Developing Visual Literacy

Data Journalism Workshop

4-5 December 2017

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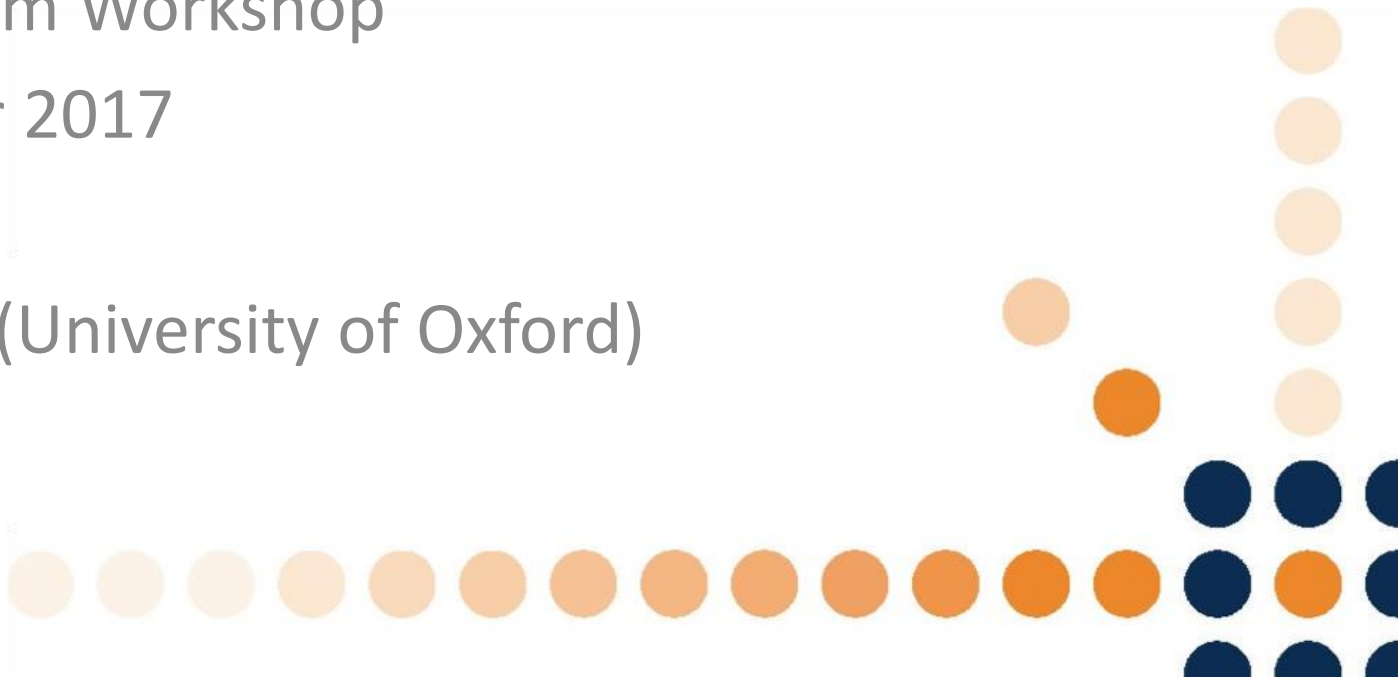


Objectives and Aims

Understand how we use visual information all the time to make sense of the world

Learn the kinds of factors (social, cultural, situational) that affect how audiences engage with data visualisations

Become ‘visually literate’ to know when and in which contexts to use visualisations and visual techniques

What Are Visualisations?

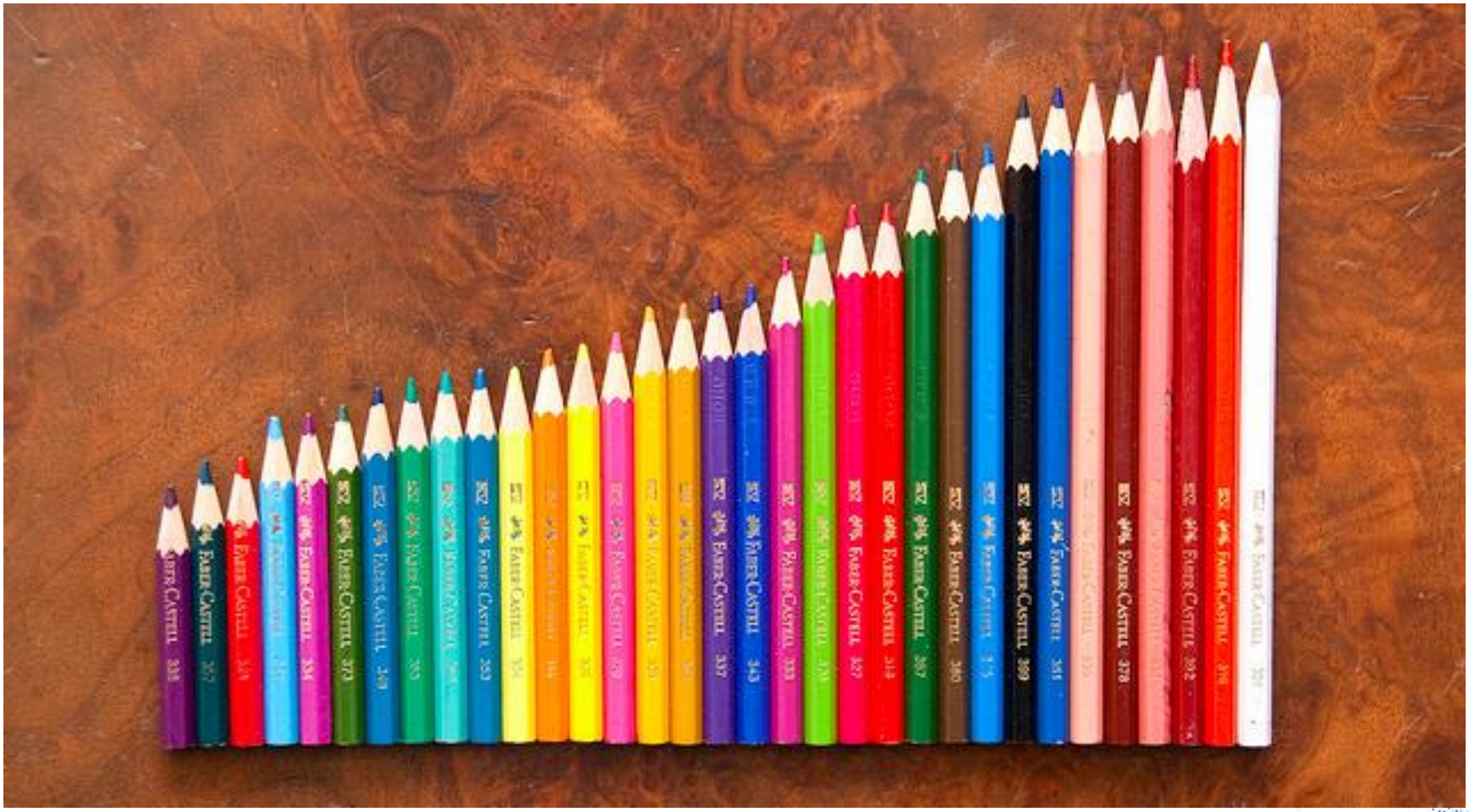
‘the **representation** and **presentation** of data to facilitate understanding’

Kirk, Andy (2016). *Data Visualisation: a handbook for data driven design*, London: SAGE

Visual Literacy and Why It is Important

We are surrounded by visual clues that communication information

Which is the Most Popular?



How Tall Over Time?

How Much Time has Passed?

How Much Pie is Left?

Visual Literacy for Producers

Simple cues (colour, shape, line, length, height) can communicate—or confuse—key messages

Don’t underestimate how important they are!

Successfully producing data visualisations involves linking these elements to your audience and purpose

Key Sets of Decisions as Designers and Producers

Gathering data

Representing data

Intended audiences

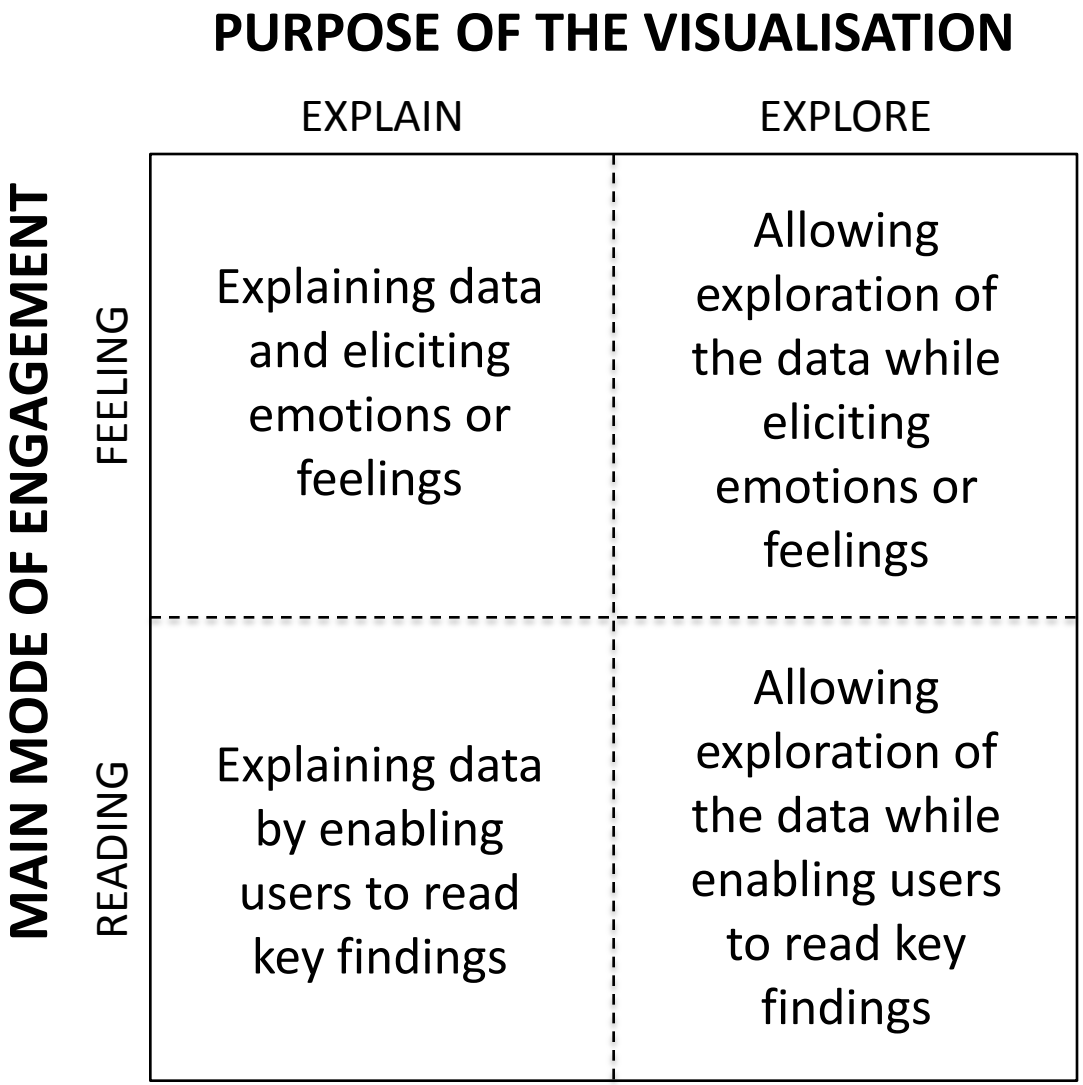
Intermediaries' agendas and values

Designers' decisions and choices

Kennedy et al. (2016). The Work that Visualisation Conventions Do. Information, Communication & Society, 19(6): 715-735.

Allen, William (2017). Making Corpus Data Visible: Visualising Text With Research Intermediaries. Corpora.

Four Types of Visualisations



Adapted from: Kirk, Andy (2016) *Data Visualisation: a handbook for data driven design*, London: SAGE

Examples

Explain and Feel: ‘US Gun Deaths in 2013’, Periscopic

Explain and Read: ‘Summers are Getting Hotter’, New York Times

Explore and Feel: ‘Better Life Index’, OECD

Explore and Read: ‘Migration in the Census’, Migration Observatory

Visual Literacy for Audiences

Audiences bring different abilities, skills, and experiences when they look at your data visualisation

Viewers have to make sense of what they see:
(1) perceiving, (2) recognising, (3) understanding

What Affects How People Engage with Data Visualisations?

The subject matter

The source

Prior beliefs and opinions

Available time

Emotions

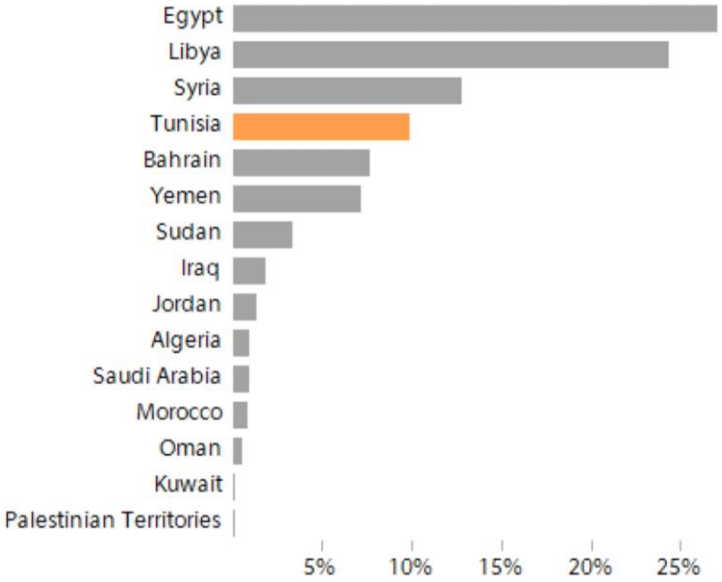
Confidence and skills

Kennedy and Allen (2017). 'Data visualisation as an emerging tool for online research', in NG Fielding, RM Lee, and G Blank (eds.) The SAGE Handbook of Online Research Methods, 2nd edition, London: SAGE.

Many Different Ways of Showing Data

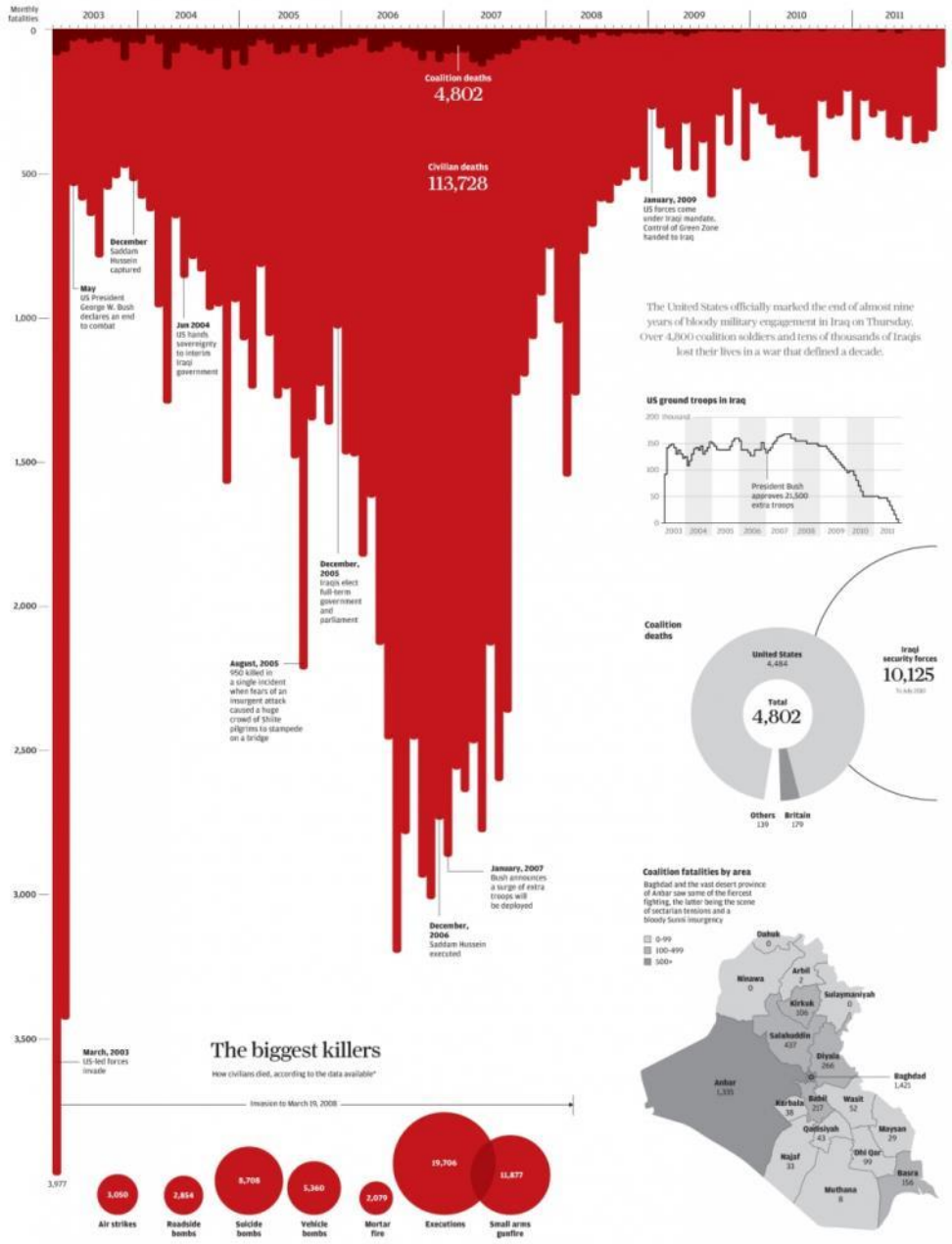
Bar Chart (or Column Chart)

length | *colour*

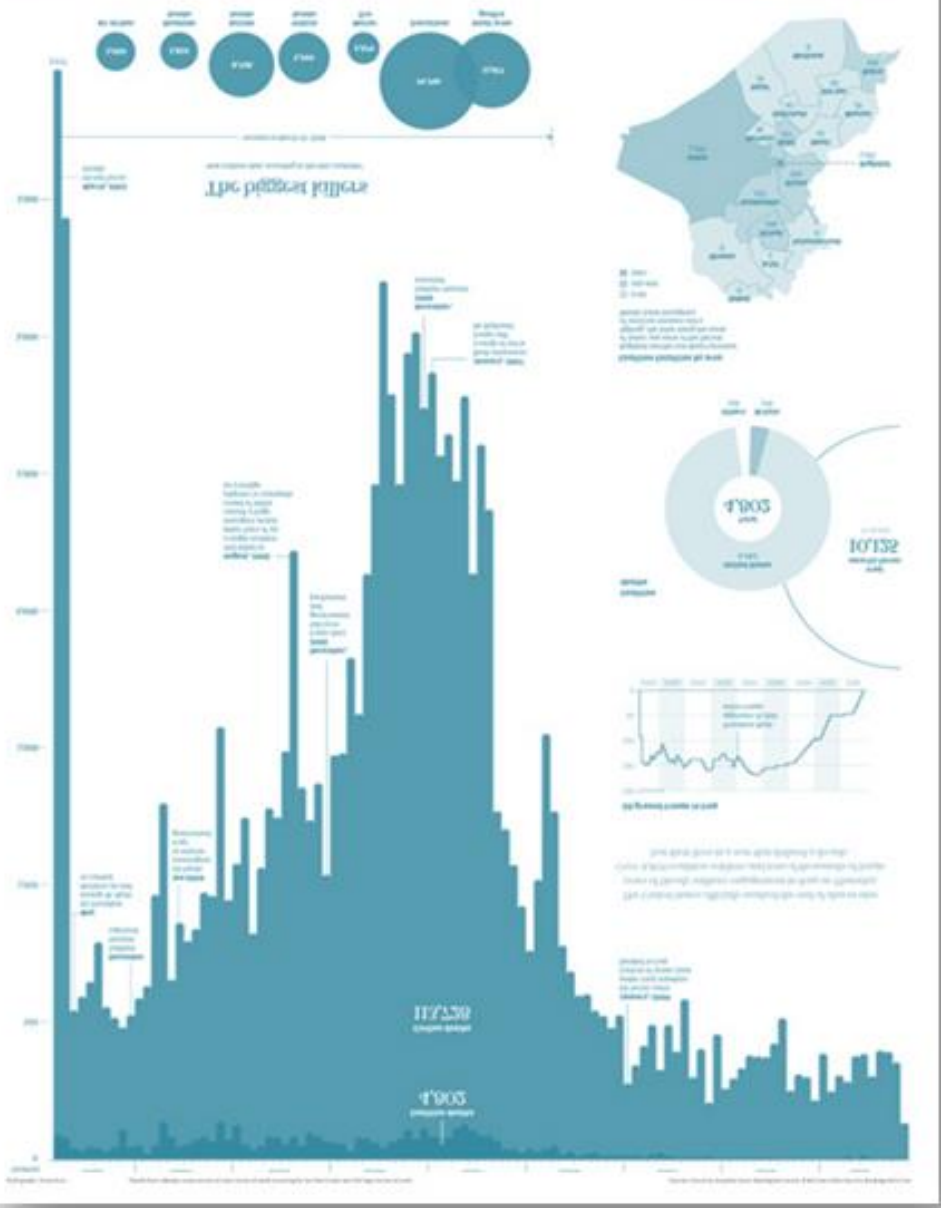


Example Visualisation: Iraq's Bloody Toll

Iraq's bloody toll



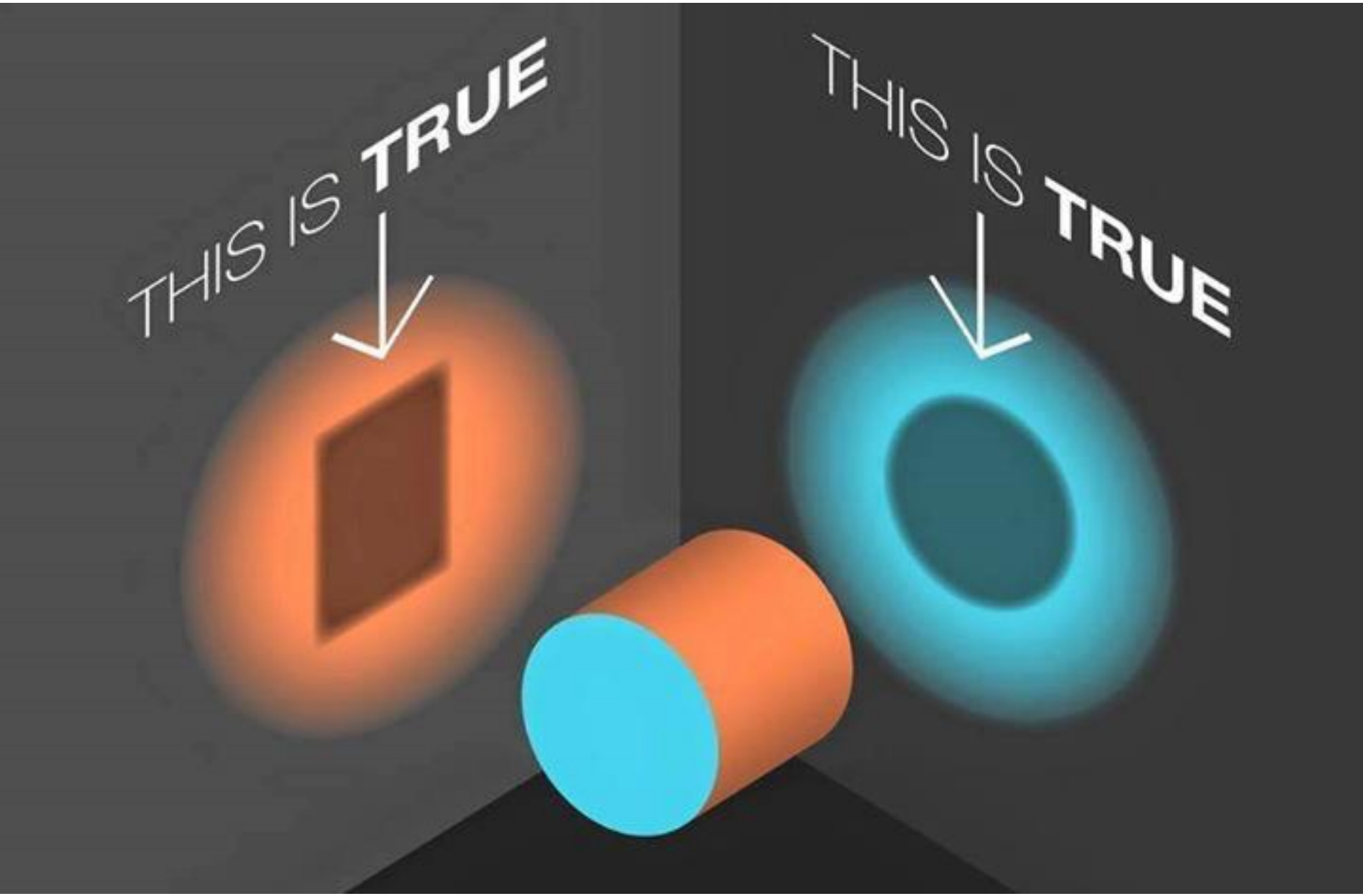
Iraq: Deaths on the Decline



Key Messages

As producers of data visualisations, we need to be visually literate enough to understand how we use visual cues to communicate messages

We also need to account for and develop our viewers' own levels of visual literacy so they can successfully engage with our data visualisations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Questions?