

1 Introduction: The Digital Revolution, the Informed Citizen, and the Culture of Democracy

Henry Jenkins and David Thorburn

Snapshot: American Democracy, circa 2000

Many political commentators predicted that networked computing might be the decisive factor in the election of 2000. By November 2000, 64 percent of all voters were Internet users and 90 percent of Americans on the Internet were registered voters.¹ The Web would offer, these commentators claimed, the least costly and most effective means of reaching likely voters. How did such predictions turn out?

- Steve Forbes became the first individual to announce his presidential candidacy on the Web.
- Arizona became the first state to allow online voting in its presidential primary.
- Bill Bradley established records in raising campaign contributions on his Web site.
- The presidential nominating conventions were Webcast for the first time.
- Both George W. Bush and Al Gore deployed their Web sites to issue “e-butts” critiquing the other side’s performance in the presidential debates. In some cases these responses were posted while the debate was still taking place. Traffic to these sites was so heavy following the debates that the Bush Web site crashed.
- The Markle Foundation’s Web, White and Blue cyberdebate site featured daily exchanges among six presidential candidates in response to questions submitted by Internet users.²
- Campaign staffs used computer modeling and extensive polling data to map their strategies, hour by hour, precinct by precinct, allowing rapid shifts of resources. In one of the closest elections in American history, both major parties believed they knew down to the last dangling chad how many votes they could expect in each district of each contested state.

Yet despite such signs of change, some commentators expressed disappointment, convinced that the public was not yet ready to participate in the cyberdemocracy they had envisioned. Jonah Seiger, cofounder of Mindshare Internet Campaigns, spoke of his disillusionment: “The evolution of the Internet and politics is going to happen a lot more slowly than people expect.”³ A Pew Research Center study found that only 18 percent of Americans had used the Internet to learn about the candidates.⁴ On the other hand, in an election that was decided by a few thousand votes, such numbers could have had an impact on the outcome. Of those whom Pew identified as seeking candidate information online, 43 percent said the Web had influenced their final decision. Fifty percent of Internet users under the age of thirty said the Net had affected their vote, a finding that suggests a generational shift in political culture.

But maybe these disappointed observers were looking in the wrong places, searching for some decisive moment that would embody the new power of digital media—the contemporary equivalent of Roosevelt’s “fireside” chats on radio or the Kennedy-Nixon debates on television. Such events, of course, were emblematic of the old “consensus” media of broadcasting, systems defined by a few monopoly networks and limited access to the channels of communication.⁵ These events were important, in part, because they enabled candidates to address directly a significant portion of the electorate. The current diversification of communication channels, on the other hand, is politically important because it expands the range of voices that can be heard in a national debate, ensuring that no one voice can speak with unquestioned authority. Networked computing operates according to principles fundamentally different from those of broadcast media: access, participation, reciprocity, and many-to-many rather than one-to-many communication.

We will not discover a single decisive moment when the Internet emerges as a force in our national politics. Instead, digital democracy will be decentralized, unevenly dispersed, even profoundly contradictory. Moreover, the effects some have ascribed to networked computing’s democratic impulses are likely to appear first not in electoral politics, but in cultural forms: in a changed sense of community, for example, or in a citizenry less dependent on official voices of expertise and authority.

We must recognize that “democracy” itself is a disputed term. Is democracy a particular structure of governance or a culture of citizenship or some complex hybrid of the two? How much power must shift to the voters to justify the argument that society is becoming more democratic? How much of our current understanding of democracy is bound up with the concept of the “informed citizen”?⁶ In an era of networked computing, we are starting to see changes not only in how politics is conducted, but in what counts

as politics. Consequently, it may take some time to discern the full influence of the Internet on American civic life.

Still, certain political events of the recent past offer some contradictory clues about what online democracy may look like. If we wish to locate a moment when the nation's attention turned to cyberspace, we might choose the 1998 release of the Starr Report.⁷ The creation of Thomas, the Library of Congress Web server, in 1995, had been one of the great idealistic achievements of the early history of cyberspace: All government documents, speeches, committee hearings, reports, and even, in some cases, drafts of reports would be made available to the public free on the Internet. Coupled with C-SPAN, which provided live or recorded television broadcasts of congressional debates and committee sessions, Thomas would permit the public to follow the tangled paths through which legislative proposals became law.⁸ Yet these noble expectations were mainly disappointed. Thomas's resources were largely unused until the presidential sex scandal and the impeachment hearings seized the nation's attention. Following a story first publicized by the online journalist Matt Drudge, more than twenty-five million citizens downloaded the Starr Report and another two million downloaded President Clinton's grand jury testimony in the first two weeks of their availability on the Web. Americans wanted access to governmental information, but perhaps not the kind the idealists had imagined.

Again, if we search for an instance in which online campaigning changed the outcome of an election, we might consider fall 1999, when Jesse Ventura, former World Wrestling Federation wrestler and Reform Party candidate, was elected governor of Minnesota.⁹ Prior to his surprising victory, Ventura received far less broadcast and print coverage than his Republican and Democratic opponents. Commentators explained his election mainly as a negative vote against the established political parties. Yet there is good reason to believe that his campaign succeeded in part because it made effective use of the World Wide Web to reach a new constituency. The major party candidates, for the most part, conceived their Web sites as glossy brochures, full of smiling pictures and vague slogans. Ventura's site, on the other hand, offered detailed position papers, and more importantly, constructed an online community that connected his supporters to the campaign and to each other. In a series of polls, *Wired* found that "netizens"—registered voters with e-mail access—were fiscally conservative and socially libertarian. Yet neither party was likely to nominate a candidate with this mix of views.¹⁰ Ventura actively appealed to these netizens, bringing record numbers of younger voters to the polls and dramatizing the changed fortunes of third parties in the digital age.

Here is another salient example of the Web's power to influence the electoral process: the Ralph Nader "vote-swapping" campaign of 2000.¹¹ Recognizing that Nader could not win the presidential election, his campaign developed a strategy calculated to enhance his percentage of the national vote, thus improving the Green Party's chances of receiving federal matching funds in the next presidential election. Gore voters in heavily Democratic states like Massachusetts were encouraged to trade their votes on the Web with Nader supporters in more closely contested states, such as Florida, California, or Oregon. Ultimately, 15,000 vote swaps were logged, with some 1,400 Nader supporters in Florida agreeing to vote for Gore. These "Nader traders" incited sharp controversy; some commentators deplored what they saw as the "Napsterization" of American politics, whereas others suggested that such vote swapping valuably enlarged the role of third parties in national elections.

To illustrate how the Web may grant visibility and influence to alternative political perspectives, we might document the rise of independent media centers during the 2000 protests in Seattle against the World Trade Organization.¹² Indymedia.org acted as a clearinghouse for publicizing the goals of the protesters, posting first-person reports, photographs, sound recordings, and digital video footage. These digitally savvy activists linked their own documentaries via satellite to a network of public-access stations around the country, developed their own Internet radio station, and published their own newspaper, available on their Web site to readers around the world. What began as a tactical response to a specific protest has become a self-sustaining, volunteer-run news organization with outposts in Belgium, Canada, Czechoslovakia, England, France, Italy, and Mexico. These independent media centers have become a central force in a worldwide campaign against what the activists perceive as the evils of globalization.

Conversely, critics who have argued that more information in circulation does not necessarily result in a more informed citizenry could cite the debate in fall 2000 in the New York senatorial campaign between Rick Lazio and Hillary Clinton. Responding to a reporter's question, both candidates strongly opposed pending legislation that would tax e-mail to provide financial support for the federal postal service.¹³ The following day, they discovered that the so-called bill was an Internet hoax, though the reporter—and the candidates—on the nationally televised debate had mistakenly believed it to be genuine.

As these examples suggest, the World Wide Web is already a powerful influence on many aspects of American political life: on the public's access to government documents, on candidates' communication with their constituencies, on voters' behavior in elections, on political activists' efforts to circulate their message, and on the topics that

enter into national debates among candidates. Not everyone would agree, however, as to whether that influence is positive or negative, even in the specific instances described above, or as to whether technological change adequately explains such social and political developments.

Challenging the Myth of Inevitability

In his famous 1974 monograph *Television: Technology and Cultural Form*, Raymond Williams challenges widespread popular and scholarly notions of technological determinism (the belief that new technologies have an intrinsic, autonomous power to shape and transform society). Instead, Williams argues, we must understand the emergence of new technologies, and in particular new communications systems, as a result of complex interactions among technological, social, cultural, political, legal, and economic forces.¹⁴ Different cultures and different political regimes will exploit nascent technologies in radically different ways, as a comparison of the early history of television in Britain, the United States, and Nazi Germany dramatically illustrates. Moreover, not only are notions of technological determinism historically mistaken, they are politically and morally dangerous, because they assume we are powerless to shape new media in socially beneficial ways and powerless to resist their pernicious effects. Paul Starr strongly agrees: “*A priori*, little can be said about the net effects of new media. When a new medium strikes an ‘old regime,’ the political effects depend on both the technology and the regime and on the decisions, both technical and political, that shape the new medium and the institutions that grow up around it.”¹⁵ Williams’s research suggests that the introduction of a new medium will engender debate about political culture but cannot by itself significantly alter the society in which it appears. Instead, the new medium generates an extended negotiation or contestation among competing forces—some emergent, some well-established; some encouraging change, others resisting it; some publicly visible, others operating covertly. The impact of new media, in Williams’s model, is evolutionary, not revolutionary.

Williams’s powerful argument confutes what one might call the rhetoric of inevitability: the assumption that the introduction of networked computing will inevitably lead to a more democratic society. In “The Laws of Cyberspace,” Lawrence Lessig, a sharp critic of technological determinism, offers a summary of such utopian faith: “Cyberspace is unavoidable, and yet cyberspace is unregulatable. No nation can live without it, yet no nation can control behavior within it. Cyberspace is that space where individuals are, inherently, free from control by real space sovereigns.”¹⁶

Such rhetoric sees freedom and democracy as inevitable consequences of digital technology, sometimes going so far as to imagine the withering away of the nation-state in favor of direct democracy.¹⁷ For example, in his notorious “Declaration of Independence for Cyberspace,” John Perry Barlow proclaims that national governments have no authority over online communities: “Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. . . . You have no sovereignty where we gather. . . . Cyberspace does not lie within your borders. Do not think that you can build it, as though it were a public construction project. You cannot. It is an act of nature and it grows itself through our collective actions.”¹⁸ In a manifesto that claims a global perspective yet draws only on American political traditions, Barlow describes computers as liberating us from the dictates of national governments. For Barlow, the battle has already been won and the outcome has been determined; it is absurd for government even to attempt to regulate this new “tribe” of the “Mind.”

One might contrast Barlow’s blithe assumption that the “revolution” has already been won with Pierre Levy’s more nuanced account of the emergence of a culture of “collective intelligence.”¹⁹ For Levy, this new information culture, defined by its high degree of participation and reciprocity, exists alongside such established structures of power as the multinational corporation and the nation-state. Levy sees these political and cultural structures as sometimes complementing, sometimes opposing each other. For Levy, the world of “collective intelligence” is an “attainable utopia,” but not a condition already achieved.

Lessig reaches a similar, if more pessimistic conclusion: “The world we are entering . . . is not a world where freedom is ensured.”²⁰ Forms of control and regulation, Lessig writes, are already embedded in the operational codes that govern our interactions in cyberspace; we already accept without thought a series of invisible constraints on digital associations and transactions that have never been publicly debated. Unless we understand this antidemocratic potential of cyberspace, Lessig says, we are likely to “sleep through the transition from freedom into control.”

Lessig is one of a number of recent writers calling on technologically literate citizens to ensure a broader public debate about the political impact of new media. Langdon Winner, for example, urges computer professionals to take civic responsibility for their work and insists that the general public should have a part in the creation and deployment of new technologies. “Right now it’s anyone’s guess what sorts of personalities, styles of discourse, and social norms will ultimately flourish” in our digital future, Winner says. “Industrial leaders present as *faits accomplis* what otherwise might have been choices open for

diverse public imaginings, investigations and debates. . . . If we're asking people to change their lives to adapt to new information systems, it seems responsible to solicit broad participation in deliberation, planning, decision making, prototyping, testing, [and] evaluation."²¹

In *Technologies of Freedom* (1983), Ithiel de Sola Pool established a framework for this debate about communication technologies and democracy: "Freedom is fostered when the means of communication are dispersed, decentralized, and easily available, as are printing presses or microcomputers. Central control is more likely when the means of communication are concentrated, monopolized, and scarce, as are great networks."²² At a time when the mainframe computer was seen as an emblem of bureaucratic control, Pool envisioned a decentralized and participatory media environment. The emergence of home computers, he predicted, might strengthen democratic culture, enabling citizens and grassroots organizations to circulate their ideas more widely than ever before. But he also recognized that such an outcome was not inevitable: "The characteristics of media shape what is done with them, so one might anticipate that these technologies of freedom will overwhelm all attempts to control them. . . . [Technology] shapes the structure of the battle, but not every outcome. While the printing press was without doubt the foundation of modern democracy, the response to the flood of publishing that it brought forth has been censorship as often as press freedom. In some times and places the even more capacious new media will open wider the floodgates for discourse, but in other times and places, in fear of that flood, attempts will be made to shut the gates."²³ Moreover, Pool said, new media are often perceived as versions or extensions of their ancestor technologies and are subjected to regulatory schemes that limit or undermine their progressive potential. The conservative force of these regulatory schemes will often blunt the radical transformations predicted at the time of the technologies' first introduction.

The most useful accounts of the political impact of new media balance excitement about these emerging communications technologies with an awareness of the social, economic, political, and cultural forces that shape their deployment. In the early 1990s, many writers believed networked computing would revitalize the public sphere. Throughout the twentieth century, theorists had warned that urbanization and increased mobility would weaken the fragile social ties upon which American democracy depended.²⁴ Now, writers were insisting that the American public hungered for community and predicting that cyberspace would give birth to a new civic culture.

Jürgen Habermas's ideal of the public sphere set the terms for this argument: "Access to the public sphere is open in principle to all citizens. A portion of the public sphere

is constituted in every conversation in which private persons come together to form a public. They are then acting neither as business or professional people conducting their private affairs nor as legal consociates subject to the legal regulations of a state bureaucracy and obligated to obedience.”²⁵ The public sphere, Habermas argued, is the site where deliberations about important civic concerns occur and the public consensus takes shape. Habermas blamed the rise of modern mass media for privatizing civic life and turning citizens into consumers. Critics have suggested that Habermas underestimated the barriers to participation in this historic public sphere.²⁶ Economic factors, for example, determined which citizens would have access to a printing press; social factors determined which citizens could exert influence at town meetings. The democratic ideals of the earlier public sphere were compromised by the disenfranchisement of women, minorities, and the poor. Similarly, the promise of a new public sphere depends on whether technical, economic, and cultural barriers to full participation—the so-called digital divide—can be overcome.²⁷ Network computing offers potential resources for community building, yet how those resources are used depends on whether society embraces the civic ideals essential to a viable public sphere.²⁸

Some writers cite evidence that online communities are embracing those civic virtues. Julian Dibbel, for example, has described the passionate debates that occurred as multi-user domains (MUDs) and other online communities struggled to develop strategies for dealing with dissent and antisocial conduct.²⁹ Online communities offer participants a chance to experience civic affiliation or personal empowerment and thus nourish ideals of citizenship.³⁰ But others have argued that immersion in these virtual worlds may simply displace what would be more productively deployed in real-world political action. These skeptics express alarm over the vulgarity, triviality, and aggressiveness of online interactions and see virtual communities through a glass darkly, as enclaves isolating participants from opposing perspectives.³¹

Howard Rheingold, the journalist who coined and popularized the term “virtual community,” is far from a technological utopian. Rheingold argued that online citizens needed to educate themselves in order to “leverage” the emerging forms of political and economic power enabled by new media: “The technology will not in itself fulfill that potential; this latent technical power must be used intelligently and deliberately by an informed population. . . . The odds are always good that big power and big money will find a way to control access to virtual communities; big power and big money always found ways to control new communications media when they emerged in the past.”³² In the early 1990s Rheingold saw a need to defend virtual communities against political and economic

forces that would coopt or corrupt them. A decade later, the economic colonization of cyberspace is still recognized as a serious threat to this participatory culture; activists are calling for the establishment of a “public commons” to ensure the survival of the grass-roots social and political experiments Rheingold and Dibble documented.³³

Which Digital Revolution?

The utopian rhetoric predicting an imminent digital revolution is simplistic and often oblivious to complex historical processes. But its tenacious, diverse history is instructive and significant. For one thing, such pervasive talk about revolutionary change implies some fundamental dissatisfaction with the established order. Even if we believe that the concept of a digital revolution is empty rhetoric, we still must explain why a revolution, even a virtual one, has such appeal. A surprising range of thinkers on the right and the left have used the notion of “the computer revolution” to imagine forms of political change. Examining the rhetoric of digital revolution, we may identify a discourse about politics and culture that appears not only in academic writing or in explicitly ideological exchanges, but also in popular journalism and science fiction. This rhetoric has clear political effects, helping to shape attitudes toward emerging technologies. And even if such discourse is not an accurate measure of the impact of new media, it may nonetheless nourish serious discussion about core values and central institutions, allowing us to envision the possibility of change. Utopian visions help us to imagine a just society and to map strategies for achieving it.

For some writers on the left, the rhetoric of “digital revolution” registers their disillusionment with earlier fantasies of revolutionary change following the fall of communism. In a return to Frankfurt School categories, some left intellectuals have cast capitalism as an irresistible force and media consumption as its most powerful tool for manufacturing consent. In contrast, some younger left intellectuals have found the “digital revolution” to be a revitalizing fantasy, the promise of an alternative media culture.³⁴ At the same time, the rhetoric of revolution has been appropriated by the right, with Newt Gingrich and George Gilder, among others, advocating a “Republican revolution” that would “get the government off our backs” and return decision making to the local level.³⁵ Still others have seen computers as paving the way for a new economy, an entrepreneurial “revolution” that would allow smaller, leaner new companies to rise to the top of corporate America. The introduction of networked computers, it has been said, will transform all aspects of our society, changing industry, government and social life, altering the ways

in which artists circulate their work and money flows through the economy. All institutions will have to be “reinvented” in response to these new technologies. The rhetoric of the digital revolution thus has allowed disillusioned left intellectuals, a newly emboldened right, ambitious entrepreneurs, and many other interest groups to see themselves as on the cusp of vast historical change.

Such a climate has enabled political alliances that would have been inconceivable a decade earlier.³⁶ Both the left and the right distrust monopoly broadcasting and embrace the promise of a more dispersed and participatory media, although they would surely disagree, in the end, about the society they hope will emerge from the “digital revolution.” Some communitarians see the Web as an instrument for social cohesion, for cybercommunities, whereas conservatives and libertarians use distributed computing as an emblem of decentralized antifederalism. Yet such alliances are fragile and problematic. One can divide these digital revolutionaries by posing basic questions. Which is the greater threat to free speech: government censorship or corporate ownership of intellectual property? Which is the greater danger to privacy: government surveillance or massive corporate databases of consumer information? In other words, if this is a digital revolution, what are we rebelling against?

There is powerful irony in the fact that both the left and the right initially understood computer networks in opposition to bureaucratic control because so much of the initial research had been funded by the military and had occurred at the Rand Corporation. The original governing fantasies, closely linked to the nuclear fears of the Cold War, were dystopian, not utopian. The government wanted to ensure “minimum essential communication” and thus preserve “second-strike” capability. A distributed system was essential so that it could operate even if central nodes were destroyed. What was envisioned was not a broad-based participatory medium, but a system restricted to government officials and the military high command in their bunkers; access was extended only reluctantly to the research scientists who were helping to transform this Cold War vision into a practical reality. One legacy of this bureaucratic understanding of the Internet is embedded in the metaphor of the “information superhighway,” allegedly coined by Albert Gore as a tribute to his senator father, who had helped to promote the interstate highway system following World War II. Describing this new information space as a “superhighway” implies that it is a federal project, a stark contrast to the libertarian fantasy of an “electronic frontier” that should remain forever free of government intervention.

Current notions of cyberdemocracy took shape amid the heated debates of the Vietnam War era. Frederick Turner has shown how publications such as *Wired* and *Mondo*

2000, digital communities like the Well, and organizations like the Electronic Frontier Foundation took root in the political culture of San Francisco, a center for many 1960s countercultural movements and subsequently a seedbed for the new digital economy.³⁷ Many writers, including Stewart Brand, Timothy Leary, Howard Rheingold, Alvin Toffler, and John Perry Barlow, shifted easily from the agrarian countercultural style associated with the *Whole Earth Catalog* to the cyberutopian and consumerist values promoted in *Wired*, helping to define the popular representations of digital technologies. Ironically, whereas the early counterculture had been emphatically anticorporate, the rhetoric of the cyberculture was coopted by digital entrepreneurs who transformed utopian longings for participatory culture into pitches for high-tech commodities. One of the most influential commercials of the personal computing era, Apple's "1984" campaign, represented the home computer as a tool of liberation directed against an impersonal Orwellian bureaucracy.³⁸ At the same time, this easy linkage of political and corporate fantasies deepened the skepticism of other leftists who understood the computer through the filter of Frankfurt School theories of mass culture as yet another manifestation of corporate control over American civic life.³⁹

In an influential essay, "Constituents for a Theory of the Media," Hans Magnus Enzensberger described the student movement's embrace of a participatory model of communications in opposition to the corporate monopoly systems of the movies and television. Enzensberger's critique centered on the absence of reciprocity in mass media, their reliance on one-to-many modes of communication. Television, he warned, "does not serve communications but prevents it."⁴⁰ Enzensberger documented the emergence of the underground newspaper, grassroots video production, people's radio stations, and other forms of independent media production and distribution, seeing them as the birthplace of a new political culture. But these "do-it-yourself" media never offered a serious alternative to commercial systems. The regulatory and policy decisions governing UHF and cable television, for example, marginalized local access content and granted priority to commercial broadcasters.⁴¹ Similarly, although the reduced cost of photocopying enabled the production of grassroots zines, there was no viable system for distributing such materials to a significant reading public.⁴²

For some, the failure of these earlier participatory media intensified skepticism about networked computing. But for others, cyberspace appeared as the second coming of participatory media; the Web, these hopefuls proclaimed, would be a world with no center, no gatekeepers, no margins. The new cyberculture would be a bulwark against the concentration of commercial media, ensuring access to alternative perspectives. Such

countercultural impulses shaped, for example, the online community's early resistance to unsolicited advertising messages and their insistence on free expression and strong encryption to protect privacy. The legacy of this construction of computing can be seen in the cyberpunk movement in science fiction, which often depicts hackers as activists at war with powerful media corporations,⁴³ or in the culture jammer movement, which aims to block the signals of commercial media in order to open channels for alternative messages,⁴⁴ or in the open-source movement, which pits the grassroots collaborators of Linux against the concentrated power of Microsoft.

Two slogans of the 1960s may help us to understand this distinction between old and new media. The first is Gil Scott Heron's song "Will the Revolution Be Televised?" The answer, in 1968, was clearly "No." A narrow pipeline controlled by corporate media was unlikely to transmit dissenting ideas or images. The counterculture communicated primarily through alternative media: underground newspapers, folk songs, posters, people's radio, comics.

But in 2003, if we ask whether the revolution will be digitized, the answer is "Yes." The Web's low barriers to entry ensure greater access than ever before to innovative, even revolutionary ideas. Those silenced by corporate media have been among the first, as Pool predicted, to transform their computers into printing presses. This access to the World Wide Web has empowered revolutionaries, reactionaries, and racists alike. It has also engendered fear in the gatekeeper intermediaries and their allies. One person's diversity, no doubt, is another person's anarchy.

Now, consider the second slogan, which students in the streets of Chicago chanted at the network news trucks: "The whole world is watching." Whatever the difficulties, the students knew that if their protests were broadcast via ABC, CBS, and NBC, they would reach tens of millions of viewers. Is there any place on the Web where the whole world is watching? The Web is a billion people on a billion soapboxes all speaking at once. But who is listening? The old intermediaries are still in place, not likely to wither away any time soon, so long as they command national and international audiences and thus retain their power to deliver commercial messages to millions.

Online activists were quick to recognize the value of that first slogan but slow to realize the importance of the second. At its most excessive, the rhetoric of the digital revolution envisioned a total displacement of centralized broadcast media by a trackless web of participatory channels. Netizens spoke of the major networks, for example, as dinosaurs slinking off to the tar pits as they confronted the realities of the new economy. The decline of the dot-coms makes clear, however, that such predictions were premature.

The power of movies and television to speak to a vast public is immensely greater than the diffused reach of the new media, through which many messages can be circulated but few can ensure a hearing. This dramatic reversal of economic fortunes suggests that similar arguments for the decline of powerful governmental institutions in the face of cyberdemocracy may be equally premature and simple-minded.

Notes

1. Jim Buie, "Internet Proves to Be Powerful in Political, Legislative Battles" (2001), available online at <<http://www.cybersavvycitizen.com/campaign2000.htm>>. See also William Benoit and Pamela J. Benoit, "The Virtual Campaign: Presidential Primary Websites in Campaign 2000," *American Communication Journal* 3, no. 3 (2000), available online at <<http://acjournal.org/holdings/vol3/Iss3/rogue4/benoit.html>>.
2. Markle Foundation, "Web, White & Blue 2000" (2000), available online at <<http://www.webwhiteblue.org/>>.
3. Aaron Pressman, "Analysis: Internet Lessons for Campaign 2004," *Industry Standard* (November 15, 2000), available online at <<http://www.cnn.com/2000/TECH/computing/11/15/campaign.2004.idg/index.html>>.
4. The Pew Research Center for the People and the Press, "Youth Vote Influenced by Online Information" (2000), available online at <<http://www.people-press.org/online00rpt.htm>>.
5. On the concept of consensus narrative, see David Thorburn, "Television Melodrama," in *TV: The Critical View*, ed. Horace Newcomb (New York: Oxford University Press, 2000), 595–608, and "Television as an Aesthetic Medium" *Critical Studies in Mass Communication* 4 (1987): 161–173.
6. On the role of the flow of information in defining our sense of belonging to nation-states, see Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nation States* (London: Verso, 1991). For a history of how the concept of the "informed citizen" shapes debates about American democracy, see Michael Schudson, *The Good Citizen: A History of American Civic Life* (New York: Free Press, 1998).
7. CBS MarketWatch, "Starr Report Cost Business Millions" (October 5, 1998), available online at <<http://www.websense.com/company/news/features/98/100598b.cfm>>.
8. Stephen Frantzich, *The C-SPAN Revolution* (Oklahoma City: University of Oklahoma Press, 1996). On Newt Gingrich's vision for Thomas, see John Heileman, "The Making of the President, 2000," *Wired* 3, no. 12 (December 1995), available online at <<http://www.wired.com/wired/archive/3.12/gorenewt.html>>.

9. For an insider perspective on the Ventura Web campaign, see Phil Madsen, "Notes Regarding Jesse Ventura's Internet Use in His 1998 Campaign for Minnesota Governor" (1998), available online at <<http://www.jesseventura.org/internet/netnotes.htm>>. Ventura's success was built on the foundation of many years of work in Minnesota promoting cyberdemocracy. For background on this earlier work, see G. S. Aikens, "American Democracy and Computer-Mediated Communication: A Case Study in Minnesota" (1998), available online at <<http://www.aikens.org/phd/>>.
10. Jonathan Katz, "The Digital Citizen," *Wired* 5, no. 12 (December 1997), available online at <<http://hotwired.lycos.com/special/citizen/>>.
11. Scott Harris, "Nader Traders May Have Affected Outcome in Florida," *Industry Standard* (November 17, 2000), available online at <<http://www.cnn.com/2000/TECH/computing/11/17/nader.traders.help.gore.idg/index.html>>. For a fuller overview of the movement, see the materials assembled at <<http://voteswap.com/>>.
12. <<http://www.indymedia.org>>. On the use of the Web for grassroots activism, see Robert Rhoads, *Freedom's Web: Student Activism in An Age of Cultural Diversity* (Baltimore: Johns Hopkins University Press, 2000).
13. Daniel Sieberg, "Debate Gaff Over E-mail Hoax Raises Red Flag for Some," CNN, Oct. 11, 2000, available online at <<http://www.cnn.com/2000/tech/computing/10/11/web.politics>>.
14. Raymond Williams, *Television: Technology and Cultural Form* (New York: Schocken, 1974).
15. Paul Starr, "The New Media and the Old Regime," paper presented at the Democracy and Digital Media Conference, Massachusetts Institute of Technology (Cambridge, October 8, 1998).
16. Lawrence Lessig, "The Laws of Cyberspace (1998), available online at <<http://www.lessig.org/>>.
17. For an overview of these debates, see Lawrence K. Grossman, *The Electronic Republic: Reshaping Democracy in the Information Age* (New York: Penguin, 1995).
18. John Perry Barlow, "Declaration of Independence for Cyberspace" (1996), available online at <<http://members.aye.net/~hippie/barlow/barlowci.htm>>.
19. Pierre Levy, *Collective Intelligence: Mankind's Emerging World in Cyberspace* (New York: Perseus, 2000). For an overview of Levy, see Henry Jenkins, "Interactive Audiences?" in *The New Media Book*, ed. Dan Harries (London: British Film Institute, 2002).
20. Lessig, "The Laws of Cyberspace." Lessig explores these ideas in more depth in his books *The Future of Ideas: The Fate of the Commons in the Digital World* (New York: Random House, 2001) and *Code and Other Laws of Cyberspace* (New York: Basic Books, 2000).

21. Langdon Winner, "Who Will We Be in Cyberspace?" *The Network Observer* 2, no. 9 (September 1995), available online at <<http://dliis.gseis.ucla.edu/people/pagre/tno/september-1995.html#who>>.
22. Ithiel de Sola Pool, *Technologies of Freedom: On Free Speech in an Electronic Age* (Cambridge: Harvard University Press, 1983), 5.
23. *Ibid.*, 251.
24. For a contemporary example of this argument, see Robert D. Putnam, *Bowling Alone: The Collapse and Revival of American Community* (New York: Touchstone, 2001).
25. Jürgen Habermas, "The Public Sphere," in *Media Studies: A Reader*, ed. Paul Marris and Sue Thornham (New York: New York University Press, 2000), 92–98, at 92. For a useful application of Habermas, see Mark Poster, "Cyberdemocracy; The Internet and the Public Sphere," in *Reading Digital Culture*, ed. David Trend (London: Blackwell, 2001), 259–271.
26. For a useful account of the debates surrounding Habermas's public sphere concept in contemporary media theory, see Lisa Cartwright and Marissa Sturken, *Practices of Looking: An Introduction to Visual Culture* (Oxford: Oxford University Press, 2001).
27. Pippa Norris, *Digital Divide: Civic Engagement, Information Poverty and the Internet Worldwide* (Cambridge: Cambridge University Press, 2001); Benjamin M. Compaigne, *The Digital Divide* (Cambridge: MIT Press, 2001); Brian Kahin and James Keller, eds., *Public Access to the Internet* (Cambridge: MIT Press, 1995); Alondra Nelson, Thu Linh Thu, and Alicia Headlam Hines, eds., *Technicolor: Race, Technology and Everyday Life* (New York: New York University Press, 2001); and Beth E. Kolko, Lisa Nakamura, and Gilbert B. Rodman, eds., *Race in Digital Space* (New York: Routledge, 2000). On struggles to overcome the gender gap in access to these technologies, see Susan Hawthorne and Renate Klein, eds., *Cyberfeminism: Connectivity, Critique, and Creativity* (Sydney: Spinifex, 1999); and Lynn Cherney and Elizabeth Reba Weise, eds., *Wired Women: Gender and New Realities in Cyberspace* (Seattle: Seal, 1996).
28. This question of how we inculcate civic virtues into our children is a recurring question in the literature on democracy: See, for example, David Buckingham, *The Making of Citizens: Young People, News and Politics* (New York: Routledge, 2000); and Don Tappscott, *Growing up Digital: The Rise of the Net Generation* (New York: McGraw-Hill, 1999). For historical antecedents of this question, see Henry Jenkins, "'No Matter How Small': The Democratic Imagination of Doctor Seuss," in *Hop on Pop: The Politics and Pleasures of Popular Culture*, ed. Henry Jenkins, Tara McPherson, and Jane Shattuc (Durham: Duke University Press, 2002), 189–210.
29. Julian Dibbel, *My Tiny Life: Crime and Passion in a Virtual World* (New York: Owl, 1999).
30. For an overview of these debates, see Steven G. Jones, *Cybersociety: Computer-Mediated Communication and Community* (Thousand Oaks, Calif.: Sage, 1995); and Peter Ludlow, ed., *High Noon on the Electronic Frontier: Conceptual Issues in Cyberspace* (Cambridge: MIT Press, 1996).

31. Cass Sunstein, *Republic.com* (Princeton: Princeton University Press, 2001). For critical responses to the book, see *Boston Review* (June 2001).
32. Howard Rheingold, *The Virtual Community: Homesteading on the Electronic Frontier* (Cambridge: MIT Press, 2000), 8.
33. Lawrence K. Grossman and Newton Minnow, *A Digital Gift to the Nation: Fulfilling the Promise of the Digital and Internet Age* (New York: Century Foundation, 2001).
34. For examples of a wide range of perspectives on these questions, see David Trend, ed., *Reading Digital Culture* (London: Blackwell, 2001); and Andrew Herman and Thomas Swiss, eds., *The World Wide Web and Contemporary Cultural Theory* (New York: Routledge, 2000).
35. George Gilder, *Telecosm: How Infinite Bandwidth Will Revolutionize Our World* (New York: Free Press, 2000), and *Life after Television* (New York: W. W. Norton, 1994).
36. For one perspective on these political realignments, see Virginia Postrel, *The Future and Its Enemies: The Growing Conflict over Creativity, Enterprise and Progress* (New York: Touchstone, 1999).
37. Frederick Turner, "From Counterculture to Cyberculture: How Stewart Brand and the *Whole Earth Catalog* Brought Us *Wired Magazine*," Ph.D. diss., Department of Communication, University of California, San Diego (forthcoming). See also Thomas Streeter, "That Deep Romantic Chasm': Libertarianism, Neoliberalism and the Computer Culture," in *Communication, Citizenship, and Social Policy: Re-thinking the Limits of the Welfare State*, ed. Andrew Calabrese and Jean-Claude Burgelman (London: Rowman & Littlefield, 1999), 49–64.
38. For background on this advertisement, see Ted Friedman, "Apple's 1984: The Introduction of the Macintosh in the Cultural History of Personal Computers" (1997), available online at <<http://www.duke.edu/~tlove/mac.htm>>.
39. Robert McChesney, *Rich Media, Poor Democracy: Communication Politics in Dubious Times* (New York: New Press, 2000).
40. Hans Magnus Enzensberger, "Constituents of a Theory of the Media," in *Media Studies: A Reader*, ed. Paul Marris and Sue Thornham (New York: New York University Press, 2000), 68–91, at 69–70.
41. Thomas Streeter, "Blue Skies and Strange Bedfellows: The Discourse on Cable Television," in *The Revolution Wasn't Televised: Sixties Television and Social Conflict*, ed. Lynn Spigel and Michael Curtin (New York: Routledge, 1997), 221–242.
42. Steven Duncombe, *Notes from Underground: Zines and the Politics of Alternative Culture* (London: Verso, 1997).

43. For an overview of the cyberpunk movement, see Larry McCaffrey, ed., *Storming the Reality Studio: A Casebook for Cyberpunk and Postmodern Science Fiction* (Durham: Duke University Press, 1992).
44. Mark Dery, *Culture Jamming: Hacking, Slashing and Sniping in the Empire of Signs* (Open Magazine Pamphlet Series, 1993), available online at <<http://web.nwe.ufl.edu/~mlaffey/cultjam1.html>>. For elaboration on the concept of culture jamming, see also Gareth Branwyn, *Jamming the Media: A Citizen's Guide for Reclaiming the Tools of Communication* (San Francisco: Chronicle, 1997); and David Cox, "Notes on Culture Jamming" (2000), available online at <<http://www.sniggle.net/Manifesti/notes.php>>.