

PREFACE

On January 25, 2006, a mysterious image showed up on YouTube, the video-sharing site that was then only three months old. A sinewy figure in a swimming-pool-blue T-shirt, his eyes obscured by a beige baseball cap, was playing electric guitar. Sun poured through a window behind him. He played in a yellow haze. The video was called simply *guitar*. A handmade title card gave the performer's name as Funtwo.

The piece Funtwo played with mounting dexterity was an exceedingly difficult rock arrangement of Pachelbel's Canon, the composition from the turn of the eighteenth century known for solemn chord progressions and overexposure at weddings. But this arrangement, attributed on another title

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card to someone called JerryC, was anything but plodding: it required high-level mastery of a singularly demanding maneuver called sweep-picking.

Over and over the guitarist's left hand articulated strings with barely perceptible movements, sounding and muting notes almost simultaneously, and playing complete arpeggios with a single stroke of his right hand. The video was thrilling to watch.

Almost instantly I was hooked. I hadn't yet seen selfies of any kind, handheld or selfie-stick-enabled, nor had I seen video on Skype or FaceTime, so I wasn't accustomed to this intensely focused exhibitionism, the pleasingly distorted self-portraits in moving pixels, often of family and intimate friends, that now flood our screens. Funtwo's own selfie video was curious, masturbatory: David Hockney colors plus chiaroscuro. The effect was not wholesome. The video lacked the creamy resolution, crystalline audio, and voluptuous effects associated with professionalism-and with even the average MTV entry.

Amateur. Homemade. Flawed. Not so much mesmerizing as provocative. Harold Bloom wrote that to behold is a tragic posture; to observe is an ethical one. Funtwo required near-clinical observation. You didn't *behold* this video, as you might a Hollywood movie, enraptured by the spectacle. You inclined toward it. You studied it, like a scientist. You peered, as at scrambled porn on a high and forbidden channel.

As soon as I leaned forward, I had reached for Tolkien's ring, or tasted some life-altering drug, or crossed a magical

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line, and there was no going back. Just as Nabokov forces us to take Humbert Humbert's language into our very mouths in the opening of his great novel of child rape—"Lo-lee-ta: the tip of the tongue taking a trip of three steps down the palate to tap, at three, on the teeth"—this video seemed to implicate anyone who watched it.

I played *guitar* again, then again. A small miracle was quietly happening in those first months on the site. The bona fide pornography that was widely expected to drive out all other video genres—as a predator plant strangles diverse flora and unbalances ecosystems—never showed up. Without actual porn, the subtler voyeurism of *guitar* stood a chance of becoming a hit with viewers. And hit it was. By the end of its first week on YouTube the video had been viewed 1 million times. By 2016 its various versions had drawn more than 10 million views, and for years it was regularly listed among the most-seen snippets of online video in the history of the World Wide Web.

Working as a critic and columnist for the *New York Times*, I had acquired some unusual new habits since YouTube launched. *Guitar* only threw the problem into relief. As network television contracted, the media business folded dozens of magazines, and YouTube was acquired by Google for \$1.65 billion, with other \$1 billion-plus tech acquisitions and giant IPOs in the offing, I found myself mystified by how much time I spent away from the tattered-armchair totems of my youth: books, magazines, newspapers, the broadcast networks, and the ever-present murmur of NPR.

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While there was still achievement and pleasure in the old media, it was clear too that the dogs had barked; the great caravan that brings the knowledge and ideas that shore up human enterprises had moved on. I renewed my subscriptions to *Vogue* and the *New York Review of Books*, until I didn't anymore. Back issues had piled up on my coffee table and then become part of recycling, landfills, and compost. They weren't culture; they were carbon. Part of the problem gumming up the environmental works.

The same thing happened to the novels-Hilary Mantel, a reissue of John Updike-that I ordered in hard copy from Amazon. The spell that had been cast over me by inked letters on white pulp was broken. Or more accurately: a new spell had been cast, on a separate part of my brain.

The deeper I ventured into the civilization I found online, the more I realized I'd need new models of courage and imagination to contend with the trippy, slanted, infinite dreamland of the rapidly evolving Web. Funtwo became my hero. The velocity, intricacy, and exactness of his performance modeled the rhythms and mental requirements of the Web itself.

Funtwo's *guitar* video speaks to me now, a decade later, just as a chalice of certain dimensions tells us something about the people who inhabited a lost world. From a chalice we learn how big were the hands that were meant to hold it; how much liquid people liked at once and could consume; what kind of liquid, cold or hot, basic or acidic, they considered potable; what type of surface their cups might sit on. The dozens of hours that I

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spent feeding my obsession with *guitar* were not wasted. Or not entirely.

The video was, in fact- as Funtwo (ne Jeong-Hyun Lim) told me when I finally met him-intended to be instructional, an early contribution to the now encyclopedic how-to category on YouTube. (Which I would later consult to learn umbilical care for my infant daughter, as well as how to shield an iPad from scratches and how to make progress in a *Wii* game called *Lego City Undercover*.) For me the video contained a powerful suggestion of the kind of person I would have to become if I was to keep a clear head in the new medium that had come to dominate my mental life. And I was not alone: the Internet was pervading the lives of all of us who were growing into a newly transmogrified social and aesthetic space, from my neighbors and colleagues, friends and children, to musicians in Taiwan and Seoul and all of the 1.4 billion active users of Facebook.

In the Funtwo days, well before the efflorescence of elegant services like Spotify for music, Reddit for ideas, Pinterest for collages, and Instagram for photographs; before Steve Jobs's death; and even before the iPhone, the socialization and mobilification of everything, and then the move to wearables, the so-called Internet of Things, 3D printing, and virtual reality, the Web asserted itself as its own culture. Right at the dawn of Web 2.0, when newly expansive broadband permitted the dissemination of video and the rise of social networking, the Internet became something more than a reformulation of the offline world. With cries variously of agony and triumph, we had to stop pretending

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that email was a handy alternative to telephones or post. Fluid and never-ending electronic exchanges made the word *communication* seem inadequate. Similarly newspapers on the Web could no longer be considered mere adaptations of newsprint.

1992 FLASHBACK

A traumatic moment in early adulthood came just as I was having doubts about my first choice of career: academia. I had started a PhD program in English in 1991, just after graduating from college. But though I was supposed to be refining my skills at rigorous academic prose, the grubbier work of Greil Marcus, whose book *Lipstick Traces* took seriously pop culture, in a pop idiom, captured my attention. I also sometimes tried in vain to copy Camille Paglia's outlandish and supersexual observations about art, though they were considered suspect in university settings. One day my traditionalist father nailed me for this.

Dad: Virginia, your prose can be a touch glib--or, rather, meretricious.

Me: W-what's meretricious, Dad?

Dad: Oh Virginia! Come on!! MERETRIX. From your Latin. "Like a prostitute."

Me: Oh-I-Oh.

Dad: Did you get NOTHING out of Latin Camp?

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My father called me a prostitute? This is not an easy dialogue to recall, but eccentricities of the early 1990s are a useful reference point when taking the measure of the Internet's influence. Those were the days before the Web. The Mount Vesuvius of digitization was faintly rumbling, but most of us were determined to block out the noise. Sure, there was email, but texting and tweeting had not yet made glibness compulsory. The Meretrix, by other names, had not yet become an Instagram paragon. Mandarin and emojis had not yet left Latin in the dust as second languages of choice. These were exciting times, filled increasingly with desktop-published zines and other transitional forms that presaged blogs, but cultural loyalists were still hoping to hold on to old paradigms as long as possible.

Today holding on is just about impossible. The tectonic shift has happened. The *New York Times* daily newspaper and the company's news apps are starkly disparate entities, and only one of them is defined by short-form aggregation, data visualizations, and streamable video. Uber is something other than a municipal taxi service. Airbnb is not another kind of hotel. Ecommerce-at eBay, Amazon, Etsy-is not analogous to catalogue shopping; it has its own rules, conventions, implications, pace, and prices. Between analog and digital are more than differences in degree. Between them is a difference in kind.

Like all new technologies, the Internet appears to represent the world more faithfully than the technologies that preceded it. And the Internet is an *extraordinarily* seductive representation of the world. We've never seen a work of art like it. That

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is this book's central contention: that the Internet is a massive and collaborative work of realist art. Moreover it's so beguiling a realist showpiece, and so readily confused with reality, that books about it call themselves books about "business," "politics," or "science"-the reigning bywords for reality. That's a mistake. Digital forms are best illuminated by cultural criticism, which uses the tools of art and literary theory to make sense of the Internet's glorious illusion: that the Internet is life.

Because of course the Internet is not life. In fact it is a highly artificial regime, with tight rules and rituals that organize its text, music, and images. That's why the Internet becomes more deeply meaningful and moving when "read" as an aesthetic object than lived or reported on as firsthand human experience. That human experience is art, where art is considered closer to a game than to a deception. Our proxies in this game are our avatars: the sum total of all the profile pictures, message-board communiques, Snapchat videos, and all other artifacts of text, image, and sound that we add to the Internet and attach to our various handles. The game itself, an artwork, is without doubt what video gamers call an MMORPG: a massively multiplayer online role-playing game.

Digital life, in its current extremely visual, social, portable, and global incarnation, rewards certain virtues. They're not the ones many of us grew up with. Engagement, emotional expression, liberalism, tolerance, self-knowledge, irony: these values of the 1970s, refined while I was in college and then in graduate school in the 1990s, lost a great deal of urgency after the turn of

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the millennium. It was unnerving to watch them go. How long had we all dilated on and argued over whether a poem ought to be read as an independent artifact or in historical context, whether a professor ought ever be fired for her views on Israel or date rape, and whether a scientific or cultural worldview was more accurate. It went on and on: what everyone made of Monica Lewinsky, Yasser Arafat, Reaganomics, the semiotics of hip-hop, the cold war, or the implications of the Milgram experiment. We citizens used all the language and logic at our command to parse these problems, with our government and institutions mostly emphasizing liberalism and tolerance. But now that digitization has changed even knowledge and ethics, the values instilled in me as the daughter of a Latin-besotted college professor in New England have turned slightly old-fashioned, like the notion of fame in *Beowulf* or honor in Sir Walter Scott's novels.

What I was trying to learn as I practiced the finger work required by my laptop, BlackBerry, and eventually iPhone-and what writers, workers, teachers, parents, students, artists, and companies appeared to be trying to learn too-were new skills and interpretive methods, many of which didn't have names yet.

After dusting off hundreds and then thousands of videos on YouTube, I have begun to see clearly the civilization they compose. Online video isn't a *new* art form, I discovered, like punk music or color-field painting in their time, starting in a time and place and slowly burgeoning. Instead the art of the Internet and its rules came into view all at once and fully formed. All over the world amateurs had apparently spent the years since the birth of

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camcorders (in 1982) and digital video (in 1986) shooting, producing, collecting, or transferring home movies, video art, pet and baby videos, surveillance videos (including some that showed police, interpersonal, and corporate misdeeds), music performances, ads, trailers, sermons, lectures, comedy sketches, theatrical scenes, pornography, magic tricks, athletic stunts, pranks, virtual tours, news broadcasts, video op-eds, how-to videos, and a vast reserve of unclassifiable entries that needed only an audience.

By 2016 more than one hundred hours of video were uploaded every minute to YouTube—hours that came with a dizzying range of styles, themes, and provenances. Many of them had clearly been produced well before the possibility of online broadcasting even existed. The first videos mounted to YouTube included a scene of civil disobedience shot in a bus in Singapore, a monologue by a Best Buy clerk, and fully fourteen short movies of mammals playing with shoelaces. Every single one of them zinged around the Web and, collectively, attracted far more passionate responses than the multimillion-dollar slates of new network television shows I regularly reviewed. For anyone (from college kids to CEOs) trying to understand our speedy, freshly digital world the videos were and are invaluable. They show whole new facets of human experience.

The Internet favors speed, accuracy, wit, prolificacy, and versatility. But it also favors integrity, mindfulness, and wise action. For however alien in appearance, the Internet is a cultural object visibly on a continuum with all the cultural artifacts that preceded it. It is not a break with history; neither is it "progress." It's just

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what happened to be next. It is not outside human civilization; it is a new and formidable iteration of that civilization. It's also a brilliant commentary on it. To be still more specific: the Internet responds, often with great sensitivity, to critical methodologies. Sense can be made of it. Logic can be divined in it. Politics can be derived from it. Pleasure can be taken in it. Beauty can be found in it. Pain too-and loss. Agony and ecstasy is what I mean: the Internet may not be reality, but it's very real art.

This has become plain in the development of hundreds of new discourses online, including feminist hawkism on FrontPageMag.com ("Inside every liberal is a totalitarian screaming to get out") and French pro-Americanism on Mediapart. It surfaces in the new-media presidency of Barack Obama, which had its policies inflected and even set by the exigencies of the Internet. I saw it clearly when I tracked down wily producers of a hoax series called *lonelygirl 5* and eventually even in the captivating Funtwo, the fame-averse Korean guitarist who taught me how an export-driven economy like South Korea's, which is long on cultural producers and short on cultural consumers, transforms even the way music is made and musical genres refined.

The Internet's responsiveness to critical tools-the kind used by English majors, historians, bloggers, readers of every stripe, including rogues like commenters, trolls, and knee-jerk tweeters-has been elucidated in my studies of baroque audiovisual projects by composers and sound designers who get it, including the Israeli Kutiman, the American Beyonce, and the Swede Paul N. J. Ottosson.

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The hallmarks of Internet culture come through in experiments like Netflix and Amazon originals, arguments and reports serialized on Twitter, podcasts like NPR's *Serial*, and the new-media franchises of reality-TV heroines. Anyone can witness from the front row the emergence of a new hierarchy of values at Wikipedia, Facebook, Twitter, Instagram, Spotify, Snapchat, Skype, Yahoo!, Tumblr, Quora, eBay, Amazon, Seamless, game apps, YouTube, the Kindle, the iPhone, the iPad, FitBit, Google Glass (RIP), Oculus Rift, the Amazon Echo, message boards and a world of blogs and commentary-through their rises and rises and rises. And, in several cases, their fascinating falls.

But the companies rise and fall on the strength and value to advertisers of what at Yahoo! news, where I covered digital politics during the 2012 election, we used to optimistically call their "assets"-visual, auditory, textual. (At least they weren't liabilities.) These assets are nearly always ironic, cartoonish, or dramatic extensions of established and even ancient art forms: aphoristic poetry suitable for Twitter; painterly images for Instagram; polemics, essays, and reports for Facebook.

When the comedy-drama series *Orange Is the New Black* appeared in 2013 as one of Netflix's first batch of original dramas-"television" had long been all-digital by then-viewers took it in stride that it would be an inmate's-eye story. It was the latest expression of prison literature, preceded by works from Socrates, Jack Henry Abbott, and Nelson Mandela, among others. These prisoners wrote books while in prison because they had paper, pens, and time. Why not? Newspapers

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had given us the numbers, but only popular culture could fully capture the reality that Americans live in an era of widespread imprisonment. The nation is striped with a penal colony that runs coast to coast. A hundred thousand Web users could have told you that prison literature had *already* taken many new shapes in the twenty-first century and dug roots deep into the Internet-on, for example, the so-called Big Board, Prison Talk Online. This large and polyglot message board, conceived in a jail cell by a felon named David Frisk, which in its first decade attracted nearly 7 million posts, connects a vast network of prisons around the world. Families check it for real-time word of prison fights. Prisoners post poetry on it. Legal advice is given. Threads range from "How to Lose 50+ lbs. before Your Man Comes Home" to "Preparing for Executions." For readers, reporters, and concerned citizens, no document more urgently suggests the intricacies of the world's hyperextended prison system: fine-grain logistical detail and harrowing incongruities. *Orange Is the New Black*, as a literary and political artifact based on a literary memoir, can only aim to distill and dramatize the wisdom of that massive project.

Other examples make still more obvious that Internet art is not all marginalia and kitty kitsch. Like Prison Talk, the June 2009 video of the murder of Neda Agha-Soltan during a march protesting the election in Iran of President Mahmoud Ahmadinejad--a video that played in Iran and around the world--crystallized a new political reality. Thanks to ubiquitous digital cameras and instant global dissemination techniques,

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Agha-Soltan became a portable symbol of the antigovernment movement in Iran the very day she died. But she's not dead in her symbolic form; she's dying, perpetually, blood pouring almost audibly from her as she lies in the street, having been shot in the heart by a sniper.

That this video circulated widely on Twitter and Facebook and instantly gained an entry in the Persian-language Wikipedia (written by the fiancé of Agha-Soltan) contributes to the effect of motion. The chaos of the protests in Iran was echoed and amplified in the chaotic Twitter reports and made the violence seem immediate and urgent even to Europeans and Americans. But when it seemed to end-when "#Neda" was no longer a trending topic on Twitter, when the video's viewers capped at around 1 million on YouTube-did the movement in Iran strike the global community as somehow finished? Unlike after events that attracted the predigital rhetoric of martyrdom (the discourses around Kent State and Ruby Ridge, say), loyalists did not demand that Agha-Soltan not be forgotten. They didn't wear her image in lockets or on T-shirts. They didn't rehearse the circumstances of her death. After the video made its rounds, it seemed we had all been eyewitnesses to the protests and the murder, and-as horrifying as it had been-it was over.

Tweets, Facebook posts, and YouTube videos seem like discrete media entities, and it's easy to focus on how illiterate they are, or how trivial. But just as the American Revolution can be seen as a consequence of the pamphlet, and the antiwar movement can be seen as rooted in television and photojournalism,

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the rise of various contemporary ideologies-Ron Paul libertarianism, Obama idolatry, and "fact-check" politics-can be seen as epiphenomena of the Internet.

To make sense of the new world we are living in-in all its speed, diversity, and eccentricity-to truly fathom the high-velocity and rapacious new medium that has both re-created and shattered traditional forms, we need to risk the pain and scrap our old aesthetics and consider a new aesthetics and associated morality.

A new brand of intellectual courage must be brought to envisioning this new symbolic order. For artists, ignoring the imperative to grasp the cultural implications of the Internet means risking irrelevance. For companies, devaluation. For politicians and foreign policy architects, it means incomprehension about how meaning is configured, with a resulting foundering of campaigns, administrations, and initiatives. As human discourse adapts to its new home, everything we do and think as human beings will be and is being shaped by new values.

Magic and Loss starts with the building blocks of our digital culture. In analog life these cultural blocks might be considered literature and communication, visual art, film and television, architecture, fashion and design, food, sculpture, dance, and music. Online, in pixels, where flesh, marble, and 3D space is (so far) scarce, it's somewhat simpler: design, text, photography, video, and music. My aim is to build a complete aesthetics-and poetics-of the Internet.

Any book about the Internet ought to offer a useful structure

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for the headache-inducing chaos of digital life. *Magic and Loss* does this, and also proposes how its pleasures might be savored—the way Ian Watt and Leslie Fiedler showed readers how to approach novels, Pauline Kael showed us how to approach movies, Lester Bangs and Greil Marcus showed us how to approach rock music, Susan Sontag showed us how to approach photography, and George Trow and Marshall McLuhan showed us how to approach media.

The Web represents a grand emotional, sensory, and intellectual adventure for anyone willing to explore it actively. Alarmist tracts that warn about how the Web endangers culture or coarsens civilization miss the point that the same was said in turn about theater, lyric poetry, the novel, film, and television. I want instead to show how readers might use the Web and not be overwhelmed by it; how we might stop fighting it, in short, and learn to love its hallucinatory splendor.

The Internet is the great masterpiece of human civilization. *As* an artifact it challenges the pyramid, the aqueduct, the highway, the novel, the newspaper, the nation-state, the Magna Carta, Easter Island, Stonehenge, agriculture, the feature film, the automobile, the telephone, the telegraph, the television, the Chanel suit, the airplane, the pencil, the book, the printing press, the radio, the realist painting, the abstract painting, the Pill, the washing machine, the skyscraper, the elevator, and cooked meat. *As* an idea it rivals monotheism.

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Just as, in Nietzsche's scheme, man created science, which in turn killed god, analog culture-books, clocks, film, industrial machines, the compasses and timers of scientific method-created digital culture, and now digital culture has superseded it. It was quick, the supersession-and now it's over. But where are we?

Magic is a word that Apple vigorously embraced. The iPad was introduced as a "magical and revolutionary device." And *magic* is a crucial term of art in computer programming. Computer code is considered magic when it seems simple but accomplishes complex operations. The Internet is paradigmatic magic. It turns experiences from the material world that used to be densely physical-involving licking stamps, say, or winding clocks or driving in cars to shopping centers-into frictionless, weightless, and fantastic abstractions. As Lawrence Lessig puts it, "The digital world has more in common with the world of ideas than with the world of things."

And yet it's still here, the persistent sense of loss. The magic of the Internet-the recession of the material world in favor of a world of ideas-is not pure delight. It seems we are missing something very worthwhile and identity-forming from our pre-digital lives. Is it a handwritten letter? Is it an analog phone call? Is it a quality of celluloid film, a multivolume encyclopedia, or a leather-bound datebook? Is it a way of thinking or being or even falling in love?

Between two discourses, two languages, two regimes, something is *always* lost. And whether or not we admit it, the Internet

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and its artifacts are not just like their cultural precedents. They're not even a rough translation-or a strong misreading-of those precedents. The Internet has a logic, a tempo, an idiom, a color scheme, a politics, and an emotional sensibility all its own. Tentatively, avidly, or kicking and screaming, nearly 2 billion of us have taken up residence on the Internet, and we're still adjusting to it. This transformation of everyday life includes moments of magic and an inevitable experience of profound loss. Any discussion of digital culture that merely catalogues its wonders and does not acknowledge these two central themes is propaganda and fails to do it justice.

Thirty-five years ago, when I first discovered it, the Internet wasn't easy to find. It wasn't a user-friendly retail franchise, as the Web is now. It was a nervous back office full of furtive clerics. You stumbled in. While computer hardware and software of the 1970s were the work of sophisticated engineers who pressed computers into the service of everything from music to word processing, architecture, and filmmaking, the slow and awkward networks in those days had limited application. These were the so-called eve networks, inspired largely by ARPANET, the landmark computer-communications system that was a project of the U.S. government's Advanced Research Projects Agency. Logically the Internet in its early days was a kind of diversion for cold war intelligence types and academics. But it was possible to stumble onto the early Internet.

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I know because I was among the stumblers. Xcaliber was early social-networking technology developed at Dartmouth College. In the heyday of Dungeons & Dragons, its vaguely Arthurian theme appealed to both hackers and tweens. Its real purpose was to facilitate communication among the several academic and scientific institutions that shared Dartmouth's main frame computer—one of those big, heaving rhinos in a cage of bulletproof Plexiglas. Every day a few hundred people dialed that mainframe for an alien signal—the then-unfamiliar squeal and crash of information transmission—and fit their receivers into acoustic couplers, like people in kayaks.

As a townie preteen, I hacked in with the help of some shaggy, kind Dartmouth students who called themselves sys-progs. In those days, "Dartmouth sysprog" sounded tantalizing to me—the way "lead singer" sounded to some of my classmates. John Kemeny, then the president of Dartmouth, had cowritten the computer language BASIC in 1964, inspiring a generation of student programmers to trek north to our snowy town. This group ("Kemeny's Kids") built the extraordinary Dartmouth Tune-Sharing System, which allowed people from all academic departments, even the humanities, to use a computer network. The sys-progs of the 1970s and early '80s also tended the main-frame as it shook and rattled incongruously on the edge of Dartmouth's Colonial campus.

With some friends I found my way to their computer center under the pretext that we wanted to talk about BASIC. We were lucky to have this opening sally. Kemeny had been required to

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teach rudimentary BASIC to the local Yankee schoolchildren, presumably to win the freedom to pursue his decidedly non-Yankee plan for ARPANET-on-the-Connecticut. To mollify our parents, we told them we needed to sharpen our programming skills if we were ever going to "work for NASA."

But the little girls of ten and eleven who stonnedX lib
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never made tech history. That worked for us at the time: all the better to enter the shadowy world of Xcaliber-and especially an addictive live-chat feature called Conference XYZ-without being noticed. Conference XYZ amplified Xcaliber's fantasy element: each convocation had levels and a self-anointed master who could banish chatters he disliked. Participants often communicated in an odd Led Zeppelin idiom or referred to damsels and steeds. I loved this. Under cover of my first avatar, Athena (naturally), I learned all of the digital skills I still rely on today. I learned to type, to talk rapidly in entwined threads with several people at once, to experiment with idioms, to test and learn, to recover from reply-all mistakes, to spot lechy people by their online styles, and to avoid ideologues who post in all caps. Most important of all, I learned, as a novelist does, to create an avatar in digital space who is simultaneously flawed, dignified, and realistic-but who can also field trolls and take sniper fire for me and thus keep the *real* me, my soul, entirely aloof and safe.

By the time I turned thirteen, I was confident I knew *every single person* online. My parents couldn't have guessed I was meeting anyone. As I sat alone at the computer hour after hour it seemed I was learning "computers." In fact, I was learning culture.

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The story of early computer networks has most often been told as a technology and business story. But like the Internet today, Conference XYZ was not an engineering experiment as much as an immersive experience. What mesmerized me and its other users were its cadences and its vocabulary. Its vibe. On some level, while we were seeking connection and community we were also helping to build a culture. Today I see that culture writ large online.

Conference XYZ pretty much folded in 1986. For years I half-repressed thoughts of Xcaliber. It would come to me in fragments of memories: the odd jargon we evolved, the hot feeling of being watched, the invective, the jokes, the speed. The highly collaborative project had been the spontaneous creation of a scene, a *modus vivendi*, an entire culture. Had we really done all that? And was it really gone?

It was not gone. What I thought was the end of a short detour from regular life was actually the beginning of the biggest cultural phenomenon of my lifetime. If it's ever fair to say that anything has "changed everything," it's fair to say so about the Internet. At stake in this cultural transformation are the way we live, the way we think, the way we love, the way we talk, and even the way we fight across the globe. The Internet is entrenched. It's time to understand it-and not as a curiosity or an entry in the annals of technology or business but as an integral part of our humanity, as the latest and most powerful extension and expression of the project of being human.