



**DataTypes&DataTypes**

Munzner, T. (2014). Visualization analysis and design. CRC press.

## Tables

Items

Attributes

## Networks & Trees

Items (nodes)

Links

Attributes

## Fields

Grids

Positions

Attributes

## Geometry

Items

Positions

## Clusters, Sets, Lists

Items

# Encoding Principles

## → Position

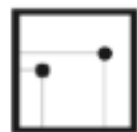
→ Horizontal



→ Vertical



→ Both



## → Color



## → Shape



## → Tilt



## → Size

→ Length



→ Area



→ Volume



## Marks as Items/Nodes

➔ Points



➔ Lines



➔ Areas



## Marks as Links

➔ Containment



➔ Connection

