What is data visualisation?

‘Data Visualisation’ refers to the visual representation of statistical and other types of numeric and non-numeric data through the use of pictures and graphics. It is used to transform (often) large quantities of data into images that can more clearly illustrate patterns, gaps, schemes, regularities, and connections.

One of the basic foundations of data visualisation is the understanding that types of graphs should follow from both, the type of data used and the theory/goal in place.

Although graphics are generally associated with bars, lines, and numbers, data visualisation can take many forms. Calendars, maps, timelines, mind-maps, and illustration diagrams are just a few types of graphics that we may use on a daily basis.

Among static graphs for statistical display, we consider the most common types to be: bar charts, histograms, line graphs, and, pie charts.

Technological developments and the rise of online media as a popular form of information distribution have also led to an increase in the use of interactive graphics as a form of data presentation, which are generally based on one (or more) of the graphic forms described above, but allow for reader interactivity (e.g., show change of variable values overtime).

Finally, infographics are a static form of data presentation, which generally uses more than one type of graphic, as well as illustrations, to tell an encompassing story about a given topic.
### USEFUL BIBLIOGRAPHY

#### SOCIAL SCIENCES


### PUBLIC POLICY


### ART & INFORMATION DESIGN


RELEVANT ACADEMIC BLOGS

The Functional Art - http://www.thefunctionalart.com

Visualising Data - http://visualisingdata.com/

EagerEyes - http://eagereyes.org

Flowing Data - http://flowingdata.com/

Information Aesthetics - http://infosthetics.com/

Storytelling with Data - http://www.storytellingwithdata.com/

Michael Babwahsingh - http://michaelbabwahsingh.com/

Perceptual Edge - http://www.perceptuledge.com/blog/

Telling Information - http://lulupinney.co.uk

AT OXFORD

“Things to do with Data” lunchtime series. Wednesdays at 12:30, from weeks 2 to 7 at IT Services.

http://blogs.it.ox.ac.uk/acit-rs-team/advice/rdmcourses/datatalks

Introduction to Data Visualisation Workshop. 9-12 February 2015.


Oxford e-Research Centre events

http://www.oerc.ox.ac.uk/research/visual-computing

Oxford Information Geographies

http://geography.ox.ac.uk/?page=home

DATA VISUALIZATION IN MEDIA


The Telegraph – http://www.telegraph.co.uk/news/interactive-graphics/

BBC - http://data-art.net


FREE TOOLS

R (coding required) - http://www.r-project.org/
Gap Minder - http://www.gapminder.org/
Gephi - https://gephi.org/
Venngage - https://venngage.com/
Dipity - http://www.dipity.com/

PAID TOOLS

STATA (coding required) - http://www.stata.com/
ZingChart - http://www.zingchart.com/
iChart - http://www.icharts.net/
Piktochart - http://piktochart.com/