

# INFORMATION DIFFUSION, ENVIRONMENTAL DEGRADATION & MODERNIZATION: HOW COVID-19 REVEALED SOCIETY'S VULNERABILITY TO DISASTER

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## COVID-19 IS AS MUCH A TECHNOLOGICAL OR "HUMAN-ENABLED" DISASTER AS A NATURAL DISASTER.

COVID-19 has been both a disaster enabled by information and disinformation as well as a disaster that has been enabled by processes of modernization.

It is a disaster that has attacked modernity. Modernity has created the industrialized, technocratic, neo-liberalized environment to allow for its own vulnerability.

### TECHNOLOGICAL DISASTERS IN THEORY

- > As opposed to a natural disaster, they differ in the way they develop and occur
- > **Ambiguity of harm:** when the harm is not easily seen, and extent or duration is unknown
- > **Corrosive communities:** adversarial behaviours emerge, resulting in a breakdown of communities
- > **Sociocultural disruption:** technological disasters undermine or destroy accepted social patterns and understandings

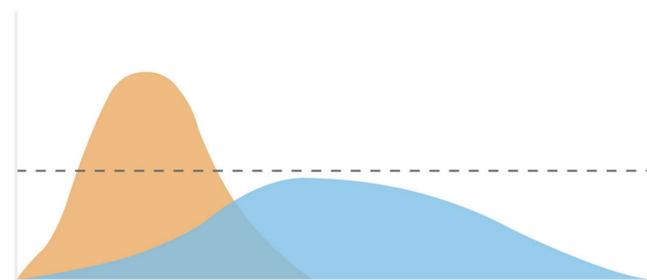
### A RISK SOCIETY

- > where the modernization processes of increased production and capital accumulation have increased the potential for risk

### AN INFODEMIC

An infodemic is described as "an over-abundance of information – some accurate and some not – that makes it hard for people to find trustworthy sources and reliable guidance when they need it."

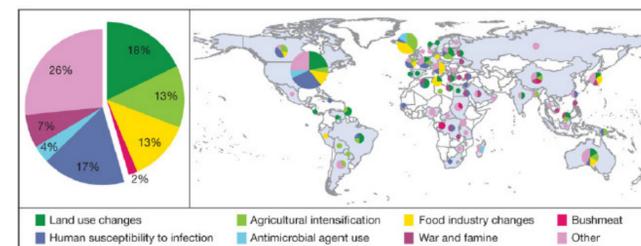
- > Infodemics can derail efforts to contain outbreaks
- > Modern information networks have become more efficient at spreading information, scaling up infodemics
- > In times of information uncertainty, rumours and groupthink increase
- > Graphs became a hallmark of this pandemic because of how easily they convey information
- > Risk communication is clear, accurate, and effective communication from official sources



the famous "flatten the curve" campaign - an example of effective risk communication. Source: NPR, CDC, Drew Harris

Period	Phase	Description
Pre-disaster	I. Operation	Socio-technical system is in operation
	II. Incubation	The accumulation of latent failures, warnings, and deviations from the norms
	III. Forewarning	Errors surfaced as near misses, accidents or events which represent early warning signs.
	IV. Activation	Specific action or events identifiable directly to cause the disaster
Disaster	V. Onset	The disaster itself
	VI. Rescue and recovery	Involves attempts to save life, properties and return to normalcy
Post-disaster	VII. Inquiry and reporting	Investigations after the disaster to identify causes and seek recommendations to avoid a recurrence
	VIII. Feedback	The receipt and implementation of the recommendations from the inquiry by the organization concerned
	IX. Social justice	Appropriate course of legal actions taken to those who contravened the laws related to the disaster
	X. Social and legislation reform	Formation of specialized bodies, amendment and introduction of acts, laws and regulations

the theoretical socio-technical disaster cycle. Source: Aini & Fakhru-Razi



locations and drivers for zoonotic diseases from 1940-2005. Source: Keesing, et al.

### SLOWLY UNFOLDING

The current COVID-19 pandemic may be thought as a sudden, unexpected global disaster, but according to theoretical disaster cycle frameworks, that may not be true.

- > The origin of this pandemic may be at least traced back to decisions made in the market liberalization period, following the events of the "Great Leap Forward"
- > A complex geopolitical context and economic-political structure had set the stage for a slow-moving disaster
- > In the incubation period, warning signals are not acted on because of information impairments including downplaying disaster severity and failing to regulate risky trade

### DEGRADATION

As has been historically the case when humans lived near wildlife, there has always been a risk of infectious disease outbreaks.

- > Forces of urbanization have placed humans near natural habitats all over the world
- > biodiversity of ecosystems is reduced and it may create an environment where infectious diseases become more prevalent
- > the unfortunate reality is that market forces, both local and global, create vulnerable communities that rely on environmentally risky lifestyles



development in the Amazon on the urban periphery in Manaus, Brazil. Source: Greenpeace