COVID-19

REORGANIZATION SCENARIOS

BY: LEAH ZAIDI



The Coronavirus (Covid-19) Pandemic is a global crisis that has destabilized the everyday fabric of our lives. As it alters the present, it will change what is possible for our future. It is important that we understand how our systems are being challenged as uncertainty continues to grow. The reality that emerges in the next few weeks will seal our fate for years to come.

This document will outline a framework to understand the overall current state and scenarios for what may emerge next.

The Current State

Covid-19 is a fast moving event that has disrupted our systems. The model that best explains what our societal systems are experiencing is the <u>Panarchy</u> (also known as the Adaptive Cycle or the Ecocycle). This framework by Gunderson and Holling describes the evolution of complex systems and suggests that, like nature, our systems go through the following cycles:

Exploitation: Rapid expansion and growth.

Conservation: Slow accumulation and stability as the system reaches carrying-capacity.

Release: Rapid entry of competition or changed conditions. Covid-19 has triggered a Release of stable, established systems.



Figure 1: The Panarchy

Reorganization: Rapid process of adaptation, selection, and reconfiguration of the system.¹

¹ The provided definitions are reworded summaries from The Sustainable Scale Project. Retrieved from http://www.sustainablescale.org/ConceptualFramework/UnderstandingScale/MeasuringScale/Panarchy.aspx



Our systems contain subsystems that move at different speeds and impact each other. This is illustrated by the Nested Panarachy (figure 2).

Covid-19 is a '**Revolt**': when a small and fast moving event disrupts a stable system and forces it into a Release period.²

Whether or not our systems go through the Release period and Reorganize effectively depends on how much we 'Remember': the extent to which we maintain the 'business as usual' paradigm (e.g. through our policies, knowledge, resistance to change, etc.).

Our socio-economic and political systems were overdue for a Release and Reorganization. It is only through

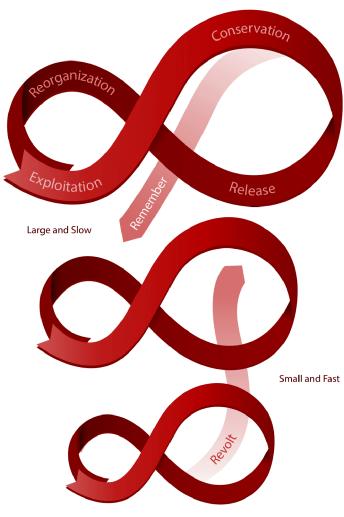


Figure 2: The Nested Panarchy

maintaining inequalities and failing to address wicked problems that we have remained in a prolonged Conservation state.

² The provided definitions are reworded summaries provided by The Sustainable Scale Project. Retrieved from http://www.sustainablescale.org/ConceptualFramework/UnderstandingScale/MeasuringScale/Panarchy.aspx
³ The provided definitions are reworded summaries provided by The Sustainable Scale Project. Retrieved from http://www.sustainablescale.org/ConceptualFramework/UnderstandingScale/MeasuringScale/Panarchy.aspx



Important Considerations for Covid-19

- Consider the Panarchy as a flexible spectrum rather than neatly separated containers.
 There is no single outcome, rather a range of possibilities within each state.
- Our actions, behaviours, and decisions can prolong or shorten the time spent in certain states. The world is currently in a Release state. Though a longer Release period will be more disruptive in the short-run, it may also create more Reorganization capacity in the long-run. The total run-time of a Release period is dependent on the time it takes to develop, test, and disseminate a vaccine.
- Artificial interventions and strategies can keep the system in a Conservation or Exploitation state, despite the need for Release and Reorganization. For instance, bailouts maintain Conservation states and prevent the Release of capital that allows for Reorganization.
- What will emerge during Reorganization and the extent to which we reorganize will
 depend on how much we 'Remember'. A comprehensive set of pre-Covid factors must
 be taken into account, ranging from the state of our healthcare systems, the decline of
 democracy, wealth inequality, stance on climate change, etc. We can not underestimate
 our resistance to change.
- Reorganization means something new will emerge. It does not mean that 'new' is better
 or devoid of negative unintended consequences. Akin to how it was naive to ignore
 dystopic scenarios pre-Covid-19, it is naive to assume what emerges next will lack
 dystopic elements or unintended consequences. A mixture of improvements and failures
 followed the Spanish Flu (e.g. universal healthcare and the U.S. privatized healthcare
 system both emerged after that pandemic). It is reasonable to expect both positive and
 negative outcomes.
- Different organizations, industries, and subsystems will react and feel impacts at different speeds.



Scenarios

The following are modular scenarios for the Covid-19 pandemic, illustrating how the system might reorganize. These modular elements may be combined and used to create a wide spectrum of sub-system scenarios. The future will contain elements of all four scenarios presented — which elements will come into play, in which configurations, and for whom remains to be seen. These scenarios may need to evolve as the crisis does.

The purpose of these scenarios is not to predict the future, but to use complex prototypes to better understand how to manage the situation today and in the near-future. Using these constructs, we can design and test more comprehensive strategies.

To create the scenarios, two strategic foresight methods have been used as follows:

First, **Jim Dator's** <u>Generic Images of the Future</u> provided archetypal templates to lay out four possible futures:

• Continuation: Business as usual/growth

• Discipline: Order and control

• Collapse: Systemic breakdown

Transformation: High-tech and/or high-spirit ⁴

Though the modular pieces are sorted into the above categories, they can be combined with each other across scenarios to construct new images and possibilities.

⁴ These definitions are summaries provided by Jim Dator in Alternative Futures at the Manoa School. Retrieved from: https://static1.squarespace.com/static/5bc578bdfb22a52798f8a038/t/5d1844ec3a01db000100f67b/1561871599474/3 .+Dator-Alt+Futs+Manoa.pdf



Second, the <u>Seven Foundations</u>⁵ model by Leah Zaidi was used to assemble the fundamental aspects of any given system for each scenario. Each 'foundation' is present in every system, though we tend to privilege some over others (e.g. Western systems favour economic outcomes). Though this model is typically presented as a wheel (figure 3), it is laid out as a grid in this document. It is then crossed with Generic Images to facilitate a holistic view of all possibilities at once and to allow for comparisons of each foundation across all four scenarios.

We are currently experiencing elements of both Continuation and Discipline scenarios. Shifts will occur as more time passes.

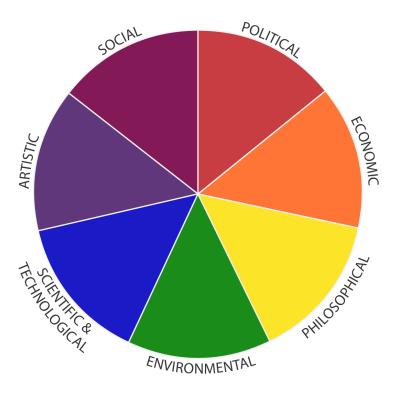


Figure 3: Seven Foundations Model

Sohail Inayatullah and Peter Black also examined the 'Black Swan' metaphor and Covid-19 scenarios in their article, Neither A Black Swan Nor A Zombie Apocalypse: The Futures Of A World With The Covid-19 Coronavirus. Please consider their work along with the scenarios presented in this document.

⁵ Created by Leah Zaidi, introduced in Brave New Worlds: Science Fiction and Transition Design. Retrieved from https://www.researchgate.net/publication/321886159_Building_Brave_New_Worlds_Science_Fiction_and_Transition_Design



COVID-19: FORESIGHT SCENARIOS

By: Leah Zaidi, Multiverse Design

These scenarios have been constructed by combining Jim Dator's Generic Images of the Future with Leah Zaidi's Seven Foundations model. The scenario types are as follows:

- -Continuation (business as usual/growth): **Detour Back** in which we attempt to return to an artificially maintained Conservation state as quickly as possible, creating the circumstances for another Release moment.
- -Discipline (order and control): Keep Calm, Carry On in which prolonged Release period creates the need for top-down and bottom-up control.
- -Collapse (systemic breakdown): Vicious Circles in which problems compound and feed each other with multiple infectious diseases that are fueled by natural disasters, rising tensions, and crippling systems.
- -Transformation (high-spirt): **We, Not Me** in which the Release period is used to Reorganize as a more equitable and empathetic society.

Political	Economic	Philosophical	Environmental	Scientific and Technological	Artistic	Social
		Philosophical	Environmental	Scientific and Technological		
Policies that continue to benefit the wealthy	Businesses open, double-down on bottom-lines	Commoditized panic	Temporary, short-lived environmental relief	Pandemic apps (e.g. tracking disease, social connectivity)	Dystopic films and music with environmental/nature themes	Set back for feminism; women stay home to care for kids
WEF/Davos styled solutions to healthcare challenges	Bailouts for corporations, dying industries clinging to life	Growing mistrust of governments and institutions	Uptick in nature retreats	Surge in IoT: ambient, touch-less technology	Increase in digital arts organizations	Millennials move to Northern communities
Temporary relief measures with deadlines	Further increase in wealth disparity	More unethical corporate behaviour without changes to policy	Gradual return to travel that ushers in pilgrimage style tours	Fast tracking AI and automation, telemedicine, virtual assistants	Virtual reality, projection communication and connection	Multi-player games adapted for work and socializing
Decreased regulation and oversight of corporations	Post-crisis billionaire donations, foundations champion billionaires	Increase in paranoia, 'other' versus 'unified' mentality	Growing demand for urban greenspace	More private healthcare providers with concierage services	Uptick in art as therapy	Mass protests: state of anger and desire for change
Coordinated efforts amongst existing allies	Postponed retirements with trickle down effects	Quick loss of distancing habits, sustainable behaviours	Reduction in C02 without other improvements (e.g. plastic in ocea	Blockchain encryption with faster servers	More desire for comedy, light heart-felt drama	Education catch-up (e.g. extended grades, cancelled summers)
Global power shifts away from G7	Telecoms, internet providers gain power and gauge	Probability bias: belief that a future pandemic is less likely	False calm on climate change that ignores ecosystem health	Boom in remote-work, communications tech	High demand for anything new	Growing demand for alternative lifestyles e.g. prepper, off-grid
Increase in lobbying efforts from incumbents	Capsule purchasing (e.g. capsule wardrobe, pandemic kits, etc.)	Renewed appreciation for 'normal'	Redesign of transit systems around new work norms	Isolation strains health systems (e.g. mental health, pregancies)	Creative economy struggles (more demand, less funds)	Social rituals inspired by other cultures (e.g. bows)
Increased donations to political campaigns	Offshore assets, hidden gold and money increase	Denial versus reality-check camps	Climate change disaster brews after double-down	Foreign-trained medical services providers certified faster	Death of the 'American Dream' myth	Ongoing trauma management, social workers still on frontlines
Self-serving agendas and policies hidden in emergency bills	Behavioural data analyses sold in droves	More 'gurus', lifestyle coaches, financial coaches	Weakened response to next natural disaster	Changes to what is 'credible' and 'citable'	High investment in entertainment	Surge in going out, dating, socializing
Resiliency measures with an eye on economy-first solutions	Prolonged global recession, more support for unions	Growing mistrust in institutionalized religion	Escalated resource extraction	Effective measures dismissed as overreactions	Backyard office sheds	Anti-loneliness movement and services
Tense elections with high voter suppression efforts	12 months of Christmas: marketing and sales overdrive	Growing disillusionment, more ostracized fringe groups	Bought time to address environmental sustainability	Covid consequences strain healthcare more (e.g. lung damage)	Indie artists rise	Change to religious services (more contactless, less people)
Early or delayed elections	Sickly unicorns that may not recover	Increased desires to volunteer and give back		Scrambling scientists, high volume of pandemic research	Return to collective activities (e.g. going to the theatre)	Skills-based after school activities
	Corporate real estate sell off with smmaler, distributed offices	Spiritual retreats, meaning of life classes increase		Some mistrust of science remains	Return of drive-in theatres	New co-living arrangements (different families under one roof)
Precarious/sovereign democracy, leaning authoritarian	Depression: bartering, informal, dark web, and vice economies	Diminishing choices and freedoms, state of paranoia	Controlled economic shutdowns for environmental benefits	Touchless and augmented reality tech	Digital collaboration and delivery	Hypo-chondriac connections and cleaning rituals
Single, impoverished class, with some elites	Nationalized essential services	Surveillance state under guise of public health	Staggered energy supply (leading to staggered work hours)	Unregulated blockchain communities: global medical connectivity	Homemade entertainment, everyday dystopias, role-playing	Changes lasting changes to celebrations and funerals
Stricter state of emergency laws, with wartime policies	No more brands, state owned-companies only	End of privacy: freedom traded for safety and security	No interference or connection to unsanctioned nature/animals	Vaccines come with state-owned biometric trackers	State-owned celebrities hired to distract the public	Delayed family planning and/or choosing not to have children
Constant border controls with no immigration	Home spun businesses operating quietly	Me and mine-first values	Less light, noise, and air pollution	Always on monitoring, tracking, and control Al and algorithms	Nationalized streaming service	Quarantine driven disorders, mental health epidemic
Political shifts with migration away from dense zones	Community tax, seizure of offshore assets	Power grab by religious extremists	Crumbling insfrastructure, lots of retro-fitting and repurposing	Clean Eating': push for lab grown foods, high-tech home gardens	Increase in government propaganda	Humanitarian aid through labour only
Redrawing of national borders for already volatile states	Rise of Do-it-Yourself and Fix-it-Yourself economy	Revived patriotism against the 'invisible enemy'	Toxic disinfectants released with spray-downs	Security, protection, biometric surveillance, policiing tech	More animated shows and films (distanced work)	Pragmatic marriages (more resources, less love)
Crackdown on non-complicit persons	Suspension of all patents, supervision of all supply chains	General state of distrust, high mistrust of 'foreigners'	Systematic animal culling of potentially infectious animals	Wartime-style medical tech innovation, R&D	Increased interest in role playing games	High social shaming, with neighbours reporting on each other
Military coups, with declarations of war	Home delivery for necessities: restrained consumption	Loss of trust, sense of self, elder wisdom, etc.	Always-on emergency management precautions/teams	Proof of isolation required to receive care, non-isolators denied	At-home projection mapped immersive environments	Repressed youth/generation
Conscription for frontline relief and civic duties	Aftershock management with staggered relief funds	Tyranny of self-sufficiency; rebuilding survival skills	High anticipation for environmental disasters, little preparedness	High status scientists that are known names	New metaphors: invisible enemies, 'we're the virus'	Mandated curfews, registered small gatherings
Strict consequences and fines for disobedience	Modern takes on pre-industrial work, roles, and services	Significant change in views on life and death	Sustainable strategies e.g. repair, repurposing, reusing	Heavy investments in R&D	Practical arts': cooking, making, building, growing	Permission-based, strategic global travel; restrained local travel
Refugee, marginalized population concentration camps	No individual ownership, possessions seized as needed	Wealth = selfishness, Luxury = greed	Improvements to wildlife populations	Mandatory health checks and swabs	Depression propaganda	Prescribed virtual connection
Expanded power and role of law enforcement	Echoes of French Revolution for the elite	Fragmented public versus private personas	Tension: resurgence in coal verus off-grid options	Dark web flourishes with underground medical supplies, services	Waste/trash art	Less pollution related deaths
Streamlined governments that focus on essentials	Government and quasi-government are the only white-collar jobs	Distancing and dying as moral obligations	Live off land: more organic, grown, harvested materials	High strain on healthcare systems, emphasis on saving the young		Prolonged homeschooling
Full breakdown of governments who lose all power	Money is meaningless	End of days rhetoric	Unexpected natural disasters further decimates society	Equally or more harmful mutations: Covid-20-21-22	Great art hoarded or stolen	Mass death decimates all fabric of society
Anarchy, laws are discarded, reinvented	Rich hideout in undisclosed bunkers	Fear rules all	Nature as punishment	Internet goes down	Pratical applications: making and using	End of equal rights, with movement towards hyper-hierarchy
Self-proclaimed leaders/strongmen; return of feudal lords	Outsiders and others feared	Destructive verus benevolent misogyny	Nature flourishes, the Earth begins to recover	Doctors, nurses become 'prized possessions' of the strong	Art becomes a connection to the lost world	Increase in violence and devastation
Sealed compounds, underground, northern island communities	Extreme nostalgia and longing for our lost world	Virus as a modern 'flood'	World without oil emerges	Pseudoscience and alternative medicine	Music and oral stories survive	Return to hunting and gathering
Breakdown triggers civil wars, creates a vicious cricle	High spirtuality versus dangerous cults	Rapture versus cleansing versus salvation	Most life is off-grid	Relentless environmental disasters devastate cities	New religions mix with old (wrathful God versus Earth mother)	People move in small packs, settle in protected communities
No more global connections, focus on local only	Seeds, cigarettes, and batteries are new currencies	Hope of new utopia, chance to rebuild	Sustainable living is the only kind of living	Other diseases flourish as Covids clear the way	Books are prized possessions	Death sentencing for the sick
Non-existent global organizations who wither away	No more corporations	End of social trust	Solar and wind technology is precious	Humanity escapes from nature in underground compounds	Singers are coveted	End of international travel
Some functioning communes with utopic ideals	Agriculture and sanitation become important	Return to indigenous knowledge	Heightened understanding of natural cycles	Artificial everything: filtered air, sunlight	Historical fiction flourishes	Small communities on islands, underground
Every style of leadership and rule of law emerges in pockets	Spoils to the survivors	Distrust of dirt; cleanliness as an act of worship	Migration amongst survivors	Survival of the fitness is the ruling natural law	Natural materials used more (e.g. clay)	Intentional social relationships, with strategic outside disconnect
Tribal mentality abound	Dispersion of belongings	Burials as offerings back to the Earth	Fertile land is coveted and protected	Healthcare breakdown makes all diseases untreatable	Return of old world films and filmmaking processes	Libraries are raided
End of democracy	Master and apprentice relationships	Distortion of truth: trying to understand what really happened	Cities abandoned, with as much converted for food as possible	Battery run tech rebounds		Sick and mentally-ill are abandoned
Í	Hardened life perspectives; meaning in surviving	Return of paganism		·		Stock-piling of weapons
Democratic socialism	Universal basic income introduced	Community-first mindset and values	Protective measures around natural resources	Increase funding for infectious disease, health institutions	Ongoing narratives of community and oneness	Augmented social services, with focus on wellbeing
Policies for lower and middle class (e.g. debt forgiveness)	Wealth dispersion mechanisms e.g. anti-hoarding laws	New symbols of social status (e.g. tax paids versus income)	Climate change mitigation with understanding that Covid-19 dress	Boom in medical knowledge and innovation	Collective creating and storytelling	Tight-knit neighbourhoods share resources e.g. community bank
People, planet before political parties (issue-based voting)	Mandated for-benefit corporations, community participation funds	Science = status: renewed respect for academia	Sustainable consumption habits, with less waste	Open-sourced science, Wikipedia models for journals	More everyday utopias (e.g. Schitt's Creek)	New literacies, social capacities (e.g. financial, futures, etc.)
Enshrined essential services (e.g. farming, frontline workers)	Local supply chains, supported by global cooperation	Diminishing power of corporate America	Push towards a post-carbon society	Global cross-collaboration on Internet 2.0	Increased interest in speculative/science fiction	Education reform: essential/creative skills, new hours/structures
Essentials are socialized public services (e.g. meals)	Shift away from manufactured consumerism	Renewed activism for climate change to mitigate disease	Rise in community garden and local farms	Rise of care-tech	Diminished celebrity culture	Equality and diversity (different ideas and experience valued)
Acting local, thinking global (e.g. changed role of UN)	Redefined shareholder benefits: pro-social mechanisms	Realignment of values around collective good	Relinquish dependance on oil	Multi-player role playing games to study scenarios	Highly diverse art and expression forms	Libraries become the heart of communities
Affordability measures implemented (e.g. new housing laws)	Shift from GDP to Affordability and Resiliency metrics	Truth triaging, rise of journalistic integrity	Organic, disaster-proof infrastructure	Climate change taken much more seriously	Global digital collaboration	Conscientious travelling with an eye on carbon footprint
Socialized education systems	Wealth and wage caps (e.g. CEO salaries, inheritance)	Demilitarization of patriotism	Clean-up of tourists sites, with controlled visitations	Renewed interest in STEM with influx of university applications	Celebration of new heroes (e.g. care and service providers)	Rise of Eastern and Indigenous spiritual practices
Internet as a human right (with ban on telecom gauging)	Increase funding social services, mental health	Growing voices of indigenous populations	Significant benefits reaped from economic shutdown	Rapid digitization of public services	New metaphors and myths (e.g. techno-Gaia narratives)	Dispersion of urban centres, reorganized suburbs
Global scientific accountability enforceable by law	Unicorn extinction	Dissipating 'hero entrepreneur' myths	Reimagine structures and infrastructure (e.g. hive homes)	New blockchain innovations that distribute real-time information	Creative economy as a revitalization strategy	Open, transparent global communication
Privacy laws that protect individuals health records	Restrained support for high profit companies, tax dodgers	Eco-reverence and respect	Greater push towards vegetarianism, lab grown meats	Fully resourced support systems for healthcare providers	Flourishing arts community, supported by UBI	Mass adoption of habits, rituals, norms from other cultures
	Decentivized, diminishing billionaires	Thought leadership diminishes as real experts rise	At or in-home farms and gardens	3D, 4D, organic printing boom to support real-time response	Different languages and cultures provide inspiration	Multi-generational learning (especially from wars)
New anti-establishment candidates						



Important Considerations for Scenarios

- Complexity requires variety: What we will see unfold is not simply elements of the future as outlined, but complex relationships between those elements. We need to consider a variety of factors and how they relate to each other when designing strategies.
- Not mutually exclusive: Elements of each of the four futures will occur at once. For
 instance, though we are seeing Discipline elements emerge, we are also seeing some
 aspects of Continuation play out. It is a question of which elements are dominant in
 which cultural context.
- Uneven distribution: Even if a dominant scenario emerges, the future will not be equal for everyone. It is possible for some to experience Transformation while others experience Collapse within the same geographic boundaries.
- We might cycle through them: It is possible that we shift through the different possible futures as the infection and death rates change. Given that we are in the Release phase of the ecocycle, we will experience both resistance and catalysts for change.
- Signposts: The more elements you see emerge across a particular scenario, the more likely that scenario's archetypal cultural narrative is emerging.
- No timeline: some incidents, events, and signposts will occur sooner than others. The system is shifting too quickly to predict what will happen and when.
- Context matters: This document is written from a Canadian perspective, with a set of strategies best suited for Canada. It will require adaptation in other contexts (For instance, it is unlikely for China to display the Political-Transformation elements. They will likely deepen their already Discipline-Collapse tendencies, with some elements of Science and Technology-Transformation).
- Be mindful of stakeholder agendas: There are plenty who benefit from broken systems, including the world we are now leaving behind. Examine motive and intention carefully.
- Not all these points are equal: For instance, an environmental disaster will have a significant detrimental impact and must be accounted for in contingency plans. A single environmental disaster during or after the height of Covid-19 may tip a system towards Collapse.



Next Steps

The next steps include the design of comprehensive sub-system scenarios, creation of short-term, mid-term, and long-term strategies, and testing these strategies for both organization and systems-level fit.



FOR MORE INFORMATION ON HOW TO NAVIGATE A POST-COVID-19 WORLD, PLEASE CONTACT LEAH ZAIDI AT MULTIVERSE DESIGN.

MULTIVERSEDESIGN.COM

