# The Net Effect: The Public's Fear and the Public Sphere[1]

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Our world is about to be transformed beyond all recognition, and nothing will ever be the same. All because of the Internet.

Such, at least, is the impression one gets from much of what's been said and written about the Net over the past few years. The Net, we are told, will dramatically change how we work, play, shop, learn, live, and even love—if, in fact, it hasn't done so already. On this point, few critics seem to disagree. Where the real debates begin is over the question of whether those changes are ones we should embrace or resist.

This essay will not bring those debates to any final resolution, if for no other reason than that the Internet is still far too new for us to make claims about its long-term social and cultural impact with any real certainty.[2] For that matter, given the speed with which computer hardware, software, and protocols continue to move in and out of the picture, even short-term predictions about the future of cyberspace need to be taken with large grains of salt. Today, for example, people often talk about the World Wide Web as if it's all there is to the Net.[3] As recently as 1994, however, the Web barely existed,[4] Netscape was just another start-up venture with an uncertain future,[5] Microsoft was only beginning to realize that cyberspace might be worth looking into,[6] and serious Net users needed to be well versed in what are now largely forgotten cybertools (e.g., Gopher, Veronica, Archie, WAIS). Even observers sharp enough to predict back then that the Web would be "the next big thing" would have been hard-pressed to envision a future

right around the corner when the Web would commonly be equated (however inaccurately) with the entirety of the Net.

Keeping the ever-shifting nature of cyberspace in mind, I'm not going to make any rash predictions about where the Net will take us tomorrow. Instead, my goal for this essay is to provide a modest, yet productive, intervention in the ongoing debates over "the Net effect." In particular, I want to examine some of the more problematic assumptions made by parties on all sides of those debates about the nature of both "the Internet" and "the public"—assumptions that flatten out the multifaceted complexities of both of these phenomena and, in turn, serve to steer the public conversation about cyberspace away from crucial questions of access, democracy, and the public sphere.

Perhaps the biggest problem with the existing public discourse about the Net is that it is dominated by extreme positions. On the one hand, there are feverish cyber-utopians who see the Net as the best thing to happen to the human race "since the capture of fire" (John Perry Barlow, in Barlow et al., 36). On the other hand, there are apocalyptic doomsayers who are convinced that the Net is a monstrous threat to our future that we need to resist and contain, if not eliminate entirely. Sven Birkerts, for instance, sees the Net as a dangerous distraction from pressing real-world concerns and rebuts Barlow's sound bite about the expanding cyberculture with one of his own: "refuse it" (Barlow et al., 37). To be sure, at each end of this spectrum one can find a mosaic of distinct—and even mutually incompatible—positions. For example, however much they may agree that the Net is a Good Thing™, the digital entrepreneurs who embrace cyberspace as a bottomless gold mine for commerce and investment don't necessarily hold the same political or cultural values as the wired communitarians who see the Net as the quintessential democratic global village. Similarly, the moral conservatives who rail against the online traffic in sex and violence don't necessarily share much (if any) philosophical common ground with the neo-Luddites who see computers as soulless boxes that take us away from our already disintegrating families and communities. Whatever the specific differences between (and within) these camps may be, however, they all share a problematic overinvestment in monolithic visions of the Net's impact, with commentators from both ends of the spectrum apparently unwilling to make more than token gestures in the direction of "the other side."[7]

One of the major reasons for the prevalence of such extreme positions is that many commentators discuss the Internet as if it were a single, relatively uncomplicated medium—a gross misrepresentation that, in turn, makes it easier to speak of the Net in overgeneralized terms. What makes this especially ironic is that a large part of the Net's impact can be traced to its multifaceted flexibility and diversity. The Net can be as private as a personal e-mail note between lovers or as public as a Usenet post available to millions of readers in dozens of countries. It can be as ephemeral as a "real-time" conversation in a chat room or as permanent as a Web-based database or archive. It can be as serious as a listserv-based support group for survivors of incest or as lighthearted as an evening of checkers in an online game room. And it can function in ways that are analogous to an incredibly broad range of offline modes of communication, including face-to-face conversation, public lectures, university seminars, telephone calls, radio, television, film, video games, family photo albums, diaries, letter writing, bulletin boards, newsletters, newspapers, magazines, scholarly journals, and books. All of which makes it more accurate to think of the Net as *multiple media* rather than as a single medium.

As obvious as this observation may seem, it's a point that bears special emphasis here, given the common tendency for both cyber-utopians and cyber-skeptics of cyberspace to focus only on the facets of the Net that bolster their larger claims. It's easy, for instance, to portray the Net as a wonderful new space for nurturing community and human interaction if one concentrates on interactive, dialogue-driven cyber-environments such as the WELL (Rheingold) and glosses over more static and/or corporatized forms of CMC (computer-mediated communication, e.g., Web sites that imitate more traditional forms of commercial publishing).[8] And it's just as easy to portray the Net as an impersonal, alienating technology if one focuses on the ways that multinational conglomerates use computer networks to create atomized, post-Fordist workplaces (Breslow) and minimizes the ways that individual people use the Net to establish and maintain interpersonal relationships and social groups.[9] Ultimately, the main problem with such analyses is not that they can't provide valuable insights about certain aspects of cyberspace, but that they fail to recognize the Net for the messy—and often self-contradictory—multiplicity that it really is. Put simply, while the Net may consist of binary code (e.g., digital

strings of o's and 1's), its social, cultural, and political impact can't safely be reduced to similar either/or dichotomies.

With this last point in mind, what I want to do in the remainder of this essay is to offer a critical analysis of some specific examples of both cyberphobia and cybermania. Admittedly, to frame my argument this way is to run the risk of reproducing the very same sort of binary opposition I'm critiquing. To paraphrase Deleuze and Guattari (20), however, I'm invoking one dualism (i.e., cyberphobia versus cybermania) not to champion one over the other or to craft some sort of rapprochement between them, but to challenge the notion that reducing the public discourse on cyberspace to simple dualisms (e.g., is the Net good or bad for us? heaven or hell? the cause of or the solution to all our problems?) will provide us with the best answers to the question of the Net's effects.

### THE PUBLIC'S FEAR

It may seem odd to talk about the public's fear of cyberspace when the number of people who use the Net continues to grow (though not quite as impressively as some observers predicted it would), the tech-dominated NASDAQ continues to be a prominent benchmark for the health of the U.S. economy (even after the dramatic stock market downturn of 2000–2001, much of which was attributed to the bursting of the hyper-inflated dot-com bubble), and even noncomputer businesses seem to feel that establishing a Web presence is now a necessity (even if only so they *look* like they're "cutting edge"). Looking at the ways in which millions of people and companies have embraced the Net (and how millions more seem eager to climb on the bandwagon), one could easily believe that whatever fear the Net once generated among the general public is now a thing of the past.

Once again, however, we need to resist the temptation to explain the Net by using simple binary oppositions. Not only is it possible for the Net's exceptional popularity to coincide with a broad level of Net-related anxiety, but, I would argue, the Net's success actually *heightens* that anxiety. After all, if the Net were floundering (e.g., if it were clearly headed the way of computer punch cards, eight-track tapes, Betamax, or DIVX), no one would be worried about the changes it might bring

to their lives. But the Net isn't floundering. On the contrary, it's rapidly acquiring a pervasiveness in U.S. culture that makes it difficult to ignore, even for people without the ability or desire to go online themselves. And it's precisely this aura of inevitability that makes some people uncomfortable. As Birkerts puts it:

> If we're merely talking about this phenomenon as an interesting, valuable supplement for those who seek it, I have no problem with it. What I'm concerned by is this becoming a potentially all-transforming event that's going to change not only how I live but how my children live. I don't believe it's going to be merely auxiliary. I think it's going to be absolutely central.        (Barlow et al., 45)

As much as Birkerts is concerned with the specific effects the Net will have on people who actually use it (e.g., his fears that Net users will lose interest in reading books or talking with their neighbors), his major fear seems to be that the Net's success will have devastating ripple effects on life in the *un*wired world—that neither the already fragile print culture nor the waning sense of physical community in the United States will be able to survive the relentless spread of cyberspace.

Nor is Birkerts alone in this fear. As positive as much of the mainstream media commentary on the growing cyberculture is, there is also more than enough doomsaying and fear-mongering to constitute at least a low-grade *moral panic* around the subject. Sociologist Stan Cohen explains the concept of a moral panic this way:

> A condition, episode, person or group of persons emerges to become defined as a threat to societal values and interests; its nature is presented in a stylized and stereo-typical fashion by the mass media; the moral barricades are manned [*sic*] by editors, bishops, politicians, and other right-thinking people; socially accredited experts pronounce their diagnoses and solutions; ways of coping are evolved or (more often) resorted to; the condition then disappears, submerges or deteriorates and becomes more visible. Sometimes the object of the panic is quite novel and at other times it is something which has been in existence long enough, but suddenly appears in the limelight. Sometimes the panic is passed over and is forgotten, except in folklore and col-

lective memory; at other times it has more serious and long-lasting repercussions and might produce such changes as those in legal and social policy or even in the way society conceives itself.

(Quoted in Hall et al., 16–17)

To be sure, the Net has been embraced widely enough (at least in the United States) to offset the most extreme instances of cyberspace-related panic in significant ways and, compared to the events that led Stuart Hall and company to invoke Cohen (i.e., media-stoked fears about the rise of "mugging" in 1970s Britain), most of the public expressions of anxiety over the Net are relatively tame. As Cohen's definition suggests, however, moral panics come in a wide variety of shapes and sizes, and one doesn't have to look very hard to find "stylized and stereo-typical" media representations of the Net being invoked in demonizing ways.

Probably the most prominent example here is the wave of moral outrage over online pornography from U.S. politicians, pundits, and concerned citizens' groups: a stream of discourse that began in mid-1995 and ultimately led Congress to add the Communications Decency Act (CDA)—which severely restricted the circulation of "adult" material online—to the Telecommunications Act of 1996.[10] While the U.S. Supreme Court eventually ruled the CDA to be unconstitutional (*Reno v. ACLU*), the extensive public debate over "cybersmut" helped to propagate and reinforce a public image of the Net as an insidious threat to both home and family—and thus, by extension, to the moral fabric of society as a whole.[11] Moreover, the public spectacle over the CDA served one of the crucial functions of any "good" moral panic: i.e., it exaggerated the Net's threat to the status quo in ways that (1) mobilized public support for what would otherwise have been seen as overtly repressive measures (i.e., the criminalization of a broad segment of online expression that retained First Amendment protection in offline contexts) and (2) directed public attention away from controversial policy decisions that might otherwise have received closer scrutiny. In the case of the CDA, Congress's primary agenda was arguably to ensure that the rest of the Telecommunications Act—which effectively transferred permanent ownership of the broadcast spectrum from the general public to the telecommunications industry—was implemented without being sub-

jected to public discussion about its broader ramifications. As Robert McChesney notes:

> The overarching purpose of the . . . Act is to deregulate all communications industries and to permit the market, not public policy, to determine the course of the information highway and the communications systems. . . . Some of the law was actually written by the lobbyists for the communication firms it affects. The only "debate" was whether broadcasters, long-distance companies, local telephone providers, or cable companies would get the inside track in the deregulatory race. . . . "I have never seen anything like the Telecommunications Bill," one career lobbyist observed. "The silence of public debate is deafening. A bill with such astonishing impact on all of us is not even being discussed."          (42–43)

In the end, the only portion of the bill that received extended public scrutiny prior to its ultimate passage was the CDA. And even though the Supreme Court held in *Reno* that the public sphere should be free from unwarranted governmental control, the fact that the rest of the Telecommunications Act permitted the government to auction off huge portions of the public sphere means that the ultimate impact of the CDA on the general public amounted to a net loss.

This victory for "the media monopoly" (Bagdikian) notwithstanding, the continued growth of the Net presented a serious challenge to more traditional media outlets—especially the national broadcast television networks. From a market perspective, the Net provided an alternate source of news and entertainment to a highly profitable demographic group (i.e., the segment of the population with both the income and the inclination to purchase high-end personal electronics) at a moment when the broadcast networks were already struggling to minimize losses in market share and profits margins in the face of competition from cable and satellite TV. Network responses to this threat varied considerably. All of the major networks established some sort of Web presence for themselves, but only NBC went so far as to establish a "TV presence" for the Net (i.e., MSNBC, a joint cable/Net venture with Microsoft; see McPherson in this volume). ABC's parent company (Disney) adopted an "if you can't beat 'em, join 'em" philosophy by creating the "Go" network: an expansion and reconfiguration of its previ-

ously unconnected online offerings into a collection of cross-linked family, news, sports, and entertainment Web sites.[12]

On occasion, however, the broadcast networks have dealt with the threat of the Net by going on the offensive. For instance, in March 1997, in the wake of the first wave of cyberspace-driven rumors about the Clinton/Lewinsky scandal, CBS aired an episode of *60 Minutes* in which Lesley Stahl took a close look at the Net—and was appalled to learn that ordinary people could "publish" virtually anything online without the benefit of formal gatekeeping procedures to screen out slander and falsehoods. In particular, Stahl's story decried Web publishers' irresponsible dissemination of scandalous news items that relied on unsubstantiated information from unidentified sources.

Insofar as anonymity and pseudonymity are commonplace features of the Net, such concerns are not without merit: cyberspace contains its fair share of lies and misinformation, and users should be cautious about automatically accepting information they find online as true. These very same concerns, however, also apply to more traditional media outlets: after all, it's not uncommon for traditional print and broadcast news reports to rely on never-identified sources (e.g., "friends of the Clintons," "lawyers familiar with the investigation," "sources inside the White House"). To hear *60 Minutes* describe it, however, such practices are all but unheard of offline and practically inescapable online. And while it's easy to interpret Stahl's report as a case of CBS trying to protect its corner of the news-reporting turf from an upstart newcomer, the overall tone of the story recast this expression of self-interest in terms that exaggerated and misrepresented the threat posed by the Net: i.e., CBS apparently felt that the unfiltered quality of online information did grave and potentially irreparable harm to the integrity of the public sphere, and thus Stahl's report was framed as an example of the network looking out for the public's interest, rather than its own.

The spring and summer of 1999 also saw the Net come under public fire for its alleged role in three otherwise unrelated 1999 tragedies: Eric Harris and Dylan Klebold's deadly assault on Columbine High School in Littleton, Colorado, in April, Benjamin Smith's murderous three-day rampage through Illinois and Indiana in early July, and Mark Barton's fatal shooting spree in Atlanta in late July. Of the three, the Internet connection in the Smith case is probably the most indirect.

The general consensus across major media news reports and editorial commentaries on Smith's crimes[13] was that they were primarily the by-product of his white supremacist beliefs: in marked contrast to the Columbine case, these were not shootings that most commentators seemed willing to blame directly on violent media fare.

At the same time, however, the initial flurry of newswire reports on the Smith shootings invoked computer games in ways that suggested at least an implicit connection between the shootings and Smith's involvement in cyberculture. As one article claimed, Smith "was known to be an aficionado of Dungeons and Dragons, the Gothic computer game of violence, something that his mother, Beverly Smith, confided to others on their street was worrisome to her" ("Out of Hatred"). While this seemingly innocuous sentence doesn't actually blame the game for either Smith's racism or his crimes, it does suggest that playing D&D is a vital fact about Smith's background that helps to explain where his hateful views and/or violent actions came from. Moreover, the references to the focal points of other moral panics serve to amplify the apparent significance of this "clue" from Smith's past. D&D, for instance, has spent the past twenty-five years on the receiving end of sporadic public outcries over role-playing teens losing touch with reality and overinvesting in the fantasy worlds inspired by the game. Ultra-violent computer games (e.g., Mortal Kombat or Street Fighter) have spent much of the past decade as one of the recurring targets of moral outrage over the rising tide of gore in popular culture. And over the past several years, the Goth subculture has been repeatedly demonized as a haven for maladjusted—and potentially disturbed—social misfits. Put together into one compact phrase, these three otherwise distinct moral panics add up to an imposing object of extreme terror.

The problem here, however, is that D&D is not necessarily (or even usually) a computer game. Or Gothic. Or even violent. While there are CD-ROM versions of the game's user manuals and adventure modules, D&D is not a game designed primarily for computer play. While there is some overlap between elements of Goth fashion and some brands of D&D fantasy, it's doubtful that most Goths play the game or that most players are Goths. And while the "sword and sorcery" aspects of D&D often involve role-played combat, the bulk of the "violence" involved in staging those battles consists of the forceful clatter of plastic dice on tabletops. In short, if D&D is really "the Gothic computer game of vio-

lence," then chess—with its historical roots in ancient Persia, hundreds of different computerized versions, and its underlying metaphor of warring kingdoms—could just as reasonably be called "the Iranian computer game of combat."

I'm unpacking this particular quote at some length because it helps to demonstrate an important aspect of how moral panics function—i.e., the way that they articulate a seemingly natural and logical connection between an allegedly dangerous phenomenon and others that are already known (or at least assumed) to be genuine threats. In the example at hand, those articulations work in several different directions at once, with each of the various objects of moral approbation being used to confirm the legitimacy of the threat posed by the others: i.e., to label Smith as *only* a D&D aficionado (or a Goth, or a computer game player) would not be enough to complete the portrait being painted of him as a dangerous individual who had been obsessed with violence for many years. In the end, however, it's the heinousness of Smith's actual crimes that most powerfully reinforces the notions that D&D, Goths, and computers are potentially deadly threats to the social order. We don't need to be told that Smith played D&D, for instance, to be horrified at the cold-blooded hatred of his violent trek through the Midwest, but outside the context of the shootings, it is not clear that Smith's history of fantasy role-playing or computer use would be enough to brand him a threat to society in most people's eyes. What such news reports accomplish, then, is the public construction of a "logical" and seemingly natural connection between heavy computer use and deadly violence.

Tellingly, a fact *not* included in the early reports about Smith's crimes was that "he had been forced to withdraw from the University of Illinois after beating up a girlfriend in the dorm" (Pollitt, 10). And while this detail from Smith's past may have surfaced only in the weeks between the initial coverage of the event and the time that Pollitt wrote the column quoted here, it's nonetheless significant that reporters who were actively working to trace Smith's history of violence and racism could overlook an instance of actual violence from Smith's recent past—one serious enough to merit expulsion from a major university—while his D&D-playing ways were deemed important enough to report right away. Smith's story could just as easily have been written as that of a man who had a troubled history of "solving" problems with phys-

ical violence, rather than that of someone whose involvement with computers and role-playing games may have contributed to his violent ways.

A similar pattern of panicky reporting can be seen in at least some of the initial press coverage of the Atlanta massacre, which emphasized Mark Barton's career as a day trader (a person who uses the Internet to play the stock market in risky but potentially lucrative ways) to the point that it appeared to be at least as relevant to his crimes as the fact that he was the primary suspect in the brutal 1993 murder of his first wife and her mother. The day after the shootings, for instance, the *St. Petersburg Times* banner headline read DAY TRADER CUTS A DEADLY SWATH, and the stories clustered inside the front section under the heading ATLANTA SHOOTINGS included an eleven-paragraph article on the economic riskiness of day trading ("Few Day Traders") that, except for a gratuitous half-sentence reference to the shootings buried deep in paragraph nine, could just as easily have been an ordinary article in the paper's Business section. Meanwhile, the article that ostensibly profiles the 1993 murders ("An Ordinary Man") dismisses Barton's suspected role in those deaths as an "exception" (albeit a glaring one) to his "mostly unremarkable life" and devotes most of its space to the tale of how he met his second wife. Even more astonishingly, the fact that Barton apparently killed his two children and his second wife earlier in the week is barely mentioned at all. To be sure, day trading *is* financially risky, Barton *was* a day trader, and the two offices he shot up *are* involved in day trading . . . but even if the dip in the stock market on the Thursday of the shootings really did cost Barton a lot of money, it's not clear how that would have compelled him to kill his second wife on Tuesday, his children on Wednesday, or (assuming the police's suspicions are accurate) his first wife and her mother six years before that.

I should note that my argument here is based primarily on the initial flurry of news reports on the Atlanta massacre; subsequent events and revelations have changed our collective understanding of what actually happened. Because of the notes he left behind, for instance, we now know (rather than merely suspect or assume) that Barton murdered his second wife and two children. And, roughly twenty-four hours after the shootings (i.e., too late for the following day's morning papers to reflect this), it was revealed that Barton's last trading day was Tuesday, not Thursday, which makes it more plausible that stock mar-

ket losses might have played a role in Barton's murder of his family. The subsequent discovery of these facts, however, doesn't do anything to fix the logical gaps in Friday's news coverage or to explain away the speed and eagerness with which the media were willing to blame day trading for Barton's murders. In much the same way that the first news reports on the 1995 Oklahoma City bombing were too quick to blame Arab terrorists for the event, early press coverage of Barton's crimes was too eager to pin the blame for them on his "dangerous" uses of the Net. Like Smith, Barton appears to have had a history of using violence to solve his problems and, as was the case with Smith, the press seemed less interested (at least at first) in discussing Barton's history of actual violence than they were in exploring his involvement with the Internet.

Not all invocations of virtual culture as a source of real violence, however, are as subtle as those found in the media coverage of the Smith and Barton shootings. In the wake of the Littleton tragedy,[14] a flood of public commentary wrestled with the question of locating the causes of Harris and Klebold's deadly assault. Suggested answers to the "who's to blame?" question ran the gamut from the plausible (e.g., ready access to firearms, inadequate numbers of school counselors) to the dubious (e.g., Marilyn Manson's music—which Harris and Klebold apparently hated [Manson, 77]), the Goth subculture (which isn't inherently violent and which the pair wasn't a part of anyway) to the absurd (e.g., the U.S. House of Representatives responded by passing a bill that, had it become law, would have allowed public schools to display the Ten Commandments on school property—as if Harris and Klebold would have been deterred from their shooting spree had the magic words "Thou Shalt Not Kill" been painted on the walls).

While clearly not all commentators were willing to point fingers at the mass media, the claim that violent entertainment directly led to the Littleton shootings was a recurring theme in the discourse. Writing in *Harper's*, Thomas de Zengotita presented a particularly blunt version of this argument:

We come closest to addressing the situation as a whole when asking how violence in the media influences behavior. Cultural conservatives focus on permissive standards related to content, and surely that content goes way beyond anything imaginable thirty years ago. People who commit these acts always show evidence of

its influence. The Littleton shooters spent a lot of time with *Natural Born Killers* and goth CDs and hate Web sites, but libertarians point out that Charlie Starkweather was inspired by comics and rock and roll, and argue that agency must be attributed to the person, not the muse. So the debate resolves itself into this question: Is the influence of today's media qualitatively different from yesterday's? The answer is obviously yes.

(55)

De Zengotita's comments rely on many of the same rhetorical tactics found in the media coverage of the Smith shootings: guilt by association (do Goth CDs really belong in the same category as hate Web sites?), factual errors (would *libertarians* blame Starkweather's crimes on mass media texts?), and the substitution of unsupported assertion for actual argument ("we come closest," "surely," "obviously," and so on). Beyond this, however, de Zengotita's larger argument reframes the problem in language that invokes the Net as the primary culprit; even when he is specifically referring to TV talk shows or Hollywood films, his operative metaphors—"virtuality," "virtual reality," "new technologies"—come from cyberspace rather than from older media. By implication, at least, what leads de Zengotita to see contemporary forms of more traditional media as "qualitatively different" in their ability to cause harm is the new, hyper-corrupting influence of the Net.

Significantly, one of the most commonly cited scapegoats in the Littleton shootings was *The Matrix*: a film that (1) makes extensive use of stylized violence in a visually striking computer-generated virtual reality and (2) was the nation's leading box office success at the time. Given the film's overall look and feel, it's not difficult to understand why some commentators saw it as a contributing factor to what happened at Columbine. If nothing else, one of the movie's most adrenaline-filled, tightly choreographed scenes depicts the two principal heroes, ultra-cool and ultra-stylish in their black trenchcoats, using high-powered assault rifles to annihilate a squad of security guards and lay waste to the lobby of a high-rise office building: a virtual reality sequence with enough similarities to Harris and Klebold's real-life shoot-out to be seen as an inspiration for their murderous rampage.

However plausible such an interpretation of the film's relationship to the Columbine massacre might seem, however, I think that it ultimately falls short of the mark—and not simply because Harris and Kle-

bold needed actual weapons (rather than just media-enhanced revenge fantasies) to carry out their attack. On the surface, *The Matrix* seems to glorify the slickness of virtual reality and the physically impossible feats of violence that it enables: only in VR, after all, could someone turn one-handed cartwheels while firing multiple rounds from an assault rifle with pinpoint accuracy, while the film's gravity-defying hand-to-hand combat sequences resemble nothing so much as "live" action versions of recent martial arts computer games. Where such a reading of the film begins to fall apart, however, is in its treatment of the film's surface as all-important and its willingness to overlook substantive details from the film's story line. The real world of the film, after all, is one in which sentient machines have enslaved the majority of the human race and plugged them into "the Matrix"—a computer simulation of late 1990s human civilization so vivid as to be indistinguishable from reality—and the quest that drives the film's plot forward is about the destruction of that virtual reality. "As long as the Matrix exists," we're told at one point, "the human race will never be free." Given that the alternative to life in the Matrix is a grungy, lower-tech bombed-out shell of a world—one where hydraulic pistons and rotary-dial phones are "cutting edge" and where the primary food is a protein-laden slop that's comparable to "runny eggs" or "a bowl of snot"—I think it's hard to argue that the film simply glorifies or embraces cyber-technology in a straightforward fashion. If anything, *The Matrix* could plausibly be said to take Birkerts's "refuse it" philosophy to a level that even he might resist, one where the "better," computer-free world that people fight and die for is a post-apocalyptic ecological nightmare.

To his credit, de Zengotita actually recognizes that *The Matrix* has a more complicated relationship to computers and virtual reality than its special-effects-laden surface would seem to indicate (58). At the same time, there is an inherent contradiction in his ability to recognize the nuances and depths to be found in contemporary media texts while simultaneously arguing that the (harmful) effects of those texts are "obviously" visible on their surfaces. For instance, how does de Zengotita manage to see through *The Matrix*'s slickly packaged hyper-violence to its "real" anti-technology message while simultaneously citing *Natural Born Killers* as an "obvious" and "influential" glorification of gunplay? Both films, after all, can plausibly be said to revel in their graphic visual display of brutal shoot-outs, and both can plausibly be said to offer pointed critiques of contemporary media culture. The problem with de Zengotita's claims for these films is not so much that he gets one (or both) of them wrong but that he fails to recognize that, like most (if not all) mass media fare, both are complicated, multifaceted texts that are subject to multiple, and perhaps even contradictory, interpretations.

And it's this polysemic quality that ultimately makes it difficult to predict the specific "effects" of particular texts—from "hate websites" to Horace Walpole—with any accuracy, regardless of whether one is skimming their surfaces or plumbing their depths. To be sure, one can point to recurring patterns of media taste and usage (for example, Doom and Myst are more likely to be played by teens and twentysomethings than by senior citizens) and there are always limits to the plausible interpretations of a text (it strains credibility to read *The Matrix* as a romantic comedy or a nature documentary), but the predictions one can safely make based on those patterns and limits are a far cry from the sort of direct cause-and-effect claims ("Hollywood made them do it") that are the primary rhetorical product of moral panics around "violent" media. When one gets down to cases, real audience responses to specific texts vary too much to be able to say with absolute certainty that *this* film inspires gunplay or *that* medium fosters alienation. Media scholar Henry Jenkins reframes the question this way:

> The key issue here isn't what the media are doing to our children but rather what our children are doing with the media. Eric Harris and Dylan Klebold weren't victims of video games. They had a complex relationship to many forms of popular culture. All of us move nomadically across the media landscape, cobbling together a personal mythology of symbols and stories, and investing those appropriated materials with various personal and subcultural meanings. Harris and Klebold happened to be drawn toward dark and brutal images, which they invested with their personal demons, their antisocial impulses, their maladjustment, their desires to hurt those who had hurt them.          (23)

Jenkins goes on to tell the tale of a sixteen-year-old girl who created a Web site consisting of pop-culture-based writings by teens from across the country:

She had reached into contemporary youth culture, including many of the same media products that had been cited in the Littleton case, and found images that emphasized the power of friendship, the importance of community, the wonder of first romance. The mass media didn't make Harris and Klebold violent and destructive and they didn't make this girl creative and sociable, but they provided them both with the raw materials necessary to construct their fantasies. Of course, we should be concerned about the content of our culture. But popular culture is only one influence on our children's imagination. Real life trumps media images every time.                                    (23)

Jenkins's efforts to the contrary notwithstanding, however, scapegoating "violent media" regularly trumps more nuanced responses to real-life violence. Jenkins's full essay describes his frustrations at testifying before Congress in the immediate aftermath of the Littleton shootings and being the only expert witness present who refused to blame "violent media" for Harris and Klebold's crimes—which, in turn, made him the only witness the mainstream news media didn't pursue for post-hearing interviews. And while Jenkins's commentary did appear in a "quality" national magazine, significantly, it did so in the same issue of *Harper's* as de Zengotita's essay. Moreover, given that the latter was billed on the cover as the issue's number two article, while the former was relegated to the magazine's monthly collection of assorted "readings," it would appear that even in a "quality" magazine like *Harper's*, "Violent media cause real-life violence" is a cover story, but "It's more complicated than that" isn't.

Nevertheless, the Net's effect *is* more complicated than that. The main problem with the public's various cyberspace-related fears isn't so much that there's nothing about the Net that merits serious concern but that such concerns are rarely as novel—or as unique to cyberspace—as they're often made out to be: one can find strikingly similar fears expressed in response to the rise of virtually any communication medium or technology one chooses, from the telegraph and telephone (Marvin) to the present day. To be sure, cyberspace is not a completely safe and trouble-free environment, and if you venture online, it's wise to be cautious about what you believe, who you trust, how much you reveal about yourself, and (if you have them) where your children are.

At the same time, such precautions don't exactly reflect dangers that are unique to the Net: they're pretty good advice for offline life as well.

Part of what makes cyberspace seem to be radically different from "real life"—and thus part of what makes it the subject of hyperbolic fears—is that, to many people, it appears to be an environment that is both out of control and uncontrollable in ways that "real" space isn't. *New York Times* columnist Thomas L. Friedman expresses this particular fear quite plainly, claiming that the Net

is different from radio, television and newspapers in that it is a totally open, interactive technology—but with no built-in editor, publisher, censor or even filters. With one mouse click, you can wander into a Nazi beer hall or a pornographer's library, hack the NASA computers or roam the Sorbonne library, and no one is there to stop or direct you. You interact with the network naked. . . . When you take such a totally open network and you combine it with parents' being able to spend less time building their kids' internal codes and filters, then you add the fact that the Internet is going to become the nervous system of our commerce and society, you have a potentially dangerous cocktail.                (12)

Some of the fear over this lack of control is probably attributable to the lingering novelty of the Net—especially for those people just now beginning to find their way online. After all, this is a technology that most current users had barely heard of (much less experienced first-hand) before 1996 that has a relatively steep learning curve, and that seems to undergo a dramatic makeover (in terms of "essential" new protocols and browser plug-ins) every few months. And while "newbies" may very well feel "naked" in their initial forays online, more experienced users know that it takes more than "one mouse click" to hack anyone's computers (much less NASA's) or to find oneself in any of the online "trouble spots" that Friedman mentions. Thus it's quite possible that some of these fears may disappear as the Net becomes a regular and familiar part of more people's daily lives.

Nevertheless, much of this lack of control is (literally) hardwired into the structure of the Net. While Friedman is simply wrong about the ease with which one can unwittingly stumble onto virtual Nazis and cyberporn,[15] he's right to point out that the Net has no central process-

ing office to manage traffic, no government bureau to regulate it, and no professional guild to control content quality. Nor is it likely that such institutions will come into existence in the foreseeable future (if ever).[16] The Internet, after all, was deliberately constructed as a *decentralized* network in order to protect its basic communicative functions from damage to any specific piece of it: a technical fact that also makes it difficult (and probably impossible) to *control* the Net from any single point. And, in the end, this is one of the most significant obstacles to creating any meaningful rapprochement between cyber-refuseniks like Birkerts and cyber-utopians like Barlow, as the very facet of the Net that most terrifies the former camp is precisely what most exhilarates the latter.

## THE PUBLIC SPHERE

For many of cyberspace's more vocal champions, the Net's built-in resistance to centralized control makes it inherently more egalitarian and democratic than other forms of mass media. At a moment when an overwhelming (and ever-expanding) percentage of the world's media is controlled by an ever-shrinking number of multinational conglomerates (Bagdikian; McChesney; Schiller), one of the primary appeals of the Net for many observers is that it bypasses the media monopoly altogether. Not only does the Net give relatively ordinary people access to a seemingly endless wealth of information from a diverse range of sources, but it also provides them with the unprecedented ability to package and distribute their own ideas to a global audience. And if, as many media critics (Carey; McChesney; Williams) argue, a crucial facet of a healthy democracy is the ability of ordinary people to participate actively in the public sphere as both "speakers" and "listeners," then the Net may be the only form of mass media that has the potential to be genuinely democratic.

The key word in that last sentence, however, is "potential," as a sizable—and perhaps even unbridgeable—gap still exists between the reality of the Net and that democratic ideal. To be sure, in the absence of governmental or corporate gatekeepers, the average Netizen *can* express him- or herself to a global audience in ways that are simply impossible via other forms of mass communication. Listservs, Usenet groups, and personal Web pages (to name only the most obvious exam-

ples) make Net-mediated communication much more interactive and multivocal than that provided via, say, the *New York Times*, CNN, or Universal Studios. At the same time, however, there are at least three sizable barriers to making a truly democratic Net a reality: the hierarchies of power inherent in network architecture, the lack of meaningful access to the Net for huge portions of the global public, and the subtle (yet formidable) gatekeepers of education and literacy.

The first of these barriers—the nature of network architecture—is perhaps the one that is the most difficult to overcome. In theory, at least, access to the Net can be expanded to include a larger and more representative portion of the population, while educational policies and practices can be improved to help make expanded access truly meaningful (though, as I argue below, neither of these issues is likely to be resolved as easily or as quickly as many cyber-utopians would like to believe). The hierarchies inherent in the architecture of computer networks and the servers that run them, however, don't appear to be quite so subject to change.

In a nutshell, most contemporary software and hardware design places the ultimate power to configure, maintain, and control any given server or network in the hands of a single person: the systems administrator (SysAdmin).[17] To be sure, a SysAdmin's job is to manage computer resources so that others have access to them, and this duty inevitably requires SysAdmins to share portions of that power with other users. If you have an Internet account, for instance, your SysAdmin has given you a measure of power over his or her server(s)—for example, you have permission to read and write to certain directories on a particular hard drive and to make use of the system's link to the Net—that is unparalleled in other media. A comparable form of power sharing by a newspaper publisher, for instance, would require the publisher to print and distribute stories written by any and all of the paper's subscribers on a regular basis. Nevertheless, this power appears more revolutionary than it actually is precisely because of the ways that other media have taken over (and eviscerated) the public sphere: in a society where the average citizen rarely has access to a public forum where he or she can *share* (and not just consume) opinions and ideas, the ability to "publish" one's thoughts where potentially millions of people might read them is a dramatic deviation from the status quo. At the same time, the extent to which this power actually makes the Net a demo-

cratic space is questionable, and we need to be cautious about conflating the power that individual users have to "speak" online with actual power over the networks that comprise the Net.

To illustrate this point, I want to look at a specific example of an "open" online forum: a cultural studies listserv called CULTSTUD-L.[18] In terms of its normal day-to-day operations, the list appears to be very democratic and egalitarian: anyone with a working e-mail account can subscribe to the list, any subscriber can contribute to the discussions, and (with the exception of some rudimentary spam/security filters) there are no technological restrictions on what subscribers can say in their posts. Even nonsubscribers can read the list's archives as long as they have access to the Web. To be sure, CULTSTUD-L is not a virtual soapbox where any and all forms of public expression are acceptable. If nothing else, the list's focus on cultural studies places implicit filters on the conversation and, as is the case with any community (virtual or otherwise), prevailing social norms and pressures create de facto limits on who feels free to speak, what subjects people are willing to discuss, and what sort of on-list behavior is deemed appropriate. Nonetheless, in the absence of formal restraints on who can join the list and what can be said there, on-list conversation tends to be free, open, and spontaneous.

Still, for all of the openness of the list, CULTSTUD-L isn't a real democracy—nor can it readily be made into one. In a genuinely democratic organization, after all, the people who make up the group have a significant measure of control over the structure and governance of the organization: if they disapprove of their leaders, they have the ability and the authority to replace them peacefully; if they want to change the basic rules by which the organization operates, they have mechanisms at their disposal to implement such changes. Such conditions, however, simply don't—and can't—exist in a networked environment like CULTSTUD-L.

As is the case with most listservs, most of the power to control the actual shape and governance of CULTSTUD-L remains in the hands of one person—me. While I usually refer to myself as a "list manager," the more common title (largely because of its prevalence in the support documentation for most listserv software) is the proprietary one of "list owner"—and even that is something of a euphemism. Because essentially I'm a dictator: a benevolent one, I hope, but a dictator nonethe-

less. In the final analysis, the list's subscribers—individually and/or collectively—have no power to regulate the list: that is, they don't have access to the server in ways that would allow them to (re)configure the list's basic settings for who can subscribe, who can post, who can read the archives, whether the list is open or moderated, what content is available on the list's Web site, and so on. These are powers reserved for me as the list's "owner," and I can invoke them without seeking permission from—or even giving notice to—the list's membership. Moreover, my status as list manager isn't—and can't be—determined by democratic ballot. Should list members be unhappy with my governance of the list, they have no way to overrule my policy decisions or to vote me out of "office."[19] To a large extent, this is because the *ultimate* authority over the list rests not with me but with the SysAdmins who run the server that CULTSTUD-L calls home and who have given me *just* enough authority to run the list. In much the same way that I can unilaterally restructure the list's shape and policies, the university's computing staff can, at any time they see fit, reconfigure the list's server—e.g., shutting it down (temporarily or permanently), changing the software used to support and maintain listservs (and thus potentially changing the possible ways the list itself operates), refusing to host listservs altogether, deleting users' accounts, and so on—without having to inform (much less get consent from) anyone who has an account on the server.

The example of CULTSTUD-L is not a unique or isolated one. The Net is almost entirely composed of hierarchical networks and virtual environments such as this: environments where access to (and thus control of) the heart of the system is severely restricted. And, if for no other reasons than those connected to issues of network security and viability, such conditions are not likely to change anytime soon. A truly open-ended network—one where anyone who logged in has access to the core operating system, the network software, the accounts and passwords for other users, etc.—runs the high risk of degenerating quickly into chaos and anarchy.[20] The main gap between cyber-democracy and "real" democracy, then, is that even in online communities where "the public" is deliberately given a voice in how systems are configured and governed, such "democracies" still depend on the willingness of the relevant SysAdmin to follow through on publicly expressed mandates.[21] So while I believe that it's possible to create places online

where *democratic participation* can take place, the hierarchies of access that are built into the hardware and software of networked environments make it far more difficult (if not impossible) to actually make the Net a space for *participatory democracies*.

The second major barrier to online democracy that I want to address here is the question of access. While I would maintain that the Net provides ordinary users with something closer to an ideal public sphere than other media do, it's debatable whether most Net users qualify as "ordinary" members of the broader population, as the actual "public" who can be found online remains a relatively small and privileged one. And while statistics on how many people actually use the Net need to be taken with a grain of salt,[22] those that exist suggest that, as of late 2000, more than 40 percent of the United States—and more than 95 percent of the world—are not online in *any* capacity at all (Nua Internet Surveys).

The fact that the Internet is a relative newcomer to the realm of public communication undoubtedly accounts for some of those sizable numbers, and I think that it's reasonable to expect the online population to continue to grow for several years to come. It is not clear, however, that the Net is expanding anywhere near as rapidly as people predicted it would; for instance, in 1995, Nicholas Negroponte forecast one billion Net users worldwide by 2000 (182), but the *highest* estimates for global users as 2000 drew to a close placed the actual total at less than half of that. In spite of its continued growth, then, it's highly unlikely that the Net will achieve the sort of (near-)universal penetration that currently exists (at least in the United States) for telephones, radio, and television in the foreseeable future.

Of course, not everyone agrees with such pessimistic predictions. For instance, David Boaz, "vice president of the libertarian Cato Institute," told the *Washington Post*:

> We've got a new technology spreading more rapidly than any new technology has spread in history. . . . And of course it doesn't spread absolutely evenly. Richer people always adopt new technology first—and that's not news. There's no such thing as information haves and information have-nots. . . . There are have-nows and have-laters. The families that don't have computers now are going to have them in a few years. (Quoted in Schwartz, A-1)

Even if such claims are true for the United States (which, for reasons I discuss below, I seriously doubt), they're certainly not applicable to most of the rest of the globe. Given that 65 percent of the world's households still don't have basic telephone service ("Wired World Atlas," 162) and that major telecommunications firms aren't exactly racing to change that (Wresch), it's hard to imagine that "in a few years" more than a tiny fraction of the 5.9 billion so-called "have-laters" around the globe will even have the theoretical potential to go online (much less actually be there).

Ironically, one of the best examples of the global gap between information haves and have-nots comes from a 1998 issue of *Wired* magazine, which included a map designed to show the relative "wiredness" of different nations: a map where the size and color of the boxes used to represent individual countries were determined by each nation's relative penetration of telephone lines and television sets ("Wired World Atlas"). Thus, a wealthy, media-saturated nation like the United States was represented by a large yellow rectangle, while a poorer, largely unwired country like the Democratic Republic of Congo was represented by a tiny purple square. As a visual display of the global distribution of phone lines—and thus the *potential* for global distribution of computer networks and online capabilities—the disparities between nations (and, more significantly, entire segments of the globe) are stunning. For instance, Monaco, the world's second-smallest nation but one of the wealthiest and *the* most heavily wired, is represented by a huge yellow box that's almost bigger than the entire continent of Africa. Moreover, Africa is apparently so unwired that *twenty-two* nations don't even rate a name tag on the map (they're simply minuscule, unmarked squares squeezed into the center of the continent)—an ignominious fate that befalls no other countries anywhere on the globe. However wide the Web may actually be, the *Wired* map demonstrates that it's still a long way from living up to the "World" portion of its full name.[23]

In the United States, the magnitude of the information have/have-not gap isn't as great as it is globally, but it remains significant—and largely for the same reason that it does in the unwired portions of the world: economics. Going (and staying) online, after all, still requires a sizable expenditure of money for hardware, software, and Internet service. And with economic surveys indicating that the gap between the

economic haves and have-nots in the United States continues to widen (Schor), it is not surprising that media-use surveys continue to show that low- and moderate-income households are still less likely to be Net users than high-income ones.

Part of the reason for this is that PCs remain expensive to buy and use. To be sure, when measured according to "bang for your buck" (as *PC Magazine* likes to describe it), computer prices have plummeted steadily for at least a decade now (if not more): the same money you would have spent ten years ago on a dual floppy drive system with no hard drive would buy a multimedia Pentium 4 system with all the silicon bells and whistles you could hope for today. Nevertheless, until very recently, the average price of a low-end home computer remained fairly stable—you still couldn't buy a new computer system for much less than $1,000—because the *trailing*-edge technology simply drops off the market completely before it actually becomes cheap enough for lower-income households to buy it.

Moreover, recent shifts in the hardware market toward affordable computing—in particular, the boom in sub-$1,000 PCs[24]—haven't changed the real costs of owning and operating a computer as significantly as industry cheerleaders suggest they have. The range of ways that hardware manufacturers and retailers have brought the (apparent) price of computers down varies wildly, and I won't pretend to account for all of them here. Most, however, revolve around cutting prices by skimping on important features and/or hiding the real costs of purchasing a system in the fine print of potentially seductive advertisements. For instance, a number of retailers and national Internet service providers (ISPs) have formed partnerships that claim to offer rock-bottom prices—as low as $99—on "full" systems. If these offers were even half as good as they appear to be on the surface, then maybe Boaz's claims about have-nows and have-laters would hold water. But a closer look at the details and obligations associated with buying those "cheap" systems reveals that the bottom line for consumers remains a pricey one. For starters, that "$99" computer is as bare-boned as they come in terms of basic features (e.g., RAM, hard disk size, processor speed), and if you want a printer or a monitor, the price goes up, as those "peripherals" are sold separately.[25] Moreover, the bulk of that deep "discount" comes in the form of a mail-in rebate that also requires you to purchase a multi-year service contract with the ISP half of the partnership. All of

which means that before you can walk out of the store with that "$99" computer, you have to pay the full list price of the system, plus the cost of a monitor (and probably a printer, too), and at least $700–$800 for the service contract.[26] And then you get to wait eight to ten weeks for a $400 rebate check. At best, then, your net cost for this *low-end* system still comes to (surprise!) about $1,000.

Beyond the deceptiveness of such promotions, it's also worth noting that three years (the typical length of these service contracts) is an eternity in computer time. The laptop I used to complete this essay, for instance, is the fifth different computer I've owned in the past decade. Each of those machines was near (though never quite at) the leading edge of the available technology when I acquired it, but each of the four that I've retired (as well as my current laptop) took less than two years (and as little as six months) to fall behind the *trailing* edge of the market: i.e., the point where no major manufacturer still offered a comparably equipped machine as part of its standard product line. Not only does this render a computer purchase tied to a three-year service contract a less-than-stellar bargain—that service contract may very well outlast your PC—but it helps to underscore the extensive investment required to stay online over time, as hardware and software become obsolete far more quickly than other comparably priced items.

Of course, for many people, some of the "need" to buy a new computer every two or three years is nothing more than the consumption-crazed desire to have the hippest, newest cybertoys on the block. But there are also a range of practical pressures behind the drive to replace or upgrade with some regularity. For starters, older computers typically have a harder time handling newer software and/or peripheral hardware, assuming they can handle it at all: a limitation that can be frustrating (if not debilitating) when it comes to sharing files with other people, even if you never use your computer to go online. Second, when older systems need repairs, it's usually more difficult to find affordable parts for them, and they often lack the ability to handle upgrades that might bring them up to speed with newer machines.[27] Finally, older machines are typically more limited in terms of where they can take you online, as content providers are often more intent on crafting Web sites and coding virtual environments that require multimedia capabilities that older computers simply can't handle.

By way of comparison, major shifts in other technologies rarely (if

ever) render older machines fully obsolete. A ten-year-old car in good working order will still get you around town, even if it doesn't have four-wheel-drive-on-demand or ergonomic seating; a fifteen-year-old TV in good working order will still show your favorite programs, even if it's not cable-ready or equipped with "picture-in-picture" capability; a twenty-year-old refrigerator in good working order will still keep your milk cold, even if it lacks a fancy icemaker or a door that beeps when you leave it open too long. But a computer as little as five years old, no matter how well its various pieces work, may simply be incapable of running the software necessary to access large portions of the Net. As Clifford Stoll notes:

> Despite having few moving parts and little to wear out, these devices have short life spans. They're discarded before they break. . . . An original IBM PC, now over ten years old, is fully obsolete. Likely, it will still work perfectly and do everything it was built for; after all, the silicon and copper haven't deteriorated. But you can't get software for it any longer. Who could run a computer without a hard disk? What word processor can squeeze into 64 Kbytes? Within two years, the value of a computer drops in half. Within five years, it's pretty much been superseded. And within a decade, you find them at Goodwill. (69–70)

In short, buying a new computer—even if you're willing to take the steeper economic plunge of a high-end, no-gimmick system—makes it likely that in three to five years (if not sooner), you'll either be buying another computer or you'll have a very expensive doorstop.

Finally, and perhaps even more important than the question of the economics of buying and using a computer, however, are the surprisingly underdiscussed questions of education and literacy. Without denying that there's an important learning process associated with any communication technology—no one, after all, is born with an intuitive understanding of how to use a telephone or with a full working knowledge of the cultural codes necessary to make sense of the average evening of prime time TV—the fact remains that using the Internet effectively requires that one know how to read, to write, to type, and to be at least minimally competent with a computer. And in the end, these skills—or, more accurately, the lack thereof—may matter even more

than economic barriers when it comes to limiting the online population to a relatively small and exclusive club. Even if a magical financial windfall allowed us to put a modem-equipped computer in every classroom and household in the country (or, as long as we're pipe-dreaming, to build telecommunication networks that would fully wire the world), such economic changes would still not amount to very much in terms of broadening the online population in any meaningful way without simultaneous shifts in priorities and funding toward bolstering basic educational skills. And, unfortunately, the current public discourse around closing the gap between the information haves and have-nots seems to be largely unconcerned with the relatively basic question of giving people the knowledge and skills necessary to use the hardware and software necessary to use the Net.[28]

One would think that some of the strongest advocates for such educational reforms would come from the ranks of professional educators. Sadly, however, academics writing about cyberspace have all too often been silent on this question. A somewhat dated, but still glaringly problematic, example of this oversight is a 1995 anthology, *Public Access to the Internet* (Kahin and Keller), a collection of papers presented at a 1993 conference on the topic. The book includes seventeen essays, all of which are ostensibly concerned with the problems of bringing more of the general public online . . . and only one of these (Civille) deals with economically disadvantaged users (or would-be users) at any length. And it addresses the question of literacy and education for only about two pages; the bulk of the paper is devoted to laying out statistical evidence proving that (surprise!) poor people are not heavy users of the Internet.[29]

Worse than being silent, however, academic commentators on the Net have too frequently been complicit in excluding large portions of the population from "the public" whose world the Net is transforming. Too often it seems that we discuss cyberculture—whether we praise it or condemn it—as if our experiences online were universal (or at least universalizable). Granted, the body of scholarly literature on cyberspace is growing almost as fast as the Net itself, and I won't pretend to have gone through every scholarly book, article, and journal on the subject with a fine-tooth comb, but to date I've encountered relatively few scholars writing about their experiences online who have also been self-reflexive enough to note that those experiences are rooted in (1)

higher than average levels of literacy (computer and otherwise) and (2) heavily (if not wholly) subsidized access to the hardware, software, and networks that are necessary to use the Net in the first place.[30]

### CONCLUSION(?)

Given that I began this essay by refusing to offer predictions about where the Net would take us tomorrow (much less next year or in the coming decades), I'm loathe to end with anything that feels like a pat conclusion. But I do want to offer a few closing thoughts.

I think it's important to recognize that, as a relatively new technology, the Internet has yet to fully come into its own. We're still very much in a moment where both our uses of and our expectations for the Net are often rooted in our visions of older forms of communication. Cyber-skeptics, for instance, often seem to be working from the assumption that the Net is—and should be—nothing more than a new conduit for already existing modes of address. So they look, for instance, at face-to-face conversation (or some idealized notion of it, anyway), see how difficult it is to duplicate online what they value most about that form of communication (e.g., the warmth of a smile, the tangibility of physical presence), and declare the Net to be a failure.[31] Cyber-utopians, on the other hand, tend to reverse this focus in equally problematic ways: i.e., they look at the inherent drawbacks of face-to-face communication (such as judging people by their appearances rather than their words or deeds), see ways in which these can be circumvented or eliminated online, and declare the Net to be a success.[32] In either case, however, what makes such assumptions troubling are the ways that they lead us to assess the value and impact of new technology according to inappropriate standards.[33]

In many respects, such problematic assumptions aren't all that surprising. After all, the formative years of almost any new communication technology are often devoted to awkward attempts to use that technology as little more than a new means of delivering some older form of communication. The early years of cinema, for example, frequently saw filmmakers place static cameras in front of traditional theatrical performances. It took years for such uniquely cinematic devices as close-ups, pans, dolly shots, zooms, and montages to develop into the norms of a new and different medium for storytelling. Similarly, even though magnetic recording tape was available as early as the 1940s, it took at least until the late 1950s (or perhaps even the late 1960s, depending on which version of popular music history one believes) before the music industry regularly began using the recording studio as more than a place to try and capture an artist's "live" sound on tape: splicing, overdubbing, multitracking, and similar studio techniques that are now taken for granted (at least in the industrialized West) were not instant developments of the new technology.

In the current context, what these historical examples should teach us is that, even while the Net is already changing our world in visible and significant ways, we can't begin to predict what its real impact is going to be until it takes a turn toward a mode (or, more likely, several modes) of expression that are *unique* to cyberspace. There are, of course, already places you can go and things you can do online that can't readily be duplicated either by other media or in "real" life. More often than not, however, such uses of the Net are overshadowed and outnumbered by more mundane ones: for every Web site that experiments in creative, groundbreaking approaches to design, there are probably a dozen (if not more) that are merely online versions of offline texts; for every MUD or MOO that stretches our notion of what sort of worlds we can build in cyberspace, there are probably twenty chat rooms that do their best to duplicate existing offline environments like bars and coffeehouses. And until those proportions start to shift in the other direction, the Net's ultimate effects remain impossible to predict with any precision.

In the meantime, I think we need to resist the temptation to assess the Net's effect in broad terms: after all, depending on where and when you're looking at it, the Net is simultaneously good *and* bad, empowering *and* alienating, educational *and* misleading, populist *and* elitist. Which means that the questions we most need to be asking are not the broad ones that have simple binary answers but the messy and complicated ones that require us to make nuanced distinctions between the different ways that specific people use the Net in particular contexts. For in the end, the only simple claim that we can safely make about the Net's social and cultural effects is that those effects are (and will continue to be) incredibly complicated. If we truly want to understand the Net's impact, we need to avoid simply retreating to one of the camps at

either end of the cybermania/cyberphobia spectrum. Instead, we need to be able to see the Net in all its complexity and to wrestle with the question(s) of its impact in correspondingly complicated ways. Of course, such an approach to studying cyberspace is a difficult one. But if our main goal is not simply to produce easy answers about the Net's effects, but to try and recognize the best ones, then that difficult task is one that we need to embrace more fully.

## NOTES

I would like to thank Alice Crawford, John Hardin, Barbara Jago, Lisa Naka-mura, and Greg Wise for providing helpful comments and insights. Extra-spe-cial thanks due to Beth Kolko for her careful and thoughtful editorial work.

1. Much as I would like to take credit for coming up with this subtitle on my own, the pun in question comes from a student reporter at Kansas State University in 1995. Conducting a telephone interview with one of the organ-izers of a conference sponsored by the KSU English Department, the reporter wrote up the story with the conference's title—"Western Humanities, Peda-gogy, and the Public Sphere"—spelled out the way she heard it: " . . . the Pub-lic's Fear." I can't even take credit for being the first person to invoke this gaffe in the context of a scholarly article on cyberspace; that honor belongs to Joseph Tabbi (233).

2. As a technological reality, the Internet could reasonably be said to date back to the development of ARPANET by the U.S. Department of Defense in the 1960s and 1970s. As a prominent *cultural formation* (see Grossberg, 69–70; Rodman, 158–161, 165–169), however, the Net is a much more recent phe-nomenon than that.

3. Perhaps the most commonplace example of this is the default label—"The Internet"—that Microsoft gives to the desktop icon for its Web browser. One can also find this slippage, however, in settings where the stakes are much higher. For instance, the U.S. Department of Justice's failed attempt to defend the constitutionality of the 1996 Communications Decency Act focused almost entirely on ways to keep minors from accessing Web-based "adult" materials: e.g., the use of credit cards as de facto adult verification devices for logging into age-restricted Web sites, filtering software for Web browsers, and the implementation of special age-rating HTML tags, etc. The fact that the CDA would also have applied to e-mail, Usenet groups, MOOs/MUDs, IRC, and other non-Web-based forms of CMC—and that none of their proposed

safeguards would have worked in such environments—appears to have slipped completely by the Department of Justice (*Reno v. ACLU*).

4. The Web was so new in 1994 that it received the barest of mentions in two highly regarded "how to" books on the Internet published that year. Adam Gaffin's *Everybody's Guide to the Internet*—a book sponsored by the Electronic Frontier Foundation—devotes all of two pages (out of 188) to the Web. Kevin Savetz's *Your Internet Consultant: The FAQs of Life Online* fares slightly better, mentioning the Web on a whopping eight pages out of 414.

5. The second edition of *Hoover's Guide to Computer Companies* (1996) does-n't include Netscape in its list of 108 "industry leaders," though it does show up in its supplemental list of 148 "selected industry players" (336) and tops the list of "the 200 fastest-growing companies" in terms of one-year sales growth (14). While Netscape's future certainly looked bright in 1995 (the last fiscal year cov-ered by this edition of the guide), it is worth remembering that in an industry where major players can (and do) go belly-up almost overnight (like Atari and Commodore), a future that *looks* bright is not necessarily a guarantee of success.

6. In 1994, after all, Windows 95—which included Microsoft's first serious attempts to provide Internet-related software of any sort—was still a year away from public release . . . though even that wasn't exactly a certainty. The oper-ating system's name notwithstanding, a host of development problems had many industry observers predicting that Windows 95 wouldn't ship until at least 1996.

7. For example, Nicholas Negroponte's 1995 best-seller *Being Digital* devotes more than 230 pages to extolling the blissful virtues of digital culture, while rel-egating discussion of the potential downsides of the changing socio-technolog-ical landscape (for example, questions of access, censorship, privacy, regulation) to a breezy eight-page afterword tacked onto the end of the book's paperback edition. Not surprisingly, given the brevity of this section, Negroponte doesn't offer much in the way of solutions to these problems besides a few sound bites: e.g., proclaiming that "cyberspace . . . should be private" (236), "national law has no place in cyberlaw" (237), and would-be cyberspace regulators should "lighten up" (235). Clifford Stoll's more pessimistic best-seller, *Silicon Snake Oil*, is slightly more balanced than Negroponte's, at least insofar as he doesn't limit the positive things he has to say about cyberspace to the margins of his text. At the same time, virtually all the benefits he sees to the Net are either limited to a *very* small fraction of the population (scientists engaged in large-scale, multina-tional research projects) or buried so thoroughly under the weight of his more scathing criticisms that they hardly seem like good things at all.

8. The specific contrast here isn't entirely fair to Rheingold, whose cele-bration of the WELL predates the rise of the Web by several years. At the same time, the moment in cyberculture reflected in Rheingold's book wasn't

necessarily any more dominated by WELL-like environments than today's cyberspace is. "Gopherspace," for example, consisted of millions of sites that were often nothing more than online databases: there's nothing particularly community-like, after all, about an archive of the National Oceanographic Administration Agency (NOAA) weather data or an electronic storehouse of government press releases.

9. Breslow's position on the Net may be somewhat less extreme than my summary here allows, as he briefly acknowledges that many people use the Net to create "friendships and systems of alliance" that would otherwise not be possible (255). At the same time, he also shrugs off such possibilities as trivial in the face of multinational capitalism's ability to use the Net to eliminate the opportunity for worker solidarity to come about.

10. Pinpointing the starting date of a moral panic isn't an exact science, by any means, but a plausible candidate here is the cover story for the 3 July 1995 issue of *Time* magazine, which showed a wide-eyed child gazing at a computer screen with a headline that read, ON A SCREEN NEAR YOU: CYBERPORN. Jonathan Wallace and Mark Mangan provide a useful discussion of the dubious study on which the *Time* story was based (125–152) and how it came to be an important piece of "evidence" in the congressional push to regulate cyberspace (173–191).

11. The basic argument here was that the unprecedented danger of the Net lay in its ability to serve as a gateway through which the most vile examples of pornography and obscenity imaginable could enter—and violate—the pristine sanctity of private domestic space.

12. A partial list of various pieces of the Go network includes sites for ABC, ABC News, ABC Sports, Disney, ESPN, five major sports leagues/associations (NASCAR, NBA, NFL, NHL, and WNBA), MrShowbiz, and Family.com.

13. In seven separate incidents across two states from 2 July to 4 July 1999, Smith shot at more than a dozen people, killing two and injuring nine, before killing himself.

14. On 20 April 1999, Eric Harris and Dylan Klebold—part of a group of outcast students known to their peers as the Trenchcoat Mafia—went on a shooting spree inside Columbine High School in Littleton, Colorado, killing twelve students and one teacher before taking their own lives.

15. Annette Markham provides an eloquent explanation of the flaws in the sort of "one click" assumption that Friedman makes here. Describing her own attempts to go online for the purpose of interviewing "heavy" Net users, she writes: "Going online took a long time and involved far more than turning on the computer, tapping out words on the keyboard, and pressing the send/enter button. It was more like entering a strange new world where the very meta-physics defied my comprehension of how worlds should work. To even begin to understand what was happening online, or to communicate with other users, I had to learn how to move, see, and talk. Until I learned these basic rules, I was paralyzed in the dark, isolated from that world as much as I would be if I were a mind without a body on the planet Earth (or so I believe)" (23). The steep learning curve that Markham describes is all the more significant in light of the fact that she was *trying* to get online to accomplish specific tasks, yet found both the technology and the social norms of cyberculture to be intimidating and (initially) difficult to master—which makes it all the more implausible for Friedman's hypothetical child Web surfer to be a single click away from unspeakable cyber-horrors.

16. A minor caveat is necessary here, insofar as there are countries (e.g., China) that attempt to monitor, regulate, and control the flow of information on the Internet within their borders. Such efforts, however, depend on all Net traffic being routed through a government server before being made "pub-licly" available: an immense undertaking that (1) is only possible in countries where most telecommunications facilities are already under tight government control and (2) has little (if any) effect on Net traffic in the rest of the world.

17. In some organizations and institutions, circumstances can result in root access being shared by a small handful of people, which affords a humane solu-tion to the problem of always having to drag the same person out of bed when the server crashes at three o'clock in the morning.

18. For more information on the listserv itself, see http://www.cas.usf.edu/communication/rodman/cultstud.

19. Having outed myself as a cyber-dictator, I feel compelled to explain that I *want* the list to remain as open and democratic as is possible (given the limi-tations of the environment) and that I do my best to "rule" with a light hand . . . though this is not always as easy as it sounds. In a twist of fate that would seem highly implausible had it been used in a Hollywood movie script, while I was sitting at my computer writing an earlier draft of this essay, a brief—but ugly—flame war broke out on the list that led me to invoke (for the first and hopefully last time in the list's history) the ultimate penalty for an individual subscriber: banishment from the list. If nothing else, the incident underscores the inherently undemocratic nature of most networked environments. Ordi-nary list members had no power to control the situation except to (a) plead with me to "do something" about it or (b) fight flames with more flames (Almost by definition, the obvious third option—to try to persuade the person to behave—is ineffective in a flame war. If reasonable discussion was likely to settle the matter, there would probably have been no matter in need of set-tling), and no authority to enforce a disciplinary decision of any sort.

20. See Allucquère Rosanne Stone (99–121) for an informative discussion of an early BBS system called CommuniTree and how its demise at the hands of "hackerkid" interlopers (who took advantage of the system's open access

architecture in a "nearly continual assault that the system operators were powerless to prevent") helped to make hierarchical mechanisms for "surveillance and social control" a standard aspect of network architecture.

21. One well-known example of an online "democracy" that has struggled with this gap is LambdaMOO, which has experimented with a democratic system of ballots about MOO policy for several years now—and where, on a handful of occasions, the MOO's "wizards" (the SysAdmins) have refused to implement "the will of the people." Short of gathering together offline and storming the building where the MOO's server is housed, however, "the people" of Lambda have no actual power to enforce or implement their will, nor can (or should) the wizards simply give them that power.

22. For example, the decentralized nature of the Net makes census taking difficult, the Net's rapid and continuing growth renders any data one collects on its overall size instantly outdated, and what actually counts as "using the Net" varies dramatically from survey to survey.

23. Space does not permit me to discuss this point in full detail, but it is worth noting that the use of ASCII as the standard character set for most online communications and the default status of English as cyberspace's lingua franca combine to place sharp restrictions on which global populations can (and can't) readily assimilate themselves into the current cyberculture.

24. According to one news report, the sub-$1,000 segment of the market "has exploded, growing from about 13 percent of the market in January 1997 to about 46 percent in June [1998]," and at least some industry figures were anticipating that that figure would rise to 67 percent within six months (Gussow, 13).

25. Insofar as one can potentially use a computer without ever wanting or needing to print anything out (though I confess that I've never met anyone who used a computer in this way), I can understand how a printer might safely be seen as a "peripheral." Monitors, on the other hand, aren't exactly an optional piece of a completed system—any more than a steering wheel is an optional piece of a functioning car.

26. This figure may actually be deceptively low, given that most of these contracts are based on the lowest tier of the ISP's service: that is, you're paying for a limited number of hours per month or access to that ISP's basic offerings. If you want to be online more than, say, twenty hours per month, or if you have any interest in your ISP's "premium" content, the actual costs for your Net use will rise accordingly. It's also worth noting that the penalties for early termination of your service contract are substantial enough to guarantee that, one way or another, you will pay your ISP several hundred dollars.

27. Two of my four upgrades came about because parts were no longer readily available to repair my "obsolete" machine. After combining inflated prices for scarce parts with high bench-labor rates, it was actually cheaper for me to

buy a new computer than to repair the old one. In one case, I was told that I could try to upgrade pieces of the system—by adding more RAM, replacing the CPU, and so on—but that my system's BIOS was so old that it might not be able to handle the newer chips anyway.

28. "Though it should be blandly obvious to readers that access to a computer and the skills to make use of it are prior conditions for a person or a group of people to go online, surprisingly little Internet research follows through on this basic premise" (Sterne, 192).

29. A notable, and important, exception to this trend is William Wresch's *Disconnected: Haves and Have Nots in the Information Age.*

30. Even scholars whose research and politics would suggest that they would know better have been known to fall prey to utopian reveries about the democratizing effects of cyberspace, as is evident in this quote from an essay on critical pedagogy and the Internet: "For example, assuming access to a modem, and the wish to do so(!), it is not at all difficult to envisage a peasant-born woman of color from a remote village conversing on equal terms with a white male professor located in one of the world's most prestigious universities" (Lankshear, Peters, and Knobel, 164).

31. For example, Clifford Stoll complains that online pedagogy eliminates the possibilities for informal face-to-face interaction between teachers and students ("The computer is a barrier to close teaching relationships. When students receive assignments through e-mail and send in homework over the network, they miss out on chances to discuss things with their prof. They don't visit her office and catch the latest news. They're learning at arm's length" [118]), while overlooking the (sad) fact that the sort of "close teaching relationships" he envisions are hardly the rule in offline pedagogical environments. Ingrid Banks offers a similar critique of the virtual classroom, in which she brushes aside reports from colleagues who assert "that certain students are willing to say things on line [sic] that they would not mention in the classroom" because she doesn't "like the idea of students' hiding behind a computer monitor" (B-6). Mind you, this isn't a bad reason for an individual teacher to resist taking his or her own courses online, but it's a bit of a logical leap to move from a desire for face-to-face interactions with one's students to the broader claim that "reliance on technology threatens the essence of teaching."

32. Perhaps the most oft-cited example of this phenomenon is an MCI television ad from 1997 that proclaimed the Net to be a space where "there is no race. There are no genders. There is no age. There are no infirmities. There are only minds." For a more extended critique of this ad, see Nakamura.

33. Christopher Anderson makes a similar argument with respect to traditional aesthetic critiques of television: "We refuse to admit that what appears to be the impoverishment of television programming may, in fact, arise from our

misrecognition of the medium, from our attempts to identify it in accordance with previous cultural forms and to define it with critical methods developed for those forms. (If a misinformed taxonomist tosses a frog from a cliff and it crashes to the ground, must we blame the frog for failing to fly?)" (114–115).

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# The Internet, Community Definition, and the Social Meaning of Legal Jurisdiction

**PAUL SCHIFF BERMAN**

Consider the following scenario. A British physicist, participating in an online discussion group, denigrates people of Canadian descent. In response, a Canadian graduate student at an American university posts a message to the group, using the university's computer system. This message falsely implies that the physicist is a pedophile. The physicist, enraged, wishes to bring a suit against both the student and the university for defamation. Leaving aside the physicist's likelihood of success on the merits of his claim, the first question to be answered is, Where can the suit be brought? In Great Britain, where the professor resides? In Canada, where the student is a citizen? Or in the United States, where the university is located?[1]

Interestingly enough, the problem is not much easier if we transplant this dispute so that it occurs entirely within the United States. Indeed, if our physicist were from California, our student from Maine, and our university located in New York, we still would be hard-pressed to determine in which *state* the suit could be brought. In legal terms, this question concerns *jurisdiction*, a doctrine used to decide whether a court has legitimate adjudicatory authority over the parties to a conflict. Historically, jurisdiction has been determined primarily by reference to the territorially based power of a sovereign. Because a person physically present in New York State literally could be seized by state law enforcement officials, New York courts could legitimately subject that person to jurisdiction. Under this doctrine, the student and the

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