Ontological Insecurity and Decision-Making with Black Swans and Dragon King Events as Precursors to Catastrophic Transition

Abstract

The tremendously disruptive global pandemic of COVID-19 has had a destabilizing effect on individuals and groups as it triggered a profound uncertainty about the ability of nations, organizations, and individuals to survive. Under such conditions, decision-making was affected in a number of ways which has a profound implication for leaders and policymakers. This paper presents theoretical lenses to consider the various potential classifications of COVID-19 as a "Black Swan" or "Dragon King" event, and how the disruption has precipitated psychological distress. Further, the paper discusses the notion that Dragon Kin extreme events may be precursors to catastrophic transition. In this analysis, we look at concepts such as R. D. Laing's *The Divided Self,* and the psychological concept of ontological insecurity. While the concept is a psychological one, it has been applied to the analysis of literature, with very illuminating results. Likewise, the concept could be applied to the factors going into thinking about reality, one's relationships with others, and then, decision-making. The overall purpose of the paper is to consider the impact on decision-making.

Introduction: A World of Black Swans and Dragon Kings

Most people are familiar with Nassim Talib's term, Black Swan, which he described at length in his book of the same name, *The Black Swan,* published in 2010, after the global financial crisis, which had been triggered in 2007, ravaged the global banking industry, bringing it to the brink of collapse. In his book, the term "black swan" refers to a totally unexpected and "out of nowhere" event that results in financial or other devastation.

Over the years, people have come to call almost all massively disruptive events "black swans." In the oil industry, the term, "black swan" has been affixed to a number of different crises, including the 1970s oil embargo, the 9-11 bombing of the World Trade Centers, the 2008 global financial crisis, the 2014-15 oil price shock, COVID-19, and the 2020 oil price collapse.

COVID-19 has variously been classified as a Black Swan, a Dragon King Event, or a social media-fueled exaggeration. The fact that there are so many differing viewpoints has complicated the situation and has made a concerted, joint and unified approach difficult.

Decision-making during Black Swan Events

Talib observed that people often display emotional decision-making during a Black Swan. First, people tend to bolt together as in a herd, thus causing panics and stampedes. Such behavior was observed by Charles MacKay, a Scottish economist, who recounted in his classic work, *Extraordinary Popular Delusions and the Madness of Crowds* (1841) times in history when people behaved in such a manner as to trigger panics, mass hysteria, and herd mentality. What started as a small thing often was turned into something devastating simply because of herd mentality. Almost all economic crises or "panics" were

due to a few triggering events followed by the collective behavior of a large group. MacKay described economic collapses such as the South Sea Bubble, Tulipomania, and The Mississippi Scheme. He also described bizarre herd behavior that was centered on widely held, but unsupported by scientific facts or observable reality, beliefs and attitudes. Those included beliefs about turning lead into gold (alchemy) and the overall transmutability of substances, and that women could be dangerous witches worthy of burning. COVID-19 was typified, from the very beginning, by panic buying of things ranging from surgical masks, N95 masks, gloves, and personal protection equipment to (often comically) toilet paper.

Second, "Black Swan" events are often accompanied by cognitive bias, which only adds to the herd behavior. Cognitive bias, which Nobel Prize-winning economist Daniel Kahneman explores in his 2011 book, *Thinking, Fast and Slow,* occurs when the part limbic system in our brain that is triggered by primitive survival emotions such as fight, flight, and feed, and it overrides the slower, more rational cerebral cortex, which processes facts.

As a result, individual behaviors are driven by fear and other survival instincts, and collective behaviors are triggered as individuals decide to rush to safety or any harbor assuages one's primitive yet powerful emotions. Needless to say, rational financial decisions, personal safety, and compassion go out the window. The primitive reptilian brain is in command.

Dragon King Events
Some have argued that the COVID-19 event was not a Black Swan. Instead, it was a Dragon event. According to Ale (2020), a Dragon event is one that is the "existence of transient organization of phenomena that can emerge into extreme events. These extreme events lead to so-called meaningful outliers" (Ale, et al, 2020, p. 5). Dragon King events have been explored in physical phenomena as well, including in thermoacoustic systems in a ducted laminar flame conductor (Premaj etal, 2021). Premaj etal examined the way in which Dragon King events were precursors to catastrophic transition, and that the Dragon King extreme events were critical indicator events that, if not actual causes of catastrophic transitions, were precursors. Premaj etal (2021) concluded that the "dragon king extreme events" could act as early warnings and alarms. Granted, a thermoacoustic system in a ducted laminar flame conductor is not a social system, but the parallel holds, and there could be measurable utility in building a dragon king-based early warning system. In comparing Dragon King events and Black Swans, there are several key differences. In many ways, the Dragon King event differs from the Black Swan in that it consists of a cluster of triggering events, rather than simply a triggered herd behavior.

Ale discusses Talib's notion of the Black Swan event and he explains why people are surprised by it: "dismissed as impossible or even not imagined at all but yet it happened" (Ale, et al, 2020, p. 5). The Dragon King event is typified by being imagined but dismissed as impossible and the event has not happened yet. Dragon King extreme events are large in size and impact, and unique in origin. One could argue that the COVID-19 pandemic, albeit predicted by experts and individuals such as Bill Gates, was dismissed as impossible to penetrate the global population. Before it entered the global population, the overall opinion was that we would be able to stop it in its tracks before it had much of a foothold, and even if it did unleash itself, we would have an effective vaccine.

Johari Window: Black Swans and Dragon Kings

Ale (2020) argues that part of the problem with responses is that there is still a feeling of disbelief. Ale and his coauthors use the Johari Window as a way to demonstrate how people may need to build self-awareness because they are not considering all possibilities when it comes to risk, including risky behavior. As can be seen in the diagram, the Johari Window, has four panes, and each represents how much we know, and how much others (or the world) know (Levin, 2016). Information moves from one pane to another as information is transferred.

	Known to self	Unknown to self
Known (in the world)	Open (Known Known)	Blind (Unknown known)
Unknown (in the world)	Hidden (Known Unknown)	Unknown

Fig. 1. case of a Black Swan event

In the case of a Black Swan event, if we use the actual terms of the Black Swan as defined by Taleb, the Black Swan would be in the lower right-hand corner, as "Unknown (in the world) and "Unknown to self." The only way to prepare oneself for a Black Swan and also to avoid being caught up in herd behavior would be to take the cognitive blindness out of the mix, and move to the lower left-hand corner, which allows one to at least prepare with simulations and thought experiments since it is now "known to self" albeit hidden.

In the case of a Dragon event, the event is known (in the world) but the individual is blind to it, since it is unknown to them. Thus the individual would be in the upper right hand corner of preparedness. To psychologically and even physically prepare oneself, when the events begin to happen, the individual would gain knowledge, which would put him/her in the "Open (Known known)" pane.

Impact of Conspiracy Theories.

The key to moving from one state of knowledge and preparedness is to have a free flow of reliable communication. If the communication is poor or filled with disinformation or conspiracy theories, the effect would be to move one from a state of knowledge and potential preparedness by means of simulation with likely events to one of blindness.

Similarly, if information is blocked or extremely expensive, decisions will be made based on the available data, which could be incomplete or politically mediated.

For example, people who become convinced that the QAnon theories are correct, would take themselves out of a state of preparedness and knowledge to one of unpreparedness since they may disbelieve the reality of an event or condition. In essence, they are pushing people into a state of ontological insecurity, and, perhaps, unwittingly embracing the most extreme of a postmodernist scenario, in which reality is a construct, and all truth is socially mediated, and socially agreed-upon. One could almost see the emergence of QAnon as something already described in a Thomas Pynchon or Don DeLillo novel. For example, in DeLillo's postmodernist novel, *White Noise* (1985), many aspects of contemporary urban or college town life are never as they seem, and people do everything they can to avoid surveillance and tracking (including customer identity in supermarket loyalty programs). People refuse to believe the official stories, and distrust of all institutions is rampant and understandable since the institutions themselves, and their values, are shown to be bankrupt.

DeLillo published *White Noise* 35 years before the COVID-19 outbreak of 2020, and such conspiracy movies such as *Plandemic.Plandemic* is a controversial "documentary" that purports that the COVID-19 pandemic was planned in order to control the population in many different ways, which would benefit a few individuals and companies.In the case of a person who believes the alternative narrative of the conspiracy theory instead of a more fact-based one, the likely outcome is that the individual will prepare themselves for what they see as a likely disruptive event or disaster. Unfortunately, they will prepare for the wrong one, and instead of investing in what is most likely to help them weather the storm and stay healthy during a pandemic, they might actually put themselves in risk. In some cases, they might make life decisions that will have devastating long-term consequences such as selling their assets and moving to a bunker or outpost in a remote area off the grid. It could also make them vulnerable to cult leaders and con artists. They may be prepared for apocalypse, but they are not prepared for a changing world with new requirements for ongoing employment.

Jean Baudrillard (1929-2007) wrote widely on the impact of the media and interconnected global trade networks to advance political, economic, and psychological agendas. As a post-structuralist, his primary focus was on how discourse (signs, language, symbols) are constantly changing, and that the meanings interact with concepts of self. He looked at systems of capitalist globalization as a commercialization / homogenization of the imagination, particularly in his landmark text *Simulacra and Simulation* (1981). Perhaps the most notable literary expression of his concepts can be found in *The Matrix* (1999). Although he may not have intended it to be so, his ideas can be used as a philosophical construct or bulwark for the most extreme conspiracy theory, and also for the idea that in most global movements or phenomena, what the public sees is far from reality. Other popular films influenced by Baudrillard's ideas include Tarkovsky's *Solaris*, *Wag the Dog,* and *Pulp Fiction.*

Ontological Security and Insecurity, Revisited
In his influential work, *The Consequences of Modernity,* Anthony Giddens suggested the notion of ontological security, which is, "that most human beings have in the continuity of their self-identity and in the surrounding social and material environments of action" (Giddens, 1990, 92).

In proposing ontological security, Giddens expanded a largely psychological notion that was developed in the late 1950s and early 1960s by the controversial British psychotherapist, R. D. Laing. In *The Divided Self* (1960), Laing proposed that under extreme stress, an individual can enter into a state in which their

sense of self, of identity, and their perceptions of the world, become deeply unstable. That state is considered to extend to the concept of beingness itself, resulting in what he termed "ontological insecurity." It is this state of ontological insecurity that leads to a feeling of fragmentation of self, of identity ruptures, and what one might consider a "schizoid" self. Marlowe & Perry (2019) assert that the value of Laing's proposed mechanism is that he was the first to describe a vulnerability toward psychological fragmentation within the self. Further, Laing boldly asserted that it is a universal feature of the human condition, and further, the fragmentation and the consequent "divided self" could result in psychosis in a previously completely sane person.

Laing's concepts have been very useful in analyzing literature, particularly the Gothic literature of Edgar Allan Poe, where in stories such as "The Tell-Tale Heart," the protagonist's sense of identity and who he is fragments, and he enters into a fugue state causing him to murder (if one can believe the narrator, who, as being himself in a state of ontological insecurity, is deeply and troublingly unreliable). Dostoyevsky's *The Double* is another literary work where Laing's ideas help the reader see deeper levels of possibility within the text. The novels and short stories of E. T. A. Hoffmann are teeming with doppelganger figures, which could not be a better illustration of Laing's "divided self." In *The Devil's Elixirs* (1815), Medardus, a Capuchin monk, cannot resist "the devil's elixir" which awaken his sensual desires. His half-brother, a Count, disguises himself as a monk and becomes Medardus's lunatic doppelganger. There are many issues of fragmentation, fragility of self and identity, and violent madness that lend themselves to Laing's Divided Self concepts.

While controversial as clinical practice, Laing's ideas are very useful in finding ways to analyze both the narrative structure and the protagonists' behaviors and mental states in postmodernist writings. Some examples include William Gass's *On Being Blue*(1976). It is, at times, an almost-maddening collection of forms, concepts, words, and cultural markers that include and encompass the word, "blue." It is a philosophical inquiry in that it deracinates the words, and then discusses how the concepts of "blue" infuse the word with other meanings. Gass's inquiry is that of a scientist in a living laboratory, looking at language under pressure from inside and outside forces, and finding a dramatic example of ontological insecurity. Another example of a postmodernist novel in which Laing's concepts provide a useful framework is Julio Cortazar's *Rayuela* (1963), one of the core works of the Latin American "Boom" which takes great liberties with narrative structure, creating chapters that may or may not contribute to the actual advancement of the various story arcs, and as a stream of consciousness tour-de-force, brings in seemingly unrelated events, thoughts, fragments, to create multi-dimensional models of tremendous psychological complexity and depth. In Laing's world, such a schizoid depiction of reality has much more verisimilitude to the actual function of the mind (and the heart) than realism. Another seminal work is David Foster Wallace's *Infinite Jest* (1996), which adopts the extreme footnotes and annotations of the early 20th century modernist T. S. Eliot's *The Wasteland* and *Four Quartets,* and also Ezra Pound's *The Pisan Cantos* and their incorporation of translation, fragments of other cultures, and a backdrop of economic, social, and psychological disintegration. Wallace, however, uses pop culture and self-help rather than high culture as its bedrock, resulting in a self-subversion that is as alarming as it is engaging.

According to Laing, in times of extreme pressure, especially those which provoke fear and angry responses, a person can start to begin to have terrible fears:

1. Engulfment: The fear of being consumed or utterly encroached on by another person (Laing, 1960, 44);
2. Implosion: The fear of having a self so fragile or vulnerable to world forces that it could "… be liable at any moment to crash in and obliterate all identity as a gas will rush in and obliterate a vacuum." (Laing, 1960, p. 45).
3. Petrification and depersonalization: The fear of having one's beingness stripped away by being depersonalized and objectified, being turned into stone (metaphorically) and unable to respond, and the only movement would be at the beck of others as in the case of a robot (Laing, 1960).

Marlowe & Perry (2019) observed that Laing's seminal work had never been developed into a psychometrically sound instrument that could be used to measure one's perceived degree of ontological insecurity, and how it related to psychotic states. Thus, Laing's theoretical structures can now be put into practice.

COVID-19 Triggered Ontological Insecurity and Decision-Making
Black Swans and Dragon events clearly constitute destabilizing, disruptive review. What exacerbates their impact is the irrational behavior of the people who consider themselves to be directly affected. Many have described the phenomena that occur, including those we mentioned before, including Nassim Taleb (The Black Swan), Charles MacKay (Popular Mass Delusions and the Madness of Crowds), and Daniel Kahneman (Thinking, Fast and Slow).

Because COVID-19 constitutes precisely the kind of destabilizing "shock" event that has the ability to create emotional distress, it could be used as a case in point for illustrating irrational decision-making and panic. Social media and news outlets further destabilize individuals because the create a perception of danger along with threats of social unrest and disorder, particularly during times of lockdown. Valente and Valera (2018) have explored how the perception of insecurity generates anxiety and ontological insecurity, even if when the individuals are living far from locations with civil unrest or violence, and even when the levels of infection are low.

Thus, given its persistence and long duration, the ongoing presence of COVID-19 could trigger ontological insecurity. Taking the fears as described by Laing, COVID-19 in and of itself, but most particularly with respect to perceptions promoted by social media, could give rise to fears of engulfment, implosion, and petrification / depersonalization.   If that is the case, what might be the specific manifestations?

Decision-making affected by COVID-19-triggered ontological insecurity
Here is a chart that suggests relationships between the different triggering events, the ontological uncertainty fear, and the resulting impact on the decision-making process.

Table 1. Decision-making affected by COVID-19-triggered ontological insecurity

Ontological Uncertainty Fear	Triggering Event	Impact on the Decision-Making Process
Engulfment	Fear of contagion	* Unwilling to work in a team or collaborate, prefers to go it alone

	Fear of bullying	* Suspicion and mistrust of highly publicized authority figures; fear that the powerful will trample the smaller, less powerful individuals and groups in society
Implosion	Fear of lockdowns and/or social order	* Decisions may fall into extreme categories: 1) Afraid to make any decisions for fear of triggering a further collapse; 2) Making quick, irrational decisions in order to escape a threatening world, and "escape" may be physical or it could involve "escape" through compulsive and potentially self-destructive behaviors
Petrification and depersonalization	Threat of surveillance and monitoring	* Decisions as a rebellion against a world perceived as wanting to invade privacy and reduce individuals to robots, or, rather than rebelling, having a conformist view and promoting the surveillance and monitoring in one's own community, office, school, home, etc.
	Conspiracy Theories	* Decisions delayed as conspiracy theories are factored into the decision-making process (even if they do not merit them.

Literary representations of ontological insecurity can provide insights into processes and often deeply-buried (or denied) fear, contradictions, and damaging knowledge. Social media accelerates and intensifies the energy that unmoors the cognitive boats from their anchors, which is to say that the logical constructs that people took for granted -- identity, cause-and-effect, process -- are up for grabs. They are destabilized and in motion, which means that there are chaotic debates, refusals to accept the assumptions, arguments, and conclusions of others, and a great deal of data from physical and social phenomena that can be interpreted in multiple ways.

Conclusion: Inside the Catastrophic Transition
One can say that Dragon King extreme events can trigger ontological security. That same ontological insecurity is further exacerbated by herd behavior and Black Swan events. If they are both precursors of catastrophic transition, it is necessary to identify where the transitions are occurring.

For leadership decision-making, the "catastrophic transition" will occur with both people and materials. Disruptions will occur in supply chains involving labor, energy, transportation, and inputs. There will also be disruptive beliefs and psychological states as conspiracy theories, fear, anxiety, denial, depression, post-traumatic stress, and more rip through the populace. The need for safety triggers herd behavior, as well as the emergence of unethical charismatic leaders who promise security. In extreme cases, such charismatic leaders form cults and entrap "true believers."

From a Nietzschean, Marxist, and even post-Marxist perspective, there is a "rage for order," and the deep anxieties produced by transition and ontological insecurity will usher in authoritarian or totalitarian meaning-making structures. Power prevails. Such ideas were detailed by Baudrillard and his notions of the Disneyfication of the imagination, but in times of pandemic, have gone far beyond a

consumer-culture mediated notion of reality. Some of Baudrillard's notions do align with conspiracy theories that suggest that pandemics are conveniently hijacked in the service of a greater "agenda" -- a police state. However, this position is also just one stop in the journey of catastrophic transition.

For leadership to be effective in Black Swan and Dragon-King extreme events, the concept of the Jahari Window becomes more important than ever because it focuses on information-gathering and organizing the facts and the knowledge to make everything as known and knowable as possible.

Using models to detect patterns in the knowledge, and also to create predictive models can be helpful, but very risky because there are often insufficient analogues for training the analytic models. Unsupervised neural networks are effective in creating patterns when there is a great deal of data, but there is always the risk of attributing causality to unrelated phenomena (a form of "butterfly effect").

Nevertheless, in the case of both Black Swan and Dragon-King extreme events, a focus on readjusting goals to adapt to real-world constraints, to provide stability is critical. To achieve the goals, it is necessary to have accurate and timely information gathering, processing and sharing, and to determine the true emotional / mental state of individuals.

Recognizing that social media and popular culture, as well as important and influential philosophical ideas have created a deep belief that governments and global organizations promote false narratives to manipulate the individual points to an essential weakness in our social and cultural institutions. In order to create effective teams and to achieve group goals, it will be necessary to acknowledge and accommodate differing views, but to provide actual facts (that are verifiable), and to be clearly working in the best interest of all the team members, stakeholders, and individuals within the organization (or entity).

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