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Matthew Hindman: The Myth of Digital Democracy

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One

The Internet and the “Democratization” of Politics

The world has arrived at an age of cheap complex devices of great reliability; and something is bound to come of it.

—Vannevar Bush, “As We May Think,” July 1945

In March 1993, a group of college students at the University of Illinois posted a small piece of software onto the Internet. The program was called Mosaic, and it was the world’s first graphical Web browser. Prior to Mosaic, the World Wide Web, invented a few years previously by an English physicist working in Geneva, was but one of a number of applications that ran on top of the Internet. Mosaic changed everything.¹ Unlike the cumbersome text-based programs that had preceded it, Mosaic made the Web a colorful and inviting medium that anyone could navigate. The Internet was soon transformed from a haven for techies and academics into the fastest-growing communications technology in history.

The release of Mosaic was the starting gun for the Internet revolution. Mosaic was quickly commercialized as the Netscape browser, and Netscape’s public stock offering in 1995 ushered in the Internet stock market bubble. But almost from the moment that it became a mass medium, the Internet was seen as more than just a way to revamp commerce and the practice of business. Its most important promise, many loudly declared, was political. New sources of online information would make citizens more informed about politics. New forms of Internet organizing would help recruit previously inactive citizens into political participation. Cyberspace

¹ For two good studies of the early history of the Internet, see Abbatte 1998; Hafner 1998. For a firsthand account of the creation of the Web, see Berners-Lee 2000.

would become a robust forum for political debate. The openness of the Internet would allow citizens to compete with journalists for the creation and dissemination of political information.

A decade and a half after Mosaic transformed the Internet, many contend that at least part of the Internet's political promise has been fulfilled. Those arguing that the Internet is transforming politics come from the upper echelons of politics, journalism, public policy, and law. Howard Dean campaign manager Joe Trippi effuses that "the Internet is the most democratizing innovation we've ever seen, more so even than the printing press" (2005, 235). The Internet's increasing importance may be the only thing that Trippi and Bush-Cheney campaign manager Ken Mehlman agree on. The key lesson of the 2004 campaign, according to Mehlman, is that "technology has broken the monopoly of the three [television] networks," and "instead of having one place where everyone gets information, there are thousands of places" (quoted in Crowe 2005).

Other prominent public officials have concluded that the Internet's influence extends beyond the campaign trail. Former Senate majority leader Trent Lott, who resigned after a few bloggers highlighted racially charged remarks, acknowledged the Internet's power, grumbling that "bloggers claim I was their first pelt, and I believe that. I'll never read a blog" (quoted in Chaddock 2005). Federal Communications Commission chair Michael Powell used the Internet to justify looser regulation of broadcast media, explaining that "information technology... has a democratizing effect. . . . With a low cost computer and an Internet connection every one has a chance to 'get the skinny,' the 'real deal,' to see the wizard behind the curtain" (2002).

Journalists, too, have concluded that the Internet's challenge to traditional media is real, and that the medium "will give new voice to people who've felt voiceless" (Gillmor 2004, xviii). Radio host and Emmy-winning former news anchor Hugh Hewitt (a blogger himself) writes that "the power of elites to determine what [is] news via a tightly controlled dissemination system [has been] shattered. The ability and authority to distribute text are now truly democratized" (2005, 70–71). Former NBC News and PBS president Lawrence Grossman concludes that the Internet gives citizens "a degree of empowerment they never had before" (1995, 146). CNN president Jonathan Klein has taken such claims even further, famously worrying that the Internet has given too much power to "a guy

sitting in his living room in his pajamas" (quoted in Colford 2004). Tom Brokaw has argued that bloggers represent "a democratization of news" (quoted in Guthrie 2004). Brian Williams, who succeeded Brokaw as anchor, complained that he had spent "all of my life, developing credentials to cover my field of work, and now I'm up against a guy named Vinny in an efficiency apartment in the Bronx who hasn't left the efficiency apartment in two years" (quoted in O'Gorman 2007). *New York Times* reporter Judith Miller laid part of the blame for her travails on overzealous bloggers, claiming that *Times* editor in chief Bill Keller told her, "You are radioactive. . . . You can see it in the blogs" (quoted in Shafer 2006). Bloggers also played a role in the resignation of Howell Raines, the *Times*' previous editor in chief, in the aftermath of the Jayson Blair scandal (Kahn and Kellner 2004).

The notion that the Internet is making public discourse more accessible has even found expression in case law. In striking down the Communications Decency Act, the U.S. Supreme Court emphasized the potential of the Internet to create a radically more diverse public sphere:

Any person or organization with a computer connected to the Internet can "publish" information. . . .

Through the use of chat rooms, any person with a phone line can become a town crier with a voice that resonates farther than it could from any soapbox. Through the use of Web pages, mail exploders, and newsgroups, the same individual can become a pamphleteer. As the District Court found, "the content on the Internet is as diverse as human thought."²

Given the high court's decision, it is perhaps unsurprising that in *John Doe No. 1 v. Cahill* (2005), the Delaware Supreme Court held as a matter of fact that "the Internet is a unique democratizing medium" that allows "more and diverse people to engage in public debate."³

It may be comforting to believe that the Internet is making U.S. politics more democratic. In a few important ways, though, beliefs that the Internet is democratizing politics are simply wrong.

² *Reno v. ACLU*, U.S. 521 (1997).

³ *John Doe No. 1 v. Cahill et al.*, DE 266, sec. III-A (2005).

Democratization and Political Voice

This book is about the Internet's impact on U.S. politics. It deals with some of the central questions in this debate: Is the Internet making politics less exclusive? Is it empowering ordinary citizens at the expense of elites? Is it, as we are often told, "democratizing" U.S. politics?

On the one hand, those arguing for the political importance of the Internet seem to have been vindicated by recent events. Online political organizations, such as the left-leaning group MoveOn.org, have attracted millions of members, raised tens of millions of dollars, and become a key force in electoral politics.⁴ Even more important, the 2004 and 2008 election cycles showed that candidates themselves can use the Internet to great effect. This book looks closely at how Dean used the Internet to recruit tens of thousands of previously inactive citizens as campaign volunteers. Dean's success at raising money from small, online donations—along with the subsequent successes of Wesley Clark, John Kerry, and even George W. Bush—challenged almost everything political scientists thought they knew about political giving. Barack Obama's primary campaign has emphasized the same lessons. And increasingly, the Web seems to have empowered a huge corps of individuals who function both as citizen-journalists and political commentators. Collectively, the weekly readership of the top dozen political blogs rivals that of *Time*, *Newsweek*, or the *New York Times*.⁵

But if the successes of Internet politics are increasingly obvious, they have also tempted us to draw the wrong conclusions. If we want to understand the fate of politics in the Internet age, we also need to acknowledge new and different types of exclusivity that shape online politics. In a host of areas, from political news to blogging to issue advocacy, this book shows that online speech follows winners-take-all patterns. Paradoxically, the extreme "openness" of the Internet has fueled the creation of new political elites. The Internet's successes at democratizing politics are real. Yet the medium's failures in this regard are less acknowledged and ultimately just as profound.

⁴For a scholarly discussion of MoveOn, see Kahn and Kellner 2004; Chadwick 2006.

⁵This conclusion comes from comparing circulation figures from the Audit Bureau of Circulation (online at AccessABC.org) with blog visitor data from SiteMeter.com compiled by N. Z. Bear (2004).

The argument of this book has several parts, and I expect a few of the claims I make to be controversial. Part of the problem with debates about Internet politics, however, comes from the vocabulary that is used. Because the language is fuzzy, much of the reasoning has been, too. So the first task of this book is to define what, exactly, we are talking about.

Defining "Democratization"

At the heart of this semantic problem are conflicting definitions and claims about the word democracy itself. Those who discuss the Internet's impact on political life are enormously fond of the word democratization, yet public discussion has used the word democratize in at least two distinct senses. If the two are confused, the argument I offer here will make little sense.

One meaning of the word democratize is normative. As George Orwell wrote in "Politics and the English Language," "The word Fascism has now no meaning except in so far as it signifies 'something not desirable'" (1946). Orwell also noted that the word democracy had been "similarly abused. . . . It is almost universally felt that when we call a country democratic we are praising it: consequently the defenders of every kind of regime claim that it is a democracy, and fear that they might have to stop using that word if it were tied down to any one meaning."

The discussion of Internet politics has been mired in this same problem. To say that the Internet is a democratic technology is to imply that the Internet is a good thing. This problem is not new: previous communications technologies, from the telegraph to the rotary press to radio and television, were similarly proclaimed to be democratic (see, for example, Bimber 2003a; Starr 2004; Barnouw 1966; McChesney 1990). Nonetheless, popular enthusiasm for technology has made a sober appraisal of the Internet's complicated political effects more difficult. Discussions of technical matters easily morph into unhelpful referenda on the technology's social value.

Broad claims about the goodness of the Internet are, of course, hard to refute. The Internet now touches countless areas of economic, social, and political life. Adding up and evaluating every impact of this technology is beyond the scope of this book. This volume tries to avoid such overarching judgments about the value of the technology.

The central argument therefore focuses on the second definition of democratization. This definition is descriptive. Most talk about Internet-fueled democratization has been quite specific about the political changes

that the Internet ostensibly promotes. In these accounts, the Internet is redistributing political influence; it is broadening the public sphere, increasing political participation, involving citizens in political activities that were previously closed to them, and challenging the monopoly of traditional elites. This second definition of democratization presumes first and foremost that the technology will amplify the political voice of ordinary citizens.

This book is a work of political science, and political voice has long been a central concern of the discipline. As Sidney Verba, Kay Lehman Schlozman, and Henry E. Brady declare in *Voice and Equality*, “meaningful democratic participation requires that the voices of citizens in politics be clear, loud, and equal” (1995, 509). In this regard, political scientists have naturally been interested in the sorts of activities discussed in a typical high school civics course. We want to know not just which citizens vote but also which are most likely to write a letter to their senator, what sorts of citizens volunteer for political campaigns, and what types of individuals give money to political interest groups. Political scientists have long known that patterns of political participation favor traditionally advantaged groups—though the magnitude of this disparity varies greatly across different avenues of participation.⁶

In recent years, some have suggested that the Internet makes it necessary to expand the study of political voice to include online activities and online speech. Most studies of political voice were written when few Americans were online. Partly, political scientists have wanted to know about online analogues of traditional political acts. If sending a letter to one’s congressperson deserves to be studied as part of political voice, surely sending an e-mail does too; if mailing a check to a candidate counts, so does an online credit card donation.⁷

If political scientists have mostly talked about voice in the context of political participation, others have wondered whether the Internet might force us to reconsider more fundamental assumptions. Many areas of political science, such as scholarship on public opinion, have drawn a sharp distinction between the political elites (including journalists) who craft and

⁶ On this point, see Schattschneider 1960; Verba, Schlozman, and Brady 1995; Rosenstone and Hansen 1993; Lijphart 1997.

⁷ Of course, elected representatives themselves may not consider an e-mail to be equivalent to a handwritten letter; for a discussion of the relative weight that members of Congress attach to constituent correspondence, see Lebert 2003; Frantzich 2004.

disseminate media messages, and the mass public that receives them (see, for example, Zaller 1992, Page and Shapiro 1992). Yet some have claimed that the Internet has blurred these traditionally ironclad distinctions. As Arthur Lupia and Gisella Sin put it,

The World Wide Web . . . allows individuals—even children—to post, at minimal cost, messages and images that can be viewed instantly by global audiences. It is worth remembering that as recently as the early 1990s, such actions were impossible for all but a few world leaders, public figures, and entertainment companies—and even for them only at select moments. Now many people take such abilities for granted. (2003, 316)

If citizens could write their own news, create their own political commentary, and post their views before a worldwide audience, this would surely have profound implications for political voice. Scholars such as Michael Schudson (1999) have talked about "monitorial citizenship," suggesting that democracy can work tolerably well even if citizens only pay attention to politics when things go obviously wrong. In this account, just responding effectively to "fire alarms" or "burglar alarms" can give citizens a strong political voice (Zaller 2003; Prior 2006; but see Bennett 2003a). From this perspective, the Internet might make monitoring more effective. It might allow citizens themselves to play part of the role traditionally reserved for the organized press.

Political philosophers have also worked in recent years to expand the notion of political voice, with a torrent of scholarship on what has come to be called deliberative democracy. Much of the initial credit for refocusing scholarly attention goes to Jürgen Habermas (1981, 1996); yet what John Dryzek (2002) terms the "deliberative turn" in political thought now includes numerous prominent scholars (Rawls 1995; Cohen 1989; Nino 1998; Gutmann and Thompson 1996; Ackerman and Fishkin 2004). Despite their differences, these deliberative democrats all agree that democracy should be more than just a process for bargaining and the aggregation of preferences. All suggest that true participation requires citizens to engage in direct discussion with other citizens. The Internet's political impacts have often been viewed through the lens that deliberative democrats have provided. The hope has been that the Internet would expand the public sphere, broadening both the range of ideas discussed and the number of citizens allowed to participate.

Scholars thus disagree about what precisely citizenship requires and what our definitions of political voice should therefore include. Yet proponents of participatory citizenship, deliberative citizenship, and monitorial citizenship all focus on political equality—and particularly on making formal political equality meaningful in practice. This book concentrates on areas where the overlap among these concerns is likely to be the greatest and where the Internet's political impact has been the clearest. It examines the Dean campaign, online political advocacy communities, and the rise of blogs. It looks at the role of search engines in guiding citizens to political content and attempts to measure where exactly citizens go when they visit online political Web sites. In each case, this book searches for evidence that the Internet has expanded the voice of ordinary citizens.

Framed in this way, broad questions about democratization can be broken down into a series of smaller, and ultimately answerable, questions. Some of these deal with political voice as traditionally conceived: Are there types of political participation that have been increased by the Internet? Have significant numbers of previously inactive citizens been recruited into political activism? Other questions deal with claims that the Internet will challenge vested political interests, encourage public debate, or even blur traditional distinctions between elites and the mass public. Exactly how open is the architecture of the Internet? Are online audiences more decentralized than audiences in traditional media? How many citizens end up getting heard in cyberspace? Are those who *do* end up getting heard a more accurate reflection of the broader public?

The main task of this book is to provide answers to this series of questions. I also attempt, more cautiously, to say how these small answers together paint a broader picture of Internet politics. Yet in order to understand this larger project, several points must be made first. Chief among them is to explain how the critique of online politics I put forward differs from the visions of the Internet that other scholars have offered.

A Different Critique

Scholars of the Internet have generally been more cautious than public figures and journalists, but they too have focused on claims that the Internet is democratizing politics. Researchers have come at this issue from a variety of perspectives—and partly as a result, we now have a more com-

plete picture of the Internet than we did a decade ago. At the same time, scholars have also come to conflicting conclusions about the Internet's political impacts.

One long-standing reason for skepticism has been the so-called digital divide. Even as Internet use expanded dramatically during the 1990s, disadvantaged groups—blacks, Hispanics, the poor, the elderly, the under-educated, and those in rural areas—continued to lag behind in their access to and use of the Net (NTIA 2000, 2002; Bimber 2000; Wilhelm 2000). While more recent data show that some gaps have narrowed, important differences remain, particularly with respect to age, race, and education (Dijk 2005; Warschauer 2004; Mossberger, Tolbert, and Stansbury 2003). Increasingly, research has shown that the skills needed to use the Web effectively are perhaps even more stratified than access itself (Hargittai 2003; Dijk 2005; DiMaggio et al. 2004; Norris 2001). Recent surveys indicate, too, that growth in the online population has slowed dramatically since 2001, dampening expectations that a rising Internet tide would quickly end such inequalities (Bimber 2003b).

Aside from the digital divide, scholars have suggested other reasons that the Internet may have little impact on politics—or even change politics for the worse. Some have proposed that the movement of traditional actors and political interests online means that cyberpolitics will mirror traditional patterns—that, as Michael Margolis and David Resnick put it, online politics is simply “politics as usual” (2000; see also Davis 1998). Others have worried that market concentration within Internet-related technology sectors—from network hardware to Internet service providers—would compromise the medium's openness (see, for example, Noam 2003). The search engine marketplace has been a particular locus of concern; as Lucas Introna and Helen Nissenbaum explain, search engines “provide essential access to the Web both to those with something to say and offer as well as those wishing to hear and find” (2000, 181).

Others have worried that instead of too much concentration, the Internet will provide too little. Cass Sunstein contends that the Internet may mean the end of broadcasting; with audiences widely dispersed over millions of Web sites, general-interest intermediaries will disappear, political polarization will accelerate, and public debate will coarsen (2001; see also Shapiro 1999; Wilhelm 2000). Robert Putnam is likewise concerned that the Internet will produce “cyberapartheid” and “cyberbalkanization” (2000). Joseph Nye even suggests that “the demise of broadcasting and

the rise of narrowcasting may fragment the sense of community and legitimacy that underpins central governments” (Karmark and Nye 2002, 10).

Against this backdrop, we have seen an explosion of scholarship documenting Internet-organized political activism that looks strikingly different from traditional patterns. From established interest groups such as Environmental Defense to brand-new organizations like MoveOn, from the Zapatista revolt to the Seattle World Trade Organization (WTO) protests, scholars have found examples of political activity that would have been impossible in the pre-Internet era.⁸ In these accounts, large, loose coalitions of citizens are able to use the Internet and related technologies to organize themselves with breathtaking speed. Some have seen these examples as proof that the Internet is “disintermediating” political activity, allowing for greater organizational flexibility while radically diminishing the role of political elites.

But if most scholars now agree that the Internet is allowing new forms of political organizing, there has been disagreement about the importance of these changes. Some have argued that citizen disinterest in politics will short-circuit much of the Internet’s potential political impact. Using longitudinal data, M. Kent Jennings and Vicki Zeitner (2003) found that Internet use had little effect on civic engagement. Pippa Norris argued that the Internet “probably has had the least impact on changing the motivational basis for political activism” (2001, 22). Markus Prior (2007) found divergent effects depending on one’s political engagement: Internet use increased political knowledge among citizens already interested in politics, but had the opposite effect among the previously apathetic. Bruce Bimber similarly concludes that despite some organizational innovations, “it does not appear, at least so far, that new technology leads to higher aggregate levels of political participation” (2003a, 5).

Others disagree. Caroline Tolbert and Ramona McNeal (2003) argue that controlling for other factors, those with access to the Internet and online political news were more likely to report that they voted in the 1996 and 2000 elections. Brian Krueger (2002) similarly suggests that the In-

⁸ On the reorganization of Environmental Defense (formerly the Environment Defense Fund), see Bimber 2000. On the emergence of MoveOn, see Kahn and Kellner 2004; Chadwick 2006. Scholarship on the Zapatista movement includes Castells 2000; Garrido and Halavais 2003; Cleaver 1998; but see May 2002. For analysis of the Seattle WTO protests, see Bennett 2003ba; Rheingold 2003; Smith 2001.

ternet will indeed mobilize many previously inactive citizens. Some scholars also conclude that at least for younger citizens, Internet use is associated with increased social capital (Shah, Kwak, and Holbert 2001; Shah, McLeod, and Yoon 2001; Johnson and Kaye 2003).

The data and analysis that this book offers is thus relevant to many different lines of research. Yet this book particularly hopes to address recent scholarship that, despite long-standing concerns, concludes that the Internet *is* giving ordinary citizens greater voice in public discourse. These scholars acknowledge the continuing effects of the digital divide, the influence of economic forces and Internet gatekeepers, and the simple fact that all Web sites are not created equal. But as Yochai Benkler observes, "We need to consider the attractiveness of the networked public sphere not from the perspective of the mid-1990s utopianism, but from the perspective of how it compares to the actual media that have dominated the public sphere in all modern democracies" (2006, 260). Richard Rogers opts for a similar stance, suggesting that despite its limitations, the Web should be seen as "the finest candidate there is for unsettling informational politics," offering greater exposure to alternate political viewpoints not aired on the evening news (2004, 3). The growth of blogging in particular has inspired hope. Andrew Chadwick states that "the explosion of blogging has democratized access to the tools and techniques required to make a political difference through content creation" (2006, 129). While Daniel Drezner and Henry Farrell note that some blogs garner far more readership than others, they state that "ultimately, the greatest advantage of the blogosphere is its accessibility" (2004b, 40).

This book will return to Benkler's arguments about what he terms "the networked public sphere"—partly because his *The Wealth of Networks* is an important work in its own right, and partly because Benkler provides an admirably clear digest of similar claims made by others. I will suggest that such accounts suffer from two different types of problems. First, key empirical claims about online political communities do not match up with the data this book provides. For example, Benkler claims that "clusters of moderately read sites provide platforms for a vastly greater number of speakers than are heard in the mass-media audience"; "As the clusters get small enough," Benkler states, "the obscurity of sites participating in the cluster diminishes, while the visibility of superstars remains high, forming a filtering and transmission backbone for universal uptake and local filtering" (2006, 242, 248; see also Drezner and Farrell

2004a). As this book shows, the “moderately read” outlets that trickle-up theories of online discourse rely on are in short supply on every level of the Web.

Second, even to the extent that the Internet or the blogosphere *does* work the way that Benkler and others suppose, Internet politics seems to nurture some democratic values at the expense of others. If our primary concern is the commercial biases of traditional media organizations, or the need for a strong corps of citizen watchdogs, then online politics may indeed promote positive change. Yet it is crucial to remember that democratic politics has other goals, too. No democratic theorist expects citizens’ voices to be considered exactly equally, but all would agree that pluralism fails whenever vast swaths of the public are systematically unheard in civic debates. The mechanisms of exclusion may be different online, but this book suggests that they are no less effective.

Gatekeeping, Filtering, and Infrastructure

For many of the observers above, from Benkler to Williams, Hewitt to Trippi, the Internet’s most important political impacts come from the elimination of “old media” gatekeepers. The concept of gatekeeping itself is credited to sociologist Kurt Lewin (1947) who suggested that social “channels” often had many points at which “gatekeepers” filtered out some items, while other items were allowed to pass. Initially applied to the food supply (where food products faced a gauntlet of gatekeepers from farmers all the way to households), Lewin pointed out that the theory could be especially helpful in explaining information flow.

The framework of gatekeeping was quickly applied to the study of media. David White’s famous study (1950) of a newspaper editor, introduced pseudonymously as “Mr. Gates,” looked at the criteria by which wire service stories were deemed “newsworthy” enough to appear in a local newspaper (see also P. Snider 1967). Later media gatekeeping research de-emphasized the judgment (and prejudices) of individual editors, and focused on broader institutional, economic, and structural factors to explain which content was produced, and which stories were printed or broadcast (Gans 1980; Epstein 1974; Fishman 1980).

In recent years, Internet researchers have revived the rubric of gatekeeping. Some argue that commercial Web sites play an important role

as filters and "traffic cops" (Hargittai 2000; Cornfield and Rainie 2003; Connolly-Ahern, Williams, and Kaid 2003; Curtin 2000). Other scholars make contrary claims. For example, Bruce Williams and Michael Delli Carpini (2000) declare that new media "undermine the idea that there are discrete gates through which political information passes: if there are no gates, there can be no gatekeepers" (61).

This book argues that gates and gatekeepers remain a critical part of the information landscape, even in the Internet age. Some ways in which online information is filtered are familiar, as traditional news organizations and broadcast companies are prominent on the Web. Other aspects of online filtering are novel. Search engines and portal Web sites are an important force, yet a key part of their role is to aggregate thousands of individual gatekeeping decisions made by others. Ultimately, this book argues that the Internet is not eliminating exclusivity in political life; instead, it is shifting the bar of exclusivity from the *production* to the *filtering* of political information.

In this vein, I want to conclude this introductory chapter by stressing two related themes that underlie much of what is to come. First, if we want to understand online gatekeeping, we need to begin by taking a closer look at the infrastructure of the Internet. Second, when considering political speech online, we must be mindful of the difference between speaking and being heard.

The Infrastructure of the Internet

From the start, claims that new media would weaken or eliminate gatekeepers focused on the Internet's architecture. From Bill Gates's best-selling *Business at the Speed of Thought* to more academic titles such as Nicholas Negroponte's *Being Digital* and Andrew Shapiro's *The Control Revolution*, the presumption was that the biggest changes in both politics and business would come from a host of new entrants who took advantage of lowered barriers to entry. Small, marginal interests and minor political parties were considered particularly likely to be advantaged by the open architecture of the Internet.

Of course, the architecture of the Internet does tell us much about the possibilities of the medium. Yet the understanding of the Internet's infrastructure that has pervaded most discussions of the medium is incomplete. The various pieces that make up the architecture of the Web function

as a whole—and that system is only as open as its most narrow choke point.

I will be referring to infrastructure a great deal, so it is worth taking the time to define the term. In its most general sense, infrastructure refers to the subordinate parts of a more complex system or organization.⁹ The word infrastructure was first used in military contexts. In order to field an effective fighting force, one needs not just infantry and tanks but also a network of supporting buildings, installations, and improvements, such as bases, supply depots, railroad bridges, training camps, and so on. Collectively, these supporting facilities came to be known as infrastructure. It remains conventional wisdom that the infrastructure that supplies and knits together an army is often more important than the combat units themselves. A popular aphorism among military personnel is that “amateurs study tactics; professionals study logistics.”

For the purposes of this book, I will be talking about infrastructure in two distinct senses. First of all, I will be talking about the infrastructure of communications technologies. In its broadest sense, the infrastructure of the Internet could be said to encompass a great deal: the computers, wiring, and other hardware; the network protocols that allow nodes on the network to talk to one another; the software code that runs the individual computers; the electric grid that powers these machines; or even the schooling that allows users to read and create online text.

I do not intend to analyze every technology and social activity that undergirds Internet use. My goal, rather, is to describe a few key parts of the Internet infrastructure that constrain citizens’ choices and ultimately filter the content that citizens see. It remains common to speak of the millions of Web sites online that citizens can choose to visit. Some scholars have talked about personalized information preferences, worrying that citizens will consciously choose to not see some categories of content and some sources of information (Sunstein 2001; Shapiro 1999; Negroponte 1995).

But the most important filtering, I argue, is not conscious at all; it is rather a product of the larger ecology of online information. The link structure of the Web is critical in determining what content citizens see.

⁹The *Oxford English Dictionary* defines infrastructure as “a collective term for the subordinate parts of an undertaking; substructure, foundation.” Similarly, *Merriam-Webster* defines infrastructure as “the underlying foundation or basic framework (as of a system or organization).”

Links are one way that users travel from one site to another; all else being equal, the more paths there are to a site, the more traffic it will receive. The pattern of links that lead to a site also largely determines its rank in search engine results.

Because of the infrastructure of the Internet, then, not all choices are equal. Some sites consistently rise to the top of Yahoo!'s and Google's search results; some sites never get indexed by search engines at all. The visibility of political content on the Internet follows winners-take-all patterns, with profound implications for political voice. If we abstract away these underlying parts of how citizens interact with the Internet, it is easy to overlook the real patterns in who gets heard online.

In recent years, scholars such as Lawrence Lessig (1999) have argued that if we are to understand the social implications of this technology, we must take a broader view of what the Internet's infrastructure includes. Regulation of the Internet, Lessig and others maintain, happens not just through laws and norms but through the fundamental design choices that went into building the Internet, and through the software code that often determines what users are and are not allowed to do.

One key contention of this book is that our understanding of the technological architecture of the Internet needs to be broader still. The network protocols that route data packets around the Internet and the HTML code used to create Web pages say nothing about search engines, and yet these tools now guide (and powerfully limit) most users' online search behavior. The technological specifications allow hyperlinks to point anywhere on the Web, yet in practice social processes have distributed them in winners-take-all patterns. If we consider the architecture of the Internet more broadly, we find that users' interactions with the Web are far more circumscribed than many realize, and the circle of sites they find and visit is much smaller than is often assumed. All of this changes our conclusions about how much room there is online for citizens' voices.

The Infrastructure of Politics

The other way in which the notion of infrastructure is useful, I suggest, is in reconceptualizing the ways in which the Internet impacts U.S. politics. In popular coverage of the Internet's effects on business, a few online retailers such as Amazon.com or Ebay have gotten much of the attention. Yet behind these online behemoths there is a less glamorous but more

important story. For every Amazon or eBay, hundreds of businesses have quietly used the Internet and related information technologies to streamline operational logistics and generally make business processes more efficient.¹⁰ The greatest impacts of the Internet have been at the back end of business—not storefronts but supply chains.

I suggest that the impact of the Internet on political practice is likely to mirror the Internet's impact on business practices. The Internet does seem to be changing the processes and technologies that support mass political participation and guide elite strategy. Part of the claim here is that changing the *infrastructure* that supports participation can alter the *patterns* of participation. E-mail appeals or text messages, for example, may inspire a different set of citizens to contribute than those who give in response to direct mail.

Early visions of how the Internet would alter campaigning imagined large numbers of ordinary citizens visiting campaign Web sites, engaging in online discussions, using this unmediated information as a basis for political decision making. Thus far the reality has been different. Most of those who visit campaign Web sites are partisans (Bimber and Davis 2003; Howard 2005; Foot and Schneider 2006). The most successful campaign sites to date have acknowledged this fact, using their online presence to solicit funds and volunteers, not to sway undecided voters.

The Difference between Speaking and Being Heard

Discussions of gatekeeping and Internet infrastructure highlight a crucial distinction that needs to be made regarding political voice. As we have seen, many continue to assume that the Internet allows motivated citizens, for the first time, the potential to be heard by a worldwide audience. Debates about blogging provide many recent examples of this assumption in action. Klein, Brokaw, and numerous others have accepted the notion that blogs have expanded ordinary citizens' voice in politics, and have moved on to a discussion of whether this change is good or bad for U.S. democracy.

Yet this book argues that such conclusions are premature. This study is careful to consider who speaks and who gets heard as two separate

¹⁰ For economists' treatments of this phenomenon, see Litan and Rivlin 2001; Borenstein and Saloner 2001; Lucking-Reiley and Spulber 2001; Brynjolfsson and Hitt 2000.

questions. On the Internet, the link between the two is weaker than it is in almost any other area of political life.

In this respect, the Internet diverges from much of what political scientists have grown to expect from the literature on political behavior. In many avenues of political participation, scholars have noted that once the initial barriers to participation are overcome, citizens' voices get considered relatively equally. When citizens vote, each ballot carries the same weight in deciding an election. When citizens volunteer for a political campaign or an advocacy group, they all face similar limits; at the extremes, no volunteer has more than twenty-four hours a day to contribute toward a campaign. The greatest exception to this rule has been political fund-raising; among the relatively small set of citizens who donate to political campaigns and interest groups, disparities in wealth make some citizens' voices much louder than others.¹¹ Even here, though, there are important (albeit imperfect) limits that constrain inequalities in who gets heard. Under federal election law, no citizen could donate more than \$2,000 total to any one candidate over the course of the 2003–4 election cycle.¹²

A central claim of this book is that direct political speech on the Internet—by which I mean the posting of political views online by citizens—does not follow these relatively egalitarian patterns. If we look at citizens' voices in terms of the *readership* their postings receive, political expression online is orders of magnitude more unequal than the disparities we are used to in voting, volunteer work, and even political fund-raising. This book also shows that by the most commonly used social science metrics, online audience concentration equals or exceeds that found in most traditional media.

This is not the conclusion I expected when I began this research several years ago. Other scholars may also find these conclusions counterintuitive. It is indeed true that the amount of material available online is vast. In chapter 3, in the first large-scale survey of political content online, my

¹¹ As Verba, Schlozman, and Brady write, "When we investigated the extent of participatory distortions for a series of politically relevant characteristics, in each case we found it to be markedly greater for contributions than for other forms of activity" (1995, 512).

¹² Individual contribution limits are now adjusted for inflation in odd-numbered years; for the 2007–8 election cycle, donations are capped at \$2,300. Contribution limits have never been completely effective, and new tactics—such as donating money to independent "527" political groups—have emerged even as some older loopholes have been closed.

collaborators and I downloaded and analyzed millions of Web pages on half a dozen diverse political topics. Even these methods likely capture only a small fraction of all content on these issues. And yet despite—or rather because of—the enormity of the content available online, citizens seem to cluster strongly around the top few information sources in a given category. The broad patterns of who gets heard online, I suggest, are nearly impossible to miss.

Too often, normative debates about the Internet have gotten ahead of the evidence. Deductive arguments based on a faulty empirical foundation have been more distracting than enlightening. But if this book leaves many normative questions about the Internet's political effects unanswered, I hope that it will help reframe ongoing debates. If the question is, *Is the Internet good for U.S. politics?* then the answer may well be yes. If the Web has somewhat equalized campaign giving across economic classes, most democratic theorists will applaud. Similarly, in an era where many scholars have worried about declines in civic participation, evidence that online tools can mobilize previously inactive citizens will be welcomed.¹³ The Internet has made basic information on countless political subjects accessible to any citizen skilled and motivated enough to seek it out. Blogs and other online forums may help strengthen the watchdog function necessary for democratic accountability.

Yet when we consider direct political speech—the ability of ordinary citizens to have their views considered by their peers and political elites—the facts bear little resemblance to the myths that continue to shape both public discussion and scholarly debate. While it is true that citizens face few formal barriers to posting their views online, this is openness in the most trivial sense. From the perspective of mass politics, we care most not about who posts but about who gets read—and there are plenty of formal and informal barriers that hinder ordinary citizens' ability to reach an audience. Most online content receives no links, attracts no eyeballs, and has minimal political relevance. Again and again, this study finds powerful hierarchies shaping a medium that continues to be celebrated for its openness. This hierarchy is structural, woven into the hyperlinks that make up the Web; it is economic, in the dominance of companies like Google, Yahoo! and Microsoft; and it is social, in the small group of white, highly

¹³ For an excellent, comprehensive overview of the many studies on declining civic participation, see Macedo et al. 2005.

educated, male professionals who are vastly overrepresented in online opinion. Google and Yahoo! now claim to index tens of billions of online documents; hierarchy is a natural and perhaps inevitable way to organize the vastness of online content. But these hierarchies are not neutral with respect to democratic values.

Understanding the subtle and not-so-subtle ways in which the hierarchies of online life impact politics will be an important task in the twenty-first century. The Internet has served to level some existing political inequalities, but it has also created new ones.