

Marian Dörk & Isabel Meirelles

## Editorial

### Information+ 2018 Conference

#### Dear readers

We are very pleased to introduce the new Information+ Special Issue of IDJ, featuring nine peer-reviewed contributions which expand on the authors' presentations during the second Information+ conference, held on 19<sup>th</sup>–21<sup>st</sup> October 2018 at the University of Applied Sciences Potsdam (FH Potsdam) in Potsdam, Germany. The conference brought together 261 researchers, practitioners and students working at the intersection of information design and data visualization to discuss common questions and current challenges. Our main goal was to stimulate cross-disciplinary exchanges and knowledge sharing while nurturing research and innovation that is relevant to academia, industry and government.

The conference program was framed by keynotes given by Sandra Rendgen (independent art historian and author), Reuben Fischer-Baum & Chiqui Esteban (*The Washington Post*), Fernanda Viégas & Martin Wattenberg (Google PAIR) and Romi Ron Morrison (University of Southern California), whose article you can read in this issue. The conference program featured 20 paper presentations and 9 lightning talks, all of which were selected from 149 submissions assessed by a program committee composed of 52 renowned experts from 11 countries. The acceptance rate for paper presentations

was 20.2%, and 18.5% for lightning talks. Our 44 speakers came from both academia (59%) and industry (41%) in ten countries, 52% of whom were women.

On the day before the conference, participants engaged in a set of hands-on and critical workshops that focused on data preparation, data traces, digital storytelling, data walks through Potsdam, and digitized cultural collections. In collaboration with the German Museum of Books and Writing of the German National Library, the exhibition “Image Factories. Infographics 1920–1945” showcased works by Otto, and Marie Neurath and Fritz Kahn, who are among the predecessors of contemporary information visualization. On Saturday evening, attendees continued discussions initiated during the conference in the midst of a variety of data-driven culinary experiences offered at the dialog dinner special event.

This second instalment of the Information+ conference was organized by Marian Dörk (FH Potsdam) and Isabel Meirelles (OCAD University), with special support from the UCLAB at FH Potsdam. We were particularly interested in bringing the enthusiasm and community spirit from the inaugural conference to this sequel in Potsdam by carefully developing the format further. An important addition was a needs-based diversity scholarship aimed at increasing the participation of traditionally under-represented or historically marginalized groups.

## The articles

The special issue starts with an article by Cruz and colleagues describing their process and visual metaphor for visualizing the U.S. immigration over time using dendrochronology, a method for analyzing patterns of growth in trees. The series of visualizations are incredibly informative about the patterns of immigrants contributing to population growth in the U.S., while also remarkably elegant in depicting a topic that has been at the center of current political debate in that country. As the authors write, “dendrochronology theme is a poetic take on the data, yet it is also a functional and conceptual space that is used to construct language and rationales on that data.”

In the article “Who Wants to Be a Self-driving Car?: A Mixed-reality Data-Trust Exercise”, Lee and colleagues present a case study describing an intriguing experiment designed to provide participants with insights into how self-driving cars operate.

The next three articles address the theoretical foundations of data visualization while raising critical questions about our field’s basic assumptions. Boyd Davis and Vane examine the contribution of design activity to collaborative visualization projects in the context of digital humanities research. In their article “Design as Externalization: enabling research”, they draw from their own work with cultural institutions, and reflect on the unique role of designers working with museum staff and humanities scholars in transdisciplinary projects. The article features a range of visualization projects that demonstrate the power of data visualization as a form of both externalization and experimentation. To encourage a more critical understanding of data visualizations in public discourse, Kosminsky and colleagues challenge notions of objectivity and offer reflections on visualization as a system of representation with strong ties to science and rationalism. Their article, “Belief at first sight:

Data visualization and the rationalization of seeing” situates data visualizations in deeply rooted conventions of visual representation in art and media throughout history, while examining their tendency to convey credibility. More fundamentally, in the article “Gaps Between the Digits: On the Fleshy Unknowns of The HUMAN,” Romi Ron Morrison challenges the aesthetics of “cleanliness” in data visualization practices and questions any notions of knowability that are reduced to measurability. The article is a compelling invitation to a much needed critical conversation about empirical methods, including data visualization practices that claim universality and justice.

The next two articles look at how perception (and interpretation) impact both our understanding of the world and our actions. In their article “Feeling Numbers: The emotional impact of proximity techniques in visualization,” Campbell and Offenhuber apply the rhetorical theories of George Campbell, in particular the proximity technique, to an empirical study testing the effectiveness of appeals to emotion in the contextual framing of visualizations. Their study indicates that people are more interested in topics when a visualization depicts data that align with their interests as well when it represents events closer in time to them. Schlaich and Meier-Walter identify a set of problems with the visual perception of two common public information pictograms: the “elevator” and the “toilet.” Their article, “The Evolution of the Elevator Pictogram: Pointing out trends for the future,” describes the challenges we face when confronted with these signs in public spaces, while also providing important directions for future consideration by the designers of these systems.

The issue ends with two contributions examining the importance of information design to the communication of complex medical information. The article “Pragmatic evaluation of The BMJ’s Visual Abstracts” by Stahl-Timmins and colleagues reports on their design process and experimentation with visual abstracts targeted at

health experts to quickly grasp the essence of medical research studies. The last article, “Designing bowel preparation patient instructions to improve colon cancer detection” by Noel and colleagues, presents a design study aimed at improving clarity of medical information and comprehensibility by patients. Both contributions illustrate the value of iterative design processes in information design, while demonstrating the insights gained from measuring success.

## Concluding

We take this opportunity to acknowledge and thank once more our distinguished interdisciplinary Program Committee, who helped ensure the quality and substance of the Information+ conference. Two subsets of the Program Committee had double duty and graciously also served in two other capacities, in the Diversity Scholarship Committee, and as reviewers for this special issue of IDJ.

Information+ 2018 would not have been possible without the generous financial support from our home institutions: FH Potsdam and OCAD U as well as the Brandenburg Centre for Media Studies and the Cluster ICT, Media and Creative Industries in Berlin & Brandenburg. Finally, we are indebted to Carla Spinillo,

IDJ’s general editor, for the renewed invitation to edit this special issue and for the continuous support of Information+.

The long-term objective of Information+ is to continue to foster an open and inclusive forum dedicated to interdisciplinary exchanges in information design and data visualization. Towards this ambition, we are very happy to announce that the third Information+ will take place in September 2020 in Atlanta, Georgia, USA. We hope that IDJ readers will consider attending and contributing to the upcoming set of events. Until then, we would like to invite you to visit the Information+ online presence, which includes, among other material, video of all presentations of the past two conferences, and soon the call for participation for Information+ 2020: [www.informationplusconference.com](http://www.informationplusconference.com).

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