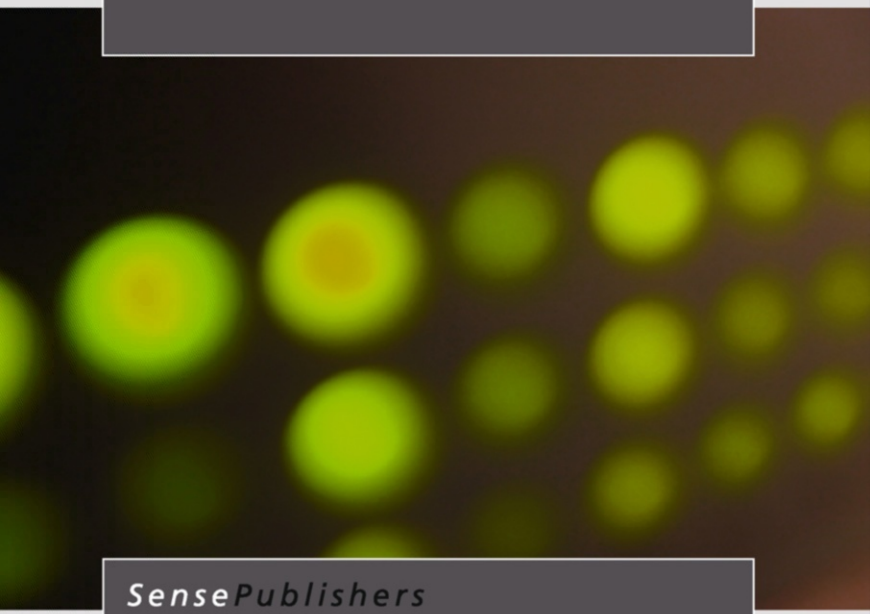
(Re)Inventing the Internet

Critical Case Studies

Andrew Feenberg and Norm Friesen (Eds.)



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PREFACE

The Internet, as Though Agency Mattered

The critique of technological determinism is something of an chapter of faith in studies of communication technologies today, thanks to two key developments dating from the early days of new media research. The first was a shift toward constructivist views of technology, borrowed from science and technology studies and cultural analyses of media in the work of Raymond Williams and others. The second was the turn toward subjectivist epistemologies and qualitative fieldwork methods that transformed communication and mass media research in the 1980s, and which encouraged a reorientation of media studies toward the "domestic" and "everyday life" contexts of media use. Since that time, media studies, cultural studies, and new media scholars have routinely disavowed the channel-centric, powerful-effects view of communication technology that pervaded so much of mass media research through the 20th century, in favour of culturally-situated, subjectively-experienced accounts of media development and use.

But if new media scholarship eschews powerful *technologies*, the field still clings to a widespread, if implicit, belief in powerful media *representations*, *content* and *institutions*. Producers and owners of media programs and systems (including new media) are assumed to wield globalized, hegemonic, and disproportionate power over consumers (even in their new guise as "users"). Although it rejects technological determinism, the field seems reluctant to part with structural/cultural determinism and the presumed "impacts" of media representations and institutions *on* individuals, society and culture. Too often, people's engagement with media is still conceptualized in terms of reception and consumption, rather than expression, organization, relations, and interaction – what elsewhere I have described as *mediation*, in both the technological sense of devices that extend our abilities to communicate, and the relational sense of negotiation and intercession (Lievrouw, 2011).

Into this arena, Andrew Feenberg and his collaborators bring a welcome, and overdue, shift of focus. Their key insight is that most media researchers, including new media scholars, have misunderstood the characteristics of networked computing and telecommunications that make "the Internet" – actually a constellation of interlinked and emergent platforms, uses, devices, affordances, and social/cultural resources and relations – a fundamentally different context and scaffolding for human communication than was ever possible via conventional mass media systems. Consequently, media researchers have tended to underestimate or even disparage the avenues and opportunities for resistance, democratic participation, and emancipatory change available via new media, and to overstate the ability of powerful institutions to block or constrain the ways that people use and reconfigure the technologies.

Certainly, new media can be used simply as pipelines for content distribution and delivery, and as with mass media distribution channels, those pipelines may be just as easy to interrupt or shut down (at least until users figure out a work-around). However, the authors in this collection argue that the real power of the Internet, as demonstrated from the earliest email programs on the ARPANET to contemporary Twitter feeds, derives from the fact that computer networking, as Feenberg puts it in his introduction, "is in fact the first successful mediation of small group activity."[1] As a communication medium, networked computing is extraordinarily well-suited to group processes and interaction, and indeed allows "local" group processes and network relations to expand to global scale. The facilitation of interpersonal and group communication, where people are *agents* and *actors* and not simply consumers of media products, is the source of the persistent appeal and power of new media.

Moreover, the material infrastructure of the Internet and related technologies is, as Feenberg says, "radically incomplete," not yet approaching the kind of closure and stabilization that have marked communication technologies in the past. (Indeed, I would go further and argue that Internet design and architecture, predicated on "survivability," redundancy, and openness to diverse devices and applications, actually *resist* this type of closure. The "recombinant" quality of Internet infrastructure is what allows us to keep calling new media "new" [Lievrouw & Livingstone, 2006]). This persistent lack of closure, and the incompleteness, emergence, or recombinant dynamics of new media technologies, in some sense invite people to tinker with existing features and platforms, and use them to devise new or non-obvious affordances and uses according to their own purposes and interests. Feenberg, of course, has usefully theorized this process, within his broader critical theory of technology, as *instrumentalization*: people seeking solutions to problems recognize potentially useful objects and affordances in the world, remove them from their original settings and purposes to highlight their new uses, and then reconfigure and fit them back into existing systems, standards, and repertoires of practice in new ways (Feenberg, 2005).

Together, the ability of Internet infrastructure to support and extend group interaction, and its "radical incompleteness," have fostered a diversified, idiosyncratic, opportunistic and serendipitous arena for building relationships, interaction and what Feenberg calls "new forms of agency." Actors can use technology to challenge established institutional power and prerogatives, and in the process reconfigure not only the prevailing social order, but the technical infrastructure that supports and subtends it. New forms of agency have opened the way for the new, mediated modes of sociality, reciprocity, participation, mobilization, and resistance that are highlighted in this book.

The chapters and cases collected here provide rich evidence that agency and action are key to understanding people's engagement with new media. To mention just a few examples: Bakardjieva documents the "subactivism" of people with little time for institutional politics, but who nonetheless identify with one another and cultivate their "small world" interests and concerns interpersonally, online. Subactivism thus echoes the "unconventional action repertoires" and "prefigurative"

forms of political action described by theorists of new social movements (i.e., movement members "live" their politics through their lifestyles, identities, creative works, and relationships, rather than joining formal political organizations and campaigns). But Bakardjieva's findings demonstrate the inseparability of such activities in online and offline modes of everyday life.

Hamilton and Feenberg make the case that effective online teaching, like effective face-to-face instruction, is fundamentally relational and not merely a matter of information delivery. Understood this way, online pedagogy has the potential to enrich and extend the traditional values of scholarship and teaching, and to resist the deskilling and reduction of higher education to David Noble's feared "digital diploma mills." Friesen, Feenberg and Smith call for a move away from framing surveillance in Foucauldian, "panoptic" terms that emphasize the unseen power embodied in remote databases, and toward a framework that recognizes people's own power to understand, act on, and undermine the interests of surveilling interests and advance their own. This notion of surveilled persons as subjective, and active, agents and actors, rather than acted-upon "representations," is broadly congruent with much recent work in surveillance studies that emphasizes "ethical surveillance" and people's capabilities to recognize, resist, and even play with the information that they reveal about themselves and thus subvert institutional aims and power (Monahan, Murikami-Woods & Phillips, 2010; boyd, 2011).

This collection, then, is not just a set of empirical "tests" of the critical theory of technology. More importantly, it is another step in the movement in new media scholarship toward an understanding of communication technologies as inextricably entwined in everyday experience, and of mediated communication as a complex, contingent and continuous process that articulates the symbolic and the material, technology and experience, structure and action, constraint and agency.

NOTES

[1] The extensive literature on computer mediated communication [CMC], grounded in theories of interpersonal, small group, and organizational communication rather than mass communication research, richly demonstrates the power of this insight. (See, e.g., Thurlow, Lengel & Tomic, 2004.)

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Los Angeles, 2011

I. CODE AND COMMUNICATION

ANDREW FEENBERG

INTRODUCTION

Toward a Critical Theory of the Internet

Technologies normally stabilize after an initial period during which many differing configurations compete. Once stabilized, their social and political implications finally become clear. But despite decades of development, the Internet remains in flux as innovative usages continue to appear. The nature of the network is still in question. It is not a fully developed technology like the refrigerator or the ball point pen. Yet this has not prevented a huge outpouring of literature hyping the Internet or criticizing its impact. Some point to the empowering effects of online activity on recent electoral campaigns in the US and revolts in the Arab world to argue that the Internet is a democratizing force. Others claim that the Internet is just a virtual mall, a final extension of capitalist rationalization into every corner of our lives, a trend supported by an ever denser web of surveillance technologies threatening individual autonomy and democratic discourse. In fact this controversy is the best evidence that the Internet is not a finished work. The case cannot be closed while the debate continues with such fierce intensity.

This book offers an original approach to the controversy. Each of the five chapters acknowledge the intensified rationalization brought about by the Internet while also highlighting the innovative forms of community that emerge among the publics these technologies assemble.

Communities of medical patients, video game players, musicians and their audiences, and many other groups have emerged on the Internet with surprising consequences. This introduction will focus on the significance of such communities as sites of resistance. Although they appear marginal to politics in the usual sense, they are redefining the political in response to the omnipresence of technology. The correlation of technological rationalization and democratic social initiative provides a more complete picture of the Internet than either aspect taken by itself.

The critical theory of technology, applied in some measure in each of the chapters, emphasizes the political structuring of the world emerging under the impact of the Internet. Technology is neither a realm of rational consensus nor is it a mere tool of its owners and managers. We have learned from social studies of science and technology (STS) that technology assembles workers, users, even victims, who share in common a world it creates. Their participation in these technological worlds shapes their conception of their concerns and channels their activities. Yet this is not a deterministic thesis. Technology is not an independent variable but is "co-constructed" by the social forces it organizes and unleashes.

Critical theory of technology departs from mainstream STS in treating such technological worlds as terrains of struggle on which hegemonic forces express

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themselves through specific design strategies in opposition to subordinate groups that are more or less successful in influencing the future form of the artifacts with which they are engaged. The Internet enables communication among these subordinate groups with significant effects. In the chapters that follow, these abstract methodological principles are applied to concrete cases involving surveillance, online education, video games, Internet activism, and citizenship.[1]

HISTORICAL BACKGROUND

The earliest version of what has become the Internet went online in 1969. This system was called the ARPANET, after the Advanced Research Projects Agency of the defense department that specialized in "blue sky" projects, projects so wild and speculative no normal government agency would dare fund them. It is interesting to note that even at this early stage some of the engineers involved believed their work would have enormous beneficial impacts. They prophesied a global community organized by computer networks. One of these early enthusiasts, Vinton Cerf, waxed poetic in his "Requiem for the APRANET." He wrote:

> Like distant islands sundered by the sea,
> we had no sense of one community.
> We lived and worked apart and rarely knew
> that others searched with us for knowledge, too...
>
> But, could these new resources not be shared?
> Let links be built; machines and men be paired!
> Let distance be no barrier! They set
> that goal: design and build the ARPANET!
> (quoted in Abbate, 1994.)[2]

The Internet gradually went public in the 1980s and '90s, but even earlier social commentators were prophesying great things from computer mediated communication. In 1978 Murray Turoff and Roxanne Hiltz published a work of analysis and prediction entitled *The Network Nation* (1993). They foresaw widespread adoption of computer networking for telework and education. They believed networking would promote gender equality and speculated that electronic discussion and voting would revivify the public sphere in democratic societies.

They may have over-estimated the transformative power of their favorite technology, but their projections were modest compared to many that came afterwards. According to a whole new genre of Internet hype, networking was a change comparable in significance to the Industrial Revolution and would soon transform every aspect of our lives. Cities would be depopulated as people retreated to electronic cottages in the woods. Government as we know it would be replaced by continuous electronic plebiscites. Intelligent "agents" would learn our preferences and control the mechanical world around us without our having to lift a finger. Even sex would be transformed through remote access to virtual partners.

Naturally, the hype called forth its demystification. The historian of technology David Noble warned ominously that "visions of democratization and popular

empowerment via the net are dangerous delusions; whatever the gains, they are overwhelmingly overshadowed and more than nullified by the losses. As the computer screens brighten with promise for the few, the light at the end of the tunnel grows dimmer for the many" (Noble, consulted Nov. 11, 2006: 12).

Noble expressed the widespread skepticism about the Internet that appeared in the 1990s as it became a theme of popular discussion. Social critics point to a number of phenomena inimical to democracy. Some argue that the digital divide excludes the poor while enhancing the powers of the well-to-do. Others complain that online discussion merely reinforces preexisting prejudices because people segregate themselves on the Internet from those with whom they disagree. Still others argue that the Internet is so thoroughly colonized by business that it is little more than a vehicle for advertising. Democracy is threatened by new technologies of surveillance that employ the network to concentrate information from many sources, exposing deviations from the norm through tracking and data mining.

This threat is the subject of the chapter by Norm Friesen, Andrew Feenberg, Grace Chung and Shannon Lowe. The chapter explores the consequences of surveillance for personal identity and the resistance it evokes. The chapter notes that surveillance technology gives rise to temporary communities of the surveilled, who enact their unruly dissent before the camera. And as Wikileaks has shown, surveillance is a two way street and can occasionally be turned against the surveillers.

The most trenchant critiques of the Internet challenge its capacity to support human community. Without face-to-face contact, it is said, people cannot take each other seriously enough to form a community. How can moral roles bind us and real consequences flow from interactions that are no more durable than a flicker on the screen? As Albert Borgmann wrote, "plugged into the network of communications and computers, people seem to enjoy omniscience and omnipotence; severed from their network, they turn out to be insubstantial and disoriented. They no longer command their world as persons in their own right. Their conversation is without depth and wit; their attention is roving and vacuous; their sense of place is uncertain and fickle" (Borgmann, 1992: 108).[3]

In this Introduction I respond to such criticisms and argue that the Internet does have democratic implications. I do not exaggerate the significance of the Internet. It will not replace Congress with a universal electronic town hall nor will it overthrow dictatorships around the world. On the other hand, the contrary exaggeration seems to me to reflect a lack of perspective. It threatens to blind us to real possibilities that should be seized rather than dismissed. These possibilities have to do with online community, supported by the Internet, and given over, as the critics note, to endless talk. But discussion lies at the heart of a democratic polity. Any new scene on which it unfolds enhances the public sphere. In an increasingly rationalized society, where individuals' activities are more and more strictly structured by business and government, the existence of this new form of community is particularly significant (Neyland and Woolgar, 2006).

Complaints about the Internet are similar to complaints about television broadcasting and in fact it seems that bad experience with the latter has shaped