## Internationalizing Internet Studies

**Beyond Anglophone Paradigms** 

Edited by Gerard Goggin and Mark McLelland

**Artificial Intelligence Series** 

# Internationalizing Internet Studies

### Routledge Advances in Internationalizing Media Studies

EDITED BY DAYA THUSSU, University of Westminster

1. Media Consumption and Everyday Life in Asia Edited by Youna Kim

#### 2. Internationalizing Internet Studies

Beyond Anglophone Paradigms Edited by Gerard Goggin and Mark McLelland

# Internationalizing Internet Studies

**Beyond Anglophone Paradigms** 

Edited by Gerard Goggin and Mark McLelland



First published 2009 by Routledge 270 Madison Ave, New York, NY 10016

Simultaneously published in the UK by Routledge 2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

This edition published in the Taylor & Francis e-Library, 2008.

"To purchase your own copy of this or any of Taylor & Francis or Routledge's collection of thousands of eBooks please go to www.eBookstore.tandf.co.uk."

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 2009 Taylor & Francis

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

**Trademark Notice:** Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

#### Library of Congress Cataloging in Publication Data

Internationalizing Internet studies / edited by Gerard Goggin and Mark McLelland.
p. cm. — (Routledge advances in internationalizing media studies ; 2)
Includes bibliographical references and index.
ISBN-13: 978-0-415-95625-3
ISBN-10: 0-415-95625-0
1. Cyberspace. 2. Internet. 3. Language and languages. 4. Communication and culture — Technological innovations. I. Goggin, Gerard, 1964 – II. McLelland, Mark J., 1966 –

HM851.I5693 2009 306.440285'4678-dc22 2008016087

ISBN 0-203-89142-2 Master e-book ISBN

ISBN10: 0-415-95625-0 (hbk) ISBN10: 0-203-89142-2 (ebk)

ISBN13: 978-0-415-95625-3 (hbk) ISBN13: 978-0-203-89142-1 (ebk)

## Contents

List of Figures List of Tables		ix xi	
PART I Rethinking Internet Studies?			
1	Internationalizing Internet Studies: Beyond Anglophone Paradigms GERARD GOGGIN AND MARK MCLELLAND	3	
2	What Cyberspace? Traveling Concepts in Internet Research SUSANNA PAASONEN	18	
3	Americanizing Palestine Through Internet Development HELGA TAWIL-SOURI	32	
4	The International Turn in Internet Governance: A World of Difference? GERARD GOGGIN	48	
PART II Language Communities Online			
5	Language on the Internet in Japan NANETTE GOTTLIEB	65	
6	More than Humor: Jokes from Russia as a Mirror of Russian Life EUGENE GORNY	79	

vi	Contents	
7	The Welsh Language on the Internet: Linguistic Resistance in the Age of the Network Society DANIEL CUNLIFFE	96
8	The Fight of a Minority Language Against the Force of Globalization: The Case of Catalan on the Internet JOSEP LLUÍS MICÓ AND PERE MASIP	112
9	The German Internet Portal Indernet: A Space for Multiple Belongingness URMILA GOEL	128
10	Serbian Minority/Refugees on the Internet: In the Midst of Denial and Acceptance of Reality LJILJANA GAVRILOVIĆ	145
	RT III am, Modernity, and the Internet	
11	Modems, Malaysia, and Modernity: Characteristics and Policy Challenges in Internet-Led Development NASYA BAHFEN	163
12	Muslim Voices in the Blogosphere: Mosaics of Local–Global Discourses MERLYNA LIM	178
13	The Internet in Iran: The Battle Over an Emerging Virtual Public Sphere GHOLAM KHIABANY AND ANNABELLE SREBERNY	196
	RT IV ian Cybercultures	
14	Internet, Internet Culture, and Internet Communities of Korea: Overview and Research Directions SEUNGHYUN YOO	217

15	Gifts of Presence: A Case Study of a South Korean Virtual Community, Cyworld's Mini-hompy LARISSA HJORTH	237
16	Affiliation in Political Blogs in South Korea: Comparing Online and Offline Social Networks HAN WOO PARK AND RANDY KLUVER	252
17	Beauty Is in the Eye of the QQ User: Instant Messaging in China PAMELA T. KOCH, BRADLEY J. KOCH, KUN HUANG, AND WEI CHEN	265
18	That Global Feeling: Sexual Subjectivities and Imagined Geographies in Chinese-Language Lesbian Cyberspaces FRAN MARTIN	285
19	Online <i>Tongzhi</i> ? Subcultural Practices in the Gay and Lesbian Community of Spiteful Tots TERRI HE	302
20	Going Mobile: The Mobile Internet, Ringtones, and the Music Market in Japan NORIKO MANABE	316
Co	Contributors	
Ind	Index	

## Figures

6.1	Anekdot.ru popularity growth: statistics by unique hosts per month.	83
7.1	Perceived importance of Welsh-language provision on websites.	101
7.2	Language preference for reading webpages.	102
15.1	An example of a male respondent's mini-hompy.	242
16.1	Network diagram of the 107 Assemblymen's blogs.	259

## Tables

7.1	Percentage of People in Wales Who "Do Not Access the Internet."	100
8.1	Catalan Linguistic Area	115
14.1	Broadband Subscribers per 100 Inhabitants (OECD, June 2006)	218
14.2	Top Five Internet Café Categories (January 2007)	219
16.1	Blog Ownership of Assemblymen by Party and Gender	257
17.1	Results for QQ Usage Questions	273
17.2	Perception of QQ and Internet Influence among People Familiar with QQ	275

# Part I Rethinking Internet Studies?

### 1 Internationalizing Internet Studies Beyond Anglophone Paradigms

Gerard Goggin and Mark McLelland

#### INTRODUCTION

In the Almond coffee shop in Roppongi, a popular haunt for teenagers in Tokyo, a group of young girls are chatting excitedly while playing with their *keitai* (mobile phones), taking and swapping photos, as well as downloading movie times and reviews and sending instant messages to absent friends advising them of the group's current location. Suddenly, one girl asks the others to be quiet and listen to a new music track coming across the café's FM radio system. This is the track she had mentioned to them earlier—what is it? Who is it by? No one seems to know. One girl takes her phone, points it in the direction of the music, and hits a menu button. The song's artist and title is immediately displayed on her screen. "I *told* you it was a new track by Gackt," she says excitedly, as she hits another menu button that takes her to a popular *chaku-mero* site where she can download the song's chorus as her new ring tone.

Meanwhile, half way around the globe in the Occupied Territories, a teenage Palestinian girl is sitting in an Internet center established by an international aid organization. She has heard from her parents and friends about the Internet and how it is the gateway to a whole world of opportunity and has come along to give it a try. However, after staring at the screen for a few minutes, she has no idea where to begin. A friendly visitor from the United States, who happens to be on the next machine, leans over to give her advice on how to set up an e-mail account. "Which language would you prefer, English or Arabic?" she inquires. "I can't understand either," replies the girl. "I can't read at all."

These two teenage girls live worlds, or even ages, apart. The term "digital divide" does not seem adequate to describe the chasm that separates their respective interactions with the world of communication technology. As Tawil-Souri (Chapter 3, this volume) points out, simply setting up Internet facilities in disadvantaged areas of the globe does very little to empower local populations that lack the cultural and social capital to render such facilities intelligible and useful. In relation to new media, young Palestinian girls are extraordinarily disadvantaged.

#### 4 Gerard Goggin and Mark McLelland

In the case of Japan, however, the teenage girls in question are the products of a society wherein they are not simply positioned as consumers of new technologies, but are part of a youth culture stretching back to the 1980s that has driven these new technologies forward and given them their current shape. As Mizuko Ito points out, in Japan (and, to an extent, in other Asian societies) mobile communications technologies were not "conceived by an elite and noncommercial technological priesthood and disseminated to the masses," but emerged out of Japanese consumers' love of "gadget fetishism and technofashion," and the market was driven, not by a business elite, but rather grew out of the existing pager culture of teenage Japanese girls.<sup>1</sup> The agency of Japanese girls stretches beyond simple consumer choice: as Manabe (Chapter 20, this volume) shows, the choices they make have actually altered the way in which the Japanese music industry is organized and how it develops and markets its products.

Obviously, these two very different stories make it necessary to underline the cultural specificity of Internet technology, its design, functions, uses, and meanings—and to emphasize its role as "an artifact located in a specific national context."<sup>2</sup> Ito points out that technologies are not universal; rather, it is necessary to attend to "the heterogeneous co-constitution of technology across a transnational stage."<sup>3</sup> Contemporary world societies comprise very different "technoscapes" that differ markedly from US and European locations, and Internet studies need to attend to these local differences. One purpose of this collection is to add to the growing recognition that communications technologies with a "global" reach also are situated in very local cultures of use.<sup>4</sup>

#### **RETHINKING THE INTERNET AS INTERNATIONAL**

From the mid-1990s onward, the Internet has shifted fundamentally from its coordinates in English-speaking countries, especially North America, to become an essential medium in a wide range of countries, cultures, and languages. According to 2007 statistics,<sup>5</sup> the Chinese language is used by 14.3 percent of all Internet users, followed by Spanish at 8 percent, and Japanese at 7.7 percent. At 29.5 percent and falling, the percentage of English-language users is now a minority in terms of overall online language use. Furthermore, at 123 million,<sup>6</sup> China has the largest number of Internet users of any country other than the United States. Given China's massive population and the rapid pace of its economic reforms, it can be anticipated that mainland China will soon be home to the largest number of Internet users of any country.

However, communications and media scholarship, especially in the Anglophone world, has not registered the deep ramifications of this shift in emphasis from English to non-English language users online or the challenges it poses to the concepts, methods, assumptions, and frameworks used to study the Internet. Despite the fact that there is also a large body of work being produced by scholars in non-English-speaking cultures and locales, hardly any of this work is being translated, and it has had little impact on the theorization of the developing fields of Internet and cognate, if short-lived, fields such as web studies.

So far, there is no single monograph or edited collection that introduces and explores the implications of the fact that the Internet is an international phenomenon. The most often used survey books—such as *The Internet in Everyday Life* (2002), or the edited collections *Web.Studies* (2nd ed., 2004) and *The Cybercultures Reader* (2nd ed., 2007)<sup>7</sup>—contain some reference to the diffusion of the Internet globally, but do not focus upon or systematically chart what is now most salient and significant about the Internet: its great cultural and linguistic variety, and the breadth and difference of its uses and applications. In these surveys, there are some useful studies and discussions of Internet use in non-Anglophone environments, but these observations remain peripheral to the bulk of research that focuses on research in English into English-language cyberspaces.

While there have been some earlier studies focusing on language use,<sup>8</sup> these investigations were undertaken when the Internet was still concentrated in wealthier, Western countries, and when the mobile Internet applications that became so popular in East Asia—or technologies such as blogs, wikis, podcasting, and so on-were unknown (and certainly not on the horizon of scholars, let alone users).9 Research into languages that do not utilize the Roman-based alphabet remains particularly lacking in the literature.<sup>10</sup> Yet, as Gavrilovic (Chapter 10, this volume) points out, in the case of Serbian on the Internet the choice of script is both contentious and politicized. In the case of Chinese, too, there are two very different ways of writing characters that divide the People's Republic of China and Taiwan and lead to encoding problems in cross-strait communication (See Martin's and He's chapters 18 and 19, respectively, this volume). Issues of orthography (and the technical means to input, transmit, and display different scripts) thus have complex cultural, political, and historical dimensions for many languages.

Recently there has been both a growing sense of the multilingual nature of the Internet, and some important work grappling with this. Notably, there has been a special journal issue on the multilingual nature of the web and multimedia.<sup>11</sup> Also, there is now an important collection looking at language and the Internet more broadly, Brenda Danet and Susan C. Herring's *The Multilingual Internet*.<sup>12</sup> However, the focus of both of these works is primarily sociolinguistic—and to a significant extent, both are informed by the tradition of work surrounding the concept of computermediated communication, a different starting point from our own work, which is guided by ideas about the Internet suggested by media and cultural studies and social studies of technology. Thus, our collection has a different focus: we have set out to bring together understandings of culture, politics, community, use, and the social shaping of technology in order to suggest the profound implications of internationalization on how we approach the Internet.

There is a growing interest in Internet development in specific societies, with important studies from a number of countries and regions becoming available.<sup>13</sup> However, there still remain a preponderance of studies about, or framed upon, Anglophone Internet experience, histories, and cultures, particularly that of North America. In the literature, generally, the United States is all too often taken as "the supposed vanguard of the information society,"<sup>14</sup> and there has been little attempt to generate a discussion between scholars working on different language cultures or to develop modes of analysis that do not take Anglophone models as their starting point.<sup>15</sup> Indeed, commenting on the collection, *Japanese Cybercultures*, Gauntlett complains of the complacency of Western scholars, pointing out that:

we assume that people in other countries, using other languages, are probably doing things with Internet technology that are *pretty similar* to those applications that we are familiar with. This book shows how wrong that assumption is.<sup>16</sup>

Ito, too, complains of the Western-centric approach of most Anglophone researchers, noting that although Japanese researchers are well acquainted with Anglophone social science theory, "the reverse flow is relatively rare," and as a consequence, studies of "the Internet" that rely solely upon Anglophone theory run the risk of being parochial at best.<sup>17</sup> At worst, such accounts underpin notions of the Internet—as well as key assumptions that shape Internet studies—that generalize on the basis of quite particular experience. What might be recognized as specific experiences of Internet technologies, in particular their cultural developments and representations are taken as general.<sup>18</sup> The strong version of this claim is borne out, for instance, in Paasonen's (Chapter 2, this volume) genealogy of "cyberspace," where she points out that this "defining" metaphor for the online environment has failed to gain currency in Finland.

In Western countries like the United States, the United Kingdom, and Australia, Internet uptake was very rapid from the mid-1990s, since the penetration rate of personal computers (PCs) in these countries was already very high. In the United States, for instance, in the 1990s, a number of factors—including the prevalence and relative affordability of PCs and the generally advanced nature of the infrastructure and high bandwidth available—encouraged rapid development of particular forms of Internet cultures that became highly visible both online and in the media. These early, largely US-based Internet cultures gave rise to certain ideas and ideologies that have been highly influential in how the Internet has been understood (one thinks of the role of theorists, such as Howard Rheingold or *Wired* magazine, for instance).<sup>19</sup> Despite the ensuing critical interrogation of such ideas of the Internet, especially their utopian and dystopian antinomies, conceptions about what the Internet signifies that are rooted in patterns of development and use that are actually quite specific to US conditions still remain—but are not generally recognized as such.

For instance, a whole popular debate and critical literature on blogging quickly emerged, yet many of the assumptions and set-pieces in this-such as the discussion of the relation of mainstream news and journalism to blogging, or what blogging portends for public spheres and general culture—are deeply fashioned upon quite specific blogospheres, not least the North American.<sup>20</sup> However, one of the most populated blogospheres is that of mainland China. Haiging Yu points out that some 14.2 percent of China's 123 million Internet users maintain a blog, and that many of these blogs are characterized not so much by "citizens' resistance" but rather by a playful and "deliberate misuse and misinterpretation of mainstream ideology."21 She suggests that Chinese bloggers enjoy the medium as a kind of "entertainment for entertainment purpose," which conflicts with the orthodox party position of "education through entertainment." Although Western journalists commonly regard these bloggers as being engaged in an adversarial relationship with state authorities, Yu suggests that the bloggers themselves do not regard their activities in such black and white terms. Rather, what is so pleasurable for bloggers, she suggests, is the potential that the medium offers for "moments of tactical and light-hearted resistance." South Korea also has a large and culturally distinct blogosphere. As Yoo (Chapter 14, this volume) points out:

Korean blogs function as a socialization tool rather than as a venue for social activism . . . blogs in Korea are used more for interaction with others and passing the time than grassroots journalism.

In Iran, too (see Chapter 13 this volume), blogging has proven popular among conservative figures, including political and especially religious leaders, to the extent that holy city of Qom has been dubbed the "IT Capital of Iran."

Furthermore, as contributors to this volume powerfully demonstrate, those interested in the Internet have yet to recognize the existence of legions of bloggers in languages such as Persian, Arabic, Indonesian, Tamil, or Korean, or in multiethnic and multilingual nations such as Iran, India, or Sri Lanka (for discussions on several of these topics, see Chapters 12, 13, 14, and 16, this volume). This is not to mention how bloggers are constituting and participating in new transnational public spheres across global faiths (Chapter 12, this volume) or sexual, linguistic, and cultural communities (Chapter 18, this volume).

To provide another example, when it comes to instant messaging, we may be aware of a number of studies and, indeed, ideas about this technology (synonymous with Microsoft<sup>®</sup> Messenger, for instance) and associated cultural practices, but what do we know about instant messaging in China, and the hugely popular software QQ (Chapter 17, this volume)? In the craze for social media and software, and buzz around Web 2.0, are our ideas of consumer-generated content and the new productive role of the user predetermined by particular discourses and cultures of use around Western social software, photo-sharing, and video-sharing sites (for which MySpace, flickr, and YouTube might be paradigmatic today)—or should we approach new versions of the Internet with the Korean Cyworld in mind?

#### THE INTERNET'S DIFFERENT HISTORIES

The process of the internationalization of the Internet makes some striking differences in how the Internet has taken shape in different countries, places, cultures, and societies much more prominent. For instance, in the West, access to the Internet began—and has largely remained—PC-based. However, in other countries, particularly China, Korea, and Japan (which now has one of the world's highest populations of Internet users), PC penetration was relatively low. This is to do with the specific orthography of character-based scripts. Japan and China never went through the same kind of office automation phase characteristic of Western countries because it was very difficult to create simple machines, such as typewriters, to reproduce their scripts (Japanese uses about 2,000 characters in daily life; Chinese over 10,000). The advent of PCs in the mid-1980s helped solve this problem, but there were considerable technical hurdles to overcome in developing a programming language that could handle so much data.<sup>22</sup> Japanese, for instance, uses three different scripts (four if you include roman) and Chinese can be written in two very different character styles-traditional (used in Taiwan, Hong Kong) and simplified (used in PRC and Singapore).

Despite the global spread of the Internet, it is still strongly influenced by its history in the United States. The Internet was originally developed in the United States as a military communications platform and later developed into a mechanism for sharing research data among scientists. Then, it gradually developed into a communications tool for researchers at universities and other research facilities in general. The original programming languages relied on roman script, and the vast majority of early communication was conducted in English. The input and digital transmission of non-roman scripts was a significant problem for programmers for many years. The situation greatly improved with the advent of Unicode.<sup>23</sup> However, there is still the issue of the input device: even today, the QWERTY keyboard remains the main input system for most of the world's different languages. The very architecture of the machine/human interface thus requires that users of different scripts familiarize themselves with roman type.

The historical dominance of English has resulted in numerous other problems for non-English users. Technical computer language, for instance, because of the primacy of US companies such as IBM and Apple, has been developed in English. This leads to problems when computer interfaces are translated into other languages. Nokia, for instance, found it difficult to come up with a Hindi interface when marketing their mobile phones in India, noting that "the terms call divert, data, fax, call register, prepaid credit, incoming call alert, and infrared, don't have good Hindi analogs."<sup>24</sup> Also, research shows how general search engines, such as Google and AltaVista, which were developed using algorithms based on roman script, are comparatively less able to comprehend queries in non-roman scripts, particularly Chinese, since they cannot identify word segments (Chinese is written with no spaces between the characters). <sup>25</sup>

However, the use of character-based scripts is not necessarily a handicap—although characters take longer to input, they take up less display space. Thus it is possible to display more complex messages on a phone's screen in Chinese characters than it is in roman script, making for a richer and more sophisticated short-messaging culture. In Chinese, for instance, popular fiction can be downloaded and read on the small screen. These issues of reshaping technology to allow for use of diverse non-roman scripts and languages, especially those of substantial customer "segments" in the prized "emerging" markets, are a key concern of leading technology companies, many of which are now basing at least some of their research and development in these countries (notably China and India).

In Japan, where prior to the late 1990s, there was not a widespread culture of PC use, it was not desktop computers that were the most popular platform for Internet access, but rather a range of mobile devices-particularly mobile phones—which were Internet-enabled as early as 1999.<sup>26</sup> As Manabe (Chapter 20, this volume) describes, Japanese phone carriers introduced 3G, which offers broadband Internet access over mobile phones, in 2001-three years before Verizon rolled out its 3G platform in the United States. As of March 2006, 3G accounted for 53 percent of all mobile subscribers in Japan. Likewise, polyphonic ringtones, or *chaku*mero as they are called in Japan, were released only three years ago in the United States, but had been developed by Japanese karaoke companies by 1996 and were commonplace in Japan by 1999. Camera phones, too, were common throughout Japan by 2001, two years before they were first marketed in the United States. Hence, despite a slower start, Japan emerged as a leader in mobile Internet access and has much more sophisticated hardware (and software) available than in Australia or even Europe and the United States, thus challenging the model that sees the United States as "the supposed vanguard of the information society."27 As Eunice Yoon points out, "The iPhone is so yesterday in Asia."28

Korea also came into the Internet age in a particular manner. Thanks to a range of factors, including Korea's topography and population distribution (almost three-quarters of the population live in seven major cities that are dense with high-rise apartment complexes equipped with high-speed Internet lines) and early government initiatives, Korea has been celebrated as one of the most broad-banded countries in the world. One of the commonly observed features of Korean Internet culture has been the café-like *bangs*, venues for sociability and online gaming.<sup>29</sup> Another key aspect of Korean Internet culture is that the majority of the population own Internet-enabled mobile phones. Korean users are among the most proactive in the world in creating their own online web content. Particularly important is Cyworld's "mini-hompy." These are personalized web pages that can be easily updated with text, pictures, video, and sound. In Korea, it is normal for young people to update their mini-hompys several times a day with news and images about whom they have met and what they are doing. Friends visit each other's hompys to find out what is going on (see Chapters 14 and 15, this volume). As work by Larissa Hjorth has shown, when Korean students move from their home environment-characterized by high levels of network bandwith and media convergence in order to study abroad-they are bewildered by the comparatively poor network services provided in supposedly advanced nations such as Australia that make it impossible to replicate their home Internet environment while overseas.<sup>30</sup> Cases such as this must surely make us rethink the Internet as a truly "international" phenomenon.

Accessing the Internet via a small mobile device is going to be very different from accessing it via a PC—different hardware both enables and disables certain kinds of use and creates particular kinds of Internet experiences. Similarly, the wider telecommunications environment of different societies (such as Korea and Australia), which is determined as much by population densities and natural topography as by government policies and strategies, has an enormous impact on the kinds of electronic cultures that develop around the Internet.

Therefore, when thinking about "the Internet" it is important to remember that we are dealing with a range of different histories and experiences, and that we should not generalize based on "our" use of the Internet to that of other people, even other people in our own communities. It is not really possible to talk about "the Internet" as if it were a single phenomenon or has a simple history.

#### THE IMPLICATIONS FOR INTERNET STUDIES

One of the important contributions of Internet studies as a field has been the recognition of the Internet as a diverse assemblage of technologies, applications, and cultural practices. Against the tendency to black-box the Internet, to see it still infused with the impulse of early encounters and scholarship as something unified in its forms, Internet studies has contributed insights. In particular, that while there certainly are things that can be said about the Internet as a whole, it is crucial to come to grips with the very different sorts of communicative structures and cultures of use that characterize, say, email lists, as opposed to web-based chat or instant messaging. Therefore we see the important work that is undertaken to describe, analyze, and theorize particular Internet forms, and how users are arranged, publics and audiences are created, and relations of consumption and production are reconfigured. What are the types and genres of blogs, for instance? What are the effects and politics of different collaborative software, such as Wikis? Here we see exploration of the various particular "cultures" of the Internet that contribute to a broader, ongoing assessment of questions relating to the Internet and culture at more general levels.

We think this kind of nuanced approach to studying the Internet has yielded much. What we think is now imperative, and we hope is indicated in this collection, is the need to take this work further still by recognizing the very different shaping of "big" and "little" cultures of the Internet in particular contexts—and by reformulating general assumptions and concepts of the Internet informed by knowledge of these diverse international Internets.

The field of Internet studies has probably not been helped in this task by some of the influential ways that the Internet was imagined during its rise to prominence in the 1990s. We are thinking here of the preoccupation with theorizing the Internet as a singular cyber "space," as "virtual," or as "deterritorialized" and "borderless." Surprisingly, perhaps, the Internet was imagined as the eminent global technology, yet its actual international instantiations were not being realized. There is a fascinating revisionist account yet to be written of the history of these concepts of the Internet. With this in mind, it is instructive to contrast the field of Internet studies with that of mobile phone studies. The study of the mobile phone really emerged in earnest in the 2000s, whereas the field of Internet studies was already taking shape in various forms in the mid-1990s. There is something quite striking about the themes, concepts, and methods of mobile studies and their focus on, say, mobiles and communication, the social implications of mobiles, place and mobiles, mobiles and the body, and mobiles and fashion.<sup>31</sup> To be sure, mobile studies draw more heavily from, say, sociology and ethnography, than Internet studies has done (at least initially). Also, the mobile phone itself, while permitting communication and interaction among people who are widely dispersed, has also been associated with the intimate and personal, and the irruption of this into the public. Deixis here has been a salient theme in mobiles—with one of the most common utterances of the user being, "where are you now?" While still dominated by researchers, organizations, and institutions from wealthier countries, especially Europe, mobile studies does have a strong, if still quite incomplete, recognition of the international development of the mobile.

Such critiques of Internet studies have been made from a range of perspectives, many of which we have found influential. Cultural movements of the Internet itself have often been the most effective and prompt resources for alternative conceptions, as, for instance, in the phenomenon Geert Lovink theorizes as "critical Internet cultures."<sup>32</sup> Important work on race and the Internet, for instance, has called attention to the social and political constitution of the Internet and its colonizing and oppressive logics, and how this either excludes or overlooks significant groups of users.<sup>33</sup> Debates on access, use, and representation figured under the North American rubric of "digital divide" also raised questions about what the Internet was assumed to be. Then the growing social and civil society movements around control for the Internet and telecommunications infrastructures, codes, and cultures, that coalesced around flashpoints such as "information superhighway" debates, domain-name regulation, and then the grandly-titled World Summit of the Information Society (WSIS; see Goggin [Chapter 4], this volume), eventually saw actors in other parts of the world than the United States and Europe figure into the definition of the Internet. Other accounts of the shaping of the Internet are increasingly being contributed from other literatures and disciplines, such as the field of development and Information and Communication Technologies.

#### DIRECTIONS FOR FUTURE RESEARCH

Despite the rapid development of the Internet as a multilingual environment, English is likely to remain the most influential online language, even as the percentage of traffic in English continues to diminish relative to newly emergent languages such as Chinese and Spanish. The power of English is, after all, apparent in the architecture of the Internet: uniform resource locators and domain names are still technically rooted in roman script,<sup>34</sup> the QWERTY keyboard remains the main human/machine interface for many languages, coding problems remain for the transfer and display of nonroman scripts, and existing search engines work best for English-language queries. Furthermore, a disproportionate amount of the world's information is stored in English: a glance at the number of articles in Wikipedia, for instance, shows that at 1.7 million, there are more than three times as many entries in English as there are in German, which has the second largest number.<sup>35</sup> However, despite the clear importance of attending to the Internet's Anglophone origins, in this introduction we have been arguing that it is necessary for Internet studies to take greater account of developments in the non-Anglophone world and to qualify the conception of the Internet as a "global" technology with increased recognition of its very local histories and cultures of use.<sup>36</sup>

There are signs that this broader perspective is increasingly being taken up both on the conference circuit and in the number of collections and individual papers being published that focus on non-Anglophone cultural spheres.<sup>37</sup> International meetings, such as the 2005 International Conference on Mobile Communication and Asian Modernities<sup>38</sup> in Hong Kong and the Internationalizing Internet Studies<sup>39</sup> workshop held as part of the Association of Internet Researchers Annual Conference in Australia in 2006, proved valuable forums for promoting discussion among researchers working on a range of non-Anglophone Internet environments.

At these events, concern was expressed regarding the ongoing dominance of US-based research within the developing field of Internet studies. When viewed from outside, the mainstream of North American Internet studies can appear rather self-involved, with its unquestioned assumption that the most interesting and most important sites for Internet analysis are US-based (or at least English-language based). This is underlined by the fact that the general surveys and collections designed to give an overview of "cyberculture" or Internet studies discussed earlier tend only to include a few selections of work from outside the Anglophone world, giving the impression that this work is tagged on rather than central to the way in which these overviews have been conceived. Given that the world's most richly funded research institutions, the most influential university presses, and the biggest market for English-language publications in the humanities and social sciences are all located within a single nation, this US-centrism has real implications for those working outside this Anglophone "center."<sup>40</sup>

Indeed, many Internet researchers working "outside" the Anglophone world sometimes find it a challenge to publish their work because US-based publishers presume that the market for such work will be limited since the majority readership (that is, within the United States) will be unfamiliar with the material and unlikely to set it as course material. These "Anglo-American gatekeepers" are also generally only likely to respond to publications that "address intellectual questions of interest to them and their colleagues," although these questions might be quite peripheral to the interests of the author and his or her regional readership.<sup>41</sup> All too often, "articles that do not have traction with Anglo-American scholars" are rejected by major publishers.<sup>42</sup>

It is also very difficult to convince publishers to go to the "extra expense" of typesetting non-roman scripts since they consider this information redundant to most Anglophone readers, despite the fact that Chinese characters, for instance, are intelligible across the cultural spheres of China, Japan, and Korea. There is a lack of recognition that English is a second language for many of the world's most highly educated people (who are likely readers of such academic texts) and that monolingualism is a characteristic only of *native* English-speaking academics.

Moreover, those working on non-Anglophone Internet cultures, particularly those in Asia, have reported difficulties in receiving useful feedback on work submitted to mainstream Anglophone journals. Not only does such work seem to take longer to review, but given the very small number of people working in English on Japanese, Chinese, and particularly Korean Internet cultures, it can be very difficult to locate peer reviewers with the necessary background. All too often, reviewers with general (read Anglophone) expertise are chosen and are not always best placed to give constructive feedback. The US-dominated academic and publishing system necessarily results in a highly uneven distribution of scholarly and cultural capital, since media studies scholars from Helsinki to Tokyo who wish to gain an international audience for their work have no choice but to acquire an understanding of the way in which Internet studies is framed in the Anglophone world. Yet, reverse flows of influence from the "margins" to the "center" seldom take place.

It is possible for media studies scholars working in English (both as the language of research as well as publication) to build successful careers while remaining almost completely ignorant of the global diversity of non-Western (and also non-American Western) Internet cultures and histories. We still live in a scholarly environment in which North American Internet cultures and theoretical paradigms are often presumed to be primary and general, while non-American cultures, both Western and non-Western, are framed as particular and secondary. We hope that an increase in conferences, workshops, edited collections, and other projects will enable transnational dialogues that challenge the current theoretical primacy of Anglophone theory and experience, but equally importantly begin to build cross-linkages among emerging media studies researchers who work within and on non-Anglophone cultures from all over the world. Clearly this volume has affiliations with broader work in cultural and media studies that also seeks to acknowledge and reflect upon the international nature of contemporary global developments.<sup>43</sup> The collection presented here, arising from just such a workshop entitled "Internationalizing Internet Studies," is offered as a step in this direction.

#### ACKNOWLEDGMENT

We gratefully acknowledge the support of the Australian Research Council Cultural Research Network, and its members, which made this project possible. We also wish to thank Alice Crawford for compiling the book's index.

#### NOTES

- 1. Mizuko Ito, Daisuke Okabe, and Misa Matsuda, eds., *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life* (Cambridge, MA: MIT Press, 2005), 9.
- 2. Misa Matsuda, "Discourses of Keitai in Japan," in *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life*, ed. Mizuko Ito, Daisuke Okabe, and Misa Matsuda (Cambridge, MA: MIT Press, 2005), 37.
- 3. Mizuko Ito, introduction, to *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life*, ed. Mizuko Ito, Daisuke Okabe, and Misa Matsuda (Cambridge, MA: MIT Press, 2005), 7.
- 4. For instance, Kristóf Nyíri, ed., A Sense of Place: The Global and the Local in Mobile Communication (Vienna: Passagen Verlag, 2005); Peilin Luo, Leopoldina Fortunati, and Shanhua Yang, eds., New Technologies in Global Societies (Singapore: World Scientific, 2006).

- 5. "Top Ten Languages Used on the Net," http://www.internetworldstats.com/ stats7.htm (accessed May 4, 2007).
- 6. Source, Internet World Stats, figures as of June 2006, "China: Internet Usage Stats and Telecommunications Market Report," http://www.internetworld-stats.com/asia/cn.htm (accessed May 8, 2007).
- Barry Wellman and Caroline Haythornwaite, eds., *The Internet in Everyday Life* (Oxford, UK: Blackwell, 2002); David Gauntlett and Ross Horley, eds., *Web.Studies*, 2nd ed. (London: Arnold, 2004); David Bell and Barbara M. Kennedy, eds., *The Cybercultures Reader*, 2nd ed. (London: Routledge, 2007).
- Donna Gibbs and Kerri-Lee Krause, eds., Cyberlines: Languages and Cultures of the Internet (Melbourne, Australia: James Nicholas Publishers, 2000); Susan Herring, ed., Computer-Mediated Communication: Linguistic, Social, and Cross-Cultural Perspectives (Amsterdam: J. Benjamins, 1996).
- 9. Chris Berry, Fran Martin, and Audrey Yue, eds., *Mobile Cultures: New Media in Queer Asia* (Durham, NC: Duke University Press, 2003).
- 10. Yukiko Nishimura, "Linguistic Innovations and Interactional Features of Casual Online Communications in Japanese," *Journal of Computer Mediated Communication* 9, no. 1 (2003), http://jcmc.indiana.edu/vol9/issue1/nishimura.html
- 11. Daniel Cunliffe and Susan Herring, eds., "Minority Languages, Multimedia and the Web," special issue, *The New Review of Multimedia and Hypermedia* 11, no. 2 (2005).
- 12. Brenda Danet and Susan C. Herring, eds., *The Multilingual Internet: Language, Culture, and Communication Online* (New York: Oxford University Press, 2007).
- 13. An indicative, and certainly not exhaustive, list includes: Rasha A. Abdulla, *The Internet in the Arab World: Egypt and Beyond* (New York: Peter Lang, 2007); Neil Blair, *Inuit in Cyberspace: Embedding Offline Identities Online* (Copenhagen: Museum Tusculanum Press, 2003); Gerard Goggin, ed., Virtual Nation: The Internet in Australia (Sydney: University of New South Wales Press, 2004); Daniel Miller and Don Slater's study of Trinidad Internet, in their *The Internet: An Ethnographic Approach* (London: Routledge, 2000); Cecilia Ng and Swasti Mitter, eds., *Gender and the Digital Economy: Perspectives from the Developing World* (Thousand Oaks, CA: Sage, 2005); Zixue Tai, *The Internet in China: Cyberspace and Civil Society* (London: Routledge, 2006); Deborah Wheeler, *The Internet in the Middle East: Global Expectations and Local Imaginations in Kuwait* (Albany: State University of New York Press, 2006); Yongming Zhou, *Historicizing Online Politics: Telegraphy, the Internet, and Political Participation in China* (Stanford, CA: Stanford University Press, 2006).
- 14. Ito, introduction, 3.
- 15. Paul Kei Matsuda, "Negotiation of Identity and Power in a Japanese Online Discourse Community," *Computers and Composition* 19 (2002): 39–55; Nishimura, "Linguistic Innovations,"
- 16. David Gauntlett, "Preface," in Nanette Gottlieb and Mark McLelland, *Japanese Cybercultures*, (London: Routledge, 2003)xii; emphasis in the original.
- 17. Ito, introduction, 4. See also Matsuda, "Negotiation of Identity,"
- 18. For recognition of the importance of the local in the Internet, see Rafael Capurro, Johannes Frühbauer, and Thomas Hausmanninger, eds., *Localizing the Internet: Ethical Aspects in Intercultural Perspective* (München: Fink Verlag, 2007).
- 19. Howard Rheingold, The Virtual Community: Homesteading on the Electronic Frontier (Reading, MA: Addison-Wesley, 1993); Kevin Kelly, New

#### 16 Gerard Goggin and Mark McLelland

*Rules for the New Economy* (New York: Viking, 1998). See Geert Lovink's critique of *Wired* magazine's cyberoptimism in *Dark Fiber: Tracking Critical Internet Culture* (Cambridge, MA: MIT Press, 2002).

- 20. Exceptions include Axel Bruns and Joanne Jacobs, eds., Uses of Blogs (New York: Peter Lang, 2006); and Geert Lovink, Zero Comments: Blogging and Critical Internet Culture (New York: Routledge, 2007).
- 21. Yu Haiqing, "Blogging Everyday Life in Chinese Internet Culture," Asian Studies Review, 31 no. 4, 423-433 2007.
- 22. Nanette Gottlieb, Word-Processing Technology in Japan: Kanji and the Keyboard (Oxford: RoutledgeCurzon, 2000).
- 23. Gottlieb, Word-Processing Technology in Japan, 186–187; also, cf. extended discussion in the introduction to Danet and Herring's Multilingual Internet.
- 24. Katja Konkka, "Indian Needs—Cultural End-User Research in Mumbai," in Mobile Usability: How Nokia Changed the Face of the Mobile Phone, ed. Christian Lindholm, Turkka Keinonen, and Harri Kiljander (New York: McGraw-Hill, 2003), 108.
- Haidar Moukdad and Hong Cui, "How Do Search Engines Handle Chinese Queries?" Webology 2, no. 3 (2005), http://www.webology.ir/2005/v2n3/ a17.html
- 26. Gottlieb and McLelland, Japanese Cybercultures, 3-4.
- 27. Ito, introduction, 3.
- 28. Eunice Yoon, "The iPhone is so yesterday in Asia," CNN, www.cnn.com (January 13, 2007).
- 29. Heejin Lee, Robert O'Keefe, and Kyounglim Yun, "The Growth of Broadband and Electronic Commerce in South Korea: Contributing Factors," *The Information Society* 19 (2003): 81–93.
- Larissa Hjorth, "Home and Away: A Case Study of Cyworld Minihompy by Korean Students Studying Abroad," *Asian Studies Review*, 31 no. 4 397-407 2007, in press.
- 31. Barry Brown, Nicola Green, and Richard Harper, eds., Wireless World: Social, Cultural and Interactional Issues in Mobile Communications and Computing (London: Springer-Verlag, 2001); Richard Harper, Leysia Palen, and Alex Taylor, eds., The Inside Text: Social, Cultural and Design Perspectives on SMS (Dordrecht, The Netherlands: Springer, 2005); Leopoldina Fortunati, James E. Katz, and Raimonda Riccini, eds., Mediating the Human Body: Technology, Communication, and Fashion (Mahwah, NJ: Lawrence Erlbaum, 2003); James E. Katz and Mark Aakhus, eds., Perpetual Contact: Mobile Communication, Private Talk, Public Performance (Cambridge: Cambridge University Press, 2002); James E. Katz, ed., Machines That Become Us: The Social Context of Personal Communication Technology (New Brunswick, NJ: Transaction, 2003); Heather Horst and Daniel Miller, The Cell Phone: An Anthropology of Communication (Oxford: Berg, 2006).
- 32. See Geert Lovink, Dark Fiber.
- 33. Beth E. Kolko, Lisa Nakamura, and Gilbert B. Rodman, eds., Race in Cyberspace. (New York: Routledge, 2000); Lisa Nakamura, Cybertypes: Race, Ethnicity, and Identity on the Internet (New York: Routledge, 2002); Linda Leung, Virtual Ethnicity: Race, Resistance and the World Wide Web (Burlington, VT: Ashgate, 2005); Mark McLelland, "'Race' on the Japanese Internet: Discussing Korea and Koreans on 2-channeru," New Media & Society, in press.
- 34. "[I]t is not possible for the Domain Name System (DNS) as it stands to incorporate full Unicode script encoding to be used in top-level domains,"

declare Danny Butt and Norbert Klein, in their "Internet Governance and Socio-Cultural Inclusion," *Internet Governance: Asia-Pacific Perspectives*, ed. Danny Butt (Bangkok: UNDP Asia-Pacific Development Information Programme), 78; Butt and Klein emphasize that "the internationalization of domain names is a cultural issue. There remain serious problems with both the ability of the DNS system to handle non-roman domain names, as well as inadequate procedures to facilitate this occurring." (p. 82).

- 35. See "List of Wikipedias," http://meta.wikimedia.org/wiki/List\_of\_Wikipedias (accessed May 7, 2007).
- 36. Here we would point to long-standing work on cross-cultural, intercultural, and ethical dimensions of technology, communication, and culture represented in the "Cultural Attitudes toward Technology and Communication" international conferences and associated work, such as Charles Ess, ed., *Culture, Technology, Communication: Towards an Intercultural Global Village* (Albany: State University of New York Press, 2001); Charles Ess and Fay Sudweeks, eds., special issue on "Culture and Computer Mediated Communication," *Journal of Computer-Mediated Communication* 11, no. 1 (2005), http://jcmc.indiana.edu/vol11/issue1/; M. Thorseth and Charles Ess, eds., *Technology in a Multicultural and Global Society* (Trondheim, Norway: Norwegian University of Science and Technology, 2005).
- 37. For instance, Raul Pertierra and Ilpo Koskinen, eds., *The Social Construction and Usage of Communication Technologies: European and Asian Experiences* (Singapore: Singapore University Press, 2007).
- 38. See conference website, http://enweb.cityu.edu.hk/mobile\_comm/
- 39. See workshop website, http://www.capstrans.edu.au/about/projects/interinternet-studies.html
- 40. This argument references the debate around the positioning of "Asian" sexualities in an academic field dominated by European and US-based theory and theorists developed by Peter Jackson, Fran Martin, Mark McLelland, and Audrey Yue. See "About AsiaPacifiQueer: Responding to Disciplinary Exclusion," http://apq.anu.edu.au/about.php
- Colin Day, "Enabling Intra-Asian Conversation," Academic Publishing Today Summer (2007), 7, http://www.iias.nl/nl/icas5/ICAS5\_2007\_07.pdf.
- 42. Ibid.
- Ackbar Abbas and John Nguyet Erni, eds., *Internationalizing Cultural Studies: An Anthology* (Malden, MA: Blackwell, 2005); Daya Thussu, ed., *Internationalizing Media Studies* (New York: Routledge, 2009).

### 2 What Cyberspace? Traveling Concepts in Internet Research

Susanna Paasonen

The figure of cyberspace, first introduced by cyberpunk author William Gibson in his 1982 short story Burning Chrome (or, depending on the interpretation, his 1984 novel, Neuromancer), was soon adapted to describe the communicative and experiential possibilities of the Internet. More than a medium, the Internet of the early 1990s was seen to open up a space, an alternative reality, or a society of the mind invested with novel possibilities of networking and exchange.<sup>1</sup> While cyberspace made its way to, and established its position in, discourses both popular and academic in English-speaking countries—North America in particular—the term did not gain similar transparency elsewhere. In my native country of Finland, cyberspace translations and various "cyber" prefixes were used up until the mid-1990s, but the term has since become somewhat anachronistic and is infrequently used. Consequently, "cyberculture studies" require conceptual analysis and contextualization when discussed in the Finnish university classroom. In such moments of translation and reflection, research terminology loses its transparency: being made strange by local terminology, it is reframed as specific, limited, and even problematic.

Derived from *cybernetics*—the study of communications and control in machines and organic systems—cyberspace is examplary of how terminology travels across national and disciplinary boundaries, crossing different genres and contexts of writing and publishing in the process. As terms travel, they are reworked, debated, and redefined. Drawing on Mieke Bal's work on traveling concepts, this chapter investigates the travels and meanings of cyberspace as a research concept, as well as the kinds of shifts that have occurred during its voyages from casual use to research practices and back again.<sup>2</sup> Using the Finnish context as a point of departure and comparison, the chapter investigates the applicability of Anglo-American conceptualizations and the kinds of Internets that they give rise to.

#### WHAT'S IN A NAME?

Ways of making new media familiar depend on the chosen terminology, metaphors, and associations through which the possibilities and meanings

of the medium are envisioned and depicted. While some of these framings are soon forgotten, others become part of the general lexicon. To use one example, as mobile phones (then bulky and hardly entirely portable) were first introduced in Finland in the 1980s, they were referred to not only as "travel phones" (matkapuhelin)—a term still in general use—but also as "shoe phones" (kenkäpuhelin), in reference to the fantastic telecommunication technologies employed by the 1960s TV secret agent, Maxwell Smart. Whereas the English terms mobile phone and cell phone refer to mobility and telephone technology, the Finnish language favors pet names, such as känny and kännykkä (liberally translated as "little hand"), which were originally introduced by Nokia staff in reference to extensions of a child's hand.<sup>3</sup> Similar pet names are in use in various European languages—in German, mobile phones are also known as "little hands" (händchen) and in Italian as "little phones" (telefonino). These formulations point to ways in which communication technology has been appropriated and personalized in practices of everyday life.<sup>4</sup>

Naming new media is also a means to domesticate it, to make it familiar. Terminologies applied contribute to certain understandings concerning the media in question and frame it in specific ways. The term Internet, "the network of networks," refers to a wide range of different, historically specific technical solutions, innovations, and uses (and is therefore a highly contingent point of reference). The word "Internet" gradually came into use in the 1980s as an umbrella term for the various existing networks, applications, and their interconnections, and for the uses of the Transmission Control Protocol/Internet Protocol (TCP/IP) protocol in particular.<sup>5</sup> Perhaps due to the technical connotation of the Internet, various abbreviations and considerably more imaginative synonyms have been launched since the late 1980s. In addition to nets, networks, and webs used to describe the operating principles of decentralized communication and information exchange, the Internet has been wrapped in various metaphorical terminologies, such as information superhighways, oceans of data, and cyberspace. Its uses again have been conceptualized through tropes of mobility and travel: one is said to "go" and "be" online, "visit" sites, "navigate"-and, especially in the 1990s-to "surf." As Internet scholar Lisa Nakamura points out, Internet use has been figured through a vocabulary of tourism, fun, adventure, and leisure.<sup>6</sup> This terminology differs from the ways of discussing previous forms of "new media," such as television, radio, or telephone. While all these media have been associated with the possibilities of overcoming and bridging geographical distance, ease of communication, and radical transformations in the availability of information, they have not-perhaps with the exception of the "ether" of early twentieth century radio amateurs-been conceptualized as spaces in themselves.7

Spatial metaphors frame the uses and experiences of the Internet, as well as the medium itself, but with considerable lingual and cultural differences. Cyberspace remains a general term in English and a key concept of Internet research. Yet, this is not the case on an international level. The term has certainly been translated, as the European examples *cyberrymd* (Swedish), *cyber espace* (French), *ciberespacio* (Spanish), or *Cyberraum* (German) illustrate, but it is not synonymous with the Internet in research, journalism or quotidian discourses. As I discuss below in more detail, in the context of Finland, researchers writing in languages other than English do not routinely resort to cyberspace when conceptualizing Internet-related phenomena.

Metaphors—both spatial and other—construct and shape the reality they describe: they are productive in a performative sense.<sup>8</sup> Scholars participate in giving shape to the Internet thorough their ways of describing the medium. Terms and metaphors are not neutral words used instrumentally or interchangeably for describing existing phenomena—and this is even less the case when these words are used as research concepts. Concepts "distort, unfix, and inflect" the object they represent while also providing a common language for discussions concerning it (Bal, *Travelling Concepts*, 22). My argument, then, is not that the framings and terms discussed in this chapter are somehow false or inaccurate and should be replaced with better ones. Rather, my interests lay in investigating the implications and frames of reference of traveling concepts that are more or less faithful to their native regions.

#### SUPERHIGHWAYS AND FRONTIERS

Beginning in the early 1990s—and especially since the introduction of graphic web interfaces in 1993—the Internet was wrapped in various metaphors of manifest regional specificity. The Vice President of the United States, Al Gore, launched the term *information superhighway* to describe the networking possibilities of the Internet. The National Information Infrastructure initiative aimed to transform the lives of the American people and contribute to national economic growth.<sup>9</sup> The information superhighway metaphor accentuated mobility through analogies to familiar forms of transport, and the creation of the national road network; like highways, the Internet would bind the continent in one network while eventually stretching across the globe and supporting democracy and welfare all over the world.<sup>10</sup>

Variations of the information superhighway metaphor have been applied internationally. The analogy of the Internet and open roads is recognizable in such iconic representations as the front cover of Bill Gates' 1996 book *The Road Ahead* (also envisioning a networked world), which shows the Microsoft CEO dressed casually in black with his hands in his pockets, standing on an open road with a flat, and characteristically American, landscape stretching out behind him.

A popular term among politicians and businessmen alike, the information superhighway was certainly not the only Internet metaphor launched in the

early 1990s. The deeply American metaphor of the electronic frontier created an analogy to the "Wild West." The West's first settlers, also known as pioneers, headed out to the patches of land allocated to them, occupied land previously belonging to the native population, and lived without a set social structure—a state often translated as freedom. In American popular culture, the Western frontier is nothing short of a mythical national symbol of freedom, adventure, and possibility. As David Silver points out, texts written by activists, writers, and scholars in the early 1990s were heavy with references to the "American pioneer spirit" and its revitalization online. Writers like John Perry Barlow, Howard Rheingold, and Douglas Rushkoff applied the frontier terminology when describing the pioneering users exploring the unknown borderlands of the Internet—as already suggested by the subtitle of Rheingold's 1993 book on virtual communities, Homesteading on the Electronic Frontier (Silver, "Looking Backwards, Looking Forwards," 21). The terminology of pioneers and frontiers creates analogies to past events, national mythology, and romanticized, selective narratives concerning them, while framing the Internet as a terrain of adventure, freedom, and community independent of governmental regulation (Chun, Control and Freedom, 51).<sup>11</sup> In doing so, they also create hierarchies separating the explorers, pioneers, and early arrivals from newcomers.<sup>12</sup>

Considering the speed of modem connections in the early and mid-1990s, the experience of command lines, or the heavily textual feel of the first browser interfaces, the analogue between Internet users and settlers on the Western frontier may have been feeble. Yet, the point of metaphors is not to reflect the existing state of affairs inasmuch as it is to frame this state in a certain way. Information superhighways implying speed and global reach or frontiers connoting unlimited possibilities worked to fuel interest toward information networks among private users, companies, and governmental bodies alike, in line with the general Internet hype of the decade.

#### ENTER CYBERSPACE

John Perry Barlow—a former lyricist for The Grateful Dead, Internet consultant, and lobbyist for freedom of speech online—has been exceptionally active in the production of Internet metaphors. In 1990, Barlow served as one of the founders of the Electronic Frontier Foundation and he also claims to have been the first to apply the metaphor of cyberspace to the Internet—cyberspace being the most widespread and influential of 1990s metaphors used for figuring the Internet. Cyberspace, as coined by Gibson, is a disembodied parallel reality reached via neural connections in which all the world's data is stored. Dangerous yet fascinating, cyberspace enables flying and adventure: it is a novel frontier that Barlow associates with individual freedom and expression. If the electronic frontier made use of a historical parallel, the metaphor of cyberspace was inspired by cyberpunk fiction—but with a necessarily no less explicit American emphasis. In his 1996 "Declaration of the Independence of Cyberspace," Barlow emulated the US Declaration of Independence while arguing for the sovereignty of cyberspace: like Gore's information superhighway, Barlow's cyberspace was embedded in a fundamentally national rhetoric.

In the early 1990s, cyberspace was used to describe both virtual reality applications and the Internet, and the boundary between the two was also blurred in cinematic depictions of immersion in virtual environments, starting with Disney's *Tron* (1982), and continuing in motion pictures as varied as *Lawnmover Man* (1992), *Lawnmover Man II: Beyond Cyberspace* (1996), *Hackers* (1995), and the *Matrix* trilogy (1999–2003). Potential conceptual slippage did not impede on the use of cyberspace as a research concept in studies of so-called new media.<sup>13</sup> Gibson's fictions have been particularly inspirational in terms of Internet research and development: cyberspace has been interpreted as social theory, a vision of future technology worth striving toward, and even as a "self-fulfilling prophecy" that will come into being as computers are connected to the Internet (Shields, "Looking Backwards, Looking Forwards", 67; cf. Chun, *Control and Freedom*, 42).<sup>14</sup> Although cyberspace may not be the most fitting term for describing the experiences of email, search engines, video downloads, or databases, it enjoys continuing popularity among scholars.

Cyberspace was established as a research concept in studies of new media largely dominated by North American voices and perspectives. Cyberspace is used to refer to the trans- and multilocal networks of online communication, the accessibility of data, and experiences thereof. It marks the differences between the Internet and previous media technologies, but equally denotes the virtual nature of contemporary media culture from television to simulated environments (Burrows, "Cyberspace as Social Theory", 240).<sup>15</sup> The notion of cyberspace both encapsulates and assumes the division of "online" and "offline" to the degree that the former becomes an alternative reality of sorts. This division has again worked to draw attention away from the contexts and conditions of Internet use while bringing to the forefront forms of online communication and interaction (and various kinds of online communities in particular). As artificial as the online/offline divide may be, it has been highly influential in the development of Internet research, methods of framing studies, and phrasing research questions.<sup>16</sup> The appeal and influence of cyberspace terminology in the English-speaking academia is largely due to transparency it has gained through reiteration. In the course of reiteration, its links to dystopian cyberpunk fiction and the declarations and manifestos of the early 1990s have been loosened, and as cyberspace was established as a research term, its specificities and limitations were rendered less striking. The figure of cyberspace comes with a legacy that is, nevertheless, partly effaced as the term has been reapplied and appropriated as research concept. Given its extended use, the figure of cyberspace has had more considerable and enduring impact than those of the information superhighway or the electronic frontier. These have remained descriptions and labels rather than research concepts.

Addressing the applicability of research concepts, Peter Hitchcock argues that their validity depends on whether they describe the phenomenon studied or whether they also have some explanatory power.<sup>17</sup> The division of description and explanation is rather difficult to make with cyberspace, given that the concept works to frame and give shape to the object that it describes. Furthermore, cyberspace is partial as both a descriptive and explanatory concept. Since research concepts are preferably explicit, clear, and defined (Bal, *Travelling Concepts*, 22), the malleability of cyberspace debilitates its explanatory force. The term cyberspace has been used casually in literary and cinematic fiction, gaming, advertising, journalism, and research. Due to such travels, it can be seen as exemplary of the conflation of words, concepts, and labels, as discussed by Mieke Bal. According to Bal, the overlap of casual and theoretical language contributes to both "reluctance to discuss 'meaning' as an academic issue" and to the overextended use of concepts (Bal, Travelling Concepts, 26-27). Something of this kind seems to be at play with the notion of cyberspace. Cyberspace is a plastic concept, and because of its plasticity, it has limited descriptive force concerning the Internet. When used as labels in the sense of not explaining or specifying the phenomenon studied, but merely naming it, concepts "lose their working force; they are subject to fashion and quickly become meaningless" (Bal, Travelling Concepts, 23, 33). In both cases, the concept is deprived of its power of conceptualization. Cyberspace has possibly traveled a bit *too* much from one forum of discussion, writing, and publication to another and back, and become analytically ineffective in the process.

Cyberspace was fashionable and widely used as a label in the mid-1990s, a period that also saw an avalanche of other neologisms and cyber prefixes, such as cybersociety, cyberlove, cybersex, and cybergeneration. Meanwhile, teen fashions paraded cyber styles and logos on T-shirts, pants, bags, and hairdos. Cybercultural imaginations entered mainstream popular culture, while scholars weaved cyberpunk visions and promises of forthcoming technology together with cultural theory, often in highly speculative ways (Mäkelä, "Virtuaalitodellisuus," 147). Cyber terminology was central to the popularization of the Internet and helped to frame the medium as exciting, novel, and techno-futuristic, with support from contemporary print and screen fiction (Chun, *Control and Freedom*, 37). At the same time, the Internet was made familiar to the general public on the policy level. Information society discourses of the 1990s may have had techno-futuristic tones, but they were still a far cry from the cyberspace visions circulated in journalism and studies of new media alike.

#### INFORMATION INTENSITY: THE CASE OF FINLAND

Finland was not an early adopter of the Internet. International network connections were established from the United States to other NATO countries in