

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



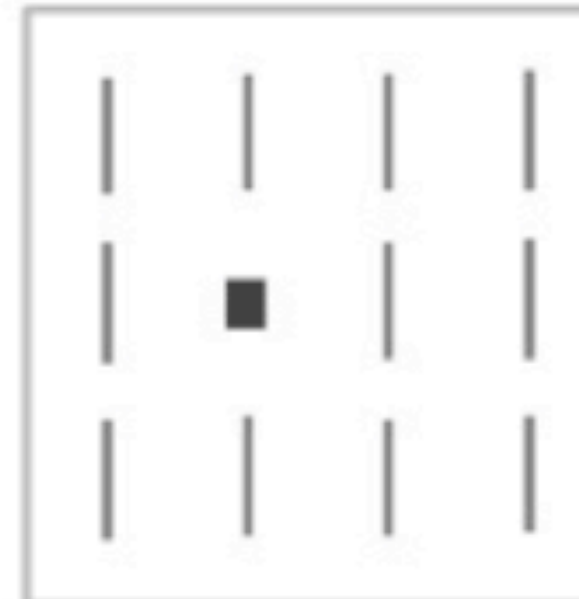
Line Width



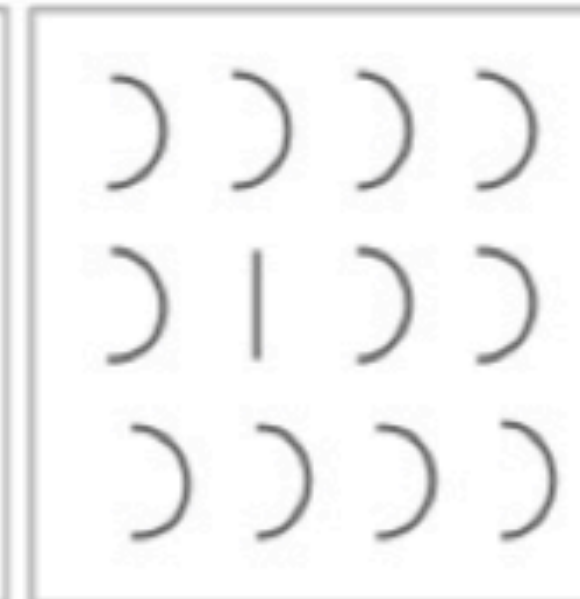
Size



Shape



Curvature



Added Marks

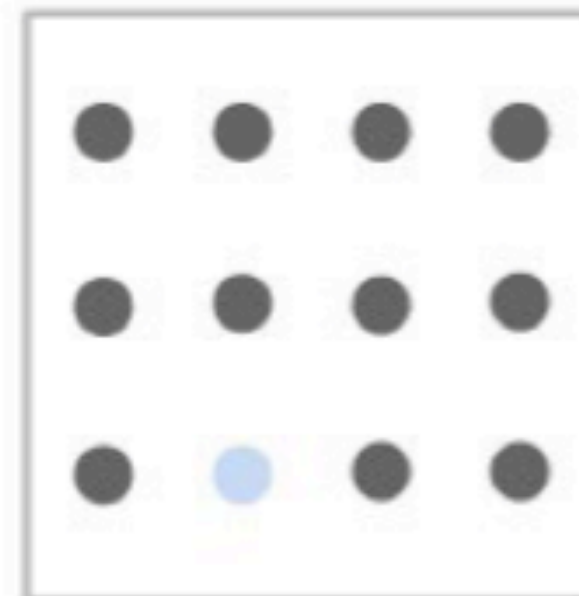


Enclosure

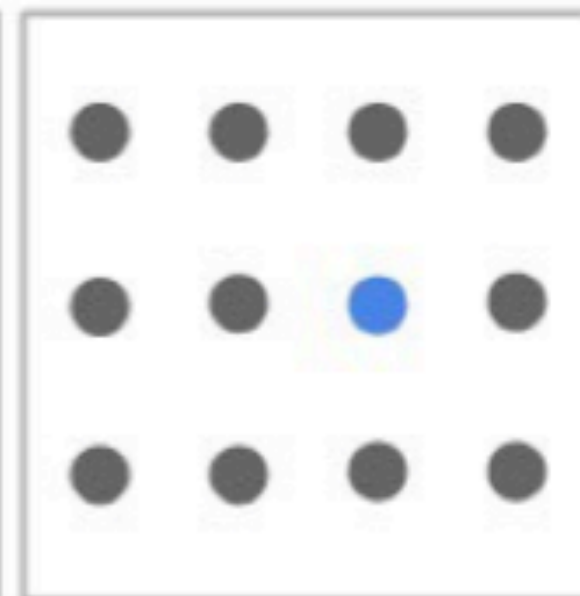


Color

Intensity

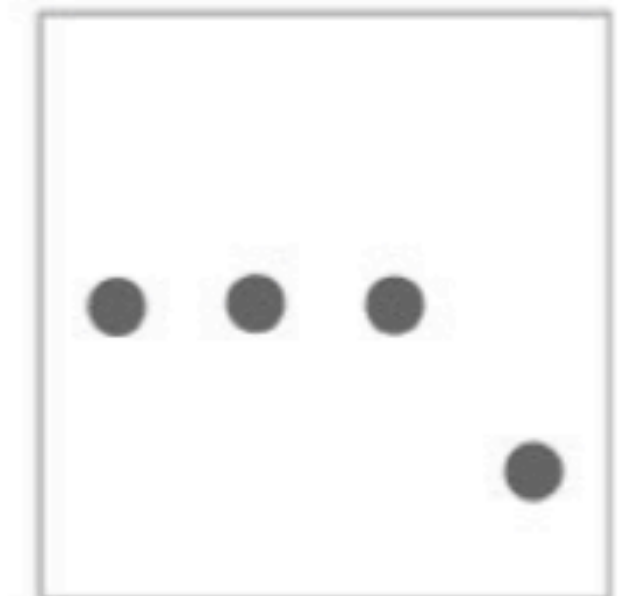


Hue

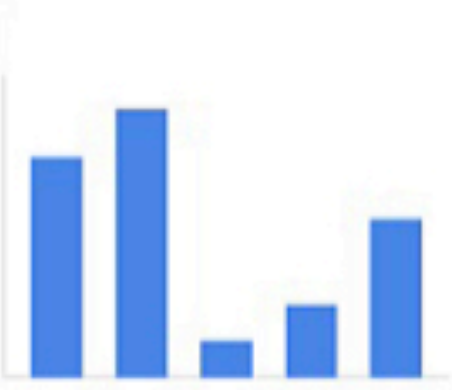
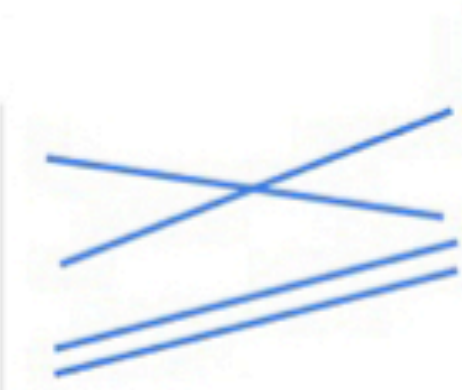







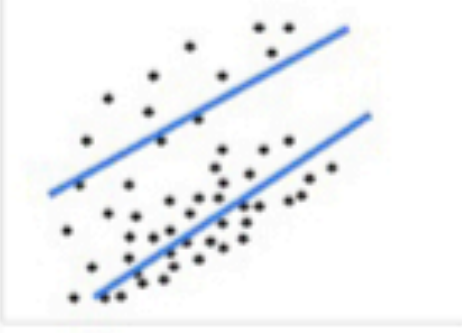




Spatial Position

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:

- 1) each group will be passed a sample figure
- 2) as a group, attempt to interpret the figure
- 3) generate a list of problems
- 4) as a group, design a 'better' figure
- 5) be ready to report out