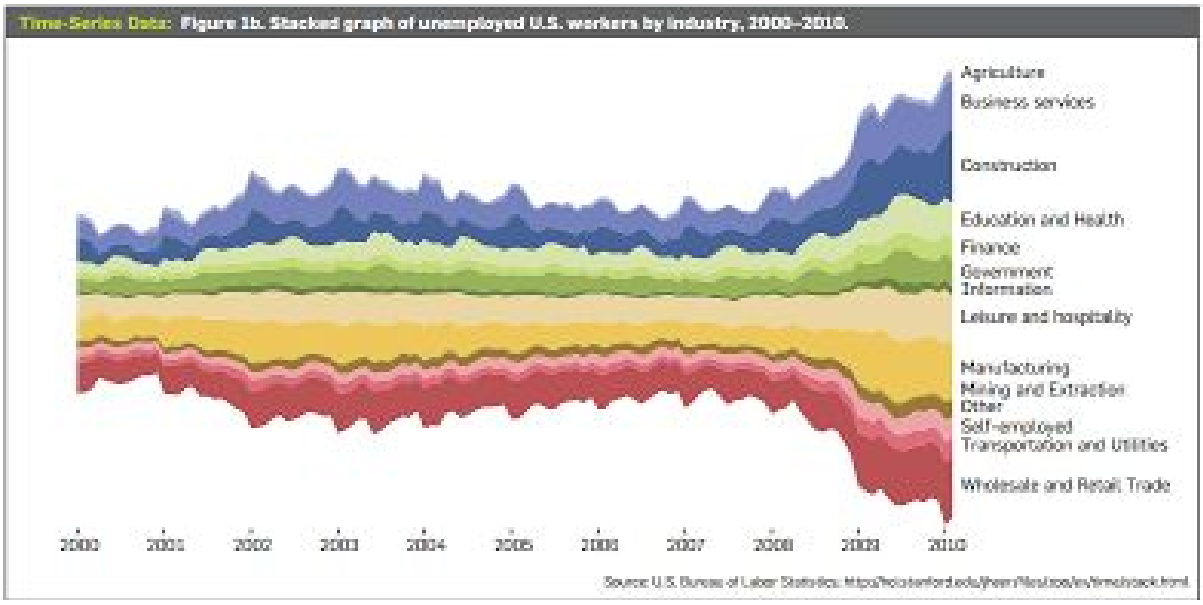
1 According to Bostock et. al., what are the primary advantages of D3? Based on your reading of the article, please provide an example of a type of visualization that would be easier and better implemented in D3 as opposed to HTML5, JSON, and Javascript. Please list the pros and cons of choosing D3 over pure HTML5, JSON and Javascript.

D3 maps data attributes directly to the elements in the DOM, the advantage is that this is possible across different platforms. D3 largely stands on it's own so there is no use for combining tons of other programming language, making it simpler. Advantage of this is that you (thankfully) don't have to use css anymore.

2 Of the visualization figures presented in Heer et. al., which do you find the most difficult to comprehend? Does the complexity of the figure interfere with the goal of visualization as described in the article? Include a screenshot of the figure you have chosen in your response and use principles that you have learned so far (i.e., from design, perception, and cognition) to justify your choice.

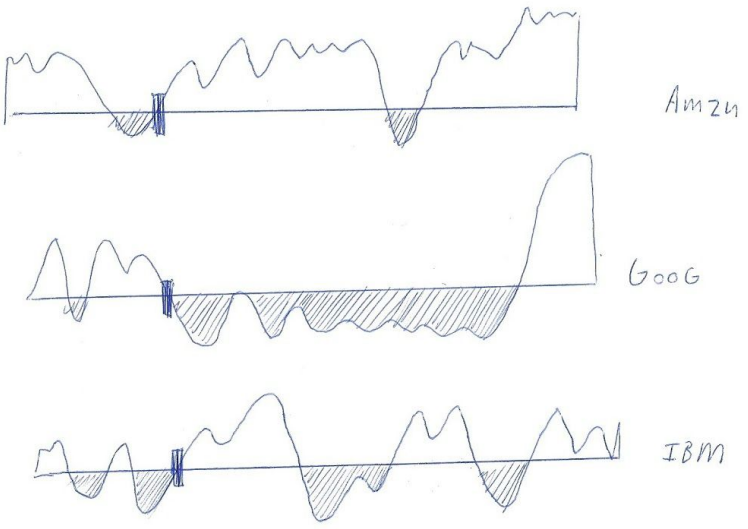


Stacked graphs like these are very difficult for me to read. It just isn't intuitive. I assume that the thickness of a color means something, but what? Is it a percentage? Or maybe some sort of amount? It doesn't specify. Naturally I asume that downwards means decline, but in this case it doesn't, which is a bit confusing. Do the colors mean anything or is it just a way to seperate the lines? The fact that the colors have a transition makes me think they have a deeper meaning, but I doubt it. It doen't really matter how long you look at the graph, it's too difficult to actually get information out of this. The thickness of the line is hard to read because of all the bumps, caused by the line above/under it. The only significant difference you can see is between different lines: the brown line is thinner than the yellow line, but seeing the progress of the brown line itself can hardly be done.

3 Play around with the interactive graphs included in the Heer article. You need to open this page in a browser that runs Java. Focus on Figure 1A. To what extent do interactivity and transitions, elements that D3 optimizes, add to the clarity and message of the visualization? With the element of interactivity in mind, redesign and sketch the contents of figure 1A with one of the other visualization types described in the Heer article. Include a picture of a sketch of your idea, and describe how it supports comprehension and data exploration.

It took a while to understand it, but it's a pretty neat idea: depending on the month you select the relative gain or loss of an investment is displayed. For example if you investen in AAPL in februari 2001 youd have a gain of over 2000%! For my sketch I used a combination of 1C and 1D. The thing I liked about !c is that the different things are shown sperately, so they don't overlap or otherwise interfere with each other. The thing I liked about 1D is were the blue and red colors, there shower the difference between rise and decline very cleary and intuitively, because red is generally associated with bad (which decline in this case is). The main problem with 1A was the fact that it wasn't very clear in the beginnign where a certain line was going, because ALL the lines went through the time-point you selected.

Combination of 1C and 1D



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