Boris bikes kicked off in 2010. All of these sources, and many more that underlie most of the book, offer a new set of lenses to look into cities, and Cheshire and Uberti show us how to wear them in style.

There are very few things I would change in the book. If I had to say something, I would have greatly enjoyed a companion website that provided the R code and guided to the production of the graphics. It would essentially be a crash course in modern cartography. To some extent this already exists in Cheshire's personal blog (spatial.ly), although a more systematic archive would be most welcome. I suppose the ultimate proof of quality of the book is how easy it is to find it in any bookshop of the British capital. I hear the tandem is coming up with a new one on animal movement, in case you are still thinking about presents for the coming season. Just saying.