Editorial

Dear readers,

The amount of data produced in industry, services, transport, human and animal activities, and many other actions in the digital domain, has created a need for methods and practices that can transform this data into knowledge. Data visualization has been used to expand human cognition, and it can assist in informing, communicating, supporting decision-making, conducting exploratory analysis, and telling stories. Due to it being a multidisciplinary topic, data visualization has been researched in areas like HCI, computer science, and information design. For the latter, data visualization is still in its infancy but should be expanded to include insights on representation, rhetorics, cognition, emotion, visual design, aesthetics, data-driven design processes, and methodologies, among other research topics.

Given the above, we are pleased to introduce INFODESIGN's special issue on data visualization from the information design perspective. The eight articles — a small sample that shows how broad the research on data visualization can be — address many topics. They include academic projects of undergraduate to doctoral students, research projects (in part or complete), and analysis based on Research through Design. The papers are from many different Brazilian states and also from abroad. Below are brief comments on each of the contributions included in this issue.

In *Fotovis: user-centered development of a tool for visually browsing photographic collections*, Giannella presented a partial result of her doctoral thesis, which investigated alternative, visual, and browsing strategies for digital tools. The paper adopted a user-centered approach to the design decisions, development, and evaluation of the interface tool, based on a sample of photographs from the Moreira Salles Institute, an important Brazilian cultural entity.

Goethe et al. used Research through Design to examine the development of the visual language for the Farm Soil Tech Project. Their paper, *Research through design: developing a visual language for farm soil mapping*, presents the result of an interdisciplinary collaboration between designers, developers, soil scientists, and agronomists in Australia.

The colors of the maps showing the spread of the COVID-19 pandemic led to Klohn and Zimmermann analyzing sample maps from two different websites of the Rio Grande do Sul state government in Brazil. Their paper, *Framework to analyze the use of colors in*

informational maps related to Covid-19 data, drew from a literature review about the use of colors and maps in data visualization.

In *Storytelling in data visualization: information bias*, Braga and Silva investigated the potential of storytelling to create a biased view of informational content. They evaluated how users perceived information in different configurations of annotated content, and they also applied qualitative and quantitative tests in two groups. The final analysis suggests that ordering, highlights, and semantics play a powerful role in how the narrative influences the reader's perception.

In *Animation and data visualization: an analysis protocol proposal*, Teixeira et al. discussed the ways researchers describe the use of animation in data visualization, and how these approaches interact with each another. They built and tested a protocol in examples of data visualization animations.

Dynamic visual identities seem to attend to the demand of audiences for personalized experiences. Lelis' paper, *Smart logos: a user's dashboard for the visualisation of meaningful brand experience data*, explores the development of smart logos, through which brands' audiences can define their experiences by visualizing personally meaningful brand-related data. The author organized five creative workshops with users from three university campuses based in the United Kingdom. The paper analyzed the outputs and delivered a heuristic to support the design of smart logos.

Based on the concept of information appropriation, the study of Barizon Filho and Rosa, entitled *Appropriation of information in data visualization*, attempted to reveal the characteristics of data visualization that can enhance the transmission and appropriation of information.

Closing this issue, the paper by Medeiros, entitled *Visualizing data visualization: a systematic literature mapping by Brazilian design researchers*, provides an overview — from a design perspective — of the Brazilian academic literature on data visualization between 2010 and 2020. The results showed the following: institutional affiliation of the researchers and their geographical distribution, evolution over the years of publication, methodological approaches and authors cited, types of study, and the visualization artifact generated and the design tools employed in this process.

We hope you enjoy this special issue!

Doris Kosminsky
Invited Editor