

I. Introduction

Predicting the future is a risky venture. Still, we see people and groups trying to predict every conceivable event and pattern. Sometimes the creativity in the choice of source material for a prediction is as interesting as the prediction itself. Earlier this year, for example, the “third annual woolly worm prognostication ceremony in Lewisburg, Pennsylvania, has concluded there will be a harsh winter this year. ... Organizers of the event say they have a good track record — they say they’ve accurately predicted the last two winters. Judges studied 16 woolly worms before drawing their conclusion.”¹ Other things can be as difficult to predict as the weather, and for most, conventions for making predictions exist. Consumer confidence studies and interest rates help Wall Street tycoons forecast behavior of the Dow Jones Industrial Average. Analyses of players and coaches figure into Super Bowl predictions. Gallup polls help political pundits and activists plan for election outcomes. Predictors of Internet trends, on the other hand, have no such conventions.

The novelty and lightning-fast development of the Internet combine to make forecasting it an equally popular and difficult challenge. The hottest trends to predict have been those surrounding the emerging digital economy and “e-commerce.” Romantic tales of 27-year-old billionaires achieving the American dream have never been more plentiful. Behind economics and business, the Internet’s role in the political process competes for attention and column inches with the Internet’s effect on entertainment and socio-cultural issues. Predictions of political usage of the Internet have lagged behind those for economic usage, but they have received a substantial amount of the attention paid to the political process in general. This makes the topic of political discourse on the Internet well worth our time to pursue.

Would-be seers in many fields spew superficial and overwhelmingly positive outlooks on the electronic frontier. The ubiquity of these rosy predictions has channeled a great deal of public attention — and profit — to the people who issue them. At the opposite extreme, a few naysayers have crept into the national discourse. Successfully portraying themselves as underdogs, these pessimists have also attracted significant media attention — ironically, more attention than they would receive if the debate were not so lopsided. These positions form the extremes of a continuum with no one in the center. Unfortunately, real truth falls in this unpopulated middle ground. I intend to show that the Internet has the potential to change political discourse and participation as we know it but that these changes will come much more slowly than the hype peddlers would have us believe. As John Perry Barlow writes in his seminal essay “Selling Wine Without Bottles,” people tend to over-estimate the impact of technological progress in the short term and underestimate it in the long term.² E-politics will prosper in time — but only after two conditions are met. Ordinary citizens must gain sufficient fluency with the new technologies, and the traditional holders of political power embrace the new ways of doing business. Until then the Internet will remain a mere curiosity, a latent distraction from the American democratic process.

In this paper I will concentrate on predictions of e-politics from three main sources: Bill Gates, elected officials, and the pair of Daniel Bennett and Pam Fielding. First, as the CEO of Microsoft and the wealthiest man on earth, Gates has exerted enormous professional and personal influence in the information technology sector over the last 20 years. Gates is a very reflective man and has written an impressive number of books and essays on the Internet’s emerging role in political affairs. Second, the men and women who hold public office play a very central role in shaping political discourse in all its forms, so ignoring their views would be

foolhardy. Additionally, political discourse is only as effective as its results in implemented public policy. The way that government officials treat Internet communications may be the largest single factor in determining the effectiveness of e-politics, at least in the short term. Third, Bennett and Fielding have pioneered the study of the use of the Internet for political ends. Daniel Bennett is an Internet communications writer and consultant whose clients include members of Congress, media organizations, nonprofits, and corporations. Pam Fielding has conducted several “cyberadvocacy” campaigns that have earned the attention of *Campaigns & Elections* magazine, *USA Today*, and the *New York Times*.³ Together, Bennett and Fielding have compiled several case studies of political activity on the Internet into their book, *The Net Effect: How Cyberadvocacy is Chancing the Political Landscape*, published earlier this year.⁴ Bennett and Fielding provide a fascinating discussion of the current state of political affairs on the Internet, which provides a useful platform from which to assess the predictions of the others. The authors also go further to predict specific ways in which e-politics will supplant more “traditional” politics in the coming years.

Background: What Is the Internet?

Modern hand-held Palm Pilots are more powerful than the room-sized mainframes of the 1960s. The costs of those electronic beasts were enormous, but no viable alternative existed for processing the increasingly calculation-dependent scientific research in a timely manner. Universities and other institutions soon began to share mainframes with one another to spread their costs across as many users as possible. One institution would physically house the computer and provide access to other institutions in return for a share of the acquisition and operating costs of the mainframe. These partner institutions would lay proprietary network cables between them, through which remote terminals could send commands to the mainframe

and receive its output. Different types of computer networks are relatively efficient or inefficient in different circumstances; many research institutions were already using mutually incompatible networks before mainframe sharing became common. Both parties would have to agree on the type of network to be used, then build and maintain it between them. This became expensive and time consuming, and it drained resources away from scientific research.

Demand for mainframe processor time grew rapidly as more and more researchers realized the possibilities of computing. To facilitate these cost-saving relationships, the Defense Advanced Research Projects Agency (DARPA) funded the research that produced a system for connecting these smaller networks and called it the Advanced Research Projects Agency Network, which it abbreviated to Arpanet. The term *internet* is merely a contraction of *interconnected network*. The word *internet* with a lowercase *i* refers to any system interconnected networks — whether they are networks of computers or any other type. The Internet, with a capital *I* (and usually denoted *the* Internet), refers to the global interconnected network of computers that eventually grew out of the original Arpanet. The new internet used an open architecture that allowed most types of proprietary networks to be “plugged in” to it. In layman’s terms, the protocols used for Arpanet translated between the different languages spoken by different types of networks. This allowed each institution to connect to every other institution simply by plugging into Arpanet — without abandoning the network that was most efficient for its internal needs or negotiating a partnership with every other institution.

The advantages of connecting to Arpanet appealed to academic and scientific institutions, and its “membership” grew much faster than the number of available mainframes. While competition for computing time grew tighter, users noticed an enticing and unexpected side benefit of using Arpanet. The new internet used a process called “packet switching,” which

breaks up data to be transmitted into small pieces called “packets,” which the receiving computer interprets and reassembles. Since packets do not have to arrive at the same time or in the proper order, there is no need for a direct, exclusive connection between the sender and receiver: packets can take vastly different routes through the internet’s cables and still be interpreted correctly. The raw input and output carried on Arpanet, transmissions between remote terminals and mainframes, totaled far less than total bandwidth of the network. Raymond Tomlinson recognized that terminals, which were cheap relative to the real computers, could prepare data in the form of simple text for processing by a mainframe and display mainframe output in the same format. He wrote a program that transferred text files between computers without interfering with their data processing chores. Suddenly, scientists could communicate with one another by sending and receiving messages to and from any terminal, on any mainframe. Email was born.

Person-to-person communication through Arpanet quickly surpassed mainframe access as the most common use of the national network. This early surge in computer-mediated communication (CMC) prompted a number of sociologists to study it. Their conclusions provide an interesting basis from which to view political discourse that takes place on the Internet today. Denise Murray, for example, identifies several attributes of CMC, including its tendency to lead “to more democratic decision making” than face-to-face communications.⁵ A thorough discussion of the sociological implications of CMC is beyond the scope of this paper, but all of the analyses presented here will implicitly address the question of whether CMC is more effective, efficient, democratic, or desirable than “traditional” forms of communication and discourse.

Why is the Internet Important?

Tim Berners-Lee invented the technology that underlies the World Wide Web in 1990. Thanks to the web, we no longer need long strings of arcane commands to navigate through the Internet. Laypersons can simply point and click in a graphic interface to retrieve whatever information or perform whatever actions they choose. Since 1992, connections to the Internet have spread from academic and research institutions to businesses and homes around the world. In the most recent published count Internet usage in the United States, the Strategis Group claims that “101 million adult Americans are now surfing the Web.”⁶ Any tool used by more than half the adult population of a country is significant. Equally significant is the growth of the Internet’s user base: the 101 million estimate as of June, 1999 is up from only “85 million [at] the end of 1998.”⁷

The fact that many people are trying to predict how the Internet will be used for political ends is also significant. Modern empirical disciplines use standardized methodologies to first describe, then explain, predict, and control natural phenomena. After they achieve the prediction stage in a given discipline, entrepreneurs position themselves to benefit from the attainment of control. For example, once physicists could predict the behavior of light waves traveling through extremely pure glass, telecommunications companies invested heavily in fiber optic technology to recreate and control that predicted behavior “in the field.” Once geneticists can accurately predict a medically beneficial result from a given genetic modification, pharmaceutical companies that can induce the change reliably stand to make enormous profits. While long-distance and pharmaceutical companies are re-channeling their applied research investments to benefit from scientific advancements, similar developments happen in hundreds of other industries and thousands of companies. The aggregate effect has been to fuel the current national

economic boom, which recently set a record as the longest, continuous peacetime economic expansion in history.

The social sciences also use standardized methodologies to describe, explain, predict, and control the phenomena they study, but one fundamental difference separates them from the natural or “hard” sciences. When natural phenomena governed by laws of nature are understood and controlled to bring about useful ends, the governing laws do not change. AT&T can exploit fiber optic technology without precluding MCI from doing the same, except in the narrow cases involving patent protection, which has not been shown empirically to affect technological innovation. Social scientific “laws,” on the other hand, *do* change as people position themselves to benefit from the acquired ability to control outcomes. If one Wall-Street investor learns to predict stock prices precisely, others will notice his consistent success and try to imitate him. If too many people follow his lead, his system will break down because stock prices depend on individuals’ behavior in the marketplace — which has changed as a direct result of someone applying his knowledge. Similarly, if one cyberadvocate achieves a political goal through use of the Internet, other advocates will copy his techniques and potentially dull their effectiveness. This has already happened in some cases. The development of e-politics therefore depends very heavily on how people *think* it will develop. To determine how people think it will develop, we must take a sampling of their predictions and analyze them. That is what this paper endeavors to do.

Is There Political Activity Online?

Internet search engines do not receive many “political” search requests. In its quarterly rankings of the one hundred most popular search terms, SearchTerms.com revealed that 18 terms — most of them dealing with pornography — preceded the closest thing to a “political” term in

the top 100 list: *United States of America*. Even as the Presidential primary race heats up, no more political-sounding terms such as *President*, *primary*, *election*, *Clinton*, and *Congress* — or even names of candidates — have cracked the list.⁸ So where, exactly, is all the political activity and how do people find it?

Usenet, the Internet's system of public bulletin boards, is one major center of political discourse. Usenet forums, also called "newsgroups," are repositories of messages posted by anyone with access to a news server. When a user posts a message, his news server stores a copy and forwards it to the next news server, which stores a copy and forwards it again. By this relatively haphazard method, newsgroup articles propagate across the Internet. Since anyone can post messages on Usenet, "there is a lot of garbage" out there, according to Bill Gates.⁹ However, this almost purely democratic medium formats and presents everyone's ideas in exactly the same way, so ideas are often able to compete with one another without the identity or charisma of the speaker clouding the issue. Newsgroups are arranged by topic, and they cover every one imaginable. The participatory nature of Usenet differentiates it from the web, which has been largely passive until very recently, as the use of Java and JavaScript have enabled webmasters to draw more interactivity from their viewers.

The other two major media for political discourse that takes place on the Internet are email and web sites. Email's potential for carrying timely political messages to a wide audience are obvious. Recipients can forward email with little effort and expense, giving them the ability to pass on political information that they receive. Jesse Ventura used email very effectively in his successful campaign for Minnesota's governorship in 1998, and he received his due media attention for being the first candidate for high public office to do so. However, email's political uses do not differ sufficiently from the political uses of "traditional" mail or newsletters for it to

warrant discussion in this paper. Therefore, I will focus largely on political discourse that takes place via Usenet and web sites.

II. Predictions of e-Politics

A. Bill Gates

Gates' Prominence

Bill Gates has had more effect on the personal computing (PC) industry than any other single person. When Gates dropped out of Harvard at the age of 20 to start Microsoft with his high school buddy, Paul Allen, most people called him a fool. Two decades later, Microsoft was the largest and most prosperous company in the software industry, and Gates was the wealthiest man on earth. In the process, Gates became a cult icon. Long before the Department of Justice filed charges against Microsoft for antitrust violations, Gates was already seen as a very powerful man. In 1996 he described how he gets courtesy-copied (“CC’d”) on a lot of the email sent to the President of the United States.¹⁰

As Microsoft grew to dominate the software industry, Gates has proven himself one of the most thoughtful and reflective CEOs in modern times. He has written extensively about the state of his own industry and also about issues that go far beyond software and operating systems. He regularly contributes essays to such periodicals as *Time*, *Newsweek*, *The Economist*, and *The Wall Street Journal*. Gates has also written two books — each of which goes far beyond the concerns of his software empire. However, readers must always be alert to Gates’ perspective in his writings. As the head of Microsoft, his primary concern economic, not political. Furthermore, he often writes about technologies into which his company has invested significant resources in research and development. It should not come as a surprise, then, that

the world's richest man touts some technologies while minimizing others. All things considered, however, Gates' opinions are worthwhile to explore, despite these potential traps.

The Road Ahead

Gates first addressed the potential of e-democracy in his 1995 book *The Road Ahead*. He boasts his optimistic outlook on the future of the information highway right from the start:

The global information market will be huge and will combine all the various ways human goods, services, and ideas are exchanged. ... Your workplace and your idea of what it means to be "educated" will be transformed, perhaps almost beyond recognition. Your sense of identity, of who you are and where you belong, may open up considerably. In short, just about everything will be done differently. I can hardly wait for this tomorrow.

You aren't sure you believe this? Or want to believe it? Perhaps you'll decline to participate. People commonly make this vow when some new technology threatens to change what they're familiar and comfortable with. At first, the bicycle was a silly contraption; the automobile, a noisy intruder; the pocket calculator, a threat to the study of mathematics; and the radio, the end of literacy.

But then something happens. Over time, these machines find a place in our everyday lives because they not only offer convenience and save labor, they also inspire us to new creative heights. We warm to them. They assume a trusted place beside our other tools. A new generation grows up with them, changing and humanizing them.¹¹

In 1997, Gates saw this humanization coming true when he wrote, "Last year [in 1996] there was marked ambivalence about the new technology. The change in attitude 12 months later was pronounced. It may signify that 1996 was a watershed in the global acceptance of information technology."¹² Even as early as 1995, when gates wrote *The Road Ahead*, there were many "examples of the [Internet] being used to mobilize those who share a common concern or interest. During the recent political conflict in Russia, both sides were able to contact people throughout the world through postings on electronic bulletin boards. The networks let you contact people you have never met or heard from who happen to share an interest."¹³

Cubby v. CompuServe

For all of the reflection that Gates does, he still misses the most important implications of some events. He fails to recognize the full political implications of several situations that he discusses in *The Road Ahead* — most notably, the 1991 Supreme Court decision in *Cubby v. CompuServe*.¹⁴ Gates discusses the economic and free speech implications of this case, but he ignores its most important implications for political discourse.

Under American defamation law, a “publisher” is responsible for the veracity of the information in its publications, while a “common carrier” is not liable for the messages that it carries. A common carrier is an entity that transmits information on behalf of other people without playing any role in the production of that information, such as a telephone company. The reasoning behind this rule is that publishers have editorial control over the information they distribute while common carriers do not. Newspaper readers expect that the publisher has verified the information in its articles; telephone subscribers expect the company to route and transmit their calls without monitoring the content of those communications. Gates explains, “If an obscene caller bothers you...nobody thinks it is the phone company’s fault that some creep is calling you and talking dirty.”¹⁵

The Internet creates a tension within this system. Gates briefly considers economic and free speech implications of this tension, but then he dismisses it without analyzing it fully.

On-line services [“OLSs”] function simultaneously as common carriers and publishers, which is where the problem lies. When they act as publishers, and offer content they have acquired, authored, or edited, it makes sense that the rules of libel and the self-governing incentive of editorial reputation would apply. But we also expect them to deliver our email [and bulletin board postings] like a common carrier without examining or taking responsibility for [their] contents.¹⁶

Gates makes a logical assumption that if an OLS were responsible for the veracity of messages sent through its servers, it would take measures to insure their truth; otherwise, it would decline to carry them. Under this system, *any* posted message would carry the implied approval of the OLS that transmitted it. This, Gates asserts, would give readers more confidence in the information they read on the Internet because they would trust a reputable company more readily than they would trust an individual whom they do not know personally — especially someone who posts anonymously. However, no OLS has the personnel capacity to review every message before transmitting it. Holding OLSs liable for defamatory messages that pass through their systems would snuff their ability to provide on-line services and access to the Internet.

In the case of *Cubby v. CompuServe*, Cubby, Inc. was a news and gossip publisher who sued CompuServe over an allegedly defamatory message that appeared in a CompuServe forum. The article was written in a newsletter called “Rumorville,” which is posted daily to a CompuServe bulletin board by its author, a company called Don Fitzpatrick Associates (“DFA”). Further complicating the situation, CompuServe had hired “Cameron Communications, Inc. (“CCI”), which is independent of CompuServe...to ‘manage, review, create, delete, edit and otherwise control the contents’ of the [forum] ‘in accordance with editorial and technical standards and conventions of style as established by CompuServe.’”¹⁷ In other words, CompuServe pays DFA to post its newsletter for CompuServe subscribers to read and also pays CCI to maintain and “police” the forum for inappropriate material. Cubby argued that by disseminating the Rumorville newsletter in this manner, CompuServe was acting more like a publisher than a common carrier and should therefore be liable for the content of the newsletter.

Normally, “one who repeats or otherwise republishes defamatory matter is subject to liability as if he had originally published it.”¹⁸ In this case, however, the Supreme Court

recognized that “CompuServe has no opportunity to review Rumorville’s contents before DFA uploads it into CompuServe’s computer banks, from which it is immediately available to...subscribers.”¹⁹ The court went on to completely absolve CompuServe from liability: “While CompuServe may decline to carry a given publication altogether, in reality, once it does decide to carry a publication, it will have little or no editorial control over that publication’s contents. This is especially so when CompuServe carries the publication as part of a forum that is managed by a company unrelated to CompuServe.”²⁰

Why is this case politically important? In addition to absolving CompuServe from liability for the third-party newsletter that it makes available to its subscribers, this precedent also absolves OLSs from liability for messages posted by their users. Holding OLSs liable would give any individual — or worse, any government official — an easy tool with which to squash offensive (but free) speech. The threat of prosecution would be enough to silence Internet speech because the OLSs and Internet service providers (“ISPs”) that transmit that speech would not be willing to accept this new liability. These companies would either cease operations altogether, or they would cease to allow users to post messages for which they could be held liable. Without ISPs to provide Internet access, individuals have no way to “speak” online. A decision against CompuServe would therefore have gone beyond curbing free speech: it would have eliminated individuals’ ability to post any information of any kind on the Internet entirely. Citizens without ISPs cannot pursue e-politics. Bill Gates failed to recognize this implication of the *Cubby* case. Perhaps his consistently optimistic outlook prevented him from seeing what he would have considered a “worst-case” scenario. However egregious this oversight may be, it should not detract from the weight given to Gates’ other predictions.

Information Highway vs. the Internet

Gates carefully differentiates the “information highway” — the foundation of his optimistic predictions for e-politics — from the Internet. The Internet may be the groundwork for the information highway, but the two should be treated as distinct. As described before, Arpanet’s physical cables could carry more information than could be processed by the mainframes it was designed to serve. This excess bandwidth made computer-mediated communication possible. However, the early Arpanet’s bandwidth was not very high by today’s standards. Users could transmit only pure text — and even then, messages had to be terse. Today’s Internet backbone consists of fiber optic cables with enough bandwidth to carry text, sound, graphics, animation, and video, all at the same time and all to millions of users. This is not merely a technical or academic distinction. As Gates points out, “The Internet has enormous potential, but it’s important for its continuing credibility that expectations aren’t cranked too high.”²¹

The limiting factor in bandwidth today is the so-called “last mile” from the telecommunications trunk line to homes and offices. The last mile is usually copper wire that has remained essentially unchanged since the reign of Britain’s Queen Victoria. These copper wires have an inherently low bandwidth capacity that is decreased even further by the need to adhere to network switching protocols that were originally intended for voice communication. These inefficiencies and the expense of laying new cables have conspired to retard the growth of “broadband” services in the last mile. The American public has only shown sufficient demand to support large infrastructure investments by telecommunication companies in the last three years. Still, most consumer/citizens will have to choose between *low* bandwidth and *no* bandwidth for at least another two to three years while the telecommunications industry builds the high capacity

networks that will deliver broadband to homes and offices. The rich and ubiquitous content that Gates envisions will only become available when every (or almost every) user has a cheap broadband connection.

Superficial and uninformed reports that the information highway has arrived or will arrive very quickly are fueling the inflated expectations of Gates' information highway. Gates warned in 1995 that we will not reach the highway for several years. Installing expensive cables just takes time. Gates also addresses the potentially overwhelming *amount* of information available online. The various types of electronic bulletin boards make it very easy to publish online, so "there is a lot of garbage on the Internet." However, there are "also a few gems" to redeem the medium.²² But this development is not new to the Internet. For every Michael Crichton, there have long been many dime-novel authors who, to put it mildly, lack Crichton's wealth of talent.

Gates Refines His Optimism

In his 1996 essay "Better government? Sure, in the Information Age" Gates laments how mainstream America was ignoring "the Internet's promise for improving democracy."²³ He goes on to describe how he thinks the Internet will improve the mechanics of American politics:

The Internet is the first medium that will make it easy for citizens to explore and participate in the issues of the day, as much or as little as they like. This will put the citizen in a fundamentally more powerful position than ever before. It will strengthen democracy and provide lots of conveniences, too. Say you're at home and you wonder, "What are the crime statistics for my neighborhood?" Or, "If I went down to court this afternoon, what would I see?" It's not easy to get this kind of information now.²⁴

The types of information that Gates enumerates here may seem insignificant or petty at first glance. After all, how pressing can a municipal court's docket be unless one is a party to its proceedings? But the implications of this new information availability go beyond the immediate

needs of judicial participants — who should already know the court’s docket anyway. American newspapers, starting with the party presses in the colonial days, have a tradition of reporting the activities of office holders to the public. Any diligent citizen could find these reports and extrapolate his representatives’ views on any matter confronting the government. The Internet will add value by making that information easy to find and by making possible coherent presentations of it. Information about the more fundamental aspects of governance will obviously be online before the minutia of municipal court dockets. By highlighting mundane examples, Gates underscores his main point that the Internet will provide *all* the information a citizen could possibly want about his representatives — and make the mass of raw data easy to understand. This prediction has been partially realized already by the first generation of political entrepreneurs that Daniel Bennett and Pam Fielding discuss in *The Net Effect*. We will return to these entrepreneurs in due course.

Gates summarized his views about the Internet’s political potential quite simply in his keynote speech at Comdex in 1997: “Well, just about every opinion you can imagine is out there somewhere.”²⁵ Before the Internet, only a few of those opinions were ever heard. “The Internet is the first medium that allows anyone with reasonably inexpensive equipment to publish to a wide audience. It is the first medium that distributes information globally at almost no marginal cost.” That is why the “Internet can raise the quality of political debate, the quality of education, the quality of life.”²⁶

II. Predictions of E-Politics

B. Elected Officials

Lack of Understanding

Few career politicians understood the Net until very recently, let alone the Net's implications for political discourse. A tone of breathless deference to the inevitable progression of high technology permeates their superficial speeches and essays. Many of them venture to discuss the Net in the first place only because it is vogue, and they want their constituents to perceive them as understanding it. Unfortunately, that may be the effective equivalent of actual understanding in professional politics today. Senator Bill Roth of Delaware provides an excellent example in a 1994 speech before the Senate:

Over the past 5 years, telecommunications have expanded far beyond what Alexander Bell could have dreamed. Telecommunications now reach far beyond the telephone. Governments at all levels, corporate America, many American families, and academia rely on computer networks to conduct their business. Every day, more entities are linked to one another. The very term network has become a household word. Foremost among the world's largest data networks is the Internet, which is funded by the Federal Government.²⁷

Few people understand the blatant inaccuracies in Roth's statement: the federal government has never funded the Internet directly. Although DARPA did fund the backbone of Arpanet, the network that eventually grew into the Internet, direct government support had been phased out by 1994.²⁸ The government still provides some indirect funding, such as through National Science Foundation grants that support research and development in computer science and applications, but the government does not write checks to the companies that provide Internet backbone hardware — except, of course, for the services that the government consumes itself. Imagine the international relations nightmares caused by more repressive regimes that seek to limit their citizens' access to the Internet if the U.S. government really did own it!

Citizen-Government Communication

While few Congressmen understand the Internet, those who do have pushed some important bills through the legislative process. These laws have helped to prepare this country for the coming of Gates' information highway, and the predictions implicit in them share his optimism.

The National Communications Competition and Information Infrastructure Act (NCCIIA) of 1994 allows federal regulatory agencies "to receive comments in electronic formats and to establish an online method of conducting some of [their] business."²⁹ Before this Act, these agencies accepted input almost exclusively from the corporations and other large bodies that they affect most directly; individual citizens rarely had the opportunity to communicate their views in a manner that would have any effect on regulatory agencies' decisions. These agencies publicized their agendas in the Federal Register — a publication that is not generally available to average citizens, who are also rarely called upon to testify before the agencies. Corporations, however, scrutinize the Federal Register regularly and are always invited to testify in defense of their interests.

In the deliberations preceding the NCCIIA's enactment in 1994, Congressmen Ed Markey recognized that these regulatory agencies had shut individuals out of their proceedings by only accepting comments on proposed rules in narrowly prescribed ways. Addressing this deficiency, he pushed Congress make the input process available to citizens by harnessing the power of the Internet. Implicit in Markey's actions is the view that the average person using the Internet can formulate a reasonable view and communicate it to the regulatory agencies in a constructive way. Markey's vision achieved fruition in 1999 when the Federal Deposit Insurance Corporation (FDIC) accepted comments on a proposed rule change via email.

Emailed comments outnumbered those submitted in more conventional forms by more than four to one, and they were instrumental in defeating the proposed change.

Though e-mail has historically been viewed as ineffective in influencing government, Federal bank regulators withdrew a proposal on Tuesday to monitor individuals' bank transactions because of hundreds of thousands of e-mail messages that protested the proposal, federal officials said. From early December to mid-March, the [FDIC] received 257,000 comments — an unprecedented number for the agency — on the proposed “Know Your Customer” policy, which would require banks to monitor customers' banking patterns and report inconsistencies to Federal regulators in the name of detecting potential money-launderers. More than 80 percent of those comments, about 205,000, arrived by e-mail. ... The FDIC's chairman, Donna Tanoue, said the huge volume of e-mail drove the decision to withdraw the proposal.³⁰

Darker Predictions

While Congressman Markey shares Gates' optimism about the future of the Internet, others in Congress clearly do not. Senator Gerald Solomon provides perhaps the best example of this. Solomon's darkly pessimistic view of the Internet's potential for political discourse shows through in a 1994 speech on the Senate floor, in which he complains that his critics had aired their opposition to him on the Internet.

[I]t was recently brought to my attention that drug legalization advocates are using the electronic information superhighway to organize the legalization movement and share information on drug use. The information superhighway was certainly not created to propagate such misinformation and the criminal activity associated with it.

This use was brought to my attention by drug legalization opponents who use the information superhighway everyday in their vocations. Apparently, the National Organization for the Reform of Marijuana Laws recently entered remarks which I personally made in opposition to drug legalization on this House floor as an example of 'rabid, right-wing prohibitionist propaganda.' Because I believe, along with 95 percent of America, that the use of illicit drugs is wrong, I was singled out as an enemy of drug users. ...

Our Nation's young children and teenagers who grew up during the 1980's were told and made aware of the evils and the hardships associated with drug use. I fear for the kind of message the children growing up in the 1990's are receiving. Pro-drug use and legalization messages on the information superhighway through Internet are wrong.

I was appalled to learn that this information even includes such things as tips on growing marijuana and ways to evade law enforcement. As more and more Americans jump onto this latest technological advancement, more and more citizens will have access to this ill-advised information. For example, the information superhighway is now available in most elementary and secondary schools and in many American homes. Now elementary students like my own grandson can obtain valuable information about an obscure nation in the South Pacific during a social studies class and then flip a screen to discover the glories of drug use and criminal activity.

Drug legalization advocates from all over the country are using this universal technology to further their movement and deceive more Americans. As Congress reviews this very important technology during the 104th Congress, the use of this service by pro-drug organizations and individuals for the propagation of this ilk must be addressed. As a nation founded on the freedoms of speech and press, the rights of life, liberty, and the pursuit of happiness must not be trampled by the disease of illegal drugs.³¹

In this speech, Solomon demonizes the Internet because his political opponents used it to organize. In his very next sentence, however, he implies that it can be a virtuous tool when it is used for economic (vocational) — not political — purposes. Solomon's basic distrust of the medium permeates the entire speech. He also gives clear evidence of his personal unfamiliarity with the Internet: he was "made aware" of his detractors' comments, and he "learned" what information they offered. He apparently did not read any of it for himself; his aides and supporters were left to educate him. A Senator more respectful of the Internet might have used the medium to respond to his critics' attacks. Solomon's distrust of e-politics contrasts sharply with the views of Gates and Markey, either of whom might advise Solomon to create his own web site explaining his views or start a discussion with his critics via email or Usenet.

Vague, Obvious, and Unoriginal Predictions

Elected officials often mention the Internet's increasing ubiquity: the Congressional Record is rife with unsubstantiated references to the network's growing prominence. However, very few of them show an adequate understanding of the Internet for us to believe what they

offer as the implications of its rising ubiquity. According to the official Congressional Record database, the information superhighway was mentioned only three times before 1993 on the floor of either house of Congress.³² Just one year later, the information superhighway received much closer to its due attention, entering the Congressional Record more than 5,000 times. When Congressmen refer to the Internet, they mention the vague, obvious, and unoriginal prediction that the Internet will continue to grow, generally without even venturing to guess by how much or how quickly. Very few Congressmen make substantive predictions about the direction of that growth or its application to e-politics. Representative Sherwood Boehlert of New York offered a typical comment in 1993: “I do not think that anyone doubts that computer networks are revolutionizing our society, and that their impact is only likely to become more pervasive in the years ahead. ... It is 21st century stuff, the kind dreams are made of.”³³

Al Gore

It is a stretch — but only a small one — to state that Al Gore was the only Senator who had heard of the Internet before 1991, and he was certainly the only Senator to use it extensively in the course of his work. When he introduced the High Performance Computing Act of 1991, many of his colleagues met his enthusiasm with doubt. This act was designed to bolster the Internet’s infrastructure because its growth relative to the number of its users had slowed significantly in the late 1980s. Congress was not immediately convinced that these infrastructure investments were necessary. Gore convinced them with his speech from the Senate floor.

This bill will have a profound impact on American science, technology, and education. ... And it will provide other benefits that we cannot even imagine. Throughout the history of civilization, technology has led to dramatic changes in society. That is particularly true of technologies that enhance our ability to create and understand information. The printing press unleashed the forces that led to the creation of the modern nation state. It made possible the widespread distribution of civic knowledge that enabled the average citizen to affect political decisions.

Today we are in the middle of similar period of profound change. Some call it the computer revolution; others, the information explosion. Computers, from personal computers to workstations to supercomputers, are empowering people all over the United States, giving them brand new ways to process information — to sort it, store it, analyze it, and display it — for use in research, education, business, everywhere.³⁴

Gore's use of the now-common analogy of the Internet as the world's largest printing press is telling. In 1991 — years before the Internet was the pop-culture phenomenon that it has become, Gore saw its potential for personal empowerment. The passage of the High Performance Computing Act underscores one major difference between Gore's and Bill Gates' visions of e-politics. Gore sees the Internet as tool that will “enhance our ability to create and enhance information.” Gates, on the other hand, repeatedly emphasizes the Internet's potential to empower citizens to receive and consume information. The software tycoon praises the Internet's usefulness in disseminating individuals' messages, but he tempers that praise, describing a “typical message” as “only a page or two” — not the sort of meaningful political communication that Gore implies with his printing press analogy.³⁵

III. Assessing Predictions

The Digital Divide

Bill Gates predicts in *The Road Ahead* that the information highway will have a tremendous impact on demographics and shifting traditional political allegiances. “Many of today's social problems have arisen because the population has been crowded into urban areas. The drawbacks of city life are obvious and substantial.... For those who have a connection to it, the [information] highway will liberate those who would like to abandon city living.”³⁶ If this particular prediction plays out, it will have a tremendous impact on demographics globally, not just in the United States. “If those who moved out of cities were mostly the affluent knowledge

workers, the urban tax base would be reduced. This would aggravate the inner city's woes and encourage other affluent people to leave."³⁷ As socioeconomic classes become increasingly separated by geography in addition to the other characteristics that have traditionally polarized them, we will see even more embittered political conflicts between them.

Survey and sales data show what Gates predicted years ago: upper and middle class white Americans have more computers per capita than poorer, minority demographic groups. The digital divide has become a political issue in itself, but it has broader implications for the future than the current debate reflects. Like Gates, most Congressmen have focused on economic disparities stemming from the digital divide. Fewer and poorer computer skills will increasingly hinder poorer job applicants relative to their more affluent competitors, who will tend to have the requisite training and are most likely own computers themselves. Without the means to buy home computers, those at the bottom of the economic ladder depend on public computing resources in schools and libraries. These facilities tend to be under-funded in the neighborhoods that need them most, so the people with the direst needs are pushed further behind. The acute shortage of computers in predominantly minority schools deprives those children of the training necessary to level the playing field later in life. The lack of computer education in these schools augments and reinforces this economic divide across generations.

The digital divide also has significant implications for e-politics because the precedents set in the next few years will define e-politics far into the future. If minority interests are not represented now, other groups may set up unfair rules to divert political influence away from them — whether they do it intentionally or not. The equalizing potential of the Internet that Gates extols time and again cannot help minorities overcome this lack of representation if the early precedents that are skewed against them become internalized in the culture of e-politics as

it evolves. This goes beyond the representation minority interests on any particular issue. The digital divide has the potential to discount minority interests on *every* issue if we determine the structure of political discourse without them.

Internet Voting

In December of 1999, the Democratic Party of Arizona announced that it would “hold what elections experts say will be the first binding Internet balloting for public office.”³⁸ Explaining the decision, Party spokesmen said they hoped “to appeal to young computer-savvy voters and raise interest in their party’s presidential primary.”³⁹ Party Chairman Mark Fleisher boldly claimed, “This will be the first thing to come along to motivate people to vote since the repeal of the poll tax.”⁴⁰ Indeed, voter surveys indicate that Internet voting will “translate to a higher turnout level” in the upcoming primary; “a full quarter of registered Democrats said they thought they would vote via the Internet.”⁴¹

Increasing voter turnout is a noble goal, but we must consider which voters will turn out in higher numbers. Upper class Caucasian men own proportionally more computers than any other demographic group today, so it stands to reason that they will take advantage of Internet voting in the highest numbers. Poverty-stricken, inner-city African Americans have one of the lowest PC “penetration” rates; consequently, Internet voting will probably have little effect on their turnout. As a fiscally responsible entity, the Arizona Democratic Party must cut back in some other area as it devotes resources to this new gimmick. With a finite budget for voter turnout efforts, the Party must reduce efforts aimed at those people without computers as it concentrates on relatively affluent Democrats. Bill Gates issued a prescient warning in *The Road Ahead* when he explained how the digital divide would separate America’s demographic groups, but he offered no remedy. We must proceed carefully; and we must carefully analyze voter

turnout patterns in the Arizona election. If we find an increased disparity between socioeconomic groups, then Internet voting should receive strict scrutiny until the sources of that disparity are properly remedied.

Humanizing E-Politics

We have seen how some prominent members of the American polity have predicted that the Internet will continue to connect more and more people, enabling them to do many things. We have seen how computing technology allows citizens to send communications back and forth, make their views known to the world as well as to specific people such as elected officials, and find politically-relevant information. But who will listen to those communications and consider those views? Armed with the information they find online, can citizens turn their political inclinations into political action? Will policy makers and party leaders listen to words sent through the ether? The parallels between the evolution of computers and that of typewriters can help us answer these questions.

Early room-sized mainframes were intended to process scientific data or crunch numbers for corporations and universities. Their capacity to transmit messages from one person to another was not recognized for decades, until after Arpanet was built and its users discovered its excess bandwidth. Similarly, the cutting-edge engineers of the 1870s designed typewriters with certain goals in mind that did not include what eventually became the most common applications of their progeny. For a brief time, the mechanical clicks and rings of these new machines symbolized the industrial efficiency that their designers had intended. Faster production of printed words was the only goal — it did not matter how those words would be used, as long as they were produced more efficiently. The pioneers of typewriter technology never envisioned that their progeny would be used primarily for communication in later years.

In his column “The Time Machine” in *American Heritage* magazine, Frederic Schwarz recounts the story of Remington’s early typewriters. In 1874, the company introduced what would eventually become the first commercially successful typewriter. Sales of early models started very slowly. Resistance to the new mechanical marvel came from many sources; one of them was the large number of “people [who] resented receiving a typed letter, with its implication that they could not read handwriting.”⁴² Eventually this perceived insult disappeared as “users began to appreciate the typewriter’s advantages over handwriting in speed, legibility, and — with carbon paper, patented in 1869 — the capacity to make multiple copies at once.”⁴³ Typewriters have long-since rendered moot the concern over legibility, but the speed and copying capacity of the Internet are two of its most often-cited advantages. Indeed, the speed and “ease with which an individual, any individual, can share his opinions with the members of a huge electronic community is unprecedented,”⁴⁴ according to Bill Gates.

As the advantages of Internet communications become apparent to more and more people, they may become humanized in the same way that typewritten communications became humanized a century ago. Convincing policy makers and other wielders of political power to accept communications sent through the Internet, however, is another matter, which Daniel Bennett and Pam Fielding have taken up in *The Net Effect*. These authors analyze several case studies of online activism and assess their effectiveness, especially the activities of “political entrepreneurs.” Analyzing Internet startups is hardly original, Bennett and Fielding’s focus on those providing political services *is* original.

Profiting From E-Politics

The first business that Bennett and Fielding describe is that of Robert Hansan and Mark West, who built a database called Capitol Wiz and developed a web-based interface that allows a

user to enter his zip code and retrieve detailed information about his Representatives and Senators. The database includes basic information about these public officials, such as their dates of election, when their terms expire, birth dates, and occupation(s) before entering Congress. More significantly, the database also includes contact information and links to Congressmen's own home pages and relevant information from other sources. Hansan and West do not provide this service to the public themselves; rather, they license their work to other sites for a \$2,500 annual subscription fee. They work with their licensees to package the database's content in a way that reflects their customers' sites' "look and feel." Licensees are left free to "spin" the content in a way that promotes their own interests.

CapWeb is one site that licenses Capitol Wiz, and it bills itself as "The Internet Guide to the U.S. Congress."⁴⁵ The site provides a wealth of information about the institution of Congress as well as detailed information about individual Congressmen. For the user's convenience, CapWeb presents information about members of Congress in several different ways. To find his own Congressmen quickly, a user can enter his zip code, and the site will display all the Representatives and Senators whose districts include that zip code. Alternatively, the user can browse the database by State, by district, by "class" (date of election), by committee and subcommittee, or by name. CapWeb users can easily select any member of Congress and send him or her email about any topic simply by clicking on a few buttons. The first button brings up a choice: to write an original letter or choose from a list of form letters that deal with "hot" issues with which the Congressman is involved. The user can modify and augment to these generically worded form letters before sending them, but the real appeal is the speed with which the user can send clearly worded support or opposition to any given issue. By having users compose and send email within simple web forms, rather than "offline" in with own email software, CapWeb

can easily retain a copy of the email and track of the issues that matter to its users and tailor its content accordingly.

Dick Morris, a former campaign advisor to President Clinton, recently launched a similar service Vote.com that targets the President as well as members of Congress.⁴⁶ Morris promises to use the site to “gauge public opinion at the same time that it forwards individual votes on issues to elected officials.”⁴⁷ Morris hopes this political participation — as paltry as it may seem — will bring individuals closer to Washington politics. One fundamental difference separates Morris’ service from the more generic ones like CapWeb: Vote.com offers no opportunity to write customized letters to office holders. Vote.com asks its visitors “to respond to such questions as whether gays need protection through special hate-crimes legislation or whether patients should be able to sue health maintenance organizations (HMOs).”⁴⁸ The site forwards each user’s responses to all his elected officials, formatted as if it were an individual’s email.

Vote.com also expands the services that generally made available by licensors of the Capitol Wiz database. The site offers to email site visitors whenever their districts’ representatives vote on legislation. These email notices tell the users which way their representatives have voted and what those votes mean, then direct the reader back to the web site so the user can send feedback to his representatives. This constant and personalized updating is a clever innovation. Morris predicts that this feedback mechanism will establish Internet users as a political force. The “Internet will replace television as the dominant force in politics. ... The theme is that the media was the fourth estate, and the Internet is now the fifth estate.”⁴⁹

Do Public Officials Listen?

CapWeb and Vote.com embody everything that Bennett and Fielding look for in political web sites: a wealth of reliable information, proactive user interaction, and citizen contact with

policy makers. These general-interest political sites make it easy for web surfers to become what Bennett and Fielding call “five-minute activists.”⁵⁰ Web surfers can read about a given issue, then point and click to send a standardized email to the proper public official — all in five minutes. Some people become activists in less than five minutes by going straight to the email without reading about the issue first. But what happens once those policy makers are contacted? In its first few weeks, Vote.com generated enough email to disrupt the normal operation of the White House’s mail server, angering the Clinton administration enough to label Morris’s efforts “spam.”⁵¹ This term generally refers to unsolicited commercial email — so using it to describe unsolicited political email is curious. Whatever spam’s precise definition, its connotations are invariably negative.

The aggregation of thousands of identical emails going to a single address can clog a mail server, impairing its ability to perform its core task of routing legitimate email. This is not unlike more “traditional” disruptive activism tactics such as sit-ins or phone call campaigns that have been successful in other contexts. The goal of these tactics is to force public officials to deal with the issues important to the campaigners by interrupting the normal functioning of their offices. The protestors command attention by forcing elected officials to deal with them in order to return to their normal daily business. However, the ease with which this disruption can be accomplished via the Internet and the ease of ignoring it through technological means reduce public officials’ patience for the electronic version. It is easier and cheaper for a single individual to forge a large number of emails than to place many phone calls or attract many sit-in participants, so elected officials are justifiably skeptical of any sudden flood of electronic messages. When messages from Vote.com users began to overburden the White House’s email server, Clinton’s staff simply reprogrammed it to reject, or “bounce,” all incoming email

originating from Dick Morris' site. The ease with which the White House wiped out Vote.com's mass-produced emails calls into question their ability to do more than temporarily annoy public officials. After all, if the public officials do not consent to receive messages from a particular site, they can block them out altogether, rendering the site's messages meaningless.

Flash Campaigns

While the volume of email sent to the White House nearly crippled its mail server and angered the administration, the Federal Deposit Insurance Corporation exhibited a very different response when it was targeted for an email campaign. Consumers, angered over a proposed rule change, contributed to FDIC's withdrawal of its proposal last March. "When consumers can get excited about an esoteric bank regulation, we have to pay attention," said FDIC chairman Donna Tanoue. "Certainly it's been an enlightening chapter for the FDIC."⁵² What does this suggest for the future of Internet communication sent to public officials? "Historically, issue advocates have used the Internet to encourage people to send faxes or letters to government agencies and officials. The conventional wisdom has been that e-mail carries less weight than written comments."⁵³ While many political site operators prepared form letters and encouraged individuals to send them as-is, most individuals did write their own emails or substantially altered the text of the form letters. Tanoue emphasized that a large "number of these e-mails were customized, [indicating that they] came from the heart."⁵⁴ This is the key difference between the effective emails to the FDIC and those that angered the Clinton Administration.

Bennett and Fielding correctly identify the FDIC episode as a "flash campaign" — an outbreak of grassroots activism over a single issue that inflames people's passions but does not evolve into a broader, extended movement such as the civil rights movement of the mid-20th century. Bennett and Fielding point to such flash campaigns as evidence that political action

over the Internet can be real political action, but they fail to consider certain characteristics of flash campaigns that are not sustainable. The authors' discussion of the "Save the E-Rate" campaign is instructive.

Vice President Al Gore championed the E-Rate program, which channels funding toward the purchase of computers and Internet connections in public schools and libraries. Telecommunications companies agreed to fund the program in 1996 in exchange for deregulation of their industry. After deregulation began, the companies tried to out of their deal with the government under cover of a public relations campaign, trying to smear the program as a hidden tax, which they dubbed "the Gore tax." In short, they refused to make the payments that would fund the E-Rate program. "Save the E-Rate" organizers established web sites with capabilities somewhat like CapWeb's, allowing users to look up their representatives by entering their zip code and send form letters to them via email.

The news media picked up the E-Rate controversy and fueled the Internet campaign with publicity that they would bestow on any novelty. Organizers released to the press some of the personalized emails sent through their sites. News outlets republished this email — with permission — and this added additional pressure to the Federal Communications Commission, Congress, and the White House to save the E-Rate program. This pressure could not have been achieved with a flood of email alone. "With messages in hand, [organizers] had a tool for 'localizing' the issue with the press. They were the evidence that proposed E-Rate cuts would devastate individual schools and libraries."⁵⁵ Without this republication by the traditional media, the "Save the E-Rate" campaign might never have reached its impressive fervor.

E-Rate funds were eventually cut, but they were reduced by much less than the amount that the telecommunications companies had sought. Bennett and Fielding claim a victory for this

cybercampaign, but they do not appreciate the full effect of the media's cooperation with the cause. According to the authors, "flash campaigns" usually arise precisely because news media attention to an issue channels public attention to it. As Rebecca Raney wrote in the *New York Times*, "crises have always boosted the visibility of advocacy groups."⁵⁶ However, Bennett and Fielding fail to consider that hundreds of sympathetic reporters will not give free publicity to most political causes in the same way. More complex and long-term political issues do not receive that sort of treatment in the mainstream media — especially if they unfold over extended periods of time. Sudden, short-term crises lend themselves much better to coverage on the evening news, and these crises are the bread and butter of flash campaign activism. This raises serious questions about our ability to the lessons of the "Save the E-Rate" campaign to a broader understanding of political discourse over the Internet.

IV. Conclusions

If the efficacy of e-politics will have the long-term impact that the Bennett and Fielding predict (and have already begun to claim) in *The Net Effect*, political entrepreneurs will have to demonstrate some real and measurable outcomes stemming from their political activity. Simply claiming victory in a campaign, as Bennett and Fielding do several times, is insufficient. The "Censure and Move On" flash campaign led by Wes Boyd and Joan Blades provides the best example of this shortcoming. Boyd and Blades' petition urged Congress to censure President Clinton for his conduct in the Monica Lewinsky affair, then "move one" to other business, without wasting any more of the nation's time in the lengthy impeachment process. In addition to the deficiencies of their flash campaign analysis, the authors proclaim this petition drive a success because it collected thousands of "signatures." Boyd and Blades demonstrated that they

could move the public to register its opinions en masse without expending the “enormous resources” that successful petitions generally require.⁵⁷

The “Censure and Move On” campaign failed to achieve its only stated goal — preventing President Clinton’s impeachment and subsequent trial. Despite this total and unequivocal failure, “other groups [have begun to] use the ‘Censure and Move On’ campaign as a template for other campaigns.”⁵⁸ This development shows the true legacy of the flash campaigns conducted in the last two years: an unresearched and poorly thought-out rush to use the Internet. “Traditional” activists salivate at the prospect of gaining a half-million signatures on a petition through a web site while devoting little time and money to the effort. Internet savvy entrepreneurs and the news media feed this enthusiasm with tantalizing reports of “successful” flash campaigns. This willingness to experiment with the new medium is understandable, considering the hard work and organizational strain required for circulating successful off-line petitions. Bill Gates would emphasize that “expectations are [being] cranked too high,”⁵⁹ and his distinction between the Internet and the information highway is enlightening because the current network still lacks several essential attributes of the highway five years after he wrote *The Road Ahead*. Half the America’s adults and more than 80% of the world’s adults still do not have access to the Internet. The demographic attributes of the “wired” group differ substantially from those of the general population. Until we resolve the economic barriers that prevent political and demographic minorities from using the Internet, e-politics cannot be sufficiently representative to substitute for traditional politics that take place with people physically present.

While the information highway is developing, we can use actions on the Internet to substitute for some traditional political actions — but not to replace them entirely. Jesse Ventura

hit upon a successful formula in his 1998 bid for Minnesota's governorship. The former professional wrestler used the Internet to mobilize his supporters, but he did not rely on the medium to earn votes. His web site and his regular emails to volunteers were designed primarily to coordinate off-line activities, and he still made heavy use of traditional communication channels. Similarly, issue-oriented campaigns such as "Save the E-Rate" or "Censure and Move On" also need an off-line component; we have seen that political action that exists only on the Internet has not been successful so far. Congressmen like Gerald Solomon still take offense at the mention of their names on the Internet, and the White House is still ignoring the political opinions expressed at Vote.com. The disparity of faith put into telephone calls and physical letters compared to email may be irrational, but we must accommodate it — at least for now.

Perhaps e-politics will become a reality along with Bill Gates' information highway. Perhaps a variation on the flash campaign "template" pioneered by Censure and Move On will find success in the future. Perhaps Governor Ventura's successor will abandon off-line activities altogether and campaign solely on the Internet. A pure e-polity is unlikely because some people will never have Internet access, due either to economic circumstances or personal choice. However, the Internet *will* continue to grow and gain new users. An increasingly wired citizenry will demand political services, information, and communication via the network. These new demands will meet a balance with the need for real representatives who interact with one another in a real capital city. Just as the "paperless office" myth that economic futurists touted ten years ago has failed to materialize, we will never entirely lose our dependence on the physical aspects of politics. Instead, we will see physical and electronic political discourse mingle to the point where they are nearly indistinguishable. Politicos of the future will regard analyses like this one

as historical curiosities — products of a time when irrational people treated glowing text on monitors and flat text on paper as inherently different things. *This* is the road ahead.

Notes

¹ UPI 1999 A

² Barlow

³ Bennett and Fielding, p. 190, “About the Authors”

⁴ Bennett, Daniel and Fielding, Pam. *The Net Effect: How Cyberadvocacy is Changing the Political Landscape*. e-advocates Press. Merrifield, VA: 1999.

⁵ Murray, p. 2

⁶ Gold

⁷ Ibid.

⁸ Reported 23 October 1999 at <http://www.searchterms.com/>

⁹ Gates 1995, p. 183

¹⁰ Gates 1996 E

¹¹ Gates 1995, p. 9-10

¹² Gates 1997 C

¹³ Gates 1995, p. 185. The “recent political conflict in Russia” presumably refers to the 1991 coup.

¹⁴ *Cubby, Inc. v. CompuServe Inc.*, 776 F.Supp. 135 (S.D.N.Y. 1991).

¹⁵ Gates 1995, p. 244

¹⁶ Ibid.

¹⁷ *Cubby v. CompuServe*, at 2.

¹⁸ Ibid. at p. 9

¹⁹ Ibid. at p. 3

²⁰ Ibid. at p. 11-2

²¹ Gates 1995, p. 186

²² Ibid, p. 183

²³ Gates 1996 A

²⁴ Ibid.

²⁵ Gates 1997 B

²⁶ Gates 1996 B

²⁷ Senate Record 4 February 1994 at S946. Bill Roth.

²⁸ The overview Arpanet’s evolution that I give here is very brief and simplified. More complete histories are available in literally hundreds of books written on the subject. For a sampling, see: *Casting the Net : From ARPANET to Internet and beyond...* by Peter H. Salus; “The Internet: From ARPANet to the NII” by Andy Carvin, available at <http://edweb.cnidr.org/ibahn/history.html>; “ARPANET and Beyond” by Sean Tappendorf, available at http://www-conted.music.uiuc.edu/sean/internet_history.html; and “An Atlas of Cyberspaces” by Martin Dodge, available at <http://www.cybergeography.org/atlas/atlas.html>. Some information is also available on DARPA’s web site at <http://www.darpa.mil/>.

²⁹ HR Record, 28 June 1994 at H5228. Ed Markey

³⁰ Raney B

³¹ HR Record 6 October 1994 at E2111. Gerald Solomon.

³² The Congressional Record database, nicknamed “Thomas,” is available on the web at <http://thomas.loc.gov/>.

³³ HR Record, 26 July 1993 at H5090. Sherwood Boehlert.

³⁴ Senate Record, 11 September 1991 at S12739. Al Gore.

³⁵ Gates 1995, p. 183

³⁶ Ibid, p. 232-3

³⁷ Ibid, p. 233

³⁸ Thomsen

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Woods

⁴² Schwarz, p. 92

⁴³ Ibid.

⁴⁴ Gates 1995, p. 242

⁴⁵ CapWeb is available at <http://www.capweb.net/>.

⁴⁶ Dick Morris' site, Vote.com, is available at <http://www.vote.com/>.

⁴⁷ Bonisteel

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ Bennett and Fielding explain this concept thoroughly in Chapter 3, "Flying Toasters and Five-Minute Activists."

⁵¹ Bonisteel

⁵² Raney B.

⁵³ Ibid.

⁵⁴ Ibid.

⁵⁵ Bennett and Fielding, p. 101

⁵⁶ Raney A

⁵⁷ Bennett and Fielding, p. 39

⁵⁸ Ibid. Bennett and Fielding expand on these other campaigns at length in *The Net Effect*. For a thorough treatment, see chapter 6, "Case Studies."

⁵⁹ Gates 1995, p. 186