

# 4

## Information Communities

Karen E. Fisher and Crystal Fulton

### Editor's Introduction

*Chapter 4: Information Communities* discusses communities as they relate to the information profession. Information behavior experts, Karen E. Fisher, professor at the University of Washington, and Crystal Fulton, associate professor at University College Dublin, use their expertise to discuss information communities in all forms.

Identifying and analyzing information communities is how information professionals can gauge the interests and needs of their community. The authors give a detailed description of what defines a community and present two important frameworks, Durrance's Information Communities and Fisher's Information Grounds, to help understand and contextualize the concept and role of communities. They provide the reader guidance on how to identify what their community's information needs might be by observing their activities and interests. They also discuss how information needs can change over time. For example, the disruption caused by the COVID-19 pandemic resulted in an explosion of new information communities as society converted to online platforms—and also in significant challenges to communities such as a “disinformation pandemic.” The authors highlight this transition, as well as other global events that have affected, and will continue to affect, established and aspiring information communities.

Understanding not only the interests of niche communities but also the larger impact that global events have on communities' information needs is what makes for efficient and effective information services. Readers will connect with a greater sense of the information professional's role, engagement, and participation in information communities and how they play an instrumental part in how resilient that community can be as they adapt to the changing landscape.

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In the 2015 first edition of *Information Services Today: An Introduction*, the authors addressed how “community” is the foundation of information services, ways of defining community, and how information professionals can facilitate information grounds and information communities. Much has happened since 2015 that has greatly affected notions of community and how community can be best served by information professionals. After completing this chapter, the reader should have an understanding of:

- how community is defined from interdisciplinary and information science perspectives;
- how four global developments resulted in the collapse of traditional community and the rise of a disinformation pandemic; and
- how information professionals, as frontline workers, are leading community resilience.

## Community Defined

“Community” is a concept central to varied professions, especially library and information science (LIS) where community is the underlying focus for all services—from design of systems to carrying out frontline operations. A useful approach to understanding community is found in Christen and Levinson’s introduction to the *Encyclopedia of Community: From the Village to the Virtual World*;<sup>1</sup> they recommend that community membership should be understood from four, often intertwining, types of membership:

- *Affinity*: common interest (e.g., book clubs, sports, pets, collecting, travel).
- *Instrumental*: shared desire to achieve specific goals, whether political, economic, or other (e.g., activist network such as from Amnesty International to neo-Nazis, a set of hospice workers, a professional association, a political party).
- *Primordial*: ties of blood, kinship, race, ethnicity, or deeply held shared beliefs (e.g., Asian American community, monastic communities).
- *Proximate*: physical residence (e.g., condominium complex, neighborhood, city).

McMillan and Chavis’s “sense of community”—perhaps the most widely cited framework for studying and serving community—is defined as “a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members’ needs will be met through their commitment to be together.”<sup>2</sup> Their framework comprises four elements:

- *Membership*: Members feel connected through boundaries, emotional safety, a sense of belonging and identification, personal investment, and a common symbol system.
- *Influence*: Group cohesion is created when members feel they have influence in the group while the group has influence on its members.
- *Integration and fulfillment of needs*: Members feel rewarded for their participation in the community.
- *Shared emotional connection*: Group members have a shared history and shared participation (or at least identification with the history).

The nature of online communities and hybrid online-offline communities has been the focus of much research. For example, Hampton discusses online communities in terms of persistent contact and pervasive awareness, which “affects the availability of social capital, the success of collective action, the cost of caring, deliberation around important issues, and how lives are linked over the life course and across generations.”<sup>3</sup> In *Technically Together: Reconstructing Community in a Networked World*, Dotson, who is critical of singular definitions of community as well as low expectations of networked individualism, commends communality for identifying online community as *thick* or *thin*, based on a seven-point framework:

1. the thickness of their webs of social ties,
2. practices of exchange and mutual aid,
3. frequency and depth of talking,
4. production of a symbolic or psychological sense of belonging,

5. degree of economic interdependence,
6. extent to which politics and justice reaffirm rather than sever relationships, and
7. strength of a moral order emphasizing collective rather than private interests.<sup>4</sup>

### ***Information Communities***

In these approaches to community, information exchange is not an explicit feature but is, instead, assumed. Two information-centric frameworks, Durrance's Information Communities<sup>5</sup> and Fisher's Information Grounds,<sup>6</sup> are reviewed here as a starting point to discussing how information communities have changed over the last several years.

Durrance's Information Communities combines previous elements of community with the added roles of information as its prime focus. Durrance describes information communities as forming primarily around people's needs to acquire and use information, defining them as "constituencies united by a common interest in building and increasing access to a set of dynamic, linked, and varying information resources." She explains how information communities are a purposeful "partnership of institutions and individuals forming and cultivating a community of interest around the provision and exchange of information, or knowledge, aimed at increasing access to that information or increasing communication, and thereby increasing that knowledge."<sup>7</sup> Within an information community, individuals or groups may play multiple roles as information seekers, users, providers, managers, and so on. Research on information communities offers five characteristics:

1. Emphasis on collaboration among diverse information providers.
2. Capacity to form around people's needs to access and use information.
3. Capacity to exploit the information-sharing qualities of emerging technologies.
4. Ability to transcend barriers to information sharing.
5. Capacity to foster social connectedness.<sup>8</sup>

Although not all these characteristics are necessarily met to the same degree in every information community, they are illustrative of the factors that optimize information flow and social cohesion. While information communities occur both offline and online, and involve fluency in information literacy, at the time of Durrance's writing, digital community development through social media, as well as adverse information events (including disinformation, fake news, trolling, and hacking), were yet to have an impact on our view of community.

### ***Information Grounds***

Information grounds are informal, offline, and online social settings where people experience information and create, remix, curate, and share everyday information—often with complete strangers—while focusing on another activity. Information grounds are wide-ranging, such as cafés and pubs, the metro, casinos, hair and tattoo salons, bus queues, grocery stores, football games, waiting rooms, parks, libraries and bookstores, luggage carousels, aircrafts, waiting areas for class, beaches, *World of Warcraft*, Etsy, Instagram, LinkedIn, Bumble, Facebook, and more. Everyone has their own information grounds. They may spring up ad hoc or in places frequented routinely. They may represent a place where they are hoping to mingle with others or a place where they want to remain anonymous. They may occur as a situation in which people have been "trapped" together, such

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as in an elevator that is stuck or in a doctor's waiting room—also known as “hostage settings.” Information grounds also spring up during times of crisis, disaster, and displacement (see also Chapter 23: Community Resilience). By understanding their characteristics—people, information, and place—information grounds can be facilitated to optimize people's everyday life situations and overall happiness.

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The findings of information grounds research can be used powerfully for designing information technology, services, and policy (see also Chapter 26: The Design Thinking Process). Information grounds was originally defined as “Environment(s) temporarily created when people come together for a singular purpose, but from whose behavior emerges a social atmosphere that fosters the spontaneous and serendipitous sharing of information.”<sup>9</sup> The framework was expanded to seven propositions (see Textbox 4.1).

#### TEXTBOX 4.1

##### Seven Propositions of the Information Grounds Framework

1. Information grounds can occur anywhere, in any type of temporal setting, and are predicated on the presence of individuals.
2. People gather at information grounds for a primary, instrumental purpose other than information sharing.
3. Information grounds are attended by different social types, most if not all of whom play expected and important, albeit different roles in information flow.
4. Social interaction is a primary activity at information grounds, such that information flow is a by-product.
5. People engage in formal and informal information sharing, and information flow occurs in many directions.
6. People use information obtained at information grounds in alternative ways, and benefit along physical, social, affective, and cognitive dimensions.
7. Many subcontexts exist within an information ground and are based on people's perspectives and physical factors; together these subcontexts form a grand context.

In the past twenty years, hundreds of studies have examined information grounds worldwide and ways of facilitating them using the fifteen facets identified in the People-Information-Place Framework developed by Fisher, Landry, and Naumer:

- *Information*: the four facets are significance, frequency discussed, how created or shared, and topics;
- *People*: the five facets are membership size, membership type, familiarity, actor roles, and motivation; and
- *Place*: the six facets are focal activities, conviviality, creature comfort, location and permanence, privacy, and ambient noise.<sup>10</sup>

Information professionals can use these facets to understand how an information ground functions (i.e., who the people are, what is the role of the place where they meet, how they experience information there) and then identify ways of supporting that information ground. For example, information about a particular topic may be more efficiently disseminated by improving the “place” factors, such as making coffee and sweets available, acquiring plants, or providing better lighting. If an information ground has excellent place factors, then it may signal opportunities for disseminating a broader array of information, such as providing health or financial information via a hair salon. Sometimes places where people feel most anonymous are where they are most receptive to sharing and experiencing information; thus, ambient noise and unfamiliarity can work in a positive way.

### **Check This Out**

Within the European Union (EU), libraries and archives have a long tradition of serving as focal points in communities. Check out Appendix 4.1 Communities in the European Context in Part II: Chapter 4 of the Online Supplement to learn more about the important role libraries fulfill in the EU.

### **Global Factors Affecting Community**

Although community has always had two sides—positive and negative—most work has focused on positive benefits and resilience. Recently, four intertwined global developments have shaken the structure of community. This information pandemic (i.e., the explosion of mis-, dis-, and malinformation online) is forcing new structures of information communities (in Durrance’s sense) and information grounds that require sophisticated information literacy skills and, foremost, leadership from information professionals. These four developments are explored next.

#### ***2016 Election and the Trump Administration***

The 2016 election between Democrat Hillary Clinton and Republican Donald Trump, and the subsequent election of Trump, signaled unprecedented social unrest through its actions and policies in the US with reverberations worldwide. Election interference by a foreign nation was identified, and other conservative and right-wing governments were installed internationally. The divisiveness of the Trump administration continued through the 2020 election, giving rise to “Trumpists” and the storming of the US Capitol in January 2021.<sup>11</sup>

Throughout the Trump administration, numerous controversial policies (e.g., the Mexico-US border, the environment, education) prompted mass online and public demonstrations.<sup>12</sup> Trump’s persistent labeling of the journalistic media as “fake news” and fervent antagonistic Twitter behavior coincided with raging online conspiracy theories supported by conservative news outlets and culminated with Trump being banned from Twitter and other social media prior to the 2020 election.<sup>13</sup> The Trump administration laid bare the stark differences across the US in every sense of community and communal structures and values, affecting community worldwide.

#### ***Demands for Social Justice***

Since before Rosa Parks and Martin Luther King Jr., demands for social justice have long been growing in the US and worldwide (see also Chapter 7: Social Justice). However, these calls accelerated quickly and significantly under the Trump administration—with the rise of Black Lives Matter (BLM) in response to several high-profile police killings of Black Americans;<sup>14</sup> Stop Asian Hate, which fought the blaming of Asians for COVID-19; and Islamophobia after 9/11.<sup>15</sup> In 2020, the Southern Poverty Law Center listed 838 hate groups and classified organizations (such as the Proud Boys) as hate groups or, in the language of the Anti-Defamation League, “extremist conservative.”<sup>16</sup>

Black, Indigenous, People of Color (BIPOC) efforts have resulted in national dialogues on caste and power,<sup>17</sup> anti-racism,<sup>18</sup> and white fragility.<sup>19</sup> Companies and institutions have begun to create poli-

cies for equity, diversity, and inclusion (EDI, also often termed diversity, equity, and inclusion, or DEI), with technology companies often garnering criticism for their internal practices (see also Chapter 6: Equity of Access, Diversity, and Inclusion). “Cancel culture,” “woke culture,” and “snowflakes” entered the lexicon as communities battled issues of social justice against white supremacy and other extremism, with deepening polarization worsened through social media.

Related to social justice, climate justice<sup>20</sup> also rose prominently in recent years, focusing on ethical and political factors affecting the environment and populations. Local activism and country-level and international efforts to stem global warming and climate change through reduced gas emissions and landfill, pipeline prevention, waterway protections, and so on, have also been challenged by fake information and actions, such as Trump’s withdrawal from the Paris Climate Accord.<sup>21</sup>

### ***Dark Communities, Fake News, and Cybertroop Activities***

Although the Internet is commonly viewed as the foundation for a democratic “global village,” the digital environment also harbors dark communities, such as extremist and far-right groups, which use the ease of the digital environment to link with similar groups worldwide.<sup>22</sup> Mobile devices, social media, and ambient technology are embedded in people’s daily lives, from their homes to how they work, shop, and pay bills, socialize, and even drive their cars. While the behemoth social media platform Facebook leads with more than 2.7 billion monthly active users in February 2021, standard-bearers (e.g., Twitter, YouTube, Instagram, Reddit, Tumblr, Pinterest, and LinkedIn) were vying with other emerging and growing social media platforms (e.g., Telegram, Meetup, WhatsApp, Snapchat, WeChat, TikTok, Medium, Twitch, MeWe, ClubHouse, Discord, Steemit, VK, Quora, Vimeo, Zoom, Parler, Houseparty, and Tapereal) for dominance. Video games, from *Minecraft* to *Fortnight* and *PUGB*, also provide means for people to communicate and carve out community. In short, use of digital tools for communication has greatly increased since COVID-19.<sup>23</sup>

Worsened by rising populism, all these developments have been accompanied by massive data leaks and hacks through malware; dis-, mis-, and malinformation (e.g., through bots, trolls, sock puppets, paid likes and followers, fake engagement, doxing, swatting, and influencers), and artificial intelligence (AI) algorithms. AI algorithms have revealed personally identifiable information (PII) about individuals and have demonstrated that they have racial and gender bias;<sup>24</sup> these issues have prompted international calls for greater regulation of technology companies in the US and the European Union.<sup>25</sup>

The recent phenomenon of “fake” communities—a segment of the online environment in which algorithms are used to manipulate public opinion by spreading disinformation or computational propaganda on social media—has risen to the fore. This “cybertroop activity” (i.e., algorithms used to influence human behavior), pursued by governments and political parties, private companies, and other organizations, has been identified in eighty-one countries and is on the rise.<sup>26</sup> While social media organizations remove accounts and pages identified as engaging in cybertrouping, millions are spent on cybertroop activities, making the task of overcoming cybertroops a continuous battle.

### ***COVID-19 Pandemic***

The COVID-19 pandemic, first recognized in December 2019, left no one untouched. Worldwide, COVID-19 caused nearly three million deaths, more than 136 million cases, took a devastating toll on people’s mental and physical health (especially among vulnerable populations), and caused personal finances and global economies to tumble. COVID-19 restricted people from gathering in person, disrupted traditional social fabric and community, gave rise to new forms of community (e.g., bubbles and pods of small households or neighbors), and exploded the rise of e-communications (e.g., Zoom for work, school, and socializing via social media).

Ironically, COVID-19 contagion hotspots—ski resorts, bars, restaurants, places of worship, beaches, schools, nursing homes, and workplaces—are also information grounds. Government measures to protect the public against COVID-19 were targeted at preventing community gatherings.

However, COVID-19 was accompanied by a disinformation pandemic spreading incorrect information about how to prevent the virus, manage infection, seek help, and get vaccinated. The pandemic provided insight on how new community structures and information grounds, with leadership from information professionals, are needed to develop global resilience to this tsunami of disinformation. For example, vaccination centers were established at information grounds, such as pharmacies, coffee shops, and libraries, where factual information was provided to participants.

These four global developments have radically changed community. According to the US National Intelligence's *Global Trends 2040* report: "In this more contested world, communities are increasingly fractured as people seek security with like-minded groups based on established and newly prominent identities; states of all types and in all regions are struggling to meet the needs and expectations of more connected, more urban, and more empowered populations."<sup>27</sup> Whether using Christensen and Levinson's "Affinity-Instrumental-Primordial-Proximate" framework,<sup>28</sup> McMillan and Chavis's "Sense of Community,"<sup>29</sup> or Dotson's "Communitality,"<sup>30</sup> the COVID-19 and accompanying disinformation pandemics have disrupted valued social order norms, along with those typical of information communities and information grounds. As people turned to the digital environment for conversation, news, and facts for work, school, and socializing, they entered a world of distrust, where accurate information pales against disinformation, misinformation, and malinformation.<sup>31</sup> They have also entered the daily dodging of spammers, trolls, and Zoom bombers who prey on their worldviews, PII, attention, and social connections, wreaking mayhem. In protest of Reddit's refusal to limit discussions promoting mis- and disinformation about COVID-19, 135 subreddit communities comprising more than ten million subscribers mounted a "gone dark" movement that blocks nonmembers from reading or joining the page, forcing action from the company).<sup>32</sup>

#### TEXTBOX 4.2

##### Discussion Question

What are the biggest current and future threats to information and community?

### Information Professionals: Frontline Workers and Community Resilience Leaders

In the US, there are more public libraries than Starbucks coffee outlets.<sup>33</sup> Prior to the COVID-19 pandemic, four million people visited a library every day before these favored institutions were forced to close their doors to the public.<sup>34</sup> Libraries quickly pivoted and frontline workers lead community resilience against both the COVID-19 and disinformation pandemics threatening society.<sup>35</sup>

ALA's 2021 *State of America's Libraries* report, Hughes and Santaro's *Pivoting during the Pandemic*, and Innovative's *Centuries of Resilience* highlighted how libraries pivoted their services to stay open despite physical closure. Libraries extended online renewal policies and online checkout, added virtual programming (e.g., story time and cooking classes), distributed free craft materials (e.g., STEAM kits), supported distance learning, and supported technology offerings (e.g., loan of laptops, Wi-Fi hotspots, and extension of Wi-Fi to parking lots and bookmobiles).<sup>36</sup> Other creative programming included the Library of Things, seed and food libraries, and outdoor escape rooms (see Textbox 4.3).

Public libraries also played a critical role in community cohesion and resilience during the pandemic (see also Chapter 10: Community Anchors for Lifelong Learning: Public Libraries).<sup>37</sup> Because these libraries and their staff are embedded in communities, they extended their pre-COVID-19 skills and efforts during the pandemic "to assist in health and social care services, some assisted in sheltered housing schemes, others worked foodbanks (either in stock control roles or out delivering

### TEXTBOX 4.3

#### **New York Public Library (NYPL) Demonstrates Value during the COVID-19 Pandemic**

The NYPL celebrated public libraries as key to New York’s recovery from more than a year in pandemic, noting that “Libraries strengthen communities and offer opportunity to all—by providing books and trusted information, addressing the digital divide, supporting remote learning and job search, offering online classes and storytimes, and more.” Using a public posting forum, NYPL gathered community testimonies about their libraries’ connections to them; scores of library clients across branches posted enthusiastically, thanking their libraries and librarians for supporting them throughout the pandemic by “being there” and offering them a “lifeline” during the crisis. Demonstrating the library’s position at the heart of community, the public referred to their libraries as essential, dedicated, helpful, vital, invaluable, and “part of the heart and soul of NYC” (New York Public Library, 2021).

parcels), supporting prescription collection and delivery, helping to staff childcare centers for key workers, working with education colleagues to support children’s mental health and wellbeing.”<sup>38</sup>

Libraries play a crucial role as not just community Gorilla or Super Glue but also as WD-40 front-line first responders who adapt with foresight to community needs. Highly experienced as emergency responders during crises (e.g., epidemics, fires, earthquakes, floods, hurricanes, tornados, shootings, bombings and other acts of terrorism), library staff have disaster preparation and emergency response plans and coordinate with other local stakeholders and Federal Emergency Management Agency (FEMA).<sup>39</sup> In disaster or emergency situations, libraries are well positioned to adapt their role from institutions that provide a range of services to “emergency information hubs.”<sup>40</sup> The multiple roles played by libraries during the pandemic illustrate their embeddedness in and importance to communities. Libraries are core to community life, providing services and programs that not only support community but also enrich communities and foster community resilience. This resilience—the ability to recover or bounce back—is the underlying theme of library crisis response.<sup>41</sup>

There are many theories of resilience. Some focus on individuals or families, and others focus more broadly on communities. Different fields of study (e.g., health, economics, psychology, and environmental science) use their own disciplinary lens to frame definitions of resilience and approaches for understanding. Information resilience is built through collaborative coping activities, such as “pooling,” which supports people’s ability to orient, adjust, and reframe their situations; information grounds—where much pooling occurs—are vital to supporting information resilience.<sup>42</sup> Lloyd and Hicks reported early findings of how individuals in the UK developed information resilience strategies during COVID-19 in everyday, workplace, and caring contexts.<sup>43</sup>

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Patin conducted landmark work on how libraries support community resilience, stemming from her experience as a librarian during Hurricane Katrina in New Orleans. Patin uses Norris et al.'s theory of community of resilience with four interconnecting community resources: economic development, social capital, community competence, and information and communication; these "act as adaptive capacities if they are robust, redundant, and rapidly accessible."<sup>44</sup> In her analysis of past crises, Patin found that libraries were strong on all four factors, but economic development was least visible to external assessors.

### Check This Out

For examples of libraries offering aid through the COVID-19 pandemic, check out Appendix 4.2 Information Organizations Offer Aid and Support during COVID-19 around the World in Part II: Chapter 4 of the Online Supplement.

#### TEXTBOX 4.4

##### Discussion Question

What will community look like in ten years, and what role will information and technology play?

### Conclusion

Libraries are vital in community rebuilding as communities move forward toward a *new normal*.<sup>45</sup> As the "People's Palace" in Klinenberg's words,<sup>46</sup> pre-COVID-19 libraries championed net neutrality and banned books, provided gathering spaces and safe spaces for all, and offered health and social services (e.g., from treating opioid overdoses to offering blood pressure clinics, food banks, and wellness clinics). Trauma-Informed Care<sup>47</sup> has also provided better library services to more than twenty-four million Americans suffering from post-traumatic stress disorder.<sup>48</sup> In the future, the call will be greater for libraries to employ trauma-informed services. Equally important will be providing trauma-informed approaches for helping library staff, as frontline workers, in particular, as they support community resilience.<sup>49</sup> The COVID-19 and the disinformation pandemics have deepened this need, creating greater vulnerability and challenges for people, especially as it relates to race and ethnicity, economic status, health, gender, and other factors.

Information communities and information grounds will have new manifestations as societies recover from the COVID-19 and the disinformation pandemics. Meanwhile, people have created new information grounds online and offline. Online communities have also spread based on communality. With the support of libraries, information resilience will continue as society realigns post-pivot.

### Appendixes

Check out the following appendixes in Part II: Chapter 4 of the Online Supplement.

- Appendix 4.1 Communities in the European Context
- Appendix 4.2 Information Organizations Offer Aid and Support during COVID-19 around the World

## Notes

1. Karen Christensen and David Levinson, "Introduction and Reader's Guide," in *Encyclopedia of Community: From the Village to the Virtual World*, ed. Karen Christensen and David Levinson (Thousand Oaks, CA: Sage Reference, 2003): xxxi-xxxiii.
2. David W. McMillan and David M. Chavis, "Sense of Community: A Definition and Theory," *Journal of Community Psychology* 14, no. 1 (1986): 9, [https://psycnet.apa.org/doi/10.1002/1520-6629\(198601\)14:1%3C6::AID-JCOP2290140103%3E3.O.CO](https://psycnet.apa.org/doi/10.1002/1520-6629(198601)14:1%3C6::AID-JCOP2290140103%3E3.O.CO).
3. Keith N. Hampton, "Persistent and Pervasive Community: New Communication Technologies and the Future of Community," *American Behavioral Scientist* 60, no. 1 (2016): 101, <https://doi.org/10.1177%2F002764215601714>.
4. Taylor Dotson, *Technically Together: Reconstructing Community in a Networked World* (Cambridge, MA; London, England: MIT Press, 2017).
5. Joan Durrance, "The Vital Role of Librarians in Creating Information Communities: Strategies for Success," *Library Administration and Management* 15, no. 3 (2017).
6. Karen E. Fisher, Carol F. Landry, and Charles Naumer, "Social Spaces, Casual Interactions, Meaningful Exchanges: 'Information Ground' Characteristics Based on the College Student Experience," *Information Research* 12, no. 2, paper 291, <http://InformationR.net/ir/12-1/paper291.html>.
7. Durrance, "The Vital Role of Librarians."
8. Karen E. Fisher, Kenton T. Unruh, and Joan C. Durrance, "Information Communities: Characteristics Gleaned from Studies of Three Online Networks," in *Proceedings of the 66th Annual Meeting of the American Society for Information Science & Technology*, ed. R. J. Todd (Medford, NJ: Information Today, Inc., 2003), <https://doi.org/10.1002/meet.1450400137>.
9. Karen E. Pettigrew, "Waiting for Chiropractic: Contextual Results from an Ethnographic Study of the Information Behavior among Attendees at Community Clinics," *Information Processing & Management* 35, no. 6 (1999), [https://doi.org/10.1016/S0306-4573\(99\)00027-8](https://doi.org/10.1016/S0306-4573(99)00027-8).
10. Fisher et al., "Social Spaces."
11. Jeffrey Goldberg, "Mass Delusion in America," *The Atlantic*, January 7, 2021, <https://www.theatlantic.com/politics/archive/2021/01/among-insurrectionists/617580/>.
12. "Explainer: Trump's Legacy—Big Policy Changes that Often Got Lost amid the Din and Scandal," *Reuters*, January 19, 2021, <https://www.reuters.com/article/us-usa-trump-legacy-policy-explainer-idUSKBN29O16C>.
13. Cody Godwin, "Trump Social Media: Twitter Suspends Account Sharing Ex-President's Posts," *BBC News*, May 7, 2021, <https://www.bbc.co.uk/news/technology-57018148>.
14. Tommy Beer, "Trump Called BLM Protesters 'Thugs' but Capital-Storming Supporters 'Very Special,'" *Forbes*, January 6, 2021, <https://www.forbes.com/sites/tommybeer/2021/01/06/trump-called-blm-protesters-thugs-but-capitol-storming-supporters-very-special/?sh=193137543465>.
15. Robert Hart, "Trump's 'Chinese Virus' Tweet Helped Fuel Anti-Asian Hate on Twitter, Study Finds," *Forbes*, March 19, 2021, <https://www.forbes.com/sites/roberthart/2021/03/19/trumps-chinese-virus-tweet-helped-fuel-anti-asian-hate-on-twitter-study-finds/?sh=400f9951a7c2>.
16. Rachel Janik and Keegan Hanks, "The Year in Hate and Extremism 2020," *Southern Poverty Law Center*, 2021, <https://www.splcenter.org/news/2021/02/01/year-hate-2020>.
17. Isabel Wilkerson, *Caste: The Origins of our Discontents* (New York: Random House, 2020).
18. Ibram X. Kendi, *How to Be an Antiracist* (New York: One World, 2019).
19. Robin DiAngelo, *White Fragility: Why It's So Hard for White People to Talk about Racism* (Boston: Beacon Press, 2018).
20. United Nations, "Climate Justice: Sustainable Development Goals," accessed August 13, 2021, <https://www.un.org/sustainabledevelopment/blog/2019/05/climate-justice/>.
21. Glenn Kessler and Michelle Ye Hee Lee, "Fact-Checking President Trump's Claims on the Paris Climate Change Deal," *Washington Post*, June 1, 2017, <https://www.washingtonpost.com/news/fact-checker/wp/2017/06/01/fact-checking-president-trumps-claims-on-the-paris-climate-change-deal/>.
22. Manuela Caiani and Linda Parenti, *European and American Extreme Right Groups and the Internet* (Burlington, VT: Ashgate, 2013).

23. Yelena Mejova and Nicolas Kourtellis, "YouTubing at Home: Media Sharing Behaviour Change as Proxy for Mobility around COVID-19 Lockdowns," *arXiv* 2103, 14601 (2021), <https://arxiv.org/abs/2103.14601>.
24. Aylin Caliskan, Joanna J. Bryson, and Arvind Narayanan, "Semantics Derived Automatically from Language Corpora Contain Human-Like Biases," *Science* 356, no. 6334 (April 2017): 183-86, doi:10.1126/science.aal4230.
25. Howard Tumber and Silvio Waisbord, eds., *The Routledge Companion to Media Disinformation and Populism* (London: Routledge, 2021).
26. Samantha Bradshaw, Hannah Bailey, and Philip N. Howard, *Industrialized Disinformation: 2020 Global Inventory of Organized Social Media Manipulation* (Oxford: Oxford Internet Institute, 2020), <https://demtech.oii.ox.ac.uk/research/posts/industrialized-disinformation/>.
27. National Intelligence Council, *Global Trends 2040: A More Contested World* (Washington, DC: National Intelligence Council, 2021): 1, <https://www.preventionweb.net/go/77088>.
28. Christensen and Levison, "Introduction and Reader's Guide."
29. McMillan, and Chavis, "Sense of Community."
30. Dotson, *Technically Together*.
31. Cherylyn Ireton and Julie Posetti, *Journalism, "Fake News: and Disinformation: Handbook for Journalism Education and Training* (Paris: United Nations Educational, Scientific and Cultural Organization [UNESCO], 2018), <https://unesdoc.unesco.org/ark:/48223/pf0000265552>.
32. Dan Milmo, "Reddit Bans COVID Misinformation Forum after 'Go Dark' Protest," *The Guardian*, 2021, <https://www.theguardian.com/technology/2021/sep/01/reddit-communities-go-dark-in-protest-over-covid-misinformation>.
33. American Library Association, "The State of America's Libraries 2019: A Report from the American Library Association," ed. Kathy S. Rosa (2019), <http://www.ala.org/news/state-americas-libraries-report-2019>.
34. American Library Association, "The State of America's Libraries 2020: A Report from the American Library Association," ed. Steve Zalusky (2020), <http://www.ala.org/news/state-americas-libraries-report-2020>.
35. Boone Ashworth, "COVID-19's Impact on Libraries Goes Beyond Books; Shuttering Public Libraries Puts a Strain on Communities—Even If It's the Only Way to Keep People Safe," *Wired Magazine*, March 25, 2020, <https://www.wired.com/story/covid-19-libraries-impact-goes-beyond-books/>.
36. American Library Association, "The State of America's Libraries 2021: A Report from the American Library Association," ed. Steve Zalusky (2021): 8, <http://www.ala.org/news/state-americas-libraries-report-2021>; Kathleen Hughes and Jamie Santaro, *Pivoting during the Pandemic: Ideas for Serving Your Community Anytime, Anywhere* (Chicago, American Library Association, 2021); Innovative, "Centuries of Resilience: Public Libraries Still Crucial during COVID-19," *ProQuest* (October 2020), <https://www.iii.com/resources/research-report-impact-of-covid-lockdowns-on-public-libraries/>.
37. Peter Reid and Lyndsay Bloice, *Libraries in Lockdown: Scottish Public Libraries and Their Role in Community Cohesion and Resilience during Lockdown* (Aberdeen, Scotland: Robert Gordon University, 2021), [https://librariesinlockdown.weebly.com/uploads/1/2/0/1/120129010/libraries\\_in\\_lockdown\\_final\\_report\\_-\\_rev.pdf](https://librariesinlockdown.weebly.com/uploads/1/2/0/1/120129010/libraries_in_lockdown_final_report_-_rev.pdf).
38. Reid and Bloice, *Libraries in Lockdown*, 53.
39. Bibi Alajmi, "When the Nation Is in Crisis: Libraries Respond," *Library Management* 37, nos. 8/9 (2016), <https://doi.org/10.1108/LM-05-2016-0043>; Robin M. Featherstone, Becky J. Lyon, and Angela B. Ruffin, "Library Roles in Disaster Response: An Oral History Project by the National Library of Medicine," *Journal of the Medical Library Association* 96, no. 4 (2008), <https://dx.doi.org/10.3163%2F1536-5050.96.4.009>; Beth Patin, "What Is Essential?: Understanding Community Resilience and Public Libraries in the United States during Disasters," *Proceedings of the Association for Information Science & Technology* 57 (2020): e26, <https://doi.org/10.1002/pr2.269>.
40. Seungwon Yang and Boryung Ju, "Library Support for Emergency Management during the Time of Natural Disasters: Through the Lens of Public Library Twitter Data," *Library & Information Science Research* 43, no. 1 (2021), <https://doi.org/10.1016/j.lisr.2021.101072>.

41. Julie Ann Pooley and Lynne Cohen, "Resilience: A Definition in Context," *The Australian Community Psychologist* 22, no. 1 (2010), <https://www.psychology.org.au/APS/media/ACP/Pooley.pdf>.
42. Annemaree Lloyd, "Building Information Resilience: How Do Resettling Refugees Connect with Health Information in Regional Landscapes—Implications for Health Literacy," *Australian Academic & Research Libraries* 45, no. 1 (2014), <https://doi.org/10.1080/00048623.2014.884916/>.
43. Annemaree Lloyd and Allison Hicks, "Contextualising Risk: The Unfolding Information Work and Practices of People during the COVID-19 Pandemic," *Journal of Documentation* 77, no. 5 (2021): 1052-72.
44. Patin, "What Is Essential?," 3.
45. Anna Maria Tamaro, "COVID 19 and Libraries in Italy," *The International Information & Library Review* 52, no. 3 (2020), <https://doi.org/10.1080/10572317.2020.1785172>.
46. Eric Klinenberg, *Palaces for the People: How Social Infrastructure Can Help Fight Inequality, Polarization, and the Decline of Civic Life* (New York: Penguin Random House, 2018).
47. Rebecca Tolley, *A Trauma-Informed Approach to Library Services* (Chicago: American Library Association, 2020).
48. Gianluca Ursini and Giovanna Punzi, "The Social and Winding Road between Inflammation and PTSD," *Neuropsychopharmacology* 46, no. 6 (2021): 1064-65, <https://doi.org/10.1038/s41386-021-00979-7>.
49. Karen E. Fisher and Lauren Gambrell, "Trauma in the Library: Symptoms of PTSD among Staff and Methods for Ensuring Trauma-Informed Care," *Library Journal* (forthcoming).