

Book Reviews / Comptes rendus

Wheeldon, J. & Åhlberg, M. K. (2012). *Visualizing Social Science Research: Maps, Methods, and Meaning*. Thousand Oaks, CA: Sage. Pages: 205. Price: 37.95 CDN (paper). ISBN 978-1-412991-04-9

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Researchers can benefit from accessing resources that promote their development as purposeful producers and critical consumers of visual displays (Tufté, 2006) and the title of the book *Visualizing Social Science Research: Maps, Methods, and Meaning*, with its emphasis on visualization, demands the reader's attention. Visualization in research is an important topic because of the potential for visual displays (e.g., words, numbers, images) to evoke emotion and deepen our understanding beyond textual presentations. The perspective we offer through this review is based on our interests, experiences, and expectations surrounding the use of visuals within the fields of educational psychology research, program evaluation, and mixed methods. To begin, we offer our own visual representation¹ of the book with its existing links as well as (what we believe are) the missing links among the seven chapters (see Figure 1). In this review we discuss three areas of strength as well as highlight where the book does not meet its full potential: intended purpose, audience, and organization.

Wheeldon and Åhlberg are to be commended for providing an accessible resource to further the discussion of the innovative topic of visualization within the research process. Research requires visualizing – a critical imaginative process which involves the (trans)formation of a mental image from an abstract idea. The authors explicitly state that the introductory text is aimed at providing a starting place for budding researchers (primarily upper-level undergraduate and graduate students) in a range of disciplines within the social sciences.

Chapter 1 provides a general overview of the rationale, the research process, and the book. Despite the statement that “sometimes the description of a book's organization within the preface is not used to its full potential” (p. 16), Wheeldon and Åhlberg include organizational details in the preface as well as in Chapter 1. The authors also make an ambitious

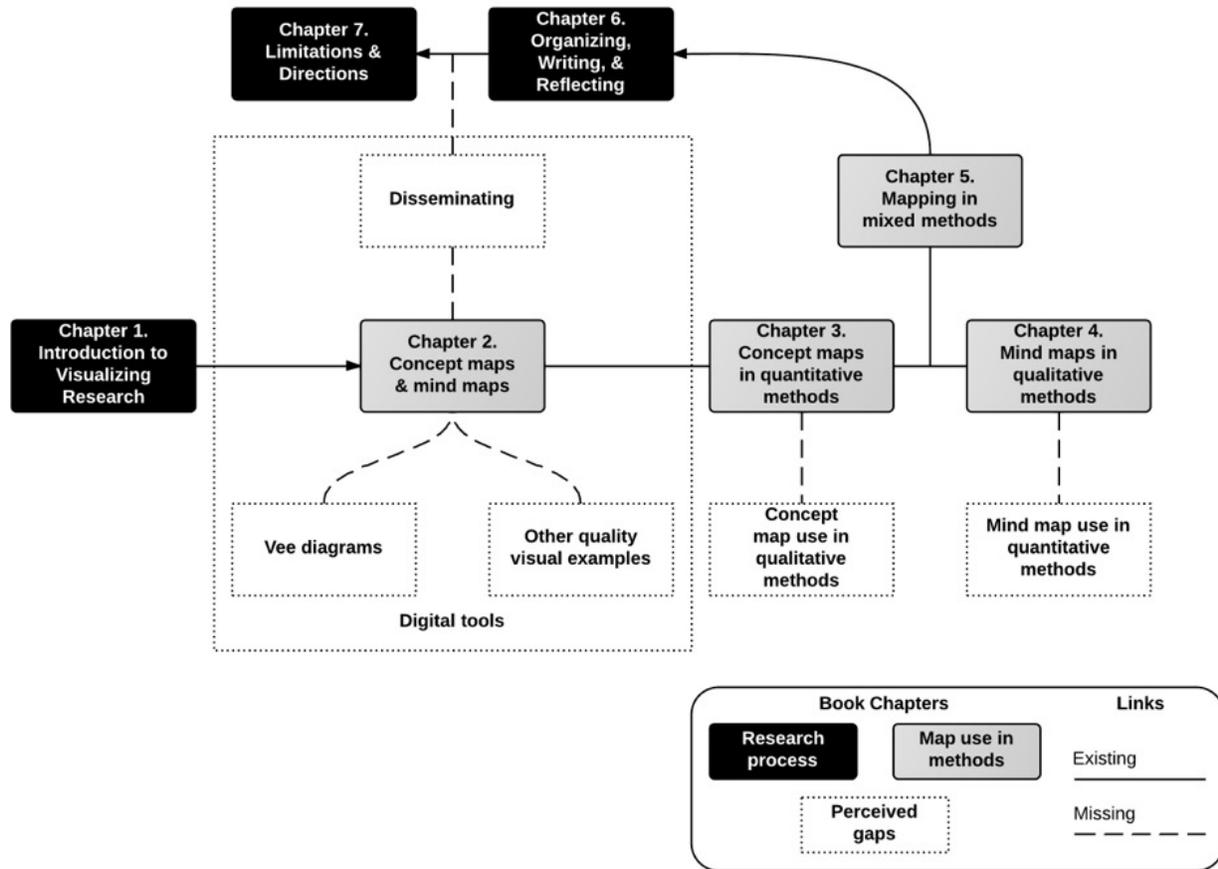


Figure 1. Visual representation of links within the text *Visualizing Social Science Research: Maps, Methods, and Meaning*. Figure created using Lucidchart (www.lucidchart.com).

claim – to provide both an introduction to research in the social sciences while focusing on the use of maps, graphs, and diagrams. In accordance with this claim, we found that the seven chapters can be arranged into two sections (see two shades of components in Figure 1): the research process and the use of maps within methods. While each chapter is of a digestible length and follows a similar layout, the progression assumes a reader will take a “cover-to-cover” approach. Yet given the proposed supplemental use of the book, it is difficult to assume readers will take a linear approach. We instead expect that students may jump around as needed (according to the inter-connections displayed through Figure 1).

Given the assumed purpose of enhancing the use of visuals in social science research, we expected the authors to model Tufte’s (2001) graphical excellence through revealing complex ideas with clarity, precision, and efficiency. The authors briefly identify the influence of Tufte on visual representations; yet fail to heed his instruction. We found both simple and cluttered displays that lack substance, progression, and aesthetic appeal. For example, the book includes simple visuals containing information more suited to an in-text list or table (e.g., Seven rules for social science research). The book does include useful examples of concept maps, particularly when related to decision-making in the research process (e.g., Are you interested in a relationship between variables or differences between groups?). Yet we generally found that concept maps, though often used to

display a lot of information, can overwhelm a reader if some in-text direction is not provided. Ironically, one cluttered example provides a pictorial overview of the traditional features of concept maps. Cluttered examples make it difficult for a reader to understand, which contradicts the purpose set out by the authors: to “quickly and easily scan [the] picture [and] identify key words” (p. 46). We also found duplicates of visuals: figures in Chapter 1 are duplicated in Chapter 5 and 6. Exploring and implementing Tufte’s (2001, 2006) ideas further may have provided the depth and direction needed to fully develop the visual representations that served as models through the text.

We appreciate the focused commitment throughout the book to two mapping strategies (concept maps and mind maps) and the connections made to methods. Yet we did not find the presentation useful for furthering the quality of visual displays across diverse methodological approaches within the social sciences – especially within the current digital age. As represented through Figure 1, the use of concept maps is primarily connected to quantitative methods (Chapter 3), while the mind map strategy appears reserved for qualitative methods (Chapter 4). We find this forced dichotomy simplistic and particularly problematic when transitioning to mixed methods research (Chapter 5) – namely, when considering mixed methods as a legitimate third methodological approach (Creswell & Plano-Clark, 2011). Moreover, the authors fail to deliver on the promise of focusing on a third visual strategy throughout the book: Vee diagrams only appear at the end of Chapter 6.

References reflective of a variety of sources and specificity would have strengthened the credibility of this book. For example, Wheeldon and Åhlberg seem to rely on one or two authors when discussing concept maps (e.g., Novak) and mind maps (e.g., Buzan). Additionally, other sources, such as Teddlie and Tashakkori (2009), are often referenced inappropriately. Teddlie and Tashakkori’s work is typically associated with mixed methods designs yet represents one of the core references cited within the quantitative chapter. Moreover, a key qualitative source, Miles and Huberman (1994), though referenced throughout the text, seemed absent within the chapter dedicated to qualitative research.

In addition to direction related to organizing, writing, and reflecting during the research process (Chapter 6), we would have appreciated a chapter on dissemination. A much-needed contribution to social sciences would include an open discussion of varied visual strategies and tools, particularly when disseminating to different audiences. Although the authors briefly introduce a useful online visualizing tool, Wordle (Feinberg, 2009), they include simple output displays that do not highlight the full potential of the visual aid. The authors show little recognition of the ever-changing range and accessibility to visualizing tools in the digital age. In addition, since there is an apparent heavy reliance on Microsoft Word SmartArt templates to create displays throughout the book, an introduction (and associated citation) would have been most appropriate.

Given the intended audience, practical applications (i.e., the use of visuals in conference poster and paper presentations or during dissertation writing) can offer increased opportunities for creating meaning. Although the authors do include practical components (exercises, student activities, research examples), the quality and quantity of these useful additions remain inconsistent across chapters. For example, Chapters 3 and 4 provide practical step-by-step student activities (e.g., Teaching others how to construct a concept map), while others offer minimal structure or conclude without a student activity or exercise.

Wheeldon and Åhlberg accurately label the research process as a series of decisions from designing to disseminating, and while they highlight the use of visuals in the planning and data collection phases, we expected some discussion of visual dissemination strategies. Further integration of maps and methods, with the purpose of visuals detailed for each method (qualitative, quantitative, mixed), would have increased the appeal of the text. Overall, the book may prove useful for educators and their students (in and outside of the social sciences) who want a supplemental text on research methods – but not for those seeking visualization discussions. 🍁

Note

1. Figure 1 was created using the useful online application *Lucidchart*.

References

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