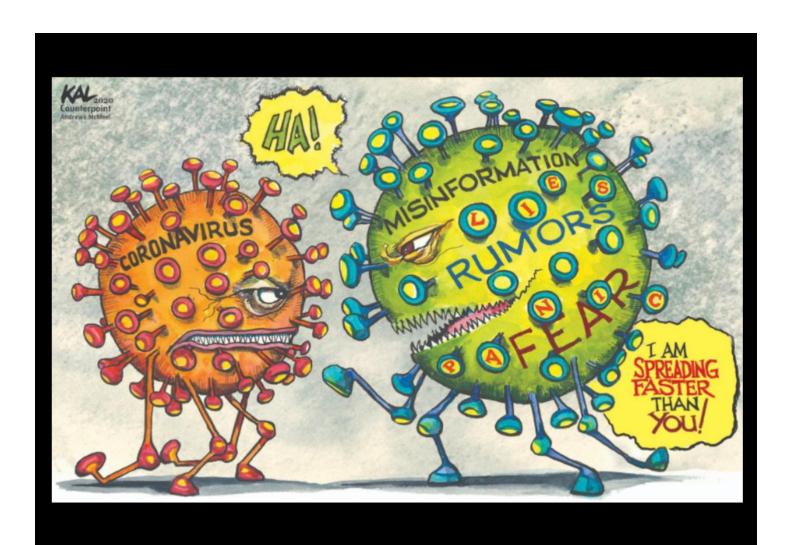DEMICOM

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Viral beliefs

Covid claims in a world of rumor

Gary Alan Fine

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Front picture: KAL, Kevin Kallaugher

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Preface

After the outbreak in the city of Wuhan, the information from the Chinese authorities was evasive. In the beginning, it was perceived as a local outbreak. When the virus began to spread in winter resorts, in Austria, the disease control agencies realized that it was a fast moving virus. In a short time, the Covid-19 spread and we learned about it through news reporting and from rumors. The experts were surprised by the speed of the outbreak. The corona pandemic became the most extensive global crisis we have had since World War II.

The rumors received more fuel after that realising the knowledge about the virus was relatively low and there were no clear plans for how to handle it. Many agencies, researchers in the field of disease control and healthcare professionals commented on the situation. The speculations began to grow wild. The withholding of information from China obviously contributed to the infection hitting vulnerable group's harder and made decision-making and crisis communication much more difficult.

This valuable research report presents insightful knowledge about rumors during the corona pandemic. It's clear that many of those who work as decision makers in government agencies, disease prevention and control, leading politicians, journalists and as communication officers need knowledge of what a crisis means and the importance of crisis communication aimed for citizens. It is not always so easy to handle when the crisis strikes. Many unclear situations arise and agencies make statements about what is going on for the moment. Rumors are usually spreading faster in society than news reporting and information from agencies. In this situation, competition arises about what we should believe in and pass on to others. Rumors spreads between people like it always have, and now even faster in the digital platforms. Understanding rumors is central to being able to conduct effective command and control in an organization where crisis communication is central. Rumors often arise from an unclear situation and are rarely constructed by anyone.

The writer of this report is Gary Alan Fine who holds the James E. Johnson Chair as Professor of Sociology at Northwestern University in Evanston, Illinois, a suburb of Chicago. He is the author of a large number of books and articles in the field of rumors. He is a member of American Academy of Arts and Sciences. He

has been a visiting fellow at the Swedish Collegium for Advanced Study in Uppsala and is a guest researcher at DEMICOM at the Mid Sweden University in Sundsvall. It's a pleasure to be able to share Professor Fine's analysis and conclusions about rumors in this report with those who have a task and responsibility in crisis communication.

The Swedish Civil Contingencies Agency's (MSB) task is to increase crises awareness and strengthen preparedness in society. This also includes being a platform for collaboration between relevant agencies and other actors who must be able to handle emergencies and crises. The agency develops methods for crisis communication and crisis management. MSB conducts business intelligence, initiates research and communicates results in the area.

Henrik Olinder
Senior Expert Crisis Communication and Editor
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Introduction

Contemporary publics reside in a fishbowl of facts: a world of promiscuous claims. Which are we to believe and on what basis do we believe them? How do authority and power bolster belief and marginalize doubt? What is likely and what stands beyond an epistemic boundary? Can we trust our social relations to discern hazy truth? These questions are central to the interpretation of rumor, conspiracy, post-truth, and uncertain information. Nowhere is this truer than when we confront beliefs – and rumors – about the novel coronavirus. While we earnestly hope that vaccines will slow or eliminate the threat, even this potential closing stage is rife with uncertain and unproven claims.

As a community, we rely on a secure obduracy of the world, a world that is knowable. Our social relations depend on this confidence. A radical constructionism that argues that there is no true reality, but only a set of arguments that are proposed by those with interests and resources may be appealing as a theorist's game. Yet, denying a knowable reality destabilizes more than it solves. In such an insecure world filled with uncertainty, knowing becomes a power play. Fake news, mischievous assertions, and bogus claims have long troubled us, even though they are now perceived as central to our current season of doubt. Disagreements and distrusts create conditions permitting contentious understandings of the past, views of the present, and expectations of the future. Nowhere are these challenges more salient than when considering the disruptions caused by unsecured information in the context of pandemic and medical disasters, such as the global public health crisis brought about by the COVID-19 virus. What might otherwise have been embraced as consensual knowledge claims are disrupted, and this epistemic trouble is evident in a culture of rumor in which some judgments must be made rapidly (depending on improvised news (Shibutani 1966)) and others only develop over time (spreading through a communal grapevine (Fine and Ellis 2020)). It becomes the responsibility of those who are committed to providing credible crisis communication that information be provided in such a way that much of the public is persuaded to believe and to act in a responsible fashion.

While battles over what constitutes legitimate pools of knowledge occur in many domains (Maines 1999), they are particularly evident when assessing

scientific/medical discussions for which members of the wider public have only insecure knowledge. This skepticism and uncertainty potentially lead to distrust of those proclaimed experts when their demands push against the desires and the imaginings of those who are the targets of their advice. This is clearly evident in the resistance to the advice of globally-recognized virologists, such as the American researcher Dr. Anthony Fauci in his desire for limits on otherwise free behaviors. This is also seen in the skepticism of those who doubt the validity of vaccines (Larson 2020), once linked to endemic diseases, but now applicable to COVID-19.

Further, as scholars who have explored the sociology of knowledge have long argued, rumors are likely to appear, expand, and spread at times of social stress, particularly in response to threatening uncertainty, often before the extent of the disaster has been fully understood, communicated, or responded to by authorities. The way that Sweden has dealt with the COVID-19 virus in a manner distinct from the rest of Europe is instructive in this regard as the judgements of the Public Health Agency of Sweden, in conjunction with Swedish law, allow Sweden to take a different path with effects that are still being played out. As we see with the first and second wave of the pandemic, it is clear that this health emergency constitutes a rolling disaster as the dynamics of the disease keeps evolving, along with public beliefs. This seems generally true of pandemic disease (Lee 2014; Bodner et al. 2020; Kitta 2019), such as AIDS and now COVID-19, but is equally applicable in the case of slowly emerging disasters, such as illnesses caused by environmental degradation.

Rumor and the pandemic death knell

In assessing the variety of knowledge claims made about the novel coronavirus, a consideration of the role of belief and trust is vital. Scholars speak of the politics of plausibility and the politics of credibility (Fine and Ellis 2010). Specifically claims must make sense given that the claims accord with the world as we believe it to be (plausibility) and that they must come from trusted claimants (credibility). Both are linked to power: the power of epistemic consensus and the power of authoritative sources. These criteria permit us to parse the multiple truth claims spread about the pandemic in light of how they fit a shared epistemology (Fine in press).

The claims made about the COVID virus, its origins, cures and vaccines are diverse. They are alternatively amusing or disturbing in light of their potential for disruption of communal responses. As I am neither an epidemiologist nor a clinician, I do not address their accuracy, other than to note that in a world of viruses, physicians, and medical practices, there is truth to be found. It is not all guesswork or personal preference. However, there is a role for a sociologist to examine the effects of truth claims. For a claim to be a rumor, it is not that it must be false, but rather it is information that is unverified by those who are defined as being in a position to know. As Eviatar Zerubavel (1997) points out in his promotion of cognitive sociology, knowledge – and presumably truth – is always positioned within a world of status and authority. We think as members of a social group, not as individuals or as a species, and our judgments of what is plausible and who is credible are shaped as a result.

In a world in which beliefs may be sharply contested and defined by politics, and in which mistrust is often evident, many – from multiple perspectives – believe that claims about COVID-19 represent "fake news" or intentionally slanted information. It is not simply that the information is incorrect or unproven, but that claims are being proposed by those who have a specific interest to mislead, even in the context of fighting a deadly disease. This recognition justifies a lack of trust and a belief in strategic disruptions. Trust in information depends on seeing each claimant as part of a collaborative search for protective truth and societal welfare. When this is not assumed, knowledge claims can easily be viewed as weapons, using mental disruption for political advantage.

In uncertain situations, claims emerge that contest with those that are officially promoted, but it is sometimes necessary for segments of the public to challenge the claims of officialdom. Even many scientists, given their specialized knowledge – their awareness of a corner of the field - cannot entirely judge the broad reality of how the virus spreads. No single scientific orthodoxy exists, although there may be a preponderance of opinion, a set of beliefs that evolves over time. As members of an uncertain public, we must decide which scientists to follow, a challenging choice of credibility when viewed from outside of a social field composed of experts.

Ultimately, an essay such as this must answer another set of questions. This is how rumor operates in the contemporary climate and how rumor is likely to change in the future. With changes in communication technology will judgments of truth alter? Can we trust those who claim to provide confident claims, such as assertions that others (politicians, scientists, essayists) are lying, misleading, or dissembling (Sunstein 2009; DiFonzo and Bordia 2007; DiFonzo 2008)? These predictions are dangerous, no matter how sincere the intention. Forecasts of the future often operate, in effect, as a genre of fiction. We should no more trust ourselves than we should trust our colleagues and we should spread doubt equally. Who could have predicted the diverse global response to the coronavirus, as each nation made decisions based on its politics, culture, and health system? Further, who would have imagined prior to the spread of the virus the rapid restructuring of social relations? Still, despite the novelty of the situation that we face, the kinds of rumors and beliefs that are being shared about the current virus (Shahsavari et al. 2020; Bodner et al. 2020) are traditional with folkloric parallels to those of viruses past (Goldstein 2004; Kitta 2019). Inevitably, numerous similarities exist between rumors about COVID-19 and the earlier SARS pandemic (Lee 2014). COVID-19 is not the first coronavirus to trouble us, and it is unlikely to be the last. There surely will be similar health threats and pandemic disasters that will call for information in confusing times.

Rumor, or what we might more precisely term uncertain knowledge, demands that we transform suspicion to confidence. Such is the nature of belief: the commitment to one version of the world as the basis of action. This demands that we judge messages in light of our previously accepted beliefs and through the reputations of those who strive to convince us. In this regard, rumor is treated as a domain of knowledge that is tightly linked to our relations with others; it is social communication.

To some degree, the politics of plausibility and the politics of credibility have shifted in an age in which we have wide access to claims about our world through websites, discussion boards, and social media as well as the more traditional face-to-face communication and mass media. The mere fact that information is widely available does not make it any the less uncertain, any more true, or any more false. While we hope to discover secure truth, the reality is that we often must live with ambiguity. We discover the boundary of truth:

ignorance's domain. At its boundary, we find cloudy knowledge, a place in which rumor thrives. Error has a history, as does truth. While insecure knowledge may be deliberately constructed by organizations or promoters that mean to deceive, often rumor results from misunderstandings or best guesses taken as reality.

When we lack personal knowledge of the events under discussion, as in the case of medical information, we are often challenged to judge the claims that we hear. This requires that we depend on our social relations and on evaluations of those to whom we are connected through our social networks. While a similar process occurs with the judgment of all kinds of information, it is particularly the case with regard to rumor, which, by definition, involves unsecured information from uncertain sponsors.

Rumors can address trivial or mundane social events as unsecured information is everywhere. However, most examinations of rumor focus on salient fears, particularly those that occur in the aftermath of disasters and other traumatic events, including the demand for information in the aftermath of wildly spreading diseases. This is understandable in that in these circumstances, those searching for security hope to reduce danger to themselves, their close contacts, or their property. In the phrase of sociologist Ulrich Beck (1992), we live in a "risk society," a circumstance that demands access to information, however received and judged. Crisis communication makes the risk – and the need to reduce it – salient. As a result, rumors constitute performances establishing a collective and protective judgment. If this is not quite the wisdom of crowds, it involves group collaboration. One gazes around to see whether neighbors treat the information as trustworthy. If so, one is likely to agree.

The world of covid claims

This past year – a year of danger for ill and for illness – has been a moment in which the spread of information and misinformation has been dramatic. Imaginings of conspiracies, practical responses, and folk remedies have been common. Such is surely understandable as citizens of the world face the challenge of the pandemic death knell. What is plausible? Who is credible? What is our future to be?

In attempting to understand the assertions that are promoted about the virus, incorporating the concepts of belief and trust is vital. What does one see fit to believe and who is worthy of our trust. Taking these features together permits us to parse the numerous truth claims that are made about the pandemic.

Rumors about the COVID-19 virus, its origins, cures, and the role of scientists are diverse and are sometimes amusing or even bizarre for much of its audience. Some are taken as advice and some as entertainment. In this essay, I present a set of these claims to indicate the range of rumors that must be considered by those in crisis communication who aim to protect the public from false, misleading, or uncertain information. However, I emphasize that I do not do so in order to debunk some claims and enshrine others. There are others whose responsibility and whose expertise allows them to take on this task. As a student of rumor, I am a scholar whose expertise is to consider uncertain claims. That there are battles over the legitimacy of these claims is to be expected and that there are battles over who has the right and the privilege of being classified as being an expert is also legitimate in a political realm. My own expertise focuses on how these claims operate in a divided and contentious social system.

It should be emphasized that rumor is not necessarily false information, but rather it is information that has unverified provenance: claims from sources who are not in a position to know (Mukerji 1976). In other words, this is information that cannot be definitively defined as being true. As social media have become increasingly prominent, what had been previously termed a rumor might now be labeled as a meme, a cultural theme with proven appeal.

Classic studies of rumor (Allport and Postman 1947; Chorus 1953) have pointed to three elements that explain the amount of active spread of rumor as it swirls throughout society. These relate both to the event under consideration and the attitudes of the rumor community. Each of these connects to the claims made of the novel coronavirus. Perhaps the word novel is especially apt as it explains that past expectations with flu-like viruses no longer hold so well as guides to this flu-like disease. These core variables are the importance of the situation, its ambiguity, and the critical ability of the audience to assess the communication (Fine 1992).

In the case of rumors about the COVID-19 virus, all three are in play. With its soaring death toll and the various social and economic dislocations, the virus is clearly a serious matter. It would rate highly on any reasonable measure of importance to the citizens of the world. However, what is at issue is more than simply the significance of the virus. There is much ambiguity as well. Over the course of the last year, much has been learned about the virus, its prevention, and its cure, but there is much that has been and still is unknown. Governments take difference stances as some believe that the science demands full lockdowns, whereas others, such as Sweden, worry more about the effects of lockdowns on their population. Claims of the efficacy of various treatments have been debated and some of these treatments have been judged fanciful by those who are counted as experts. We find ourselves confronting claims that are often hard to judge, both from our perspective and even by those in medical research. The third feature changes our focus from the topic itself to those who participate in its discussion. The claim of critical ability – the ability to separate what is likely from those things that are less likely, at least according to expert sentiment – is an important feature that determines how many rumors spread. In cases in which publics have low critical ability, perhaps because of wish-fulfillment or because of hostility and mistrust, people are willing to consider a wider range of claims. Because of the divisions in society, rumors about COVID and its origins often fall into this zone in which their audience have low critical ability, whether or not the rumors eventually prove to be accurate.

There is another factor to consider. In a world in which beliefs are often sharply divided and defined by politics, and in which epistemic mistrust is widely evident, many believe that claims about COVID-19 represent "fake news" or deliberately misleading information. The point here is not simply that the information is incorrect or unproven, but the claims are being proposed by those who have a specific desire to mislead and to manipulate. Attacks are sometimes made on national actors, whether Russian, Chinese, American, or subnational groups. Whether these are directly controlled by the government or perhaps from those who support government projects by creating chaos or disbelief is a matter of considerable dispute. The point is that in contrast to those rumors that appear because they are seen as plausible attempts at an effort after meaning, these other accounts are designed to generate mistrust and undercut social

harmony. Of course, we may be prone to see the divisions – political, moral, or cultural – as something new. However, this recognition of disharmony is long-standing as societies have strong fault lines within. This may be a case in which we attempt to honor ourselves by suggesting that we are facing unique problems. The COVID crisis is unique in its particulars, but perhaps not unique in its ability to generate rumor, memes, conspiracies, and skeptical beliefs.

In this essay, I build on the research on rumor in the modern era, linking, as noted, to plausibility and credibility. But my particular source of inspiration are those rumors and conspiracy theories that address the novel coronavirus (COVID-19). To be sure, whenever one chooses to write such an essay on a contemporary and moving topic, one realizes that new rumors are continually being birthed during the process of writing and publication.

As in situations of complexity, uncertainty, and controversy, claims emerge that challenge those that are officially authorized to set policy – but there are many who have that role. Although it is frequently remarked that we need to "follow the science," this ignores the reality that "science" often is filled with competing claims. There is no one scientific orthodoxy, although there often is a preponderance of opinion. Perhaps it is better to say that we must follow the scientists, but then we must decide which scientists to follow. But even this suggestion, as reasonable at it seems, leads us to a consideration of what we might consider the domain of unofficial information: rumors, speculations, and conspiracy theories. While we must be cautious in accepting these proposals, it is important to recognize that not all unofficial claims are wrong and not all institutional claims deserve to be embraced. The rumors and beliefs that are spread about the COVID-19 virus range from what most would see as possible to what many would see as fantastic, humorous, or even malign.

Rumors about the COVID virus fall within several broad themes. We can categorize these as Origins and Conspiracies, as Self-Medication, and as Viral Susceptibility. Each of these includes numerous unconfirmed claims, operating from different perspectives and with different judgments of plausibility and credibility.

Conspiratorial origins

As might be expected, public concern focuses on how the virus originated, and, following from this, whose interest did it serve? Conspiratorial beliefs ask the Latin question: Cui Bono? Who benefits? Even though it leads into conspiratorial belief, it is, on the surface, a reasonable question to ask. We look for responsibility. We assume that a disaster and our response cannot simply be a random fluctuation, biological perturbation, or unintentional error. Some decision contributed to the disaster, and that decision might be one that was deliberately made.

At the outset of the spread of the novel coronavirus, the leading explanation – and still a likely one – was that the virus transferred to human hosts in a Chinese "wet market" in the large city of Wuhan, a location where live animals are bought and sold. Perhaps the virus is zoonotic and jumped from bats or pangolins (a scaly anteater) to humans. In addition to the fact that epidemiologists know of zoonotic viruses, this claim had appeal in the West in that it emphasized the otherness of the Chinese. Consuming a bat or an anteater demonstrated this cultural divide. This had an emotional punch for a frightened public.

Soon claims about the origins of COVID-19 spread beyond zoonotic illnesses (Bodner et al. 2020). Wuhan, the epicenter of the Chinese outbreak, is the location of the Chinese Institute of Virology. The coincidence allowed for the suspicion on which rumor feeds and it could be used by those in the West – and particularly in the United States – who mistrusted the intentions of the People's Republic of China. During the United States presidential election year, this claim could stand in for a need for the American government to confront the PRC, labeling the disease, as President Trump did, "the China virus." Others described it as the "Wuhan Virus" or even the more racist label of the "Kung Flu." While some alleged that the virus escaped from the laboratory unintentionally, suggesting an absence of careful science or competent security, others, more conspiratorial, felt that the viral escape was deliberate, designed to produce international chaos. The apparent success of the Chinese in controlling the virus after the first few weeks provided support for those who saw this as justifying their lack of trust in the Chinese government and, extending that in a disruptive fashion, to the Chinese

people. Perhaps the virus was a bioweapon or that the goal was to wreck the American economy. In turn, some in China, with their own agenda, suggested that the virus was spread through an American military base or by the CIA to kill Chinese citizens or to ruin their economy. These rumors are, in effect, mirror images. Even if some doubt these claims, they are treated in certain quarters as plausible explanations. If the actual violence against those of Chinese descent seems small, the pattern of mistrust is large.

While the Chinese connection was the most prominent claim, some rumors pointed to the spread of the virus as resulting from the activities of other malign actors, again asking who benefits, denying trust to shadowy and powerful elites, frequent targets of earlier rumors.

Some explained that the outbreak is a Zionist plot for world domination – a rumor that is always with us – while others point to the pharmaceutical industry that hoped to profit from medicines or vaccines. Still others suggested a plot by Bill Gates, founder of Microsoft, to profit from his own vaccine or perhaps to permit Microsoft to track the activities of those who are vaccinated. The global influence of the Gates Foundation, supposedly doing good work, and the resistance to the power of social media companies made Gates a plausible target. One sees something of the same suspicion in rumors that global investor George Soros owns a laboratory that works on COVID-19 vaccines. The fear of his hidden level of control, particularly among those who see him as an agent for leftist or Jewish interests, made the claim plausible when promoted through media that the audience considered trustworthy. Perhaps connected to these claims is the belief that the virus was created by President Trump's opponents (perhaps Soros or Gates) to defeat what was seen as his likely re-election. Mistrust can attach itself to any purported villain, as long as the audience treats the claim as reasonable and the promoter as knowledgeable.

Some rumors point to the developing 5G cellphone networks whose electrical fields either produced or spread the virus. While the linkage may seem obscure, the timing and the lack of awareness of the workings of the technology justify opposition to this technology that will enrich cellphone companies (just as earlier rumors referred to the dangers of the original cellular towers and electrical poles).

Perhaps, oddly, a claim made that was the virus was developed by the European Union to punish the British for Brexit. While hard to believe, it connects the timing of the virus to European politics. These examples show the range of the rumors. Of course, it is clear from the diversity of accounts that not all will be widespread or treated as equally believable. The Internet, now a central vector of information diffusion, allows quick access to the range of rumors, although also to quick denials. While the unconfirmed information being spread may be dangerous, it may be equally dangerous for the mandarins of Silicon Valley only to tolerate claims that receive their stamp of approval. Bowing to expert knowledge is particularly comforting for those who see themselves as being in league with these experts. Taken together rumors provide a map of patterns of mistrust toward those in authority.

Medicating oneself

Along with the challenge of determining and condemning those who are seen as is responsible for this deadly scourge is the question of how one can provide protection or a personal cure. We see such folk remedies in the case of many epidemics, including notably Polio or AIDS. Using popular images and metaphors of the disease and the cure (Sontag 1978; Kitta 2019), those who feel themselves at risk consider what is likely to protect them and may act on these beliefs. With COVID-19 being a virus or even an especially transmissible and severe flu, these diseases, as previously experienced, provide suggestions as to what prophylactics might be most effective, whether or not the medical establishment endorses them. We have, of course, the official, medically sponsored suggestions: wear a mask, keep a distance, and wash one's hands, and there are a few medications and medical procedures that appear to have some effect. But, understandably, there have been no experimental studies with control groups that demonstrate the efficacy of these treatments (although there have been for vaccines). Those treatments that doctors recommend in their role as "experts" places them outside the realm of claims that we consider as rumors.

Other unofficial treatments, while perhaps invalid, can be seen as plausible or at least as not harmful. For example, people are encouraged to gargle with mouthwash or salt water, eat garlic, consume vitamin C or D, or drink hot water and lemon. These are measures that have been used to fight the common cold

and the seasonal flu. Even if there is no compelling evidence that they have effect on the depredations of the COVID virus, they surely do no harm and perhaps bolster immune systems. Other treatments rely on more speculative assertions, such as consuming colloidal silver or zinc (which are used otherwise as dietary supplements), eating bananas, drinking small amounts of water every few minutes, consuming vinegar, eating hot peppers, or using a hair dryer to blow hot air. None of these are likely to do much damage, but without any clear connection to solving any medical problem. Each can be framed as being healthy, even if they might cause individuals to avoid receiving the treatments that would be more effective. Finally, there are a range of suggestions that while framed in some way as killing the virus, have little in the way of benefit, and may even cause harm. The most widely known of these nostrums is the suggestion to use bleach internally. While the American president, Donald Trump, was accused of suggesting this as a cure, in reality he only speculated that perhaps scientists could find some way of using bleach. He suggested the same for light therapy used within the body to kill the virus. A few Americans took these remarks as constituting medical advice, although the claims that many did seem overblown. Perhaps these discussions were more about politics than about medicine, but there were some who attempted the cure to their regret.

By listing all of these means of self-medication to prevent or mitigate the virus, we recognize the process through which individuals and the groups to which they belong determine which suggestions have the most plausibility, and, inevitably, these communities differ as to their judgments. These plausibility judgments merge with judgments of credibility, as those who learn of possible preventions from doctors might award them more credibility than those who learn of them from speculating politicians. Most audiences lack medical expertise, but they do rely upon symbolic understandings of the way in which diseases are imagined to be cured. Even when these claims are not scientifically legitimate, they are often cultural legitimate in that they depend upon images from folk medicine. Even the assertion, perhaps overly optimistic, that the Dutch government was planning to spray disinfectant over the whole nation to wipe out the coronavirus referred to the aerial spraying for mosquitos and other pests that spread disease.

Susceptibilities

Finally, there are claims of who are most (or least) at risk. We know of the dangers that medical workers, nursing home residents, the elderly, and those with conditions of co-morbidity face. However, rumors extend beyond these scientifically at-risk groups. In addition, there was an assertion from a Chinese doctor that Africans are not susceptible to the COVID virus. While the official rates of COVID in sub-Saharan Africa have not been high, perhaps this is a function of an absence of testing, the climate, or an absence of global contact. Blacks in the United States and elsewhere have certainly been heavily affected by the virus. Despite this reality, such rumors underline the racialist belief that Africans have some special genetic code or biology that differentiates them from others. One recalls that similar rumors linking nationality and disease were also characteristic of the HIV virus, but here Africans and Haitians were judged as being highly at risk. This contrasts with another rumor, equally unlikely, that alleges that Asians are more vulnerable to the virus than others.

Along with Africans, rumors suggest that vegans are resistant to the COVID virus. Whatever the medical evidence, the symbolic connection might be tied to the alleged origins of COVID in a Chinese wet market. If eating bat soup is the original vector of the virus's transfer from animals to humans, perhaps all meat and animal products are potentially linked to viral susceptibility. While many people would find this to be implausible (or amusing) and would look for a credible source, there is at least a symbolic connection.

By examining these rumors culled from Internet websites, I have not attempted to describe in detail all of the rumors and conspiracy theories that have been spreading about the COVID-19 virus as it makes its global rounds, but to underline the range of claims that some individuals have found sufficiently plausible to spread, whatever their motivations. Without additional research and observation, it is difficult to determine the credibility of these sources and the extent to which the judged reliability of the communicators made a difference in what one chooses to spread further. In addition, one needs more evidence as to which sources of authority were linked to a consideration of what was worth challenging and the reasons for these choices. Part of the rumor surround is the fact that sources of authority step in to limit the spread of claims that are seen as

wrong, misleading, or threatening, even in some cases alleging that they are being spread falsely and maliciously.

Rumor and the balance of truth

The complexities of modern life, coupled with the expanded reach of the media, mass and cyber, find contemporary societies awash in "news." For better and for worse, we reside in a world in which there is simultaneously too much information and too little. Many groups present the truth "in their opinion" in an attempt to convince others to see the world through their eyes. These truth claims frequently have an uncertain provenance: when we doubt what we hear, they may be labeled "rumors" or "urban legends" or even, should we be unkind, as "lies." When they harmonize with our desires, our past beliefs, and our assessments of reputations, we accept them, act upon them, and spread them. In sharing, we demonstrate that we are a part of the community of talk. This is important as society is based on community, and crisis management must depend on the existence of a shared commitment to a healthy civil society. While people require trust in the content of what they communicate, sharing rumors is an easy way of participating in social groups on the local, national, and even global level. As short bursts of information, rumors are a key means by which communities develop the need to act together.

As a form of knowledge, rumor strives to organize a confusing world. Some rumors connect to the audience's underlying beliefs, which members maintain so devoutly that exploring or questioning the claim seems unnecessary. A situation defined by war, disaster, or crisis may provide rumor with a dynamic presence. For instance, in the aftermath of Hurricane Katrina in the American state of Louisiana, even well-educated, liberal-thinking news commentators instinctively were quick to report that Blacks temporarily housed in the city's Superdome were engaging in rampant acts of rape, murder, looting, or even cannibalism, even though no first-hand evidence of any such extreme disorder ever emerged. In other words, rumor shapes how people think and then respond to the world around them, sometimes justifying prejudice and the status quo and sometimes justifying social reform or even revolt. Spreading rumors is a fundamentally political act with the power to alter or bolster social structures, and this is true in the case of the pandemic in which discussions of masks and distancing – and

their effects – and the violations by leading politicians have become widely debated issues. As a result, given that periods of stress, emergency, or confusion often generate rumor, examining this information is a legitimate topic for all those engaged in crisis management. Rumors direct action, motivating political critique.

Rumor fills several important slots for societies. Unraveling their meaning allows us to explore social dilemmas. First, the examination of rumor uncovers the concerns - some hidden, some explicit - of citizens. Rumor allows a community to debate issues that cannot be discussed given the absence of expert, technical knowledge, but that suggest deep concerns. As a result, a rumor can be considered the canary in the coalmine of mistrust. Through rumor, we can address these beliefs – matters of life and death in a pandemic – because we can act as if we are talking about real events, not just idiosyncratic beliefs. Rumor allows us to discuss hidden fears and desires without claiming these attitudes as our own. In other words, in their telling rumor proposes that shared fantasies are real. They actually happened, so it is claimed! In this, we present ourselves as mere reporters of current events, and distance ourselves from being fabricators or fibbers. While we might be blamed as the messenger who brings unpleasant news, such a position is more comfortable than being condemned as a provocateur or a fear-monger. Even to an unsympathetic audience, the claimed truth of rumor – however incorrect it may prove to be – provides a potent defense that justifies its spread ("I heard that . . . and you need to know"). Rumor permits concealed and congealed sentiments to enter public debate, gaining a sympathetic audience for assertions that might otherwise be deeply troubling. While these sentiments are not always pleasant, being made public they can be more effectively addressed than when closeted. For health providers and crisis managers, this ability to deal with the beliefs about the pandemic are crucial whether we address conspiracies or folk remedies or likelihood of being infected.

Beyond a culture of rumor

Even if we must distance ourselves from its "truth," the examination of rumor should never be taken as unthinking support for the status quo. Sometimes the status quo requires shaking and sometimes authorities mislead, knowingly or not. As noted, rumor provides a map to the problems that must be confronted.

The danger is that rumor may be treated as fact and supposition is taken as proof. The beliefs that we are willing to entertain about alien others – Chinese peasants and Chinese scientists, for example - can be dangerous. In a globalized world of deep and powerful interconnections, we require each other, even if we recognize that strains and competition cannot be casually erased.

However, despite general patterns of belief, trust, and prejudice, rumor does not remain still. Technology, travel, and new forms of social relations matter. There is a future of rumor just as there is a rumor past. While rumor as a form of uncertain knowledge will always be part of the communicative surround, changes in access to communication and changes in the forms of communication shift as technologies and institutions alter.

Even as recently as the Swine Flu epidemic of 1976, we did not speak of social media, but today these immediate and personal domains are prevalent, worrisome in part, and even the source of medical information for good and for ill. Both Facebook and Twitter are powerful global phenomena, knitting together global contacts, having dramatically altered communication over the brief span of two decades; other platforms, some legitimate and others less so, like Instagram, TikTok, Reddit, or WhatsApp are also common. These sites bring both light and darkness. Social media permit claims to spread with astonishing speed, but at the same time encourage the belief that participants belong to the same community and that they matter to each other. Whether they, in fact, matter as friends or colleagues, they spread information whatever the legitimacy of what is reported.

Tied to social media is the availability of a wide, bewildering array of content. Users can select websites that reflect their own political, sexual, or avocational interests and, crucially, their relationship with the medical establishment. Anyone with an idea, not matter how wise, foolish, or malicious can find a soapbox on the computer in their bedroom or basement. Of course, there were viral communities during the Spanish flu pandemic of 1918-1919, but today the spread of information is wider and deeper. There are many more divergent and discordant voices. Facebook, YouTube, and Twitter may attempt to label information about COVID-19 that they consider false, implausible, incredible, but the claims get through.

Finally, we recognize the rise of globalization. This has occurred with regard to international trade in goods and services, but equally so in terms of information, and especially evident when coping with a global pandemic. Extended skeins of knowledge are not limited by national boundaries, not when we are all at risk from a virus that does not respect political borders.

More than ever we find that the world is a rumor bazaar. These rumors, whether about terrorism, immigration, or today about disease diffuse rapidly and it is up to experts in crisis communication to address them productively, avoiding both spreading them further and preventing limits on freedom of expression. Every culture has a street on which talk is cheap. These narratives can quicken our pulse and raise our temperature. Our goal must not be to discover whether rumors are present – they are and will always be – but to learn from them what themes are most common, through which channels they are spread, and what fears they reveal. In this, the examination of rumors – as they exist and as they evolve – shapes the future of our lives together.

Contracting rumor in a viral age

Research on rumor and uncertain knowledge is a means to understand disruptions to the social system, particularly at times of crisis. One might suggest that, given the multiplicity of problems, societies are always in crisis. Still, one might see the global effects of the novel coronavirus as a special case in which nations and people must respond to a crisis of uncertainty both rapidly and deliberately, determining whom to trust, who has expertise, which therapies work, and which vaccines are most promising, while recognizing that politics will always shape what we believe and how we act.

We know that competing rumors – information that is "unsecured" – can spread disruption and dissention. With beliefs in the malign power of elites (on whatever side), debates over social distancing, restaurant dining, mask wearing, school openings, and the like can be contentious, and they have been in Sweden and in different forms in the other Nordic nations. The problem is that we must not doubt expertise too completely, but we must also be cautious of accepting the claims of elites who define themselves as experts simply because they say so. It has often been said that everyone is entitled to their own opinions, but not to their own facts. This is true, but it leaves open the question of who gets to judge

facts. The vibrancy of rumor suggests that facts and expertise are precisely what is at issue.

These debates and these controversies when fairly and respectfully handled can provide a means through which disruption of previously taken-for-granted worldviews can change society. We see this in many domains. The Sunrise movement sparked by Greta Thunberg and her student activists have changed the perspective of even those who are might otherwise doubt human environmental effects. Perhaps not all the demands of the new militant environmental movement deserve to be accepted, but increasingly there is a recognition that concern is warranted. We are witnessing the benefits of this disruption in pandemic politics as well, as politicians must respond to a cacophony of voices and the reality of viral spread. Unauthorized information and that marketed as expert can combine to create social change. The vital buzz of claims through both new and traditional communication channels reminds us that debate is healthy. Rumor is viral.

References

Allport, Gordon and Leo G. Postman. 1947. *The Psychology of Rumor*. New York: Henry Holt.

Beck, Ulrich. 1992. *Risk Society.* London: Sage.

Bodner, John, Wendy Welch, Ian Brodie, Anna Muldoon, Donald Leech, and Ashley Marshall. 2020. *COVID-19 Conspiracy Theories: QAnon, 5G, the New World Order and Other Viral Ideas*. Jefferson, NC: McFarland.

Chorus, A. 1953. "The Basic Law of Rumor." *Journal of Abnormal and Social Psychology* 48: 313-14.

Dégh, Linda. 2001. *Legend and Belief: Dialectics of a Folklore Genre*. Bloomington: Indiana University Press.

DiFonzo, Nicholas. 2008. *The Watercooler Effect: A Psychologist Explores the Extraordinary Power of Rumors.* New York: Avery.

DiFonzo, Nicholas and Prashant Bordia. 2007. *Rumor Psychology: Social and Organizational Approaches*. Washington: American Psychological Association.

Fine, Gary Alan. 1992. *Manufacturing Tales: Sex and Money in Contemporary Legends*. Knoxville: University of Tennessee Press.

Fine, Gary Alan and Bill Ellis. 2010. *The Global Grapevine: Why Rumors of Terrorism, Immigration, and Trade Matter.* New York: Oxford University Press.

Goldstein, Diane. 2004. *Once Upon a Virus: AIDS Legends and Vernacular Risk Perception.* Logan, UT: Utah State University Press.

Kitta, Andrea. 2019. *The Kiss of Death: Contagion, Contamination, and Folklore.* Louisville, CO: Utah State University Press.

Larson, Heidi. 2020. *Stuck: How Vaccine Rumors Start – and Why They Don't Go Away*. New York: Oxford University Press.

Lee, Jon D. 2014. *An Epidemic of Rumors: How Stories Shape Our Perceptions of Disease.* Boulder, CO: Utah State University Press.

Maines, David. 1999. "Information Pools and Racialized Narrative Structures." *Sociological Quarterly* 40: 316–26.

Miller, Dan. 2006. "Rumor: The Examination of Some Stereotypes." *Symbolic Interaction* 28: 505-19.

Mukerji, Chandra. 1976. "Having the Authority to Know: Decision-Making on Student Film Crews." *Work and Occupations* 3: 63-87.

Shahsavari, Shadi, Pavan Holur, Timothy Tangherlini, Vwani Roychowdhury. 2020. "Conspiracy in the Time of Corona: Automatic Detection of Covid-19 Conspiracy Theories in Social Media and the News." Unpublished Manuscript.

Sontag, Susan. 1978. *Illness as Metaphor.* New York: Farrar, Straus, and Giroux.

Sunstein, Cass. *On Rumors: How Falsehoods Spread, Why We Believe Them, What Can Be Done.* New York: Farrar, Straus, and Giroux.

Zerubavel, Eviatar. 1997. *Social Mindscapes: An Invitation to Cognitive Sociology*. Cambridge: Harvard University Press.