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Insurrections are nothing new in U.S. history. But social media adds a new twist.

ome commercial media outlets would have us believe that the 6 January 2021 insurrection that led to the assault on the Capitol was a unique, existential crisis in the United States. Humbug! Insurrection, riots, massacres, uprisings, and sundry other forms of organized mass violence are not unusual in U.S. history. That's true even if we restrict our attention to just domestic plots to overthrow the government. In early colonial times, Bacon's Rebellion (1676) sought to overthrow the government of Virginia. In republican times, Shays' Rebellion (1786) sought to overthrow the government of Massachusetts. In the Wilmington insurrection (1898), white supremacists violently overthrew the elected government of Wilmington and used the incident to reclaim control of state politics in North Carolina.

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Even if we further narrow the scope to "domestic plots to over-throw the federal government in the 20th century," the 2021 Capitol insurrection still isn't unique. A coup was planned during the Business Plot of 1933 (see Katz, McCormack, and Talbot —and for largely the same reasons as in 2021. And let's not forget the Civil War and sundry other

secessionist and racially charged insurrections throughout our history. But the January 6 Capitol riot was unique in one respect: it was the first insurrection that was facilitated by social media. That alone makes it worthy of our current attention.

#### **QAnon AND OPINION CREEP**

There are many ways to look at insurrections. Certainly, the political and social landscapes are critical to an understanding. But I want to focus here on a narrow, technical dimension with respect to one of the recent players: QAnon.

Mike Rothschild<sup>6</sup> defines QAnon as a "complex web of mythology, conspiracy theories, personal interpretations, and assumptions featuring a vast range of characters, events, symbols, shibboleths, and jargon." This working definition provides a useful overview of QAnon. But in recounting any part of the QAnon story, we are well-served to heed Rothschild's cautionary note that QAnon can be understood from

many different points of view: as a cult, pseudo-religion, conspiracy cabal, promoter of false prophecies, online disinformation source, Internet scam, hate group, far-right political movement, and trope for anti-Semitism, fascism, apocalypticism, and domestic terror threats. Each of these is a correct, though incomplete, description of QAnon. And to a large degree, that is why QAnon appeals to many audiences.

QAnon is different things to different people—people who have different levels of anger and anxiety, knowledge and experience, enthusiasm or tolerance for violence, and political motives approach the QAnon experience from their own perspectives. This, in turn, also explains why QAnon relies upon social media. Diffuse audiences are best served by communication systems that are digitally adaptable. What confuses some commentators is that the various threads of QAnon are so tightly woven together in the QAnon mythology that it's difficult to associate an individual thread with a particular audience. This oversight underestimates the complexity of the QAnon movement and its effect on politics and social media.

Regarding political movements, let's begin by recognizing what QAnon is not. It does not represent an objective, logical, value-neutral, presentation of reality and facts. There are no eternal truths to be found in QAnon drops, just jingoism and dog-whistle missives driven by irrational, obscure dogma. QAnon should be appreciated for what it is: electronic tribal warfare in its purest form. It is the digital fulfillment of political sabotage and dirty tricks-a marriage of social media technology with the most egregious examples of faulty and fallacious reasoning for political purposes. QAnon is a paradigm for what happens when digital politics goes off the rails.

QAnon offers a public political narrative along right-wing, authoritarian lines whose operational strategy is to reshape public opinion through online channeling of disinformation. QAnon is what noble lies and pious fictions are without the nobleness and piety. A literary example of ignoble impiety is Anthony Trollope's 1868 novel *Phineas Finn*, and this is also a common theme in many of Noam Chomsky's books on media and culture. 9,10 (For a similar example, see "HALanon" for a proposal about the creation of a new tribe.)

The political use of ignoble impieties is represented by the movement of the so-called Overton Window that purports to explain the behavior of politicians as they chase after votes and campaign funding. On this account, politicians aggressively modify their opinions to best match the attitudes of the voters. So if QAnon or any other group can move public opinion toward an ideological extreme, the Overton Window theory holds that politicians will follow in the same direction in search of votes and financial support. Overton Window analysis is simply a fancy way of describing opinion creep, which has always been a favored tool of politicians to achieve public support of agendas that are not obviously in the public interest. Chomsky<sup>9</sup> makes the same point from a media perspective:

The smart way to keep people passive and obedient is to strictly limit the spectrum of acceptable opinion, but allow very lively debate within that spectrum—even encourage the more critical and dissident views. That gives people the sense that there's free thinking going on, while all the time the presuppositions of the system are being reinforced by the limits put on the range of the debate.

And so it is with QAnon. This strategy follows the same playbook as the authors of The Protocols of the Elders of

Zion—a bogus conspiracy theory about a Jewish plot to achieve global domination published around the turn of the 20th century. Despite the fact that the monograph enjoyed a checkered history, was historically absurd, included plagiarized content, and had unverifiable provenance, it gained popularity with anti-Semites and conspiracy theorists in the 20th century, and it achieved prominence in the United States through liberal coverage in Henry Ford's newspaper, The Dearborn Independent. 11 What is most remarkable is that even though the Protocols was disclosed as a hoax at the time it first appeared, it remained serviceable to anti-Semites for the following century. Umberto Eco<sup>12</sup> wrote that this incoherent text with fabricated origins took on a life of its own among tribal patrons. As Eco explains:

If at first the Protocols was taken seriously, it is because it was presented as a shocking revelation.... But what seems incredible is how this fake arose from its own ashes each time someone proved that it was, beyond all doubt, a fake.... It is as if, after Copernicus, Galileo, and Kepler, one were to continue publishing textbooks claiming that the sun travels around the earth.

Such resilience is both noteworthy and profound as it underscores the opinion creep utility of false narratives such as conspiracy theories  $^{13}$  to the tribes that create them. The QAnon movement capitalizes on this utility, just as the panderers of the Protocols did.

Other parallels to the QAnon experience may be drawn from history. Nostradamus and QAnon share a common heritage of skullduggery. Where Nostradamus relied on print, word of mouth, and Catherine de' Medici, QAnon relied on social media, talking heads, and Marjorie Taylor Greene.

### **HALanon**

The membership of any movement that purports to be exceptional must be selective. How else could we discriminate between the "us" and "them"? In keeping with the spirit of this article, I propose a new tribe, HALanon, as an homage to Arthur Clarke's 2001: A Space Odyssey. The official mantra for HALanon members will be "it is what it is" (iiWii).

Membership in HALanon is secret and must never be discussed openly. Further, membership requires demonstrated cerebral proficiency on the official HALanon challenge (Drop # 0.0 below). A successful HALanon brevet member will have:
1) answered questions 1–3 correctly based solely upon the evidence provided and 2) affirmed in silence that they have not accepted the assistance of anyone who has taken a class in formal logic, Boolean algebra, or digital circuits within the past 20 years. Elevation to Brigadier status may be achieved by also answering questions 4–6 under the same conditions. The satisfaction of these requirements will be based on the honor system and must not be discussed in polite company.

Of course, any movement worthy of the name must also metagrobolize members through a continuous stream of industrial-strength missives. Consumer-grade missives such as "Beware—something important will happen whenever the current year divided by 3.036036036036.... is a positive integer" or "An emperor will appear whenever the last two digits of the sum of the date, month, and year of a presidential election year are twice the value of the first two digits" are sophomoric, anemic, and unacceptable. All HALanon missives to members will consist of weapons-grade, vainglorious psychobabble promulgated either over airwaves not regulated by the U.S. Federal Communications Commission or on privacy-abusing social media platforms.

#### **HALanon DROP # 0.0**

Three witnesses came forth with the following testimonies:

- » Witness A: "If (Ron is not Q and Don is not Q), then Q is actually three or more people."
- » Witness B: "If Q is not three or more people, then either Ron is Q or Don is Q, but not both."
- » Witness C: "If both Q and Don used the r/CBTS stream, then either Don is Q or Q is actually three or more people."

On the basis of these three testimonies, answer the following questions:

- 1. Assuming that only witness C lied, who was Q?
- 2. Assuming that only witness B lied, who was O?
- 3. Assuming that all testimonies were false, what can you say about the identity of Q? In that case, who used the r/ CBTS stream?

To receive elevation to the position of Brigadier of Disinformatics, you must also answer the following three questions:

- 4. Assuming that either Ron was Q or Don was Q, but not both, which witnesses were definitely lying?
- 5. Assuming that there was exactly one person who was Q, but it was neither Ron nor Don, which witnesses definitely lied and which might have told the truth?
- 6. What fact could resolve whether the suspected truthful witness in 5) did in fact tell the truth?

Parallels between the Protocols and *The Turner Diaries*, both in terms of the epistolary style and as a framing narrative for propaganda, should also not be overlooked. <sup>14</sup>

# CONTENT-FREE POLITICAL THEATER AND INTELLECTUALLY INERT DELUSIONS

Nostradamus and QAnon are useful comparisons in that their prophecies were (by design) sufficiently vague, general, subjective, and amenable to such a wide range of interpretations that falsifiability, for most intents

and purposes, was impossible. This heritage is derived from millennia of intellectually inert delusions, including the belief in alchemy, astrology, zodiacal omens, mysticism, sorcery, witchcraft, eugenics, supernatural creatures, ghosts, homeopathic cures, telepathy, clairvoyance, extraterrestrial beings, flat earth, perpetual motion, Lysenkoism, and on and on. The fact that these terms are familiar to us is testimony to the ubiquity of the crypto-rationality around us. Over the centuries, humankind has demonstrated an infinite capacity for inert delusions. Perhaps it's woven into the

fabric of human DNA. In any event, the sources of delusion can be counted on for at least three main benefactions: failed prophecies, intransigence and hostility toward opposing views, and the intractability of beliefs. QAnon is no exception.

#### AND THE SURVEYS SAID...

A 2020 survey polled 4,000 adults on whether they heard of or believe in four QAnon conspiracies<sup>15</sup>:

 A global network tortures and sexually abuses children in Satanic rituals.

- President Trump is secretly preparing a mass arrest of government officials and celebrities.
- 3. Celebrities harvest adrenochrome from children's bodies.
- Robert Mueller was actually investigating a child sex-trafficking network.

#### The reported findings include:

- A majority of Americans report that they have not heard about QAnon.
- But 20% of Americans believe in at least one of the four QAnon conspiracy claims.
- Seven percent of Americans have a favorable view of QAnon and trust it to provide accurate information most of the time.
- Sixteen percent of those who did not rate QAnon favorably recognized and believed at least one of the four conspiracy claims anyway.

The public familiarity with QAnon is consistent with a Pew survey taken at approximately the same time. <sup>16</sup> The Pew survey also reported that 40% of Republican voters who have heard of QAnon conspiracies say QAnon is a good thing for the country. While Nostradamus may no longer be among us, his spirit is very much alive in the QAnon movement.

Political scientist Robert Pape<sup>17</sup> offered a characterization of the participants of the January 6 insurrection based on a series of surveys. Pape investigated the court records of the first few hundred insurrectionists who were arrested and found that they were a different mix from participants in prior acts of domestic terrorism related to right-wing causes from 2015 to 2020. The Capitol arrestees had a different demographic profile from the comparison group of rightwing extremists. Although overwhelmingly white males, the Capitol insurrectionists tended to be older, were less likely to be connected with gangs and militias, and were primarily from urban areas with the most significant decreases in white population (~75%). As a group, they tended to be lower in educational achievement and heavier users of right-wing media, particularly 8chan and Infowars.

Pape's study estimates that the insurrectionists are drawn from a pool of 65 million Americans (~30%) who believe that the 2020 presidential election was stolen, of whom approximately one-third (~20 million) are willing to use force to overturn the results. Approximately 30% of the 21 million support right-wing militias, 32% own guns, and 15% have prior military service. Fifty-one percent self-identified as Republican, 34% as independent, and 10% as Democrat. Pape found that the two greatest single drivers of participation were a belief in a "great displacement" where whites are losing control to nonwhites (~65%) and the QAnon conspiracy belief about a global Satanic pedophile cult (54%). The primary news sources for the Capitol insurrectionists were NewsMax and One America News Network, right-wing talk radio, and social media. 18,19

While these surveys are interesting (and frightening) in and of themselves as we try to understand the new wave of collective political violence in America, they also provide useful data on the demographic of the people who are using social media to advance insurrectionist and seditious causes and the growth of violent organizations. Exactly why this demographic is so prone to conspiracy theories, intellectually inert delusions, nonreality-based belief systems, and social media will doubtless be the subject of social science doctoral degrees for decades to come.

#### **COGNITIVE DISTORTIONS**

Social scientists have identified some common characteristics of those who attach themselves to fringe groups and their conspiracies. Uscinski<sup>20</sup> discusses the need for cognitive closure and intolerance of uncertainty, excessive suspicion and distrust, cognitive

dissonance, confirmation bias, motivated reasoning that is dismissive of all information that challenges our worldview, the need for uniqueness, and a cornucopia of personality traits, including narcissism, delusional thinking, Manichean thinking, dogmatism, and authoritarianism. The social science literature<sup>21,22</sup> and popular press<sup>23</sup> are replete with studies that support such findings.

The one characteristic that comes up in every study is cognitive dissonance—the description of the high degree of tension that results from simultaneously holding cognitions (ideas, attitudes, beliefs, and opinions) that are inconsistent.<sup>24</sup> This principle, first observed by Leon Festinger<sup>25</sup> in the 1950s, accounts for the fact that people will go to great lengths (and engage in exceedingly irrational behavior) to avoid the mental discomfort produced by cognitive dissonance. Nowhere is this more obvious than in the intransigent support of failed predictions. In this case, the cognitive dissonance is maximized when the predictions fail to materialize [for example, when QAnon predicted Hillary Clinton's arrest on 30 October 2017 (drop #0)].

Festinger's theory of cognitive dissonance arose from a study of an apocalyptic cult that predicted doom on 21 December 1954. Festinger hypothesized beforehand that if the apocalypse failed to materialize, the strongest adherents would double down on their commitment to the cult, while those least committed would abandon the cult. Festinger and his colleagues infiltrated the cult and remained until the doomsday date when his hypothesis was confirmed. His explanation of the intransigence to give up a belief based on a failed prediction led to his famous theory. Cognitive dissonance is a motivating factor in and of itself. That accounts for the fact that the strongest of adherents of cults will either ignore failed predictions or attempt to explain them away.

There is no shortage of documentation regarding QAnon's failed

predictions.6,26,27 But, as Festinger would have predicted, these observed failures have had little effect on OAnon's core followers. The further removal of QAnon drops by many of the major social media platforms and a decrease in the volume of posts after the 2020 elections have been misinterpreted by some as a sign of the demise of QAnon.<sup>28</sup> Festinger would no doubt have predicted that the most hard-core adherents would simply wait things out until they can rally behind the next prediction. And that appears to be the case. Core adherents have simply switched to alternative social media platforms<sup>29</sup> and a new trope, "devolution."30

## THE ROLE OF SOCIAL MEDIA IN TRIBAL CULTURES

So there we have it. QAnon manufactures our political staple opinion creep but in a uniquely digital waynudging the so-called Overton Window toward authoritarianism to make the public more accepting of its conspiratorial narratives. It achieves this through what we'll call content-free political theater. There are a lot of characters in this play (compare https:// qanon.pub/) and a dizzying array of plots and subplots—far more complex than a game of Clue. But unlike Clue, there is no rulebook and only one end state. The intellectually inert delusions associated with QAnon are real and familiar-the characteristics of the followers are similar to those found with Nostradamus and Festinger's doomsday cult leader. We've seen this all before.

How critical was social media to the success of QAnon? In a word: decisive. It is not clear that a movement like QAnon could been created and sustained without it. Why would that be?

After the doomsday prophecy failed, Festinger<sup>31</sup> argued that for the vitality of a cult to continue after the disconfirmation of a core belief, several conditions must be satisfied:

 The core members must be deeply committed to a conviction.

- The conviction must be something that is disconfirmable.
- Such unequivocal disconfirmation must occur.
- Social support must be available to the members following the disconfirmation to reinforce the beliefs.

Festinger showed that these conditions were satisfied by the doomsday cult. The cult continued after the unequivocal disconfirmation of the predicted apocalypse failed to take place on 21 December 1954, and after some of the least committed members dropped out, the cult leader was able to recruit new members. The same conditions were present after scores of failed QAnon predictions, 6,26,27 and as with the doomsday cult, the retention of the members was proportional to their level of commitment. Such is the power of cognitive dissonance that even when confronted with unequivocal disconfirmation, some people cannot bear the discomfort of accepting that their beliefs were misguided or that they were duped. To admit this would be an affirmation that a profound personal deficiency allowed us to be fooled. For this reason, there is a human inclination to protect convictions ingeniously and robustly and to avoid any situation or negative evidence that would undermine our beliefs, no matter how misguided and unjustified.

The differences between the doomsday cultists and QAnon members confirm the advantages that social media offers disinformationalists. The doomsday cult never grew much beyond the number of people who could fit in the cult leader's living room. Most insurrections, including those of 6 January 2021, are unlikely to be spawned from that small of a group. So the first value of social media to cult building and tribal reinforcement is scalability. Social media easily expands to match the size of a deluded group. There is effectively no limit to the size that can be accommodated by an online disinformation platform.

But what is even more important is the granularity of messaging that social media offers. One-size-fits-all messaging is ineffective when it comes to motivating tribes with conspiracy theories, hate speech, and so forth because different subtribes respond differently to different dog whistles. Sending the wrong message not only doesn't have a positive effect on the membership; it produces a negative effect as it encourages disengagement. This is one of the lessons learned from phishing. Spear phishing Citibank customers with Wells Fargo phish bait will not only be ineffective, but it will elevate the recipient's suspicions.

To a large degree, social media can prevent mismessaging through selfenrollment to newsfeeds, content distribution by user profiles (for example, Facebook's EdgeRank family of algorithms), filtered sharing, and so forth. The result is the ability to fine-tune the messaging to arbitrary audiences of arbitrary sizes. Add to that the native support of filter bubbles (for example, Facebook Pages), and the result is the ability to fine-tune the delivery so that even the narrowest of audiences can receive unique messaging. Social media can bind any number of birds of a feather into a flock. This is a sine qua non when it comes to uniting an effective force of extremists who may have their own unique perspectives on radical or fanatical causes.

Social media can also galvanize insurrectionists with geographical transparency. The importance of geographical transparency is obvious when one considers the geographical distribution of the 700 people who were arrested for participation in the 2021 Capitol insurrection.<sup>32</sup> This is understandable given the small numbers of available cohorts who are willing to take an active part in an attempt to overthrow a government. It would be unusual indeed if such a coalition of the willing just happened to be concentrated in one geographical area. To put a fine point on this, the value of social media is directly related to the unpopularity of the activity—the more unpopular the cause, the wider one has to cast the net to attract willing participants. When it comes to sedition, treason, major criminal activities, and so forth, social media is the optimal way to achieve critical mass quickly. I can think of no viable alternative at this time.

Tribal attachment also requires the ability for members to create what in the 1990s we subsumed under the rubric of thought swarms and idea structuring. Although the phrase is quaint, the meaning is profound. For tribal cohorts to feel invested in an experience, they have to be bound by common beliefs that are shared by others in an affinity group. Nowhere is this more critical than with fringe groups and extremists where beliefs fall way short of universal appeal. Social media has extended this concept to include prescriptive or directed thought swarms or filter bubbles. 33

Both the doomsday cult and QAnon needed time to cultivate their members. We may think of this as the conspiracy gestation period. Psychologist Stanley Milgram's experiments showed that ordinary people can be enticed to do immoral and harmful things if they are motivated slowly and allowed time to self-justify their behavior in small steps.34 The key is that the subjects must be provided the time, opportunity, and reinforcing environment to come to accept the untenable belief—in this case that harming others was the right thing to do in the context of the experiment. Because social media engagement is intermittent and user controlled, it is an ideal reinforcing environment. Users don't feel pushed into anything; they are willingly drawn into it.

Our final emphasis is on the importance of social media sharing, which is critical to maintain the feeling of online affinity. Sharing, whether manifested as redirected copypasta (text reproduced via the cut-copy-paste desktop metaphor), memes, imagery and multimedia, or online sharing,

has similar effects by unifying targeted communities. But the flexibility of online sharing is unique.

The format versatility of sharing also makes it an ideal personal recommending environment.35 This is one of the crowning achievements of social media. Internet interactivity makes it easier to create and sustain echo chambers than any other form of communication. Sharing can create a self-reinforcing, interactive, collaborative environment that is ideal for supporting narrowly focused, toxic ideas. Further, it is exceptional in its ability to attract lurkers efficiently. Choice morsels of hate speech, ethnic slurs, historical negationalism, and xenophobia will draw psychologically compatible prospects to a cause like moths to flame.

Finally, the previously mentioned features contribute to the ability of social media platforms to maximize the effects of cognitive and confirmation bias through selective exposure. There is no alternative communication platform that offers the same degree of convenience, flexibility, and effectiveness as social media in reinforcing group attitudes and behavior.

e conclude with some additional disclaimers. There are other aspects of the use of social media in support of insurrection, terrorism, and sundry other forms of antisocial behavior that go beyond the account given here. For example, a Terrorgram plot on Telegram to seduce antivaxxers followed on the heels of the January 6 insurrection.<sup>36</sup> We avoid these details because the overarching significance of these events remains the same: society is not prepared for the velocity of ignorance and intellectually inert delusions made possible by social media.

The question naturally arises how society should respond to these faux communications. In my view, the least controversial approach is best because of the intransigence and hostility of the holders. Stephen Jay Gould took

the moral high road, it seems to me, when addressing the Omphalos hypothesis that the Earth was created approximately 6,000 years ago by a creator who intentionally left false evidence like the fossil record so that scientists would be deceived into thinking that the world was billions of years older than Bishop Usher calculated. This "deceitful creator" account ensures that no empirical evidence could falsify Young Earth Creationism. The planting of false evidence is now an integral part of the creation myth. Gould's reaction was entirely fitting. He didn't attack the Omphalos hypothesis as false. He dismissed it as useless!<sup>37</sup> On Gould's account, Young Earth Creationism goes in the same bin as the story of the Easter Bunny and Tooth Fairy-collectively, these stories contribute nothing to our understanding of anything. Debating whether they are true or false attaches to them undeserved credibility. They should be dismissed, not debated.

So it should be with intellectually inert delusions. Unverifiable and unfalsifiable claims, whether inspired by creationism or conspiracy theory, have motivative and not intellective value and may thus be ignored or discarded without cognitive loss. One of the immediate practical consequences of this is the appreciation that there is no merit in disputation. It is wise to recall Festinger's hypothesis: the proponents of cognitive delusions will double down when confronted with contrary evidence in proportion to their level of commitment to the delusions. Another consequence is that with the appropriate input and in a nurturing and reinforcing context supplemented by willful ignorance, intellectually inert delusions can become reality. The psychological causes of such delusions have been studied by social scientists<sup>22</sup> since Karl Jaspers first defined delusional behavior in 1913.38 Delusional, querulant behavior even has legal status under the rubric of litigious paranoia. While finding a "cure" for such behavior may be difficult to achieve, identifying it is relatively easy for a prepared mind.

QAnon played an important role on the social media side of the recent Capitol insurrection. Its use of social media platforms was testimony to how deeply embedded weaponized digital platforms are in partisan politics. QAnon approached digital politics the way businesses approach advertising, recognizing full well that the "quality and usefulness of their goods are subordinate to the artifice of their display."39 The success that QAnon had in getting fringe elements to coalesce into effective partisan tribes speaks to the extent to which much of political propaganda is extralogical performance art.<sup>7,40</sup> The fact that there was no verifiable content in the QAnon missives was no deterrent in galvanizing the base.

We remain silent on the particular motivating tribal beliefs behind the January 6 affair. From the logical point of view, beliefs are just vacant thoughts. One doesn't need to invest much intellectual effort to acquire them—they just pop in and out of existence on demand. But despite their hollowness, beliefs generate convictions far stronger than active reasoning can produce. This phenomenon was not lost on Francis Bacon, the father of the scientific method, 400 years ago in his famous discussion of four idols of the mind in Book One of his epic Novum Organum (1620). Bacon's idols were simply impediments to clear understanding—in our terms, intellectually inert delusions. Kurt Andersen<sup>41</sup> ties such idols together in an American cultural theme, which he calls the fantasy-industrial complex.

No matter how we describe them, the worst of these traits are the foundation for the weaponized disinformation infrastructure, of which QAnon is but a small part. This infrastructure produces hyperpartisan tribes, empowered through social media that has had a far greater negative effect on social order than could be imagined by an analysis of the use of social media in the Cambridge Analytica scandal. <sup>42,43</sup>

What we are learning is that social media is the key component of global disinformation campaigns that promulgate the big lies of our time and encourage the subversion of democratic processes. Future students of disinformatics may look back at the QAnon experience as the start of a Cambrian explosion of disinformation. While the social scientists try to determine what the root causes of insurrectionist or seditious behavior are, computer scientists and engineers will have to take the leadership role in determining how computing and networking technologies may be abused for this purpose.

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#### **AFTERSHOCK**

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