The Jeffersonian Syndrome: The Predictable Misperception of the Internet's Boon to Commerce, Politics, and Community

François Bar

John E. Richards

Christian Sandvig

March 2000

Correspondence to: François Bar

Department of Communication

Stanford University

Stanford, CA 94305-2050

fbar@stanford.edu

(650) 723-0701

Abstract

It is often claimed that Internet technology will revolutionize society by privileging the small and benefiting the individual. We term the utopian tendency to hail a new communication technology as an inherently positive, decentralizing, and democratic force "the Jeffersonian syndrome." This syndrome leads to fallacious expectations about the impact of technology, and these misguided expectations are cyclic and predictable—as is seen through a brief historical discussion of earlier communication technologies. Jeffersonian claims about the Internet are rebutted by the three propositions: new technologies do not operate in isolation from existing organizations and systems, valuable information is never cheap, and the economics of information markets imply concentrated structures. The Internet's non-Jeffersonian impact on economic, political, and community structures is discussed using three cases: the online market for books, the claims made about direct democracy and political parties, and the hopes for computer-mediated communities.

The Jeffersonian Syndrome

"Life in cyberspace seems to be shaping up exactly like Thomas Jefferson would have wanted: founded on the primacy of individual liberty and a commitment to pluralism, diversity, and community" (Kapor, 1993).

"…the social liberalism of New Left and the economic liberalism of New Right have converged into an ambiguous dream of a hi-tech 'Jeffersonian democracy'. Interpreted generously, this retro-futurism could be a vision of a cybernetic frontier where hi-tech artisans discover their individual self-fulfillment in either the electronic agora or the electronic marketplace" (Barbrook & Cameron, 1998).

Social critics dislike paucity. Society, they complain, suffers when there are too few firms in a market, too few political choices, or too little communication. Small numbers of firms coordinate actions to stifle entry and innovation, largely at the expense of consumers. Concentration at the most extreme results in rapacious monopolies that produce inferior products at high prices. Likewise, a small number of political parties limit voter choice, stifle policy change, and produce voter apathy and special interest politics. Society would clearly be better served, so the critics argue, by greater political choice and the accompanying increased voter participation. Too little communication is also bad for society, as limited communication precludes understanding, diversity, and community.

Social critics often place their hopes in technology to erode the dominance of the few and foster diversity. Many view the internet as a liberating technology. Indeed, they embrace the internet as subversive, a technology that will pry power away from the few—tyrants, censors, robber barons and phone monopolies—and return it to the people. The internet, so the critics claim, will usher in a new era of perfect market competition, more direct democracy, and greater community-building (cf. Dyson, 1997). Ultimately, it will undermine the dominant few in many segments of society, and usher in a more democratic and heterogeneous political and economic system—a system that will produce infinite consumer choice in the marketplace, deliver true democracy in the political realm, and provide unlimited and enhanced communication in the

cultural realm. These hopes reflect what we will call a "Jeffersonian syndrome,"[1] named in honor of the American so often appropriated to identify the decentralized, democratic outcome—the predicted triumph of the many over the few.[2]

Jeffersonian wishes for the internet find their roots in the characteristics of internet technology, in particular in the fact that the technology is naturally and inherently decentralized and democratic. Technically, any network can become part of the Inter-network as soon as it speaks IP, the common language. The Internet's governance is decentralized, largely outside the hands of traditional government institutions, and carefully watched by a wide array of private individuals and institutions.[3] Its architecture, and even the words used to describe it (like "peering"), are "democratic." The internet's creation, once passed its early government-dominated phase, was user-driven and bottom-up. Initial commercialization of the technology was largely led by new start-up firms with little presence in the "bricks and mortar" economy.[4] Cooperative processes are used to administer and govern it. Indeed, government has remained on the sidelines to an unprecedented extent, and much of the discussion assumes that no one needs to be in charge of the internet. In short, the system is self-healing and self-regulating, and any individual or organization can participate on an equal footing.

The hopes are that these characteristics of the *technology* of the network will simply carry over to the economic, political and social processes that make use of the internet. That is, decentralized technology naturally leads to decentralized outcomes in the use of the technology. Those stricken with the Jeffersonian syndrome claim that "new technologies will both democratize the information marketplace…and diversify it" (Volokh, 1996). Empowered by this

---

[1] Other authors wishing to go beyond the word "utopian" have coined other terms, such as "cyberplatonism" (Fuller, 1995).

[2] Note that the widespread identification of Jefferson with these utopian claims is problematic. While Jefferson was a fierce enthusiast for technology, who "foreshadowed the later world-wide reputation of Americans as lovers of mechanical gadgets" (Meier, 1990, p. 25), it is unlikely he would argue for a causal link from technology to the decentralization of control by way of a free-market process. Living "at a time when the idea of the market economy as the 'natural' regulator of economic behavior enjoys great prestige, Jefferson associates it with oppressive institutions" (Marx, 1964, p. 128-129). Even while advocating the beauty of the small unit of production, Jefferson agreed with the economists of the day that it was neither the inevitable, nor the most efficient outcome. Rather, he believed the reduced efficiency to be compensated by "permanence in government" and other factors (Jefferson, 1964, p. 157-158; Marx, 1964). Indeed, throughout his life Jefferson continually demonstrated a profound ambivalence: while an enthusiastic supporter of science and technological progress, he feared the specter of an industrialized Europe—an apparition he saw as created by a market unchecked.

[3] See "Internet Governing Group Already Has a Watchdog" (Clausing, 1999)

powerful tool-kit, so the argument goes, anyone can become a publisher, an auction house, a phone company, or a bookstore. The ability of almost any new firm to cheaply enter the electronic marketplace, coupled with the highly visible success of new entrants such as Amazon and eBay, is touted as evidence for the re-structuring potential of internet technology. And of course more competitive markets mean better outcomes for consumers. This is a view in which a liberating technology will drive market structure. And the low cost of adoption and the seemingly endless range of new applications well-suited for the technology further bolster claims that the internet is a democratizing technology that will lower barriers to entry, de-centralize economic and political power, and thereby fundamentally democratize society and empower individuals.

As the internet matures, however, the evidence flies in the face of such hopes. It is increasingly clear that economic, political, and social reality diverge from the Jeffersonian ideal. The firms producing network equipment, as well as those deploying network infrastructure, are increasingly big and operate in an increasingly concentrated industry. Cisco is ten times the size of its nearest rival; WorldCom owns a large part of the internet backbone (even before the planned Sprint acquisition). If the network plumbers are big, the portals are even bigger. (xxx-we should update these stats as Yahoo has captured more of the traffic that used to go to other portals in the last few months. The web site is in the footnote.) Yahoo-GeoCities now accounts for the lion's share of portal traffic, with some 40 million users, more than double its closest rival AOL (with 15 million users).[5] E-commerce presents a similar picture. Amazon, ironically perhaps the best-known example of how the internet lowers barriers to entry and enables small nimble competitors to bring down industry giants, now dwarfs all other online bookstores. By market capitalization, Amazon is almost ten times its nearest rival, BarnesandNoble.com.[6] Moreover, Amazon's zShops seeks to do for all shopping categories what it did for books—concentrate them all under an Amazon roof! Other online vertical markets share similar dynamics—one leading player and a troupe of also-rans.[7] Recent moves by MSN, Amazon, Yahoo, Lycos and others to combine their auction listings to better compete with segment leader

---

[4] In Europe, established technology firms in Europe played a larger role early on than in the U.S. But even in Europe new firms were important in early commercialization of the technology.
[5] Data is from http://www.internetstats.net/, 7.6.99.
[6] Amazon's market cap as of 7.6.99 was $20.498 billion while barnesandnoble.com had a market cap of $2.415 billion.

eBay clearly illustrate the importance of being the biggest in any particular vertical market. These statistics suggest that, in the long term, there is little space for small internet portals, bookstore, or travel agents. Even in the short run, the business plans of almost all new internet startups are predicated on market dominance. If everyone can be a publisher, only large publishers are reaching real audiences. And, if everyone can open a bookstore on the internet, not every online bookstore will be profitable.

In fact, we predict, when the dust settles, there won't be greater diversity, lower industrial concentration, fewer bottlenecks, or greater distribution of economic, political and social power. This is not to say that the internet won't transform the economic, political, and social landscape in important ways. Indeed, the internet has already contributed to significant changes in the organization of firms, marketplace competition, and some political and social dynamics. There will undoubtedly be many new actors who owe their emergence to their clever use of internet technology, and many old actors will succumb to attacks that leverage the power of these technologies. In the end, however, the structure of markets, politics and communities will not be Jeffersonian because of the Internet. We do not believe that the internet will by itself lead to a world built on individual liberty, diversity, community and decentralized governance. Our economies are unlikely to transmute into a global bazaar in which individuals are in charge. Nor are we likely to see radical changes in the organization of politics, or in the number and organization of communities. Put simply, the decentralized and self-governing internet technology will not automatically result in decentralized and self-governing markets, politics and communities.

1.0 Three reasons why the Internet won't lead to a Jeffersonian world

So what went wrong? How has the promising future of the Internet been hijacked so soon? The answer is that the promising future was never more than the same old story that we have seen each time a new technology is introduced: commentators arise that turn their frustrations with the present into their expectations of a technological future. We view these relentlessly optimistic technological determinists as backward-looking observers dissatisfied with the status quo—not analysts of how technology will actually shape and be shaped by

---

[7] Mercer Management Consulting had dubbed this phenonmenon the “silver medalist” problem. See XXX.

society. Since Bacon, utopian claims have always been best understood as social criticism veiled in clothes that resemble speculative fiction. These utopian claims are the rhetorical devices of those who seek "…a chance to lay the foundation for an ideal future culture based on a chosen past" (Marvin, 1988, p. 203).

As we shall later demonstrate, these Jeffersonian claims have historically been particularly prone to arise with communication technologies such as the Internet. These are technologies that facilitate the exchange of information. If we wish to judge the arguments engendered by the Jeffersonian syndrome, the relevant point is that the architecture of information distribution is fundamentally an unequal one because of characteristics of information itself. Technologies that facilitate information exchange will not diminish the incentives of those in control of the system at hand (be it a seller, political party, or community) to shape and channel our habits and behavior. This becomes particularly clear when considered from an economic perspective, which we shall endeavor to do in the remainder of this paper through the proposal of three core precepts. These precepts are always relevant to the architecture of information distribution, and are always ignored by those fevered by the Jeffersonian syndrome.

Social, political, and economic forces drive how internet technology is developed, adopted and used, and how the e-markets and e-communities of the future actually work and function. The first precept is that to realize significant societal change, technology may be necessary, but it is not sufficient. We note that technology always stands at the center of deterministic Jeffersonian arguments, with little role for other factors. Specifically, Jeffersonians ignore the importance of existing economic and political arrangements for the use and adoption of technology, and erroneously define "technology" in a very narrow way. We assert that technology must be understood not as simply tools, objects, and skills, but rather as an interrelated system of tools, economic relationships, law, and cultural practices. "Although [technical objects] point to an end, a use for which they have been conceived, they also form part of a long chain of people, products, tools, machines, money, and so forth…" (Akrich, 1992, p. 205). A simple example might be the car, where

> …the strength of the materials used to build cars is a function of predictions about the stresses they will have to bear. These are in turn linked to the speed of the car, which is itself the product of a complex compromise between engine performance, legislation, law enforcement, and the values ascribed to different kinds of behavior. (, p. 205)

This is not to imply that technological innovations are neutral: the introduction of new technical objects has caused and will continue to cause social change—but technology has not caused change alone because it is always embedded in a larger system of relationships. In short, new technology must be adopted and used by organizations, firms, and individuals that participate in relationships, markets, and cultures that predate the innovation, and these players are likely to have stakes and investments in the status quo. [8] It may be that Internet technology will contribute to significant changes in the organization of politics, markets, and communities, but any attempt to analyze this potential must realize technology as embedded in a larger system. A realistic attempt at such an analysis would begin with the present social, political and economic system, not with an ideal future or a chosen past, as we have seen in many arguments to date.

The second core idea is that valuable information is never cheap. Those with a penchant for epigrams are fond of quoting Stewart Brand's phrase "Information wants to be free." (Brand, 1987, p. 202). It is ironic, then, that the sentence immediately after is so frequently omitted: "Information also wants to be expensive." (p. 202). We do not believe information is so fickle. It has always been difficult, and will continue to be difficult, to find the right piece of information, share it (or protect it) appropriately, analyze it correctly, and act upon it judiciously. The internet may provide individuals with faster access to more information, it doesn't necessarily help them profit from it. Perhaps more important, the value of information is always relative: what matters is not what you know but whether you know more, better and sooner than others. Just as the internet made it possible for everyone to get delayed stock quotes for free, it also made them nearly worthless compared to the quotes market-makers get instantly, through the same internet. Thus, while the internet helps everyone get more information faster, it also multiplies the way to create disparities in the value of that information.

The third pillar of our analysis is the fact that in time, bigger is usually better: the economics of information technology markets imply concentrated market structures. Jeffersonians pondering ever-improving technologies of customization and personalization

---

[8] Solar technology, for example, was widely heralded as being a technology that would revolutionize the entire economy built around petroleum products. Yet the large oil companies simply bought many of the key patents and sat on the technology.

erroneously conclude that a diversity of product offerings or individual choices necessarily implies that the a greater number of organizations will exist to provide them.[9] Different pieces of the internet world (infrastructure, services providers, e-commerce sites, auction sites, portals, etc.) tend toward concentrated structures for two reasons. First, a wide range of internet-related goods and services, ranging from software to network provision, are characterized by high fixed costs and near zero marginal costs: they are "expensive to produce, cheap to reproduce" (Shapiro & Varian, 1998). Large firms therefore enjoy decisive economies of scale over their smaller rivals. Second, network externalities pervade the internet. An individual's choices about where to go on the network, which hardware and software tools to use, are strongly influenced by the previous choices of other individuals. Not only do these externalities crimp the Jeffersonian "primacy of individual liberty," they also lead to concentrated supply and use. Sellers hawking Beanie Babies want to sell on the site with the largest number of buyers. Likewise, buyers prefer large numbers of sellers. Both buyers and sellers thus rationally choose the largest marketplace.

The need for compatibility between users or across networks creates further network externalities, continually reinforcing dominant standards—when these standards are embedded in fiercely guarded intellectual property, these are hardly the conditions leading to a democratic, decentralized world with a large number of small players. Of course, small newcomers with great technologies or clever ideas for new services might upset established players. But in short order, scale economies and network externalities combine to bring back "winner-take-all" dynamics. For example, in the commercial world we should not mistake any single online upstart's success for evidence of Jeffersonian market structure: in time, each of these firms only survives if it dominates, and extant company strategies demonstrate a widespread recognition of this dynamic. The fact that a diverse group of players try to make money during the commercialization of the internet using diverse strategies does not mean that the ultimate industry structure will be one with easy entry and a diverse population of firms. The early stages of many earlier information technology industries had easy entry, followed by massive exit in a shakeout. We expect to see a similar pattern in the commercialization of internet technology; just because garage startups succeed in the early going does not mean that garage startups will do well in more mature markets and that markets will end up atomistically competitive. As Marvin

---

[9] Kling terms this somewhat paradoxical process "concentrated demassification" (Kling, 1996, p. 310).

notes, "…nothing in history suggests that revolutionary change does not produce new forms of monopoly in its own time" (Marvin, 1980). It is realistic to expect that the few will also dominate electronic domains. It may be a different few, but few nonetheless.

2.0 History Repeats

The tendency to see only the inherently positive, decentralizing characteristics of internet technology demonstrates an embarrassing inability to learn from history. Indeed, in the U.S. at least, almost every significant new communications technology has been greeted with predictions that it will be democratic, privilege the small, and liberate the individual. A corollary to these claims has often been that some dramatic difference in technology renders government regulation undesirable, problematic, or impossible. In 1843, for example, Ralph Waldo Emerson noted in his journal that "Machinery and Transcendentalism agree well. Stage-coach and railroad are bursting the old legislation like green withes" (Emerson, 1909-14, p. 397). Unfortunately, as soon as the infrastructure no longer is new, the rhetoric evaporates to reveal an industry structure that overturns these predictions.

Historian Leo Marx (1964) called this recurring idolization of new technologies the "rhetoric of the technological sublime." A key feature in the American romance with each new innovation has been the conflation of technology with idealized cultural values—the value of choice among those with the Jeffersonian syndrome being the longstanding preference for egalitarian organization, as evinced by frequent reference to Jefferson, democratic control, and competition between small firms (cf. Nye, 1994). Historically, infrastructure technologies involving networks must be understood as complex systems that typically evolve by passing through clear stages. Presenting the case of electrification, Hughes shows that in the early stages the key actors are inventors, proponents and enthusiasts, but as time passes their influence yields to that of more fiscally-minded entrepreneurs and professional classes of engineers. Finally, financiers and established interests assume primacy, often co-opting the technology to fit established relationships and structures (Hughes, 1983). In the case of the internet, while we now bear witness to the claims of the proponents in control of the system in its early stages; the question is not whether these voices will be displaced, but what and who will displace them.
In the 1880s, for example, it was not uncommon to hear reflection that "[a]n agent was at hand to bring everything into harmonious cooperation…triumphing over space and time…to subdue

prejudice and unite every part of our land in rapid and friendly communication," Had it been the 1990s, we would have expected the phrase to continue: "…and that agent was the internet." In 1880, the author continued: "…and that great motive agent was steam." (Fraser, cited in Carey, 1989b, p. 120). Steam power, via the railroads, was seen by many as inherently liberating to the individual and a force that would allow production facilities to be smaller and dispersed—yet the vast cities "that Jefferson hoped would never dominate America mushroomed wherever rivers and railways met," (Nye, 1994, p. 64) while the hierarchical organization of rail interests became the model for the modern corporation (Chandler, 1977).

We now know how history unfolded to shatter these myths: with the advent of electrification and a rhetorical reversal, steam became the great centralizer from which electricity would free society. This culminated in a short-lived belief in the viability of small cooperatives as the perfect unit for providing power (Hughes, 1983; Nye, 1990). After steam and electricity, new communications technologies carried on the pattern with a stunning regularity:

To nineteenth-century observers, the telegraph seemed quite as revolutionary as computing seems to us. Jacksonian democrats hailed it as a technology with a built-in logic of decentralization and waited for it to put an end to monopolies of information that had distorted political and economic democracy. (Marvin, 1996)

In a 1914 edition, *Popular Mechanics* explains the virtues of wireless telegraphy as a system that "has made it possible for the private citizen to communicate across great distances without the aid of either the government or a corporation" (Douglas, 1989, p. 206). But by the end of the 1920s, radio communication was dominated by a handful of large corporations (McChesney, 1993, p. 12). This pattern then repeated itself in communication technologies to come, such as cable television and the computer.

Students of history have shown the endurance of the pattern. In the 1950s, economic historian Harold Innis surveyed communication technologies from antiquity to the present and claimed that, by contrast with the contemporary rhetoric, each communication technology should be seen as a system requiring a substantial investment of resources. These systems, he argued, tend invariably toward concentration of political and economic control (Innis, 1964; Innis, 1972). This work is mentioned here because to absorb it is to realize the rarity of such an argument—to say that all communication technologies beginning with clay and papyrus inherently produce biased outcomes that favor inequity. This argument is absent from popular culture, and is often

missing from the academic literature as well. The prevailing understanding of these systems stands as “sublime”—in the face of the evidence.

In the U.S., the emergence of every new technology is saluted with the same Jeffersonian zeal and enthusiasm. The dream of leveraging new communication technology into democratic empowerment has been made for the telegraph, telephone, radio, television, and computer. Even what might be seen as smaller-scale innovations generate these claims: the video camera, the public access cable channel, and the advent of desktop publishing software all fit the pattern. This is not surprising: rather than a story about technological determinism, this tells a story about dissatisfaction with the status quo. Yet technology cannot deliver us from the status quo without the support and participation of actors who comprise existing arrangements. That is to say, individuals, firms, and other organizations have stakes in status quo arrangements. Technology opens up new possibilities for these actors, but how these possibilities translate into outcome depends to a very large degree on the economics and incentives these various actors face in the new arenas opened up by technology.

3.0 The quest for a perfect market

The area of internet activity that has received the lion’s share of popular attention is electronic commerce. This is for good reason: internet-based commerce is rapidly transforming the way consumers search for goods or services, compare and purchase them, even how they take delivery. At the same time, e-commerce is transforming business-to-business commerce even more deeply, fast re-shaping traditional supplier relationships and procurement practices. One only needs to look at today's pervasive use of intranets throughout companies, of extranets linking business partners, and internet-supported markets. Likewise, the ability to order products online, compare prices, or bid for items at auctions is truly unique to electronic markets. In many markets, internet-based technologies have brought down search costs, information costs, and transaction costs. In several industries, the internet has also lowered entry barriers (or, more exactly, created pathways around existing barriers), letting new firms challenge existing players, and forcing established firms to be more attentive and responsive to their consumers.

For all their revolutionary aspects, electronic markets share essential characteristics with their brick-and-mortar counterparts. In particular, commerce always involves much communication: buyers and sellers must exchange information about the characteristics of goods

and services, about quantities, availability and prices; firms must coordinate their activities with those of partners and subcontractors. New communication media therefore can profoundly affect the conduct of economic activities as they transform the way in which various economic actors communicate. Fundamentally, the internet's impact on markets comes from the way it transforms communication among marketplace participants and their resulting economic relationships.

Jeffersonians have seized on this idea. If internet technology is inherently decentralized and democratic, it should transform marketplace communication and bring us closer to Adam Smith's ideal of a “perfect market” (In search of the perfect market, 1997): multiple buyers, multiple sellers, many interchangeable products, smoothly and swiftly converging toward equilibrium thanks to perfect information. With the internet, this argument goes, consumers can know everything there is to know about the prices, characteristics and quantities of goods in the market, and make instantaneous, perfect, rational decisions. The result, it is claimed, will be “friction-free,” dis-intermediated markets—“a new world of low-friction low-overhead capitalism, in which market information will be plentiful and transaction costs low” (Gates, 1995, p. 158). Easy entry and easy exit afforded by cheap, flexible internet technologies will keep the players constantly on their toes, in the best interest of economic efficiency. “Any product that resembles a commodity—and most do—will be driven down in price by the efficiency of the Internet as a marketplace” (Gates, 1999b, p. 8). At the end of the day, “we can now get very close to that Adam Smith ideal,” (Gates, 1999a). “There is a fundamental shift in power, and it’s shifting to the consumer” (Ferguson, cited in Quick, 1998a, p. R14).

However, reality does not seem to be headed quite that way. Despite the wishes of technological optimists, the particulars of this transformation are unlikely to be so straightforward. There may well be a multitude of sellers in the e-markets but the large sellers clearly dominate. Barriers to initial entry may be low, but the barriers to effective, sustainable market participation are another matter. While traditional intermediaries (loan or stock brokers, for example) are clearly feeling pressured, a flurry of new intermediaries emerge (e-loan, e-trade). Internet communication could conceivably have ushered in friction-free interchange, but “friction” (or, as venture capitalists like to call it, “stickiness”) seems to be a fundamental ingredient in every e-business plan. There may be much more information flowing over the networks, but it clearly is not evenly distributed. In fact, all market participants try their hardest

to shape the architecture of the emerging e-marketplace in ways that favor their own interests, as in the words of a business analyst: "Nobody wants to be reduced to a commodity" (Ferguson, cited in Quick, 1998b). The result is unlikely to be a Jeffersonian-style level playing field.

Perhaps the best-known, most often cited example of internet-led market transformation if the online book marketplace, with Amazon.com as its poster child. The founding myth of that e-marketplace is the oft-told story of how Jeff Bezos wrote Amazon's business plan while on a cross-country trip with his wife. Soon upon arrival in Seattle in July 1995, he opened the "Earth's Biggest Bookstore," out of his 400-square-foot garage, funded with only $84,000 of his own money and $1.2 million in venture investment (Bayers, 1999; Sahlman & Katz, 1999). The tale illustrates how the internet erased entry barriers, letting a newcomer successfully challenge established players. Today, Amazon dominates the online book market, has expanded to sell products ranging from video tapes and CDs to tools and prescription drugs. It has become the largest internet retailer, with a market capitalization about thirty times its nearest rival, BarnesandNoble.com, the online offshoot of the once-dominant brick-and-mortar book distributor.[10]

To sustain that position however, Amazon believes it must make considerable investments. For example, it is spending more than $300 million to build seven automated warehouses around the United States (Hansell, 1999). In fact, it is investing such considerable sums in marketing, acquisitions and expansions of its many lines of business that, despite sales estimated to top $1 billion for 1999, the company is currently losing about 26 cents a share (Hansell, 1999). If the beginning of the tale suggested that the internet had lowered entry barriers for this one player with the right idea and the right timing, the sequel suggests that today, entering this market with any chance to compete with Amazon.com would require tremendously deep pockets. While small players can cheaply set up an e-business site, credible competitive entry, the kind that gets noticeable market share, is not so easy. Amazon's relentless marketing spending also suggests the company believe this is not a Jeffersonian perfect market, but one with considerable economies of scale, where size will determine success.

Indeed, after its ebullient beginnings, the online book market seems fast headed for substantial consolidation. In November 1999, for example, BarnesandNoble.com acquired

---

[10] Market capitalization figures are current as of November 1999.

online bookseller Books.com. An emerging theme in this unfolding story is the battle waged, via software, to design electronic marketplaces that advantage certain sets of market players. An interesting example was acses.com, a “shopbot” that worked for consumers (Giussani, 1998). Acses compares book prices, shipping charges and delivery times across a wide range of online sellers. But Acses didn't remain solely in the buyers' camp for very long. The company was recently acquired by Bertelsmann Ventures (owner of a 42% stake in of barnesandnoble.com) and renamed “dealpilot.com,” just as a year earlier Amazon acquired the most prominent shopbot developer of the day, “Junglee” (Bertelsmann AG: Investing Arm to Announce Minority Stake in Acses Site, 1998; Dealpilot.com, 1999; Quick, 1998a). At this point, it is unclear whether searches using “dealpilot” or “Junglee” favor their owners in any way. Their owners may in fact decide that there is more to gain from offering a level marketplace, much like American Airlines once learned that rather than favoring its own listings on the SABRE computerized reservation system, it could make more money by turning SABRE into an unbiased electronic marketplace and charging fees to all participants. Clearly in the book e-marketplace today, as in computerized reservation systems earlier, strategies revolve around the encoding of marketplace characteristics into software controlled by the major market players. Similar stories could be told of other internet-based markets, such as stock brokerage, travel arrangements or electronics sales. Initial barriers to entry may be low, but sustained participation in those markets requires size and resources. So with electronic markets, we seem not to be headed for the technology-driven, Jeffersonian vision that predicts perfect, open, friction-free competition, where an infinite number of small buyers and sellers deal directly with one another. We should not be surprised that electronic commerce resists the Jeffersonian makeover.

Network infrastructures cannot be viewed in isolation from the economic systems that ride upon them. Fundamentally, the network is becoming the *place* where market transactions take place. This virtual *place* entails technological possibilities that are different from physical *places*. But the particular deployment of these possibilities is not determined by the technology: the fact that the internet protocol is open doesn't imply that that network marketplaces built upon the internet will be equally open. In fact we are often seeing precisely the reverse. The protocol's openness allows any player to influence the network marketplace's architecture, and those with greater market power tend to wield greater influence. Because they have tremendous stakes in how this place will actually function, they in turn use that influence to promote a

marketplace architecture that favors their economic interest. In addition, existing actors have stakes in more traditional market-*places* and will resist relinquishing control to less favorable markets. These stakes are embodied in patterns of economic relationships that will not vanish simply because they take place over a network that transmits packets faster and more cheaply than its precursors.

Ultimately, because the network is the place where these transactions occur, the architecture of that place matters. Like the architecture of Henry Ford's factories was key to mass-production, or the architecture of shopping malls shapes commercial activities, the network's architecture (or its configuration) shapes the transactions it supports, and that architecture is not neutral. Those who control the network's configuration therefore control the market-place. They decide who gets to play, and according to what rules.

4.0 The Arrival of Direct Democracy?

The re-making of the political process and political life has been at the forefront of the discussion about the impact of the internet on society, and many analysts see the internet as the vehicle for revitalizing political life in the advanced industrialized world.[11] By making political participation cheap and easily accessible for all citizens and enabling a whole range of new ways to vote and express preferences on political issues, technological optimists claim that the internet will revolutionize politics and return control over the political process to the people. Internet technology will “empower you to make your voice heard,” while democracy will be “well served by individuals using the Net to increase their participation in political life” (Shapiro, 1999, p. 151). Overall, “the full interactive potential of the Internet offers a real chance to restore some purpose to our politics by restoring some power to our people” (Bailey, 1999).

One of the central pillars of the techno-optimists view of TCP/IP-enabled politics is direct democracy. As we might suspect, however, the idea of using technology to eliminate politicians—the “middle-men” of the political process—is hardly new. As early as 1871 James Russell Lowell predicted disintermediation when he noted: “It has been said that our system of town meetings made our revolution possible…but this was at most of partial efficacy…the newspapers and telegraph [now] gather the whole nation into a vast town-meeting” (Carey,

1989a, p. 192). In the 1930s, Lewis Mumford and Britain's Earl of Birkenhead both predicted a future in which electronics would allow direct democracy (Grosswiler, 1998, p. 135). Buckminster Fuller proposed "voting by telephone on all prominent questions before Congress" (Fuller, 1963).

Despite the long history of predictions about technology eliminating the need for politicians, proponents claim the internet is revolutionary not only because of the ability for voters to communicate but also because the internet makes it possible for constituents to cheaply and easily access the necessary information to make informed political choices.[12] With cheap and easy access to information, coupled with a ubiquitous network enabling voting from any geographic location, cyber-optimists see direct democracy as the solution to political malaise and voter dissatisfaction. No more going to the polls, no more complicated reading materials explaining the details of ballot initiatives or the positions of different candidates, and no more need to have all political questions decided on one or two days a year. Rather, put political questions up for vote online as issues arise. And, because voters have access to information and can easily communicate with their representatives, "it will be the voters who ask the questions and control the conversation" (Bailey, 1999).

This vision of internet-enabled direct democracy translates into a prediction for the disintermediation of politics. That is, the internet will eliminate the need for political representatives altogether—there will simply no longer be the need for a "middle man" to mediate the relationship between constituents and political outcomes. As Shapiro notes, "since the advent of interactive, networked computers, the possibility of direct democracy—of citizens controlling the political system directly, rather than through elected representatives—has been very much in play" (Shapiro, 1999, p. 58). Others go further. Davidson and Rees-Mogg, for example, write that "representative democracy as we now know it will fade away, to be replaced by the new democracy of choice in the cybermarketplace" (Davidson & Rees-Mogg, 1997, 35). This new democracy of choice will be cheap, fast, effective, respond directly to the preferences and will of the public, and will also presumably lack the political parties, interest-group politics,

---

[11] For a recent example, see *The New York Times*, December 18, 1999, "White House Announces Online Initiatives."

[12] While proponents also claim that Internet technologies can improve the *quality* of the available information, and the *deliberation* about that information (e.g., Friedland, 1996), we focus on access to information and the voting act in this analysis.

and voter apathy that characterize today's political markets.

Claims about the ability of the internet to revolutionize the political process rest on three dynamics. First, the internet makes information cheap and easily available to all. In the words of pundit Jon Katz: "The world's information is being liberated, and so, as a consequence, are we" (1997, p. 50). Second, at the same time it enables new forms of voting that have heretofore been impossible or impractical. As Jeffrey Reiss, who attempted to create the Democracy Channel on cable television in 1994, "I would not rule out transforming our government into a direct democracy…when we truly have an enlightened public" (Schwartz, 1994).[13] The third pillar of optimist claims about the internet rest on the assertion that the internet "prompts people to take action" (Shapiro, 1999, p. 151). That is, because the internet is inherently a decentralized medium where people are able to undertake a whole series of activities that have the potential to dramatically alter the political process, people will make the effort to do so. The internet enables things to be different, and therefore people will grasp the initiative and participate more fully in society's political choices.

This vision of electronic democracy is generally criticized in four ways (as noted by Street, 1997). First, the notion that disintermediation is itself a positive step is suspect: an electronic democracy that eliminates representation appeals to those who idolize individualism, but it conflates an argument for a technological process and an argument for a political process. Second, the case can be made that preference aggregation for an increasing number of issues is not equivalent to democracy, and neglects deliberation as a goal. Third, it is often argued that a bias in access will privilege those with the resources to afford the technology to participate, and those with the resources to control the terms of the debate—that is, the questions that are asked. Our analysis will address the fourth line of argument: the characteristics of information. That is, "[w]hile there are powerful reasons for seeing freedom of information as a central tenet of democracy, it does not follow that all information in itself enhances democracy" (p. 32). We will concentrate on this area because "cyberspace's…remaking of information constitutes its key contribution to remaking politics" (Jordan, 1999, p. 162) and while the other issues raised may also be valid critiques, we show how the properties of information mean that, even if electronic democracy is defined in the terms of its proponents (that is, using the analogy of the market) it

---

[13] When or how the public would become is sufficiently enlightened was not specified.

will still fail to create a Jeffersonian world.

In short, we are skeptical of the vision of direct TCP/IP democracy promised by cyber-optimists. And, as in our analysis of markets above and our discussion of communities in the next section, our skepticism is rooted in the costs of information and the economics of scale and scope in political markets.

Our first quibble with TCIP/IP democracy revolves around the naïve belief that the internet makes political information free, with the implication that voters can freely become informed about political choices. Optimists are indeed correct to point out that the internet reduces the cost of acquiring information and communicating citizens preferences to political actors. It is easier to browse the web for recent Congressional votes and send an email regarding these votes than it would be absent the web, for example. But this reduction in the cost of information does not mean information is *free* for the individual consuming the information. In particular, an individual must still acquire, process, and act upon a given piece of information. Acquiring information takes time and is therefore never actually free. Meanwhile, processing information and making informed judgments about political events is time-consuming regardless of how information is actually delivered. In short, access to information does not freely translate into knowledge about political issues.

In fact, direct democracy and the internet do not eliminate all costs. Voters still face the costs of becoming informed about a decision, regardless of online information sources. The time required to become informed and make decisions about political choices is perhaps the largest cost facing voter both today and in the future. Yet recent literature on voting suggests that voters have very low information costs even prior to the internet due to the ability of individuals to reason and make informed choices even absent concrete specific knowledge.[14] If voters already have low costs to acquire information, yet fail to participate in significant numbers, should we really expect the internet to usher in a radically new set of behaviors by individuals?

The problem in predicting new and improved voter behavior with the cheap information ushered in by the internet is that this vision ignores individual level incentives for behavior. Individuals can either participate in the political process or abstain. If they choose to participate,

---

[14] For a detailed examination of the voting literature and extensive theoretical and empirical support of the argument that voters can make informed choices even in the absence of extensive concrete information, see Lupia & McCubbins, 1998.

there is a wide range of actions that can be undertaken. But the first decision is whether or not to participate in any capacity. We assume that voters are rational and therefore vote if the benefits of voting outweigh the costs of doing so (Downs, 1957); that is, voting provides net gains to voters who choose to vote.[15] If voting is too costly, voters will largely abstain unless the potential benefits from participating are correspondingly large. On the benefits side of voting, individuals face an unappealing fact of life: there are very few, if any, benefits to voting simply because it is unlikely that any single individual's vote is likely to be decisive in any given election. In short, it is unlikely that there vote matters. This simple fact means that individuals have clear incentives to spend as little time as possible gathering information about political markets.[16]

If we only examine the cost side of the voting equation, we might be tended to suggest that the internet may reduce the costs of voting and *therefore* produce greater participation. This is the logic that cyber-optimists rely on when they predict that internet-enabled direct democracy will increase political participation: reduce the cost of voting and participation will increase as the benefits will outweigh the costs for more people than under the status quo. Yet this ignored the benefits side of the equation—and the fact that this set of limited benefits conditions today's political markets. That is to say, today's passive public already enjoys very cheap information and is able to make informed choices about politics even in the absence of a large number of important facts. Why should be expect that some minor incremental decline in the cost of information will lead to greater voter participation? We don't—in fact we expect that even in a wired future we will see limited voter participation and the entire panopoly of malaise that the cyber-optimists believe that TCP/IP will banish.

Our second quibble with the cyber-optimist view of e-democracy stems from the fact that there are significant economies of scale and scope in political markets—dynamics that suggest that the predicted end of political parties and interest group politics may not be just around the corner. Put differently, there are solid reasons why few political parties and limited political choice are likely to remain part of the political landscape even in a wired future. In thinking about why political parties and politicians behave as they do in the political process, it is useful

---

[15] Certainly all approaches to the analysis of voter behavior do not share this starting point—yet for lack of space we will address only one case in the domain of politics, with one starting point.

to remember the incentives individuals face in the political process: to spend as little time as possible gathering information.[17] This fact conditions the behavior of politicians (and political parties) because it sets parameters on the range of actions that will win them re-election. In particular, the fact that voters rely on cues rather than on information-gathering to evaluate candidates and policies means that politicians have large incentives to invest in cues that make them appealing to voters (Popkin, 1991). The simplest and most well known cues that voters rely on today are party labels. Indeed, party labels are cultivated by politicians as a low-cost information signal to communicate policy positions to rationally ignorant voters. A party label thus represents a set of policy positions that can be cheaply communicated to voters.

Party labels are important precisely because voters are uninformed about particular policy positions and rely on these cues to help them make decisions. The fact that voters rely on cues to make voting decisions, and that politicians respond to these incentives by creating and relying on simple low-cost signals, is important because it reveals the role of scale in the political marketplace. In particular, there are large economies of scale and scope in developing, maintaining, and communicating party labels to voters. Specifically, it is expensive to run a party organization, and there are large benefits to have a nation-wide operation.[18] For individual politicians, meanwhile, joining established parties is generally more successful than launching new parties as long as the costs of information remain positive. This is true simply because starting new parties requires making the investment necessary to "build" a new party label. Put in marketplace terms, party labels are barriers to entry that make it more difficult for new parties or individual politicians to enter the political marketplace. And, just as in economic markets, politicians seek to create "stickiness" by mediating the relationship between constituents and the political process in a particular way. Given the lack of success of recent efforts to launch new parties in most of the advanced industrialized world, these barriers to entry are quite substantial. We see no reason to expect that the internet will reduce the importance of these barriers to entry in political markets.

---

[16] It is irrational to vote when there are large numbers of voters, therefore it makes little sense to invest large amounts of time gathering data and making decisions about political representatives or issues.

[17] It is irrational to vote when there are large numbers of voters, therefore it makes little sense to invest large amounts of time gathering data and making decisions about political representatives or issues.

[18] Of course, it is not altogether impossible to create new parties and win elections. However, the limited success of the Greens in Germany or the Social Democrats in the U.K. demonstrate the difficulty in translating the creation of a

To summarize the preceding discussion, the claim that the internet will produce a well-functioning Jeffersonian democracy in which direct participation forces a responsive government to enact the will of the people rests upon wishful thinking and dissatisfaction with the status quo rather than analysis of the individual actions that would be required to deliver this utopian vision. With an eye to the negative aspects of current political markets—low voter turnout, voter apathy, uninformed publics, unattentive parties—cyber-optimists view a rosy future filled with technology and positive political processes and outcomes. There is no logical connection between the technology and these outcomes, however. The internet will do little to alter the incentives of individuals to become informed about and participate in the political process, nor will it eliminate the economies of scale and scope in the supply side of the political process. Indeed, we expect that the internet will do little to increase the number of political parties or increase voter turnout. Technology may make voting and communication easier, but it will do little to alter the nature of competition in political markets.

5.0 The Unrealistic Hopes for Online Communities

Just as the spheres of economics and politics seem to repel the Jeffersonian metamorphosis, we will find that so too does the domain of culture. Specifically, the fervor of positive expectations for Internet technology may culminate in the online community—a concept that has delighted many observers. The issue at stake for a minority is the possibility of recreating an offline understanding of community online using technology, but for the rest the promise is that of a *better* community through technology (Jones, 1997, p. 10). As in the economic and political sphere, this is less an analysis of the facts at hand than a thinly veiled desire for reform: the prospects for online community excite so many because it is felt that we *need* new communities (Jones, 1998, p. 9).

To assess the prospects for online community, consider what is perhaps the most familiar case: the WELL of San Francisco. Stewart Brand and Larry Brilliant founded the WELL, or "Whole Earth 'Lectronic Link" in 1985 as an online bulletin board system offshoot of the *Whole Earth Review*. What evolved is described by the WELL's own literature as an "open but remarkably literate and uninhibited intellectual gathering" (WELL, 1999). The WELL became

---

party into victory at the polls. In the U.S., new parties generally emerge when new issues emerge that are ignored by

linked to the Internet in 1992 and was subsequently widely popularized, first among computing elites, then among the public generally by influential members (most notably Rheingold, 1994 but also; Seabrook, 1997). The WELL became a darling of the press (e.g., see Basch, 1993) and it was subsequently at least mentioned in almost every academic discussion of online community as a successful example of the Internet's propensity to promote community in new ways. As an online community, the WELL in the early 1990s exhibited all of the best features of off-line communities—broadly supportive relationships, strong ties, reciprocity, and attachment.
The example of the WELL is useful because, aside from being pervasive in the literature, its success as a community demonstrates that it is possible to build a successful community online (cf. Cohill & Kavanaugh, 1997). In particular, the WELL demonstrated that computer-mediated communities *can* support the best features of traditional community—though this does not mean that they are necessarily predisposed to do so (Wellman & Gulia, 1999). However, the lack of an increasing number of additional success stories for online communities suggests that building online communities is more difficult than most suspect. Indeed, many analysts believed that the WELL was the forefront of a new embodiment of community in technology; what took place and developed in the WELL was seen by many as one stream heralding a coming flood, a flood that has not arrived.

As time passed, it became clear that the inevitability of widespread, positive online communities was far from certain. The reasons for this stem from our central argument; when techno-optimists predict the Internet's beneficial qualities for promoting computer-mediated community, one envisions an ideal that might be termed the strictest sense of the word community: a group of individuals who have a collective identity, who "trust one another," who share "a common purpose or moral commitment," and who "share a common ethical system that constrains interactions among members" (Komito, 1998, p. 98). Komito identifies Rheingold's account of the WELL as such a community. This form of community may be beneficial, yet it is the most difficult form to achieve—cohesion and reciprocity require considerable effort and personal investment. While online communities may be different in many ways than their off-line counterparts, they are not different in a way that affects this ultimate limit on true community, the requirement for human effort to be spent interacting with other humans. To

---

the dominant parties (For a historical overview, see Burnham, 1970).

continue the economic analogy: it is not search cost that is prohibitively high, but maintenance. In the best case, online communities are said to empower individuals by creating new places of assembly not bound by two other strict limits that usually restrict human action: geography and the body. Techno-optimists often focus on geography as a dynamic of community that the Internet will change. Separating community and geography has been a foremost interest of Internet proponents since before the network's birth. As computer networking pioneer J.C.R. Licklider[19] explained in 1968, "It appears that the best and quickest way to…move forward the development of interactive *communities* of geographically separated people…is to set up an experimental network of multiaccess computers." The most important advance that the network promised for communities was the possibility that they "will be communities not of common location, but of *common interest*" (Licklider, 1968, italics in original). Geography was identified by pioneers like Licklider as a trap that computer networks will allow us to escape, and it is a trap that we have hoped previous communication technologies like the telephone and radio would allow us to escape.

It should then be striking that the WELL and other strong examples of online community *are* often bound to geographical places (Doheny-Farina, 1996), in the case of the WELL, to the San Francisco Bay Area. It may be that physical meetings and shared referents act as an aid to generating the high level of participation sustaining such a community requires. When a community has no geographical referent, "we lose those markers of place that confer rhetorical authority" (Kolko & Reid, 1998, p. 226). In recent years, the WELL has undergone several reorganizations. In 1995, the WELL attempted to dissolve its geographical tie to the San Francisco Bay Area by launching a $1 million national advertising campaign (Voight, 1995). To some extent it may have succeeded in this bid, as it is a globally-recognizable name because of its role as an early pioneer, yet it can be argued that eliminating a geographical tie can only harm a true community.

There is more than geography at stake, as in addition ideal "virtual communities are depicted as the answer to the theorist's search for a less exclusionary or repressive experience of community," (Willson, 1997, p. 146), hence the WELL's emphasis on the word "open." Online community advocates delight in the realization that dimensions of social stratification (gender,

---

[19] Licklider was the Director of Information Processing Techniques Office at the Pentagon's Advanced Research Projects Agency (ARPA). He commissioned the beginning of the Internet in the early 1960s.

race, class) are typically related in some way to the physical body (e.g., through appearance or location). The promotion of communication on the Internet can then lead to a utopian state where the body is invisible or virtual, thus the community is free from biases based on traditional strata.

To believe that the Internet will promote equity is misguided—those stricken by the Jeffersonian syndrome must ignore the strong race and class bias accompanying this expensive technology (Hoffman & Novak, 1998; Wolf, 1998). They must additionally defend against those who fear increased online activity would lead to social isolation in the off-line world, and they must refute those who would argue that spatial dispersion of community is not a positive end (Breslow, 1997).

While the WELL may at one time have been the perfect example of positive community in the strictest sense, this sense of communty as a concept coexists with many others (Komito, 1998, p. 98). As a community can be marked by investment and attachment, it can also be nothing more than a loose association, or a group forced to interact by circumstance that otherwise appears to share nothing. As we have stated, claims that focus on a technological artifact as a vehicle for progress are flawed in that they are often claims made about technology alone. Technology does not engender a community-building system free from the influence of the existing economic, political, and cultural structure—as the early WELL demonstrated a recreation of community in the strong form, we should expect the Internet to also proliferate communities of lesser or no value to society. The Internet will not lead to communities where communication is qualitatively more free or more democratic because the extant strata will be either carried over from previous experience or re-created in new forms.

In 1994, the last shares of the WELL held by the publishers of the *Whole Earth Review* were sold (WELL consolidates ownership, 1994). With the shift in ownership may have come a change away from the earlier years of an “open but remarkably literate and uninhibited intellectual gathering.” The commodification of the community that was the WELL would continue, and with it provide an example of a more likely direction for community to take on the Internet. It is not that technology cannot act as an agent of change, but rather that the technological differences demonstrated in the Internet, namely the much-touted removal of limits on geography and the body, fail to withstand close scrutiny. As to the claim that the Internet’s ease in facilitating communication will promote community—a quantity argument—valuable

information remains costly by definition. It is not the quantity of communication messages or outlets that is a limit, but rather the human effort required to participate. Actors are still constrained by time, entering a new community requires significant learning costs, and we might consider communities as subject to lock-in due to of high switching costs. There is a finite limit to the number of communities one person can participate in, if we assume participation requires some degree of personal investment. Because of the continuing and permanent scarcity of attention, online communities can be said to be characterized by disincentives to invest time and energy.

If we understand communities as a derivative of an information market, information markets imply concentrated structures. As we have stated with respect to markets, a limitless realm of decentralized communities appears unlikely. The Internet may change the dynamics of community in that if communities are online, the cost of constructing the hardware and software fora in which they exist can be reduced by scale. The Internet might be said to lower the barriers to entry for organizations or individuals that wish to host communities, in that it can provide an inexpensive technical foundation for a community not previously possible, but increased scale would lead to even lower costs for this foundation, leading to concentration. Indeed, in 1996, the WELL hired Time Warner executive Maria Wilhelm as president (Taylor, 1996b) and spun off its in-house discussion group system, *Well Engaged*, to a separate company offering the software as a product to other online community sites (Taylor, 1996a). In effect, *Well Engaged* promise for sale the prepackaged software foundation to build an online community. Software for discussion group systems, however, may have no preference for community in the strict sense that we might prefer.

Control of the online communication that communities depend on is embedded in the technology of the network. While optimists see the network as a liberating force, it can equally be seen as a force for social control where those that make the rules are those with economic or political command of the system. Those who control the software supporting these communities will have an interest in furthering their own ends, whatever those ends may be. Is the computer-generated “local avenue” provided by a global portal organization truly a community? It may use discussion group software and it may promote discussion, but Internet user “communities” have recently emerged as a commodity owned by the corporations that provide the location for their product-centric interactions (cf. Hagel & Armstrong, 1997). It is important to note that we

do not hold these as communities by our definition.[20]

Communities, then, may diverge into two distinct groups. The first group contains small communities marked by considerable investment. The most likely path to such investment is a geographical tie, although this may not be required. The second group contains large pseudo-communities marked by a lack of personal investment, cohesion, and attachment. These are little more than groups of purchasers momentarily stopping to gather information, interested in committing as little effort as possible and wary of interaction that is not directly related to the goal of the transaction at hand.

As of 1999, the WELL has 7,000 members, down from 8,000 in 1994 (Wall Street Journal, 1994) and the community has been purchased by Salon.com in an effort to "[position] Salon as an upscale AOL." Salon has "always wanted a premium-membership area," according to the WELL's executive director (Wingfield & Hanrahan, 1999). To conclude, in the story of the WELL, even in the best example there is little evidence to support the claim that the advent of the Internet as a communication technology will make communities less repressive, more democratic, or closer to a Jeffersonian ideal—the many will still be subject to the control of the few.

6.0 Conclusion, or Why "Jeffersonians" Should Listen to Social Scientists

New technology now arrives at a predictably rapid rate. For thirty years we have had Moore's law, and Metcalf's corollary is now almost two decades old. In the thirty-four years from 1950-1984, Beniger identifies 73 technological "revolutions" proclaimed in major works, from "…a technetronic era (Brzezinski 1970)…[to] postindustrial society (Touraine 1971; Bell 1973)…[to] the micro millenium (Evans 1979)" (Beniger, 1986, p. 2-3). In his words:
Regardless of how we explain the recurrent failure of past generations to appreciate the major societal transformations of their own eras, we might expect that their record would at least chasten students of contemporary social change. In fact, just the opposite appears to be the case.

---

[20] The 19th century began a sharp decline in the importance of "traditional communal relationships" and a corresponding rise in the "impersonal, highly restricted associations" required by business (Beniger, 1987, p. 353). Improvements in communication technology in the 20th century have now made if practical to allow the restricted associations of business to masquerade as personal and communal—this is what Beniger terms pseudo-community. Pseudo-community is achieved through personalization and by manipulating the appearance of sincerity, as in the

(p. 2)

The hype surrounding technology is also predictably old: the introduction of the PC ushered in the "PC revolution" quite simply because many analysts expected the technology to usher in just that—a revolution (a revolution of what and how the revolution was to happen was never quite specified). The hype and bluster of the internet and in particular electronic markets is thus just yet another round of new technologies and anticipated revolutions. These technologies have had, and may yet have a broad range of important and far-reaching implications. The question on the table is whether these technologies will deliver on the promised Jeffersonian expectations of decentralization and democratization, or whether this revolution will yet again fail to materialize. As we hope to have made clear, the weight of history leads us to doubt, the present conditions in electronic commerce lead us to doubt, the claims made about direct democracy lead us to doubt, and the idolatry of the computer-mediated community lead us to doubt. While this paper has approached these domains largely using an economic perspective, we suspect that judicious analysis from other perspectives would also cast the Jeffersonian expectation in an unflattering light.

It is not that we wish to promote an opposite, dystopian perspective, nor do we consider the Internet impotent in terms of societal change. Instead, we wish to call attention to the Jeffersonian syndrome as a very predictable misperception that is a waste of our energies. First, as a society we must in reasoned deliberation conclude that we are in need of one or more of the goals we have discussed here; be it less concentrated markets, greater economic efficiency, more direct democracy, a more decentralized political system, or more participatory and emancipatory communities. Second, after a rational analysis of our goal and the changes needed in the social, political, and economic domains to approach it (addressing also the question of if and how Internet has the potential to aid us in these ends), then third and finally we need to advance that goal through policy. The Internet or any technology can not, will not, and should not act as a proxy to achieve the dreams and social goals we lack the courage to propose, debate, and legislate.

---

targeted mass mailing. We must see many current manifestations of so-called "community" on the Internet as the present summit of this trend, and not as true communities.

Sources

Akrich, M. (1992). The De-Scription of Technical Objects. In W. E. Bijker & J. Law (Eds.), *Shaping technology / Building society: Studies in sociotechnical change* (pp. 205-224). Cambridge, MA: MIT Press.

Bailey, D. (1999, September). Politics on the Internet. *Civilization*.

Barbrook, R., & Cameron, A. (1998). *Californian Ideology, part 8*. HyperMedia Research Centre. Available: http://ma.hrc.wmin.ac.uk/ma.theory.4.2.1.10.dbSeptember 18].

Basch, R. (1993, May). The WELL--A hidden treasure. *Information Today, 10,* 13-14.

Bayers, C. (1999, March). The Inner Bezos. *WIRED, 7*.

Beniger, J. R. (1986). *The control revolution: Technological and economic origins of the information society.* Cambridge: Harvard University Press.

Beniger, J. R. (1987). Personalization of mass media and the growth of pseudo-community. *Communication Research, 14*(3), 352-371.

Bertelsmann AG: Investing Arm to Announce Minority Stake in Acses Site. (1998, December 15). *Wall Street Journal,* pp. B4.

Brand, S. (1987). *The Media Lab: Inventing the future at MIT*. New York: Viking.

Breslow, H. (1997). Civil society, political economy, and the Internet. In S. G. Jones (Ed.), *Virtual culture: Identity and communication in cybersociety* (pp. 236-257). Thousand Oaks, CA: Sage.

Burnham, W. D. (1970). *Critical elections and the mainsprings of American politics.* New York: Norton.

Carey, J. W. (1989a). The history of the future. In J. W. Carey (Ed.), *Communication as culture: Essays on media and society* (pp. 173-200). New York: Routledge.

Carey, J. W. (1989b). The mythos of the electronic revolution. In J. W. Carey (Ed.), *Communication as culture: Essays on media and society* (pp. 113-141). New York: Routledge.

Chandler, A. D. J. (1977). *The visible hand: The managerial revolution in American business*. Cambridge, Mass.: Belknap Press.

Clausing, J. (1999, July 6). Internet governing group already has a watchdog *The New York Times*.

Cohill, A. M., & Kavanaugh, A. L. (Eds.). (1997). *Community networks: Lessons from*

Blacksburg, Virginia. Norwood, MA: Artech House.

Davidson, J., & Rees-Mogg, W. (1997). *The Sovereign Individual: How to Survive and Thrive During the Collapse of the Welfare State.* New York: Simon & Schuster.

Dealpilot.com. (1999, October 7). *Bertelsmann Takes Majority Stake In Internet Company DealPilot.com*, [Press Release]. Dealpilot.com AG. Available: http://www.dealpilot.com/october71999.html.

Doheny-Farina, S. (1996). *The Wired Neighborhood*. New Haven, CT: Yale University Press.

Douglas, S. J. (1989). *Inventing American broadcasting, 1899-1922*. Baltimore: Johns Hopkins University Press.

Downs, A. (1957). *An economic theory of democracy*. New York: Harper.

Dyson, E. (1997). *Release 2.0*. New York: Broadway Books.

Emerson, R. W. (1909-14). Journal of Ralph Waldo Emerson. In E. W. Emerson & W. E. Forbes (Eds.), *Journals of Ralph Waldo Emerson* (Vol. VI. 1841-1844,). Boston: Houghton Mifflin.

Friedland, L. A. (1996). Electronic Democracy and the New Citizenship. *Media, Culture, & Society, 18*(2), 185-212.

Fuller, R. B. (1963). *No more secondhand God, and other writings*. Carbondale, Illinois: Southern Illinois University Press.

Fuller, S. (1995). Cybermaterialism, or Why There Is No Free Lunch in Cyberspace. *The Information Society, 11*(4), 325-332.

Gates, B. (1995). *The Road Ahead*. New York: Viking Penguin.

Gates, B. (1999a). *Bill Gates talks about Business @ the Speed of Thought*, [WWW]. Microsoft Digital Nervous System Australia. Available: http://www.microsoft.com/australia/dns/talkAboutBASOT/qanda.htm [1999, December 10].

Gates, B. (1999b, March). The price of the future. *Executive Excellence, 16,* 8.

Giussani, B. (1998, August 11). German students build a next-generation 'shopbot'. *The New York Times*.

Grosswiler, P. (1998). Historical Hopes, Media Fears, and the Electronic Town Meeting Concept: Where Technology Meets Democracy or Demagogy? *Journal of Communication Inquiry, 22*(2), 133-151.

Hagel, J., III, & Armstrong, A. G. (1997). *Net gain: Expanding markets through virtual communities*. Boston: Harvard Business School Press.

Hansell, S. (1999, October 28). Amazon says its losses could grow in the fourth quarter. *New York Times*.

Hoffman, D. L., & Novak, T. P. (1998). Bridging the racial divide on the Internet. *Science, 280*(April 17), 390-391.

Hughes, T. P. (1983). *Networks of power: Electrification in Western society, 1880-1930*. Baltimore: Johns Hopkins University Press.

In search of the perfect market. (1997, May 10). *The Economist, Survey,* pp. 1-5 (insert).

Innis, H. A. (1964). *The bias of communication*. Toronto: University of Toronto Press.

Innis, H. A. (1972). *Empire and communications*. Toronto: University of Toronto Press.

Jefferson, T. (1964). *Notes on the State of Virginia*. New York: Harper & Row.

Jones, S. G. (1997). The Internet and its Social Landscape. In S. G. Jones (Ed.), *Virtual Culture: Identity and Communication on Cybersociety* (pp. 7-35). Thousand Oaks, Calif.: Sage.

Jones, S. G. (1998). Information, Internet, and Community. In S. G. Jones (Ed.), *Cybersociety 2.0: Revisiting Computer-Mediated Communication and Community* (Vol. 1-34,). Thousand Oaks, Calif.: Sage.

Jordan, T. (1999). *Cyberpower: The Culture and Politics of Cyberspace and the Internet*. New York: Routledge.

Kapor, M. (1993, July/August). Where is the Digital Highway Really Heading? The case for a Jeffersonian information policy. *Wired, 1*.

Katz, J. (1997, April). Birth of a Digital Nation. *Wired, 5*.

Kling, R. (1996). Being Read in Cyberspace: Boutique and Mass Media Markets, Intermediation, and the Costs of On-Line Services. *The Communication Review, 1*(3), 297-314.

Kolko, B., & Reid, E. (1998). Dissolution and fragmentation: Problems in on-line communities. In S. G. Jones (Ed.), *Cybersociety 2.0: Revisiting computer-mediated communication and community* (Rev. ed., pp. 212-229). Thousand Oaks, CA: Sage.

Komito, L. (1998). The Net as a foraging society: Flexible communities. *The Information Society, 14*(2), 97-106.

Licklider, J. C. R. (1968, April). The Computer as a Communication Device. *Science and Technology*.

Lupia, A., & McCubbins, M. D. (1998). *The democratic dilemma: Can citizens learn what they need to know?* New York: Cambridge University Press.

Marvin, C. (1980). Delivering the News of the Future. *Journal of Communication, 30*(1), 10-20.

Marvin, C. (1988). *When old technologies were new: Thinking about electric communication in the late nineteenth century*. New York: Oxford University Press.

Marvin, C. (1996). Cheap, But Not Easy: Democracy and Information Abundance. *The Communication Review, 1*(3), 329-335.

Marx, L. (1964). *The machine in the garden: Technology and the pastoral ideal in America*. New York: Oxford University Press.

McChesney, R. W. (1993). *Telecommunications, mass media, and democracy: The battle for the control of U.S. broadcasting 1928-1935*. New York: Oxford University Press.

Meier, H. A. (1990). Thomas Jefferson and a democratic technology. In C. W. Pursell (Ed.), *Technology in America: A history of individuals and ideas* (2nd ed., pp. 17-34). Cambridge, MA: MIT Press.

Nye, D. E. (1990). *Electrifying America: Social meanings of a new technology, 1880-1940*. Cambridge, MA: MIT Press.

Nye, D. E. (1994). *American technological sublime*. Cambridge, MA: MIT Press.

Popkin, S. L. (1991). *The reasoning voter: Communication and persuasion in election campaigns*. Chicago: University of Chicago Press.

Quick, R. (1998a, December 7). The attack of the robots: Comparison-shopping technology is here--whether retailers like it or not. *Wall Street Journal,* pp. R14.

Quick, R. (1998b, September 3). Web's robot shoppers don't roam free. *Wall Street Journal,* pp. B1.

Rheingold, H. (1994). *The virtual community: Homesteading on the electronic frontier*. New York: HarperPerennial.

Sahlman, W. A., & Katz, L. E. (1999). *Amazon.com: Going public* (Case Study 899003). Cambridge, Mass.: Harvard Business School.

Schwartz, E. I. (1994, January). Direct Democracy. *Wired, 2*.

Seabrook, J. (1997). *Deeper: My two-year odyssey in cyberspace*. New York: Simon & Schuster.

Shapiro, A. L. (1999). *The Control Revolution: How the Internet is Putting Individuals in Charge and Changing the World as we Know It*. New York: PublicAffairs.

Shapiro, C., & Varian, H. R. (1998). *Information rules: A strategic guide to the network economy.* Boston: Harvard Business School Press.

Street, J. (1997). Remote Control? Politics, Technology, and 'Electronic Democracy'. *European Journal of Communication, 12*(1), 27-42.

Taylor, C. (1996a, September 16). Sophisticating Chat. *Mediaweek, 6,* 58.

Taylor, C. (1996b, April 8). TW exec dips into the Well. *Mediaweek, 6,* 8.

Voight, J. (1995, September 25). Area on-line service seeks agency to shape wider national presence. *Adweek, 45,* 5.

Volokh, E. (1996). Cheap Speech And What It Will Do. *The Communication Review, 1*(3), 261-290.

WELL consolidates ownership. (1994, February). *Information Today,* pp. 10.

WELL, T. (1999). *About The WELL*, [WWW]. Available: http://www.well.com/aboutwell.html [1999, August 21].

Wellman, B., & Gulia, M. (1999). Virtual communities as communities: Net surfers don't ride alone. In M. A. Smith & P. Kollock (Eds.), *Communities in Cyberspace* (pp. 167-194). London: Routledge.

Willson, M. (1997). Community in the abstract: A political and ethical dilemma? In D. Holmes (Ed.), *Virtual politics: Identity and community in cyberspace* (pp. 145-162). Thousand Oaks, CA: Sage.

Wingfield, N., & Hanrahan, T. (1999, April 8). Web firm Salon buys 'the Well,' an online pioneer. *Wall Street Journal,* pp. B9.

Wolf, A. (1998). Exposing the great equalizer: Demythologizing Internet equity. In B. Ebo (Ed.), *Cyberghetto or cybertopia? Race, class, and gender on the Internet* (pp. 15-32). Westport, CT: Praeger.