

KEATON WILSON

SOME DATA VIZ STRUCTURE TO
THINK ABOUT

MEMORY AND VISION WORKING
TOGETHER

Preattentive attributes:
Immediately eye-catching
Less than 10 milliseconds

Form

Orientation



Line Length



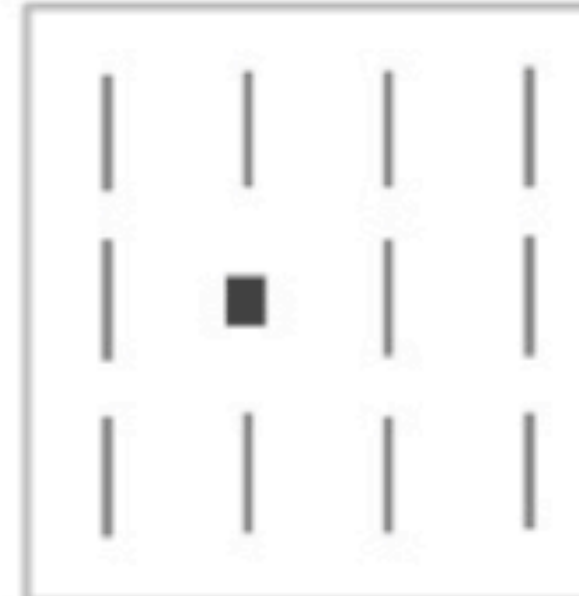
Line Width



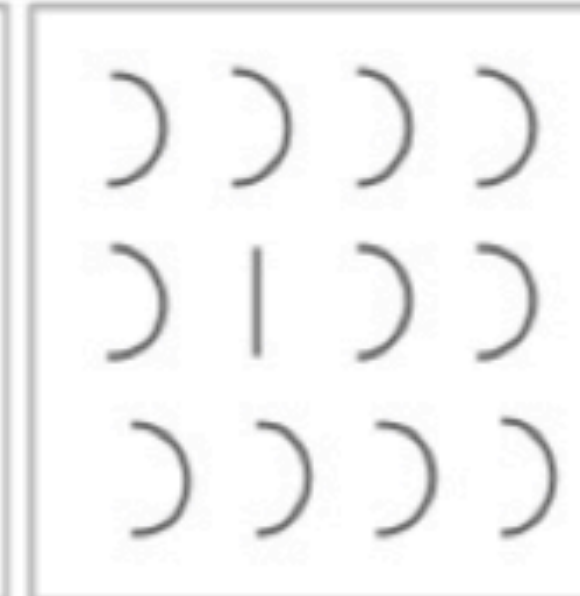
Size



Shape



Curvature



Added Marks

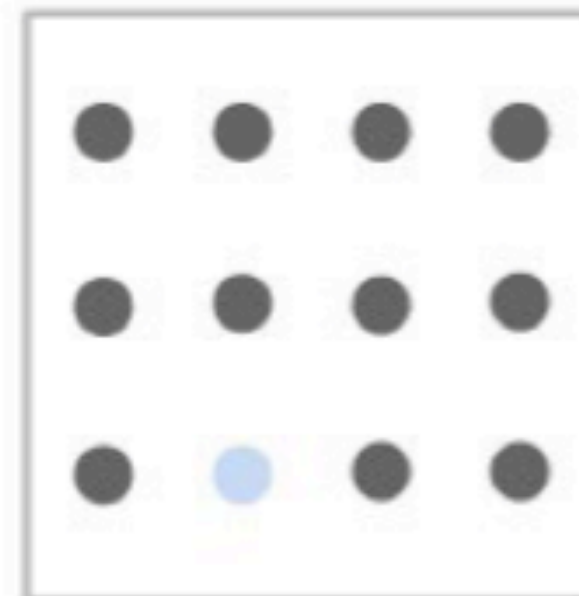


Enclosure

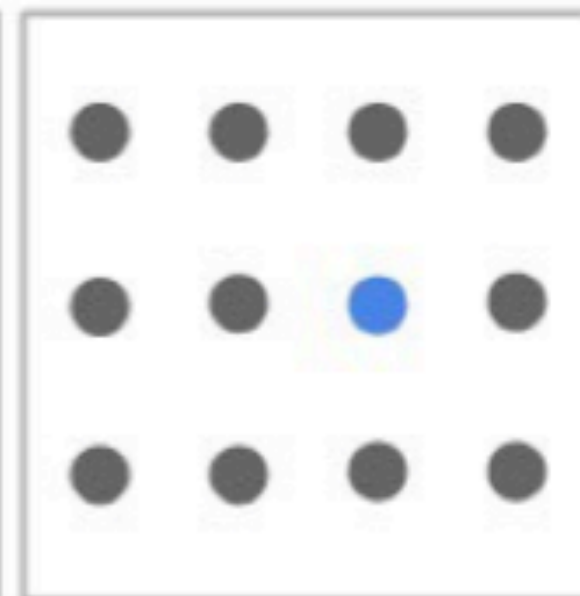


Color

Intensity

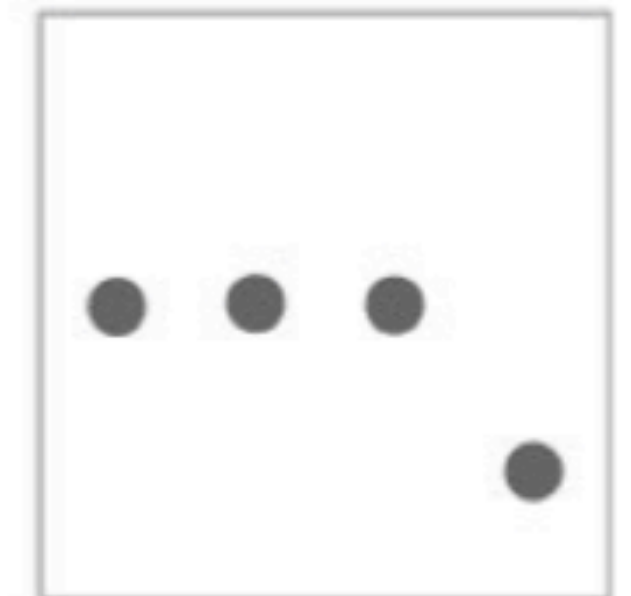


Hue

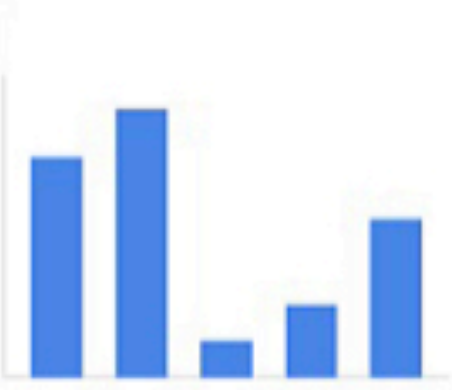
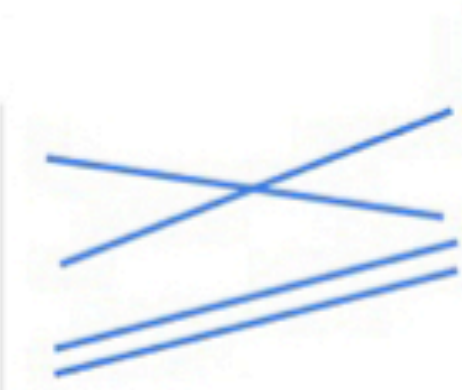







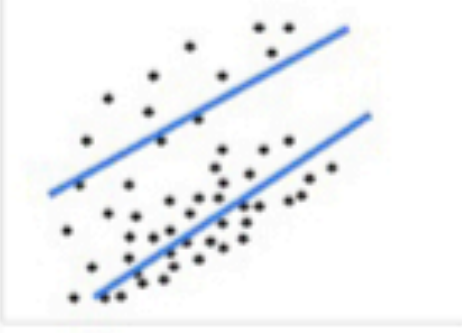




Spatial Position

2-D Position



Analytical patterns are built
from preattentive
attributes

| Pattern | Example | Pattern | Example |
|---|---|-----------------------------------|---|
| High, low and in between |  | Non-intersecting and intersecting |  |
| Going up, going down and remaining flat |  | Symmetrical and skewed |  |
| Steep and gradual |  | Wide and narrow |  |
| Steady and fluctuating |  | Clusters and gaps |  |
| Random and repeating |  | Tightly and loosely distributed |  |
| Straight and curved |  | Normal and abnormal |  |

Edward Tufte - The Visual Display of Quantitative Information

Data ink ratio = data ink/total ink used in the graphic

MAXIMIZE THIS RATIO!

DITCH CHARTJUNK

- Vibrating chart junk - i.e. crosshatching or patterns that distract
- Grids
- Color schemes or patterns that are introduced for artistic appeal rather than information content
- Move toward horizontal graphics about 50 percent wider than tall (3:2)

FIGURE CRITIQUE LINK:
[BIT.LY/2MTDHQO](https://bit.ly/2MTDHQO)