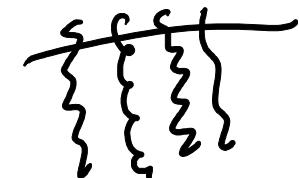


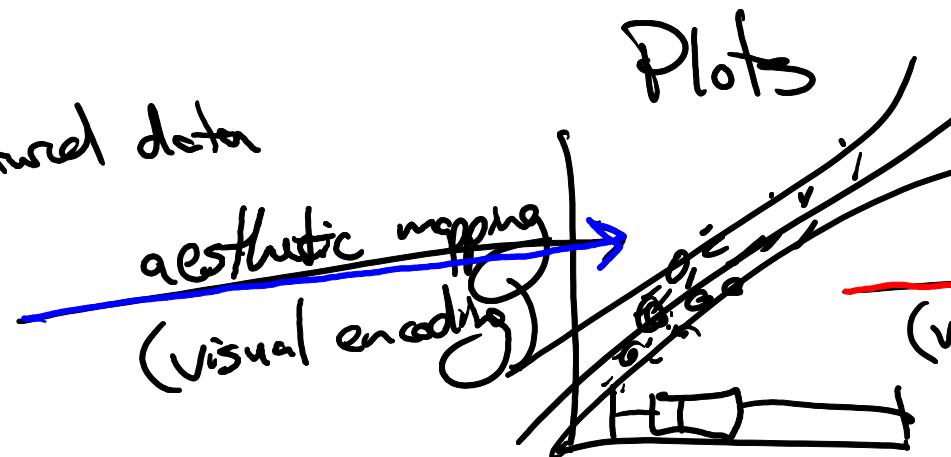
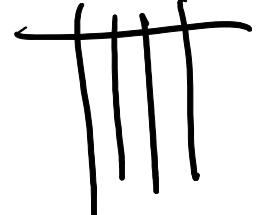
# Big Picture for DataViz

I know/think/understand something new about the data.

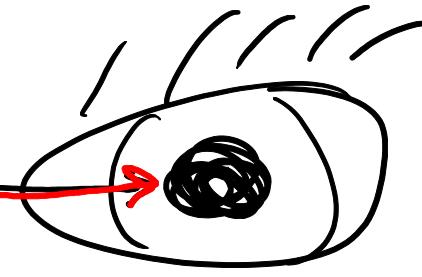
messy/raw data



clean/structured data



reading  
(visual decoding)



Statistical models/summaries/aggregations

$$\hat{Y} = \hat{\beta}_0 + \hat{\beta}_1 X$$

min  
Q<sub>1</sub>  
median  
Q<sub>3</sub>  
max

A		10
B		15
C		25

Goal of dataviz:

build plots that are  
accurate, readable  
and informative

# Questions to ask (and answer) when building data visualizations

## Encoding Step:

- What stat. methods help tell your story?
- What plot shows the right comparisons, trend?
- What variable types am I working with?
- What is the data context? and what is important?

## Decoding Step:

- Who is the audience?

↳ what do they know / think / understand?  
↳ what should they know / think / understand?

- What is the medium for communication?

