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Interactive Media

Blog post 1

Overview of Data Visualization – Li (2020)

In this chapter, Li talks about the concept of data visualization and the relationship between aesthetics and data visualization. Li also discusses the many different forms of visual data representation.

Data visualization, as described by Card, Mackinlay and Schneiderman (1999), data visualization is defined as “the use of computer-supported, interactive, visual representations of data to amplify cognition” (P. 6). Data visualization is an important part of research as it has contributed to many different inventions and discoveries throughout history.

Li begins to discuss that the invention of technology has had an impact on the way the data is processed and communicated through visual representation, data visualization is an important part of human research as it also helps with data analysis, thus being more accurate through the graphical data visualization.

There are a few advantages to having the traditional form of data visualization, such as: having the ability to gather huge amounts of data immediately, it enables people to see patterns in data and invent new ideas, as well as identifies problems immediately due to the use of data analysis.

According to Bikakis (2018), data visualization has 4 main aspects, these include: real-time interaction, on-the-fly processing, visual scalability and user assistance and personalization. In summary, the real-time interaction refers to making use of something at the same time and getting the response back immediately, on-the-fly can be categorized as raw data that needs processing.

Li discusses that there is information visualization and scientific visualization. Information visualization tends to be focused on the communication of information and its accuracy. The information visualization can be categorized into three different parts: organized information, understanding and input. This involves maps, charts, tables, diagrams and graphs. In the scientific visualization, there are different forms of data visualization such as: waveforms, volume and simulations.

Li then begins to discuss each form of data visualization, in depth, as to what they are, where they originate from, how they have evolved and how they are used. Then going on to discuss the characteristics of traditional data visualization, it should be readable, users should be able to recognize it and communicate information that is easily understandable.

It can also be seen that our perception as human beings plays a huge role in data visualization. Perception can be defined as data that is collected, organized and then interpreting that data in a different means.

To conclude, there is no relation to these data visualizations and aesthetics as they have ignored aesthetic and rather have contributed to the information processing. These aesthetics are not necessarily only art related as they also come with techniques, methods and ideas.

# References

Li, Q., 2020. In: *Embodying Data.* s.l.:s.n., pp. 17 - 47..