15

Communicating Risks

It is crucial to communicate the hazards of climate change and our power to act on them, believing and acting with 'constructive optimism'. The COVID-19 pandemic has taught us the significance of effective risk communication. Transparent and credible oversight of risk management strategies by reputable authorities is vital.

Eight to nine typhoons, on average, make landfall every year in my home country, the Philippines. Although I live on the southern tip of the, where intense storms do not usually strike, the most recent typhoons have been stronger. In December 2021, Typhoon Rai hit the northern part of my home island, Mindanao, causing catastrophic damage before moving across the southern Visayas through Palawan. Rai killed more than 400 people while damaging nearly US$1 billion of crops, infrastructure, and properties.

The coastal orientation of my country means that our communities tend to settle near the waters. Indeed, we build our cities on the coasts. With strong typhoons, these coastal communities have been at risk of extreme hazards, including strong winds and sea surges. But weather extremes, such as super typhoons, are not the only hazard we Filipinos face. As a country in the Pacific Ring of Fire, active volcanoes dot our archipelago. These erupt from time to time, producing pyroclastic flows that affect lives and livelihoods. Seismic activities, including strong earthquakes, are also common phenomena. The 2019 earthquakes in Cotabato, my home region, and in Davao del Sur and Batanes were destructive.

Already burdened with seismic and volcanic hazards, the vulnerabilities of many Filipinos will exacerbate as climate change intensifies its impacts. Hydrometeorological threats, including extreme weather events like super typhoons and prolonged droughts, will increase the likelihood of misery among Filipinos. Farmers and fisherfolks, particularly, are at high risk.

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Preparing for disasters has thus become de facto public policy in the Philippines. The country has robust guidelines, frameworks, and plans for disaster risk reduction. Disaster warnings and risk communications have long been the focus of the national government and, most significantly, many local governments. The corpus on disaster warnings, not only in the Philippines but globally, often tackles how to sensibly advise and alert those at risk so that they can shield and protect themselves before, during, and after disastrous events (Sylves, 2019; Islam et al., 2016; Whelchel et al., 2018).

Communicating risks is vital as climate change exacerbate its impacts and weather extremes become more frequent and more potent than previously experienced (National Academy of Sciences, 2018; Millet et al., 2020; Rabinovich and Morton, 2012; MacIntyre et al., 2019). The extant literature suggests the following criteria for risk communication and action to be effective. First, people and communities at risk should obtain and understand the warning. Second, they should comprehend that the guidance applies to them personally. Third, they should be convinced that they are at risk. Fourth, they should be aware of what they must do to cushion themselves from the risks and when to act. Fifth, they should be able to do what has been recommended. Sixth, and finally, they should be able to recognise when the threat is over. These steps must be successfully and swiftly carried out sequentially (National Academy of Sciences, 2018).

Our COVID-19 pandemic experiences best demonstrate the appropriateness of communicating risks (Paulik, Keenan, and Durda, 2020). This global misery provided lessons on the importance of appropriate risk communication. The transparent and credible superintending of the steps mentioned above by trustworthy authorities is paramount (Crick, 2021). When decision-makers meet these qualifications – transparency, credibility, trustworthiness – the public put their faith in the risk warning advice provided to them (Paulik, Keenan, and Durda, 2020; cf., Leavitt, 2003).

In the absence of these qualities, the public turn to the so-called normalcy bias. This cognitive bias leads people to minimise, even disbelieve, warnings of risks even when they are already experiencing real danger (Chang et al., 2021; Cato et al., 2021). With normalcy bias, people at risk may not follow the guidance provided. And even if they decide to take flight or evacuate, they may do so belatedly, incurring significant damages, including the possible loss of many lives and the decimation of livelihoods.

Normalcy bias is very predominant in our present understanding of the climate crisis (Deotto, 2021). Most of us believe that things will continue to function in the future as they always have in the past. This bias leads people to undervalue the probability of disasters-upon-disasters eventuating and the

potency of their effects. Normalcy bias causes people to deny the need to make plans or respond to risks, crises, or miseries they have never experienced before.

The hellish summer of 2020 in the northern hemisphere was accentuated by one climate disaster hitting after another: wildfires in California and bush fires in Australia. In 2021, heavy rains flooded New York, Germany, and China. As the year ended, Typhoon Rai, mentioned earlier, heralded a sad Christmas Eve for thousands of Filipinos who lost their homes. In the summer of 2022, as these words are written, Europe is burning with heatwaves. These events are not even previews of what the future could look like. These are not the new normal. In the end, we might find these stories much kinder and gentler compared to our experiences. Despite the preponderance of evidence that climate misery will most likely distinguish our future, most of us still think the future will be OK. The collective trauma we experienced during the pandemic should discredit our normalcy bias.

We will not be getting a second free pass with the climate crisis. The next global emergency, most likely punctuated by not one, not two, but cascading climate-related events, should not be labelled 'unprecedented'. We have already seen the fragility of our international system when faced with an intractable crisis. We cannot blame others but only ourselves the next time science tells us that our overly consumerist lifestyles and wanton emissions are unsustainable. We deserve the consequences if we do not take the climate emergency seriously.

Don't Look Up, a comedy that addresses climate change, was one of the most popular offers on Netflix in early 2022. The film has an all-star ensemble, including Leonardo DiCaprio, Jennifer Lawrence, and Meryl Streep, and recounts the tale of two scientists who discover an Earth-bound comet. We see their unsuccessful efforts to convince governments and society to respond to the existential danger posed by the hurling heavenly body. The storytelling is so powerful it drove increased attention to climate change. While *Don't Look Up* became popular, it does not necessarily mean that it will change the mindsets of those not alarmed by the severe impacts of the climate crisis. Those who are already worried about the climate catastrophe are more likely to watch it, but those the movie seeks to mock are less likely to do so. However, those who are aware of or worried about climate change, but who are not yet frightened, will find *Don't Look Up* to be of great import (Delina, 2022).

What we can observe from this film is that carrying out the order of risk communication from a warning to protecting oneself posits some serious issues. These are essential lessons for communicating the risks of the climate crisis. The COVID-19 pandemic made these issues obvious. Within the general population, for instance, some groups source their information from doubtful references and dubious informants (Rocha et al., 2021; Dang, 2021). Social media became a platform for sowing misinformation about the coronavirus.

False conspiracy theories were shared on social media, for example, that the 5G cellular network had caused the virus (Ahmed et al., 2020), and fake remedies such as injecting yourself with bleach (Litman et al., 2021) or taking ivermectin (originally prescribed for horses) (Di Giorgio, 2022) were spread. Political elites, such as Donald Trump and Jair Bolsonaro, also peddled fake news, falsely claiming, for instance, that hydroxychloroquine is an antiviral agent (Casarões and Magalhães, 2021). The film *Don't Look Up* illustrates how falsehoods are invented, broadcast, and, finally, accepted by many.

The challenges of effective risk communication further extend to the personality and capacity of the receiver of the warning. While some people may tolerate any risk, others are risk-averse. During the pandemic, some may have wanted to heed the warnings, but because they were designated as 'essential' workers, they had no choice but to expose themselves and their households to risk because they needed to work. Many people were also forced to remain locked in crowded homes, where, in comparison to the economically well-off, they could not practice social distancing.

In February 2022, a Hong Kong construction worker, who tested positive for COVID-19, along with his wife, who also tested positive, decided to camp on the rooftop of their tenement building in Sham Shui Po for more than two weeks, braving the biting winter. They did it out of fear that they would infect their five-year-old daughter and two-year-old son, as well as the construction worker's sixty-six-year-old father, brother, sister-in-law, and five-year-old niece. This extended family of eight live in a less than 20 m^2 unit (Sun, 2022).

This story struck a chord with me as someone who grew up deprived of even the bare essentials. Survival was always the first order of the day for my parents. How can then one bear the additional burden of contemplating another layer of misery? Following the impacts of the pandemic on people's livelihoods, encountering another looming distress, that of the climate crisis, can only lead to melancholia. After all, *Don't Look Up*'s dark ending is scary, if not numbing.

Communicating climate change using fear appeals or narratives of hope remains a topic of significant debate. A single message will not necessarily change people's behaviour or attitudes. Disaster researchers have argued that the sources of information must be seen as credible and objective (Seppänen and Virrantaus, 2015). Bearers of this information must also be trustworthy and evince genuine concern for the public's general well-being. Consistency in messaging also matters. Messengers should also recognise – with all humility – that information continually changes and evolves.

Communicating the risks of climate change and our ability to act – believing and acting in 'constructive hope' – is critical (Maartensson and Loi, 2022). Despite the fact that the comet ultimately killed human civilisation in *Don't Look Up*, the film made it obvious that humanity had the potential to prevent its

demise. Similarly, we still have the ability to address climate change, although time is running out as we postpone action.

Towards the end of the film, as the comet makes its impact, the two scientists, together with their families and friends, are having dinner amid profound conversations. It was a moment from which we can learn: battering people with facts is a weak communication strategy. Instead, it should be about listening more than speaking and lending a hand so that people can connect the dots between what matters most to them and climate action.

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