

TECHNOLOGY

# How to Misinform Yourself About the Coronavirus

Even if you avoid the conspiracy theories, tweeting through a global emergency is messy, context-free, and disorienting.

By Alexis C. Madrigal



Carlos Garcia Rawlins / Reuters

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A few minutes before 11 p.m. on January 20, Eric Feigl-Ding was pretty much just another guy on the internet. Sure, he is a Harvard-affiliated public-health researcher who lives in Washington, D.C., and has multiple degrees, but his Twitter account was nothing special. He had about 2,000 followers—a modest count on a scale that reaches into the millions—and his average tweet got about one retweet and five likes.

That all changed when Feigl-Ding read a paper about the new coronavirus spreading out of Wuhan, China, and spotted an eye-popping stat. The paper

estimated that the virus's contagiousness, which is captured in a variable called  $R_0$ , was 3.8—meaning that every person who caught the disease would give it to almost 4 other people. The paper cautioned that there was “considerable uncertainty associated with the outbreak,” but Feigl-Ding still worried that such a highly transmissible disease would be a key ingredient in the recipe for a major pandemic. “I read that 3.8 value and I was like: ‘Oh my gosh!’” he told me. “I tweeted it out.”

That's an understatement. “HOLY MOTHER OF GOD—the new coronavirus is a 3.8!!!” Feigl-Ding's tweet read. “How bad is that reproductive  $R_0$  value? It is thermonuclear pandemic level bad—never seen an actual virality coefficient outside of Twitter in my entire career. I'm not exaggerating.” During the next five minutes, Feigl-Ding put together a thread on Twitter, mostly quoting the paper itself, that declared we were “faced with the most virulent virus epidemic the world has ever seen.”

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Twitter ate it up. Many people seemed to be experiencing the outbreak, especially from afar, as some kind of distributed movie, watched in grainy cellphone videos sent out of China and populated by Twitter heads filling in the backstory. The thread soon had thousands of retweets. Feigl-Ding's account was flooded with new followers. Here was a Harvard epidemiologist naming the world's darkest fear about the new disease and confirming it.

Yet there were issues with Feigl-Ding's analysis, even if they were not immediately apparent to the people simply scrolling through Twitter. The thread exemplified a deep problem on Twitter: The most extreme statements can be far more amplified than more measured messages. In the information sphere, while public-health researchers are doing their best to distribute scientific evidence, viral Twitter threads, context-free videos, and even conspiracy theories are reaching far more people.

The coronavirus outbreak is a serious public-health problem. Although reports began to surface in early January, the Chinese government massively escalated its response last week, calling for an unprecedented quarantine of tens of millions of people. The outbreak struck within a fraught set of geopolitical circumstances. There is the history of the respiratory illness SARS. There is the uncertainty about how transparent the factions of the Chinese government are being about the severity of the outbreak. There is the sheer size of China—and the appearance of the disease in the weeks leading up to the new year, which sends hundreds of millions of people traveling across the country. And, of course, there is global competition between the U.S. and China, which provides a little extra incentive (and prospective attention) for Americans on Twitter trying to garner an audience.

Most Americans cannot read Chinese, nor are they present in large numbers on Chinese social-media sites such as Weibo and WeChat. The internet has fractured over the past decade, with American and Chinese social-media companies carving up distinct parts of the world. While that makes it difficult for many Americans to parse what's happening on Chinese social media, it also creates an opportunity for people who are tapped in on both sides. They can arbitrage from the Chinese to the American internet, turning WeChat videos into Twitter gold. Accounts big and small have whipped up quite an apocalyptic fervor in the past weeks, posting scary videos of dubious provenance and veracity. The mainstream media has proceeded carefully, and reporters' stories have seemingly been unable to satiate the rising hunger for more information about coronavirus.

This was the ecosystem in which Feigl-Ding's thread landed. No wonder it took off. Unfortunately, there were some mistakes. While Feigl-Ding included quotes and screenshots of the paper, which was preliminary and not peer-reviewed, he omitted some context, primarily that other infectious diseases such as measles also have very high R0 numbers. He also made a clear error: "Ding claimed that the new virus was eight times as infectious as SARS, when in fact SARS had an R0 ranging from 2 to 5, very comparable with these estimates for the new coronavirus," the science journalist Ferris Jabr, who watched Feigl-Ding's thread wing around the internet that Friday night, told me. Feigl-Ding deleted the SARS tweet once he realized the mistake.

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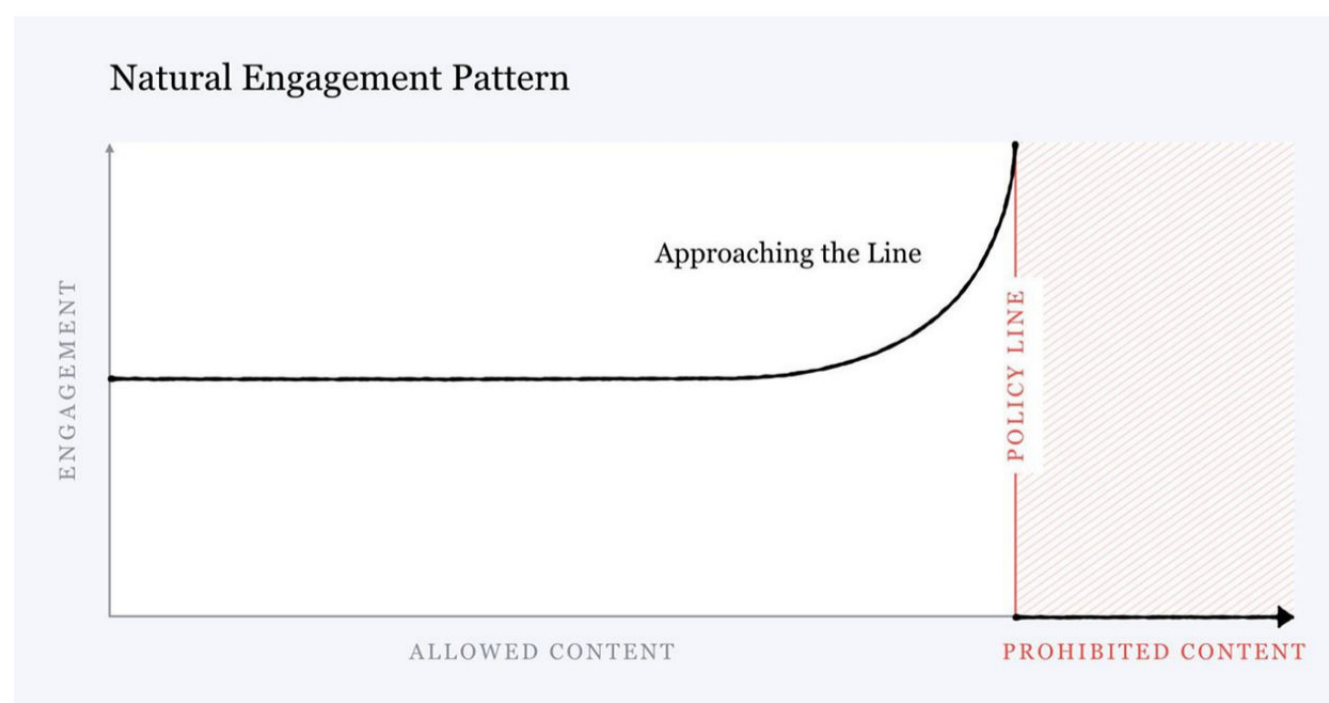
The problems didn't end there, though. Feigl-Ding hadn't known that by the time he tweeted about the paper, the researchers had already lowered their estimate to 2.5. And R0, for that matter, is not the be-all and end-all of the danger of a virus. Some highly transmissible diseases are not actually that dangerous. Other experts chimed in to chide his characterizations (and some of his Harvard colleagues talked directly to him, he told me). One

epidemiologist, Michael Bazaco, quote-tweeted Feigl-Ding and proclaimed, “This is fearmongering hyperbole, and borderline public health malpractice.” The tone was clearly not straight out of the Centers for Disease Control and Prevention, nor was the form of the tweets.

When Jabr began to add up all the issues, he realized that he should create his own corrective thread. “I decided to counter with a thread that filled in the missing context and collated some of the known facts at the time, along with their sources,” he said. “By the next morning, both our threads had been amplified, but his had still been RTed and liked at least twice as many times.”

By the time of this writing, Feigl-Ding’s thread has roughly triple the likes and retweets of Jabr’s. This is one of the realities of the current information ecosystem: While out-and-out conspiracies and hoaxes will draw some attention, it’s really the stuff that’s close to the boundaries of discourse that grabs the most eyeballs. That is, the information that’s plausible, and that fits into a narrative mounting outside the mainstream, gets the most clicks, likes, and retweets. Bonus points if it’s sensational or something that someone might want to censor. After all, which is more interesting: “HOLY MOTHER OF GOD,” or “the essential data are still being collected and assessed,” as Jabr ended his thread?

In 2018, after years of research into the trouble Facebook was having moderating material on its platform, the company’s CEO, Mark Zuckerberg, identified a dark pattern in Facebook’s data concerning what he called “borderline content”—stuff that was almost prohibited by Facebook, but not quite. He made this chart.



Facebook

Feigl-Ding’s tweets seem to approach the line of what professional ethics would permit public-health authorities to say. He certainly wasn’t endorsing full-on conspiracy theories about bioweapons and zombies, as some people have suggested during the coronavirus outbreak. But he also was far from the calm, slow-down-there stance of the majority of other officials. And, of

course, that's what made his message so irresistible.

Twitter has made some effort to slow the spread of misinformation on its platform. Searches for *coronavirus* now produce a link to the CDC with the message "Know the facts."

Feigl-Ding, for his part, admits that he wishes he'd worded things a little differently. "I really wish Twitter was like Facebook and you could edit," he told me. Since his thread went big, he's moderated the tone of his tweets considerably and hewed closer to the public-health consensus on how to describe the situation.

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Still, Feigl-Ding is just one guy on the internet. Many people have been tweeting into the borderline space, and not everyone shows signs of remorse.

Misinformation has always been an element of people's response to disease; we didn't have to wait around for social media to be invented to spread rumors or contest facts. But the fundamental difference today is the scope and speed by which social-media platforms enable this to happen—and the strangeness of the information networks that are formed in crisis.

One user in particular, @howroute, has had tremendously viral tweets about the terrible danger the world faces. These have drawn more likes and retweets than anything from Feigl-Ding or Jabr. One shows people in hazmat suits on an airplane. "BREAKING NEWS: This is not a scene from some apocalyptic horror movie, this is a #coronavirus outbreak in China," @howroute posted. The tweet has been retweeted and liked about 50,000 times. "The SARS like virus has already spread to four countries and infected more than 1700 people. US airports are monitored. Be on alert, stay safe!"

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The account has also posted videos supposedly showing people dead in the hallways of hospitals and someone twitching under a hospital sheet. Most of the videos seem to be real, but the context is missing. Within the apocalyptic frame that they've been given, they are terrifying.

The name on the account is Max Howroute, but I've been unable to find any person by that name in public-records searches. There's no record of Max Howroute working at a publication or producing work other than some satirical YouTube videos, yet the account describes Howroute as a "journalist." Before the Wuhan crisis, @howroute had mostly posted anti-Trump memes. Since the viral hit, the account has gone all in, tweeting completely context-

free videos and charging its critics with being Chinese Communist Party trolls. “You’re liar and I will report you to Twitter,” @howroute tweeted at the [Hong Kong dissident artist Badiucao](#). “You’re obviously new here. I’m one of the most trusted sources on coronavirus reporting on Twitter. How dare are you to question my reporting!!”

It’s not clear what @howroute is doing, or who is responsible. The account—it often posts using *we*—has not responded to my requests for an interview, and studiously maintains that everything it has posted has been verified. According to fact-checking by *BuzzFeed’s* Jane Lytvynenko, [that is not true](#).

Is @howroute someone seeking global attention, someone who believes what they are doing is righteous, someone who’s simply an exploitative grifter? Perhaps the only clear thing about the account is that it has shaped the online conversation about the coronavirus outbreak, regardless of its intentions. It may be that @howroute is “one of the most trusted sources on coronavirus reporting on Twitter,” which is exactly the problem. Some entity with no discernible knowledge about China, epidemiology, or infectious disease, working from a pseudonymous account, has become a leading source for people across the world about a global pandemic.

## ABOUT THE AUTHOR

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