

Data Visualization + Empathy

Application for the Visualizing the Future Symposia: A National Forum on Data Visualization in Libraries
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Data visualization, as a practice, combines the disciplines of statistical analysis and design. When done well, it enhances our abilities to both better understand and summarize a particular data set, as well as communicate the same to an audience. Without statistical analysis, data visualization is “an exercise only in illustration and aesthetics,” while without good design, it fails to inspire (Yau, 2013). It is the intersection of these two disciplines that creates the interesting question of whether or not data visualizations can – or should – maintain neutrality in the messages they convey, in particular messages that evoke an empathetic response.

Since its beginnings, many lively debates have occurred amongst practitioners in the field regarding this question (Zer-Aviv, 2015). Journalism professor Alberto Cairo, author of *The Functional Art* and *The Truthful Art*, is skeptical of the visualization medium’s ability to convey or increase empathy (Zer-Aviv, 2015). Practitioners, such as Lisa Charlotte Rost (2017), and companies, such as Perisopic (2019), advocate for data visualization to do just that, i.e. stimulate the audience to act on the data presented by increasing the emotional connection. In other words, injecting the human into the numbers. The greatest perceived benefit of neutral visualization is that it eliminates, or at least reduces, bias in the message. In contrast, visualization that evokes empathy may benefit from an increased chance of motivating individuals towards a particular belief and/or action. While all camps believe that a significant purpose of data visualization is to make the meaning of the data easier for the audience to comprehend and remember, the questions of how, where, and why any emotional aspects of the meaning are conveyed are more complicated.

Our proposal seeks to examine the question of whether or not data visualization can elicit empathy and, if so, what are the (1) limits, (2) ethical considerations, (3) responsible use, and (4) best practices? If empathy is “the action of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experience of another of either the past or present without having the feelings, thoughts, and experience fully communicated in an objectively explicit manner” (Merriam-Webster, 2019), and empathy and action result in compassion, what is the role of the creator of the visualization? What is the responsibility of the creator? And where does a library fit in this equation? Is it ethical for libraries, professionally, to provide instruction that imparts methods to sway an emotional argument? Are libraries and librarians neutral? Are we supposed to be? We find all of these questions to be of great interest and believe that both grappling with and understanding them are of great importance within a national forum seeking to develop a vision of the place of data visualization instruction and data visualization services in libraries.

If accepted, we will review the literature to explore and expound upon arguments for and against the use of data visualization as a means of eliciting empathy, as well as the means and extent to which empathy can be evoked. We will also explore any issues regarding a library’s role and responsibility towards neutrality in the delivery of information, and how this might fit within instruction on data visualization. Finally, based on our findings, we will develop best practices surrounding empathy and data visualization in both instruction and practice.

In our professional positions, we have both been data visualization practitioners and instructors. Our faculty, staff, and students are expressing a growing need for support and training in this area, and we believe that our participation in the Forum will positively affect our abilities to deliver better course content and enhanced data visualization services. Finally, we are in a unique position to tie this particular proposal with our library’s existing work in the area of graphic medicine. Empathy is often at the heart of the use of comics in medical education. We hope to discover ways in which empathy in data visualization overlaps and/or intersects with the same in graphic medicine, helping us bring new light to this special collection and our projects that stem from it.

We are always happy to learn of others in our profession who are engaged in data visualization and who believe it has a home in libraries. Thank you to the organizers of this Forum for bringing this topic and the subsequent discussions and work to this level. We appreciate your consideration of our proposal to participate.

References:

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