

Why Design is Worth the Time

Description: In this Posit Conference talk, Dr. Laura Gast provides an overview of the cognitive science that backs design principles, including attention, memory, and beauty, thereby motivating the need for aesthetic design in plots and deliverables.

What I learned: One major takeaway from this talk was about cognitive load theory, which states that brains can only absorb so much information when presented with new ideas. Cognitive load consists of intrinsic load (how difficult something is to learn), extraneous load (how complexly information is presented), and germane load (how easily the information is connected to existing knowledge). Minimizing distractions and maximizing storytelling helps increase attention and retention.

Course connection: One of the most explicit connections between this talk and INF) 526 was Gast's discussion of leveraging sensory memory to capture viewer's attention and direct their eyes over a plot. This is an uncontrolled response in a viewer, but can be manipulated through elements like size, enclosure, and color. While these are elements we have studied in Grammar of Graphics, they can also guide my production of visuals in this class and beyond to help better disseminate stories or trends in data visualizations.

Styling and Templating Quarto Documents

Description: In this Posit Conference talk, Emil Hvitfeldt overviews styling any type of Quarto document using .scss and .css arguments and the Quarto YAML.

What I learned: I found this talk really valuable as it helped me grasp an additional aspect of using Quarto and R Studio. I learned how to set a style file within the YAML, and how to format style documents to set document fonts, colors, and other attributes.

Course connection: This is especially pertinent to this course as we use Quarto documents for almost every project. While the native theming/styling settings for our documents are sufficient and aesthetically pleasing, making changes can help highlight certain types of information or direct viewers' attention in certain ways. I will be able to use the information I learned in my final project to style my Quarto website and documents within.