

Final Project
Narrative Visualization Essay

CS498 Data Visualization

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Overview:

My narrative visualization explores our President and his twitter account. Specifically, I wanted to take the reader on an exploration to discover how absolutely ridiculous some of his tweeting behaviors are, how little productive communication he achieves through that medium, and then allow the reader to explore for themselves his tweets to better understand these behaviors.

Messaging:

What is the message you are trying to communicate with the narrative visualization?

The message I am attempting to communicate is simple. The President is a mess. Through an exploration of his twitter account we see his repetition of phrases, unnecessary misuse of punctuation, and the timing of his twitter activity is unusual for a man with such a significant amount of responsibility.

Narrative Structure:

Which structure was your narrative visualization designed to follow (martini glass, interactive slide show or drop-down story)?

Martini glass.

How does your narrative visualization follow that structure? (All of these structures can include the opportunity to "drill-down" and explore. The difference is where that opportunity happens in the structure.)

In the martini glass narrative structure, the author controls the direction and flow of the scenes and allows the consumer to explore on their own at the very end. My narrative visualization follows this pattern with very defined visualizations in the beginning and then an opportunity for the user to explore the entire tweet database in the end.

Visual Structure:

What visual structure is used for each scene?

Scene 1: Bubble Chart

Scene 2: Doughnut Chart

Scene 3: Bar Chart

How does it ensure the viewer can understand the data and navigate the scene?

The scenes are stationary and the triggers to change scenes are links in the navigation bar with links. The data visualizations use a combination of text for storyline and context, the visualizations, labels, annotations, and legends to help the viewer understand the data and its context.

How does it highlight to urge the viewer to focus on the important parts of the data in each scene?

The visualizations are large and colorful with annotations and labels. The text guides the reader to understand the importance or relevance to the story.

How does it help the viewer transition to other scenes, to understand how the data connects to the data in other scenes?

Initially, the viewer just views random but enlightening facts about Trump's tweets. These are to highlight the absurdity. For example, did you know he has a tweet with seventeen exclamation marks? After viewing these absurd factoids, the user is then directed to further explore the data in other ways.

Scenes:

What are the scenes of your narrative visualization? How are the scenes ordered, and why?

The introduction frames the narrative visualization and grounds the user in the fact that the visualizations will be about Trump. The first scene is of a bubble chart which shows how frequently the president has tweeted certain phrases. This was presented first because it involves more text than the other slides and allows the user to "see the tweets" first before being taken to a more abstract data visualization about timing or frequency. The second scene is a quick visualization of how frequently Trump uses exclamation marks. This further points out that his tweets are frequently hyperbolic and is slightly more drilled down and abstract. Finally, the user is allowed to explore on their own Trump's twitter habits in a bar chart that display how many tweets he has sent per each hour of the day. This self-exploration is fun and entertaining as you discover on your own that he is more likely to use an exclamation mark in

the morning, he mentions golf more in the afternoon, and since he has been president he is less likely to be awake in the middle of the night.

Annotations:

What template was followed for the annotations, and why that template?

I used different templates depending on the scene but all annotations were textual. On the initial graph I limited the annotations to those that fit inside the defined bubbles but also provided a legend to the left. In the second scene I moved the annotations off of the doughnut chart to allow for better visualization of the chart itself and the final visualization the axes serve to frame the volume of tweets sent.

How are the annotations used to support the messaging?

They display the exact tweet or the number of exclamation marks depending on which scene it is. This shows the user exactly which component of the tweet they are viewing. Is it the entire tweet text or are we drilling down into tweet components.

Do the annotations change within a single scene, and if so, how and why?

Not really, the annotations are relatively static.

Parameters:

What are the parameters of the narrative visualization? What are the states of the narrative visualization? How are the parameters used to define the state and each scene?

The parameters are the checkboxes in the final scene and or the url of the webpage. As the url changes via link clicks the state of the narrative visualization changes from scene to scene. In the final chart where the user is allowed more exploration on their own the parameters include the checkboxes which transition the visualization based on those parameters.

Triggers:

What are the triggers that connect user actions to changes of state in the narrative visualization? What affordances are provided to the user to communicate to them what options are available to them in the narrative visualization?

I used mostly text to show the user what the particular scene was about and what they could do to trigger changes in the scene. Given that this was a martini glass structure that primarily occurs in my last slide. Otherwise, the trigger to change scenes is the press of the link for each scene in the navbar.