Preface

Research methods have experienced considerable changes in the past decades, in part as a consequence of the widespread use of computers and increasingly more sophisticated software applications, and appear to be changing yet again with the development of online versions of conventional research methods. In fact, in a multiplicity of disciplines, researchers have been converting conventional paper-and-pencil research methods into new digital and online versions, borrowing methods and tools from other disciplines, a pioneering work that provides valuable references for urban and planning researchers and practitioners. In the data acquisition phase of the research process there are now methods, based in digital technologies, similar to well-known paper-and-pencil research methods, as several chapters in this book show. Illustrations of this are the different forms of online observation, as well as the various types of online interviews and other modes of online data survey. In all these cases, it is not only the use of digital tools but their online application that is changing the way research is conducted in the field of urban and planning studies.

However, the extent of the impacts of this digital revolution in the professional practice of urban researchers and urban planners is still largely undetermined, notwithstanding the fact that data accessibility and the ever increasing size of databanks, made possible by the use of these new digital technologies, associated with continuous innovations in the supporting software, for both quantitative and qualitative analysis, contributed undoubtedly to the expansion of the methodological options available for urban research and urban planning. Data archiving and the publication of research outcomes have also experienced substantial changes, some of which created new or reinforced previous ethical and legal challenges that urban researchers need to address carefully.

Therefore, the goal of this book is to provide an overview of online research methods applied or likely to be applied in the field of urban and planning studies. In 23 chapters, written by 42 authors, from different academic and professional backgrounds, working in different parts of the world, the book explores and discusses the new digital technologies and Web-based research methods, as well as the legal and ethical challenges associated with the use of these methods. Its organization progresses from data collection and data analysis methods to archiving and publication of research outcomes and ends with ethical and legal considerations associated with research in digital and online environments.

The opening chapter of the book, “Research Methods for Urban Planning in the Digital Age,” provides an outline of research methods for urban and planning research, examines different digital technologies and Web-based research methods, applied in the different stages of the research process, in particular during data acquisition and data analysis, and summarizes ethical issues in online research, some of which are examined in greater detail in the following chapters, namely in the last two. Randall J. Olsen in the second chapter, “Infrastructure for Survey Data Processing in Urban and Planning Studies,” looks at
the methods used to collect survey data, how they have changed in the last decades, and how they are likely to change again as a result of the rise of Web-based technologies, with a specific focus on how the new telecommunication technologies will probably dominate, in the future, survey data collection in urban studies. In the third chapter, “Volunteer Panel Web Surveys in Urban Planning,” Sunghee Lee provides an overview of the volunteer panel Web surveys, including their operational procedures and methodological advantages and weaknesses.

The next five chapters deal with different modes of digital and online interviews. In Chapter 4, “Online Qualitative Interviews: Opportunities and Challenges for Urban and Planning Studies,” Kathleen J. Hanrahan, Mathew T. Smith, and Judith E. Sturges examine the feasibility of online qualitative interviews, offer an overview and comparison of the online options available, and discuss research ethics issues related to human subject protection. This is followed by Chapter 5, “Towards a Method for Research Interviews using e-Mail,” where Peter Petocz, Sue Gordon, and Anna Reid explain how the use of e-mail interviews provides a relatively low-tech methodology for research in the field of urban and planning studies, and examines its advantages over live interviews and high-tech video interviews. Jason Zalinger in Chapter 6, “The Story of Ethnochat: Designing an Instant Messaging Program to Conduct Semi-Structured or Unstructured Interviews,” presents and discusses a tool for conducting semi-structured or unstructured online interviews, and offers a detailed description of his prototype Instant Messaging program, Ethnochat.

Joachim Gerich, in Chapter 7, “Video-Enhanced Self-Administered Computer Interviews,” reflects on the characteristics of this digital and online interview method, its strengths and shortcomings, especially when employed to interview respondents with special needs, in particular deaf or young respondents. In the last chapter of this section, “Unveiling Space by using Participatory Photo Interview,” Bettina Kolb reflects on how the use of visual material in a participatory interview process facilitates communication with human participants and a deeper understanding of their perspectives, offers an overview of the literature, outlines the strengths and weaknesses of this approach, and discusses prospects for the application of this method in the field of urban and planning studies.

The following chapters deal with methods that in different ways can be applied by researchers and urban planners to produce creative ideas or perspectives about the future of cities and regions. In Chapter 9, “Brainstorming in Virtual Teams,” Mary T. Dzindolet, Paul B. Paulus, and Courtney Glazer offer a review of the literature on virtual teams as well as on practical techniques that researchers can apply to effectively and efficiently brainstorm in virtual teams, with a particular focus on the idea generation phase of the research process. Nicolas Michinov in the following chapter, “The use of Electronic Brainstorming for Collecting Ideas in Scientific Research Teams: A Challenge for Future Online Research,” offers a review of the literature on brainstorming and reflects on electronic brainstorming as a method to create ideas within research teams, geographically dispersed, and as a problem-solving technique that can be used by researchers and urban planners to find solutions to multifaceted spatial problems. In Chapter 11, “The Delphi Technique: Use, Considerations, and Applications in the Conventional, Policy, and On-Line Environments,” Chia-Chien Hsu and Brian A. Sandford explain how the Delphi technique uses experts to produce information beyond what is currently known, and provide an overview of the different variants of this method, the conventional Delphi and the Policy Delphi, their main characteristics and differences, including, for both cases, the digital version, or e-Delphi, supported by Web-based forms of online communication.

Considerably different from brainstorming and from the Delphi method, the laddering technique is another example of a research method that should be used more extensively in urban and planning studies.
Thorsten Gruber, Alexander E. Reppel, Isabelle Szminig, and Rödiger Voss, in Chapter 12, “Designing Online Laddering Studies,” offer a well informed account of this research method, its strengths and weaknesses, which, as they explain, can provide rich data to help understand means-end considerations, and describe how qualitative urban researchers can successfully apply laddering in an online environment, explaining the different stages of the online laddering process. This section ends with Chapter 13, “Search Conferences and Future Search Conferences: Potential Tools for Urban Planning in an On-Line Environment,” by Rosalind Hurworth. The author examines the potential of the Search Conference, and its more recent version, the Future Search Conference, as useful participatory methods in urban planning and discusses their strengths and shortcomings. As Rosalind Hurworth emphasizes, this is a method in which each participant is expected to contribute to the implementation of the proposals recommended during the participatory process.

The following section provides, in five chapters, an overview of methods and digital technologies for online observation of the new forms of interaction and social organization that takes place in the Internet, some of them developed outside the field of urban and planning studies. It is the case of Chapter 14, “Netnography: An Assessment of a Novel Research Approach and its Underlying Philosophical Assumptions,” by Guido Lang, Stanislav Mamonov, and Karl R. Lang, first developed for consumer research in the field of marketing and later applied in other fields. The authors elaborate on the philosophical assumptions and specific methods of netnography, present findings from several qualitative studies, and offer a number of recommendations that researchers and urban planners should consider. This is followed, in Chapter 15, “Citizens on YouTube: Research-Method Issues,” in which Stefano Pace provides methodological recommendations on how to research YouTube videos, in particular videos focused on urban issues.

Lesley Murray, in the chapter “Online Opportunities for Mobile and Visual Research,” explores the ways in which mobile and visual methods can be combined to create new knowledge and original insights, through the use of Web-based technologies, and assesses the effectiveness of these methods. In Chapter 17, “Using Digital Tools in Qualitative Research: Supporting Integrity, Simplicity, Deep Insight and Social Change,” Susan Crichton reflects on the ways new digital technologies can be used to respect participants’ voices and experiences, and makes a number of suggestions and recommendations about new tools and software. In the last chapter in this section, “Empirical Research Methods in Virtual Worlds,” Travis L. Ross, Edward Castronova, and Gert G. Wagner provide an overview of empirical methods for research in virtual worlds, and address experiences in those virtual settings, concluding that virtual worlds are a valid venue to conduct empirical research.

The next three chapters deal with different issues: mobility in urban spaces; population characteristics in major informal urban areas, the slums, in the developing world; audio and video archives. In Chapter 19, “Monitoring Pedestrian Spatio-Temporal Behavior using Semi-Automated Shadowing,” Alexandra Millonig, Markus Ray, and Helmut Schrom-Feiertag address and discuss research methods for the study of mobility and orientation behavior, and describe a new approach, which combines simple observation with new data collection technologies for monitoring pedestrian spatio-temporal behavior. Amy Wesolowski and Nathan Eagle, in Chapter 20, “Mobile Phones as a Lens into Slum Dynamics,” explore and discuss the use of data produced by mobile phones as an opportunity to better understand human behavior, as well as the social, economic and mobility characteristics of the population living in slums. In the third chapter of this section, “Archiving Audio and Video Interviews,” Almut Leh and Doris Tausendfreund explore developments in online archival storage and retrieval of oral history interviews and reflect on its
future prospects, focusing on experiences and projects in Germany, which should be seen as examples of technical and ethical issues likely to emerge in the field of urban and planning research.

The book ends with two chapters, “Addressing Legal Issues in Online Research, Publication and Archiving: A UK Perspective,” by Andrew Charlesworth, and “Ethical Considerations in Online Research Methods,” by Harsh Suri and Fay Patel. Andrew Charlesworth provides a broad and critical overview of the legal and ethical risks that researchers face when they use online research methods and Web-based technologies, for data collection and data analysis, for the communication of research outcomes, and in the archiving of data produced by the research team or by other researchers. Harsh Suri and Fay Patel outline and discuss critically a number of ethical dilemmas faced by researchers in each stage of the online research process.

In conclusion, these essays, written by distinguished colleagues, from different academic and professional backgrounds, give an updated and well informed overview of some of the ground-breaking online research methods, their strengths and shortcomings, examine and discuss important ethical and legal issues, and provide, when appropriate, practical guidance on how to conduct and apply each of these methods. For all these reasons, I trust the book will be useful for students, teachers, researchers and practitioners in the field of urban and planning studies, and in related disciplines. I hope the book will contribute to enhance the use of digital technologies and Web-based research methods and will stimulate the conversation, within urban and planning studies, about these digital technologies and online research methods.

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