Covid-19 was no black swan, but a paradigmatic black elephant

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In the wake of the Covid-19 pandemic, everybody now knows that:

- **Warnings about pandemic disease had been touted for decades**
- **Myriad organisations had called for increased health security funding**
- **The world ignored all these warnings**
- **SARS-CoV-2 emerged in 2019 with dire consequences**

The fact that all these warnings were known, yet action was scant, remains difficult to comprehend. Although somewhat perversely, we even knew we would ignore the warnings. Psychological research has shown that these kinds of rare but devastating events are exactly the ones humans tend to overlook. As if to drive this point home, I noted in the news today that a resident of Westport (a New Zealand town flooded by a '1 in 100 year event') even stated that he knew the area had flooded, but thought "the last one was it".

The 'unforeseen' Covid-19 surprise

International organisations such as the UN, WHO, World Bank, and organisations such as the US National Academy of Sciences had made explicit warnings to governments across many years about pandemic and emerging infectious disease risk.

The human and economic impact of pandemic disease had been detailed, and estimated at *half a trillion dollars per year* (Fan 2017). The measures the world needed to take to detect, prevent and respond to infectious disease had been widely circulated and all the States Parties to the International Health Regulations had committed to implementing them (few contributed substantial resources and few had succeeded by the time Covid-19 struck).

No country was adequately prepared for Covid-19 (Dalglish 2021). The risk of coronaviruses had not been appropriately understood by governments, and many pandemic action plans (New Zealand's included) focused solely on influenza.

A coronavirus pandemic simply wasn't foreseen many would cry. We were struck by a black swan.

Covid-19 was no black swan

Black swans, are outlier events that comes as a *surprise*, have a major effect, and are inappropriately rationalised after the fact (Taleb, 2007).

However, coronavirus pandemics had been identified as a 'time bomb' after SARS 2003, and had been specifically workshopped in 2019 at the 'Event 201' pandemic exercise. This exercise involved leaders from a number of public and private global organisations contemplating how to deal with a coronavirus pandemic that kills 65 million people.

This table-top exercise took place in New York on 18 October 2019, when plausibly the first cases of Covid-19 were emerging half a world away. Within six weeks a handful of concerning cases were being discussed with alarm by experts on the ProMED bulletin board.

None of this fits the 'surprise' aspect of a black swan.

In the face of Covid-19 New Zealand lacked public health infrastructure (Baker, Wilson, & Woodward, 2017), lacked surge capacity (Skegg, 2021), and decision-makers had not previously contemplated the most effective measures ultimately deployed. These turned out to be border closure and comprehensive managed isolation.

In fact, as far back as 2017 two New Zealand academics (the author included) had started modelling the threshold criteria for when border closure for pandemics might be economically rational (Boyd 2017, 2018, 2019, 2020). We approached individuals at the Ministry of Health with a research proposal only to be told that border closure in a pandemic would never be a policy option and as such no funding could be provided to explore the policy in more detail.

Had these 'left field' organisms (coronaviruses!) and mitigation approaches (border closure) been pre-contemplated, then 'off the shelf' solutions, or at least solution outlines, might have been available at the time the pandemic struck. Appropriate border policies enacted

in time might have prevented the mind-bogglingly expensive lockdowns New Zealand endured, and appropriate MIQ protocols might have prevented the second Auckland lock-down.

Historical myopia slowed New Zealand's border control action leading to a troubled and porous approach amid inadequate legislation and the deficient public health infrastructure (Skegg, 2021).

Shortcomings were not unique to New Zealand and structural and textual failures in guiding regulations and processes at the international level, namely the International Health Regulations, and the World Health Organization generally, had been criticised, and continue to be criticised (Boyd & Wilson, 2021).

We knew the threat and we knew there would be a striking lack of global coordination. Covid-19, and its global ramifications, was no surprise, and therefore no black swan.

The black elephant

Indeed, the Covid-19 pandemic was a paradigmatic black elephant, a catastrophe that was extremely likely and widely predicted by experts, but ignored or simply unspoken (Asayama 2021).

Gupta describes a black elephant as:

'an event which is extremely likely and widely predicted by experts, but people attempt to pass it off as a Black Swan when it finally happens. Usually the experts who had predicted the event – from the economic crisis to pandemic flu—go from being marginalized to being lionized when the problem finally rears its head' (Gupta, 2009).

Knowledge about human cognitive biases explains why we ignore these kinds of risks (Gluckman 2021).

Overall, and painfully, not only was the threat of Covid-19 *known*, but we also *knew that we would ignore it*. There existed a myopic focus on day-to-day health needs, health policy that considers only the health sector, a reactive, response-focused approach, and lack of attention to future welfare. In general, a reluctance to address *catastrophic risks*, yet these kinds of risks harbour almost all the harm.

Escaping black elephants

By definition, information about black elephants is widely understood. To properly prepare for them governments must look both outwardly and inwardly.

Governments must engage experts not just policy wonks

Looking outward, we need to see crowd-sourced solutions, the power of superforecasters must be harnessed, and governments need to enlist assistance engaging in problem-finding, rather than mere problem-solving activities. These tasks will require close engagement with:

- experts in academia
- industry leaders & technical experts
- non-government sectors

- creative sectors

Although sensible plans might already be in place, there is always the possibility (or in the case of coronaviruses, probability) that reality will fall beyond the scope of established plans. Red-teaming* approaches are needed, experts should be engaged to try to break existing plans. This requires openness and cooperation.

A percentage of preparatory investment should go to diversifying approaches to outlier events, especially when they are inevitable, as is the case with many black elephants. These days a few tens of millions of dollars thrown at understanding these problems, in order to draw the possibility space of mitigation measures, now looks trivial.

Public sector departments must self-critique

Perhaps more important than looking outward is looking inward. Governments must engage in institutional self-reflexivity and this is a process that must be supported from the outside.

Some of the greatest threats are the processes of governance themselves. These processes can become stuck through entrenchment, inertia, historical myopia, status quo, lack of imagination, ignorance, adherence to 'best-practice' and corruption by vested interest.

There must be a continual process of self-evaluation and self-critique. In a world of rapidly accelerating technology and human impact, the days of government departments simply justifying post-hoc their pre-formulated plans must end. A radical revision of risk and responsibility is needed, with diverse inputs and 'crazy ideas' articulated in detail and held on file for when they are needed.

National and global catastrophic risks must be the purvey of the population, not merely the secret notebooks of intelligence agents and officials in the Department of Prime Minister and Cabinet.

* Red teaming is the process of rigorously challenging plans, policies, systems and assumptions to overcome cognitive weaknesses including groupthink and confirmation bias that can impair decision-making or critical thinking of an organization.

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Lead image: Parsing Eye on Unsplash

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