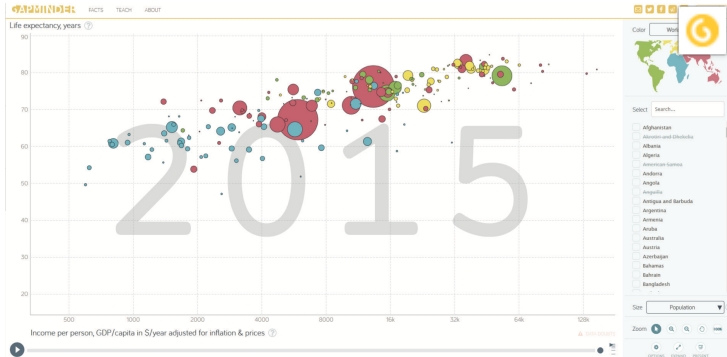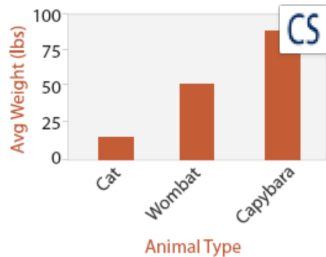# Construction Kit

Reverse Engineering with the whole group

Scatterplot

WHAT: two quantitative value for x + y axis (bi-variate), also suitable for multivariate data including other visual variables

WHY: Find trends and outliers, see distributions and correlations, locate clusters

Point

Rectangular

2D-Plot

WHAT: univariate data structure: one quantitative value and one categorical attribute as key attribute
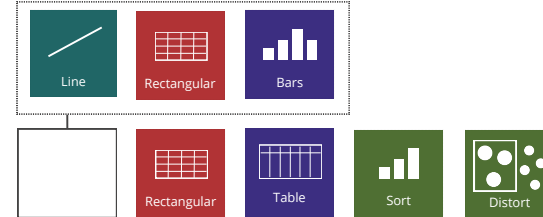
WHY: compare and identify values

Line

Rectangular

Bars

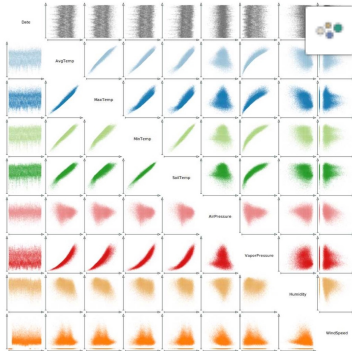## Table-based Visualizations

WHAT: multivariate data with ordered attributes

WHY: detect correlations, outliers and clusters

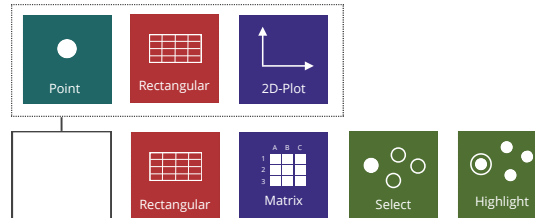Line · Rectangular · Bars
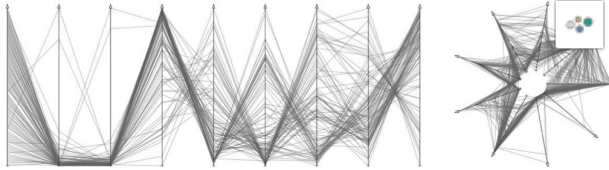
Rectangular · Table · Sort · Distort

Combined bi-variate Visualizations

WHAT: multivariate data with quantitative attributes

WHY: detect correlations, outliers and clusters

Point · Rectangular · 2D-Plot

Rectangular · Matrix · Select · Highlight

Polyline-based Visualizations
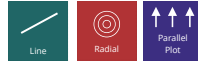

WHAT: multivariate data with quantitative attributes
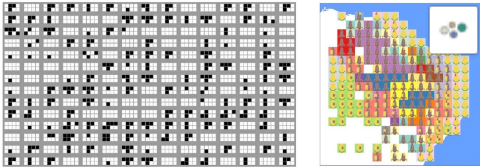
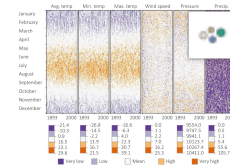**WHY:** detect correlations, outliers and clusters

Parallele Koordinaten	Line	Rectangular	Parallel Plot
Radar-Chart	Line	Radial	Parallel Plot
		Adjust	Filter

Glyph-based Visualizations

| Auto-glyphs | Glyph | Rectangular | Tiles |
| Corn-glyphs | Glyph | Rectangular | Map |

WHAT: multivariate data with different attributes
WHY: Overview of distribution of properties, comparison

Pixel-based Visualizations

| Point | Rectangular | Tiles | | Rectangular | List |

WHAT: multivariate data with ordered attributes
WHY: Overview of distributions in large data sets
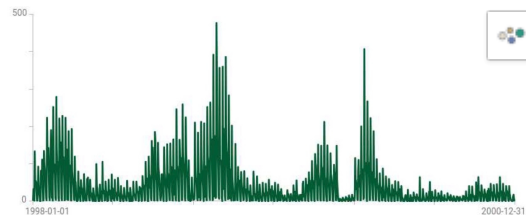
Nested Visualizations

Mosaic-Plot

| Area | Rectangular | Nested |
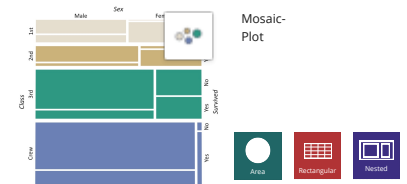
WHAT: multivariate data with categorical attributes and quantitative measures
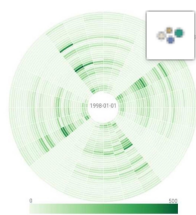
WHY: Overview of distributions

Line-Plot

500

1998-01-01   2000-12-31

| Line |
| Rectangular |
| 2D-Plot |

Spiral Plot

1998-01-01

0   500

| Area |
| Radial |
| Tiles |

Theme River

Nationalization of property begins
Castro bans religious TV and radio
Castro confiscates American refineries
US imposes embargo on Cuba
Cuba and Soviet relations resume
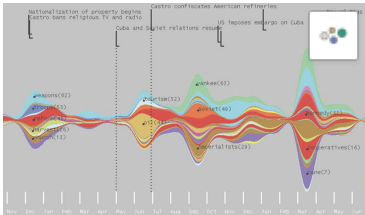
| Flow |
| Rectangular |
| 2D-Plot |

Colored Calendar Vis

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015												
2014												
2013												
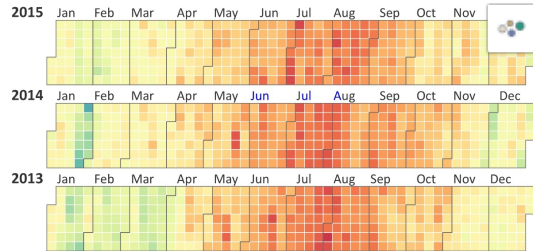
| Area |
| Rectangular |
| Tiles |

Time Wheel
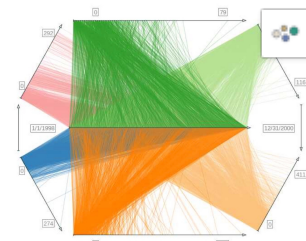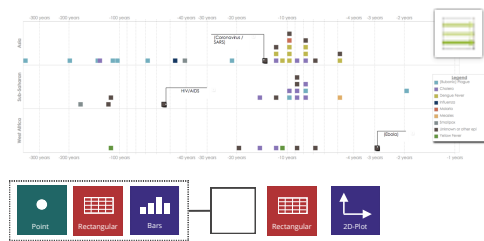
| Line |
| Radial |
| Parallel Plot |

| Point | Rectangular | Bars | | Rectangular | 2D-Plot |

Point	Line	Area	Volume	ABC Text	Image	Icon	Glyph	Flow

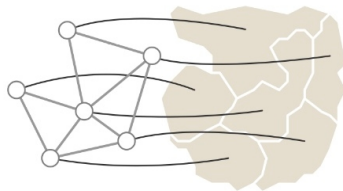| Map				...

Map Projections
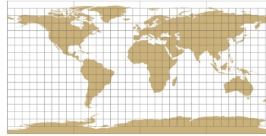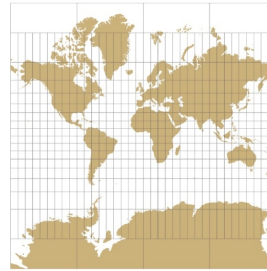
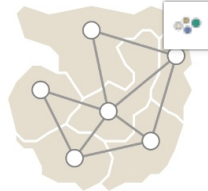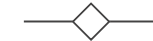**Equirectangular**   **Mercator**   **Natural Earth**
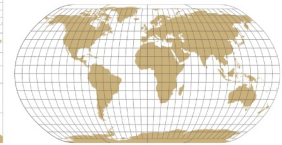
Visualisierung

Indirect Visualization

Direct Visualization

Superimposed

Juxtaposed

Network

Node-Link

Image · Radial · Node-Link

Matrix

Glyph · Rectangular · Matrix
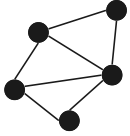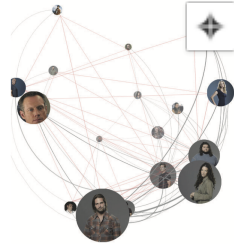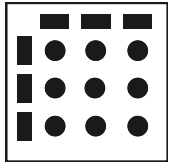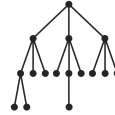
Hierarchy
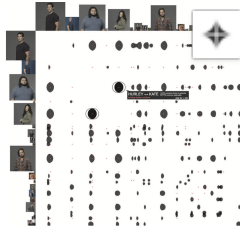
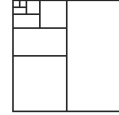Node-Link · Nested · Partitioned · Indented
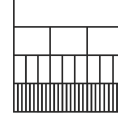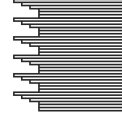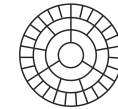
Rectangular

Triangular

Node-Link

Treemap

Icicle Tree

Indented Outline

Radial

Radial Node-Link

Nested Circles

Sunburst