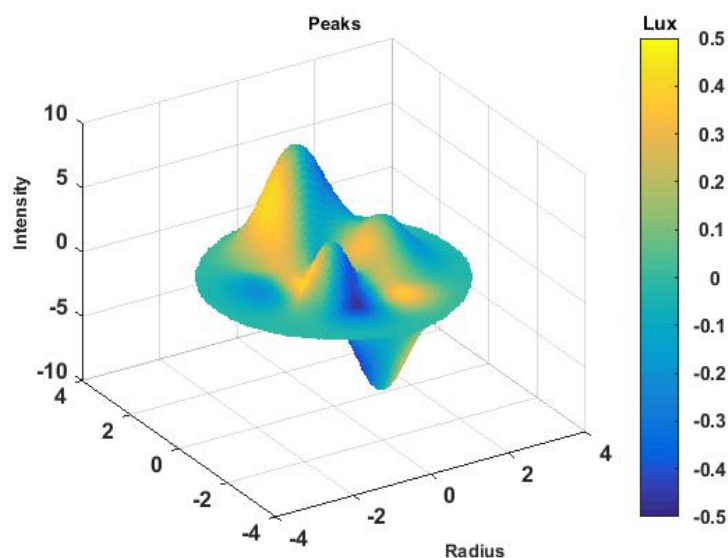


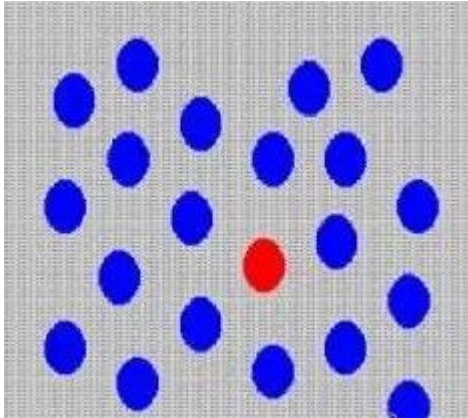
I think that everyone knows about the fairy tale --- Cinderella. Cinderella means one whose attributes were unrecognized, or one who unexpectedly achieves recognition or success after a period of obscurity and neglect. What I want to do here is let Cinderella to represent color. Color is the most serious problem of abusing and neglecting in data, even we aware of this, it is still hard for us to make a choice. The most common way that we use color in visualization is for a great view in visualization. However, I want to show that color is not only for the beauty but also for obviousness in visualization.

Research Question: What role of color in the visualizations?

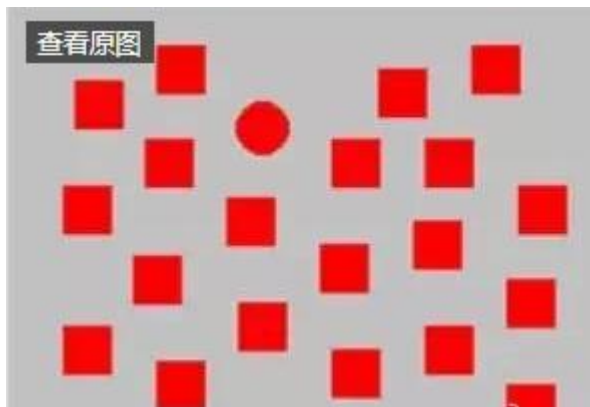
Color has two advantages, the first one is that the color is multidimensional. We can distinguish color hue, lightness, and purity at the same time, which means that it can represent our data into different levels. Here is a visualization I found for multidimensional.



Second one I think is the best advantage for color is the obviousness. It is easy for people to distinguish different color in visualizations. For example, here is a visualization for man and woman in a company.

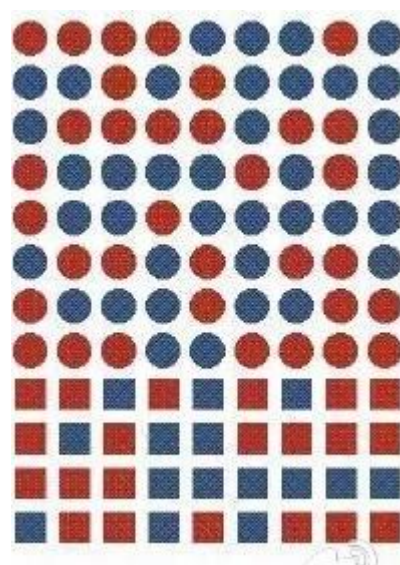
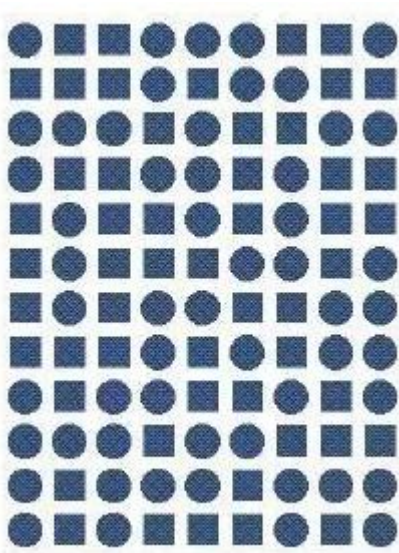


It is easy to distinguish the red circle in this visualization. Here is another visualization to represent women and men in a different shape.



It is not as easy to distinguish as color.

Perhaps the above two visualizations are not direct enough to express the advantages of color. Let us see this one.



It is obviously that colors are more easily processed by pre-processing than other visual features such as shapes. Also it represent that color is the one of the important features in visualization.