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Sociologist **Barry Wellman** learned to keypunch in a Harvard basement in 1965. He now heads the NetLab at the University of Toronto. Wellman founded the International Network for Social Network Analysis in 1976 and led it for a dozen years. He recently chaired the Community and Urban Sociology section of the American Sociology Association and was the first keynote speaker of the Association of Internet Research's keynote conference. Professor Wellman has added the study of virtual community and computer-supported cooperative work to his continuing interests in community, social support, and social networks. He recently edited *Networks in the Global Village* and co-edited *Social Structures: A Network Approach*. He is currently writing about living wired in a network society. http://www.chass.utoronto.ca/~wellman/

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Foreword

The Virtual Community in the Real World

Howard Rheingold

Now that the authors of this volume (and many other social scientists around the world) have established a solid foundation of systematic observation and theory about the ways the Internet influences everyday life, perhaps we won't have to rely on data-free philosophizing to make policy decisions as citizens and societies.

Until recently, individuals and policy-makers have been making decisions about personal use and societal regulation of the Internet amidst a scarcity of science and abundance of rumor and sensationalism. Since the early 1990s, popular concerns, images, and delusions, as reflected in and molded by mass-media journalism and online folklore, have outpaced systematic studies of social cyberspace. The quality of contemporary cyberspace studies today leads me to suspect that social scientists have pulled ahead of anecdotal evidence and armchair theorizing to provide significant answers to some of society's most important questions about social behavior via online media.

No population that seeks to govern itself can hope to do so for long without good information and widespread debate about how to address the issues of the day. For some time, the place of the Internet in everyday life has been one of the most important issues of the day. Unfortunately, good information was hard to come by until recently, and as a consequence, the level of debate took a long time to evolve. Good information is now available, but it's still drowned out by the noise. The next step is getting that news out. Good information only becomes popular information when it diffuses beyond the population

of specialists who first find it. I hope it's not too late for more people to raise the quality of the questions they are asking.

Since the 1990s, I have been asked the same questions in many places:

- Does using the Internet make people happier or unhappier?
- Is the Internet empowering, or is it a tool of social control?
- Is the Internet addicting?
- Does virtual community erode face to face community?

These were natural questions. It took me years and many conversations with some of the authors of this volume to realize that the questions themselves were the first problem to solve:

- Is the Internet empowering to which specific groups of people and under what circumstances, and by whose definition of "power?"
- Which people, in what contexts, are getting happier or unhappier? And in exactly what manner did these specified groups of people use the Internet?
- What do we expect from the word "community," and for whom, precisely, do we expect it?
- Are there more usefully specific terms than "community" to describe human relationships in the alphabet-printing-press-telephone-Internet-enabled era?
- How do we want to define "we" in this context, and who does the defining?
- How have previous communication technologies, from the alphabet and printing press to the telephone and Internet, enabled social changes in traditional (i.e., pre-new-technology) families, social networks, neighborhoods, villages, nations?

People and our circumstances are too different from city to city and continent to continent to generalize about how anything affects them in more than a general way. Most importantly, what data do we have to support different hypotheses regarding these issues, once the issues are stated specifically enough? What methodology was used to gather that data?

The current volume provides useful answers. More importantly, it frames the right kinds of questions about the ways in which the use of Internet-enabled media affect everyday lives. Each chapter in this volume should stimulate others to ask even more specific questions, as all good research should.

Series Editor's Preface

The Internet and the Network Society

Manuel Castells

This book is precious. It provides us with reliable, scholarly research on the hows and whats of the Internet as it relates to people's lives. The critical importance of the Internet as a new medium of communication is only surpassed by the amount of fantasy and gossip that surround its development. At the end of 2001 the number of Internet users in the world has crossed the threshold of 500 million (up from 16 million in 1996), and in North America and Scandinavia over 60 percent of the population has access to the Internet. While the digital divide is still a fundamental source of inequality on the planet, the Internet is rapidly becoming part of the fabric of our lives, not only in advanced societies but in the core activities and dominant social groups in most of the world. Yet, its perception in the public opinion continues to be dominated by misrepresentations induced by futurologists and business consultants. It is about time for academic researchers to set the record straight, engaging into the exploration of a new society, our society, the network society.

The network society is precisely that: a social structure built on networks. But not any kind of networks, since social networks have been an important dimension of social life since the origins of humankind. The networks that characterize contemporary social organization are information networks powered by microelectronics-based information technology. This is most easily perceived in the new, global economy. It is an economy characterized by the dominance of interdependent global financial markets, operated by electronic networks processing information at high speed, handling huge volumes of transactions in a pattern of extraordinary complexity. It is also an economy where the

core activities of management, production, and distribution of goods and services are equally organized around electronic networks that simultaneously coordinate decision-making and decentralize production and distribution throughout the planet. Business is organized around projects, that bring together various firms, and segments of firms, to accomplish a given task, then reorganizing themselves to undertake the next project, in an endless process of organizational reconfiguration. This is the network enterprise, that brings together intranets and extranets, that connects labor under different labor relationships, and that constitutes the operating system of the information economy.

Cultural expressions are increasingly captured in the electronic hypertext of the multimedia system that is at the same time global and local: global in its interaction, local in its sources of emission and in the destination of its messages. Multidirectional networks are the stuff of which the media world is made, the heart of the system of collective images and representations.

Governance becomes largely irrelevant when confined within the obsolete boundaries of the nation-state, but nation-states do not disappear: they transform themselves. They band together, forming coalitions and crystallizing these coalitions of interest into supra-national and co-national institutions that allow them to manage the global processes that constitute wealth and power in our world. They also relate to their civil societies through a process of decentralization, at the regional and local level, extended through non-governmental organizations that become a new layer of the political system. Thus, a new state, the network state, emerges as the form of the state in the information age.

Social protest also comes to depend on networking capability on the Internet, as shown by recent experiences of the women's movement, the environmental movement, or the anti-globalization movement – a global movement enacted by and with the Internet.

Sociability is also transformed by a combination of cultural change, transformation of work, and technology. The crisis of patriarchalism, and the self-centered character of personality systems in our societies, combine with the individualization of labor and the fragmentation of the work process to induce the rise of individualism as a predominant pattern of behavior. But individualism is not social isolation or even alienation, as superficial observers or nostalgic commentators often suggest. It is a social pattern, it is a source of meaning, of meaning constructed around the projects and desires of the individual. And it

finds in the Internet the proper technology for its expression and its organization. The emerging pattern is one of self-directed networking, both in terms of social relationships and in terms of social projects. It does not substitute for face-to-face sociability or for social participation. It adds to it, although it rarely counteracts forms of social disengagement derived from other causes. For instance, the crisis of political legitimacy is linked to the crisis of political parties and to the politics of scandal, and cannot be countered by the Internet. In fact, it may be deepened, as citizens find new forms of connection outside the institutional realm.

Thus, the Internet is the appropriate tool for networking, and for self-directed, horizontal communication. This is one the reasons (the other being technological, e.g. the worldwide web) why, after three decades of existence, it emerged from specialized communities in the world of researchers, techies, hackers, and countercultural communities, to catch fire in business and in society at large.

Furthermore, if users are producers of technology, of all technologies, this is even more clearly the case for the Internet, due to the speed of its feedback effects. Thus, many of the Internet applications, including email, chat rooms, and group lists, were serendipitously developed by early users. This continues to be the case every day. So, rather than analyzing the impact of the Internet on society, the key issue is to understand the effect of society on the Internet. However, the Internet is not just a tool, it is an essential medium for the network society to unfold its logic. This is a clear case of co-evolution between technology and society. As for the content of this co-evolution, it is by investigating along the lines suggested in this volume that we will be able to assess its contour and its implications. The network is the message, and the Internet is the messenger.