Please post your [discussion response](https://courses.cs.washington.edu/courses/cse512/22sp/#participation) for Week 1 here by end-of-day Friday April 1. You can either respond to the prompt below or raise an additional discussion topic in a new comment.

Here is a discussion question to get the ball rolling...

Card, Mackinlay, and Shneiderman posit a dichotomy between "scientific visualization" and "information visualization" based primarily on the input data: physical "scientific" data (e.g., air flow over an airplane wing) often has a natural spatial mapping whereas "abstract" data (e.g., stock prices or an online social network) require that spatial mappings be designed. However, UBC professor Tamara Munzner aptly points out that "information visualization is not unscientific, nor is scientific visualization uninformative". To what extent do you agree or disagree with this distinction? Do you see it as helpful or hurtful to the study of visualization?

(Card et al. also mention Larkin and Simon's study of people solving physics problems with and without the use of diagrams. If you're interested, I recommend reading their paper “[Why a Diagram is (Sometimes) Worth Ten Thousand Words](http://onlinelibrary.wiley.com/doi/10.1111/j.1551-6708.1987.tb00863.x/abstract)”)

Comment

**My response:**

Scientific visualization is commonly thought to focus on the visual presentation of spatial data associated with scientific processes, whereas information visualization investigates the development of visual metaphors for data that is not inherently spatial. This method of frequent categorization is simple, but it can also be ambiguous and perplexing. T. M. Rhyne et al. (2003) propose a new taxonomy based on data model characteristics rather than attributes, such as continuous model visualization and discrete model visualization. These new categories are less ambiguous than previous categorization methods and may aid in the organization of visualization literature and concepts.

Overall, I agree with Prof. Munzner, and I believe that Information and Scientific Visualization share common ground: visual communication for the purposes of presenting and exploring data, ideas, connections, and processes. In addition, I would argue that most, if not all, visualization approaches, interactive tools, and evaluation processes are applicable to both the Scientific Visualization and Information Visualization communities. Scientific visualization, for example, has traditionally been used to analyze and comprehend large-scale simulations and experiments, according to research. Today's scientific data is becoming multi-dimensional, making classic scientific visualization approaches ineffective. I think we should use the best of information and scientific visualization research methodologies to build integrated visualization and analytical capabilities. Everyone would benefit from exposure to the entire spectrum of the discipline rather than attempting to create a split that would, in my viewpoint, be ineffective.