A call to action for librarians: Countering conspiracy theories in the age of QAnon

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Title: A call to action for librarians: Countering conspiracy theories in the age of QAnon

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Abstract:
Librarians empower learners to become discerning citizens through a set of diverse skills and literacies. To cultivate critical thinkers, librarians continue to build innovative practices, even as technology rapidly evolves. However, the pervasiveness of misinformation and disinformation, most recently seen in the conspiratorial worldviews of QAnon, challenges librarians to center critical thinking in their information literacy praxis. This article provides a concise overview of QAnon and the problems that contemporary internet conspiracy theories like it pose. We offer an epistemological shift for information literacy, from heuristics to mindsets and behaviors, drawing on disciplines external to librarianship. Finally, we consider the role that emotions play in the promotion and spread of conspiracism. Equipping librarians with a better understanding of conspiracy thinking and the tools to counter it will, in turn, empower the next generation of critical thinkers.

Keywords: information literacy, critical thinking, conspiracy thinking, academic librarianship, QAnon

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Introduction

"Where we go one, we go all." — QAnon mantra.

Conspiracy theories have existed since time immemorial, regardless of nationality, age, race, ethnicity, or any other identity marker. Conspiracies tell a powerful story about the zeitgeist of a particular moment and the deep uncertainties and anxieties of those who believe them, even if that story isn’t true (Pipes, 1997; Chabris & Simons, 2010; Walker, 2013; Jane & Fleming, 2014; Brotherton, 2016; Uscinski & Parent, 2014; Uscinski, 2019; Butter, 2020). A potent new conspiracy theory called QAnon has recently emerged, which has received widespread media attention. In this article, we offer a concise overview of the history of QAnon, its relationship to other conspiracy theories, and the challenges it poses for librarians. Although widely covered in disciplinary discourse external to librarianship, a gap exists between the literature on information literacy and conspiracy thinking. Yet, in the fight against misinformation and disinformation, information literacy and critical thinking have been identified as essential (de Paor & Heravi, 2020; Batchelor, 2017; Eva & Shea, 2018). As information literacy librarians teaching source evaluation, we offer the following analysis of ongoing research into conspiracy theories, on the one hand, and methods for interrogating online information sources on the other. Taken together, we hope to start a conversation with fellow librarians on countering conspiratorial worldviews like QAnon through information literacy and critical thinking instruction.

Defining Conspiracy Theories

In the September 2013 special issue of the British Psychology Society's Quarterly Magazine, Robert Brotherton defines conspiracy theories through seven characteristics, which serve as a useful guide for distinguishing them from other (non-conspiracy) theories. First, conspiracy theories are, and may contain, unverified claims at odds with the mainstream consensus, and they grow and thrive because of their opposition to consensus: "In conspiracist rhetoric, the mainstream explanation is usually termed the official story," with "official" serving as a disparaging label for the facts (Brotherton, 2013, 10, his emphasis). Conspiracy theories are sensationalistic -- of all the conspiracies throughout history, those that gain the most notoriety most often surround disasters, pandemics, terrorist attacks, celebrity deaths, political figures, crashes, and aliens (Brotherton, 2013, 10-11). They assume everything is intentional, nothing is coincidental, and the world is divided into "good...struggling against evil" (Brotherton, 2013, 11). Those adhering to conspiracy theories have low standards of evidence: "Conspiracy theories are primarily built upon negative evidence — gaps or ambiguities in knowledge," such as perceived "isolated unanswered questions remaining to be solved" (Brotherton, 2013, 12). Lastly, conspiracy theories are epistemically self-insulating "against questioning or
correction," as seen in the phenomenon known as "cascade logic," which implicates a greater number of people and data into an alleged scheme the longer it exists (Brotherton, 2013, 12). Therefore, the most successful conspiracy theories morph and evolve in order to stay relevant to followers.

The Conspiratorial Worldview Called QAnon

Brotherton might have been describing QAnon, a conspiratorial worldview that believes an underground cabal of Satan-worshipping pedophiles, largely comprised of leftist elites with globalist agendas, is embedded within the U.S. government. Like other contemporary conspiracy theories, QAnon was born on the internet and continues to recruit members there. Beginning around 2016, it has evolved into what conspiracy theory expert Mike Rothschild terms "a cult, a religion, a conspiracy theory, a shared delusion, a political movement" (2020a, paragraph 10). In her interviews with QAnon members, executive editor and journalist for The Atlantic Adrienne LaFrance noted the evangelical overtones of the loose-knit group and their absolute devotion to their anonymous leader, Q: "This [movement] is so much bigger than Q, the person or the people behind the account, whoever they are" (Brooks et al. 2020, 7:22-9:07).

QAnon was born on an internet image (chan) board called 4chan, created by the computer programmer Christopher Poole in the early 2000s. Message boards are organized according to themes, and users post messages anonymously as "anons." From 2003-2008, 4chan was a loose-knit group of hackers, anime-enthusiasts, and gamers (Beran, 2019). The next three years gave rise to the hacktivist collective, "Anonymous," which became famous in hacker circles for its roles in the Occupy Wall Street protests and Arab Spring uprisings (Beran, 2019, xii). Despite the positive associations with "Anonymous," 4chan also became known for its /pol/ (politically incorrect) board, which expanded in membership as it attracted white nationalists, conspiracy theorists, and angry, disaffected young men defining themselves by their lack of employment and education (Beran, 2019, 123-4, 131).

From 2006-2015, several chan boards began competing for membership and prominence (e.g., 2chan, 4chan, 8chan). In 2012, a new imageboard (8chan) was launched by programmer Frederick Brennan. Known as an "infinity board," it allowed users to create SubBoards on any topic. This type of unmoderated permissiveness led to its exponential growth (Beran, 2019, 143-6). After 2015, several of its members rose to prominence, including Milo Yiannopoulos, who pivoted to Donald Trump's presidential campaign. Although he was not a gamer, he had found an audience for the Trump campaign in the chan boards' membership: "an immense population of disenfranchised young men who were largely voiceless" (Beran 2019, 148). Another minor actor would ultimately play a larger role in the QAnon saga. Jim Watkins, the owner of 2chan, was a fervent conspiracy theorist and already operated a right-wing media conglomerate out of the Philippines (Vogt et al., 2020, 58:26). He bought 8chan from Brennan in 2015, effectively owning the Q account (Vogt et al., 2020, 58:26). From 2016 to
today, QAnon adherents, fact-checkers, and journalists have speculated about Watkins's level of involvement in the Q persona and the Q account (Goldman et al., 2018, 35:00; Vogt et al., 2020, 58:26; Logically, 2020; Rothschild, 2020b).

A year after Brennan sold Watkins 8chan, presidential candidate Hillary Clinton's 2016 campaign manager, John Podesta, found his email account hacked. What became known in the broader media as "pizzagate" took hold, and QAnon sprung into the limelight. Infamously, Edgar Maddison Welch showed up to the Comet Ping Pong Pizzaria with a AR 15 ready to free enslaved sex-trafficked children. When he found nothing and was arrested, he responded that intel on the situation wasn't one hundred percent (LaFrance, 2020, 29). To understand this connection, one needs to realize that CP stood for child pornography in chan community discourse and that child pornography was often a joke on the seedier imageboards (2019, 218). Thus, when the chan community saw Clinton and Podesta, they shortened the initials to CP (as a joke), and the D.C. Pizza parlor, Comet Ping Pong, where Podesta had organized campaign events, to CPP (as a joke), as well as any mention of cheese pizza (CP) (Beran, 2019, 218). From the outset, the chan community joked that John Podesta's emails were written in code and any mention of CP stood for child pornography, even though chan members had, by then, shortened many things to CP. Like so much of the discourse created on the chan boards, it soon took on a life of its own:

To anyone remotely familiar with chan culture and its winking meme signals, it was clear that the 'pizzagate' conspiracy theory was a joke... But remarkably, in a post-fact world, in which conspiracy was more fun and useful than reality, the report spread like all the other Clinton conspiracy theories [at the time]... In this environment, it was easy to pick up the banner on Twitter and insist that pizzagate was real (Beran, 2019, 219).

Insider jokes and communities are how many of these conspiracies gestated. Another common trope on these boards is Live Action Role Playing, where participants act out a role in an evolving script. For example, in 2016, a number of participants acted as government officials leaking secrets, including HighlevelAnon, FBI-Anon, CIA-Anon, White House Insider Anon (Vogt et al., 2020, 21:44-22:33). Because of this culture, nobody gave much thought to a new member who "started posting on the /pol/ board, initially not giving any information about themselves, just posting these sort of bizarre polemics that were mostly comprised of rhetorical questions...with a paranoid whiff to them" (Goldman et al., 2020, 11:53-12:45). The community dubbed the user Q for the top security Q clearance they claimed to have. In 2016, even Brennan, the inventor of 8chan, was incredulous: "When I first heard about Q, I just thought that it was...somebody having a laugh and tricking people...[and] posting vague Nostradamus-like messages" (Vogt et al., 2020, 21:14-39).
However, Q posted around sixty times over the next three or four days, and the chan community took note. The posts were based around the premise that Q is an intelligence or military insider with "proof" that the U.S. Department of Justice Special Counsel Robert Mueller’s investigation into President Trump was all a façade (Goldman et al., 2018, 13:12-13:20). President Trump, the belief goes, "is a brilliant 4-dimensional chess player" engaged in a strategic prosecution of left-leaning elites who also "run a child sex and torture ring [and are] in collusion with basically every person who has been a part of a right-wing conspiracy over the last ten years" (Goldman et al., 2018, 13:12-16:49). Joseph Uscinski, professor of Political Science, argues that QAnon's ideation resembles a cult:

> As wacky as the QAnon conspiracy theories sound, there's nothing new to them, and in fact, it's just a bunch of other long-standing conspiracy theories mushed together into one... What Q has done is to galvanize people around a set of ideas and weaponize [them] in a way that we haven't normally seen... because Q is a cult. They have a sense of group belonging, and even though they're decentralized because they're online, they have catchphrases, [a] sense of destiny, [and] they lean on each other (Brooks et al., 2020, 25:44-27:46).

Q further claims that indictments have already been handed down but are sealed, and the government is tracking bad actors (Goldman et al., 2018, 16:49-19:50). As the chan community accepted this worldview, certain users turned to mainstream platforms to proselytize their interpretations of Q's messages (Goldman et al., 2018, 33:04; Vogt et al., 2020, 58:26). Over the next six months, the Q movement jumped over to YouTube, where videos garnered half a million views, and Reddit Boards gathered 30,000 members (Goldman et al., 2020, 25:00-25:33). In December 2017, Paul Furber, a devoted follower and interpreter of Q posts made a pitch tailored to a broader audience: "The story behind QAnon is so big that we need to get it out to as many people as possible, which is why we're going wider...to Youtubers.. Infowars..independent media" (Vogt et al., 2020, 30:19-33:52). So while Reddit shut down the problematic boards, QAnon quickly spread to Facebook, Twitter, YouTube, and other social media platforms, sneaking into pre-existing groups with seemingly harmless slogans like "Save the Children" (Goforth, 2020; Levai, 2020; Miller, 2020).

Similarly, internet users without strong critical information literacy skills continue to drive the conspiracy: "the purpose of this whole community is [that] you have to do your own research...and that makes this theory something you can tailor to fit whatever you want it to be" (Prescott et al., 2020, paragraph 15). Followers scour Q's messages, called Qdrops, posted multiple times per day and shared via various aggregating or social media sites to interpret actions for "fighting back" (Brooks et al., 2020, 5:41-5:49). LaFrance interviewed QAnon adherents to discover that some of them spent six hours per day poring over Q's messages for clues to the conspiracy puzzle. Some QAnon adherents have even authored entire tomes to the conspiracy theory, which have exploited the internet's retail
algorithms (Collins, 2019). Adding to this malevolent cocktail is a president who endorses and feeds the conspiratorial frenzy. Fueled by the internet's particularities, the 45th president, and the "post-truth" era (Fister, 2017), the particular brand QAnon is selling has entered the mainstream: "The rise of mainstream conspiracism is the result not just of bad information or bad politics or bad thinking, but of systems built to stoke paranoia and to profit from mistrust" (Goldberg et al., 2020, paragraph 3). By September 2020, corporations had teamed up with politicians and QAnon supporters on Trump's re-election campaign (Associated Press, 2020; Levinthal, 2020).

While the Q movement began as obscure messages posted on the internet's fringe, it has spread rapidly in four years, capitalizing on people's "greatest dreams, impulses, and worst nightmares" (Goldman et al., 2018, 24:40-24:48). Conspiracies themselves may not be new, but the internet has enabled fringe thinkers to "find their people;" and "the power of the social web" allows groups to spread from "a niche or regionally-specific cult to a global movement" (Brooks et al., 2020, 31:30-31:51). One of the more concerning aspects of QAnon has been its ability to morph as it gathers followers (Frenkel & Hsu, 2020; Mac & Lytvynenko, 2020; Frenkel, 2020). QAnon provides a compelling case study for how these worldviews propagate and spread. Disinformation expert Joan Donovan describes it as "a densely networked conspiracy theory that is extendible, adaptable, flexible and resilient to takedown" (Donovan, quoted in Manjoo, 2020, paragraph 16). Although numbers are hard to pin down, recent polling shows that as many as one-third of Republicans believe QAnon to be "mostly true" (Rothschild, 2020a, paragraph 21), and almost half (47%) of Americans say they have heard of QAnon, as of September 2020 (Mitchell et al., 2020, paragraph 3).

**Strategies for Countering Conspiracy Thinking in Academic Libraries**

Why should librarians worry about conspiracy theories and those who believe them? Are librarians prepared for interacting with QAnon adherents, and what might those interactions look like? The next sections outline some strategies and techniques that may assist with such interactions, drawn from various disciplines (e.g., psychology, sociology, philosophy, political science).

The core values of the librarian profession in North America, as promulgated by the American Library Association (ALA), include the promotion of social justice and democracy, which "presupposes an informed citizenry" (American Library Association, 2006, paragraph 5). John Dewey, one of the founders of the ALA, argued that critical thinking is necessary to dispel doubt and promote democracy, and education is the primary way of accomplishing that task (Haber, 2020, 24). Today, the ALA and the Association of College and Research Libraries (ACRL) continue to produce information literacy standards and frameworks that advocate for critical thinking
through cultivating discerning citizens and lifelong learning. A challenge of this current moment, however, is the pervasiveness of misinformation and disinformation. As fellow librarian Barbara Fister surmises in a 2017 essay, "Practicing Freedom in a Post-Trust Era," we encourage students to "read widely [and] think critically" because we’re preparing them for an ambiguous and complex world; information literacy involves weighing evidence and equipping learners to "engage with the world as citizens and perhaps change it for the better" (Abstract).

Librarians are uniquely poised to prepare learners for a lifetime of critical thinking, analytical reasoning, and information literacy. The rapidly changing information landscape demands a new approach to teaching, recognizing, and countering the kind of conspiratorial disinformation that intentionally exploits group polarization. Nancy Kranich, in her 2020 article, "Libraries and Democracy Revisited," argues that libraries should capitalize on this tumultuous democratic moment to "catalyze the shift from merely informing citizens to engaging them..." reclaiming our "essential role as cornerstones of democracy" (2020, abstract). To this end, we propose the following call to action, building upon an epistemological shift that has already been occurring in information literacy and adding lessons drawn from the social sciences and sciences. Throughout, we emphasize critical thinking and analytical reasoning, metacognition, and affect. Each strategy offers a brief overview, with additional takeaways available on the article’s companion website (https://sites.google.com/oakland.edu/calltoaction/home).

Shifting Mindsets and Behaviors to Better Evaluate Information

Thus far, one of the only information evaluation tools dedicated to combating conspiracy theories relies heavily on the CRAAP test (Meriam Library, 2010). While checklists such as the CRAAP test are great mnemonic devices created by librarians to ease the challenging process of information evaluation, they risk flattening complex decision-making processes into a series of heuristics. Since the CRAAP test was designed, the information ecosystem has become much more complex. The contexts for trusting and using information have also become more complicated and ambiguous: "We live in a confusing world, where neither the CRAAP test nor extensive LibGuides will cure our susceptibility to misleading, inaccurate, fictionalized, politicized narratives" (Fister, 2017, paragraph 15). Recently, librarians have begun to pivot away from checklists toward critical pedagogies and metacognition, focusing instead on behavioral models and mindsets.

Key to this transformation has been threshold concepts, integral to the ACRL Framework for Information Literacy for Higher Education (Framework) (American Library Association, 2015). Hofer, Lin Hanick, and Townsend's Transforming Information Literacy Instruction: Threshold Concepts in Theory and Practice (2019) describe how the mastery of threshold concepts leads
to greater information literacy. For example, we may think of authority as inherent to a thing or an individual. However, another way to think about authority is through the dual lenses of cognitive authority and second-hand knowledge (Wilson, 1983). We acquire a limited amount of knowledge through direct observation and experience and learn the rest through second-hand knowledge. Through recommendations from friends or family, reading articles, browsing the internet or social media, listening to an interview or podcast, we learn a lot about the things around us. For example, most of us are not scientists, but we trust that gravity keeps us grounded. When we do not possess enough expertise on a topic, we decide whether or not to trust someone or something based on the source’s perceived competence and expertise.

Competence means that the source is qualified to speak on that topic -- that they possess expertise. Importantly, this happens over time. Someone cannot declare themself an expert, and they are not an expert simply because they earned a degree. Authority is dynamic and depends a lot on us and our feelings over time and in different contexts. In the case of QAnon, followers ascribed cognitive authority to Q over time, based on perceived expertise and qualifications according to a conspiratorial worldview in particular community discourse. Another factor is intent. Does the source intend to be accurate and reliable? This is harder to answer with Q, and even the Q community has struggled to answer this question. For example, there have been times when Q "oversteps... and upsets people," making followers question the validity of their claims (Goldman et al., 2018, 24:00-24:13).

Therefore, cognitive authority is not bound up with a source -- it is a subjective form of trust that we ascribe to a source, and it accrues over time. This trust evaluation is wrapped up with the purpose of the information, who is responsible for creating it, and the processes of its creation, all of which inform its credibility. Asking questions about quality control mechanisms, such as review processes, aids in confirming whether a source intends to be accurate, transparent, and trustworthy. In QAnon's case, the process behind creating the Qdrops is so opaque, the trust evaluation should fall apart. However, QAnon followers ascribe cognitive authority to Q and high-ranking members of the movement. An appropriate intervention for a QAnon adherent might be to ask about how accurate Q's predictions are, what quality control mechanisms exist for QAnon messages if any, and how reliable have they been over time?

In today’s misinformation and disinformation environment, librarians and journalists are quick to recommend fact-checking techniques and tools (Wineburg & McGrew, 2017; Caulfield, 2017; Graves, 2016, 2017; Donovan et al., 2020; Lewis & Marwick, 2017; Silverman, 2015). As appealing as fact-checking is, these techniques may not always work, especially with conspiracy ideation. Conspiracy theorists reject fact-checking because they feel they expose inconvenient truths that fact-checkers keep out of the conversation (Lynch, 2019, 31-32). A spectrum of people are interested in conspiracy theories: from those who are just beginning their...
exploration into a conspiracy theory to the devoted conspiracy adherent who rejects all authoritative and mainstream accounts (Pierre, 2020, paragraph 10). While healthy skepticism encourages us to evaluate critically, global skepticism leads to a suspicious mindset. Instead, we should aim for cognitive flexibility, which embraces open-mindedness and acknowledges where we might be wrong (Pierre, 2020, paragraph 11).

One method for engendering cognitive flexibility has been through learning metacognition and critical thinking. In a 2016 analysis of the "immensity of definitions," Angela Franco points to a 2011 Delphi study, which arrived at six significant dimensions of critical thinking: interpretation, analysis, evaluation, inference, explanation, and self-regulation (110). The overlap with information literacy is noticeable. For example, interpretation includes building meaning from information and minimizing the impact of personal biases, while analysis skills require learners to break down complex information into smaller units for easier analysis, synthesis, and interpretation (110). Evaluation asks learners to assess a source's credibility, grounded in evidence, and inference compels learners to hypothesize toward conclusions, analyze cost-benefits, and test premises (110). Lastly, explanation and self-regulation refer to learners' abilities, including presenting arguments and opinions skillfully and metacognitive thinking to include accuracy and self-correction (110). Ku and Ho (2010) found that students who had low-level metacognitive skills jumped into faulty decision-making despite recognizing that they did not understand the sources they had been given (262). Magno (2010) found that metacognition leads to greater critical thinking through teaching learners how to consistently test and evaluate their thinking (149). Metacognitive strategies cannot be taught only once but rather integrated throughout a course in order to build effective critical thinking.

More recently, librarians have embraced metacognition for information literacy, as supported by the Framework. With a focus on engendering transferable critical thinking dispositions (Weiner, 2013), librarians play an essential role in equipping a new generation of thinkers. The Art of Asking Essential Questions: Based on Critical Thinking Concepts and Socratic Principles, Elder et al. (2019) offer opportunities for library workers at every interaction to integrate Socratic questioning and critical thinking skills. Likewise, Robinson argues for integrating Socratic questioning in student research consultations (2017) to prompt greater critical thinking and reflective practices. Bezanilla (2019) offers an excellent review of the methodologies for teaching critical thinking adapted into information literacy instruction. Together, these practices provide librarians a model for integrating critical thinking habits into every interaction with patrons. (See Takeaways in the companion website).

Learning From Conspiracy Research in the Social Sciences and Sciences
Because conspiracy ideation presents such a formidable challenge, librarians can leverage the valuable insights and disciplinary expertise external to our field. To understand the nuances of how conspiracy thinking occurs and methods for countering it, librarians can look to research from psychology and affiliated fields, sociology, political science, communication studies, education, climate science, and the biosciences. By incorporating takeaways from this wealth of scholarship, we can formulate enhanced information literacy strategies.

Marchlewkska, Cichocka, and Kossowska discovered that people who are predisposed to belief in conspiracy theories like QAnon might have a greater need to find an explanation for random occurrences (2018), while Lantian et al. found they may also feel a need to be seen as unique (2017). Conspiracy theorists are also more likely to have a cognitive bias called hypersensitive agency detection (Douglas et al., 2016) or teleologic thinking, whereby events are overattributed to hidden forces, purposes, and motives (Wagner-Egger et al., 2018; Leman & Cinnirella, 2013). One socio-psychological mechanism that may be a factor is the tendency to project moral proclivities onto strangers, where we believe others would do as we would, even those we think are involved in nefarious conspiracies (Douglas & Sutton, 2011).

Fascinatingly, research has shown that if people believe one conspiracy theory, they are more likely to believe others, even when there is no logical connection between them: "with rare exception, almost every study that has looked at the relationships between beliefs in different conspiracy theories has found these kinds of correlations" (Brotherton, 2016, 65; Wood & Douglas, 2013; Kay, 2011; Lewandowsky et al., 2013; Swami et al., 2011; Goertzel, 1994; Jolley & Douglas, 2014; Wood et al., 2012). Some people will believe a conspiracy theory that psychologists have made up just for the sake of research (Brotherton, 2016, 66). Perhaps unsurprisingly, the most significant predictor of conspiracy ideation is whether or not someone possesses a suspicious mindset. As long as someone believes something fishy is going on or is willing to buy into the plausibility of a nefarious cover-up, there is a cascading effect where they are much more likely to buy into a whole host of schemes and conspiracies, even when two or more schemes contradict each other. This tendency has become known as monological reasoning or a conspiratorial worldview (Goertzel, 1994).

Psychologists have measured trust and its relationship to conspiracy ideation, finding that the more people distrust those around them, the more likely they are to distrust institutions and society more broadly; this heightened distrust can lead to seeking out answers in conspiracy theories (Goertzel, 1994; Hofstadter, 1964; Darwin et al., 2011; Swami et al., 2010, 2013; Parsons et al. 1999; Abalakina-Paap et al., 1999). Jan-Willem van Prooijen ascribes a biological underpinning to conspiracy theory adoption, arguing that conspiracies are "rooted in our ancient tribal instinct to classify the world into 'Us' versus 'Them'" (van Prooijen, 2019). Our
minds have adapted to become prudently paranoid (Freeman, 2007; Kramer, 2002; Brotherton, 2016), serving as an early warning system when something doesn't feel quite right (Freeman, 2007; Kramer, 1998). When we are uncertain, we tend to err, slipping into what psychologists call the "sinister attribution error" (Main et al., 2007). As Brotherton points out, it is easy to see why conspiracy theories are so widespread: "Given a little prudent paranoia, our brains can go into overdrive, collecting and overanalyzing information until we see hidden motives and signs of deceit" everywhere (Brotherton, 2016, 82). With a distrustful mindset, conspiracy theories offer answers, a discernible pattern to randomized chaos.

Increasingly, those who study conspiracy ideation have been framing it in terms of cognitive maladaptation. Psychologists have replicated uncertainty and anxiety before surveying participants about their beliefs in a host of conspiracy theories and have found a direct correlation between these feelings and conspiracy ideation (Sullivan et al., 2010; Whitson & Galinsky, 2008; Grzesiak-Feldman, 2013; Kramer, 1998; Brotherton, 2016). Additionally, conspiracy ideation may be triggered by perceived exploitation or sustained vulnerability and the need to avoid the painful feelings that arise from these states (Cosmides & Tooby, 1992; Bost et al., 2010; Bost & Prunier, 2013; Sunstein & Vermeule, 2009). Researchers have also found a correlation between conspiracism and feelings of powerlessness and alienation (Goertzel, 1994; Abalakina-Paap et al., 1999; Swami et al., 2010), which can, in turn, result in a state of hypervigilance (Kramer & Gavrieli, 2005). Scientists Whitson and Galinsky argue that if the conspiracy theory implicates someone's identity, even those who are not predisposed to a conspiratorial mindset may nonetheless become drawn to conspiracies (2008). In an uncertain time, people may seek answers from "receptive [communities like] QAnon" (Donovan, quoted in Manjoo, 2020).

One method to counter conspiracy ideation has been to incorporate analytical thinking throughout education (Swami et al., 2014; Douglas et al., 2016; Oliver & Wood, 2014b). Douglas et al. (2016) have found that those with lower levels of education and analytical thinking are more likely to see causal intentionality everywhere, a finding that is corroborated by Swami et al. (2014). Critical thinking, in particular, may decrease susceptibility to the reasoning bias known as "myside bias," in which people evaluate, generate, and test hypotheses in a way that is biased to favor their own opinions and attitudes (Toplak & Stanovich, 2003). In place of logical and probabilistic reasoning, conspiracy theorists tend toward magical thinking (Brotherton & French, 2014; Agnoli & Krantz, 1989; Sedlmeier & Gigerenzer, 2001; Darwin et al., 2011), whereas critical thinking teaches individuals to determine whether conclusions follow logically from evidence and to consider alternative explanations. Therefore, when designing information literacy lessons and workshops, librarians should assume knowledge and
skill gaps in critical thinking and analytical reasoning and incorporate pedagogical strategies to address them.

Even though there is evidence that education combats belief in conspiracy theories, the truth is, none of us are entirely immune to them. Brotherton cites the "third-person effect," the hypothesis that people tend to think the average person will be more influenced by fake news or conspiracy theories than they are themselves (Basu, 2020, paragraph 6). Studies have also shown that as much as half of the U.S. population believes in at least one political or medical conspiracy theory (Oliver & Wood, 2014a; Goertzel, 1994; Uscinski & Parent, 2014; Uscinski, 2019; Brotherton, 2016). Some scholars argue that results are too mixed to say with certainty that lower levels of education correlate with conspiracy ideation (Bogart & Bird, 2003; Bost, 2015; Clark et al., 2008; Parsons et al., 1999; Simmons & Parsons, 2005). For example, those educated about documented race-based conspiracies are more likely to endorse them (Nelson et al., 2010). One reason for this may be that education provides only modest training in analytical reasoning (Cullen et al., 2018). In a case study modeled after LSAT logical reasoning arguments, Cullen et al. asked students to construct argument visualizations in groups and independently, iteratively refining problem sets through feedback from their peers and instructors (Cullen et al., 2018, paragraph 5). Instruction librarians looking to adapt the lessons from this case study can look to the sound pedagogical practices at the root of their research (e.g., collaboration, feedback, constructive activities). Students experienced an improvement in analytical reasoning skills, "important because such skills are foundational for university-level study across the disciplines and improving them is the most commonly cited goal of undergraduate education" (Cullen et al., 2018, paragraph 14). Armed with our knowledge of the psychology of conspiracy thinking, librarians can build better tools and techniques into information literacy instruction and interactions with patrons (See Takeaways on the companion website).

Preparing for Conversations: Conspiracy Thinking and Emotions

Interacting with people who endorse conspiracies is challenging. Conspiracy theories seduce people by appealing to deeper feelings of anxiety, resentment, disillusionment, uncertainty, and alienation. Although one impulse may be to engage in counter-argument, evidence has shown that it often leads to further entrenchment (Goertzel, 2010; Keeley, 1999). Pointing out logical contradictions in the conspiracist argument is seldom enough to change a person’s perspective.

Known as the "backfire effect," labeling a person's belief or interest a "conspiracy theory" may backfire because "conspiracy theories have a kind of romanticism to them" (Wood, 2016).
Believers often feel they have become experts on a hidden truth (Oliver & Wood, 2014). This friction between experts and non-experts is crucial to understanding the emotions behind the allure of conspiracy theories. Myriad authorities are built up throughout life for each of us, much of them subconsciously accepted. The notions of expertise, authority, or fact can seem beyond interrogation. It may also be hard to explain why we believe one thing to be fact and another to be fiction, especially if we become accustomed to trusting our gut. Suppose a librarian questions us about our emotions and thoughts as we evaluate these types of information sources. In that case, we might experience negative affect because we are left feeling uncertain and unmoored in our trust evaluations. Librarians can assist patrons through this time of uncertainty by acting as a bridge between one community and another, such as between high school and university, or between an online community and a disciplinary community of practice. Hagen (2020) argues that academics should treat conspiracy theories with the same level of "rigor, open-mindedness, and intellectual honesty" as "any other idea" that we encounter (427). Conspiracy theorists are already members of communities, and every community has insiders and outsiders, social relationships, norms, and practices. Librarians are skilled at recognizing and traversing communities of practice.

Instead of offering contrary information, empathetic listening and careful language will be far more effective when interacting with people experiencing conspiracy ideation. Before entering into a conversation with anyone espousing conspiratorial worldviews, self-monitor for empathetic body language and facial expression as much as verbal cues, arm yourself with patience, and be ready for de-escalation strategies in case the conversation turns heated. Let the conspiracy theorist explain their logic, using mindfulness and metacognition to tune into your own thought processes as they present their thinking. It is important to monitor your verbal and facial cues, as well as body language, which may inadvertently communicate a defensive posture. JD, a family therapist and social worker who is trained in working with people and families where conspiracy thinking has become problematic, suggests approaching conversations openly and calmly, emphasizing that a person's tone of voice sets the stage for how a conversation will go: "From a neurological standpoint, a negative tone can activate our fight or flight response, which creates a headspace where we're stressed, agitated, and far less open to hearing what the other person has to say" (Rohlinger 2020). This phenomenon, where one person's emotions trigger similar emotions in another, is known as emotional contagion, and one way to control this is through the language we use. For example, "you" statements should be avoided because they might raise defensiveness in the other person; "I" statements are preferred. Replacing "but" with "and" also lowers defenses. Additionally, he recommends starting with something positive, like a compliment or observation, adding that, "It's not what you say, it's how you say it" (Rohlinger, 2020). Habitual use of learner-centered language can help bridge the gap between the librarian and the conspiracy theorist. Like the words "you" and
"but," the terms "should" and "ought" can also have adverse effects and are to be avoided (Klipfel, 2017, 50-53). If the conversation gets tense to the point of arguing, modify language use to "disagree agreeably" ("Disagree agreeably," 2015). For example, instead of "You may think that sentient reptiles control the world in a secret shadow government, but there is no evidence of that," try, "I understand that is a terrifying thought, and you want to get as much information as possible. Let's try and look critically at what we can find together."

It may help to remind ourselves that conspiracy theorists have had a productive impact on society: "Conspiracy theories, even when they miss the mark, can make a case for increased transparency. [W]e know far more about the Kennedy assassination and 9/11 terror attacks because conspiracy theorists questioned the official narratives and demanded further details" (Uscinski, 2020, 6). Historically, some conspiracy theories have been confirmed, lending a sheen of legitimacy to any new conspiracy theories. The conspiracy theorist wants answers just as any other patron. It might help to remember that feelings of powerlessness during crises may have lead to a loss of trust in established institutions, including universities and libraries (Lewandowsky & Cook, 2020).

Librarians can be instrumental in rebuilding trust, even through small steps over time at a service desk or in a classroom. One way we can sympathize with people who believe in conspiracy theories is to understand that they are looking for certainty (Rohlinger, 2020). Physician Yoo Jung Kim argues that the medical community has been dealing with conspiracy ideation for decades through motivational interviewing, a type of conversation therapy (2020). Over time, patients who might be "hesitant to heed medical advice" about vaccines, taking medications, or quitting smoking, "either due to misinformation...or a reluctance to change their habits" are assessed and gently guided toward better choices (Jung Kim, 2020, paragraph 3). Over periodic visits, she identifies the things that may be barriers to change, building trust with her patient, not unlike a patron learning to trust a librarian over a series of reference interactions. Jung Kim describes it thusly:

At the end of every discussion, I reassess my patients' willingness to change. Most of my patients aren't willing to give up their deep-rooted beliefs or habits after a single office visit...[but] over the course of many visits... I can often nudge them toward healthy behaviors [and] actionable steps (Jung Kim, 2020, paragraph 6).

Showing compassion and interest in a person will go a long way toward building a foundation of trust. On an initial interaction, a librarian might consider inserting some critical thinking questions into a patron’s line of reasoning to see how open-minded they seem. If they appear defensive, defiant, or entrenched, that will indicate that they aren't yet ready to engage on that
level (Basu, 2020, paragraph 14). Finding something to agree on will allow for mutual interest and trust to build. Hornsey and Felding point to the aspects of someone's identity that, if identified, might establish trust: vested interests, personal identity expressions, social identity, fears, or phobias (Hornsey & Felding, 2017). Over time, patrons might be willing to give a little more of themselves, and librarians might be able to insert a bit more critical thinking and reflection into interactions. (See Takeaways on the companion website).

Conclusions and Implications for Future Research

Whatever the result of the QAnon movement, there will always be another conspiracy to take its place, especially given the internet's rhizomatic nature, and we must be prepared. "Nature abhors a vacuum, and the internet turns a vacuum into conspiracies. All of us have a role to play in not contributing to misinformation" (Ovide, 2020). Indeed, a 2019 FBI bulletin warned of "conspiracy-driven domestic extremists," including QAnon adherents, adding that the current information ecosystem allows such groups to "carry out criminal and violent acts," including hate speech (Legum, 2020). While we have examined facets of conspiracy ideation, we acknowledge the more "hateful" side of QAnon, even though some believers "just want to believe what they're told on social media; those are the people with whom we must engage" (Wiener, 2020, paragraph 14). With that in mind, we recommend keeping a record of interactions with conspiracy theorists, especially those trending toward QAnon. A team approach to public services is useful, so that team members can step in and relieve one another should an interaction need intervention. De-escalation strategies should be a part of periodic training for front-line employees, and policies should be put in place to protect public services employees and patrons. As has been noted here, delusions and schizotypal thinking can occur in extreme cases of conspiracy ideation, and calling for assistance from specialists who are trained to assist in mental health care is essential if that is of concern. If there is any violence or threat of violence, it goes without saying that policies should be in place for when and how law enforcement should intervene. Hotlines and phone numbers should be posted and refreshed at every service point, and training should likewise be implemented, maintained, and refreshed regularly. Such policies and team-based approaches recognize the full range of conspiracy ideation - from the mild, exploratory phase, which may look like a patron exploring a topic but unsure about its ramifications (i.e., a "fence-sitter"), to the full-blown conspiracy theorist who appears to have lost touch with reality (i.e., the "true believer") (Pierre, 2020, paragraphs 7-12). If we want QAnon to subside, we must increase information literacy, holistically - in their information evaluation and assessment. While acknowledging that conspiracy theories are not new, they present a growing threat because the social web enables conspiracy theories to propagate (Legum, 2020).
During the instructional shift of the early 2000s, librarians looked to the educational and psychological fields for best practices. The growing body of library-related pedagogical material attests to our success at expanding our repertoire. The QAnon movement illustrates another significant paradigm shift. Because it was born and propagated online, librarians and researchers should obtain and maintain technical skills that were not necessary a generation ago. We need to create and test lesson plans that promote critical thinking and analytical reasoning to counter conspiracy thinking, and we encourage our fellow instruction librarians to share them to open repositories such as the ACRL Framework for Information Literacy Sandbox, CORA, and PRIMO. Franco (2016) echoes our call for change when she describes the transformation in global higher education, extending to our responsibilities beyond the classroom. Because "education will change more in the next ten years than it did in the previous hundred" (Sreenivasan, 2014, 1, quoted in Franco, 119), it is more essential than ever before that we teach critical thinking for social change, now and in the future.

This article presents only a sliver of the literature in other fields and suggestions that need to be tested and put into practice to assess their effectiveness. To further understand the QAnon movement, we plan to conduct a study into the information behaviors of QAnon adherents to discover how they conceptualize and practice their notion of research and information-seeking. More studies like this with conspiracy theorists would greatly benefit the library community. Our profession must pursue research that builds upon the work done in other fields to contribute to our understanding of how conspiracy ideation and information literacy intersect.

For practical takeaways, please visit the companion website: https://sites.google.com/oakland.edu/calltoaction/home

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