Bill Lennon

CAPP 30239 Data Visualization

Project 2

Visualization 1:

Map

Description automatically generated

1. *Title:* Annual Mortality Rate from Seasonal Influenza in the Over-65’s

*Created by:* Global Pandemic Mortality Project II

*Publication Source:* Our World in Data

*Data:* Paget J, Spreeuwenberg P, Charu V, Taylor RJ, Iuliano AD, Bresee J, Simonsen L, Viboud C; Global Seasonal Influenza-associated Mortality Collaborator Network and GLaMOR Collaborating Teams

1. *Purpose of Visualization*

The purpose of this visualization is to display a massive amount of aggregated flu mortality information in a manner that allows readers to quickly compare countries and determine the how significantly flu impacted countries around the world.

1. *Visualization Composition*

The composition of this visualization is easily approachable and understandable to the reader. The descriptive title and one sentence of explanation answer the “What am I looking at?” question for the reader. The projection and orientation of the world map is very commonly used in the United States and the simple color scale at the bottom is easy to follow. The gradual increase in the color scheme allows the reader to easily compare countries as well as identify countries with the highest seasonal influenza mortality rate. The visualization also contains the capability to identify the name and numerical influenza mortality rate when the mouse is hovered over the area (as shown with Argentina above).

1. *Does the visualization have a clear message? Who is the intended audience?*

This visualization does not have a clear message. While it is easy for the reader to determine “What am I looking at?”, the following question “What’s the point?” is not obvious. No death is good, but are these mortality rates good or bad compared to historical norms? This visualization is a very reader-driven story because it does not have a defined start, progression, or end.

The intended audience is broad and uncertain. The mission of the publication source, “Our World in Data”, is to publish the research and data to make progress against the world’s largest problems. Research and policy making organizations can use the data to identify trends and recommend improvements. This visualization does not have much of a narrative without context of a researcher assessing causes or solutions. It’s data without a story.

1. *Visualization Effectiveness*

This visualization struggles to be effective because it’s not accompanied by any focused message or agenda. However, due to being a reader-driven story, it can be effective as a starting point for researchers to generate questions and identify areas for deeper exploration.

1. *Recommended changes to strengthen the message*

The “Our World In Data” organization strives to make previously siloed data publicly available. Therefore, I think this style of visualization would be more beneficial if it focused on the challenges of the data collection. The textual description of the data collection describe the research methods utilized to evaluate the data availability and reliability from each country to generate comparable numbers around the world. I think a more useful graphic for “Our World in Data” to provide is a map depicting the confidence interval of the generated numbers for each country. This information would show researchers areas where improvement can be made as well as prevent a casual observer from quickly drawing conclusions from the current graphic unaware of each country’s data precision.

Visualization 2:

A picture containing scatter chart

Description automatically generated

1. *Title:* What the F.B.I. Seized From Mar-a-Lago, Illustrated

*Created by:* Charlie Smart and Larry Buchanan

*Publication Source:* The New York Times

*Data:* A court filing from the U.S. District Court, Southern District of Florida, West Palm Beach Division unsealed on August 30, 2022. Case No. 22-CV-81294-CANNON

1. *Purpose of Visualization*

The purpose of the visualization is to create a more engaging and tactile experience for a reader to understand what the FBI seized from Mar-a-Lago on August 8, 2022.

1. *Visualization Composition*

The visualization is composed of 33 segments (only one segment shown above) each containing color coded text and then a cartoon-like depiction of the text. The color coding of the text and graphics draw attention to the classified material that was seized in the each of the 33 locations/containers.

1. *Does the visualization have a clear message? Who is the intended audience?*

The visualization clearly depicts the total amount of seized material and how much of it was classified. It was published in The New York times (online) so the intended audience is someone who reads popular news sources. I don’t expect the average reader to access The New York Times specifically to find the illustrated information. Therefore, it makes sense that this is more an author driven experience for a reader in a casual “information absorption” mindset. The graphic is eye catching in order to gain attention (clicks) and then requires the reader to scroll down the page viewing illustrations 1-33 in order. This visualization takes advantage of the lack of space limitations available when publishing online. It’s not realistic to publish a visualization with 33 detailed illustrations in a print newspaper because it would fill multiple pages.

1. *Visualization Effectiveness*

The visualization effectively conveys to the audience the quantity and types of documents the F.B.I. seized. The visualization is more effective than simply reading the F.B.I.’s detailed inventory. The picture below depicts the same information as the above image from The New York Times.

Table

Description automatically generated

1. *Recommended changes to strengthen the message*

2/3 of the 33 illustrations state that the documents were found in a “Container from Storage Room”. This leaves the reader wondering where was the storage room or rooms? What else was around this storage room? Who had access and what was the proximity to former President Trump’s office and residence? These questions could be addressed if the visualization was all contained within a blueprint of Mar-a-Lago. The reader could then scroll over different sections of the blueprint which would contain pop-ups of the contents seized from each area. This would make the visualization more reader driven and prevent the need to scroll one by one through 33 different large images.

Visualization 3:

Chart, scatter chart

Description automatically generated

1. *Title:* In America and Eastern Europe, COVID-19 Got Worse in 2021

*Created by:* The Economist Data Journalism Team

*Publication Source:* The Economist

*Data:* “Life Expectancy Changes Since COVID-19” by J. Scholey et al, Nature Human Behaviour, 2022

1. *Purpose of Visualization*

This visualization allows the reader to see and compare life expectancy of country-level populations since 1900. However, the title focuses the reader on the years 2020 and 2021 which are boxed and labeled on the far-right side.

1. *Visualization Composition*

The visualization is composed of a clearly understandable time series horizontal axis and countries are listed on the right side of the vertical axis. In this case, it makes sense to have the vertical axis labels on the right side of the graphic because the focus of the visualization is on the 2020 and 2021 data.

1. *Does the visualization have a clear message? Who is the intended audience?*

The visualization has a clear message that is aligned with the title and the color coded data points are easy to understand and compare among countries. Additionally, I appreciate the text that gives a brief explanation for anomalies (bright red colored boxes) such as “Second World War”.

1. *Visualization Effectiveness*

The visualization is effective at showing the reader that the average life expectancy in America and eastern Europe decreased in 2021 and that this was not a trend evident in all other countries. However, this graphic and accompanying article do not explain why these 16 countries were chosen for the display while other countries in Asia, Australia, and South America were not. Additionally, it’s unclear why so much space (ink) is used for data from 1900 to 2018 if the purpose of the chart is to depict how Covid-19 impacted life expectancy.

1. *Recommended changes to strengthen the message*

I recommend removing all data prior to 2015 in order to focus on the COVID-19 time frame while still allowing the reader some lead time to identify trends. Additionally, I recommend including all countries from which reliable data is available to have more context to determine if America and eastern Europe are indeed outliers or if there’s a wide variation around the world.