

## CONCLUSION

### *IN DEFENSE OF THE COMMONS: A MANIFESTO FOR SUSTAINABLE CULTURE*

*It may seem counterintuitive at a time of information overload, viral media, aggregation, and instant commenting to worry about our cultural supply. But we are at risk of starving in the midst of plenty. A decade ago few would have thought a book with a title like *In Defense of Food* was necessary. Food, after all, had never been cheaper or more abundant; what could be wrong with the picture? A similar shift of perception needs to happen in the cultural realm. Culture, even if it is immaterial, has material conditions, and free culture, like cheap food, incurs hidden costs.*

One positive step may be something deceptively simple: an effort to raise consciousness about something we could call sustainable culture. “Culture” and “cultivate” share the same root, after all: “Coulter,” a cognate of “culture,” means the blade of a plowshare. It is not a reach to align the production and consumption of culture with the growing appreciation of skilled workmanship and artisanal goods, of community food systems and ethical economies. The aims of this movement may be extended and adapted to describe cultural production and exchange, online and off.

The concept of sustainable culture begins with envisioning a cultural ecology. New and old media are not separate provinces but part of a hybrid cultural ecosystem that includes the traditional and digital and composites of the two. Our virtual and physical lives are intertwined, inseparable, equally “real.” Whether their work is distributed by paper or pixels, creators never emerge fully formed from the ether. Individuals are buttressed by an array of plinths and braces, by families and friends, patrons and publics, and institutions that include universities, foundations, community centers, publishers, distributors, libraries, bookstores, rock venues, and cinemas, as well as the ad hoc networks that comprise scenes and subcultures, digital and analog.

We are embedded beings who create work in a social context, toiling shared soil in the hopes that our labor bears fruit. It is up to all of us whether this soil is enriched or depleted, whether it nurtures diverse and vital produce or allows predictable crops to take root and run rampant. The notion of sustainable culture forces us to recognize that the digital has not rendered all previously existing institutions obsolete. It also challenges us to figure out how to improve them.

*Many structures of the old-media system, however flawed, relieved some of the burdens now*

*borne solely by individuals. Institutions provide capital, legal protection, leverage, and also continuity, facilitating the transmission of knowledge and skills from one generation to the next. At their best, institutions can help support challenging efforts through a process the musician Damian Kulash calls “risk aggregation.” Though his band OK Go left their record label and found a following online, Kulash still believes labels—though “greedy and shortsighted”—played a crucial function in the cultural landscape, one we have not figured out how to replicate or improve upon within the digital realm: like publishing houses, newspapers, and film studios, they funnel revenues from more successful acts to less successful ones.*

Scale allows institutions to fight the kinds of legal battles investigative journalism requires or weather a string of losses until the odds finally deliver that blockbuster hit, an arrangement that looks grossly inefficient from one angle, or almost socialist from another. Labels “invest in however many young bands a year and most of them fail,” Kulash told an interviewer. “Those bands go back to their jobs at the local coffee houses without having to be in tens or hundreds of thousands of dollars of personal debt for having gone for it.” He credits this process with making his career possible. “If we don’t want to be just a domain of the independently wealthy and people who can take time off from their jobs for a couple of years to see what happens, or finance their own world tour while they figure out exactly how to make the number at the end of the column black, then somebody has to be doing this risk aggregation.”<sup>1</sup>

The frame of sustainable culture has other benefits as well. In stark contrast to the emphasis on newness and nowness of most online platforms, it encourages us to think long term. Inherent in the concept of sustainability, after all, is the element of duration, of time and also depth of attention, for both creators and consumers. To escape the cycle of churnalism and expendable content in favor of sustainable culture, we need to develop supports that allow for the prolonged immersion and engagement artistic and journalistic endeavors often require, nurturing projects that are timeless rather than timely.

We also need to provide reliable means of preservation. Too often people assume that digital content will last forever, immateriality and reproducibility encouraging the false impression that anything uploaded to the cloud is safely stored for posterity. In reality, we lose an estimated quarter of all working links every seven years and digital files can quickly become incomprehensible due to the swift churn of technological obsolescence. Sustainable culture includes building archives that will allow people to explore their cultural heritage for years to come.<sup>2</sup>

The concept of sustainability also poses a direct challenge to both the fixation on rapid growth and quick profits and the fantasy of sidestepping the issue of finance altogether. Material factors cannot be ignored or wished away.<sup>3</sup> Free culture advocates have it right that

excessive copyright regulation can inhibit creativity, and the current copyright regime is in urgent need of reform. But “free” is not the answer: too many creative endeavors fail due to lack of investment; countless creative experiments go untried; important investigations never get off the ground; voices that refuse to peddle or pander go unacknowledged; truth seeking and beauty making are undervalued, all while mediocre ideas prosper, aided and abetted by the fertilizers of advertising dollars and manufactured desire.

A vision of sustainability acknowledges the damage incurred by the sole pursuit of wealth while trying to build an equitable system that can enable the production of socially valuable goods. The proliferation of crowdfunding Web sites, which allow people to back creative projects without expectation of financial return, are an encouraging development and a critical source of support to artists and tinkerers—yet they are no panacea. There are limits to individual, one-off fund-raising campaigns, which cannot substitute for broader, more stable support structures.

Finally, a sustainability movement would harness new communications tools to shift the current conversation from free culture to fair culture. Established fair trade principles, known to anyone who has purchased coffee with the telltale label, include transparency and accountability, payment of just prices, nondiscrimination and gender and racial equity, and respect for the environment.

These principles speak to many of the problems raised in this book: the secretive methods of many Internet companies, the feudal business model of Web 2.0, the increasingly common expectation that people work without compensation, the persistence of inequality and intolerance online, and the disastrous consequences of high-tech manufacturing techniques and the constant upgrading and disposal of still functional, but no longer fashionable, gadgets on our natural world.

The shift to sustainable culture is possible, but implementing the necessary changes cannot fall to individuals and the marketplace alone. The solutions we need require collective, political action. Not unlike American agriculture businesses, which receive billions in federal aid while flooding the market with processed food, heedless of the effect on small farmers, today’s corporate media and technology firms depend on substantial and unacknowledged public subsidy, putting them at an unfair advantage at all our expense.

Strengthening our cultural commons requires profound changes in policy, animated by the same spirit as the 1965 congressional resolution that established the National Endowment for the Arts: “While no government can call a great artist or scholar into existence, it is necessary and appropriate for the federal government to help create and sustain not only a climate encouraging freedom of thought, imagination, and inquiry, but also the material conditions facilitating the release of this creative talent.”

The dominant idea today is that the Internet, by lowering barriers to entry, will do this work

for us, creating a free market in art and ideas and ushering in a “utopia of openness.” A free and open web will spark innovation and competition and a cultural revolution will result. This assumption channels political activism to the fight for network neutrality and against regulation like SOPA (where the interests of the public and of large technology firms are generally compatible), while explicitly progressive causes that push back against business interests—battles against consolidation, commercialization, unfair labor practices, and the lack of diversity—take a backseat.

Yet, as we know, open systems can be starkly inegalitarian and open markets cannot be counted on to provide everything people want or need, which is why there are many areas we strive to at least partly shield from capitalism’s excesses, such as scientific research, health, and education. A laissez-faire system will inevitably underinvest in less profitable cultural works, no matter how worthy, enriching, or utterly vital they are. No matter how technically “disruptive” or “revolutionary,” a communications system left to the free market will not produce the independent, democratic culture we need.

*In the language of economists, culture is a public good. Like a sunset we can all enjoy without its being diminished, a song isn’t used up when people sing it. Moving beyond the academic definition, culture is also a public good in the sense that it benefits all: our lives are improved by the positive externalities art and ideas produce, our world more beautiful, more interesting, more ambitious. The word has other meanings as well. On the one hand, something can be public in the sense of being open to all, like a public meeting. But the word also means “shared”: something that is public belongs to everyone, like a local library; it is funded by the public purse. It is this last meaning—public in the sense of ownership and funding—that technology commentators too often sideline. We envision a cultural commons accessible to all but shy away from discussing how to make this aspiration a reality.*

The truth is that the public good is increasingly financed by private money. Google Books, despite the legal troubles that dogged the endeavor, is a prime example of this phenomenon. While often described as a “universal library” the project is anything but. More accurately, it was devised with the aim of transforming the library from an institution that collects and distributes information to the public into one that collects and distributes the public’s information in service of Google’s core advertising business.<sup>4</sup>

Google Books is a perfect example of what media scholar Siva Vaidhyanathan calls “public failure,” a situation where private actors perform services for gain that would be better left to the public sector.<sup>5</sup> Vaidhyanathan has proposed something called the Human Knowledge Project, a government-led effort to create a truly global online library aimed at “satiating curiosity,” not “facilitating consumption.”

Other countries have instigated modest alternatives: in Norway, citizens can check out newly released books from the national digital archive; France pledged 750 million euros for the

digitization of the nation's "cultural patrimony"; the Netherlands has a ten-year plan to digitize every Dutch book, newspaper, and periodical produced since 1470. There is also the European Union-sponsored Europeana, a meta aggregator that links the collections of almost thirty countries.

In the United States, however, the idea of a publicly funded digital repository for our shared heritage is a pipe dream, a circumstance that has led an intrepid group of librarians, academics, archivists, and activists to begin the process of slowly trying to build a noncommercial alternative to Google Books, the Digital Public Library of America, which went online in 2013. This freely accessible network of resources from libraries, archives, museums, and universities is looking to foundations for support.<sup>6</sup>

"Clearly, we should not trust Google to be the custodian of our most precious cultural and scientific resources," cautions Vaidhyathan. "Without firm regulations, a truly competitive market, or a competing project, we have no recourse in the event of sub-standard performance or malfeasance by the company."

This warning applies well beyond books to the majority of online platforms where we spend our time. They are "public" in a limited sense of the word: they are open spaces, but they are also private ones, where the rights Americans claim to hold dear—namely, protections for free speech and privacy—do not apply. When the CEO of Twitter tells users to "think of Twitter as a global town square," he elides the fact that we don't have to click "agree" on a Terms of Service, a binding contract, before entering an urban plaza. Similarly, Lawrence Lessig, when expounding on the value of social media sites for the cultural commons, does a disservice when he quotes one of the founders of the Yahoo!-owned photo-sharing site Flickr likening the operation to a "land trust" and his colleagues to "custodians." Flickr is no such thing, just as Google is not operating a library. They are commercial enterprises designed to maximize revenue, not defend political expression, preserve our collective heritage, or facilitate creativity, and the people who work there are private employees, not public servants.<sup>7</sup>

The not-for-profit, donor-supported, volunteer-produced Wikipedia is often held up as the archetypal organization of an information age. Yet Wikipedia is utterly unique among the world's most popular Web sites. Average Internet users spend most of their time visiting sites operated by for-profit companies. Web sites maintained to serve the interests of civil society, not shareholders, are losing ground.<sup>8</sup>

While there might be many exciting, small experiments online, there are no large spaces dedicated to the public good. And while the Internet could have offered an alternative to the sphere of commodity exchange, private and often monopolistic markets now dominate; contrary to expectations, digital concentration set in more rapidly than with previous mediums. The revolutionary nature of technology was simply no match for the underlying

economic imperatives, which have driven new-media companies to amass power and capital and struggle for market dominance. Consider Twitter. The service has been a powerful tool for activists around the world but this may change. “It is not difficult to imagine a scenario in which Twitter will have to sacrifice its values, at least somewhat, on the high altar of the quarterly earnings report,” as Elias Grol warns in *Foreign Policy*.<sup>9</sup> In theory, Twitter’s founders could have considered alternative business models. Instead of rushing to debut on the Stock Exchange they could have chosen to operate as a nonprofit, low-profit, or, following the example of the popular online crafts marketplace Etsy, a Certified B Corporation, a relatively new designation that takes social and environment impacts into account.

Why not resurrect the vision of an advertising-independent search engine that initially inspired Google’s founders, or launch a cooperatively owned version of iTunes or Netflix (perhaps modeled on successful institutions such as New Day Films, a documentary distribution collective that has survived for four decades), or start online associations based on Community Supported Agriculture (known as CSAs) that allow readers to purchase advance shares to fund local newsgathering? There are plenty of inventive financial arrangements that could put sustainability and civic responsibility front and center, yet so far they mostly go untried.

In the digital realm, who stands for the public interest? The state remains the most powerful entity that can be employed to advance the cause of sustainable culture. Americans, however, are deeply skeptical of the government’s involvement in culture and the arts. The exceptions have been few and far between, including the Works Progress Administration (WPA) of the New Deal and the establishment of the National Endowment for the Arts, the National Endowment for the Humanities, and Public Broadcasting in the 1960s.

With the founding of these institutions, the United States joined the rest of the developed world in providing state subsidy to creative endeavors. Direct government support of the arts petered out after the Cold War, during which fear of a Soviet planet prompted a variety of cultural outreach programs at the behest of the State Department, a concerted effort to contrast American dynamism to the drab Eastern Bloc. Since the fall of the Berlin Wall, the venture capital model has ruled supreme.<sup>10</sup>

Just as emphatically, technology is regarded as an arena that the government must not touch, the state said to be too ossified and slow to keep up with Silicon Valley’s rapid pace. The Internet, in particular, is presented as territory upon which regulation should not encroach.<sup>11</sup> The weaknesses and hypocrisies of this libertarian fallacy aside, it is a philosophical orientation that, by holding up private enterprise and free markets as the primary drivers of innovation and progress, obscures a profound truth: the computer industry and the Internet would not exist without massive and ongoing funding from the federal government of the

United States, which invested hundreds of billions of dollars over the course of many years to create it.

Early on, the government funded the invention of the microprocessor and was its first major consumer, jump-starting the modern technology industry. Later, the Internet and the World Wide Web came into being as a consequence of state financing that included military and scientific funding in the United States and Europe, combining countercultural, academic, and public service values such as decentralization, openness, and interactivity. From Apple products to Google's search engine, from GPS to voice recognition to touch-screens to the anonymity-enabling software TOR, we have public investment to thank for many of the tools we use every day, yet the private sector reaps all of the rewards and credit.<sup>12</sup>

In the standard narrative of techno-triumphalism, all of this history is repressed, as is the increasingly pro-active role the government played throughout our nation's communications history: designing the free-expression-enabling network known as the post office, promoting newspapers through postal subsidies, instituting a decentralized public broadcasting system, and, of course, creating the Internet. Nonetheless, pundits insist we are entering a new, "open" world that has transcended markets and states and made regulation obsolete.

Technology companies, cable providers, and Hollywood are happy to agree, insisting that the means smaller governments employ to maintain their cultural distinctiveness—production subsidies, broadcast quotas, spending rules, selective taxes and levies, and national ownership—are no longer needed because "spectrum scarcity," long the leading justification for investment in public media and protectionist cultural policies, does not exist online.<sup>13</sup> On the Internet the "dial is infinite," to quote Jacob Glick, Google Canada's policy counsel.<sup>14</sup> Yet the infinite dial means that countries at a disadvantage in terms of population and GDP will find themselves using Web sites promoted by a handful of big Silicon Valley players and swamped by ready-made American culture.<sup>15</sup>

What technology boosters ignore is the fact that the steady erosion of regulation and checks on corporate power was a major factor in the development of the "old model" they so vociferously decry. For example, it was the 1996 Telecommunications Act (the "coup de grace of media deregulation") that reduced the number of telephone service providers, unleashed a torrent of mergers and acquisitions that culminated in the ill-fated marriage of AOL and Time Warner, and opened the way for Clear Channel's dramatic takeover of commercial radio. Without intervention, we will find our options similarly diminished in the digital realm.

There is no such thing as a public Internet: everything flows through private pipes. However, using the Internet for the consumption of culture or to search for information is nearly as essential to participating in modern life as having electricity or plumbing in your home (try going to school or applying for a job without it). Thus a growing chorus of progressive

technologists and critics argues that both the service providers and the most popular platforms should be regulated as public utilities (indeed, Mark Zuckerberg refers to Facebook as a “social utility.”)

This is one example of the kind of media policy we need. There are other possibilities worth considering. To prevent what may be the next wave of consolidation, Tim Wu, coiner of the term “Net neutrality,” argues that a “Separations Principle” is necessary, erecting a firewall between firms that transport and create information. Wu is worried about the potential vertical integration of companies like Verizon and Google or AT&T and Facebook into “information empires,” but his principle would also have more immediate effects. Apple, for example, would not be able to sell or stream music or movies at a loss to buoy the sale of hardware; Amazon would be prevented from pursuing its ambition of controlling the book market (a scenario in which most volumes are either published by or self-published through the company and tethered to the Kindle platform); and Google would be forbidden to promote its own products above competitors’ in search results.

Given the reality of digital convergence—the fact that once distinct channels of telephony, television, radio, film, and print media have merged—a movement for sustainable culture must concern itself with every layer of our communications infrastructure, from the creative works distributed online to the Web sites we visit to the mud and wires that make our connections possible. Reform might begin with the phone, cable, and Internet providers who hook up our homes and mobile devices and have carved the United States into noncompetitive fiefdoms, enabling them to extract enormous rewards from what are essentially natural monopolies. As a result, cable incumbents enjoy up to 95 percent profit margins on broadband service.

A proposal to nationalize these service providers would be a hard sell, but at minimum such powerful private actors should be subject to strong common carriage obligations. Network infrastructure expert Andrew Blum has pointed to the local food movement as a potential model. “We’re all consuming the Internet equivalent of iceberg lettuce,” he says. In a handful of successful cases municipalities have begun to offer fast and affordable fiber broadband to residents. But these alternatives won’t be won without a fight. Cable and telecom companies have fought tooth and nail against these community broadband initiatives, spending over \$300,000 to derail a referendum on the issue in a single town. Millions more have been spent lobbying to effectively block cities from providing high-speed access, with legislation passed in nineteen states.<sup>16</sup>

At present, the United States occupies the worst of both media worlds, lacking either a competitive market or meaningful government investment or oversight.<sup>17</sup> Though it’s contrary to conventional wisdom, government intervention is sometimes the only way to ensure competition. When left to their own devices, wired and wireless Internet service



providers stifle innovation.

One might assume such profitable companies would eagerly upgrade their facilities and replace cable wires with optical fiber to satisfy customers' appetite for high-speed data transmission, but this is not the case. Wall Street would punish them for the substantial capital expenditures required, and with no pressure from rivals, stock prices and dividends take precedent over people's needs. (This dynamic explains why the digital divide has not been bridged; private investment markets would rather cherry-pick districts packed with well-to-do customers than invest in broadband infrastructure to serve poor and sparsely populated regions.)

Something similar holds true in the field of journalism, where government occasionally plays a positive role, for example through Federal Communications Commission requirements that broadcasters serve the public interest in return for using the public spectrum. These rules have been eroded since the Reagan era, but the bottom line is that educational programming and costly news departments, which often scrutinize the actions of the state, were established and maintained only at government behest, not because of market ingenuity.

More robust public support for the fourth estate would produce even greater freedom and diversity. In direct contradiction of stereotypes about the chilling effects of "state-controlled media," countries enjoying such support are home to an unimpeded and vibrant press.

Norway's generous government subsidies have yielded the highest number of newspaper readers per capita and the country has repeatedly ranked as the number one democracy by the *Economist*, hardly a bastion of left-wing thinking.

There's evidence that Americans would appreciate a similar approach, for they display surprising devotion to the limited public broadcasting options available: public radio's audience has more than doubled since the late 1990s, and viewers have deemed PBS the "most trusted source of news and public affairs" among broadcast and cable sources. Polls show that money spent on public broadcasting is believed to be well spent, which sets it apart from most other expenditures.<sup>18</sup> The irony is that public broadcasting in the United States decreasingly qualifies as such. Regular fund-raising drives are designed to compensate for the minimal direct federal funding granted to PBS and NPR for operations (indirectly, federal funds make up about 15 percent of PBS's annual budget and a mere 2 percent of NPR's). Our per capita spending for public media currently stands at about \$1.63 a citizen a year, while Finland and Denmark spend seventy and eighty times that amount. This lack of direct government sponsorship opens a widening space for corporate underwriting, despite the compromising and sometimes overtly censoring effects of this strategy.<sup>19</sup> (Canada, unfortunately, may be following in its southern neighbor's footsteps, with CBC's Radio Two carrying advertising after a four-decade ban in response to budget cuts instituted by the conservative administration.) The obvious solution of building on the success of these

enterprises and expanding government subsidy for a more expansive public media goes unconsidered because of widespread and deeply held misconceptions.

We must find ways to adapt and extend tried and true policies while taking the unique architecture of twenty-first-century communications technologies into account. The historic conception of public broadcasting is insufficient for twenty-first-century communications technology. Public media policy will need to address infrastructure and information, conduit and content, thus spanning a broad array of issues including Net neutrality, antitrust, user privacy, copyright reform, software production, the development of new platforms for engagement and discovery, and subsidy and promotion of cultural products, whether they are classically crafted novels or avant-garde apps.

While some have suggested that crowdfunding sites like Kickstarter can replace government agencies to do much of this work, such a view is shortsighted. Crowdfunding allows individual creators to raise money from their contacts, which gives well-known and often well-resourced individuals a significant advantage. In contrast, a government agency must concern itself with the larger public good, paying special attention to underserved geographic regions and communities (taxation, in a sense, is a form of crowdfunding, but with far wider obligations).<sup>20</sup>

Public agencies, in other words, have to consider the whole cultural ecology. Thus other countries not only fund individual creators but assist independent institutions including community centers, cinemas, and booksellers. France's *loi Lang*, for example, prevents the discounting of books in order to protect small shops from being forced out of business by supermarkets, chains, and Amazon, acknowledging their proven role in encouraging diverse reading habits and nurturing literary culture. Most discussions about the Internet's effect on art and culture do not account for the heterogeneity that brick-and-mortar institutions foster.<sup>21</sup> Nonetheless, a skeptic may still insist that these proposals for supporting sustainable culture are too costly to seriously consider.<sup>22</sup> But the money for such an undertaking exists, indeed it is already being spent, but with great inefficiency. We pay a small fortune for the devices and connections required to use the Internet (global spending on consumer electronics surpassed \$1 trillion in 2012, despite the recession).<sup>23</sup> We also pay dearly for the services and culture we consume online through the opaque, private tax referred to as advertising (and we also pay with our privacy).

The over \$700 billion spent annually on advertising could be subject to a transparent public tax and put to good use. Additional funding streams exist to be tapped. In 2009 the Associated Press revealed that the U.S. Army spent \$4.7 billion and employed nearly thirty thousand people to do public relations, an unaccountable form of taxpayer-financed media. A small fraction of these assets could be appropriated and applied to beef up our paltry public broadcasting budget.

Other options would be to demand that radio and television broadcasters pay the market rate for spectrum licenses or make technology companies help foot the bill for the content they depend on for survival. The most straightforward method may be to force leading technology firms to pay their taxes, which they have been diligently dodging through cunning accounting schemes, loopholes, and shelters. These machinations have allowed Google to effectively pay an overseas tax rate of as little as 2.4 percent, Apple to shield approximately \$74 billion from the Internal Revenue Service between 2009 and 2012, and Amazon to spend years refusing to collect sales tax, starving states of revenue (Jeff Bezos is said to have considered establishing Amazon on an Indian reservation to avoid paying taxes).<sup>25</sup>

A portion of these funds could be earmarked to underwrite and promote art, culture, and journalism. The fruits of such investment could be made widely available, free of copyright restrictions, much the way a dedicated community of academics working under the banner of “open access” is making publicly funded research readily available to anyone who wants to learn regardless of income or institutional affiliation.

The fact is that, as with the research and development of technology, the state is already present. The industries discussed in the book hardly operate in a free market. Our public airwaves, worth hundreds of billions of dollars, are handed over without charge to radio and television broadcasters, or auctioned off to the highest bidding phone companies, all for private profit. Much of the infrastructure cable and telecommunications providers depend on was subsidized by taxpayers, who are stuck with patchier, inferior, and more expensive service than citizens of other countries (meanwhile Comcast has increased its lobbying budget from \$570,000 in 2001 to \$19.6 million in 2011 in order to maintain this cushy arrangement).

Media conglomerates receive tax write-offs for the costs of marketing their wares. Lucrative copyrights are indefinitely extended and dubious patents protected to appease entertainment and technology executives, these government-granted monopolies funneling massive fortunes into corporate coffers.<sup>25</sup> Public subsidies abound, though one would be hard pressed to say they are in the public’s interest.

*In the cultural realm we are told that the Internet and a medley of ever-evolving devices and services will automatically and effortlessly improve our media system. That sounds wonderful, but we need to identify what, precisely, was broken about the old arrangement so those problems don’t carry over. We also need to reflect on where we are heading. What does it mean to “democratize culture”?*

Too often technology gurus talk about democratizing culture as though the meaning of the phrase was self-evident. Everyone has a chance of making it online, they insist, pointing to individuals who use social media to pull away from the pack or dropouts who founded billion-dollar businesses in their basements. While it sounds empowering, the presence of a

small number of superstars is actually detrimental to democracy, not emblematic of it. Instead of facilitating the fame and fabulous wealth of a lucky few, democratizing culture involves mitigating against the winner-take-all effects of digital networks and finding ways to bolster the missing middle.

A more democratic culture means supporting creative work not because it is viral but because it is important, focusing on serving needs as well as desires, and making sure marginalized people are given not just a chance to speak but to be heard. A more democratic culture is one where previously excluded populations are given the material means to fully engage. To create a culture that is more diverse and inclusive, we have to pioneer ways of addressing discrimination and bias head-on, despite the difficulties of applying traditional methods of mitigating prejudice to digital networks. We have to shape our tools of discovery, the recommendation engines and personalization filters, so they do more than reinforce our prior choices and private bubbles. Finally, if we want a culture that is more resistant to the short-term expectations of corporate shareholders and the whims of marketers, we have to invest in noncommercial enterprises.

There is no shortage of good ideas. By not experimenting, we court disillusionment. The Internet was supposed to be free and ubiquitous, but a cable cartel would rather rake in profits than provide universal service. It was supposed to enable small producers, but instead it has given rise to some of the most mammoth corporations of all time. It was supposed to create a decentralized media system, but the shift to cloud computing has recentralized communications in unprecedented ways. It was supposed to make our culture more open, but the companies that dominate the technology industry are shockingly opaque. It was supposed to liberate users but instead facilitated all-invasive corporate and government surveillance. Instead of eliminating middlemen and enabling peer-to-peer relationships, it has empowered an influential and practically omnipresent crop of mediators. Instead of making our relationships horizontal and bringing prosperity to all, the gap between the most popular and the practically invisible, the haves and have-nots, has grown. Instead of unshackling individuals from the grip of high-priced spectacles, it has helped entertainment firms dominate global audiences. Instead of decommodifying art and culture, every communication has become an advertising opportunity.

The utopian undercurrents that suffused these erroneous predictions are not the problem. The problem is that we have not confronted the obstacles that have impeded them, particularly the economic ones. A more open, egalitarian, participatory, and sustainable culture is profoundly worth championing, but technology alone cannot bring it into being. Left to race along its current course, the new order will come increasingly to resemble the old, and may end up worse in many ways. But the future has not been decided.

Our communications system is at a crossroads, one way leading to an increasingly

corporatized and commercialized world where we are treated as targeted consumers, the other to a true cultural commons where we are nurtured as citizens and creators. To create a media environment where democracy can thrive, we need to devise progressive policy that takes into account the entire context in which art, journalism, and information are created, distributed, discovered, and preserved, online and off. We need strategies and policies for an age of abundance, not scarcity, and to invent new ways of sustaining and managing the Internet to put people before profit. Only then will a revolution worth cheering be upon us.