

The unstoppable spread of misinformation and fake news

Candidate Name: Sumer Kaistha

Real Life Situation (RLS) - Conspiracy theorists burn 5G towers claiming link to coronavirus

<https://www.thehindu.com/news/international/conspiracy-theorists-burn-5g-towers-claiming-link-to-coronavirus/article31395286.ece>



A cell tower in Dagenham, England which was destroyed in an arson attack fuelled by conspiracy theories linking new 5G mobile networks and the coronavirus pandemic. | Photo Credit: AP

Some 50 fires targeting cell towers and other equipment have been reported in Britain this month; some 16 have been torched in the Netherlands, with attacks also reported in Ireland, Cyprus, and Belgium

The CCTV footage from a Dutch business park shows a man in a black cap pouring the contents of a white container at the base of a cellular radio tower. Flames burst out as the man jogs back to his Toyota to flee into the evening.

It's a scene that's been repeated dozens of times in recent weeks in Europe, where officials are pushing back against conspiracy theories linking new 5G

mobile networks and the **coronavirus pandemic** are fueling arson attacks on cell towers.



Martin McCaffrey
It is time to act now. Any 5g tower in your area burn it down! Collect people and stand and fight this. Act now before it's too late!
Like · 12 h

Key concepts in RLS

- ▶ Misinformation and fake news spread faster - Popular beliefs and conspiracy theories that wireless communications pose a threat have long been around, but the global spread of the virus while countries were rolling out fifth generation wireless technology has seen some of those false narratives amplified.
- ▶ Ethical beliefs and actions - Officials in Europe and the U.S. are watching the situation closely, concerned that attacks will undermine vital telecommunications links at a time they're most needed to deal with the pandemic.

Decontextualization



In certain scenarios, can fear and impulses dictate the actions taken?



Do biases such as group bias have stronger effects during times of emotional distraught?



What is a major cause of spreading false rumours and conspiracies?

Central Knowledge Question - What role do human sciences and ethics play in the validation of shared knowledge?



AOKs - Human Science, Ethics

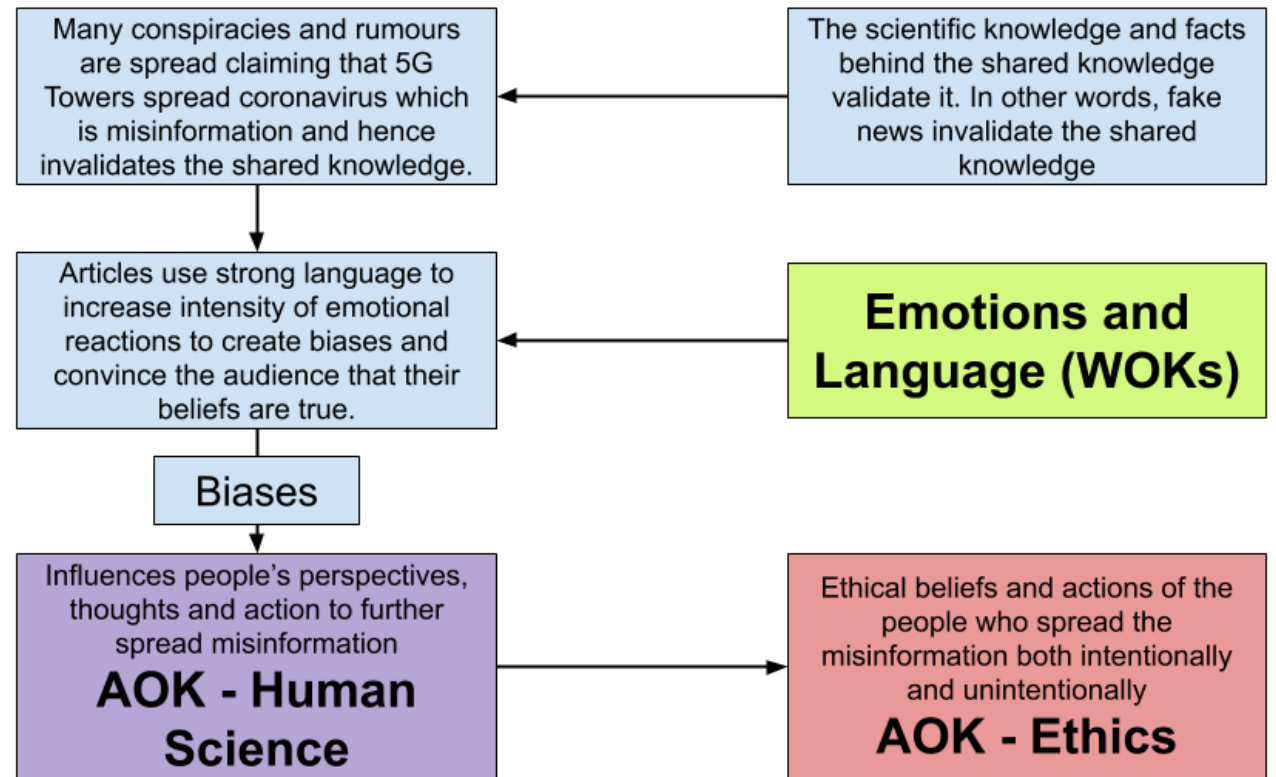


WOKs - Emotion, Language

Connection between RLS and CKQ

- ▶ Scientific knowledge and facts prove that 5G towers do not spread the coronavirus and hence, it validates the shared knowledge, which is the knowledge shared amongst the public. In this case, it is the knowledge about the towers
- ▶ Any articles claiming otherwise can be considered as spreading misinformation and fake news and thus are invalidating the knowledge. The articles may use specific and strong language to elicit emotional responses (WOKs) in the audience and create biases to affect their beliefs, thoughts and actions (AOK - Human Science). This would further propagate misinformation.
- ▶ Regardless of what people's beliefs and perspectives, there is only one reality behind any event which is in accordance with scientific facts and the reality.
- ▶ Ethical decisions (AOK - Ethics) are made by those who create the misinformation as well as the government who may choose to restrain certain

Visual Representation



CKQ - What role do human sciences and ethics play in the validation of shared knowledge?

Related Knowledge Question (RKQ) 1: What role do language and emotion play in creating biases which promote misinformation?

CKQ - What role do human sciences and ethics play in the validation of shared knowledge?

What role do language and emotion play in creating biases which promote misinformation?

- ▶ **Claim:** Only emotions and language propagate misinformation by creating group-think biases.

Evidence:

- ▶ MIT study - The study analyzed the spreading of 126,000 stories on Twitter between the years 2006 and 2017. The analysis showed fake news spreads much faster and broader than true stories. The researchers provided two explanations for this: the language used, and the emotions evoked.
- ▶ A study about anatomy of news consumption on Facebook showed that news consumption online of Facebook is limited to a very few pages. This phenomenon is known as selective exposure and leads to further segregation.

The spread of true and false news online

We investigated the differential diffusion of all of the verified true and false news stories distributed on Twitter from 2006 to 2017. The data comprise ~126,000 stories tweeted by ~3 million people more than 4.5 million times. We classified news as true or false using information from six independent fact-checking organizations that exhibited 95 to 98% agreement on the classifications. Falsehood diffused significantly farther, faster, deeper, and more broadly than the truth in all categories of information, and the effects were more pronounced for false political news than for false news about terrorism, natural disasters, science, urban legends, or financial information. We found that false news was more novel than true news, which suggests that people were more likely to share novel information. Whereas false stories inspired fear, disgust, and surprise in replies, true stories inspired anticipation, sadness, joy, and trust. Contrary to conventional wisdom, robots accelerated the spread of true and false news at the same rate, implying that false news spreads more than the truth because humans, not robots, are more likely to spread it.

CKQ - What role do human sciences and ethics play in the validation of shared knowledge?

What role do language and emotion play in creating biases which promote misinformation?

- ▶ **Counter Claim:** Reason can also promote false shared knowledge due to selective reasoning arising from biases.

Evidence:

- ▶ Recent paper by Belgian researchers found that the cognitive ability of people determines how they adjust their attitudes after false information has been corrected.
- ▶ Study in nature human behavior scientific journal shows that both information overflow and users' limited attention span affect our cognition creating a confirmation bias.

'Fake news': Incorrect, but hard to correct. The role of cognitive ability on the impact of false information on social impressions

Jonas De keersmaecker , Arne Roets

nature
human behaviour

LETTERS

PUBLISHED: 26 JUNE 2017 | VOLUME: 1 | ARTICLE NUMBER: 0132

Limited individual attention and online virality of low-quality information

Xiaoyan Qiu^{1,2†}, Diego F. M. Oliveira^{2*†}, Alireza Sahami Shirazi³, Alessandro Flammini^{2,4} and Filippo Menczer^{2,3,4}

CKQ - What role do human sciences and ethics play in the validation of shared knowledge?

Related Knowledge Question (RKQ) 2: How do moral actions play a role in the skewing of shared knowledge?

CKQ - What role do human sciences and ethics play in the validation of shared knowledge?

How do moral actions play a role in the skewing of shared knowledge?

- ▶ **Claim:** Ethically egoistic actions cause the greatest skewing of shared knowledge

Evidence:

- ▶ A 43-year-old Gurgaon shopkeeper was arrested for selling footballs with fake, counterfeit labels of popular sports brands. The shopkeeper was found selling the footballs at a 'discounted' price.

Gurgaon shopkeeper nabbed for selling footballs with fake label of brands

A 43-year-old shopkeeper in Chakkarpur was arrested on Wednesday for selling footballs with counterfeit labels of popular sports brands. Sixty-three footballs with fake holograms of popular brands were seized.

CKQ - What role do human sciences and ethics play in the validation of shared knowledge?

How do moral actions play a role in the skewing of shared knowledge?

- ▶ **Counter Claim:** The greatest skewing of shared knowledge is due to ethical altruism.

Evidence:

- ▶ President Joko “Jokowi” Widodo has admitted that he was deliberately holding back some information on COVID-19 cases to prevent the public from panicking.

CKQ - What role do human sciences and ethics play in the validation of shared knowledge?



NEWS > NATIONAL

**'We don't want people to panic':
Jokowi says on lack of transparency
about COVID cases**

Conclusion

Figures of authority and media make use of the ways of knowing, emotions and language, to successfully influence and change the perspectives of the general public. Tight communities are formed with common beliefs based on the false knowledge and fake news.

Due to psychological biases, once the people believe the false information it is hard for them to use reason to change their views and perspectives. Their actions are mostly dictated by their beliefs and hence, once they consider the false claims as the reality of the situation, it is hard to change thoughts and actions.

Ethical knowledge can also affect the validation of the shared knowledge. However, the role it plays is largely dependent on the situation. We must take the people's perspectives, ethical beliefs, as well as the reaction the public may have towards the reality of the shared knowledge into consideration.

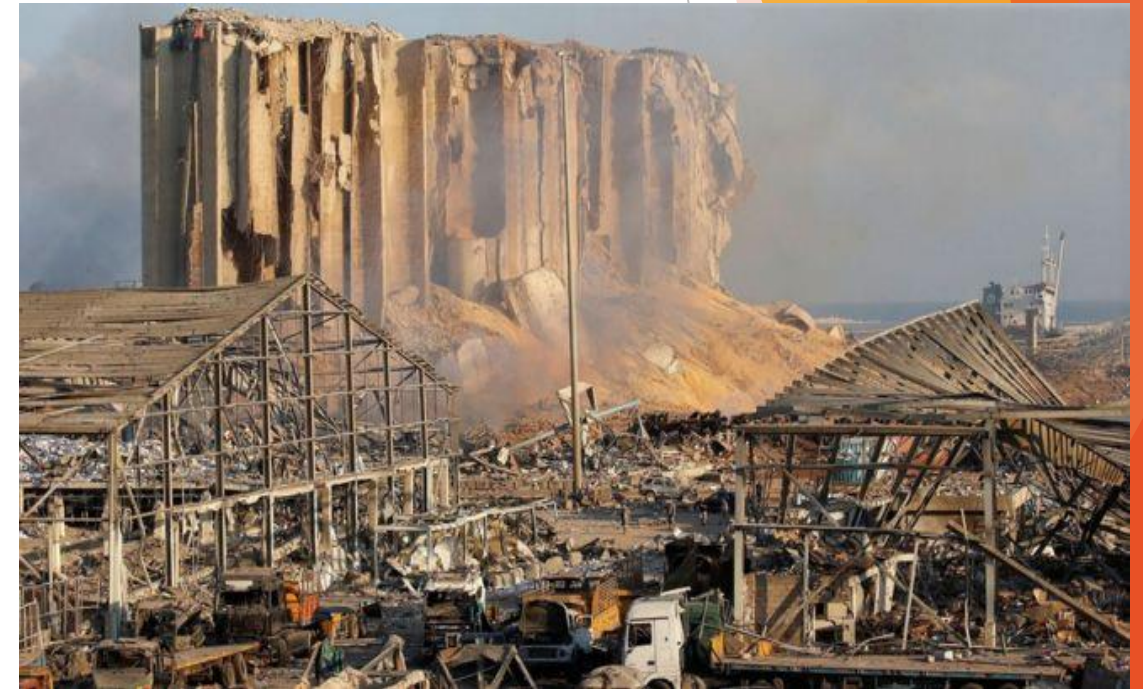
CKQ - What role do human sciences and ethics play in the validation of shared knowledge?

Link Back to RLS

- ▶ The reality of my real life situation is that the coronavirus evolved naturally and is not artificially spread by 5G towers.
- ▶ Social media promoted the belief that the towers spread the virus. These false claims invalidate the shared knowledge behind the towers and spread misinformation rapidly amongst the people.
- ▶ The common belief based on rumours and false knowledge was created through social media evoking intense emotions amongst the readers. These beliefs were shared in the community led them to take extreme actions such as burning down the tower. This belief would be hard to change due to biases.
- ▶ The ethical beliefs of the groups involved played an important role too. In this RLS, assuming that people only act upon their own moral code, the actions taken by the groups indicate that the difference in moral beliefs may further propagate the false knowledge.

Application to Other Real Life Situations: Beirut Explosion

- ▶ Very recently, a huge explosion occurred in the port area of Beirut, the capital of Lebanon. 2,750 tonnes of ammonium nitrate stored unsafely in a warehouse caused the blast according to the president, Michel Aoun.
- ▶ Unfounded claims, shared by partisan news sites as well as public figures, began to spread.
- ▶ Strong language such as nuclear and atomic bombs was written with the aim to arouse the audience's interest.
- ▶ The people's beliefs and perspectives were heavily influenced by the false knowledge and due to the psychological biases, they would be hard to change.
- ▶ Assuming people only act on their ethical beliefs as they find it morally acceptable, there could be several ways the ethical beliefs influenced the validation of knowledge.
- ▶ <https://www.bbc.com/news/53669029>
- ▶ <https://www.nytimes.com/2020/08/05/world/middleeast/beirut-explosion-what-happened.html>



Application to Other Real Life Situations:

Flight MH370 missing

- ▶ On March 8, 2014, a Boeing 777-200ER operated by Malaysia Airlines took off. The designator for Malaysia Airlines is MH and the flight number was 370. The flight then simply disappeared from radars, which led to an international search and other operations to find leads. However, no leads were found, and the operations were called off in 2018.
- ▶ Several theories were spread by amateurs as well as aviation specialists regarding what occurred on the flight although we have no knowledge about this currently.
- ▶ The theories make use of surprising and shocking ideas to elicit an emotional response and convince the audience towards their beliefs. The ways of knowing grab the audience's attention and influence their perspectives with the help of biases.
- ▶ There are several ethical beliefs and actions to be considered. One would be the Malaysians officials hiding information about what had occurred. Other ethical concepts help promote the wild conspiracy theories.
- ▶ <https://www.theatlantic.com/magazine/archive/2019/07/mh370-malaysia-airlines/590653/>
- ▶ <https://www.businessinsider.in/transportation/the-mystery-of-mh370-is-about-to-be-laid-to-rest-for-good-here-are-all-the-theories-dead-ends-and-unanswered-questions-from-the-most-bizarre-airline-disaster-of-the-century/articleshow/65174382.cms>

Bibliography

- ▶ <https://socialmediapsychology.eu/2018/09/20/the-psychology-of-fake-news-how-disinformation-spreads-online/>
- ▶ <https://www.hindustantimes.com/gurgaon/gurgaon-shopkeeper-nabbed-for-selling-footballs-with-fake-label-of-brands/story-2mynLrCBhZl4XWaDkDjw8N.html>
- ▶ <https://www.thejakartapost.com/news/2020/03/13/we-dont-want-people-to-panic-jokowi-says-on-lack-of-transparency-about-covid-cases.html>
- ▶ <https://www.mtholyoke.edu/sites/default/files/president/docs/EthicsofLying.pdf>
- ▶ <https://www.apa.org/monitor/2014/05/jn>
- ▶ <https://www.lexisnexis.com/community/casebrief/p/casebrief-frazier-v-cupp>
- ▶ <https://www.learningtogive.org/resources/egoism>
- ▶ <https://www.bbc.com/news/53669029>



► Thank You