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Cyberspace, U.S.A.

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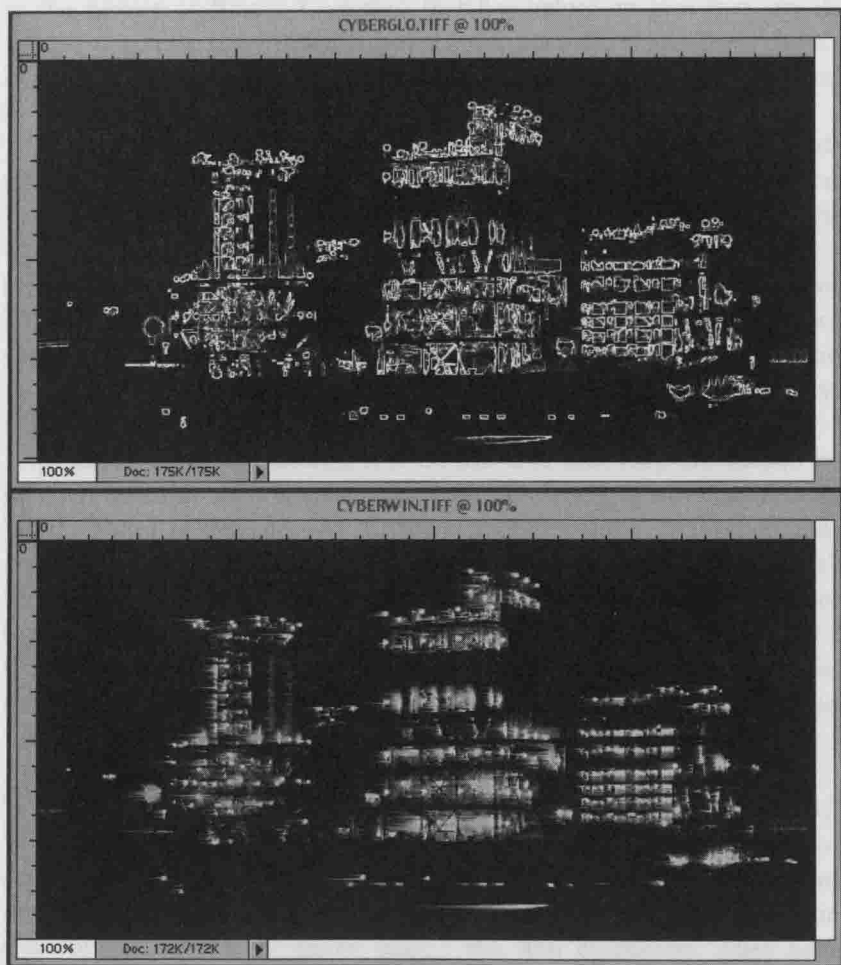
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as international audits, for something harder to define—a genre but—
interactive. In reads, David Harvey further obtains, for example, a spate

Cyberspace, occupying no actual place, is often imagined with two basic features: grids and glowing lights. Image by Nate Ayers.

Cyberspace, U.S.A.

I write not of Thomas Jefferson's town, where I live, nor of the American South to which I have devoted my working life. Rather, I write of a new American place, one we cannot see but whose effects we increasingly feel: "cyberspace." That place, simultaneously metaphorical and tangible, has touched every part of the United States. Information surges along networks of copper and glass, weaving ever tighter webs across the country and the world. Those networks define a space at once empty and densely populated, desolate and hopeful. By its very nature, cyberspace is the space among other places. It touches them all but is possessed by none.

At one level, cyberspace is merely bits of electronic information, zeroes and ones, stored on computers and networks. At another level, it is more concrete, addresses and linkages whose names people know and can read. And at the sites where people interact with one another, cyberspace becomes physical, filled with color, sound, and image. Even though those places are merely projected on screens, people have fallen in love there, have cooperated, conspired, traded, and raged.

So powerful has this new kind of space become that some observers worry that cyberspace may efface the country it is colonizing with such speed. The portals of cyberspace, critics charge, pull people into basements and bedrooms, encapsulate them in lonely fantasies of sex, greed, and violence, replace real communities with virtual ones. Other

commentators hold out the hope that cyberspace will unite people by affinity and passion rather than by the mere accident of physical locale. These optimists believe that the fabric of American society can be strengthened by the new networks. Either way, the stakes are high.

Cyberspace is not a purely American invention; like the railroad, automobile, cinema, radio, and television, cyberspace grew out of international collaboration. But like those innovations, it has been absorbed and dominated by the United States, claimed as an American contribution to the world. The conceit is not baseless, for not only did U.S. military spending and engineering ingenuity undergird the creation of much of the original network, but American business has taken up where defense spending left off. Two-thirds of Web traffic originates in the United States, and two-thirds of Web users speak English, the native language and lingua franca of cyberspace.

This historian came to cyberspace with no intention of staying. I arrived several years after the Internet, the infrastructure of cyberspace, had been constructed by engineers and scientists for their own purposes. When I had first used computers, in the 1970s, they had seemed isolated behemoths, ensconced behind glass, presided over by priestlike figures. Though the first link between computers had been established in 1969, the maturation and spread of the technology had taken years to unfold. When I returned to computing in the early 1980s, everything had changed. Machine and machine connected with hidden protocols, moving information instantly and invisibly, ignoring distance. The networks tied people and machine together in a new kind of intimacy.

No one spoke in the early years of "cyberspace." The descriptive and prosaic "net" served as the term of choice until an influential, if unlikely, book appeared in 1984: *Neuromancer*, by William Gibson. An American living in Canada, Gibson wrote in an American idiom of science fiction and dystopia, of fascination with and dread of the future. Fittingly enough for this pioneering era, he composed his book on a manual typewriter, extrapolating the implications of cyberspace from the merest glimpses of the new technology. Discovering a portable cassette player in a shop a few years earlier, Gibson had slipped the headphones on. "For the first time I was able to move my nervous system through a landscape with my choice of soundtrack," he recalled. Gibson imagined cyberspace when he saw an ad for an early Apple computer and con-

nected it with the experience of the cassette player: "I thought, if there is an imaginary point of convergence where the information this machine handles could be accessed with the under-the-skin intimacy of the Walkman, what would that be like?" Gibson envisioned cyberspace as a "consensual hallucination," people at their computers weaving their imaginations into vast metaphors of information and disembodied energy, power and wealth translating into immaterial but potent form. It did not take long in Gibson's novel for the hallucination to become all too real, for the longing actually to enter cyberspace to become so strong that characters "jacked in" to the network directly with their brains and bodies.

Gibson's vision resonated with those who logged on to the early net. People in the 1980s experienced cyberspace only through words and symbols glowing on a monochromatic screen. No images, no sounds, intruded; imagination confronted limitless space. Across that immense void, mere typed conversation became appealing in a way few would have foreseen. Words, devalued by movies and television, took on a new life. In the absence of ready-made entertainment, people filled the vacuum with role-playing games, dramas of mutual creation. Solitary people sought out compatriots; enthusiasts sought out fellow enthusiasts; people of many sorts sought out titillation of one form or another. The net appeared, paradoxically, both empty and intimate. People rushed to its lists and groups, to its virtual chat rooms, dungeons, and bordellos, and yet the place still felt like a secret sanctuary for the few hundred thousand souls who occupied it.

To most people, even to some of its inhabitants, the world of the net seemed overwhelming and uncertain. Bleak visions of the society that might accompany cyberspace proliferated in the eighties. *Neuromancer* was not alone. The film *Blade Runner* portrayed a postindustrial society awash in its own waste and discarded people, no longer able to keep law and order. A famous Super Bowl advertisement of 1984 evoked a leaden world of robotic clones that only more computers, Apple computers, could supposedly shatter. Neal Stephenson's *Snow Crash* portrayed a world where franchises and viruses attached themselves to weakened hosts in both cyberspace and the material world. Young people in these years imagined themselves as "cyberpunks," marrying a facility with the new networks to the anarchic sensibility of the Sex Pistols. They and

their allies waged battles, both legal and illicit, to keep cyberspace beyond the grasp of government and corporate capitalism, to create a libertarian paradise of hackers.

Other people pursued a different vision, one of strengthened community and responsibility. One of the most successful efforts grew from an experiment called the WELL, founded in 1985. The outgrowth of San Francisco–area countercultural leaders, the WELL sought to provide a place for sustained communal conversation. It attracted thousands of participants and for many people stood as the embodiment of what an online community could be. As Howard Rheingold, an active member of the WELL and a pioneering writer on community in cyberspace, later put it, "Hundreds of thousands of people rely on their virtual communities as a real lifeline—people whose illness or disability prevents normal communication, people who are caregivers or who suffer from any one of hundreds of diseases, people who live in isolated areas, the only gay teenager in a small town, people trying to escape abusive relationships." Rheingold had personally taken his "turn sitting by the deathbed of a woman who would have died alone if it were not for the real-life presence of a virtual community."

About this time, in a much more prosaic way, I became entangled in the world of the Internet. I had recently conceived of trying to get at the larger issues surrounding the American Civil War through a linked study of a Northern community and a Southern community, done the old-fashioned way, with notecards and text. Through a series of coincidences and collaborations, however, I ended up in 1991 beginning to build the archive for such a study in a computerized format that could be shared with others. While I had casually used the Internet for years, I could not imagine how to distribute this digital archive in any form other than putting it on a tape and mailing it to the other few institutions that had the considerable hardware necessary to run it. We set to work digitizing newspapers, censuses, diaries, letters, and maps with just this purpose in mind. The Internet let us transfer some files and let us collaborate from our offices, but our project remained isolated.

One day in 1993, however, one of my computer science associates e-mailed me to say that I must come to his office as soon as I could. There, he showed me Mosaic, the key tool for something called the World Wide Web. The Web, an overlay of linked text and image that used the net for its vehicle, redefined the experience of being online. The brainchild

of an English physicist working in Switzerland, Mosaic had been designed for scientific collaboration. We confronted Mosaic on a high-end Unix operating system, but versions of this browser software—polished and promoted by Americans—soon appeared for desktop computers. Overnight, cyberspace became a far more literal, and populated, place.

It was immediately apparent that everything had changed, including the Civil War community project. Now we could construct an archive online; our material need not wait for years to be disseminated but could be shared even as we gathered it. The archive could go anywhere in the world people could tie into the network, a network expanding exponentially. We threw ourselves into building a Website devoted to this slice of history. We called it the Valley of the Shadow Project, for our two communities lay in the Great Valley of the eastern United States and had been visited by death and devastation in the war. The archive grew until it contained thousands of sources, detailing, week by week, the fates of a Virginia county and a Pennsylvania county from 1859 to 1869. The archive housed civilians as well as soldiers, women as well as men, enslaved as well as free.

The Web offered a challenge to many of the conventions of the historian's craft. Long, linear prose did not work on the Web, and yet we did not know how to write in any other way. The Web loved images, but we knew words best. The Web depended on instant interactivity, but we were used to laying out our arguments in a fixed form. No one has yet discovered how to write for this new medium, how to tell a historical story in scrolled or interactive text. Some worry, in fact, that the short attention spans and fixation on the future supposedly bred in cyberspace will erode historical thinking. On the other hand, the new medium may be especially well suited to convey the complexity and depth of history. Only trying will tell.

History has traditionally been a solitary craft, the product of one person thinking about something a long time, but the Web demands collaboration. Team-produced history makes some people nervous, as they wonder where authority and accountability lie. As it turned out, however, our collaboration proved a delightful innovation, all the more satisfying for being absolutely necessary. Dozens of students and allies were pulled into the project as the archive steadily grew. We held each other accountable and found our authority in combined effort.

To our surprise, over three million visitors came to the Valley Project

on the Web, people of all ages, from all over the world. Some told us that this history on a computer screen, as unlikely as that seemed, touched them more deeply than any other they had ever experienced. Part of the appeal came from the very thing we had worried about: the lack of a visible authority, the absence of a single voice, the empty space where there would normally be an argument or narrative. Instead, we had created a place where visitors in effect collaborated with us to weave stories from the records.

We had stumbled upon what proved to be one of the most appealing metaphors of the Web: community. The historical sources took on meaning because they told of communities of imaginable size undergoing the most dramatic events the people of this nation have ever known. But there was more to the appeal than that, for people using the site seemed to feel themselves a part of a larger community. They knew they were not the only ones thinking about these anonymous people of the past. Messages came virtually every day to the Valley Project, sharing enthusiasm and encouragement. The new technology seemed to be creating new communities, both real and virtual.

Other Web communities were far more self-consciously orchestrated. Businesses quickly sprang up around the metaphor; tens of millions of people "joined communities" by posting Websites reflecting their personalities, interests, and images of themselves. Those virtual communities soon became among the most heavily visited places in cyberspace; twenty million people have created Web pages in one virtual neighborhood or another, and the number of new arrivals continues to expand. The metaphor is pursued with great thoroughness and literal-mindedness. At GeoCities, one of the largest virtual communities, visitors are promised they can "meet people just like you." Websites are divided into neighborhoods, blocks, and houses. Each neighborhood is themed, its denizens united by their fascination with some hobby, celebrity, or cause. The neighborhoods read like an X ray of American obsessions, pastimes, and fantasies. People can choose to live, among many other places, in WallStreet (investing, finance), TimesSquare (games, role-playing), Athens (education, philosophy), Hollywood (film and TV), Pentagon (military), or RainForest (the environment).

As in suburbia, looks can be deceptive; though each house in each block appears the same, behind the surface great variation awaits. Some houses are filled with sophisticated graphics and text, while others bear

the marks of residents who lost interest after posting a photo of their cat or listing their favorite television shows. Some communities have active city fathers and mothers who strive for cybercivic pride. In the Heartland community, for example, residents vie for the Heartland Award of Excellence, given to those who do the most to encourage the values of the traditional American community. Special places have been set aside in the Heartland for genealogy, prayer, and other honored practices and values. Sites are decorated with symbols rich in nostalgia and earth tones.

Much of cyberspace, in other words, has become thoroughly domesticated. It would be difficult to imagine places much farther removed from the dark, slick, and sinister spaces of *Neuromancer* than these relentlessly cheerful commercial communities. While early visions of cyberspace envisioned power nakedly displayed in glowing cubes and grids, cyberspace at the turn of the century resembles nothing so much as it does the American suburbia in which it flourishes. Confronted with a blank slate on which to imagine a new kind of space, people on the Web have replicated late twentieth-century America and its car culture of malls, subdivisions, traffic, construction, shopping baskets, and chain stores. People have even begun to buy and sell, at escalating prices, "real estate" in role-playing games. Until proven otherwise, everything on the Web is an advertisement for something else. Eighty-three percent of sites devote themselves to commercial content; 6 percent are devoted to education and science. We have met cyberspace and it is us.

Relentless optimism stands as the official mood of cyberspace. "In this Internet moment—a remarkable convergence of calendar and change—we the people have a chance at last to become our own masters," one booster enthused at the approach of the new millennium. "We are all moguls now, pooh-bahs with our hands on the machinery of vast empires. We are retail lords, media masters, forces on Wall Street and in Hollywood. And we don't even have to put on ties or heels." While critics of the Web complained that over half of all Web traffic was already controlled by a few big companies, optimists pointed out that half remained for everyone else.

The sense of danger, nevertheless, continues to lurk. No sooner had cyberspace been settled than it attracted doomsday cults, pedophiles, and fascist skinheads. Nostalgia immediately developed for the old Internet. "Cyberspace, once thought of as the world's most cozy community," one

editorial lamented in the wake of a computer virus, "has quickly become a lonely, infinite expanse of electronic hallways filled with endless queues of on-line shopping malls and shadowy alleys where computer outlaws and their rogue programs lurk." The world of *Neuromancer* has merged with that of Wal-Mart. Faced with this anomie, gated communities have proliferated in cyberspace; some people, presented with an unprecedented possibility, want instead to mingle with people virtually like themselves. Shoppers are automatically guided to the same music and books as other people who bought similar music and books before. The web of "customerization" grows tighter and tighter, hopes of communities based on something other than consumerism dwindle.

It is a familiar pattern: Americans, perpetually optimistic, are also perpetually disappointed. In this way, the accelerated history of cyberspace has recapitulated the history of the country where it has most flourished. Things tend to begin with millennial visions and end in comfort, convenience, commerce, and more than a little regret and guilt. A dominant emotion of cyberspace might be called "anticipointment," a perpetual sense of possibility undercut by the acknowledgment that the reality can never quite live up to the idealized image we have of it.

Echoes of earlier periods in American history run through much of the discussion of cyberspace. Even as they talk about the newest and latest things, commentators reach toward the familiar formulas, standards, and assumptions that have shaped much of American public and private life since the birth of the republic. Confronted with a new medium and a new expressive freedom, Americans have seized on familiar metaphors of prophecy and analysis.

The most obvious analogy of the new information age is the Wild West. Images of gold rushes and gunfights fill stories about otherwise humdrum business Web ventures. The other obvious analogy is that of the robber barons and the Gilded Age. Bill Gates finds himself compared, depending on the purpose of the commentator, to both the rapacious Jay Gould and the generous Andrew Carnegie. Editorials attack the concentration of wealth in the new realm with a spirit the Populists would have applauded: "Five years into the e-commerce revolution," one editorial raged, "the big dogs of mass-market retailing are throwing untold millions into the development of category-dominating megasites." Such people watch with disgust as the democratic possibilities of cyberspace seem to disappear as quickly as they materialize. The Americans

with the least access to this new landscape turn out to be the Americans who have the least access to the existing landscape: the poor, the black, the urban, the rural, and the old.

Economic inequality is not the only threat to democracy in cyberspace. Many people worry more about the absence of authority than about its concentration. In the wake of a high-school shooting spree, an editorial in the *New York Times* noted that one of the young killers maintained a Website that contained directions for making a bomb, along with threatening cartoons and lyrics, posted for anyone to see. But no one did see, or if they did, no one attempted to stop the outburst: "Precisely because the Internet is such a neutral, free, open and unregulated technology," the editorialist lamented, "it means that we are all connected, but no one is in charge. The Internet is a democracy, but with no constitution."

Alexis de Tocqueville, of all people, would have understood. Tocqueville, routinely trotted out to explain every facet of American community and character for the last 150 years, did nevertheless seem to speak directly to the world of cyberspace. Indeed, of all the writers on cyberspace, Tocqueville, writing in the 1830s, may have come the closest to capturing its relationship to the United States because cyberspace is a clear projection of core American hopes and anxieties.

Tocqueville's great volumes on democracy in America explored the paradoxes of a place where no one seemed in charge and yet people behaved with remarkable uniformity, where everything seemed possible and yet devoid of the joy one might expect in a land so prosperous and free. One commentator on Tocqueville, writing years before either the net or cyberspace had been imagined, distilled the essence of the French visitor's argument: "The egalitarian principle takes a heavy toll from the human personality, sacrificing depth to busyness, and courtesy to vulgarity, putting easy social relations ahead of meaningful human ones, restlessness ahead of rootedness, independence ahead of authority, private decision ahead of public taste, materialist well-being ahead of the intangibles of the mind, the belief in progress ahead of a sense of complexity in society and history, and the 'indefinite perfectibility of man' ahead of the mystery of the supernatural." These words anticipated, with remarkable thoroughness, the laments of many who worry about the morality fostered in cyberspace. Every clause has been the focus of one critic or another of the new space growing in our midst. Cyberspace seems a

distillation of America. Both are quick, shallow, and lonely as well as hopeful, energetic, and sociable.

Like Tocqueville's America, cyberspace America confronts no old order to overthrow, no virtual monarchy, church, or aristocracy to slow its spreading dominion. There is only momentum—of network, of mass communication, of consumerism, of hunger for speed, stimulation, and gratification. As in Tocqueville's America, the government in cyberspace is decentralized, distrusted, and weak, afraid to interfere. As in Tocqueville's America, the denizens of cyberspace are fascinated by any machinery faster and shinier than yesterday's machinery. People flock together to discuss UFOs, politics, or stocks online, just as they flocked to the lodges, reform organizations, and religions they invented on the spot in the America of Andrew Jackson. The impulse is constant; only the medium has changed.

Tocqueville still speaks to us because he refused to speak in mere disdain. No one today reads the European observers who visited only to sneer, and no one takes seriously those who only doled out praise. Tocqueville admired much of what he saw in America, but he worried about the lack of satisfaction he found here: "In America I saw the freest and most enlightened men, placed in the happiest circumstances which the world affords; it seemed to me as if a cloud habitually hung upon their brow, and I thought them serious and almost sad even in their pleasures." Tocqueville ascribed this perpetual longing to the impossibility of ever acquiring true equality; each man thought every other man was getting ahead, leaving him behind with no one else to blame. Americans felt alone, adrift, without a place and without community.

Presented with a clean sheet on which to draw our deepest desires and our best plans, Americans seem to be re-creating much of what Tocqueville saw. In cyberspace, we reconstitute the hustle and anxiety even as we try to build the perfect community to contain both. The Web of today contains virtual versions of earlier monuments to these competing impulses. Without much difficulty, a visitor to the Web can see Main Street and Times Square, Levittown and trailer parks, Brook Farm and Las Vegas, white-steepled churches and storefront ministries, red schoolhouses and night schools. As in Disneyland, we try to re-create our real communities in idealized ones that we can smooth, perfect, and contain. Like many of their predecessors, those places in cyberspace have been put up quickly, often shoddily, because no one expects them to last

very long. We build only to tear down for something better, something that may satisfy our hunger for connection and belonging.

The World Wide Web will not long endure in its current state. Today's most sophisticated Websites will seem hopelessly limited in just a few years; the technologies that will permit a new generation of cyberspace are being readied at a feverish pace. Cyberspace may yet grow into the nightmare of *Neuromancer*, the beloved community of the WELL, or something else altogether. Whatever the machinery or the landscape, one thing seems likely: a longing for community, as tangible and as elusive as always, will hover over Cyberspace, U.S.A.