Book Review: Visualizing Social Science Research: Maps, Methods and Meaning

by Blog Admin                                       January 3, 2013

Presenting basic principles of social science research through maps, graphs, and diagrams, this book shows how concept maps and mind maps can be used in quantitative, qualitative and mixed methods research, using student-focused examples and classroom based activities. Stavroula Tsirogianni would like to have seen more discussion on audiences and design, but feels the book will certainly appeal to educators and researchers.


Although one is told not to judge a book by its cover and title, Visualizing Social Science Research: Maps, Methods and Meaning tempts the reader to expect its content to be on visualization methods and choices in social research. However, as soon as one reads the preface, it becomes clear that the book is written as an introduction to basic principles and approaches in social research and the uses of mind maps and concept maps in understanding and exploring different issues related to the research process. For this reason it makes it suitable, as the authors also state in their preface, for undergraduate and postgraduate students or anyone unfamiliar to social science research.

Throughout the book, authors Johannes Wheeldon & Mauri K. Ahlberg provide a variety of practical examples of how maps can and have been used in quantitative, qualitative and mixed methods research, to demonstrate their utility in assisting the understanding of the phenomenon under study and the different elements in research. The book is divided into two main sections, covering theoretical foundations about visualization and maps (chapters 1 & 2), and the use of maps at different stages in quantitative, qualitative and mixed-methods research from designing the research, collecting, analyzing data to writing a research paper (chapters 3-6). In their final chapter, the authors cover conceptual and practical limitations of maps, issues on reliability and credibility in social research, and introduce participatory action research and systematic literature as new directions in social science. Each chapter ends with student activities and review questions that aim to enhance the application of the main points covered to practice.

The authors introduce the concept of visualization in chapter one by making brief reference to the work of American statistician and professor emeritus of political science, statistics, and computer science at Yale University, Edward Tufte. Noted for his writings on information design and as a pioneer in the field of data visualization, Tufte’s work is used to explain why visualization is useful not only as a tool to present findings but also a tool to demystify what social research entails. This is an important and innovative addition to a methods book, but unfortunately not explored in depth. The authors then move to introduce different aspects of the research process and use maps to represent this visually. Concept maps (diagrams showing the relationships among concepts) and mind maps (diagrams used to visually outline information) are also fully explained here.

In Chapter two, the authors provide a short historical overview of the use of different types of maps in philosophy, psychology and information technology, to represent different types of knowledge. New
readers may struggle with terms such as schematic maps, cognitive maps, semantic maps, mental maps—all of which are introduced in the chapter without the differences between them fully explained. Although the aim of this short history is to point out the utility of visual representation of ideas through maps, the differences between different types of maps is an evident limitation and would deserve more attention than provided.

A brief theoretical explanation of the use of maps in qualitative research is given in chapter four, and the authors go on to cover basic issues around designing qualitative research, collecting, analyzing and interpreting qualitative data. They choose three epistemological approaches in qualitative research: ethnography, phenomenology, and grounded theory, without really explaining the reasons for choosing these paradigms. They do, however, explain them in an accessible manner which many readers will find useful. Also included is are examples demonstrating the potential of maps as data collection tools.

As an introductory text to the use of maps it does demonstrate how maps can enhance the learning and thinking of students, educators and researchers, but it does not set the stage for further inquiry into visualization. The authors introduce the reader to a catalogue of uses rather than an exploration of possibilities and approaches through different types of maps, graphs and diagrams and visualization in general. Although it is clear that the authors limit themselves to mind maps and conceptual maps they do this without opening the discussion to the use other types of maps and visual methods that can facilitate reasoning and thinking about research, which would be a refreshing addition to the issue of visualization in the social sciences.

Moreover, there is no discussion about how one can use maps to present findings and ideas to different audiences and how one can maximize the understanding and aesthetic appeal of maps. Overall the authors’ concern is mostly linked to the epistemic value of maps rather than the intensity of aesthetic experience maps and other graphical displays afford. Appealing maps and graphs can better highlight concepts, ideas, and data. Some of the maps, diagrams, and graphs presented in the book are complex to understand and visually unattractive, which do not manage to ‘channel creativity’ as the authors explicitly intend. The main goal of visualization is to present information in an easy to understand, intuitive, and attractive manner, which in this reviewer’s mind, the authors do not seem to completely appreciate. Overall, the authors’ visualization approach attests the dominant culture in social sciences, which is the lack of appreciation of different graphical techniques and approaches in visualization (again, Tufte is a good reference).

Overall, the book needs to be seen as a complementary text to a research methods book that demonstrates the value of maps in enhancing the understanding of different elements in the social research process. It is not clear when it stops being a handbook for social research methods and starts being a guide to the use of maps. This book would certainly appeal to educators who want to teach the methodological issues covered in the book and apprentices in social science research methods. However, it does not bring visualization into the centre of discussions about research methods, as one would hope so judging from the title.

Stavroula Tsirogianni is a Research Fellow at the Department of Methodology at the LSE. She currently designs, in collaboration with Martin Bauer, a new course entitled ‘Visual Rhetoric: Using Graphic Design in Research’ aiming to stimulate knowledge exchange between designers on the Graphic Design Postgraduate Program at the London College of Communication (LCC) and LSE academics and PhD students. Read more reviews by Stavroula.