Quadrigram | Chart Selection Diagram
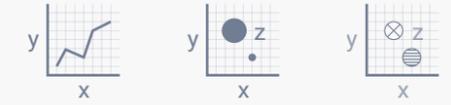
Basic Information

Continuous Variable
A continuous variable is one in which data can take on any value within a specified range (which may be infinite). Eg. 1'4 , 983

Discrete Variable
A discrete variable is one in which the data can only take on certain values, for example integers. Eg. Apple, New York

Discrete Temporal Variable
A discrete temporal variable is one in which the data can only take on certain temporal values. Eg. Monday, Januaty 1st 1988

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1 VARIABLE

CONTINUOUS

Histogram
Graphical representation of the distribution of numerical data. It is an estimate of the probability distribution of a continuous variable.

2 VARIABLE

X DISCRETE, Y CONTINUOUS

Bar Chart
Group data with rectangular bars with lengths proportional to the values that they represent using a bar chart.

≥1 X CONTINUOUS, Y DISCRETE

Matrix
Graphical tool that shows the correlation between variables in form of table. Relations are given at each intersection of rows and columns.

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2 VARIABLE

X DISCRETE TEMPORAL, Y CONTINUOUS

Area Chart
Stack multiple time series to represent accumulated totals over time using percentages.

Comparative Proportions
Shows evolution of variables over time, adjusting its shapes to the ranking of the variables at any given point in time.

Line Chart
Display a selectable list of items. Useful to make interactive filters.

X CONTINUOUS, Y CONTINUOUS

Scatter Plot
Compare up to two* (X-axis, Y-axis) numeric variables using a scatter plot.

*This is the standard scatter plot use case.

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3 VARIABLE

X CONTINUOUS, Y CONTINUOUS, Z CONTINUOUS

Scatter Plot
Compare up to three (X-axis, Y-axis and point radius) numeric variables using a scatter plot.

X CONTINUOUS, Y CONTINUOUS, Z DISCRETE

Scatter Plot
Compare up to three (X-axis, Y-axis and point radius) numeric variables using a scatter plot.

X DISCRETE, Y CONTINUOUS, Z DISCRETE

Grouped Bar Chart
Groups series of data as rectangular bars next to each other with a bar chart.

Stacked Bar Chart
Stack series of data on top of each other with a stacked bar chart.

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3 VARIABLE

X DISCRETE, Y DISCRETE, Z DISCRETE

Line + Bar Chart
Dual axes chart. It contains two Y axes with different scales and visual geometries (line and bar)

4 VARIABLE

X CONTINUOUS, Y CONTINUOUS, Z1 CONTINUOUS, Z2 DISCRETE

Scatter Plot
Compare up to four (X-axis, Y-axis , Z1-axis & Z2-axis) numeric variables using a scatter plot.

POLAR COORDINATES

≥4 CONTINUOUS VARIABLE

Radial Chart
Display multivariate data in the form of a two-dimensional chart.

WITHOUT COORDINATES

≥2 CONTINUOUS VARIABLE

Parallel Coordinates
Multidimensional plot. Each coordinate (Y axes) represents a continuous variable and each line represents an observation of the dataset.

WITHOUT COORDINATES

1 CONTINUOUS, 1 DISCRETE

Donut
A simple pie chart, but with a hole inside. Hole radius is customizable.

Treemap
Display a data set as a group of rectangles that fill the plane.

Pictogram
Uses icons to give a more engaging overall view of small sets of discrete data.

Word Cloud
Visual reprlesentation of text data. Uses tags which are words and their size is proportional to their number of occurrences in the text.

WITHOUT COORDINATES

1 CONTINUOUS, 1 DISCRETE

Bubble Chart
Encodes data in the area of circles.

NETWORKS

Forces Network
Plots a network as a collection of nodes and relations using a force-directed network layout.

Radial Network
Plots a network as a collection of nodes and relations using a circular network layout.

MAPS

Heat Map
Plots geographical coordinates overlayed with a color spectrum to communicate density, based on a continuous variable linked to the coordinates.

Choropleth
A map in which areas are shaded or patterned in proportion to the measurement of the variable displayed on the map (eg: population density)

Points on Map
Draw geolocalized data points over a dynamic map.