

2. Effective use of visual channels

Lecture learning goals

1. Choose effective visual channels for information display.
2. Distinguish between when to use an area and when to use a line to represent a trend.
3. Visualize frequencies with bar charts and histograms.
4. Facet into subplots to explore more variables simultaneously.
5. Customize axes labels and scales.

Required readings

Before class:

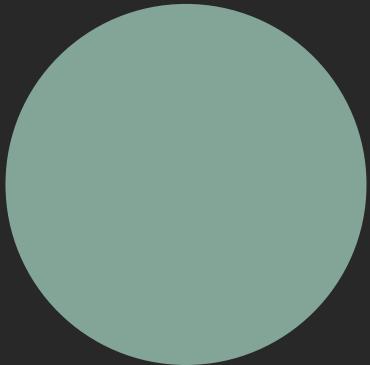
- The lecture notes up until the section “Global development data”.
- [Section 1.4 - 1.8 in the book Data Visualization: A practical introduction by Kieran Healy.](#)

After class:

- The remaining lecture notes.

How many times bigger is the big circle?

Enter a number in the iclicker



How many times bigger is the big bar?

Enter a number in the iclicker

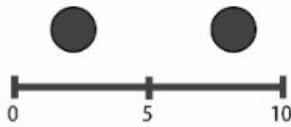




7x

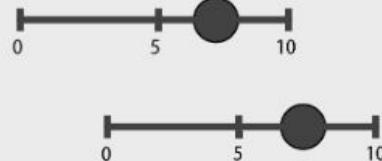
7x

1



Position on
a common scale

2



Position on
unaligned
scales

3



Length

4



Tilt or Angle

5



Area (2D as size)

6



Depth
(3D as position)

7



Color luminance
or brightness

8



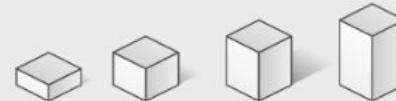
Color saturation
or intensity

9



Curvature

10



Volume
(3D as size)

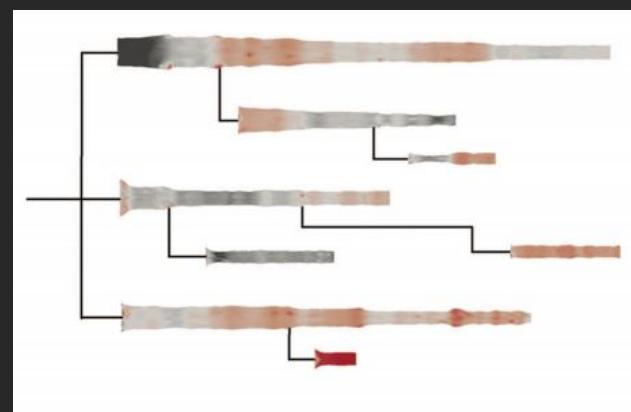
40%



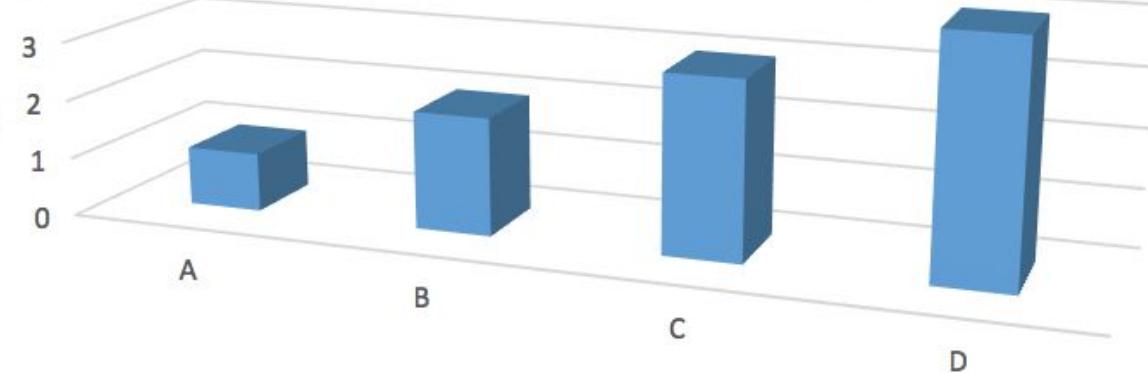
70%



90%



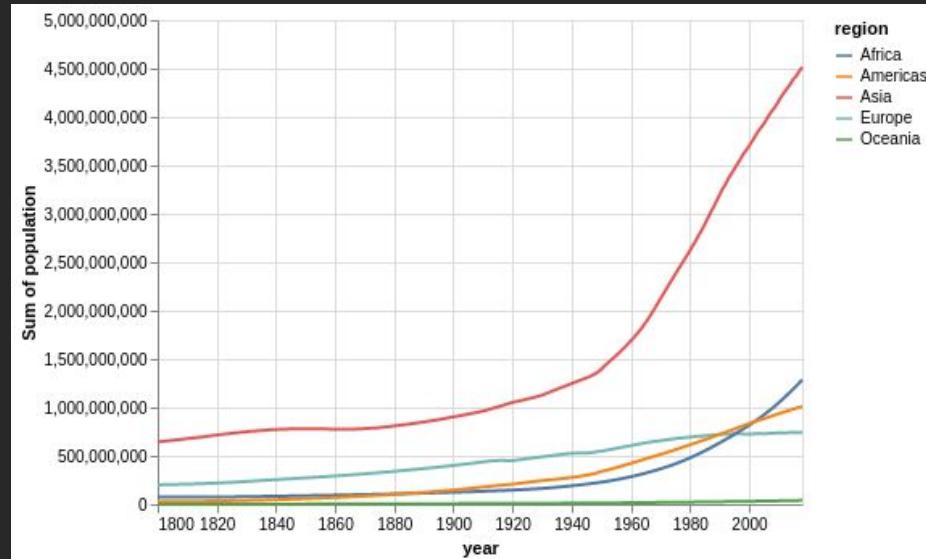
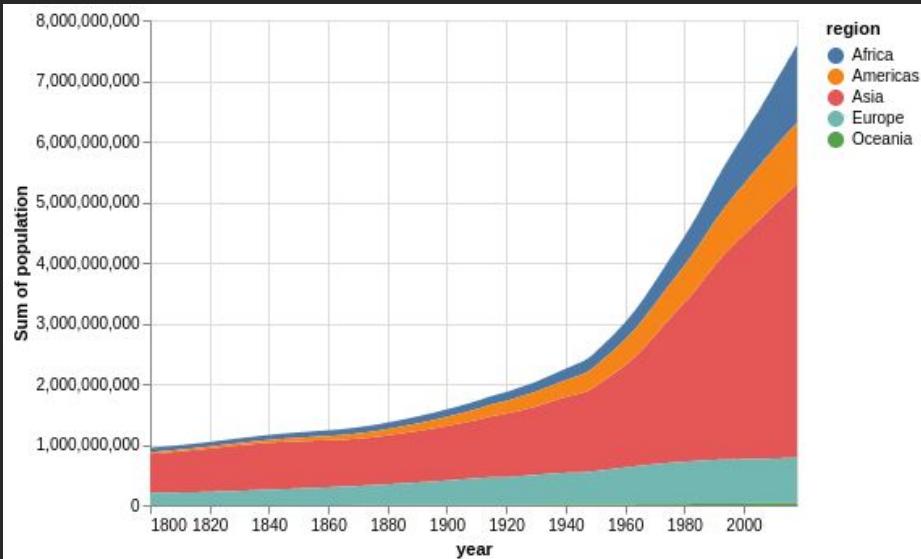
3D Column Charts in Excel are Awesome



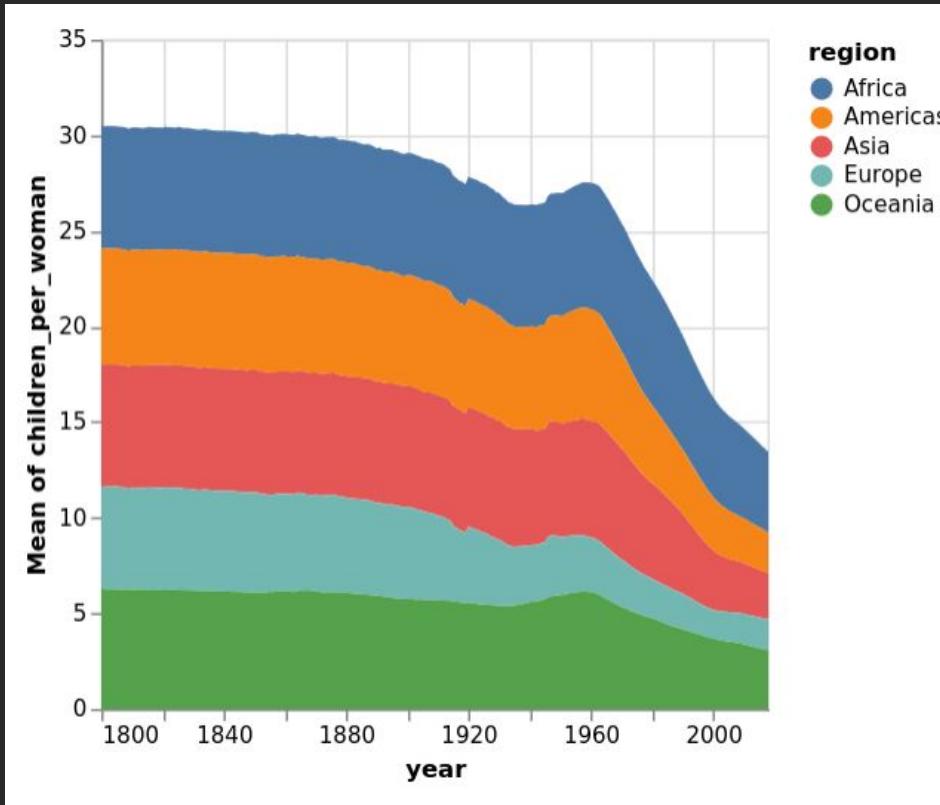
Which chart makes it easier to answer these questions?

1. How many people live in the world?
2. How many people live in the Americas?
3. Which region has the second highest population in 2015?

Enter a text response, e.g. "1-line, 2-line, 3-area"



What's the average number of children per woman in the world?



Which of the following data sets do you think gave rise to the barplot?

