

FUNDAMENTAL PRINCIPLES FOR DATA VISUALIZATION DESIGN

Data visualization serves two purposes; to inform and to visually entice.

Viewing dashboards through an artistic lens opens a whole world of design theory that you can apply to create richer, more engaging data creations. The following principles have evolved over centuries of artistic exploration and study, and can be put into practice in your data visualizations for maximum impact and adoption.



Symmetrical



Asymmetrical



Radial

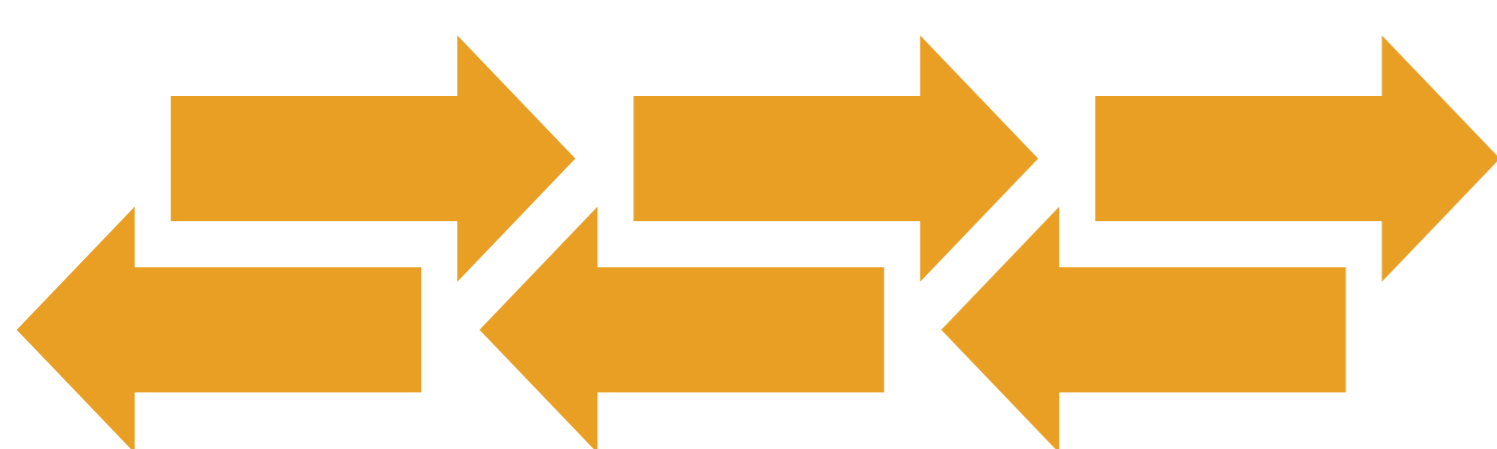
BALANCE

The distribution of visual weight within a frame. Components like objects, colors, texture, and negative space all carry weight.



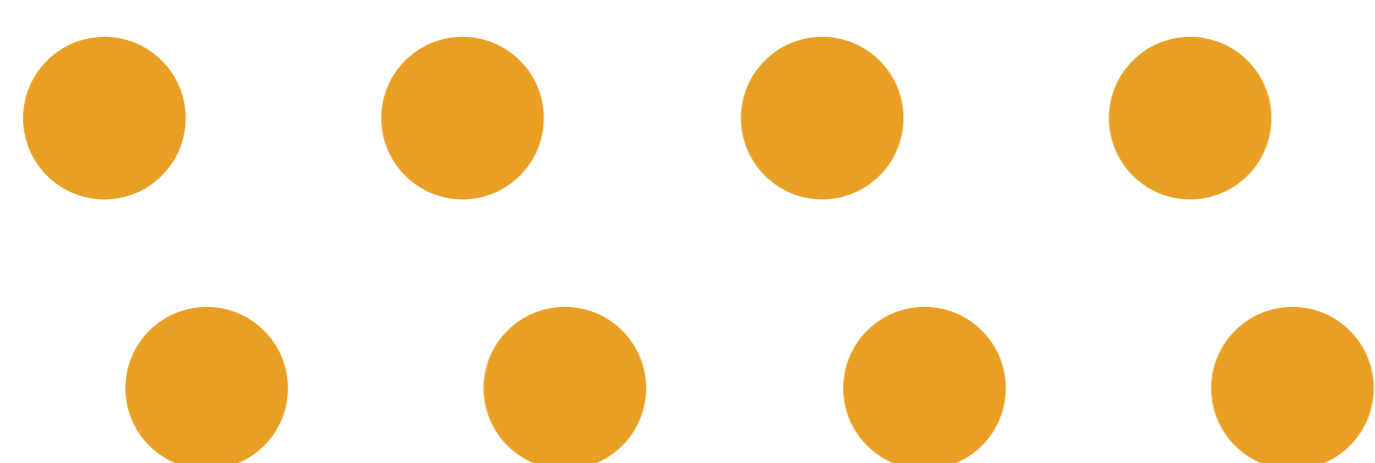
EMPHASIS

Highlighting an element to indicate its importance to the viewer. Contrast (of color, texture, size, or shape) is a simple way to draw attention to the object of interest.



MOVEMENT

Pulling the viewer's eyes across the page with graphic elements that flow. Movement can be directed along lines, edges, colors, or shapes.



PATTERN

Consistent repetition of objects or elements within a design that creates a larger overall design. Patterns establish a visual experience that is both active and pleasingly predictable.



PROPORTION

The relative size and scale of elements in a design. Larger elements are perceived as more prominent, while smaller elements recede into the background. Proportion must be determined in the context of both the parts of the design and the whole completed tableau.



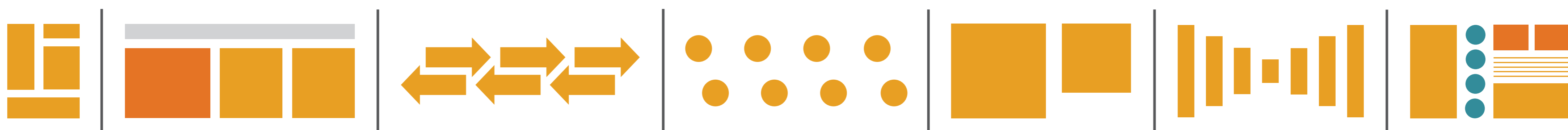
RHYTHM

The repetition of visual elements that creates a feeling of organized movement. Rhythm can feel smooth and consistent or discordant and exciting, depending on the characteristics of the arrangement.



VARIETY

Holding the viewer's attention by using several different design elements. Variety can also be used to guide the eye through and around the work of art (or dashboard).



UNITY

Each part of your design is congruent. While your dashboard may contain many different elements, they feel connected and part of the same visual theme.

