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Aharon Kellerman

# Geographic Interpretations of the Internet



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*Dedicated to my granddaughter Alma-Chaya*

# Preface

This book constitutes yet another building block in my continuous efforts to contribute to the development, establishment and presentation of the geographical dimensions of the Internet. Back in 2002, in my book *The Internet on Earth: A Geography of Information*, I attempted to draw the geography of the Internet, as part of the wider area of the geography of information, focusing mainly on its revelation in real space. My two following books, devoted to the study of mobility, *Personal Mobilities* (2006) and *Daily Spatial Mobilities* (2012), experimented with the Internet as a type of virtual mobility, operated by people side by side with their mobilities in real space. Finally yet significantly, my last book, *The Internet as Second Action Space* (2014), tackled with the more recent trend of individuals using the Internet as an additional operational space, or even as a replacement, for the ‘natural’ and veteran physical space.

This rather brief book takes yet another course in my continuous exploration of geographical dimensions of the Internet, this time dealing with the geography of the Internet as cyberspace, in its constitution of a special class of space. We will attempt, in the following chapters, to use concepts and notions, all well-known from their role for the basic analysis of real space, for the understanding and interpretation of the Internet as cyberspace. As such, I trust that this book will add another constructive element for the emerging geographical comprehension of the Internet.

The drive for the analysis proposed and developed in this book, and the carrying out of its writing at this specific point in time, have emerged from my own personal experience as a geographer using the Internet extensively, through computers as well as through smartphones, and for continuously expanding purposes. I have been under a growing impression that when making use of the Internet we are actually involved in a geographical experience, albeit in cyberspace, moving among cyberspatial places, and acting within them. This feeling has been enhanced with the continuously improving graphics of Internet screens, coupled with the speed marvels of broadband communications.

Parts of the book constitute an expansion of my recent *GeoJournal* article, entitled ‘Image spaces and the geography of Internet screen-space’ (2016). Thus,

Chap. 2 of the book is an expansion of the first sections of that article, whereas parts of Chaps. 3–5 present elaborated discussions of terms and concepts listed briefly in latter sections of that article, with a newly added discussion of co-presence. Chapter 6 follows in part yet another article of mine, devoted to cyberspatial cognition (Kellerman 2007).

Most of the terms and concepts that are presented in this book serve as basic tools for geographical analysis in human geography, and their use for the interpretation of the Internet is our basic objective in this book. Albeit, some of the concepts discussed in the following chapters, notably those of distanciation, co-presence, proximity, and directionality, though being straightforward terms for spatial analysis, have not been developed within geography, and geographers have made little use of them. They have rather emerged in sociology, thus pointing to the growing interest of sociologists in space and in spatial organization in general, and in cyberspace in particular. Sociologists have focused on the exploration of the human significance of these dimensions, notably within the recently emerging interdisciplinary study of mobilities.

The book may appeal to the wider communities of human and economic geographers, and it may be of special interest to those involved in information and Internet geographies. The book may also appeal to geographers interested in the terms, concepts, and methods, developed and used by geographers for their analyses of real space, so that this book may provide them with some insights as for their possible extension for the analysis of cyberspace. The book may further be of special interest and importance to sociologists and media scholars and students, notably for those specializing in information society and information technologies, as well as to those dealing with the interrelationships between societies, on the one hand, and communications technologies and the Internet, on the other.

I acknowledge the permission granted by Springer for the use of my *GeoJournal* (2016) article mentioned before, as well as for Fig. 2.1, another version of which was originally published in that article. I further acknowledge the permission granted by [Chitika.com](http://Chitika.com) for the use of the data presented in Tables 4.1, 4.2 and in Fig. 4.1. Thanks are due to Kety Gersht (Zefat Academic College) for the drawing of Fig. 2.1, and to Noga Yoselevich (University of Haifa) for the drawing of Fig. 7.1.

As always, I owe a deep gratitude to my wife Michal, for her continuous patience and tolerance for what seems to be my unstoppable involvement in research and writing.

March 2016

## Reference

Kellerman, A. (2007). Cyberspace classification and cognition: Information and communications cyberspaces. *Journal of Urban Technology*, 14, 5–32.



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# Chapter 1

## Introduction: The Internet and Geography

**Abstract** This, introductory chapter will introduce the thesis of the book, its relevance and importance. It will further elaborate on the literature which has attempted so far to relate to the Internet as a geographical space. The chapter will also treat several Internet-related topics, such as digital gaps, sociality, and the territorial geography of the Internet.

**Keywords** Internet geography · Geographic terminology · Internet foundations · Digital gaps · Internet social spatiality · Terrestrial geography of the internet

### 1.1 Book Objectives and Structure

The Internet has turned into an integral element of our daily lives in all of their three current major spheres: home, work, and on the go. The Internet constitutes for contemporary societies a triple space: information space through the Web and its websites; communications space through platforms that facilitate e-mailing, chatting, and calling; and Internet screen space, serving as the interface between the first two spaces and their users. As such, the Internet does not only passively ‘inform’ its users, but it permits the active performance of informational and communications activities of all kinds by its subscribers. The following chapters will introduce a new perspective for the Internet: veteran spatial concepts and terms, developed originally for the description and analysis of real space, will be portrayed, in an attempt to apply them for a geographic interpretation of the Internet. The discussions in the following chapters may jointly put forward an initial systematic geographic interpretation of the system. Thus, the following discussions may possibly shed a significant light on the Internet as a spatial entity, an entity being both similar and different, as compared to real space.

The approach advanced in the book amounts to an extension of numerous and basic real-space geographical concepts for the cyber spatial Internet. Geographers, as well as scholars from adjacent disciplines, notably sociology, have developed these concepts over the years for the understanding and analysis of terrestrial