Foreword: The dawn of a philosophy of visualization

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Geographer John Pickles once wrote that ‘GIS is a set of tools, technologies, approaches and ideas that are vitally embedded in broader transformations of science, society, and culture’. That’s true of data visualization too, therefore the relevance of the book that you have in your hands, Data Visualization in Society.

I often joke—although I’m inclined to believe—that a field X reaches maturity when a parallel field of ‘philosophy of X’ springs into existence. That hasn’t happened yet with data visualization, at least formally. Might we be on the path to it, though? I hope so. Some books have paved the way. Think of David J. Staley’s Computers, Visualization, and History, Charles Kostelnick and Michael Hassett’s Shaping Information, and Wolff-Michael Roth’s Toward an Anthropology of Graphing, all from the early 2000s. Or, more recently, Orit Halpern’s Beautiful Data (2014), Johanna Drucker’s Graphesis (2014), R. J. Andrews’s Info We Trust (2019), Sandra Rendgen and Julius Wiedemann’s History of Information Graphics (2019), or the upcoming Data Feminism (2020), by Catherine D’Ignazio and Lauren Klein, who have also contributed to this volume.

Books like these prove that writing about visualization doesn’t mean just thinking about how to design visualizations, but also about what visualization is, why it is the way it is—and what it could be. Data visualization is a technology—or set of technologies—and, like artefacts such as the clock, the compass, the abacus, or the map, it transforms the way we see and relate to reality. As Langdon Winner suggested in The Whale and the Reactor (1986), a foundational book in the phenomenological philosophy of technology, to create technologies doesn’t consist just of crafting stuff; rather, when technologies come about ‘new worlds are being made’. What ‘new worlds’ does visualization generate? That’s a question for a potential philosophy of visualization.

A philosophy of visualization may derive themes, methodologies, and language from a wide range of disciplines: epistemology, sociology, semiotics, history, ethics, critical theory fields such as critical cartography, or from the philosophies of science, statistics, art, and—perhaps more strongly than any
other—the philosophy of technology. Philosophers of visualization should reason about visualization's history, assumptions, conventions, practices, and impacts on individuals, cultures, and societies. They will combine the observational, descriptive, and hermeneutical—dealing with what currently exists and why—the normative—, asking what should or shouldn't exist or happen—and the critical—, challenging visualization's core tenets.

*Data Visualization in Society* is a collection of chapters by scholars and professionals who don't call themselves philosophers of visualization but who, in practice, operate as such. I see this book as a relevant step toward the possible inception of the philosophy of data visualization as a discipline. I hope it will serve as a starting point for many inquiries by other thinkers. This includes myself: I read all chapters with pleasure and took copious notes on the margins. I know these scribbles will later echo in my own work.

That's the virtue of the best philosophical writing: it doesn't aspire to settle matters outright, but to inspire further reflection. *Data Visualization in Society* may spur questions such as: Does visualization pretend to be 'objective', or is it just wrongly perceived as such? What does 'objective' mean in the first place? What is the influence of visualization on politics? Is numeracy—numerical literacy—enough to design or read visualizations? Doesn't the fact that a substantial portion of the public isn't numerate—or 'graphicate'—deepen existing inequalities and even create new ones? What do we mean when we say that a visualization is 'beautiful'? Is the goal of visualization to convey facts and data, or can it also spark profound emotional experiences? If so, how? And many more.

The variety of topics and approaches of the chapters in this book is astounding, but what most have in common is an open ending: they are links in a chain of reasoning—a dialogue—that extends from the distant past and that, conceivably, and with the contribution of a large critical mass of academics and practitioners of the craft, will continue beyond the foreseeable future. That's where you come in: does any of these chapters inspire you? Do you agree or disagree with it? Reason why. Argue. Establish a conversation with it. Write and publish, and be open to further responses and critiques. That's how philosophy begins.