# SEEING DATA: DATA VISUALIZATION IS NOT NEUTRAL

Dr Alexandra Anderson

# "VISUALIZATION IS THE RESULT OF NUMEROUS CHOICES INVOLVING A RANGE OF PEOPLE (THOSE WHO WANT THE VISUALISATION TO BE MADE, THOSE MAKING IT, AND OTHERS IN BETWEEN)"

Kennedy, H., et al. (2016) The work that visualization conventions do.

# DATA VIZ IS NOT NEUTRAL

**Designers (us!) make decisions**

- what data to use in the first place

- what to include, what to exclude

- how to narrate what we're visualizing

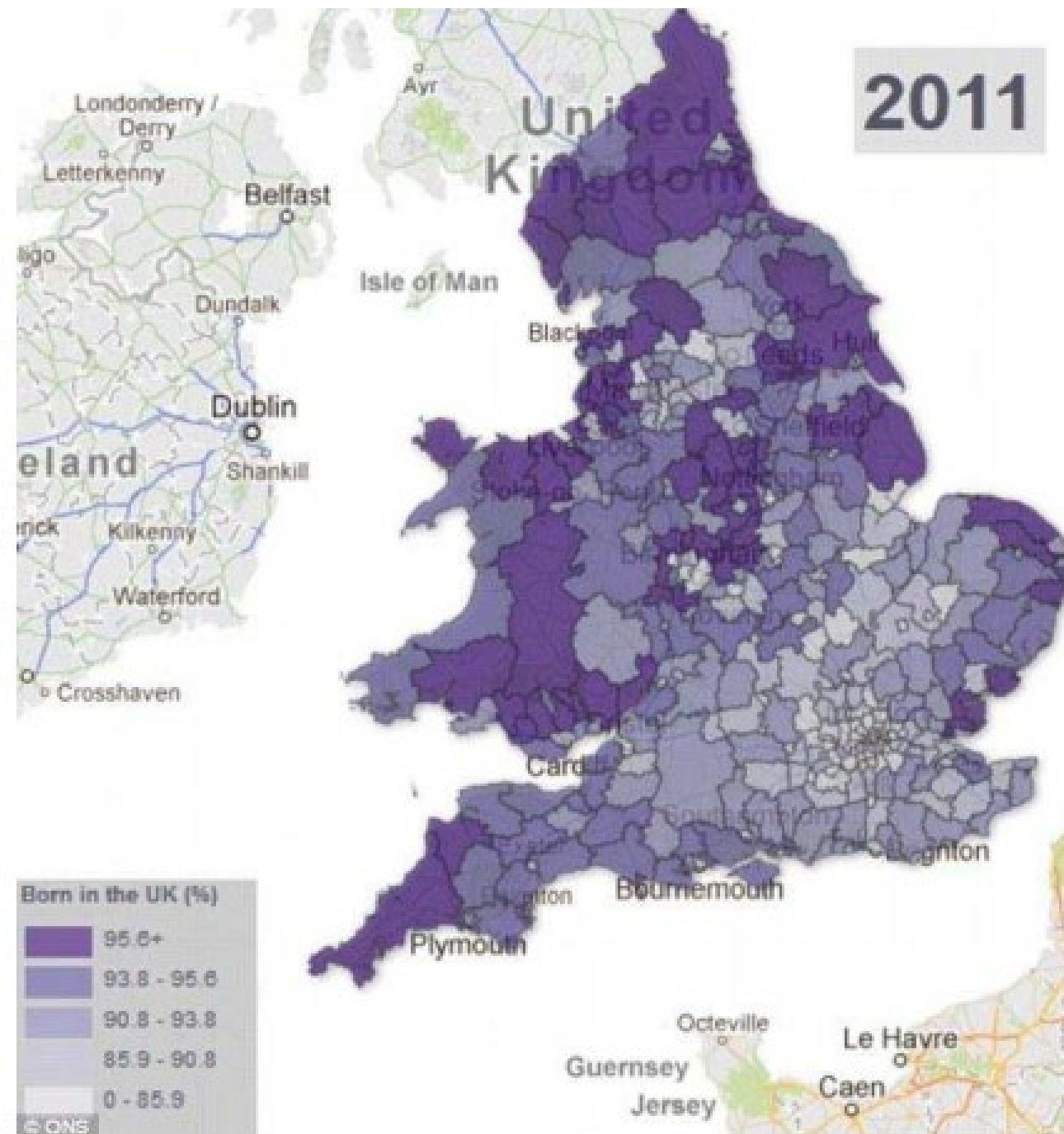**And people often interpret data viz as appearing neutral**

- particularly in comparison with prose

## "AURA OF OBJECTIVITY"

a) two-dimensional viewpoints

b) clean layouts

c) geometric shapes and lines
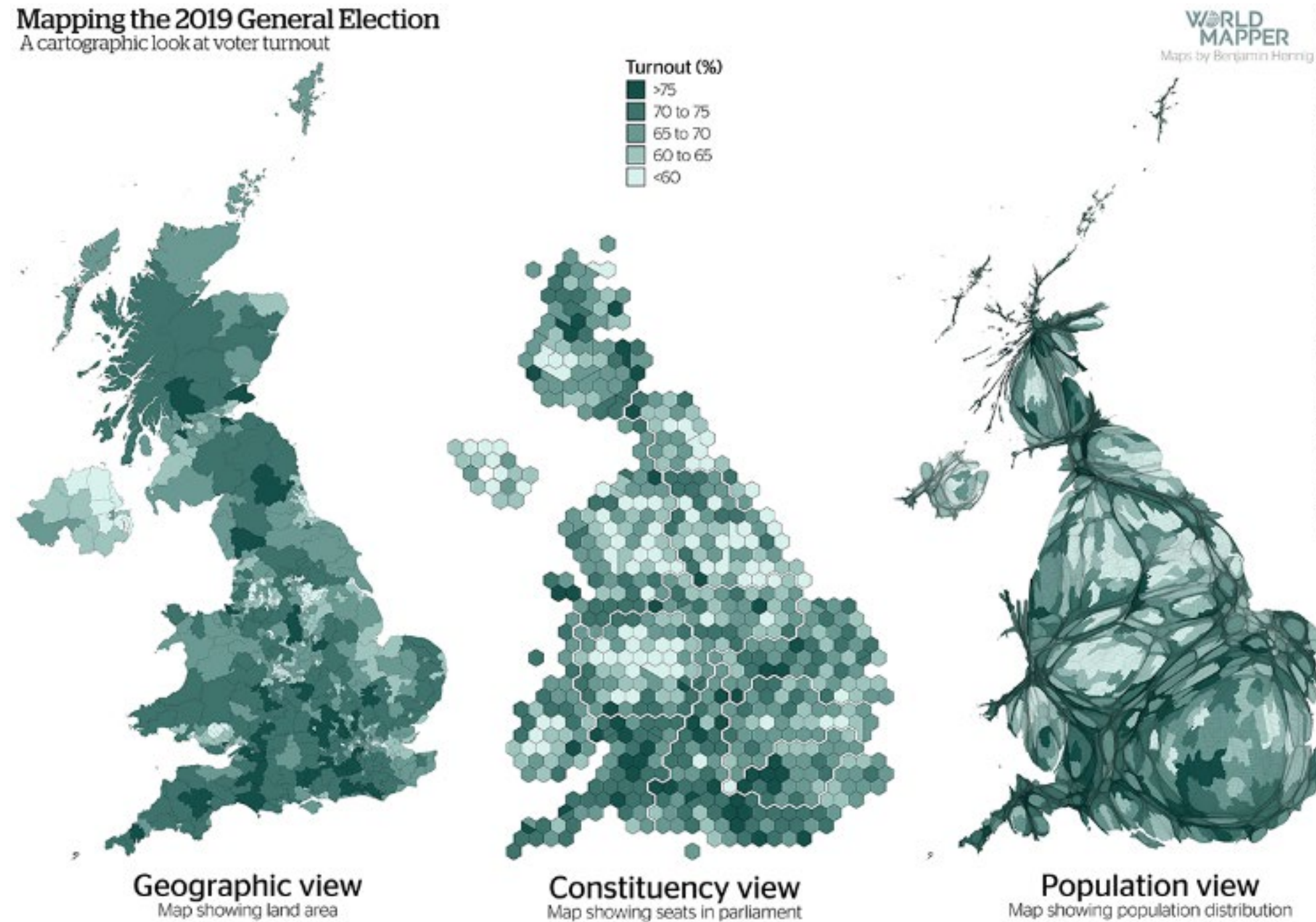
d) the inclusion of data sources.

# A) TWO-DIMENSIONAL VIEWPOINTS



Source: 2011 Census Map Analysis –
Percentage of Respondents Born in
the UK (Office for
National Statistics)

In: Kennedy, H., et al. (2016) The work
that visualization conventions do

# A) TWO-DIMENSIONAL VIEWPOINTS



Source: Benjamin Hennig (2019). 'Cartographic perspectives of the 2019 General Election', in UK Election Analysis 2019: Media, Voters and the Campaign.

# B) CLEAN LAYOUTS



Source: Non-UK Born Census Populations 1951-2011 (Office for National Statistics)

In: Kennedy, H., et al. (2016) The work that visualization conventions do

# C) GEOMETRIC SHAPES AND LINES



Source: The Global Flow of People (Nikola Sander, Guy J. Abel & Ramon Bauer, Wittgenstein Centre for Demography and Global Human Capital)

In: Kennedy, H., et al. (2016) The work that visualization conventions do

# D) THE INCLUSION OF DATA SOURCES

**How can graphs give the *impression* of openness and transparency?**

- source cited in the graph itself

- identifies what methods have been used

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