Lecture note on 2/4
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- Example: visualization: 35 years of American death
  Trends: see change overtime
  e.g: Hiv/aids- see rise and fall of the virus
  - How does it visualize data:
    Data came from dearth certificates & Union Correctional Institution, etc
    Choosing of color to show intensity and range of map
    Pros: dimension of time (see rise and fall)& color showing trend& detail information
    Cons: compare reasons are difficult(have to click on by one on the list)& have to guess and click each region to see info

- How to dram an image:

Modern graphics are composed of grids of pixels.
Drawing a line: set start point and end point for the line.
Not always one-to one representation of data and pixel

- Representations: raster& vector

Raster: Describe precisely what to display.
Vector: Component is "drawing" component

- Eliminate storage of image –make compression

How to store: see the pixels of picture -> decide how to representation
Change size of pixel: may change to optimal way to represent

- Draw a circle: decide the center point and radius
  Drawing more circles means more data
  Choosing of raster or vector representation based on size

- Text:
  Raster file: fonts do not need to be embedded
  n raster image file formats, fonts do not need to be embedded: the rasterized, rendered version is the one that is transmitted to the viewer.
  Vector file: fonts needs to be embedded or fallback fonts available

- Geographical Data

Which of these are better represented as raster or vector?
State Boundaries
-vector
Relief (height) Map
-raster
Population Density

-raster (difficult to create a filled area)
Capitol Cities
-vector

- ➔ Raster: more detailed information, detailed to each pixel.
- ➔ Vector: component with associated properties

- Histograms: mutations - change the number of data points (reduction)
- Splitting: categorical "descriptive" data—based on types