Data Visualisation Course: Optional Preparatory Tasks

Dr Jon Minton

8 June 2014

# Introduction

Thank you for signing up to attend the SRA Data Visualisation course. I look forward to meeting you in July.

Below are two tasks which, if you are able to complete ahead of the course, will help you gain even more from the day itself. Of the two tasks, the first is the most important, and so if you have only time for one of the tasks, please prioritise this one.

Please be prepared to share your experiences of these tasks, especially any insights or challenges, with the other delegates within the course. In the case of the first task please be willing to show the visualisations themselves to the rest of the group.

Kind regards,

Jon

# Task One: Learning by Doing

For this task, download a dataset containing at least three variables. Using this dataset, produce two different types of visualisation. Please make notes about, and be willing to discuss, each of the stages involved in producing the visualisation, including: finding and downloading the data; cleaning and preparing the data; making decisions about the design of the visualisations; producing the visualisation using the chosen software; and finalising, polishing or finessing the visualisation into something for a broader audience.

# Task Two: Comparing and Contrasting

On the next page I have grouped a number of websites into one of the following categories: Visualisers; News Portals; Data sources; and Online Visualisation tools.

For any three of these categories please look at at least two of the websites, and compare and contrast what you see. I am most interested in knowing what insights and challenges the websites present you as a producer, rather than just a consumer, of data visualisations.

# Websites

## Visualisers

**David McCandless**

A graphic designer-turned- information visualiser closely linked with the Guardian newspaper.

[~ davidmccandless.com](http://www.davidmccandless.com/)

**Nathan Yau**

Runs the highly popular Flowing Data blog; has a PhD in data visualisation and has written two books on the subject

[~ flowingdata.com](http://flowingdata.com/)

**Stephen Few**

A long established data visualisation business consultant.

<http://www.perceptualedge.com/examples.php>

## News Portals

**The New York Times**

Internationally famed both for its journalism and, more recently, data science journalism:

<http://www.nytimes.com/2013/07/22/business/in-climbing-income-ladder-location-matters.html?adxnnl=1&adxnnlx=1402259027-GmcIbYCCkDg4J2joCbLmxA>

**Guardian**

Likewise:

[~ theguardian.com > Uk](http://www.theguardian.com/uk)

## Sources of Data

**The Office for National Statistics** (UK) and NOMIS: **Labour Market Statistics**

<http://www.ons.gov.uk/ons/datasets-and-tables/index.html>

<http://www.nomisweb.co.uk/>

**Scottish Neighbourhood Statistics** (UK for now)

<http://www.sns.gov.uk/>

**Guardian Data Archive**

<http://www.theguardian.com/news/datablog/interactive/2013/jan/14/all-our-datasets-index>

**Demography**

**The Human Mortality Database** and **Human Fertility Database**

[mortality.org](http://www.mortality.org/)

<http://www.humanfertility.org/cgi-bin/main.php>

## Online Visualisation Tools

**Many Eyes**

<http://www-958.ibm.com/software/analytics/manyeyes/>

**Google Charts**

[~ https://developers.google.com/chart/interactive/docs/gallery](https://developers.google.com/chart/interactive/docs/gallery)

**Tableau**

[~ tableausoftware.com > Trial > Tableau-software ? ...](http://www.tableausoftware.com/trial/tableau-software?cid=70160000000X8RA&ls=Paid%20Search&lsd=Google%20AdWords%20-%20Tableau%20-%20EMEA%20-%20UK%20-%20Free%20Trial&adgroup=Tableau%20-%20Exact&kw=tableau&adused=23854722742&distribution=search&gclid=CjkKEQjwk9CcBRDEopHmnZa5td8BEiQAr2BckKd3PpiAbwskNksl09E6Tt6LokSBnT2KAendMwbBLSHw_wcB)

**Gapminder**

[~ gapminder.org](http://www.gapminder.org/)