# Networked Trust & the Future of Media

## Lee Rainie

Americans believe the civic information ecosystem is collapsing. Trust in journalism has declined in the past generation, and news media now draw polarized audiences. Public confidence in social media as a news and information source has never been strong, and people today say social media firms cannot be trusted to be objective or impartial information curators of political discourse or stewards of their users' personal data. This adds up to public despair about disinformation and misinformation that impinges on the way expert knowledge is evaluated and deeply affects public life. A reckoning for both the news media and social media is at hand : For journalists, the existential challenge centers on the viability of their underlying business model. For social media firms, "techlash" might force them to change their structures and practices. Under the circumstances, networked individuals will determine the contours of trust in media.

t was supposed to turn out so well. John Perry Barlow's 1996 "Declaration of the Independence of Cyberspace" proclaimed:

We are creating a world that all may enter without privilege or prejudice accorded by race, economic power, military force, or station of birth. We are creating a world where anyone, anywhere may express his or her beliefs, no matter how singular, without fear of being coerced into silence or conformity.... In our world, whatever the human mind may create can be reproduced and distributed infinitely at no cost. The global conveyance of thought no longer requires your factories to accomplish.... We will create a civilization of the Mind in Cyberspace. May it be more humane and fair than the world your governments have made before.<sup>1</sup>

A quarter-century hence, those dreams have foundered, and many believe the civic information ecosystem is collapsing. In truth, Barlow's vision was about half right. Just as his words implied, many of the tribunes of traditional civic information were upended by the internet. Essential news nodes, especially local newspapers, were pummeled by digital competition and distractions.<sup>2</sup> Daily newspaper circulation fell from a high of about sixty million in the 1980s to twenty-eight million in 2018, and the circulation of the nation's top twenty-five newspapers has fallen 20 percent during the COVID-19 pandemic.<sup>3</sup> Starting at the turn of the twenty-first century, the economics of newspapers changed dramatically as consumer be-

haviors shifted from print to online, as did the retail and classified advertising that was the major source of revenue for newspapers. Ad revenue for print newspapers declined from a high of \$49.4 billion in 2005 to \$18.3 billion in 2016. Between 2004 and 2019, almost 1,800 newspapers closed.<sup>4</sup> That made about two hundred counties in the country "news deserts" with no newspaper at all, and about half the country's 3,143 counties had a single newspaper, often a small weekly that barely, if at all, covered local civic life like meetings of the local government, school board, or zoning board. The number of employed journalists dropped 26 percent between 2008 and 2020, a loss of about thirty thousand jobs.<sup>5</sup> This hollowing out of newsrooms is alarming and particularly important because newspaper coverage is often the essential nutrient feeding other parts of the news ecology.<sup>6</sup>

At the same time, the other half of Barlow's prediction about the "civilization of the mind" has hardly been realized. Rather than becoming "more humane and fair," cyberspaces have turned out to be republics of rage, rife with mis- and disinformation and dominated by info-warriors tearing into those who have competing ideas. As social media and other online forums came to prominence, many people began to think much worse of each other and the institutions designed to serve the collective good.<sup>7</sup> Gallup pollsters have documented how one of the institutions that suffered a great loss of confidence is journalism: The share of Americans who said they had a great deal or a lot of confidence in newspapers fell from 51 percent in 1979 to 20 percent in 2021. It was much the same for television news, dropping from 46 percent in 1993 to 16 percent in 2021.<sup>8</sup> A related problem is that the news audience has polarized in ways that make it difficult for the public to assess one central cluster of organizations and norms in the news world that embodies the field as a whole.<sup>9</sup>

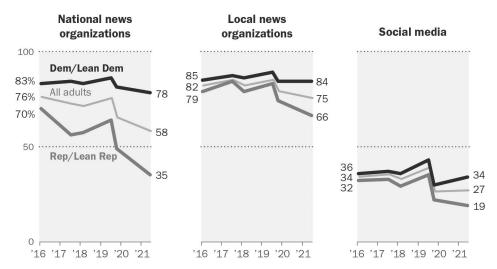
Meanwhile, the main digital spaces that have arisen alongside traditional journalism have hardly been the kind of inspirational substitutes Barlow imagined. In particular, public trust in social media as a news and information source has never been strong. In 2020, only 4 percent of Americans trusted the information in social media "a lot" and another 22 percent trusted the sites "some," figures that have worsened a bit since 2016.<sup>10</sup> Even as people find pockets of the social mediasphere they trust, they are generally not confident in the overall performance of the firms that run these platforms. Some 73 percent of U.S. adults say social media firms cannot be trusted to be objective or impartial information curators of political discourse.<sup>11</sup>

Indeed, public distress at the "surveillance capitalism" practiced by social media platforms and other giant tech firms has created a striking kind of anomie: Majorities of Americans are concerned, confused, and feeling out of control about how they are tracked, ranked, and rated by corporations and governments.<sup>12</sup> They feel powerless to take back control of their personal information and fundamental identities.

This sense of loss of personal agency ties to people's judgments about public life. Many believe that social media has worsened the information environment

#### *Figure 1* Wider Partisan Gaps Emerge in Trust of National and Local News Organizations, Social Media, 2016 – 2021

% of U.S. adults who say they have a lot or some trust in the information that comes from ...



In 2016, trust of information from social media was only asked of and based on internet-using U.S. adults. Source: Survey of U.S. adults conducted from June 14 to June 27, 2021, published in Jeffrey Gottfried and Jacob Liedke, "Partisan Divides in Media Trust Widen, Driven by a Decline among Republicans," Pew Research Center, August 30, 2021, https://www.pewresearch.org/fact-tank/2021/08/30/partisan-divides-in-media-trust-widen-driven-by-a-decline-among -republicans/.

and overall cultural climate: 64 percent of American adults say social media has a mostly negative effect on the way things are going in the country.<sup>13</sup> They are unhappy about the impact of disinformation and misinformation, fearful about the proliferation of conspiracy theories, and anguished about the toll of information wars.<sup>14</sup> They believe trust in government and interpersonal trust suffer in this environment.<sup>15</sup> Alarmingly, 73 percent of Americans now believe that political partisans do not operate in a shared reality, and a similar proportion of adults believe the party partisans do not occupy a shared moral universe.<sup>16</sup> The endpoint of this catalog of woe is that citizens' gloom extends into the coming decades: they foresee further decline in the United States' role in the world, along with growing inequality, polarization, and strife.<sup>17</sup>

B eneath this overall troubling story, though, a more mixed and somewhat hopeful story about public trust in news media is evident. Trust in media and information sources is not entirely vanishing. Rather, it is becoming distributed, networked, and dynamic.<sup>18</sup> Trust appears to be less a kind of property that people attribute to individuals, organizations, or systems and more a kind of conditional and context-specific social transaction that is applied in particular circumstances and for particular purposes to particular subparts of systems. In the industrial era of big, analog media in radio, TV, and newspapers, trust was easy to see as a thumbs up/thumbs down verdict on whole segments of the media industry. In the digital era, trust is better understood as fractal and contingent.

For instance, there is evidence that the broad distrusting judgments people apply to major institutions and groups do not represent their full answer about their trust in the individual components of those groups. The same people who say they do not have confidence in the news media in general can also cite news operations they trust, which is often tied to the partisan composition of news organizations' audiences. Republicans and conservatives particularly gravitate to Fox News, while Democrats and liberals say they trust multiple sources such as CNN, *The New York Times*, PBS, NPR, and NBC News.<sup>19</sup> Partisans' distrust decisions closely mirror their trust judgments: they distrust the news sources that are more trusted by those in the opposite party.

A similar polarized sorting process occurs when people are asked about trust in key institutions. In the past generation, Democrats have increasingly come to trust journalism, higher education, and science more than Republicans. At the same time, Republicans have come to trust the military, religion, and the police more than Democrats.<sup>20</sup> Only a few institutions, such as medicine and perhaps television (but not TV news) and the law, remain relatively apolitical, and partisans share an equal disdain for elected officials.<sup>21</sup>

When it comes to individual parts of government, Americans also have diverse and discriminating views that do not match their scorn toward the "federal government" as a whole. For example, a survey by Pew Research Center in 2020 seeking public opinion about ten different federal agencies in the final year of the Donald Trump presidency showed that all but one of those agencies enjoyed strong public support, the exception being U.S. Immigration and Customs Enforcement, on which there was a split public verdict (45 percent unfavorable versus 46 percent favorable).<sup>22</sup> Among the agencies viewed in a positive light, the support ranged from 91 percent for the Postal Service to 60 percent for the Justice Department. About two-thirds viewed Veterans Affairs and the IRS favorably (both 65 percent). Slightly more held favorable views of the Federal Reserve (69 percent) and the Department of Homeland Security (71 percent).

As the COVID-19 pandemic enveloped the world, an analogous process of evaluation and trust allocation by Americans applied to different parts of the public

### *Figure* 2 Ideology Adds Another Layer to Party-Line Divides of the Most Trusted and Distrusted News Sources

Democrat/Lean Dem				Republican/Lean Rep				
LIBERAL		MODERATE/ CONSERVATIVE		MODERATE/ LIBERAL		CONSERVATIVE		
CNN	70%	CNN	65%	Fox News	51%	Fox News	75%	
New York Times	66	ABC News	63	ABC News	47	Hannity (radio)	43	
PBS	66	NBC News	61	CBS News	42	Limbaugh (radio)	38	
NPR	63	CBS News	60	NBC News	41	ABC News	24	
NBC News	61	PBS	48	CNN	36	CBS News	23	

% who <u>trust</u> each source for political and election news (first five shown)

% who <u>distrust</u> each source for political and election news (first five shown)

Democrat/Lean Dem				Republican/Lean Rep				
LIBERAL		MODERATE/ CONSERVATIVE		MODERATE/ LIBERAL		CONSERVATIVE		
Fox News	77%	Fox News	48%	CNN	43%	CNN	67%	
Limbaugh (radio)	55	Limbaugh (radio)	34	MSNBC	32	MSNBC	57	
Breitbart	53	Hannity (radio)	28	HuffPost	30	New York Times	50	
Hannity (radio)	50	Breitbart	22	BuzzFeed	29	NBC News	50	
NY Post	27	BuzzFeed	20	Fox News	29	CBS News	48	

Order of outlets does not necessarily indicate statistically significant differences. Source: Survey of U.S. adults conducted from October 29 to November 11, 2019, published in Mark Jurkowitz, Amy Mitchell, Elisa Shearer, and Mason Walker, "U.S. Media Polarization and the 2020 Election: A Nation Divided," Pew Research Center, January 24, 2020, https://www.pewresearch.org/journalism/2020/01/24/u-s-media-polarization-and-the-2020-election-a-nation-divided/.

health system. The vast majority said their local hospitals were doing an excellent or good job responding to the coronavirus outbreak. Smaller, but significant majorities said the same about public health officials, such as those at the Centers for Disease Control and Prevention. Local officials received the next most favorable public reaction. State and federal elected officials fared the worst.<sup>23</sup> Of course, this follows the long-standing finding on the "trust gap" showing that those who have dim views of systems – such as Congress, the school system, or the health care system – are also usually quite happy with their community's member of Con-

## *Figure* 3 Sizable Partisan Divisions in Public Confidence in Leaders and Institutions

% of U.S. adults in each group with a great deal/fair amount of confidence in  $\ldots$ 

Groups Republicans trust more				Total Rep/ 83% Lean Rep
The military		Dem/Lean	<b>Dem:</b> 76% ●	• 091%
Police officers			69 •	78 <b>O</b> 89
Religious leaders		53 🌒	• 61 <b>0</b> 73	
Officials appointed by a president to oversee government agencies	28 ●	• 42	<b>O</b> 60	
Business leaders	36 🖜	• 43 • 53	}	
Groups Democrats trust more				
Scientists			75 <b>o</b>	●83● 89
Public school principals for K-12			74 O	●80● 85
College and university professors		48 <b>o</b>	68	● 84
Journalists	30 <b>O</b>	• 5	5 7	6
Career employees at government agencies not appointed by a president		48 <b>O</b>	● 61 ● 71	
Group with similar levels of trust				
Elected officials	36 🌏	<sup>37</sup> 37		

Respondents who gave other answers or no answer are not shown. Source: Survey conducted from November 27 to December 10, 2018, published in Lee Rainie, Scott Keeter, and Andrew Perrin, "Trust and Distrust in America," Pew Research Center, July 22, 2019, https://www.pewresearch.org/politics/2019/07/22/how-americans-see-problems-of-trust/.

gress, their local teachers, and their own doctors.<sup>24</sup> Studies of trust in news media show a similar trust tilt toward local fare, rather than regional, national, or international media.<sup>25</sup>

In these circumstances, trust in media and information is best viewed as a continuum with multiple levels, rather than a binary of trust or distrust. The continuum became multidimensional once people's social networks and social media became embedded in their media spaces. This adds another set of factors for news consumers to consider as they decide where to invest their attention and make calculations about what information to trust. Social media users are quite clear about their unhappiness with the overall quality of information and tone of discourse on social media. But they have not fled from the spaces – indeed, the share of those who use such spaces has grown – because they find clear social and civic value in the things they see and the ways that can participate on these platforms.<sup>26</sup> For example, 45 percent of U.S. adults say social media platforms are very or somewhat important to them personally in finding other people who share their views about key issues; 44 percent say the platforms are important for getting them involved with political and social issues; and 40 percent say they are important in giving them a venue to express their political opinions. Black adults and Hispanic adults are especially likely to say each of those things. Young adults aged eighteen to twenty-nine are also more likely than older Americans to say those traits of social media are important to them.<sup>27</sup>

The new character of information in digital social spaces makes these disparate and paradoxical views possible. Studies by media theorist danah boyd and Pew Research Center show there are eight aspects of digital information linked via the internet that have created a different kind of mediascape and, therefore, a different kind of milieu in which to consider trust. In other words, there are eight ways in which digital media are qualitatively or quantitatively different from previous kinds of analog media.<sup>28</sup>

First, the shift of media from atoms to bits has allowed *digital media to become pervasive*. All forms of media – text, audio, pictorial, video – now are conveyed in a digital format, making it possible for digital devices to be displays and amplifiers of information. Many analog media devices from radios to TVs to telephones to record players have been reimagined to embrace the multiplexity of digital formats. Moreover, smartphones themselves, which are owned by 85 percent of American adults, have become all-purpose media devices.<sup>29</sup> It is difficult to escape media now, especially for the 31 percent of Americans who say they are online "almost constantly."<sup>30</sup>

Second, *digital media are portable*. The rise of mobile connectivity has allowed media to move around with humans and decouples media experiences from the place-based media gadgetry that delivered news in the analog era. It also means that people think of their smartphones as a body appendage, an adjunct of their brain or, indeed, another limb.<sup>31</sup> This allows media to be consumed on-the-fly as people are moving around the world.

Third, *digital media and communication are persistent and visible*. Online expressions, boyd notes, are automatically recorded and archived. What one says sticks around, unlike the more evanescent communication and information sharing that takes place in nondigital environments.<sup>32</sup> Even ephemera often remain on the record, publicly visible for wide audiences. That reality overturns the common experience of the analog era when it took considerable effort and expense to publish media and gain an audience for it. This condition of persistence and visibility also

### *Figure 4* Black and Hispanic Social Media Users More Likely than White Users to Say Social Media Is Important to Them for Engaging in Certain Political Activities

% of social media users who say that social media is **very or somewhat important** to them personally when it comes to ...

	White Hispanic Black	Total
Finding other people who share their views about important issues	39% 57 60 ● • ● ●	 45%
Getting involved with political and social issues that are important to them	37 53 60 • • O	 44
Giving them a venue to express their ——political opinions	34 5153	 40

White and Black adults include those who report only one race and are not Hispanic. Hispanics are of any race. Those who did not give an answer or who gave other responses are not shown. Source: Survey of U.S. adults conducted from June 16 to June 22, 2020, published in Brooke Auxier, "Activism on Social Media Varies by Race and Ethnicity, Age, Political Party," Pew Research Center, July 13, 2020, https://www.pewresearch.org/fact-tank/2020/07/13/ activism-on-social-media-varies-by-race-and-ethnicity-age-political-party/.

puts on display the wide range of human activities – including civically related activities and opinions – that in yesteryear were largely invisible.

Fourth, *digital media are personal and customizable*. Essential parts of people's digital information flows are personally curated and shaped by algorithmic curation systems. Both the technological and social filters that people use to customize the information flows into their lives are often necessitated by the volume and variety of information coursing around them. They filter email traffic. They make friending and unfriending decisions based on the relevance and appeal of the media and messaging others create. They subscribe to various types of content, crafting "playlists" of music, news, social encounters, and a host of other kinds of media content. Moreover, many function within algorithm-mediated environments in which media recommendations are offered ("here are other books that people who purchased this book purchased"), and profiles of them are created based on their purchases, clicks, shares, comments, or likes to craft the flow of new content in their "feeds." This inevitably leads to situations in which people who share the same physical worlds – neighborhoods, apartment complexes, work cubicles – do not share the same information and media spheres. Fifth, *digital media are participatory : they allow everyday users to be content creators and activists in realms that matter to them*. Arguably, the greatest impact of the rise of digital, connected media is that it has enabled many users to become media-makers themselves as they use low-cost tools to tell their stories and display their experiences to the world. Through social media, there are powerful new ways for citizens to draw an audience to their ideas and creations. This social production has disrupted every form of civic activity, knowledge-generating endeavor, and creative pursuit from scholarly work to music and film-making to software development.<sup>33</sup> In turn, the democratization of media production has challenged the structures of expertise, media gatekeeping, and legal regulation of media that dominated the industrial era of media. Of course, it has also given purveyors of misinformation, fraud, and menace new tools to torment and trick others.

Sixth, *digital media are replicable*. Digital bits are easy to duplicate. "Copies are inherent to these systems," boyd notes.

In a world of bits, there is no way to differentiate the original bit from its duplicate. And, because bits can be easily modified, content can be transformed in ways that make it hard to tell which is the source and which is the alteration. The replicable nature of content ...means that what is replicated may be altered in ways that people do not easily realize.<sup>34</sup>

Mash-ups and outright theft of digital content are commonplace in the digital era. People's private one-to-one messages can be cut and pasted and thrust into the digital public square. An emerging concern is the rise of manipulated copies or creations of falsified information – deepfakes and cheapfakes – that give a mistaken appearance of real human activity.

Seventh, *digital media are spreadable and scalable*. A great deal of digital media creation, particularly in social media, is done for the purpose of sharing content and allowing it to be shared by others. Many websites and apps have one-click buttons for sharing that vastly expand the universe of potential consumers of information. Virality is an essential engagement metric for digital media and the advertisements it attracts. Of course, the same spreading process that enables meaningful and joyful content to find an audience is used by trolls and other malefactors to attack or shame content creators.

Eighth, *digital media are searchable*. The explosion of digital media would be largely unnavigable without powerful search tools that allow users to find the content they want – and remember it when they have forgotten it. Search enables long-ago episodes to be unearthed. Search permits people to outsource their memories to digital storage, retrievable almost instantaneously in a few commands. It also means that creators and users of digital content leave a record – a searchable, findable record that others can examine and exploit and perhaps even invade.

Taken as a whole, digital information reconfigures the media terrain and scrambles the way people think about and meet their information needs. The digital media ecosystem captures and exploits vastly more visible evidence about people's political and social engagement, their social networks, the subjects around which they cluster, their institutional affiliations, their allegiances, alliances, affirmations, enemies, arguments, and do-it-yourself initiatives. Further, this ecosystem allows tech firms to inject all this insight into the social media threads of others. This creates new context for people's considerations about what and whom to trust.

These sweeping developments in information structure have changed the character of media spaces, changed the way citizens use them, changed the nature and forms of civic participation, and changed the way people make judgments about trust and distrust in information and those who share it. It is a mediasphere in which every assertion can be liked, shared, commented upon, up-voted or down-voted, linked to, scraped for a database, de-contextualized as a singular tidbit or factoid, and re-contextualized by links to other assertions. Perhaps most consequentially, the "digital exhaust" that people create adds to the growing pile of data from all sources, thus forcing people to rely on new tools, organizations, and learning arrangements to help them navigate the digital mediasphere.

Moreover, these changes in the makeup and role of information have arisen at the same time that key social structures like families, groups, communities, organizations, and national relationships are also in transition. To the degree that every decision a person makes about who or what to trust is a social calculation, there is deep intersection between changes in information and changes in social arrangements. Especially in the age of social media, the members of users' personal and professional networks are key conduits to civic information and serve as key commentators on that information. In effect, citizens' efforts at assessing whether content can be trusted are now networking activities performed by networked individuals. Networked individuals live in a "social operating system" that could be called networked individualism.<sup>35</sup> In that system, people function more as connected individuals and less as embedded group members.

Networked individuals are also more in charge of the process of acquiring and evaluating information than their forebearers. When Pew Research Center asked Americans where they turn for information and advice when they have major decisions to make, they gave a very networked individual kind of answer: 81 percent said they relied a lot on their own research; 43 percent said they relied a lot on family and friends; and 31 percent said they relied a lot on professional experts.<sup>36</sup> Other evidence suggests that networked individuals meet their civic, social, emotional, and economic needs by tapping into loosely knit networks of diverse as-

sociates rather than relying on tight connections to a relatively small number of core associates. When they have problems to solve, decisions to make, or questions that need answers, people usually turn to the relevant parts of their network for assistance. They do not have one surefire anchor community to help them with all the issues that arise in their lives. Instead, they rely on many specialized relationships – and on information they find online – to meet their needs.

The most successful networked individuals have diverse networks – and diverse media needs – that require allocations of trust that are targeted and transactional. They have partial membership in multiple networks and rely less on permanent memberships in settled groups. Social media plays a special role for networked individuals because it is a creative and participatory medium. Network connections can ripen in important ways as social media offers so many options for interaction and information sharing. In addition, social media allows people to tell their stories, draw an audience, and gain assistance when they are in need.

ll told, the social realities of networked individuals and their information needs create a new setting for considering what civic news and information to trust. Can trust in media be restored? A major reason to hope so is that humans have gone through challenges like this after information revolutions in the past and found ways to mitigate the harmful impacts created by disorienting upsurges in information and data. Yes, the rise of the printing press gave new life to those who practiced and promoted folklore, quackery, witchcraft, and alchemy by allowing them to propagate their crackpot theories cheaply and widely. But it also created the conditions that eventually gave rise to the Enlightenment and Scientific Revolution. Historian Elizabeth Eisenstein has argued that largescale changes in the creation, collection, and preservation of data and then the standardization and dissemination of information "brought about the most radical transformation in the condition of intellectual life in the history of Western civilization.... Its effects were sooner or later felt in every department of human life." 37 Analysis by Jennifer Kavanagh and her team at RAND documents a similar dynamic in American journalism of "truth decay" abuse followed by reform that revives trust in media and government in several eras: The yellow journalism of the late nineteenth century begat the practices and norms of objectivity and muckraking in the ensuing generation. The "jazz journalism" and tabloid sensibilities of the 1920s begat the increasing effort by the government to gather and share statistics and was countered by the rise of scientific public opinion polling. The lying and dissembling of government officials during the Vietnam War and Watergate scandal begat aggressive investigative reporting and government transparency reforms like open-meeting laws and campaign disclosure laws.

There are similar efforts now under consideration to ameliorate the worst impacts of the explosion of digital media. In a series of nonscientific canvassings in recent years seeking the insights of experts who build technology and scholars who study communications, Pew Research Center has cataloged a variety of initiatives aimed at reestablishing trust in media and comity in public life. They include twenty-first-century updates of time-tested strategies for trust-building: more institutional transparency; rules that limit abuse of power by those with the upper hand; more oversight of the distrusted and mechanisms to hold them accountable; construction of public alternatives to privately run organizations; and more education to allow the disadvantaged to gain agency. Some of the key ideas include:<sup>38</sup>

Give people control of their data and more power in their interactions with major tech platforms. Advocates argue for a legally enforceable "internet bill of rights" giving users sovereignty over their data and online identities.<sup>39</sup> The core planks would grant users access to and knowledge of all collection and uses of personal data by companies; opt-in consent to the collection of personal data by any party and to the sharing of personal data with a third party; secure personal data and timely notification when a security breach or unauthorized access of personal data is discovered; and interoperability of data so that users could move all personal data from one network to another. Proponents believe this is the surest antidote to surveillance capitalism and all the public confusions and dismay that surround it.

*Change social media algorithms to downplay anger and divisive discourse and upvote accuracy, diverse perspectives, and pathways to agreement.* Social media algorithms are optimized for capturing users' attention and measure that through metrics of engagement with content. This leads to promotion of misinformation, hate speech, and angry and divisive content, which invariably generate the most shares, comments, and likes.<sup>40</sup> Of course, algorithms can be programmed to optimize for other things and reformers list a variety of examples: diversity of opinion; points of view different from users' known interests; discourse that signals openness to constructive conversation and dialed-down anger. Users can also be offered "middleware" options allowing them to adjust algorithm parameters to experience the quality and tone of commentary that appeals to them.<sup>41</sup> Artificial intelligence learning systems can be designed to encourage the promotion of accurate and thoughtful content, and to shun or downplay misinformation from known sources of troublesome material.

*Embrace transparency in both formal news operations and social media.* The Knight Commission on Trust, Media and Democracy outlined the ways in which greater transparency can be embraced by news organizations:

News leaders across competitive boundaries [can] work together to develop and adopt common standards and best practices that promote transparency. These include: labeling news, opinion and fact-based commentary; best practices on corrections, fact-checking, anonymous sources and tracking disinformation; and avoiding advertising formats that blur the line between content and commerce.<sup>42</sup>

On the technology side, transparency initiatives could cover several aspects of the work of the major platforms, starting with algorithmic forensics that would expose and reorient the hidden systems that are optimized for profit maximization. Another step toward transparency would be to press for algorithmic explainability. Judith Donath, of Harvard's Berkman-Klein Center for Internet and Society, puts it this way:

The [algorithmic] process should not be a black box into which we feed data and out comes an answer, but a transparent process designed not just to produce a result, but to explain how it came up with that result. The systems should be able to produce clear, legible text and graphics that help the users – readers, editors, doctors, patients, loan applicants, voters, etc. – understand how the decision was made. The systems should be interactive, so that people can examine how changing data, assumptions, rules would change outcomes. The algorithm should not be the new authority; the goal should be to help people question authority.<sup>43</sup>

A connected issue involves diversifying the pool of those who design algorithms and using data sets to train machine-learning systems that reflect diverse populations.<sup>44</sup> Nearly all the scores of ethics frameworks that have been proposed for AI initiatives call for increased diversity among the code writers and more substantial analysis of potential disparate impacts of algorithmic applications as they are making predictions. As algorithms and artificial intelligence spread, an increasingly common reform proposal is for the federal government to create an "FDA for algorithms," applying the same regulatory framework for the approval of algorithms that is now required for drug approval.<sup>45</sup>

*Revive journalism and create public spaces like public broadcasting spaces in TV and radio.* Good journalism is the beating heart of civic life. Many advocates believe the best way to restore trust in civic life is to beat back the efforts of malevolent infowarriors by pumping much more accurate information into the media ecosystem. Advocates acknowledge the problem with online news is structural: there are too few gatekeepers, and the ad-based business model does not sustain quality journalism. So proponents focus on nonprofit and even subsidized systems of journalism. The Knight Trust Commission was particularly encouraging of nonprofit models such as community news organizations, public benefit corporations, and news organizations funded by venture philanthropy, a kind of grant-making that is specifically designed to address market failures. Some reformers specifically call for the creation of a "PBS for the internet" that would intentionally operate on different news standards with a different sense of the broad audience to be served. Of course, there are also ways that networked individuals and groups can band together to create news operations that cover relatively wide-ranging subjects like the investigative work of ProPublica, the Texas Tribune, and the Intercept, or that cover niche subjects in blogs and newsletters.

*Create new educational programs for digital and civic literacy.* Historically, education programs have been the places where cultures invest in long-term improvements in civic life, and the bedrock of education efforts has always been literacy. Many have called for adding dedicated courses on "cyberliteracy" to the formal education.<sup>46</sup> Perhaps one-third of American adults do not have basic "digital readiness" and an even larger share reports they struggle to find the information they want on-line.<sup>47</sup> Of course, this ties strongly to the struggles people have with civic literacy.

Just as some of the biggest problems of the Industrial Age eventually were mitigated by civic and social innovation such as labor organizations and labor laws, product safety rules, health and environmental regulations, and communitybased social associations, many futurists expect the same kind of response to the problems that have spawned techlash. Beyond the general ideas listed above, futurists predict such information-era innovations as citizen engagement in participatory rule-making and budgeting, particularly at the local level; crowd-sourced and crowd-funded collective civic actions, especially in cases of natural disasters; smart agents that extend people's civic activities; hybrid and self-directed learning that mixes in-person and digital programming; citizen-science and do-ityourself local problem-solving; and peer-to-peer health care that complements institutional health care.

It is not entirely clear if any of those kinds of efforts will rebuild public trust in democracy, democratic institutions, or news media. What they do illustrate is how the traits and appeal of digital media to networked individuals might be recast to meet their needs. Digital media, notably social media, puts new tools in their hands to find, share, and create information. This is a social and information environment well understood by nineteenth-century German sociologist Georg Simmel, who initially formulated the ideas that now underlie social network analysis. Looking at the industrialization and urbanization reshaping his culture, Simmel argued that social life - especially in cities - was a fluid form of networks in which people make ongoing calculations about obligations and benefits.<sup>48</sup> He wrote: "The deepest problems of modern life flow from the attempt of the individual to maintain the independence and individuality of his existence against the sovereign powers of society, against the weight of the historical heritage and the external culture and technique of life." In the march from primitive life to village life to industrial, bureaucratic, urbanized life, he argued that "the same fundamental motive was at work, namely the resistance of the individual to being levelled, swallowed up in the social-technological mechanism."49 Simmel recognized that the move from villages to cities meant that people were no longer totally enmeshed in one all-encompassing community. Instead, they could maneuver more freely through their partial social attachment in a variety of social circles. He understood that this existence is both anxiety-producing and liberating, and that the nature of this networked world increases the stakes as people make trust decisions.<sup>50</sup>

Mericans have their own ideas about how to restore trust in each other, if not trust in media. First, they see community activity as restorative. Some believe their neighborhoods and local civic groups such as churches, libraries, and schools are key places where interpersonal trust can be rebuilt as people work side by side on local projects.<sup>51</sup> A sizeable share of Americans also says the news and information ecosystem could be changed in several ways to serve the common good. They urge their fellow citizens to have a more balanced news diet that focuses less on insult-ridden talk shows. They want fewer sensationalist stories about conflict and more on the ways people cooperate, persevere, and achieve.

A majority also see the need for major reform in democratic processes.<sup>52</sup> Asked to name the biggest problem with government today, many cite Congress, politics, or a sense of corruption or undue outside influence, and they back changes to mute the effects of money and special interests.<sup>53</sup> Of course, once specific ideas to restructure the government are on the table, people's partisan preferences kick in. But their clear emotional yearning is for a better-performing, less money-saturated, and more accountable government.

Many recognize that the climb back to a better-functioning, more trusting society will be a long one. It would start with changes in the media ecosystem and with acts of kindness and cooperation among individuals. In short, Americans seem to know that the path to rebuilding begins with them and the information they produce and consume.

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