UM02 – class

Why is it helpful to see things?

* Biological process / functions
* The writing / visualizing dilemma

One of the main theory is that writing was invented to record speech. But actually it is most likely that it was invented for direct use, daily life useful thing.

* The beautiful / useful dilemma

Journalists think that visualization is more to make something beautiful. (=> If you don’t make it beautiful, people will not look at it. So let’s make it beautiful so that people could learn something)

For scientist or analytics, visualization is a useful tool, it is to transmit information. (But if you make it beautiful, the knowledge could be better, the visualization usually becomes not so accurate)

* Make it useful and if you can make it beautiful it is better but it is not mandatory.

Some useful website focusing on visualization:

* Flowing data
* Information visualization
* Information is beautiful
* datavisualization.ch
* datablog guardians
* eagereyes
* chartjunk => often use in exam

Bruno Latour: one of the top French sociologist.

Paper: Le “pédofil” de Boa Vista – montage photo-philosophique

1969 – Jacques Bertin : Graphical Semiology

What are the components of « La répartition de la population en Haute-Normadie en 1999 » map ?

* population urban unit (size)
* annual rate (gradient + color)
* geography (2D)

Same for « carte figurative » :

* Temperature 2DXY
* Geography XY
* Soldier Quantity size
* Back & forth color
* The number of visual variable should be at least be equal to the number of components.
* 3 or less visual variables can be read as one image. 4 or more cannot.
  + For a keynote or a quick presentation is better to do visualization with 3 or less components.
  + 4 or more, you will need to go to the legend and the image (back and forth).
* A short component is 4 or less divisions, a long one is more than 15

Principales causes de mortalité.

Components:

* Emphasize (color: 2)
* Age range (X: 6)
* Age total (X: 2)
* Rank (Y: 15)

The 8 things you can vary in a visualization:

* Two dimensions of plan
  + X
  + Y
* Shape
* Size
* Value
* Grain
* Color
* Orientation

Organizations level are the key:

* Qualitative
  + Selective (this is different from that)
  + Associative (this and that are alike)
* Ordered
* Quantitative