

Timely new research shows that while rumors alone may have limited impact, their impact increases when they reinforce existing beliefs. Add effective communication, and rumors can lead to high-impact action.

"There is only one thing in the world worse than being talked about, and that is not being talked about," wrote playwright and novelist Oscar Wilde. In our hyper-connected world, it seems that very little is not being talked about these days. The very ideas of talk, communication and news became notably hot topics themselves during last year's US presidential election, and have remained one of the most debated issues around the world.

Much of the discussion has been about the exponential growth of fake news — what it is, what it isn't, and how it spreads. Fake news may be defined as news or stories that purport to be true but that are actually founded on rumor, conjecture or lies, and that are spread with malicious intent.

When rumors are followed by action, their power is notorious. Rumors that a bank is about to fail can trigger a run on the bank, as happened in Hong Kong in 2008 at the onset of the financial crisis, when rumors that the Bank of East Asia was in difficulties spurred thousands of panicked customers to withdraw their savings. Rumors can also have huge political impact, even triggering revolutions as in the case of the Velvet Revolution of 1989 in the former Czechoslovakia, when false rumors of a brutal student killing triggered a mass anti-government demonstration that eventually led to the overthrow of the government.

These cases have been widely reported. What has received much less attention is scrutiny of how rumors evolve from words into action, and why some rumors trigger action while others do not. Now, thanks to a new study by researchers at the University of Hong Kong and the Hong Kong University of Science and Technology, we have a much clearer idea of how that happens.



For rumors to have a tangible impact, the rumor must trigger action. And for action to happen, the rumor must be communicated widely among people. That is shown in the new study, which is entitled "The Power of Whispers: A Theory of Rumor, Communication, and Revolution" by Heng Chen, Yang K. Lu and Wing Suen and published in the International Economic Review Vol 57, No 1, in February 2016.

"The goal of our analysis is to shed light on why some rumors can be so effective while others are not.... Communication among citizens is the key," write the researchers.

The researchers also found that people tend to believe things that are closely related to what they already believe. For example, says Dr Chen, "if I start with a belief that Clinton is doing something fishy, I will be inclined to believe those rumors about her server; while if I think Russia is so powerful and taking up the world, I would believe the Russia rumor about Trump."

This helps rumors spread, as when people hear rumors that validate their own prior beliefs, they are likely to tell others about their findings. In turn, that will be important when those others are deciding who to vote for and whether to take part in a movement, adds Dr Chen.

The research is highly relevant and timely. The US election focused global attention on how fake news is created and shared. The sources of fake news were said variously be the Russians, the Chinese, hired bloggers in Eastern Europe and both of the leading US political parties, among others. Closer investigation showed that many of those claims were themselves based on rumors or conjecture.

Nonetheless, whether true or false, these news stories had an astounding impact on the outcome of the US election. According to the Washington Post, the torrent of fake news that was spread during the election was helped by a "Russian propaganda campaign that created and spread misleading articles online with the goal of punishing Democrat Hillary Clinton, helping Republican Donald Trump and undermining faith in American democracy."

Giant companies such as Facebook and Google have become central to the fake news debate. People and governments are questioning what kind of organizations they really are - passive facilitators of social interaction or fully-fledged media organizations? - and how much responsibility they bear for the fake news that is spread on their platforms. Attention is now being paid to how information circulates on social media and creates a bubble effect, in which people respond positively and share information that corresponds to their previously held views while disregarding or perhaps never receiving information that questions or disproves their beliefs. Security organizations in the US and in other countries are conducting inquiries into the role of foreign countries in the spread of fake news, and many newspapers and media companies are scrutinizing their own news gathering and fact-checking methodologies as a frustrated and confused public demands improved transparency.

Fake news now circulates as widely as the real thing. According to the Financial Times, almost one-quarter of the news circulating on Twitter in the crucial swing state of Michigan in the last days of the election was fake news, based on the results of a study by the University of Oxford. The FT said the effect was to "distort public perceptions and political debate", as well as to cast a disturbing shadow of doubt on the veracity of genuine news reports. The percentage of news that was fake news equaled that of genuine news in circulation in Michigan at the time, according to the FT.

The battle lines, then, between fake news and real news are evenly drawn. And the stakes are too high to ignore. This time, after all, nothing less than the election of the president of the United States was caught in the crosshairs.

Effective communication of news, whether true or fake, was a decisive factor in the election. President Trump's campaign team relied on social media to a greater extent than ever before, according to Gary Coby, director of advertising for the Republican Party. Coby said that the Trump campaign spent about US\$70m on Facebook alone during the election period.

"The way we bought media on Facebook was like no one else in politics has ever done," he told British broadcaster BBC.com.

This heightened level of communication is intrinsic to how rumors succeed or fail to push people to take action. According to Chen, Lu and Suen's research, action does not depend on whether the rumor proves to be true or false. In fact, the truth or falseness of the rumor is usually of no importance. What matters is how effectively the rumor is communicated. Communication is what fans the spark of a rumor into a flame.

"... [I]t matters little whether rumors reflect the truth or have no basis in fact. What matters is that rumors create public topics that people can talk about. By communicating, people learn from what others believe regarding the rumor, and can better coordinate their actions. That explains why some false rumors could mobilize citizens very effectively when collective action takes place," write the researchers.

Describing the crux of their findings, they wrote: "Strikingly, the effect of communication can be so large that when a rumor against the regime circulates, the regime could survive when all citizens believe that it is true, but could collapse when citizens know that the rumor may be uninformative."

Communication, then, can make rumors even more effective than trusted news in mobilizing people. Communication has the power to elevate a rumor to near certainty or, conversely, to reduce reactions to skepticism. It all depends on how people communicate the rumor — whether they discuss rumors between themselves, or merely observe passively what others are doing in public.

The impact of widely spread rumors has the potential to be devastating. Consider one of the biggest rumors concerning Asia to have emerged from the new administration in the US. In April, the White House stated that the US fleet headed by the massive USS Carl Vinson was headed for North Korea in the wake of a showdown between the North Korean and US leaders following a failed missile launch by North Korean leader Kim Jong Un. War rhetoric immediately soared around the region and beyond. Immediately following the announcement, China called for calm, the Pope spoke of the need for diplomacy, and Japan warned its citizens in South Korea to be ready for war. The region was on edge. A few days later, it transpired that the flotilla was in fact heading for Australia, not for North Korea. The New York Times later admitted that they had not fact-checked the original story because the source was the White House and the US military, which were once deemed to reliable news sources. Times, it seems, have changed.

While the region breathed a sigh of relief this time, the potential for any government to take devastating military action based on misinformation is clearly alarming. In the ongoing debate about fake news, this new research adds relevant and timely new considerations.

Contributing Reporter: Liana Cafolla Source: Heng Chen, Yang K. Lu, Wing Suen. The Power of Whispers: A Theory of Rumor, Communication, and Revolution. International Economic Review, 2016, 57(1), 89-116.