Assignment 9: Data visualization

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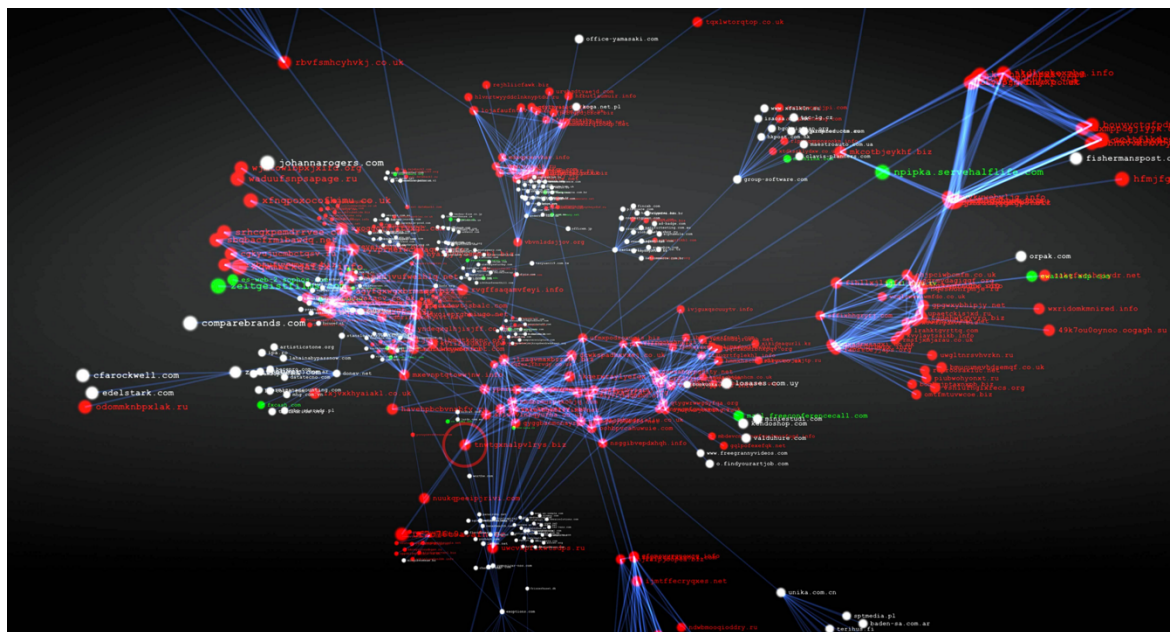YINGZHI YANG(YIY50)
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1. Visualization of the ransomware infrastructure

Description: This is a graph of the ransomware infrastructure in the world.

link: http://mms.businesswire.com/media/20140805005344/en/426895/5/cryptolocker-bfs4.jpg?download=1

Analysis:
We found this graph from a company's website. Unfortunately, in our opinion, this is a bad big data visualization and we can not even find one good point in this graph.

1. Awful color

Color of this graph is terrible. Black background make readers can't figure out the words clearly. Blue green and red are also too dazzling to observe.
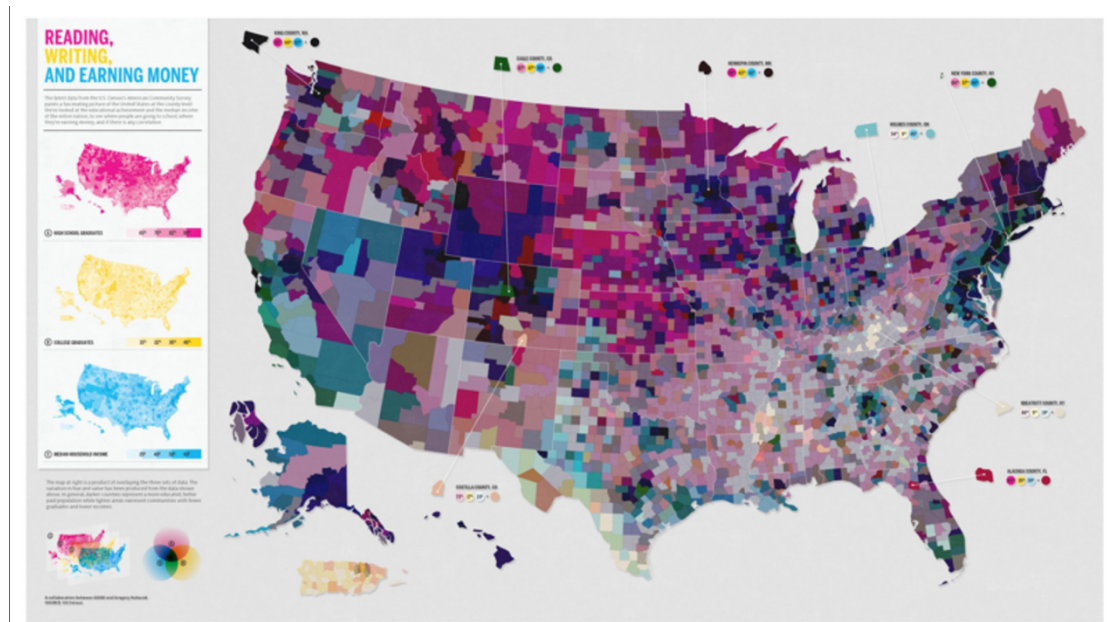
2. data overlap

Many words and lines overlap in this graph, which makes the data so mess.

2. Reading, writing and earning money in USA
Description: This map want to show the distribution and degree of reading, writing and earning money in USA.

link: http://www.theguardian.com/news/datablog/gallery/2013/aug/01/16-useless-infographics#img-1

Analysis:

This map shows the distribution quite clearly. There are also some lines to explain the combination of some new color. However, it still has a big flaw:

1. Overlaying is not a good idea

From the bottom-left corner of this picture, we can see that the colours in the final graph are based on three maps overlayed. This is a really embarrassing method to combine 3 unrelated element together.

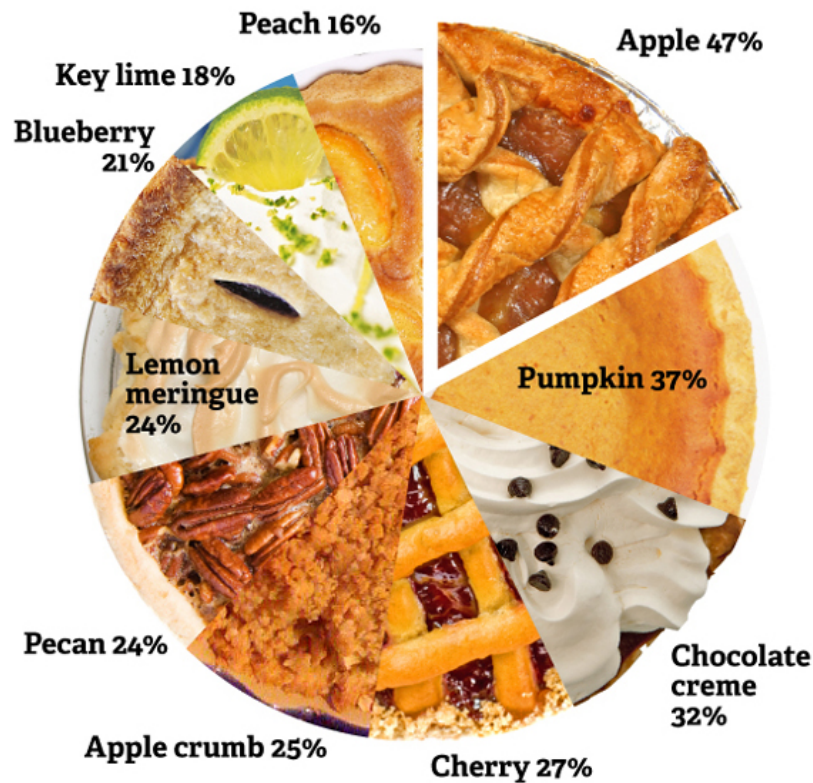## 3. A Real Pie Chart: America's Favorite Pies

Description: This picture purports to show the results of a survey, asking "What are your three favorite types of pies"? Every participant of the survey chose three favorite type of pies.

Link: http://www.livescience.com/33111-favorite-pie-america.html

A Real Pie Chart

Results of a nationwide poll by Schwan's Consumer Brands North America, the makers of the Mrs. Smith's brand of pie products.*

What are your three most favorite types of pie?

Peach 16%

Key lime 18%

Blueberry 21%

Apple 47%

Lemon meringue 24%

Pumpkin 37%

Pecan 24%

Apple crumb 25%

Cherry 27%

Chocolate creme 32%

*Total adds up to more than 100 percent because people were asked to rank their three favorite types of pie.

SOURCES: SCHWAN'S CONSUMER BRANDS N.A. PIE PREFERENCE SURVEY, 2008; DREAMSTIME

KARL TATE, lifeslittlemysteries.com

Analysis: This pie chart shows a result that what types of pie does people like, but this chart is evil and always make readers confused. Here are some problems of this chart and some methods to improve:

1. It is hard to compare different pieces of data because the data adds up to more than 100 percent.

Each person voted for up to three types of pies, and it is impossible to tell from either the pie slices or the percent what is what. Merely saying that the "total adds up to more than 100 percent" doesn't help. A better way is that show the number of participants at first, and then make the data add up to 100 percent.

2. The information in the chart is too little.

From the chart, we can only see the percent of every material, but we can't know what are candidates' first, second and third choice.

3. The pictures of every material are ridiculous; exploding the Apple slice is also meaningless.

Designer should use exact pictures to make materials visual. Separating the apple slice doesn't matter anything but confusing readers.