Visualizations are an effective way to communicate a story about a data or an analysis. This essay looks at how visualization can help with analysis and how it can also have the opposite effect of creating deception. Five principles are discussed in this essay which aim to provide set of guidelines in creating beautiful & self-explanatory visualizations.

The first principle suggests, the purpose of the visuals should be self-explanatory. When someone is seeing the graph or chart, they should get the idea in the first glance what a graph/chart is trying to represent. To do that, an example is given which there is same data but three different visuals which conveys different analysis. This shows importance of choosing your visual wisely based on type of data given. The second principle suggests that the visuals should fit their purpose. For instance, line graphs are used to show analysis between numerical and categorical data instead of only two categorical data. It also suggests that there should be consistency between different figures as possible.

Principle three suggests keeping things simple. Do not create complex visualization for simple data. Creating things more complex makes it hard for users to find meaning out of visuals. Extending that principle four says each graph should stand on its own i.e., each graph should contain all the information related to it. For instance, with graph, there should be labels of axis explaining what do each axis represent. If the data is less, then it should contain data labels in charts. Do avoid adding excess information which does not serve any purpose in analysis. And last principle five suggests, trying to avoid deception. A user can create multiple type of visualizations using same data. But one must avoid that and keep things simple.

Overall, following above mentioned principles should help one to create simple yet self-explanatory and meaningful visualizations.