ESSAY REVIEWS

Demystifying Some Momentous Changes

Richard R. John, Network Nation

MEGAN MULLEN

How do we know when a communication technology has been fully integrated into society? Perhaps it is when most people no longer think about, or even remember, the debates surrounding its adoption. Many adults today have vivid recollections of the debates and challenges surrounding the 1996 Telecommunications Act; in fact, some of its key concerns, especially those related to the Internet, remain unresolved. But we can only imagine the times when older technologies—those we now take for granted or those we have discarded—were having their practices and protocols negotiated. The telephone and telegraph are two such technologies. A common way of introducing young scholars to these precedent-setting electrical media networks is through memorable phrases like James Carey’s “the effective separation of communication from transportation” or Daniel Czitrom’s “annihilator of time and space.” Like Carey and Czitrom, scholars ranging from Harold Innis and Marshall McLuhan to Carolyn Marvin and Claude Fischer have recounted fascinating tales of the dramatic changes to everyday life that accompanied the harnessing of electricity.1 Such stories and metaphors play a critical role in our understanding of communication and culture broadly, and of the institutional development of networked communication media specifically. For the reflective global citizen in an Internet-saturated world, understanding the first moves from the physical transport of messages to their electronic transmission is vital.

Megan Mullen is a professor and chair of the Department of Communication at the University of Wisconsin–Parkside. She researches early cable television history, and her most recent book is Television in the Multichannel Age (2008).

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This foundational understanding is necessary, but not sufficient. We need to move to a broader comprehension of the intersecting societal forces that not only launched the U.S. telegraph and telephone industries, but also set lasting precedents for networked media in this country. In *Network Nation: Inventing American Telecommunications* (Cambridge, Mass.: Harvard University Press, 2010. Pp. iv+520. $39.95), Columbia University journalism professor Richard R. John takes the “annihilation” perspective as a given, and proceeds to provide a detailed business and policy history that overturns many a misperception of telecommunications history. Over a decade ago, John took on a similar project related to the rise of the U.S. Post Office in *Spreading the News: The American Postal System from Franklin to Morse*, giving center stage to an often overlooked yet nonetheless pivotal and precedent-setting networked media industry. *Network Nation* begins where *Spreading the News* left off. Its central premise is that the post office was the first networked media industry in the United States, and that the institutional structure and policy framework of the postal system were the models against which future decisions regarding networked media would be weighed.

John is uniquely convincing in arguing that the rise of the telegraph and telephone industries formed the basis for the notion of “telecommunications,” as understood from technological, business, and legal perspectives. For example, with the 1910 Mann-Elkins Act, the telephone, telegraph, and cable (that is, the underwater cable lines that linked continents) became known as “common carriers,” establishing not only key terminology, but also a way of distinguishing media of interpersonal communication from those whose primary functions would be providing information and entertainment on a mass, ideally nondiscriminatory basis (p. 343). The 1934 Communications Act was built upon this framework, as were twentieth-century cultural and policy debates around newer media like cable television and, eventually, the Internet.

The precedents we take for granted today did not emerge overnight. Scrutiny and theorizing on the part of both government policymakers and academics (especially within the newer social scientific disciplines) fueled some important ethical debates. One of the most important of these centered on the question of whether communications networks were “natural monopolies.” By the mid-1800s it was clear that competition could not function in networked media industries, as it did in manufacturing, for example. Should the telegraph, then, follow the precedent set by the postal service and become a government-controlled monopoly (as was occurring in other countries where the industry was in a comparable stage of development), or should it be privately held? In addition, it was generally accepted that the postal service could only serve the public through direct government control and the assurance of flat-rate service. It also was a given that users in high-traffic urban areas would subsidize those in iso-
lated rural areas—a notion that remains largely unquestioned to this day. Like the U.S. Postal Service, the telegraph was considered by some (including President Ulysses S. Grant) to be “a kind of educational institution” in that, while it did not create knowledge, it played an essential role in circulating knowledge created by others (p. 126). Some policymakers and members of the public had grown concerned in particular about the quality of newspaper content fed by the new wire services, specifically the NYAP (New York Associated Press).

Others saw the issue differently, taking it for granted that, because the postal service already filled the “universal service” role in making information available to the public, the telegraph and telephone were luxuries necessary only for businesses and the more affluent classes. John’s detailed narrative of the debates surrounding equal service shows us that the government-sanctioned privatization of these industries was not taken lightly; it also shows the variety of reasons why the common-carrier structure eventually was set in stone—at least through the better part of the twentieth century. Western Union dominated the telegraph through the twentieth century, and AT&T held its monopoly in telephone service until its 1984 government-mandated divestiture.

The policy debates of the nineteenth century resurfaced in even greater complexity with the advent of broadcast radio and television networks during the first half of the twentieth. The question of government versus private ownership again came to the fore, as many debated the responsibilities of those using a scarce resource of the electromagnetic spectrum. The arrival of cable television and the Internet served to demonstrate how complex and controversial the ownership of networked media could be as a policy issue, particularly as these new media possessed attributes characteristic of both wired common carriers and broadcast media.

John reminds us how little our modern-day cultural expectations for networked communication media resemble those of our forebears a century or more ago. Indeed, both the telegraph and the telephone examples show that it can take many decades for new media technologies to become part of the routines of average citizens. When the telephone industry was growing, the telegraph was still relatively new itself, remaining largely beyond the reach of most Americans, who considered postal mail the standard for long-distance communication. And the telephone definitely was not perceived as an update or replacement for the telegraph; those in business, journalism, and politics who relied on the new electrical technologies continued for decades to prefer the telegraph due to the written record it retained.

Here as elsewhere, John challenges modern-day assumptions. For example, while arguments in favor of network expansion often were grounded in the notion that each new subscriber added value for existing users, this was a tenuous notion in the nineteenth century and not the com-
mon wisdom it has become in recent years. Users could not be expected to be aware of (and thus to pay for) such speculative increases in value without guidance. Making “everyday” people and private households into subscribers thus involved major publicity campaigns on the part of the telephone companies, as John demonstrates. Even expanding the telephone network within a specific municipality was not viewed as the sensible investment it later was assumed to be (pp. 338–39). Even more surprising to modern scholars would be the lukewarm response of early telephone users to long-distance service. As John points out, “it is hard to envision a time when the long-distance network failed to generate a profit. Early on, however, no one knew for certain if it would ever cover its cost. It took courage, [AT&T president Theodore N.] Vail later recalled, to even embark on its construction” (p. 211).

If I perceive a small flaw in John’s writing style, it is in the steady (and occasionally repetitive) stream of anecdotes intermingled with analytic insight. Although there clearly is a hierarchy of ideas, this is not always as apparent as it might be at critical junctures. The much more significant upside to this style, though, is the extent to which the lives, dispositions, and morals of the many individuals with a political or economic interest in the technologies are chronicled. Deeds of the “great men” of networked media history—figures ranging from Samuel F. B. Morse and Alexander Graham Bell to Vail and Western Union’s Jay Gould—are incorporated with those of lesser known or long-forgotten legislators, bureaucrats, and entrepreneurs to fill out this critical historical trajectory. This results in a far more developed picture than previously held—in short, a laudable contribution to scholarship.