# Here are some resources to help you
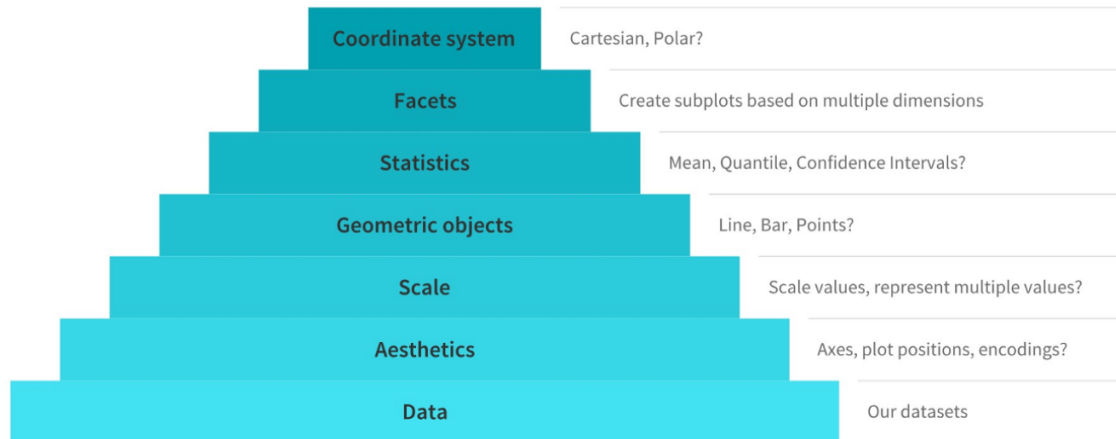
Grammar of Graphics to understand the dimensions of visuals.

## Major Components of the Grammar of Graphics

| | |
|---|---|
| Coordinate system | Cartesian, Polar? |
| Facets | Create subplots based on multiple dimensions |
| Statistics | Mean, Quantile, Confidence Intervals? |
| Geometric objects | Line, Bar, Points? |
| Scale | Scale values, represent multiple values? |
| Aesthetics | Axes, plot positions, encodings? |
| Data | Our datasets |

# CHART SUGGESTIONS - A THOUGHT-STARTER

| Variable Width Column Chart | Table or Table with Embedded Charts | Bar Chart | Column Chart | Circular Area Chart | Line Chart | Column Chart | Line Chart |
|---|---|---|---|---|---|---|---|
| TWO VARIABLES PER ITEM | MANY CATEGORIES | MANY ITEMS | FEW ITEMS | CYCLICAL DATA | NON-CYCLICAL DATA | SINGLE OR FEW CATEGORIES | MANY CATEGORIES |

FEW CATEGORIES

MANY PERIODS · FEW PERIODS

ONE VARIABLE PER ITEM

AMONG ITEMS · OVER TIME

**COMPARISON**

**RELATIONSHIP**

| Scatter Chart | TWO VARIABLES |
|---|---|
| Bubble Chart | THREE VARIABLES |

### WHAT WOULD YOU LIKE TO SHOW?

**DISTRIBUTION**

| | | |
|---|---|---|
| FEW DATA POINTS | | Column Histogram |
| | SINGLE VARIABLE | |
| MANY DATA POINTS | | Line Histogram |
| TWO VARIABLES | | Scatter Chart |
| THREE VARIABLES | | 3D Area Chart |

**COMPOSITION**

CHANGING OVER TIME · STATIC

FEW PERIODS · MANY PERIODS

| ONLY RELATIVE DIFFERENCES MATTER | RELATIVE AND ABSOLUTE DIFFERENCES MATTER | ONLY RELATIVE DIFFERENCES MATTER | RELATIVE AND ABSOLUTE DIFFERENCES MATTER | SIMPLE SHARE OF TOTAL | ACCUMULATION OR SUBSTRACTION TO TOTAL | COMPONENTS OF COMPONENTS |
|---|---|---|---|---|---|---|
| Stacked 100% Column Chart | Stacked Column Chart | Stacked 100% Area Chart | Stacked Area Chart | Pie Chart | Waterfall Chart | Stacked 100% Column Chart with Subcomponents |

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