Manuel Castells, Mireia Fernandez-Ardevol, Jack Linchuan Qiu, and Araba Sey, **Mobile Communication** and Society: A Global Perspective, MIT Press, 2007, 331 pp., \$21.86 (hardcover).

Reviewed by Scott W. Campbell University of Michigan

Not being bound by traditional page-length restrictions is an advantage to writing for an online journal, particularly when the contributor is tasked with reviewing one of the most comprehensive books in his field of study. "Mobile Communication and Society" (2007) by Manuel Castells, Mireia Fernandez-Ardevol, Jack Linchuan Qiu, and Araba Sey provides an up-to-date account of key developments in wireless communication research, theory, and practice, with an emphasis on mobile telephony. The authors set out to answer a number of important questions about the rise of wireless communication technologies and social transformations associated with their diffusion and use. These questions explore uses and ramifications for the private sphere of everyday life as well as the public sphere of political change. The authors are careful to contextualize their accounts with an analytic approach that examines how culture and other socio-demographic variables intersect with the adoption, use, and social consequences of these new media. In doing so, Castells et al. manage to expand the developing field of mobile communication studies by offering new levels of breadth in their global analysis. At the same time, they provide the reader with in-depth images of the technology's implications within certain societies and sub-sets of those societies. In part, this cross-cultural approach is possible because the book is authored by a multinational team of researchers with expertise in mobile communication as well as their respective cultural environments. In addition, the authors draw from an impressive collection of academic research, government reports, and industry data to provide what is arguably the most comprehensive look at mobile communication and society from a cross-cultural perspective. While this summary and evaluation may exceed customary standards for book review lengths, it far from covers everything in the text. Rather, the intent here is to capture highlights from select chapters of Castells' et al.'s "Mobile Communication and Society," while reflecting on some of the assets, limitations, and opportunities the text has to offer for researchers and instructors of communication in a time when wireless and mobile communication have come of age.

Trends in adoption and use

In recent years, wireless communication has emerged as the fastest growing communication technology *ever*. However, that rate of adoption varies according to geographic region and country. In the first chapter, the authors report on the diffusion trends for the mobile phone and forms of wireless Internet access, such as WiFi. While this chapter is highly descriptive, they strive to also explain the reasons for diffusion patterns by taking into account a host of contextual factors that account for variation in adoption rates, including socio-cultural, governmental, economic, industry, and policy-related factors. Not surprisingly, diffusion patterns tend to reflect the traditional digital divide between wealthy and poorer countries. We see substantially higher adoption rates in Europe, North America, Oceana, and certain Asian Pacific countries than in Africa, Latin America, and poorer parts of Asia. However, this gap is not as prominent for mobile telephony as it is for the Internet. As the authors point out, mobile telephony has

Copyright © 2007 (Scott W. Campbell, scamp10343@aol.com). Licensed under the Creative Commons Attribution Non-commercial No Derivatives (by-nc-nd). Available at http://ijoc.org.

become more economically viable than fixed-line services in many poorer countries, which contributes to its relatively rapid rate of adoption in some of these areas. For example, the highest growth rates worldwide are on the continent of Africa. But this growth is unevenly distributed, with greater access in more developed countries such as South Africa and populated urban areas, a trend that is evident in other parts of the world as well.

In Chapter 2, the authors delve into the social differentiation of wireless users according to age, gender, ethnicity, and socioeconomic status. They begin with a look at whether the mobile divide manifests among age groups. The mobile started off as a business tool for middle age adults, so this age group tends to have high adoption rates. Eventually, this also became the case for adolescents and young adults as prices began to drop and the technology was embraced as a resource for sociability. The authors point out that the elderly are less inclined to use mobile telephony, but this may be changing as the industry increasingly targets this potential group of users. While adoption rates might be similar among middle-age adults and young people, there are notable differences in use, with the older group being heaviest users of voice calling and the youth as pioneers and heavy users of text messaging and other features/services. In recognition of the social implications of the distinctive mobile communication habits of young people, the authors later dedicate an entire chapter of the book to "the mobile youth culture."

Castells et al. are able to provide a nuanced account of gender trends by reporting on patterns of mobile adoption and use in different parts of the world, as well as at different periods of the technology's dissemination. Originally, males were more likely to adopt mobile telephony, but this gap has been steadily closing over the years. Still, there are global data that suggest males are generally more likely to own a mobile phone than females. Although data are too sparse to paint a complete picture, Castells et al. manage to pull together information from several countries in Europe, North America, and Asia to provide a cross-cultural look at gender trends in adoption and use of the mobile phone. The authors report that while males generally tend to edge out females as users of the technology, this can vary by country. For example, there is a higher proportion of female than male users in the United States. The gender gap also varies according to tele-density, as the gap is closing more quickly in markets with high penetration rates.

Beyond adoption, the authors also review gender trends in how the technology is regarded and used. Making global observations, the authors note that gender patterns in use tend to follow those associated with the landline, which can both loosen and reinforce traditional gender roles. In general, it seems that women tend to adopt the mobile phone more for purposes of security, maintaining social network ties, and coordinating domestic affairs than do men, however this is certainly not the case in all societies. For example, research in Norway indicates very little difference in how men and women use the mobile phone, although there do seem to be differences in how they talk about their use. In other parts of the world, such as India, mobile communication practices seem to follow more patriarchal patterns, with women realizing that perpetual accessibility can lead to less control over their own lives. While the evidence is enlightening, it is important to keep in mind — as the authors acknowledge throughout — that culturally specific data are limited and not necessarily representative of all users in a given society.

Castells et al. continue with an analysis of the interplay between culture and socioeconomic status. Although there are cultural particularities, one general trend is that mobile phone adoption and use

is higher among the more wealthy economic classes. This is an unsurprising trend that can be seen in both developed and developing nations. The authors forecast the possibility of change in this trend as mobile markets become more saturated. Furthermore, the authors see important socioeconomic possibilities, because the technology offers opportunities for upward mobility and bridging the digital divide.

As they do with age and gender, Castells et al. try to nuance their discussion of socioeconomic status by looking at how it intersects with important elements of social context. One important influence seems to be population density, with substantially lower adoption in rural areas. The authors note, "The differential distribution of mobile phones within countries is often hidden or overlooked because most national statistics are not broken down to show the rural-urban divide" (p. 58). Cross-culturally, the authors observe the trend that users of lower economic status tend to exploit less expensive services. These features include short messaging, limited mobility plans, prepaid plans, and "beeping." Beeping, which is particularly popular in sub-Saharan Africa, is the practice of dialing a number and hanging up before the call is answered. Depending on the context of use, the message behind a beep can be "call me back," "I made it home," or otherwise. The authors explain that the economic implications of such low-cost services can be important for users with limited calling plans. Use of these services can have larger social implications as well, evidenced by the use of text messaging to help organize a massive demonstration in the Philippines, which culminated in the ousting of President Joseph Estrada in 2001.

Just as adoption and use of the mobile phone can vary according to age, gender, and socioeconomic status, so too can they differentiate along ethnic lines. Without yielding to the pitfalls of stereotyping, Castells et al. explore some trends associated with ethnicity, social exclusion, and usage patterns. Situating the discussion in the context of other technologies, such as the Internet, the authors note that for various reasons, ethnic minorities tend to face barriers in access to communication technologies and skills in their use. However, it seems this trend is not necessarily the same for mobile telephony, since "the limited evidence so far suggests that ethnicity is a barrier only insofar as it intersects with other factors, such as residence in under-served areas, language differences, the need to make expensive international calls, and low income levels" (p. 67).

Mobile communication in work life, private life, and the public sphere

After reviewing trends in adoption and use, "Mobile Communication and Society" examines the social ramifications of mobile communication in some key dimensions of everyday life, including work, family, friends, and community. With regard to work, the authors point out some of the opportunities and challenges associated with mobility on the job. On the one hand, the technology affords spatial flexibility and the ability to stay in constant contact with key figures, such as headquarters, clients, etc. However, mobile workers also face challenges in maintaining this contact, which can be posed by unaccommodating physical surroundings, new forms of surveillance, and the blurring of boundaries that delineate work from personal life. Castells et al. pay special attention to the implications of mobility for migrant workers and those in developing parts of the world. As of yet, evidence remains to be seen that mobile communication increases productivity in developing countries, but there are compelling examples of how it affords a heightened level of flexibility in how and where workers in these areas do their jobs. In addition, mobile

telephony lowers the cost of communication for those individuals who would otherwise have to travel to a fixed-line telephone or meet a colleague in person.

Another major theme in the research is the role of mobile communication in family life. The authors argue that instead of bringing revolutionary change, mobile communication generally strengthens family relationships as individuals develop communal practices of sharing, micro-coordinate daily family activities, give remote care, and maintain socio-emotional connections. From a comparative perspective, the authors see consistencies in how these trends cut across cultures and socioeconomic status. At the same time, these communication practices are also deeply situated in context. As the authors explain, "the effects of mobile telephony are processed by the patterns of social relationships, often characterized by domination and conflict" (p. 91). So, while mobile communication may strengthen family ties, it may also reflect and even exacerbate family problems and gender-related inequities.

Mobile communication also strengthens ties among friends and other intimate contacts through distinctive new forms of interaction, such as the use of text messaging to maintain ongoing background interaction between face-to-face visits. As is the case with work and family, mobile communication for social networking offers the potential for both promise and peril. One concern is that these "full-time intimate communities" of close friends and family members can actually become "tele-cocooned" in insularity. The potential for insularity may also come out of more individualized aspects of the technology, such as mobile entertainment content.

In addition to the private sphere, Castells et al. examine implications of mobile communication for the public sphere of social life. Whether or not one uses a mobile phone, we all have to experience the technology's influence on public settings. Castells et al. discuss some of the developments in the emerging "m-etiquette" for normative mobile phone use around co-present others, noting differences that develop in culturally situated environments, such as Japanese restrictions on voice calling on public transportation systems. They also note growing opportunities for public citizenship by highlighting initiatives to connect individuals with their community through mobile links to local information and events. Yet, the authors caution that these programs can be cost-prohibitive to less economically developed societies.

Later in the book they move into the political ramifications of the technology with a chapter containing a series of case studies on how it has been used to support efforts toward rapid and large-scale social change. A renowned example is the overthrow of Filipino President Joseph Estrada, as noted above. Castells et al. provide detailed illustrations of how the technology has been used for political mobilization in South Korea, Spain, and the United States as well.

Mobile communication in the network society

One of the most obvious implications of mobile communication technology is its importance as a social resource in the lives of young people. In recognition of this, Castells et al. dedicate an entire chapter of book (Chapter 4) to exploring the uses of mobile telephony in what they characterize as a global "mobile youth culture." The authors attribute the emergence of this culture to the fact that today's youth "find in mobile communication an adequate form of expression and reinforcement" (p. 127). The

authors frame their discussion of this phenomenon with theoretical underpinnings from Castells' theory of the network society. As Castells explicates elsewhere (see for example Castells, 2000, 2001) the network society is a dominant new form of social order characterized by decentralized, flexible network nodes connected through technologies such as the Internet and, increasingly, the mobile phone. This chapter uses features of the network society — namely, structural networking, cultural individualization, and autonomy-building — as lenses for understanding how and why young people use mobile technology to manage peer group ties and build both individual and collective identities. Tying up the theoretical threads, the authors conclude that the mobile youth culture "is a typical networked culture" (p. 168) which develops connections to both reinforce and extend selective networked sociability.

While there are coherent patterns in how young people orient to and use mobile communication technology, the authors note how these patterns are influenced by age group (i.e., young adult, teen, and children) and are tied to existing social structures and cultural values. So, once again they contextualize the discussion to the extent possible with data and findings from the research in different social and cultural settings.

In their analysis, the most complete picture of youth practices is depicted in Europe. Not surprisingly, the most prominent effect is that young people are using the technology in both instrumental and expressive ways to establish and maintain their social networks and romantic relationships. As established by others (see for example, Ling 2004), the authors explain how these connections not only strengthen network ties among young people, but a sense of personal and collective identity as well. One interesting trend the authors point out is that, at least in certain parts of Europe, the older segments of the mobile youth culture seem to be more multi-modal in their use of mobile telephony than are younger segments. With less data available in areas such as the United States, Latin America, and Africa, the authors identify a need for additional research, although it is clear that economic restraints in the developing world have hindered the mobile youth culture from materializing to the same extent that it has elsewhere.

In Chapter 5, the authors develop an updated discussion the implications of mobile communication on how individuals experience and use space and time. Like the previous chapter, this one is heavily rooted in the theoretical perspective of the network society, most notably its key concepts of the "space of flows" and "timeless time." The space of flows refers to "the material organization of simultaneous social interaction at a distance by networking communication" (p. 172). In short, spaces take on new meanings in the network society as they are increasingly regarded and used for their ability to support mediated connections among network nodes. The authors explain, "the structure and meaning of the space of flows are not related to any place, but to the relationships constructed in and around the network processing of the specific flows of communication" (p. 172). As with space, time takes on new meaning in the network society through the "desequencing of social interaction, either by compression of time or by random ordering of the moments of the sequence" (p. 172).

The authors draw from the available literature to show how mobile communication enhances timeless time and the space of flows, while constituting them in ways that are distinctive from the computer and Internet technologies that fueled Castells' earlier theory building on the network society.

Mobile communication gives rise to new forms of networked interactions in new places, which redefines the meaning of these places. Places are individualized as users of the technology transform public settings into personal spaces. The authors explain that time is also given distinctive new meaning in the mobile network society as individuals establish new social rhythms that can be seen in patterns of technology use, everyday life, and institutional change.

Castells et al. continue the theoretical dialogue in their final chapter which summarizes the key implications of this book within the framework of the network society. In their concluding remarks they are careful to emphasize that the "effects" of the technology, while powerful, are not to be taken as socially determinant. That is, "technology does not determine society: it *is* society, and can only be understood in social terms as a social practice" (p. 246). Toward this end, the authors have put together an impressive review of how the social practice of wireless communication is transforming private and public life in disparate parts of the world.

By way of concluding this review, some collective observations about the strengths, weaknesses, and opportunities of the book are in order. As noted, a primary strength of the text lies in its breadth of data sources coupled with a comparative approach to making sense of the data. These aspects of the project allow the authors to provide a fresh look into how perceptions, uses, and effects of wireless technologies intersect with culture and other important socio-demographic variables. Furthermore, the authors do not shy from grappling with the ways these variables can overlap and play off one another, as they frequently demonstrate through illustrations from both developed and developing countries. Indeed, their attention to developing countries, throughout the text and especially in Chapter 8 on global development, is warranted as the mobile communication society rapidly spreads into these parts of the world, bringing with it important benefits for connectivity and economic development. In recent years, scholars have made important steps forward in understanding the particularities of mobile communication in developing countries. However, most of the authored and edited books on mobile communication, tend to do so with emphasis on developed countries that originally embraced the technology. This is understandable considering mobile communication is an emerging and fairly new field of study. This book achieves an unusual degree of breadth in reviewing how mobile and wireless communication cut across different societal contexts as well as depth in how it plays out within them. Beyond merely reviewing key patterns in adoption, use, and social change, the authors strive to make analytic sense by interpreting them in socio-cultural context, while also observing larger regional and global consistencies.

In short, "Mobile Communication and Society" is one of the most up-to-date and comprehensive resources that highlight trends associated with mobile communication, while periodically giving nod to related trends associated with other forms of wireless communication. The text is a helpful tool for scholars to identify past and future steps in the research as well as instructors who wish to provide students an overview of the key research topics and in-depth glimpses within them. In this sense, the book helps take a step forward with the developing field of mobile communication studies.

While it contributes to the field in these ways, the project must be qualified by an inevitable limitation. Although it offers a global perspective, much of the analysis is limited by the nature of the data available. In many cases, the authors rely on exploratory studies to gain insights. While these insights

provide evidence of both old and new trends, they cannot always be generalized to entire populations of interest, and there is need for more representative research, especially in developing and rural areas. To their credit, Castells et al. report on nationally representative data where available.

As noted, the authors make theoretical connections to the network society in several segments of the book. At the same time, they leave opportunities for further theoretical development, such as how wireless and mobile technologies enable "mass-self" communication (Castells, 2007). Elsewhere, Castells (2007) argues that, "Appropriating the new forms of communication, people have built their own system of mass communication, via SMS, blogs, vlogs, podcasts, wikis, and the like" (pp. 246-247). "Mobile Communication and Society" leaves opportunities for additional research and theory building on the uses of mobile and wireless media as channels of mass communication and the social implications that come out of such use. The text lays an excellent foundation for this and other areas of future research, thereby offering heuristic as well as analytic value.

References

- Castells, M. (2000). *The rise of the network society: The information age: Economy, society and culture* (2nd ed). Oxford: Blackwell.
- Castells, M. (2001). *The internet galaxy: Reflections on the Internet, business, and society.* Oxford: Oxford University Press.
- Castells, M. (2007). Communication, power and counter-power in the network society. *International Journal of Communication*, *1*, 238-266. Retrieved April 7, 2007 from, http://ijoc.org/ojs/index.php/ijoc/article/view/46
- Ling, R. (2004). *The mobile connection: The cell phone's impact on society.* San Francisco: Morgan Kaufman Publishers.