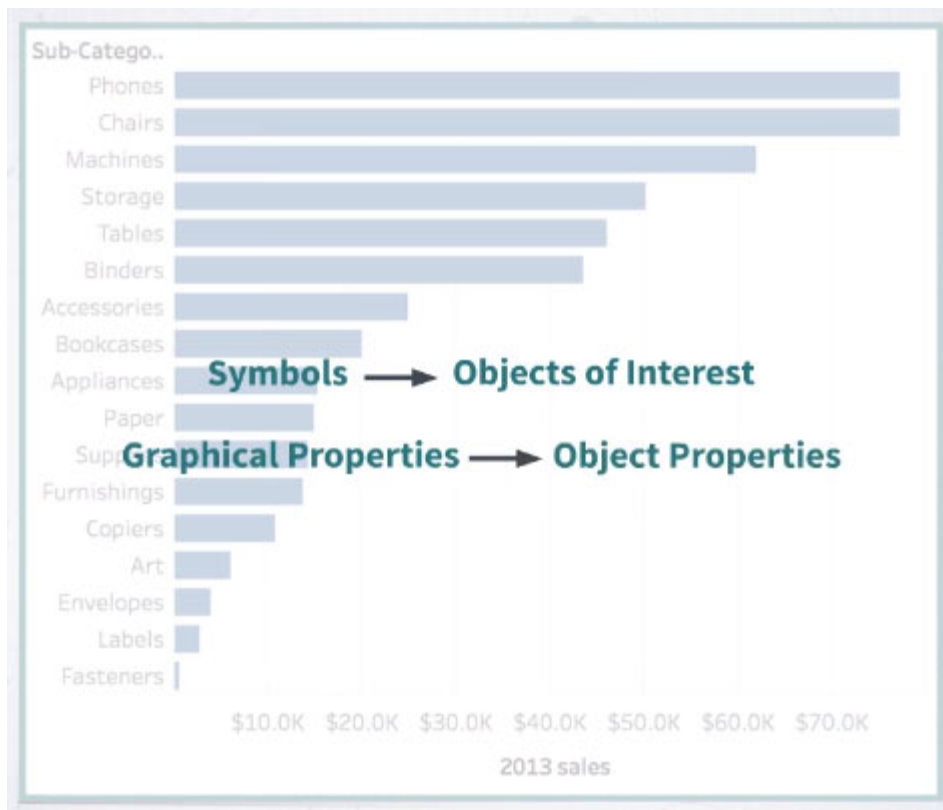


# Mapping between data properties

Friday, November 9, 2018 16:04



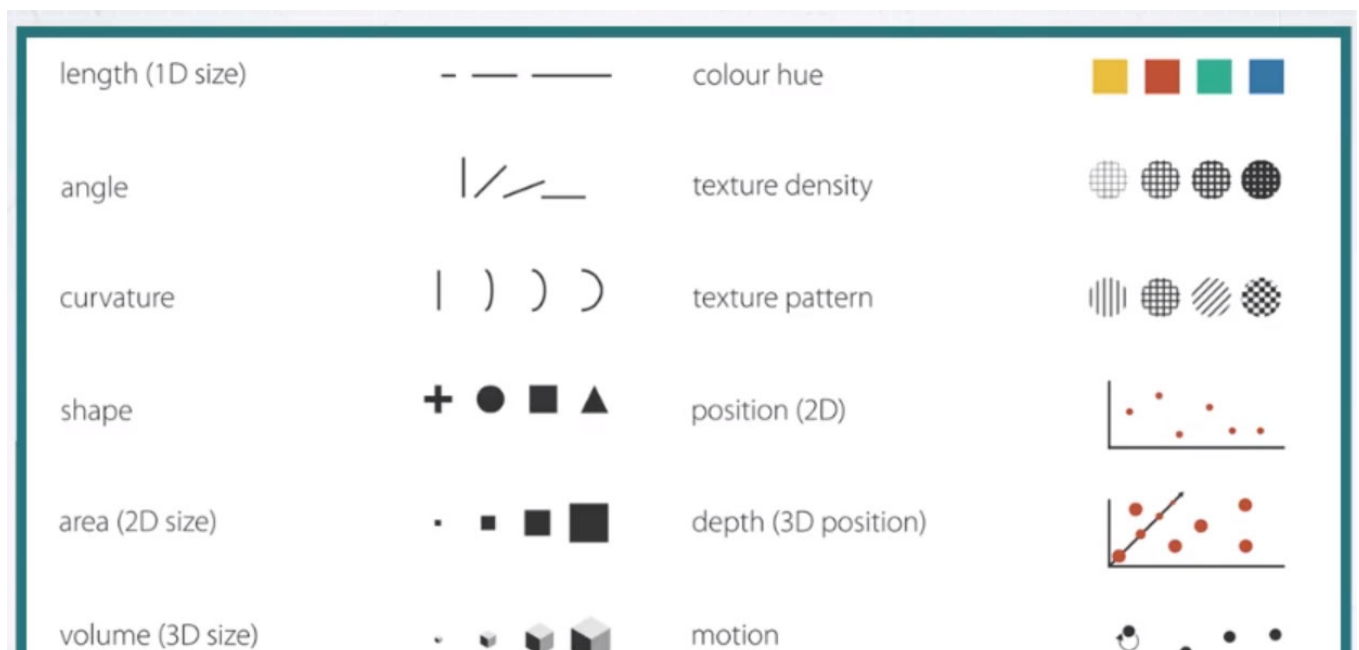
Symbols → Objects of interest → Categories

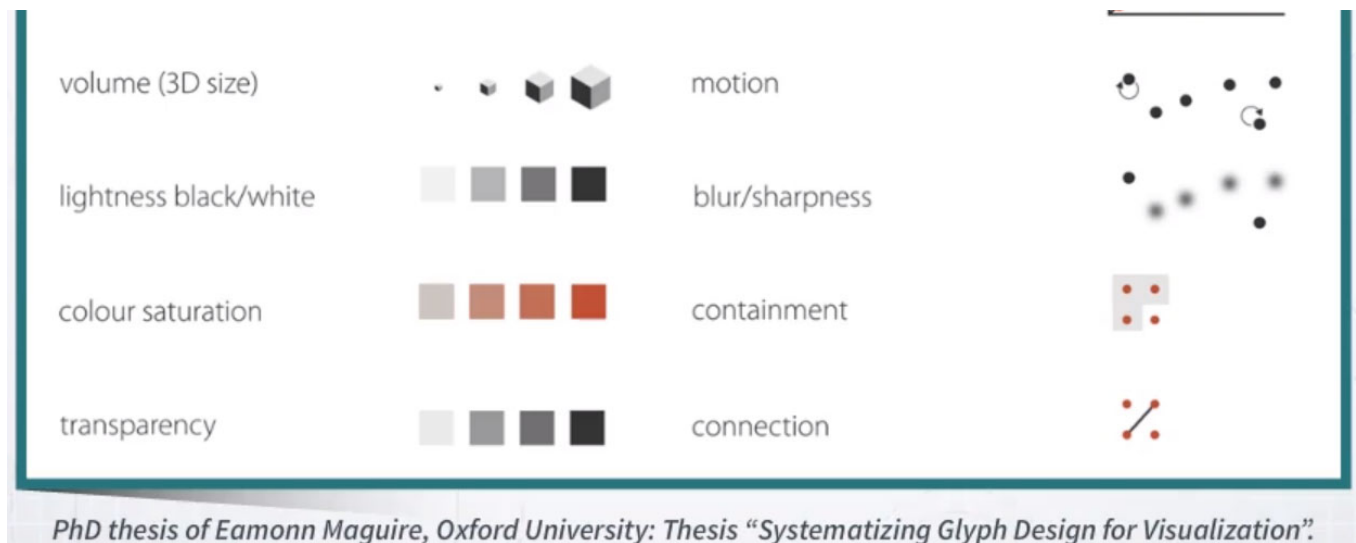
Graphical properties (length) → Object properties → Sales

Channels:

Y-position: categories

Length: sales





## Channel effectiveness and expressiveness

### Types of information

- Nominal → categories (comparing)
- Ordinal → rank order, survey scales (order in categories)
- Interval → quantities, no zero value → percent, temperature
- Ratio → quantities, there is a zero value (weight, height)

### Relevant types of attributes

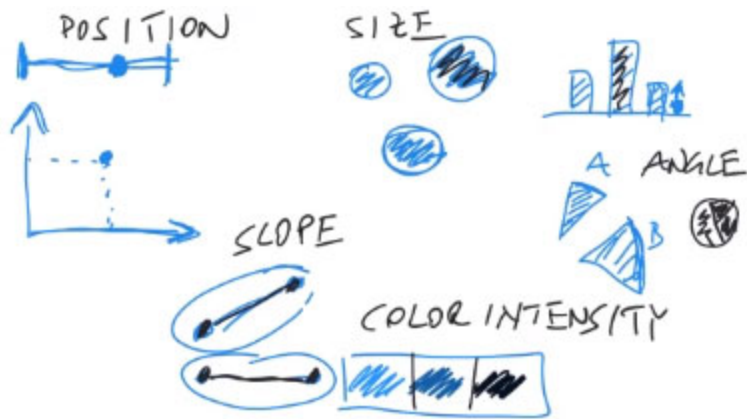
- Quantitative
- Sequential
- Categorical

### Expressiveness → **what** can be expressed

- Type of information that can (or cannot) be expressed with a channel
- More precisely, whether a channel can express information about quantities, sequences or categories
- At the same time, a given channel *doesn't express information not intended to be expressed*.

### Effectiveness → **how well** it can be expressed

### Quantity



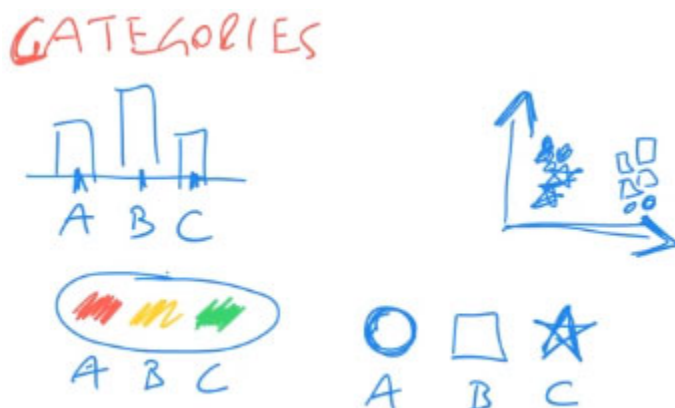
Position is the best channel

### Order



- Position is the best channel to represent order.
- Size
- Texture density
- Color intensity

### Categories



- Position (best channel)

- Color hue
- Shape