

Book Review

Data during the fact: A review of *The Infographic* by Murray Dick

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Murray Dick, *The Infographic: A History of Data Graphics in News and Communications*. Cambridge, MA: MIT Press, 2020. 232 pp. ISBN 9780262043823 Hardcover, \$35.00.

I first became interested in Joseph Priestley after reading just two and a half pages of ‘Data before the Fact’ by Daniel Rosenberg (an important chapter in a book of important chapters: “*Raw Data*” is an *Oxymoron* (2013) edited by Lisa Gitelman). Rosenberg describes his own encounter with Priestley’s 1788 *Lectures on History and General Policy* in which Priestley uses the word ‘data’ in his text. For me personally, Rosenberg’s descriptions of Priestley’s work to quantify historical figures, their domains, and their achievements was an alluring nod to an early form of statistical bibliography (the predecessor of contemporary bibliometrics). My initial interest in Priestley was to examine this historical work and its influences on Edward Wyndam Hulme and his *Tabular Surveys of the divisions in the literature of Architecture and the Textile Industries* (published in Hulme, 1923) as sociology of science.

Like Rosenberg and so many others before, I was hooked on the earliest forms of data visualization because of their inherent familiarity and the sense that, even without any context for their production, they were ingeniously using data (read: truth) in new and timeless ways. In fact, after my detour I returned to Rosenberg to learn that it was these encounters with Priestley and William Playfair and others who use the word “data” in the eighteenth century that frame Rosenberg’s research journey to explore the history, evolution, semantics, and contexts of the word itself, from the earliest use in 1646 to the twentieth century. Most importantly, the author explores the historical relationship between data, truth, fact, and evidence in the English language, and argues that semantics and historical contexts are of seminal importance to our understanding of “data” as representation of fact. However, “data has no truth . . . This fact is essential to our current usage. It was no less so in the early modern period; but in our age of communication, it is this rhetorical aspect of the term ‘data’ that has made it indispensable” (Rosenberg, 2013, p. 37).

Whether it is Priestley's early forms of data visualization or contemporary information graphics, historical propaganda or contemporary disinformation, when it comes to the creation, manipulation, representation, and presentation of fact, context matters. And even though we may take them for granted, these aspects of the data-driven visual culture we know today has a long history in the visual-discursive forms of the past.

In the newest addition to the History and Foundations of Information Science Series from MIT Press, Murray Dick explores the history and various uses of data-driven "truth" through the production and dissemination of graphical information in British journalism. Dick, a Lecturer in Multimedia Journalism at Newcastle University, has significant expertise in this topic, having worked at the BBC and the Centre for Investigative Journalism, and writing his dissertation thesis *News Values in Online and Visual Data Journalism* in 2015. He is also the author of *Search: Theory and Practice in Journalism Online* (Palgrave, 2013).

In this book, Dick utilizes his thorough research and expertise to examine the people and the social contexts around the development, use, and sites of resistance associated with forms of information visualization in six historical eras of journalism and mass media in Britain. His ultimate goal is the defense of infographics and the introduction of a philosophical argument for the concept of the *synopticon*, "a data visualization that embodies the importance of sound data design as a tool in the functioning of modern life" (p. 30).

The word infographic in the title may indicate to some readers that this analysis is focused on a particular type of popular visualization in contemporary magazines. This is not the case, as this author has adopted a much broader definition and use of that term, allowing him to examine multiple forms of information visualization, graphical representation, and visual media used in public discourse and journalism from the eighteenth century to the present. As he explains:

In this book I use the terms "infographic" and "data visualization" interchangeably; and treat them as synonyms or as near-synonyms . . . In this work I propose that the epistemic nature of the new information/data visualization may be understood by . . . distinguishing between "acquaintance with" (infographics that are concerned with news events) and "knowledge about" (data visualizations that are concerned with processes, explanation, and exploration)." (p. 9)

With this wide net, Dick examines six historical eras of infographics in popular culture across four chapters, focusing on new and evolving forms of visualizations in various types of socially-, politically-, and media-generated contexts. His analyses focus on individuals and institutions and the information needs of their personal or social settings that result in the development and use of new forms of infographics. This includes multiple examples of what those visualizations were and assessments about their historical reception (noting sources of academic or social resistance to certain forms or attempted uses of different graphics) and their statistical and persuasive rigor from a contemporary perspective.

Chapter 2 describes the emerging phases of the proto-infographic and the classical eras of the eighteenth century. We meet Joseph Priestley and William Playfair and their divergent forms of education-based visualization that draw on Enlightenment ideals and the contextual influences of the democratic and demotic print culture of the time. During these eras, journalism is embodied by publicity and propaganda, government control, and counter-discourses competing to be the voice of a fractured public interest. In Chapter 3, we see how information visualizations develop into forms that can be used in a much broader public discourse to persuade and affect social progress and change. New forms of discursive context in journalism do not rely on visualizations, so this improving era, as Dick calls it, is embodied in the work of Joseph Fletcher, John Snow, and Florence Nightingale. The nineteenth century bears witness to the institutionalization of infographics and a new enthusiasm for data and statistics as a form of empirical fact that can be used to support social awareness and change.

The second half of the nineteenth century sees a new professionalism emerging in British journalism that brings us through the final three eras of the author's analysis: the commercial era, the ideological era, and the professional era. Chapters 5 and 6 dive more deeply into forms of mass media visualizations that we associate with British (and global) journalism today. It is in these chapters that the author's extensive work in nineteenth and twentieth century newspaper archives is brought to light, including Picture Post Historical Archive, NewsVault, and the digital archives of some of the most important newspapers and dailies in the U.K., including *The Guardian* and *The Observer*, the *Financial Times*, the *Daily Mirror*, and *The Independent*. It is during these eras that we see the rise of New Journalism and the "power of symbolic production" (p. 122) and symbolic forms of language as a mediating factor in public opinion. The shift from local to global tastes greatly influences the development of infographics and ushers in the visual journalism, interactive infographics, and post-truth realities of the twentieth and twenty-first centuries.

With nearly 40 color and black-and-white images, this book will appeal to academics and students interested in the history of data visualization in a general sense, and those specifically interested in the people and ideals associated with the developments of British print and visual culture in public discourse and mass media. It will also appeal to anyone interested in an introduction to figures in eighteenth and nineteenth century scientific communication and social history and the impact of data and infographics on historical personas like Florence Nightingale and William Playfair.

From the significance of the dissenting tradition and disparities between political parties to the importance of Fleet Street and Wapping, the author, at times, assumes the reader's familiarity with various aspects of British history and print culture. Given the source and subject matter, this can be expected, but the lack of context for some of the nuances of British social/religious/political structures that play an important role in the author's argument is sometimes unfortunate. Generally, this does not detract from the prose, but it may hinder the book's accessibility to non-specialist readers.

The history of infographics and data visualization can be seen in Joseph Priestley's original eighteenth century timelines, in Hulme's tabular surveys, and in the evolution of work done by journalists and newspapers over two and a half centuries. Like Daniel Rosenberg, our interest in them and their descendants lies in their ability to encapsulate shared knowledge and shared discourse at a particular time and place, while also remaining timeless. They were just one type of factual technique that emerged alongside print culture and the new semantics of shared truths in the early modern world. They helped people in the past work with and understand data during the fact of its appearance and its appearance as fact in the English vernacular and, just as today, provided new ways to sustain and challenge the social, political, and educational norms of a growing public sphere. In this vein, Dick's historical perspective and his defense of the role of infographics in the functioning of modern life reminds us that while visualization techniques may change, data is here to stay.

References

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