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Special Issue: Postnormal Matters.
Guest Editors: Maya Van Leemput, Linda Hyökki, Christopher Jones

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Editorial

Ziauddin Sardar posited over a decade ago that we were entering a period of accelerating change that would produce greater complexity, chaos, and contradictions—*postnormal times*. By 2021 if there were any doubt, the rise of authoritarian leaders, the decline of democracies, the continued mass migration due to conflict and environmental change, and the global pandemic are clear indicators of postnormal times. Postnormal bursts, lag, and tilt are plain to see in the COVID-19 pandemic and the consequent human responses to it, in the end, many people were quite happy to say goodbye to the "old normal." For many, "normal" was oppressive or simply wrong. Black Lives Matter and anti-colonialist movements argue that the "old normal" serves the interests of the oppressors and particular interests of elites while social media algorithms amplify conflict and disinformation, and all along climate change brings more heatwaves, wildfires, algae, and jellyfish. Even though there is talk about a 'new normal', it comes with many questions. Of the home offices, schools on zoom, mobility restrictions, and vaccination "passports,"; which one is less oppressive or loaded by privilege and entitlement compared to what we had before? Maybe the *postnormal* can indeed challenge the wish for any manufactured normalcy, and bring a whole new paradigm. Something that Ziauddin Sardar in this Special Issue also suggests could be called "transnormal".

This Special Issue represents the body of work that has refined and reinforced the decades-long position by Ziauddin Sardar on the dynamics of postnormal times. Also, the Centre for Postnormal Policy and Futures Studies (CPPFS) continues to catalog the evidence for postnormal dynamics and give voice to diverse perspectives on a global scale. To borrow from the American feminist Carol Hanisch, the "postnormal is personal:" postnormal times lays bare many of the structural inequities and oppression of "normal." And it has also been very personal for the editorial team working on this issue during the 16 months (up until the time of this writing) of lockdowns, disruptions, and grief over the loss of good parts of "normality", friends, and family. None of us have been left unscathed by the global pandemic—and it is not over. We have navigated a 20th Century publishing platform and the mysteries of the SAGE editorial system, encouraged polylogue in a relatively closed environment created by mobility restrictions, and all the distractions of 2020 and early 2021 (Insurrections! Goodbye Trump?).

The guest editors have been blessed with articles and essays that take Postnormal Theory, analysis, and emerging methodologies to the next level, building on more than a decade of literature. In this regard, the Special Issue is the epitome of postnormality and Futures; with the collection of these scholarly works, from the Call for Papers to the final acceptance after peer review, the editorial team made a conscious decision to challenge the orthodoxy of academic publishing. The reader will soon notice how the traditional register of academic writing is not present in many of the articles. The diverse formats of the texts manifest the true nature of Postnormality. We could not just approach the madness of our times from a theoretical perspective–as it remains questionable even how much theory is needed when we are forced almost daily to redo our little theories of life and question everything we have learnt so far. Fortunately, storytelling,

hands-on practice, and a textual polylogue enrich the analysis. This provides an impression of postnormal matters both in content and form and showcases academic writing and publishing alternatives. The addition of a new category label 'Polylogues' for texts in WFR in recognition of such emerging practices is a valuable step ahead in that sense as well.

The team has been in the middle of and active in the CPPFS network. Maya is a practitioner, educator, and ethnographic futures researcher with a preference for co-creation, working at the intersection of futures and (media, art) design. Linda is a researcher, advocate, and social critic exploring the cultural boundaries between the West and the Rest through futures studies and postnormal lens. Chris is an educator and scholar in public policy and administration and a long-time futurist who discovered postnormal times theory recently. All are committed to polylogue, inclusion, and to expanding individual and community empowerment through anticipatory planning, scenario development, visioning, and implementation of positive futures. All share the belief that those things need to happen within the context of a keen understanding of postnormal dynamics. All-in-all, the past year and a half has not only brought to light the *postnormal* in our personal and professional lives, but it has been a period of transition, if not the beginnings of a transformation.

The article line-up includes thoughts by the main force behind the theory, Zia Sardar. His reflection interrogates the meanings and "flavors" of "normal" before and after the pandemic, explores a range of futures scenarios of post-pandemic society generated by other futurists, including the prospect of a "snap back" to the pre-pandemic status quo. He asks us to consider some of the more daunting possibilities, even the fundamental question of whether Civilization itself is at risk, to which he poses those opportunities of a shift towards transnormality. He furthermore encourages us to embrace mutually assured diversity (and other MAD combinations) as a bridge beyond postnormal times to something better.

A number of blog posts at CPPFS in the middle of the pandemic connected postnormal times and aspects of the COVID-19 pandemic, resulting in three of the articles of this Special Issue published variously by Jordi Serra del Pino, Liam Mayo, and Christopher Jones. They look at the role of the primary drivers, dynamics, and artifacts of postnormal times, such as adjustments to Rao's manufactured normalcy fields or tilt towards a postnormal burst. They explore aspects of the postnormal menagerie, the black swans, elephants, and jellyfish populating the world of change. Critically, they argue the case for a new approach to understanding change through postnormal times analysis and the Three Tomorrow's approach to scenario planning and development. As the world is trapped in a short-term positive feedback loop, these authors provide insight into how postnormal times theory can be applied in concrete futures oriented work based on their experience of running futures workshops in various locations with diverse sets of participants, also adding the results of their application of the three tomorrows framework, so demonstrating the characteristics of the scenarios it can generate. Serra then digs deeper into each of the three tomorrow's specificities to reinforce the call directed at futures thinkers, practitioners, and educators to use postnormal theory not only for orientation in the challenging present but also for looking ahead.

A large part of the special issue is devoted to additional voices speaking out on postnormal matters and further connecting to the *personal* in the postnormal. Amjad Saleem, John Sweeney, Jean Hon, Saeed Khan, Wei Ling Low, and Zarina Nalla offer us a polylogue on the nature of religious and spiritual change during the pandemic and in postnormal times. They each examine differences and changes in religious practice and thought during the crisis, how postnormal times have shaped and reshaped their religious and spiritual thought and practice, and the challenges to religious and spiritual practice during the pandemic. They offer striking contrasts and commonalities in the transformation of worship and transfer of faith practice to online modes and reconstruction of

our faith-oriented manufactured normalcy fields. Naveen Rao takes us on an imaginary journey into a near-term postnormal reality in a story where a postnormal lens distorts reality, where roles are fluid, and assumptions about health care modalities and social safety nets are torn, tugged, and run ragged in downtown Oakland, California. Here, amid an almost apocalyptic scene, we were reminded of Gertrude Stein's observation about the disappearance of her childhood Oakland home: "there's no there there…" Now everything we once assumed to be normal is questionable. Scott Jordan navigates postnormal love and eros in pandemic times, questioning the "over-categorization" of sex, gender, and the cultural contexts of/for love—the boundaries of which seem increasingly contested and problematic. He dives into the possibilities of transformed manufactured normalcy fields and postnormal tilt in the meanings of love and pursuit of eros to navigate the opportunities to find postnormal love.

The closing article by Liam Mayo and Shamim Miah takes us furthest into the epistemological and ontological space. It explores the erosion of traditional, "normal" knowledge, expands on Sardar's belief that imagination is central to unlocking new ways of being, and argues that we should leverage imagination to enhance and engage our agency to realize preferred futures and reach transnormal times.

We hope you have as much fun and intellectual stimulation as we had while weaving this issue together.

Maya Van Leemput
Linda Hyökki
Christopher Jones

Afterthoughts: Transnormal, the "New Normal" and Other Varieties of "Normal" in Postnormal Times

Ziauddin Sardar[1]

Abstract

What is normal? And what constitutes "the new normal"? This article argues that the much vaunted "new normal" is nothing more than a return to the status quo ante, life before COVID-19, with a few extra appendages. After discussing the notion of the complex normal, the article suggests that what lies at the other end of postnormal times is best seen as the domain of the transnormal: over and beyond capitalism and neoliberalism, modernity, and postmodernism, almost most of what we can possibly conceive as normal or "the new normal." The route to a transnormal world is a process of systematic movement leading to transposition: acts of changing relationships, structures, and values that interactively and collectively relocate humanity to a trans, or stable, state or realm of existence. The article suggests that we use the concepts of transmodernity and mutually assured diversity as tools to navigate toward the transnormal and our way out of postnormal times.

"The last normal photo." In May 2020, Robyn Vinter, a journalist based in Leeds for *Yorkshire Post*, started the hashtag #lastnormalphoto (Bakare 2020). It went viral: she received thousands of replies, with people across the world posting the last picture they took before the COVID-19 global lockdown. Amongst the photos were music concerts, football matches, shopping, restaurant dinners, plates piled up with food glorious food, people meeting elderly relatives, revellers on the beach, fashion, and a truckload of celebrity selfies. Other hashtags followed, including #happiertimes, #beforesocialdistancing, and #misstheolddays,

all confirming an instant nostalgia for something called "the normal."

But what is this "normal" that is so desired by so many people? Conspicuously missing from the last normal photos are pictures of people living from hand to mouth, plates with

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little or no food, migrant and refugees living in squalor, and the homeless living on the streets. We do not see this as "normal." But as Pope Francis (2020) points out, this too is normal for a substantial segment of the global population—a reality we cannot deny: "to discover such a large number of people who are on the margins…And we don't see them, because poverty is bashful… they have become part of the landscape; they are things." There is a great deal more that is "part of the landscape" that we do not see as normal: devastation caused by climate change; the megafires in Australia and the United States; cities, such as Male and Jakarta, drowning underwater; the rising tide of far right in Europe, the United States, India, and elsewhere; gross inequality within and between nations; the incompetence of political and business elite; authoritarian regimes arresting, beating, or torturing dissidents; and the hoarding of global wealth in ever fewer hands. The nostalgic perception of pre–COVID-19 days is thus a rather truncated, myopic normal. The normal, as Indian writer and activist, Roy (2020), points out, "is the wreckage of a train that has been careening down the tract for years." Indeed, from the perspective of those who are suffering from the direct impact of climate change, or migrants and refugees fleeing oppression, or millions of those who lost their jobs due to automation and AI, or those millions who are thrown in internment camps or declared non-citizens simply because of their faith, the pre–COVID-19 world was rather abnormal: this is not how things ought to be, you can hear them scream.

Return to Normal

The clamor for life to get "back to normal," as evident on the front pages of newspapers as on the news channels and social media, is a demand for return to the status quo ante: the "normal" state of affairs before COVID-19. But as graffiti in Hong Kong, and elsewhere, declared: "there can be no return to normal because normal was the problem in the first place." Indeed, way back in 1983, singer Bruce

Cockburn told us that the normal gets worse and worse:

> Strikes across the frontier and strikes for higher wage
> Planet lurches to the right as ideologies engage
> Suddenly it's repression, moratorium on rights
> What did they think the politics of panic would invite?
> Person in the street shrugs "Security comes first"
> But the trouble with normal is it always gets worse.

For Nichol (2020), a California-based novelist, "normal life" was certainly getting crueller and crueller. She had to live through "the last year's fire, and the fires the year before that, and the fires year before that." During 2018, she informs us, "fires burned nearly two million acres in California. And in 2017, fire ravaged a significant portion of my hometown. When the university where I teach recently closed for the semester because of shelter-at-home orders, it was the fourth closure in three years." The Indian intellectual Mishra (2020) suggested that even bigger "systematic crisis" lay ahead, and as such, return to imagined normal was not on the cards. Baker (2020) concludes his "long read" article in the *Guardian*, "we can't go back to normal," by suggesting "we are not watching a movie, we are writing one, together, until the end."

What then lies at the end of the COVID-19 tunnel depends on your perception and outlook—whether you are a pessimist or an optimist, politically on the left or the right, realist or a dreamer, or looking at short term or long term futures. In the short run, the "the new normal," Park (Park 2020) tells us in *Time*, means "the death of the handshake," "rethinking how self-isolation fits into broader policy decisions," and "microbial threats like coronaviruses will inevitably move from the bottom to the top of public health priority lists, and the danger of infectious diseases will loom large on our collective conscious." According to numerous reports in the *Guardian*, the "new normal" will include social distancing for years

to come, more people working from home, common use of face masks, swift shutdowns, health checks when flying, and end of business travel—namely, the old normal with a few restrictions. Beyond that, the optimistic view suggests that the experience of COVID-19 could enhance our understanding of climate change, there will be mass protests for change, and "moments of solidarity" could be transformed into "the broader political sphere." The pessimists believe that surveillance will intensify, authoritarian regimes will become even more draconian, distrust between government and citizens will increase, neoliberal capitalism will run wild, and there will be more deaths and suffering worldwide. However, it could take some time before we are out of the crisis. As journalist Young (2020) suggests in the *Atlantic*, the "end game" has three possible outcomes. First, there is an international unity and collaboration to concurrently stamp out the virus but this does not look likely. Second, people develop "herd immunity" but this will "come at a terrible cost," and "it would likely leave behind many millions of corpses and a trail of devastated health systems." The third potential outcome is that the virus is extinguished here and there until a viable vaccine is developed; something that may take "very long." We will have to learn to live with the virus until such time.

The Changing Normal

Whatever happens, Yuval Noah Harari argued in a much-quoted article in *Financial Times* that we will never be the same again. Short "emergency measures will become a fixture of life," we could "give legitimacy to a terrifying new surveillance system," and, on the up side, we would probably trust science and expert opinion much more (Harari 2020). Journalist Wintour (2020) reported that in Europe, the United States, and Asia, almost everything is up for debate: "the trade-off between trashed economy and public health, the relative virtues of centralized or regionalized health systems, the exposed fragility of globalization, the future of the EU, populism, the advantages of authoritarianism."

He cites President Emmanuel Macron of France who declared: "many certainties and convictions will be swept away. Many things we thought were impossible are happening." The most obvious "impossible" thing that is all too evident is the return of the big state after a 30-year retreat. In many countries, states have provided support for its citizens, forced by COVID-19 to isolate; in some countries, even small and big businesses have been rescued and stopped from going bankrupt. Nationalization, another recent "impossible," is now on the cards: Spain considered and then postponed nationalizing private hospitals, France is keen to nationalize large businesses, and in Britain, there is a strong possibility of nationalizing some parts of public transport. However, it may take a few years before we can declare the end of COVID-19 days.

In a massive dossier, with contributions from a host of American and European academics and writers, *Politico* magazine provides a long catalog of how "Coronavirus will change the world permanently." The suggestions from the good and the great include the obvious—we will be more reluctant to touch people, there will be less communal dining and more cooking, we will work more from home, and virtual meetings will become common—to not-so-obvious positive and negative predictions. These include polarization and individualism: "the coronavirus pandemic marks the end of our romance with market society and hyper-individualism." Or, we could also go the other way: become less communal and more authoritarian. "Regulatory barriers to online tools will fall," and Big Tech would become omnipotent. Governments could become Big Pharma and themselves research and manufacture medicines and vaccines. Cultural critic Virginia Heffernan suggests we will be released from "the tyranny of habit": our fantasy of "optimizing" life with emphasis on "peak performance, productivity, efficiency" could give way to "stop taking the streetcar, working for money, bowling, and going to the movies" and devote more time to "imaginative and unconventional" pursuits. Filmmaker Astra Taylor points out that the rules that have shaped

our lives are now mostly irrelevant. And, Matthew Continetti, journalist and resident Fellow at the American Enterprise Institute, predicts that we are heading for a "paradigm shift" which will actually change our understanding of change (Politico Magazine 2020).

The dominant perception of the normal is also challenged by a short campaigning film by UNESCO. Shown on several networks (including NBC, Euronews, Al Jazeera, France Télévisions, Canal+, IPS, as well as on You-Tube) across the world, it juxtaposes certain facts we take for granted with other facts that we do not regard as normal. For example:

1. Air pollution causes eight million early deaths a year—*normal*
2. During COVID-19, Himalayan peaks become visible for the first time in thirty years—*not normal*
3. One child dies of pneumonia every twenty-nine seconds—*normal*
4. Coronavirus leads scientists and tech companies to open source their patents—*not normal* (UNESCO n.d.).

The film concludes by declaring: "Now is the time to build a better normal" and suggests: "it all starts with education, science, culture, information." One can logistically ask: are the existing values and structures of science and education, or the dominant paradigms capable of producing a "better normal"? And is a "better normal" actually a, or indeed the, new normal?

"The New Normal"

While COVID-19 has made "the new normal" ubiquitous, the term itself is not particularly new. It has a long history in education going back to the late 19th and early 20th century when American text books were rewritten, undated, and modernized. There we will find such titles as *The New Normal History of the United States* (Henry 1904), *The New Normal Music Course* (Taft, Holt, and Marshall 1910), and *The New Normal Mental Athematic* (Brooks 1873) More recently, in a 2003 report,

the US NGO Human Rights First described the post-9/11 American landscape as "the new normal of US governance," which is defined by "the loss of particular freedoms for some, and worse, a detachment for the rule of law as a whole" (Doherty and Pearlstein 2003). So, some forms of "the new normal" have existed for some time!

However, what can we say about the post–COVID-19 new normal? There has been a veritable avalanche of scenarios and prediction of potential futures from various outlooks and perspectives. One can argue that the new normal is what you want it to be, as can be seen in *Aftershocks and Opportunities: Scenarios for a Post-Pandemic Future* (Talwar et al. 2020) where futurists provide a variety of predictions and forecasts on a range of subjects, from an array of perspectives. But most of the scenarios in *Aftershocks and Opportunities* and in other places are firmly focused on economic recovery. For example, Talwar, Wells and Whittington suggest that "the shape of economic recovery" gives us four scenarios:

1. The Long Goodbye (poorly contained pandemic, deep and prolonged downturn),
2. The VIP Economy (poorly contained pandemic, vibrant economic rebound),
3. Safe but Hungry (eradication of the pandemic, deep and prolonged downturn), and
4. Inclusive Abundance (eradication of the pandemic, vibrant economic rebound).

McKinsey & Company, the global management company, offers a similar four-stage analysis for emergence of the new normal. The first stage, resolve, will require governments and businesses to assess the scope, scale, and depth of action that is required. The second state, resilience, a period of financial stress, requires businesses to develop plans to accommodate the shock. Stage three, return, requires supply chains to be strengthened so the economy can return to pre–COVID-19 levels of production and sales. And finally, stage four, re-imagination, where shifts have to be made on the way we live, work, and how we use new

and emerging technologies (Sneader and Singhal 2020). In contrast, Simon Mair paints a somewhat different picture of the new normal as four possible futures. On the BBC Future website, Mair asserts that the dominant economic paradigm is based on two interlinked beliefs: "the market is what delivers a good quality of life, so it must be protected" and "the market will always return to normal after short periods of crisis." Mair wants to emphasize value and centralization in shaping his post–COVID-19 four potential futures:

1. State capitalism: centralized response, prioritizing exchange value
2. Barbarism: decentralized response, prioritizing exchange value
3. State socialism: centralized response, prioritizing the protection of life
4. Mutual aid: decentralized response, prioritizing the protection of life.

Mair (2020) favors state socialism where "the state steps in to protect the parts of the economy that are essential to life: the production of food, energy, and shelter for instance, to ensure that the basic provisions of life are no longer subject to the whims of the market" and "mutual aid" future where "we adopt the protection of life as the guiding principle of our economy" and "individuals and small groups begin to organize support and care within their communities."

Whatever the new normal, what we can say about it with some confidence is that it is a contested territory: a future-oriented struggle over different visions from different perspectives. The very concept of the "new normal" is a fantasy that provides a false sense of certainty in a time of deep uncertainty, an intentional move to remain at the level of surface uncertainty when postnormal times requires delving into the depths. Or, as Canadian critical theorist Haiven (2020) puts it, the post–COVID-19 future will be "defined by either the desperate drive to "return to normal" or a great refusal of that normal" (204). Indeed, if the new normal is simply an extension of the neoliberal, free-market, technocratic worldview, then

Haiven's warning is worth heeding. "In the wake of the pandemic," he writes,

> there will almost certainly be efforts by those vastly enriched and empowered in the last decades, notably in the intertwined technology and financial sectors, to leverage their influence and resources, as well as the weakness and disarray of traditional institutions, to lead the reorganization of society along neo-technocratic lines. They will continue to generously offer the services of their powerful and integrated surveillance, logistics, financial and data empires to "optimize" social and political life. This corporate dystopia can wear a human face: basic income, hypervigilance for new epidemics, personalized medicine. Already they arrive, bearing gifts to help us in this emergency: tracking disease vectors, banning disinformation, offering states help with data and population management. Underneath the mask will be the reorganization of society to better conform to the hyper-capitalist meta-algorithm which, though driven by capitalist contradictions, will essentially be nonfeudal for most of us: a world of data and risk management where only a small handful enjoy the benefits (Haiven 2020, 206).

The new normal, then, is the same old way of colonizing the future. It could result in the tech giants—what Amy Webb describes as *The Big Nine* (Google, Amazon, Facebook, Microsoft, IBM, Apple, Technet, Baidu, and Alibaba)—(Webb 2019) becoming even more powerful and entrenched then before the crisis started. Indeed, as Meserole (2020), of the Brookings Institution points out, "techlash" could evaporate into thin air: as we become more and more reliant on smartphone data location, Zoom meetings, and shops online, anti-trust activity against the largest technology companies will wane, and regulation of these giants will be eased or may even disappear. The new normal, then, could turn out to be, to use the words of Haiven, "vindictive normal."

Many of the optimistic scenarios and visions for a more just and equitable post–COVID-19 world underestimate the resilience of neoliberal capitalism. It has deep roots and can bounce

back even after a deep recession; "the market will always return to normal after short periods of crisis" may be a belief, as Mair notes, but it is a belief based on entrenched economic system with formidable momentum. In general, systems—including global economic system—are structured to return to established, entrenched norms. The COVID-19 pandemic has loosened or decoupled the system, unhinged aspects of systems' interconnections. It may even have freed up space momentarily for alternative actions. But this is a temporary phenomenon; the system will readjust rapidly to re-solidify in old patterns. Prodigious entrenched resources are focused on re-inscribing old systems. The COVID-19 affair is an extreme event, defined as "a dynamic occurrence within a limited timeframe that impedes the normal functioning of a system or systems" (Broska, Poganietz, and Vögele 2020), which has to be seen in all its complexity, but it does not necessarily mean that it will overturn the entire system. There is, however, a probability that the new normal could turn out to be even worse than the old normal!

The Complex Normal

There is, however, something special about the COVID-19 pandemic. We have never experienced anything like it in living memory. It has brought the entire world to a screeching halt. It has shown, as journalist Meek (2020) suggests, that "the boundary between the normal and abnormal, between the state of social security and social breakdown, is elusive." It has displayed how science and ignorance go hand-in-hand. It has demonstrated, to the extent that even the most myopic can see, that the curtailment of human activities has a profound impact on the environment (Allan 2020). It has exposed the belief that "we have achieved mastery over nature" and thus can "exercise control over events" as a superannuated illusion (Lal 2020). It has generated a host of "new moral questions," ranging from the ethics of social distancing (Evans 2020); to the interaction between climate chaos, ecosystem collapse, and the pandemic (Moore and Nelson 2020); to the

importance of communitarian ethics (Furman 2020). And, what is particularly special about the pandemic is that it is the first global, clearly recognizable, postnormal event.

In her introduction to the special issue of *Futures* on Postnormal Times, Merryl Wyn Davies asked: "are we there yet?" Davies (2011) argued that evidence for postnormality was not particularly strong and that perhaps it was too early to suggest that "the specific features of postnormal times (are) unlike anything encountered in the past?" This question has been answered by a number of "extreme weirding" (Sweeney 2016) events over the last decade. Indeed, as *New York Times* columnist Manjoo (2020) has noted, "the world has become unmoored, crazier, somehow messier. The black swans are circling; chaos monkeys have been unleashed." But if there was still any doubt about the arrival of postnormal times, COVID-19 has resolved them (Serra et al. 2020).

Postnormal times is an in-between, transitory period but how long the transition will last is anyone's guess. The transition is from what we have thought of, and may still think of, as normal, what we may contemplate as the "new normal," the multitudes of new normals that may emerge in the future, toward a radically different world. As such, all the normals and new normals will be integral parts of the extensive age of postnormal times. COVID-19 has clearly moved the planet toward the edge of chaos, but it has not actually brought us to the tipping point. There will be other postnormal events in the future, each nudging the globe closer and closer to the edge of chaos. Right at the very edge of chaos, the tipping point itself, there are only two options: collapse or a new order.

While postnormal times are a product of our complex, interconnected world, with instantly and constantly generating feedback loops, complex societies themselves are not particularly unusual. As anthropologist Stephen Lansing and geneticist Murray Cox show in *Islands of Order*, emergent complexity is evident in even historic societies presumed to be "simple." They look at the historic societies of

the Malay archipelago and the wider Pacific; examine language, kinship, large-scale population movement, genetic makeup, cultural change, and racial topology; and the impact of colonialism and show that the complex patterns of these societies are not random; rather, order and chaos emerge out of non-linear dynamics or complexity. In a non-linear, complex situation, states of stable equilibrium—such as persistent language communities—"appear as Islands of order in a sea of change" (Lansing and Cox 2019). Out of equilibrium, social dynamics, often produced by contradictions within societies, lead to chaos and collapse. Collapse can occur for many reasons from resource depletion and environmental change but, as Tainter (1988) demonstrates in his monumental study, *The Collapse of Complex Societies*, complexity is a "continuous variable." Both a sharp increase as well as a sudden decline (as we witnessed with the global COVID-19 lockdown) in complexity can lead to collapse. Complexity makes it more and more difficult for organization to function adequately. Eventually, complex societies reach a point of "declining marginal returns" when things begin to fall apart, leading to collapse.

To some extent, it does look like we are following the footsteps of the Mayans, the Aztecs, the Chacoans, and the Roman Empire. As Patrick Wyman suggests in an article in *Mother Jones*, we are witnessing the fall of an empire: "the end of a polity, a socioeconomic order, a dominant culture, or the intertwined whole (Wyman 2020)." The "empire" in question is Western civilization, which requires limitless resources in a finite earth to keep itself afloat. But in *This Civilization is Finished*, philosopher Rupert Read and sustainability expert Samuel Alexander argue the global capitalist system, the foundation of this civilization, "will come to an end, destroyed by its own ecological contradictions" (Read and Alexander 2019). In *The Precipice*, moral philosopher Ord (2020) marshals strong evidence in support of a string of existential threats: climate change, environmental damage, nuclear weapons, pandemics, "unaligned artificial intelligence," nanotechnologies,

and dystopian scenarios which can have self-fulfilling affect or even be desired by certain groups of people. The "Declaration of Rebellion" by the global non-violent environment movement, Extinction Rebellion (2019), declares that humanity is facing "our darkest hour": "humanity finds itself embroiled in an event"—sixth mass extinction, also known as Holocene—"unprecedented in its history, one which, unless immediately addressed, will catapult us further into the destruction of all we hold dear." In the Extinction Rebellion handbook, environmentalist Jem Bendell suggests:

> we should be preparing for social collapse. By that I mean an uneven ending of our normal modes of sustenance, security, pleasure, identity, meaning and hope. It is very difficult to predict when a collapse will occur, especially given the complexity of our agricultural and economic systems. My guess is that, within ten years from now, a social collapse of some form will have occurred in the majority of countries around the world (Bendell 2019).

However, as futurist Jim Dator has repeatedly pointed out, we should not see all collapses as negative. Indeed, some types of collapses are essential for a major transformation to occur: for example, the collapse of capitalism, which Dator (2009) argues may be welcomed by those who desire an end to the "economic rat race," the laborers and wage earners who struggle daily to put food on the table. The collapse of destructive dominant paradigms may be necessary for new ones to emerge. Moreover, the postnormal condition has also brought certain societies to the threshold of collapse. The United States is unraveling fast, may descend into civil war (Raymond 2019), or move toward fascism (Churchwell 2020), and could collapse suddenly (Acemoglu 2020). The European Union too could be heading toward collapse (Kearns 2019). We have witnessed the collapse of Syria due to civil war, the economic collapse of Greece as a result of the 2008 financial crisis, the collapse of the Rohingya through genocide, and the Maldives due to sea level rises. Many

indigenous cultures and non-Western societies have experienced collapse during the last century. Digital media expert, Abigail De Kosnik, points out:

> I am from the Philippines, a twice colonised archipelago, and I grasp very well that when a foreign people have arrived on your shores, taken over your lands and waters, banned your language, changed your names, killed and injured millions, forced you to convert to their religion, seized control of your economic, political and cultural systems, labelled you subhuman, and imposed colonialism and other forms of racial/ethnic and national hierarchies, your society has known Collapse (De Kosnik 2020)

It would thus be hardly surprising if most of the non-West felt a sense of relief with the collapse of Western civilization. Actually, that date may not be too far, as recent work at MIT, based on the World One computer model originally devised by Jay Forrester for the 1972 *Limits to Growth* study, predicts the "end of civilization" around 2040 (Durden 2018).

There is, however, a key difference between collapse of historic empires and civilization and collapse that may greet us at the finale of postnormal times. Earlier collapses were societal, local, regional, and civilizational in nature. There may be similar collapses, in degrees or stages, in the future. Societies, economies, cultures, paradigms, and worldviews may collapse. But a universal Collapse—as De Kosnik (2020) points out, "will not be confined to either Global North or Global South; it would be global Collapse." It thus presents an existential threat to both—humanity and the planet. When Western civilization goes down, it will also take the rest of people and the planet with it!

Transnormal

The challenge of postnormal times is to navigate from our current unstable state to another more structurally stable state without reaching the tipping point where overall Collapse of apocalyptic proportion causing immense misery and suffering becomes inevitable. This is a process of systematic movement leading to transposition: acts of changing relationships, structures, and values that interactively and collectively relocate humanity to a trans, or stable, state or realm of existence. *Trans* confirms the meaning of "going beyond" the current positions in all fields of human behavior, thought, and endeavors to reach a state of dynamic equilibrium. To go beyond—rise above, cut across, leave behind, and surpass—is also to prudently navigate our way to the other side of postnormal times. The world beyond postnormal times will be a radically different world; not so much a world of "new normal" but a transnormal world. We do not know what it will look like, but we do know what we need to transcend to get there!

The transnormal has two dimensions: the logical imperatives needed to avoid the real possibility of collapse and the visionary element that involves the collective and collaborative visions of most, if not all of us, of viable, thriving futures of humanity on an ecologically healthy Earth. Here, I am concerned with the logical imperatives to avoid collapse and lay the foundations for wholesome and inclusive social and cultural notions which could form the basis of futures' visions.

What exactly do we need to transcend? There is no lack of candidates in postnormal times. But let us begin with the black elephant that all, other than the most myopic, can see: planetary boundaries, of which climate change is only one limit. As Goodell (2020) points out in *Rolling Stone* magazine, "climate change isn't an 'event' or an 'issue'. It's an era, and it is just beginning." The era began when we started to violate planetary boundaries. According to the Stockholm Resilience Centre, there are nine planetary boundaries which regulate the stability and resilience of the Earth system and bind us to a circumference within which we can survive and thrive: climate change, change in biosphere integrity (biodiversity loss and species extinction), stratospheric ozone depletion, ocean acidification, biogeochemical flows (phosphorus and nitrogen cycles), land-system change (e.g., deforestation), freshwater use,

atmospheric aerosol loading (microscopic particles in the atmosphere that affect climate and living organisms), and the introduction of novel entities (e.g., organic pollutants, radioactive materials, nanomaterials, and microplastics). Four of these boundaries have already been crossed: climate change, loss of biosphere integrity, land-system change, and altered biogeochemical cycles, presenting a serious risk to the entire Earth system and the survival of humanity (stockholmresilience.org 2015). To transcend climate change is to return to the planetary boundaries—a journey that requires profound changes in all spheres of life—a logical necessity to avoid further turmoil, even collapse, and ensure sustainable survival of all life.

Climate change, and associated environmental problems, is a consequence of how we perceive and treat nature. The notion that nature has to be dominated, indeed tortured to yield its secret, that emerged from Western thought has now become a universal philosophy. The emergence of COVID-19 has been described as a "message from nature" by many environmentalists. However, the realization that our attitudes to nature are producing an unsustainable world is not new. In its modern form, it can be traced back to the famous 1967 article, "The Historical Roots of Our Ecological Crisis" by Lynn White. "What we do about ecology depends on our ideas of the man-nature relationship," wrote White. "More science and more technology are not going to get us out of the present ecologic crisis" (White 1967). White suggested a return to the metaphysics of Saint Francis of Assisi. A year later, in his 1968 book, *The Encounter of Man and Nature*, Nasr (1968) argued that "there is everywhere the desire to conquer nature, but in the process the value of the conquer himself, who is man, is destroyed and his very existence threatened." Nasr suggested a return to non-Western metaphysics of Islamic, Hindu, and Chinese traditions. Whether we opt for White's recommendation or the Nasr option is beside the point; what is important is the realization that metaphysics is "the essential ingredient that's gone missing" (Tudge 2020) from our

attitude to nature. So, transnormal is also trans domination of nature and requires us to re-integrate metaphysics into our approach to nature.

The unbridled exploitation of nature is a consequence of neoliberal capitalism, a system based on cruelty, competition, and contradictions, promoting extreme inequality. Capitalism monetizes everything: human actions, desires, indeed human beings themselves as well as flora and fauna, and the environment to extract maximum value and profit (Collier 2018; Mason 2015; Wilmott and Orrell 2017). It is a system based on the logic of perpetual growth and continuous linear "progress" leading to rampant deforestation, devastating industrial agriculture, caustic-intensive farming, and corrosive infrastructure developments. As Abbey (1991) has said: "growth for the sake of growth is the ideology of the cancer cell." But it is also not a question of low growth or even zero growth; planetary boundaries now demand degrowth (D'Alisa, Demaria, and Kallis 2015). Progress based on everlasting growth, which has brought us to the precipice, has to be abolished and replaced with homeostatic progress, a dynamic state of balance between human activities and ecological imperatives. Transnormal then is also trans capitalism, trans inequality, trans growth, and trans progress.

The notions of progress, growth, efficiency as well as contemporary economic thought and framework are products of current modes of knowledge production. Contemporary knowledge structures with their associated disciplines are embedded in Western narratives and privilege and give unwarranted acclaim, dominance, and extension to Western culture and its products, at the expense of knowledge systems, ways of thinking, and cultural outputs of non-Western people (Harding 1993; Lal 2002). However, knowledge production is changing rapidly. As I have written elsewhere, knowledge production has now become complex and incorporates knowledge based on Big Data, dubious and opaque mathematical models, racialized artificial intelligence, weaponized disciplines, and what is described as "forbidden

knowledge" (such as genetic engineering and synthetic biology). It has thus acquired a strong toxic component—"the smog of ignorance" (Sardar 2020) which cannot be isolated or quarantined through existing disciplinary structures. Knowledge production then has to embrace social construction of ignorance as one of its central theme; the role of ignorance as a methodology, as a tool for valuing and managing the unknown in science, technology, and medicine; the use of ignorance as power and as an instrument of oppression; ignorance as economic theory, risk management, and security studies (Gross and McGoey 2015) as well as strategic ignorance and the role of ignorance in foresight (McGoey 2014, 2016)— all play a major role in the production of knowledge. We need to rethink what exactly is science and how it should function in "the Anthropocene" (Nowotny et al. 2002; Renn 2020). Trans normal therefore implies trans disciplinary structures; a clear movement toward multi-, inter-, and trans disciplinarity; serious engagement with all varieties of ignorances; and generating new, more diverse and open discourses of knowledge. Trans-normal also requires us to embrace what is uncommon or infrequent, what is unconventional and extraordinary, and come to terms with uncertainty. In a transnormal world, knowledge, ignorance, and uncertainty will be deeply integrated.

Toxic knowledge is also a by-product of technological determinism, the view that technology and innovation must proceed whatever the moral consequence to become the primary drivers of economic, social, cultural, and political change. This dogma turns technology into an ideology. As Weyl and Lanier (2020) categorically state in the technophile *Wired* magazine, "AI is an ideology, Not a technology," at its core is the "perilous belief that fails to recognize the agency of humans." Similarly the promotion of synthetic biology, genetic engineering, and killer robots are based on instrumental rationality—the pursuit of ideological goals by any means necessary without moral qualms. "Because our technological creations are challenging historical limits through climate change, artificial intelligence and synthetic biology," says the Chinese philosopher Hui (2020), "it is critical to re-examine the diversity of cosmotechnics, or how technology is infused with a worldview." To go trans from instrumental rationality and technological determinism is to explore "how non-European thought and corollary ways of being can affect the development of technology."

This brings us to the worldviews that have to be transcended to realize the transnormal: modernity and postmodernism. Modernity can be traced back to the Enlightenment, while postmodernism emerged in the 1970s. Both worldviews have shaped the world and brought us to postnormal times. As Giddens (1990) has shown in his classic work, *The Consequences of Modernity*, the social order of modernity is capitalistic in both its economic system and its other institutions. Modernity "ensures that political, military, and ideological power come together in hitherto unimaginably concentrated form" (Sardar 1992). Postmodernism, with its emphasis on absolute relativism and the collapse of the grand narrative, has led to the fragmentation of the world, increasing strife and discord, and ushered in the post-truth regimes. It has served as a hand-maiden to neoliberalism and the "death cult," as John Oliver describes it, of free market and has arrived at a globalized levelling of differences which threatens the extinction of culture altogether in what Appingnanesi (2019) has described as "terminal post-culture." Both modernity and postmodernism are failed projects that have brought us to the postnormal condition. They function, to use the words of Beck (2001), as "Zombie categories," which govern and direct our thinking, ushering us toward self-destructive outcomes.

The Indian intellectual and cultural theorist, Nandy (1987), described modernity as a secular theory of salvation. Postmodernism attempted to replace modernity by constructing secular liberalism as a new theory of absolution. Both theories trap us in a manufactured normalcy field: a product of our perception of what is and what is not normal. The postnormal

condition, as Mayo (2020) notes, "is a cultural crisis owed to humanities inability to move beyond a manufactured normalcy that perpetuates a familiar sense of present." Our desire for stability and certainty, "to deemphasize change, and make all things normal, fundamentally expedites a sense of crisis," which itself "nurtures ignorance and fosters uncertainty; the distinguishing characteristics of the postnormal condition." Thus, the demand for a return to normal, or even an acceptance of a modified new normal, is a yearning for the safe bosom of the manufactured normalcy field.

To locate ourselves in a transnormal domain, we need to break the chains of the manufactured normalcy field and move beyond modernity and postmodernism (Sardar and Sweeney 2016). This demands the creating of a radically novel cultural space that synthesizes the best of tradition, modernity, and tradition; does not privilege any cultural standpoint or orthodoxy; and creates a radically transformed social and cultural dynamics. Transmodernity provides us with such a framework.

Transmodernity and Mutually Assured Diversity

Transmodernity is based on the assumption that cultures do not, and have never, existed in isolation. All cultures interact, and all future actions are located in the interactions of cultures (Sardar 2006a, 2006b, 2012). It is a concept designed to address the positive element of self-renewal and self-reorganization in diverse world cultures. It proposes to encourage change transculturally, and it is decentered in its scrutiny of trans cultures and characterized by a sense of mobility. Transmodernity aims to produce a *trans* discourse of knowledge which gives equal importance to knowledge systems of non-Western civilizations and cultures, including indigenous cultures, tacit and intuitive methods, and promotes the realization that in a diverse and dynamic world, there are many ways to be human. It looks at cultural diversity "on the move."

Transmodernity offers the potential of new ways of looking at culture and shaping the world that goes beyond all our conceptions and perceptions of normal and pilots us in the direction of the transnormal domain. More specifically, the *trans* dimension of transmodernity stand for:

1. The continuous and constant transformation of all cultures;
2. The ceaseless transmission of cultures between cultures;
3. The incessant and perpetual transitions within cultures;
4. The valid transitive relations within particular cultures;
5. The constant to-and-fro translation of cultures between cultures;
6. The regular translocation of cultures in geographical space in a globalized world;
7. The transparency of power relations between and within cultures;
8. The transference of cultural desires to new cultural goals;
9. Trans disciplinary modes of study and inquiry and understanding cultures; and
10. Transcendence of the given future of modernity and colonized futures of postmodernism into a plethora of viable and desirable, autonomous and interconnected, transmodern futures.

Finally, there is one more relational notion that needs to be transcended: alterity. In its conventional, philosophical, and anthropological sense, alterity refers to "otherness"; something other than "sameness," outside the dominant worldview, its conventions and principles, external from the given notion of "the normal" and "the new normal." We are concerned with the fear of the Other, whether the Other is perceived as other people or cultures; or other ways of being, knowing, or doing—other cosmologies. It is about such things as fear of migration and Islamophobia, fear of different ways of life, as well as representations of the Other, and the fear of the

sacred and nature itself. What we end up talking about is the fear of diversity in all its multiple forms.

Both our survival as human communities and cultures and the survival of our planet depends on diversity—the difference that makes the difference between survival and oblivion. Diversity is more than acceptance and respect of other cultures or simply recognizing that each individual, culture, and community is unique. It is also appreciating the simple fact that our own happiness and enrichment depends on the happiness and enrichment of others. We are not just different; but our difference depends on and is connected to all other different cultures and communities. If one different culture becomes extinct, all humanity suffers. That's where the notion of mutually assured diversity (MAD) enters the equation (Sardar 2006a). MAD is based on the assumption that there is no such thing as a distinct culture: all cultures are always diverse and always complex, never static but always adoptive and changing, particularly in a globalized context. Moreover, internally, individual cultures or subcultures are heterogeneous and speak with multiple voices; externally, they do not engage in a dialogue but a polylogue, where different voices are talking simultaneously to each other and Others. Thus, cultural relations are all about maintaining the external and internal diversity of cultures and ensuring that all the different voices can be heard. The notion of mutuality and respect are essential for polylogue and creating spaces for the articulation of different voices and for them to be heard.

But "mutually" in MAD is about more than mutual respect. It is explicitly a definition of what we are being mutual about. And what is mutual is that the human condition is a cultural condition and that culture is an essential relational attribute, an enabling feature of knowing, being, and doing. It is the acceptance that all cultures are equally important, that culture is the source of identity for everyone, and that identity provides a hand and eye to manipulate the kaleidoscope of diversity, both within culture and between cultures. It is the acceptance that for all people everywhere, identity is

not formed in a vacuum but within a cultural realm that comes with values, history, traditions, contradictions, and perennial questions. Mutually assured diversity is the universal acceptance of an obvious fact that there is more than one way to be human; it requires rejecting the notion that there is only one way, the right way; and recognizing the multiple ways the world's people have of seeking meaning, of comprehending values, and means of delivering values in daily life. What needs to be grasped is that all societies, cultures, and civilizations have undergone change and are in a process of negotiating change. What is significant is what kind of change they accept, find problematic, reject, or have mixed feelings about and have alternate responses to, and for what reasons. It is the transmission of identity across change that is the cultural reflex par excellence because identity is the attribute of belonging that grows from knowing oneself so that one has the ability to know others and learn about other cultures.

What are we giving assurance about? The assurance is the universal acceptance of the continuity of cultural identity for everyone on the planet as a negotiated, adaptive, and meaningful space. It is the acknowledgment that for difference to exist as difference, it needs cultural space to be different. It is the proposition that all cultures have the right to know themselves, to understand and interact with their cultural self, and to do this within their own cultural space. In other words, all cultures have a right to enhance their cultural power and to represent their cultures with their own concepts and categories.

Mutually assured diversity is not focused on a single arena or issue. It is a holistic concept, and, as such, to be meaningful, it must operate across a whole range of cultural, social, political, and discursive fields. There are 12 varieties of mutually assured diversities to be considered:

1. Mutually assured definitions: The greatest power we have is the power to define. If we define other people out of existence, then there is no point

to mutually assured diversity! Other cultures have the right to use the categories and concepts of their own worldview to define what are freedoms, what are rights and responsibilities, what is important and what is not, and what they consider to be immutable. Everyone must be allowed to live by the worldview which seems true to them. This is not about absolute relativism of the postmodern variety but about different ways of being human.

2. Mutually assured dissent: To make difference possible, to ensure the right to critical engagement, and to agree to disagree.

3. Mutually assured discourse: Each culture has its own way of knowing, being, and doing. We therefore need to appreciate other forms of knowledge and allow the discourses of other cultures to come to the fore.

4. Mutually assured demarcations: To ensure that difference can exist as difference and boundaries are negotiated. Not just that we do not know how to demarcate, but it is a particularly difficult thing to do in a globalized world. This is something we have to learn.

5. Mutually assured democracy: Which does not marginalize the minorities or leads to their displacement from power. We need to conceive genuinely participatory democracy which has priority over the orthodox and self-replicating mechanics of politics.

6. Mutually assured degrowth: Which is essential to ensure sustainable futures for all cultures, future generations, and the ecological survival of the Earth—the terrestrial abode of humans as well as flora and fauna.

7. Mutually assured dematerialization: Reduction of growth depends on drastic reduction in the sheer quantity of resources and materials used to serve the production and consumption needs of our wasteful society; it is not just a question of reducing carbon emissions but also a dramatic change in our consumer-oriented profligate lifestyles.

8. Mutually assured defense: It is not just our security that matters. The security of others is equally important. We cannot invade other countries simply to ensure our security. By putting others in danger, we also put ourselves in danger.

9. Mutually assured dependence: Which is a prerequisite for an interdependent, interconnected, and complex world.

10. Mutually assured desires: Our desires should not undermine the desires of others. If we consume most of the resources of the planet, we deny others their right to adequate and viable consumption.

11. Mutually assured dignity: Beyond human rights, we must also ensure that the dignity of other individuals, cultures, and communities are maintained—so that our own dignity is ensured.

12. Mutually assured destinies: It is not just our future but the futures of all cultures and communities are equally important. The future belongs to every culture and community on the planet, and every culture and community has the right to determine its own future.

The verities of mutually assured diversities are a connected ensemble. Each enhances the others across a range of human endeavors; collectively, they move us past what Slaughter (2020) calls "the trap our species has created for itself" and the "mosaic-like but almost singular macro-future" that we are hurling toward.

In the final analysis, transmodernity and MAD are all about power. They seek to undermine the sources, means, and relations of dominance, control, and subordination, as they are enacted in political, social, and cultural processes, and structures and methods of knowing, doing, and being, between cultures

and within cultures. The aim is nothing less than transforming the world, moving it to a new level, where mutual diversity and cultural equality are the norms.

Toward Transnormal

The transformations needed to move forward toward a transnormal world are truly profound. They require abandonment of a great deal of what we have hitherto taken for granted, natural, and normal. Moreover, we feel helpless at the pace of accelerating change, increasing uncertainty and complexity, astounding contradictions, and cumulative chaos. Think how the COVID-19 global pandemic stopped the world in its tracks, isolated us from each other, and made us feel exceedingly vulnerable. Future postnormal events could be even more devastating and thus further enhance our feelings of powerlessness.

But agency has not been lost. Rather, both as individuals and communities, we now have more agency than ever before. Initial conditions and small perturbations are very important in our world of chaos. The action of an individual, or an apparently insignificant event, can have the "butterfly effect"—triggering a chain of reaction that could lead to new developments or even a new order. Think of the Arab Spring, the rapid globalization of the MeToo movement triggered by Harvey Weinstein accusations, and the swift evolution of Black Lives Matter after the murder of George Floyd. Recognizing the legal rights to flora and fauna as living entities, as granted to the Whanganui River in New Zealand (Roy 2017) or to all rivers in Bangladesh, is a small step that can trigger a chain reaction. What we think and do as individuals and communities is important; our actions can multiply in geometric proportions, leading to chaotic events with the potential to usher both positive and negative change. Postnormal time is a period of change: what happens next is up to us. We can use the period of change to elicit the change we want. We need to realize that in these transformative times, "everyone can lead" and that "everybody contributes to,

and in fact cocreates, the world we live in, whether conscious of their agency or not." The transnormal world will be created through what Montuori and Donnelly (2017) call "transformative leadership" which "invites everybody to ask what kind of a world they are creating through their thoughts, beliefs, actions, and interactions"—to think creatively and imaginatively about their "being, relating, knowing, and doing."

What distinguishes us from all other species on the planet is our ability to understand that futures exist, our inclination to study and explore alternative futures, and our willingness to shape viable, sustainable, and ethical futures (van Creveld 2020). Postnormal times force us to take our futures seriously. To use all the agency we have wisely and steer our communities and societies toward the transnormal. Historic societies used stars to navigate. Then, maps were provided as additional tools. Nowadays, we rely on GPS (although there are many other technology-based ways of navigating). Navigating postnormal times requires us to use the metaphorical equivalent of all three. Metaphysics and other cosmologies are our guiding stars. Transmodernity and mutually assured diversity provide us with a map of the terrain we need to navigate. Our moral conscience, creativity, and imagination, and our abilities to perceive and shape better futures are our GPS. Collectively, they can guide us toward the transnormal—our destination out of the postnormal times.

In his online 2020 Easter Sermon, Justin Welby, the Archbishop of Canterbury, reflected on what should happen after the COVID-19 pandemic has been brought under control around the world. "After so much suffering," he said, "so much heroism" and "so much effort," "we cannot go back to what was before as if all is normal. There needs to be a resurrection of our common life, something that links to the old, but is different and more beautiful" (Wilby 2020). The transnormal is the first step toward that "more beautiful" world we all ought to be seeking; beyond that, its beauty depends on the magnificence of our collective

visions. The journey to transnormal requires both thoughtful future visions as well as serious future-oriented action.

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Ziauddin Sardar, futurist and public intellectual, is Consulting editor of Futures. He has published over fifty books, including *Rescuing All Our Futures* (1999), *Future: All That Matters* (2013) and *The Postnormal Times Reader* (2017).

The Perfect Postnormal Storm: COVID-19 Chronicles (2020 Edition)

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Abstract

This essay addresses the COVID-19 pandemic as a case study in postnormal times phenomena: a perfect postnormal storm. The essay introduces basic concepts of postnormal analysis and provides examples of the acceleration of speed, scope, scale, and simultaneity of change in a number of human and natural systems and gives examples of the accelerating complexity, chaos, and contradictions that characterize phenomenon and systems as they become more postnormal. The related concepts of the layers of ignorance and uncertainty are explored related to the movement of phenomenon toward postnormal states. The importance of the idea of manufactured normalcy fields and resistance to or accommodation of postnormal burst, such as lag and tilt, can help to better understand the postnormal landscape. For example, the pros and cons of returning to "normal" raise fundamental questions about the logic and wisdom of the dominant growth and economic paradigm.

Introduction

Ziauddin Sardar welcomed us to postnormal times a decade ago in a germinal 2010 article that proposed a new theoretical approach to provide a better understanding of how change is unfolding in the 21st century. Sardar's initial description of postnormal times theory generated substantial interest within the futures studies field (Gary 2010; Markley 2011, 2012; Montuori 2010; Ringland 2010) and criticism (Cairns 2017; Cole 2010; Cubbit, Hassan, and Volkmer 2010; Gidley 2010; Kapoor 2010). Sardar (2015) responded to criticisms and, further, presented a timeline of how various civilizational artifacts such as meaning, truth, knowledge, world order, and governance have been transformed over time from the classic period to modern, postmodern, and then to contemporary postnormal times. Sardar and Sweeney (2017) further developed the concepts, exploring the temporal topography and possibilities of change over time. A *Postnormal Times Reader* emerged in 2017 with 20 new and reprinted articles that added to the postnormal times body of analysis and

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knowledge. Postnormal times analysis has been further explored by futurists and others across a range of subjects and disciplines: agriculture (Coventry 2015); art and design (Van Leemput 2018); conservation biology (Colloff et al. 2017); creativity (Montuori 2010); education (Çepni 2017); epistemology (Mayo 2020); evaluation (Schwandt 2019); futures studies practice (Fuller 2017); global change/weirding (Jones 2019; Sweeney 2017); intelligence services (Serra and Sardar 2017); Islam (Muzykina 2018); science education (Gilbert 2016); and sociology (Bussey 2018). Over the past few years, the number of events, issues, and cases that support postnormal times theory have grown rapidly. We argued in a 2020 blog series[1] that the current COVID-19 pandemic and ripple effects are a perfect example of emergent postnormal times phenomena.

What Happened to "Normal?"

Sardar (2010) characterized postnormal times as "an in-between period where old orthodoxies are dying, new ones have yet to be born, and very few things seem to make sense" (436). Bauman and Mauro (2016) put it this way: "We are hanging between the 'no longer' and the 'not yet' and thus we are necessarily unstable" (20). We are thus living in "a transitional age, a time without the confidence that we can return to any past we have known and with no confidence in any path to a desirable, attainable, or sustainable future." A common and persistent meme of the pandemic in the mass media, press, and social media is "when will we get back to normal?" Everything has been disrupted by the pandemic, but is a return to normal even possible or desirable?

It seems clear to us that the accelerating rate of change in contemporary times has had something to do with it, as has our ability as individuals to communicate with millions of people at the speed of light due to the spread social media. We live in a globalized world that is interconnected and interdependent in numerous ways. News and information, as well conspiracy theories and misinformation, spread at astonishing rate; we are primed to act and

interact in an instant. All these actions, interactions, and interconnections at every level, from local to global, at nearly every moment of our lives, constantly and perpetually, generate a change that is outside of previous human experience: postnormal change. A convenient way to think about it is to consider the four letters S of change: the speed, scope, scale, and simultaneity of change (4Ss). The overall acceleration of change is a direct product of combined force of the *speed* with which change occurs; the global *scope* of this change; the fact that this change can *scale* down to individual levels and scale up; and that these aspects of change occur with increasing *simultaneity*. The 4Ss define the dynamics that generate postnormal change. The postnormal times conditions are both part and parcel to the emergent COVID-19 pandemic.

Postnormal change does not intrinsically produce postnormal phenomena, but in an interconnected, globalized world, with a multiplicity of scales, accelerating speed, scope, and simultaneously interacting elements with nonlinear feedback loops, the consequences manifest in complexity, chaos, and contradictions (the 3Cs). *Contradictions* come to the fore and enhance the *complexity* of social, technological, and economic systems. These systems are wholes far greater than the sum of their parts; they exhibit properties of emergence and cannot be analyzed in terms of their parts but only be understood in complete, unabridged form (think: hyperobjects, Morton 2013); and the myriad interacting components self-organize to produce new patterns and structures. Complexity and contradictions then generate positive feedback loops leading to *chaos*. It is when the complexity, contradictions, and chaos emerge together that postnormal phenomena become visible.

Together the 4Ss and the 3Cs constitute the basic pillars of the postnormal times theory and are complemented by two other aspects: rising levels of resulting *uncertainty* and *ignorance* (see: Sardar and Sweeney 2017), which vary in kind, but generally grow in tandem as postnormal phenomenon develop and mature. Over time, the extent of ignorance and uncertainty can expand or deepen dramatically. Over longer time frames and across greater scales of

change, ignorance, and uncertainty can accelerate. Postnormal phenomena generate and are deeply embedded in growing uncertainties, which in turn produce a variety of ignorance. We use the *three tomorrows* scenario planning and scenario building approach (addressed in other articles and essays in this issue), each of which has a particular type of ignorance and uncertainty, as described by Sardar and Sweeney. Three tomorrows are where futures studies meet postnormal times analysis in attempting to explain postnormality. We argue that to deal with uncertainties and gaps in our knowledge, and we need to expose our individual and cultural biases. We have to consider uncomfortable, unthought, and/or unimagined futures, to help re-examine our basic assumptions, ideas, values, narratives, and worldviews. We need to show humility: postnormal events and issues cannot be controlled or managed—they can only be navigated.

The COVID-19 pandemic is a postnormal phenomenon/hyperobject because it satisfies all of the postnormal criteria: complexity, contradictions, and chaos, and their handmaidens—the speed, scope, scale, and simultaneity of accelerating change.

Speed

The contagion spread incredibly fast. The first confirmed case was in 17 November 2019; 5 months later, there were 2.5 million confirmed cases and more than 167,000 deaths. At the time of this writing, global cases were reportedly 26.4 million, with 870,000 deaths.[2] Given the shortage of test kits, undercounting early in the pandemic, and data collection and reporting inconsistencies, the real figures are probably much higher. Similarly, the economic impacts were swift—US equity markets lost roughly 40% of their value between mid-February and late-March 2020; the technology-heavy Nasdaq market regained most of that value in 2 months. These were rapid and historic shifts. Lockdown policies had almost immediate consequences for employment: US unemployment numbers doubled from 3.3 million to 6.6 million in the third week of March.[3]

Misinformation and conspiracy theories also spread at the speed of light. Social media have played a central role in accelerating the speed of active responses to video records of police murders and brutality. Protests have occurred in the wake of the pandemic, both on the right and left, but most notable are the protests against police brutality in the United States and related anticolonialism protests, internationally.[4] The pandemic itself: it will be the fastest-growing global pandemic in human history. The ripple effects have moved equally fast.

Scale

Global 2020 infection maps graphically demonstrate the spread, first from Wuhan, through land transportation systems, then globally thanks to air travel systems through clusters of infection: parties, ski trips, and conferences. Currently, only a single African country and geographically isolated Pacific Island countries have no detected cases. It is just a matter of time until they too report local infections. Thanks to globalization and interconnections, it will be the most widespread global pandemic in human history. The only continent spared thus far is Antarctica. In the United States, mid-West states that largely avoided outbreaks in March are seeing surges in cases as we write this.

Scope

The combination of a comparatively high degree of infectiousness, undetected transmission by asymptomatic individuals, and our lack of knowledge about the virus made human confinement the best option to fight further spread. Some countries have been more successful than others, and intrastate and international travel continue to pose challenges to contain the coronavirus. The world's economy and global supply chains have been under great stress. After starting in China, COVID-19 triggered cascading effects. The scope is so vast and immediate that threats to industrial capitalism and liberal democracy are potentially far greater than the 2008 global recession. Tens of thousands of small businesses and restaurants

have closed in the United States,[5] and likely multitudes more, globally. Industrialized nations initially spent billions of US dollars/euros on unemployment and wage/unemployment subsidies. There are possibly serious downstream consequences for future generations burdened with the debt incurred. Or will debt simply be forgiven, in national and international jubilees? While it is impossible to predict the outcome, the scope of these disruptions will echo through the lives of young people today. Reconceptualizing, or reforming, the global market economy, is perhaps one of the main outcomes of this pandemic. It has had an impact on almost every individual, in every community across the planet; there is no telling what the mid- or long-term effects will be. The World Health Organization (WHO) projects that a widespread COVID-19 vaccination not likely to be available until the middle of 2021.[6]

Simultaneity

The pandemic has altered billions of lives. Initially, communities learned how to live indoors, and during the early 2020 lockdown, many cities looked like ghost towns. Wildlife crept back into urban spaces and nature had a short reprieve from human activities. Control of the coronavirus spread was effective in some places that led, in late spring, to cautious reopening. The rules were often ignored. There were notable successes, but simultaneous nonconformity—particularly risky behavior by adolescents and young adults—that caused outbreak clusters and resurgence into the summer of 2020. Meantime, global supply chains were disrupted and the shortcomings of production and distribution of personal protective equipment (PPE), much of it manufactured in China, raised questions about reliance on global distribution systems. Retail and manufacturing similarly suffered, and many businesses have restructured to use local resources and suppliers.[7] New wrinkles in our reliance on globalization were easier to see. A new set of economic relationships may be unfolding and beg the question: How much of our present arrangements will survive and

recover after COVID-19 runs its course, assuming we can achieve widespread vaccination? Will the direct short-term impacts on the economy and the rippling secondary and tertiary impacts, to which we are not currently paying attention, transform economic and technological systems? What will the longer-term consequences be of joblessness, isolation, masking, economic disruption, housing, generational (age cohort) impacts, education, travel, and transportation realignments? Telecommunications technology, the internet, and instantaneous communication provide greater awareness and ignorance about all of these things, at the same time.

Arguably the COVID-19 pandemic has all of the expected characteristics of postnormal change, but what made it a postnormal event? The 4Ss describe the changing nature of change itself, but Sardar's original study argued that postnormal times emerge as a result of the resulting and growing complexity, chaos, and contradictions within human systems—the 3Cs. More than being the driving forces or characteristics of postnormal times, they are also postnormal enablers—intrinsic factors that need to combine or overlap in order to trigger postnormal phenomena. Complexity, chaos, and contradictions have always been a factor of life, but they are converging and feeding each other now in human social and technological systems in ways that are unique, unpredictable, and increasingly nonlinear.

Complexity

Complexity is the property of a system that has multiple components that interact in many ways. Complex systems exhibit behavior based on the interaction of these components. Some properties that complex systems feature include: self-organization, nonlinearity, emergence, feedback cycles, and adaptation. Growing complexity will require a better "understanding of the dynamics of intertwined human and planetary systems" (Schultz 2016, 330). To grapple with the postnormal aspects of complexity, consider plurality of diverse elements in the COVID-19 system and their interconnections.

The pandemic was a result of several elements acting synchronously in response to the emerging coronavirus. First, a large Chinese diaspora spread across the world after 1850. Second, the timing of the emergence of the pathogen coincided with the Chinese lunar New Year. Third, continuous national and international travel and transportation systems. Those latter systems spread the virus at astonishing speeds. Fourth, the pandemic has had impacts across a whole range of sectors of the economy: from international finance to health services, employment, food production, and manufacturing. The pandemic has exacerbated system stress by restricting travel and freedom of movement upon which the systems originally depended. Business and public organizations have adapted, and there has been some cost savings for corporations, but the use of Zoom meetings and remote employment contribute complexities of their own.

Over Chinese New Year 2020 celebrations in January, millions of Chinese traveled from the far corners of the Earth to return home to celebrate with families, in what is among the largest annual population movements across the planet. Diffusion maps of the virus across China show how widespread and complex air, rail, and road transportation made viral transmission unavoidable. This tapestry of multiple interconnections made the spread of the virus inevitable, despite the apparently effective lockdown measures in Wuhan, and the surrounding region, because the virus was already loose in the world. The spread in the Americas was primarily via Europe and followed a similar diffusion pattern of clusters, super-spreader events often involving long-distance travel. The outbreaks in eldercare facilities obscured the fact the young people can be asymptomatic hosts.

Complexity, as a feature of modern life was a priori, a given, well before the pandemic. One of its emerging lessons may be that fragmented, self-governing political systems are poorly adapted to a planetary civilization. The liberal democratic concept of personal liberty may be incompatible with maintaining public health. To make matters worse, the global system is not even close to a system of governance, it is still a Wild West of nation-states not unified, but separated by territorial integrity, tenuous sovereignty, and a lingering attachment to the Peace of Westphalia. With roughly 200 separate countries, not to mention the thousands of cities, states, and territories in the mix, connectivity is sought even more desperately to respond to the scientific, economic, social, and political needs of the pandemic and the problems/challenges it will generate in our futures.

Another factor adding to global complexity is China's growing financial muscle and status as the world's second largest economy and growing military power. What will economic contraction mean for its Silk Road Initiative and infrastructure projects around the world? In any case, system complexity has been fueled by the success of the Chinese economy and the huge demographic shifts from rural villages to megacities. China has become an increasingly mobile society. Making things even more complex, China has become a critical player in the global supply chain. Before the pandemic, China produced more PPE than the rest of the world combined. Since February, China's output has increased five-fold and it dominates the PPE market.[8]

The concurrent New Year's celebration and mass travel increased system complexity. The complex mix of unitary, federal, and confederal states, the WHO, and leading experts often took (continue to take) disparate responses in restrictions of movement and epidemiology tracking. China is criticized for taking draconian steps, while South Korea is praised for taking a democratic but communitarian response. When we wrote our blog in May, Italy, Spain, and the United States seemed to respond "too little, too late" to avoid serious casualties. The United States is now the record holder for the highest caseload, over 11 million, and nearly 250,000 dead. The United States, Spain, Iran, and parts of Latin America remain hotspots at this writing.

Chaos

The second C in postnormal analysis is seen as the feature of dynamic nonlinear systems that

exhibit disproportionate inputs and outputs; the COVID-19 pandemic has shown chaotic behavior in many ways. Indeed, the fact that we know so little about the virus has not helped, but its high rate of infection (R0) and asymptomatic carriers have resulted in a wide range of responses leading to a large variance in results. Differences in geography, climate, and community infections have continued to make it hard to identify patterns. It is increasingly clear, however, that asymptomatic transmission by younger people is prevalent,[9] how the virus spreads, but the long-term consequences of the disease are troublesome. For example, long-term pulmonary and coronary complications affect many survivors[10] along with brain fog, circulation problems, and other side effects of the disease. It remains to be seen what the longer-term medical and healthcare needs will be for people, especially young people, who survive with deeper underlying damage to their bodies. The pandemic has been like an event where thousands of butterflies begin to fly simultaneously, without anyone noticing them, and they then unleash a series of hurricanes far too powerful to be mitigated.

Chaos was particularly evident in the first 2 months of the global pandemic, with the initial reluctance of China to accept the Wuhan outbreak, then immediate lockdown. The lack of science and knowledge led to mixed messages about mask effectiveness, and WHO officials did not always appear to agree with nation-state spokespersons. The intricacy (complexity and contradictions) of systems and messaging of surveillance and communication channels and media were revealed. The overlay of social media complicated matters more, with confusion about conspiracy theories, basic facts, and then presidential and prime ministerial fake news. The EU came to face the realities of decisive leadership on one hand, and the re-emergence of hard borders, on the other hand. Sovereign decision-making and reliance on supply chains hampered manufacture and distribution of basic protective gear, and leaders sent mixed messages to consumers about appropriate behavior. Vaccine production has also been compromised by short-term

capitalism and a lack of strategic, long-term responsibility for the possibility of pandemic. Ironically, contagion war gaming and role-playing has been widely used in academic and foreign policy settings, but apparently no one at the top paid attention or cared enough to respond in time. Response to the pandemic reflects the complexity of the global milieu. For example, in the United States, leaders at the local level, governors, and city mayors have been making the more aggressive and effective science-based policies to prevent the spread of the coronavirus (like in Italy, where some mayors have personally enforced the confinement). There has been widespread criticism of the US president for a lack of consistent and effectively leadership in responding to the crisis—his campaign continues to refer to the pandemic in the past tense,[11] despite the growing case numbers, appearing to hope that the whole thing will just go away!

Contradictions

The contradictions in the wake of this crisis are obvious. Efforts by politicians to downplay the crisis and avoid panic in many cases have made it worse. Long held values get in the way; the values of economic production, jobs, and continued growth contradict community health and physical well-being. The pandemic will illuminate, like no other, the direct relationship between androcentric values, particularly economic values, and the rest of the planet. Preliminary figures already demonstrate the improvement in the quality of air, water, and atmosphere due to the economic slowdown. COVID-19, some say, may be Mother Earth's rejoinder.[12]

The pandemic brings a host of other contradictions to the forefront. It has been driving a centrifugal globalization dynamic, but forcing a centripetal, inward spiral with travel restrictions, surge lockdowns, isolation, safe distancing, and masking. Some are even calling for economic deglobalization in a "waning hyper-globalization era."[13] The question is, while some countries seem to be doing well, so far, will they be able to make it through a global

recession or depression? Projections for a fall resurgence in the Northern hemisphere are dire, not only for the pandemic but for the growth of hunger and homelessness barring more economic stimulus and/or unemployment compensation (now at a standstill in the United States). A global food crisis is emerging.[14] Social distancing re-inforces the importance of close-community networks, yet it is also lethal for local retail as it lacks the structure to deliver, while Amazon and the like are making record profits.[15]

The pandemic may provide growth opportunity for some sharing economy firms (Globo, Uber, and Airbnb), on the other hand, the impact on gig economy workers is less clear. Unemployment may drive more individuals into the sharing and gig economies.[16] The new business models may suffer the consequences of riders and drivers getting sick, homeowners going bankrupt, and the vicissitudes of the general economic and employment crisis. The pandemic calls for effective and inspiring public and private leadership, leadership that has been sadly lacking (e.g. Greta Thunberg's scolding of world leaders on global warming[17]) and char-acterized by fructuous ideologues worldwide (with few dignified exceptions) that enable or encourage authoritarianism and the rise of strong men who go unchecked. The internet and telecommunications now make it possible for people to stay in touch with friends and family near and far, and for many professionals to carry on more-or-less "as usual." But it will also accelerate growth of cyber-infrastructure, the automation process, and will likely leave mil-lions unemployed. Perhaps the most poignant contradiction has been moral dilemma, the tension, between saving lives or saving jobs. Or even worse: killing people that do not respect confinement (a measure originally designed to keep them safe) as in the case of President Duterte of the Philippines who ordered lock-down violators be shot.[18] As shocking or worrying the emerging pandemic contradictions may seem to be, the main lesson is that the contradictions only increase the postnormal nature of the phenomenon. How are we going to cope, as individuals, communities, and societies as things become more and more postnormal?

The staff, fellows, researchers, and directors of our Center[19] are particularly concerned and disturbed about the likelihood that the COVID-19 will have its greatest impact on the most vulnerable and marginalized people on the planet; our primary concern is decolonizing futures (see Sardar 1999). In industrialized countries, it is clear that the elderly and mar-ginalized are expendable. There appears to be great media attention and public gratitude to "first responders" and yet we collectively and our leaders are allowing hundreds if not thousands of nurses and doctors and other healthcare workers succumb to this pandemic. The general public might not have been able to foresee COVID-19, but environmental scien-tists, epidemiologists, and other experts as well as futurists forecast the inevitability of zoonotic pandemics to follow in the wake of MERS, SARS, swine flu, and Ebola. However, now that the event has begun to unfold as a post-normal phenomenon (we may not even be halfway through the pandemic at this point in time), we need to learn to navigate it. Of course, the best way to navigate a storm is to be able to anticipate and find the course that can take us away from it, and this is why futures studies are important. How can we navigate this crisis? How much do we not know about current COVID-19 crisis? And how are going to deal with our ignorance?

Navigating the Pandemic

What is known about SARS-CoV-2? Re-searchers appear to know where it originated,[20] how it spread, and have a rough idea of its contagion levels. We know that the spread of the coronavirus has been matched by the spread of information—and misinformation—about the virus and the disease COVID-19 through social media networks, which have exacerbated levels of anxiety and clouded clarity in decision-making at every level. We know that governments have made decisions to lock down communities to enact social distancing to mitigate against viral spread, while the business sector suffered the loss of customers and workers, and many industrial and service

sectors have been damaged. Tourism and the travel industries have been hard-hit, as have retail trade, but impacts in other sectors others are minimal or mixed.[21] The global economy is in decline yet global equity markets have seen both volatile lows and recent highs that seem illogical in the face of economic uncertainty. Healthcare workers, across the globe, are now on the front line of the gravest existential threat to humanity in a century. Global warming and social inequity movements have been eclipsed by the global pandemic.

How can individuals and organizations better navigate the emergent global COVID-19 crisis? We suggest that it is essential to address these two questions: (1) How much do we not know about the COVID-19 pandemic and its consequences at this point in time? And depending on the answer to that question: (2) How are we going to act based on determining what we do not know but still need to find out?

Manufactured Normalcy Field

Cognitively, human minds excel at normalizing whatever happens. Our brains tend to reject contradictions and anomalies when we experience cognitive dissonance. It is an evolutionary biology advantage that allows individuals to adapt quickly to external change, but it becomes a hurdle when one needs to be open to a wide range of possibilities, particularly novel ones. Rao's (2012) notion of a cognitive *manufactured normalcy field* aligns with postnormal adaptation to the impact of normalcy in our thoughts and behaviors. The manufactured normalcy field is the ontological construct, a hyperobject, that reaffirms normalcy despite disruptive external change. The manufactured normalcy field is not intrinsically positive or negative, but an adaptive strategy that may need recalibration in the face of rapid change or the accumulation of uncertainty and ignorance in postnormal creep. The manufactured normalcy field tends to reinforce conventional linear thinking and induction as the best strategy to deal with the "normal." COVID-19 entails deeper layers of uncertainty that cannot be overcome with plain ignorance. The normalcy

of concerts, spring break, teen parties, bars, and large weddings in many societies is challenged by recommendations or mandates to wear masks, social distance, and the new norms of public health policy.

Postnormal Shifts—What the Shift?

Postnormal theory has argued that the greater the influence and convergence of complexity, chaos, and contradiction within a phenomenon, the greater the uncertainty. Yet, uncertainty is not unidimensional, simply by increasing in size, rather as the 3 Cs overlap each other, uncertainty grows in phase changes: *postnormal creep*. Postnormal creep is the specific process any event or phenomenon follows when developing its postnormal potential and has a material aspect (uncertainty) and a cognitive aspect (ignorance). The more postnormal creep progresses, the greater uncertainty becomes and depending on the degree of uncertainty, our individual ignorance becomes measurably deeper and/or wider. Once postnormal creep reaches a certain threshold, there can a *postnormal tilt*, a readjustment to the manufactured normalcy field, or a phase change: a *postnormal burst*. We argue that COVID-19 has features of all of those manufactured normalcy field adjustments and is multilayered with cross-sectoral, temporal (old and new characteristics), and cultural adjustments. The postnormal creep and adjustments are widespread in the emergence of SARS-CoV-2 and the resulting COVID-19 pandemic, which provides further proof that COVID-19 is a postnormal "perfect storm." Arguably, the global pandemic, considered as a hyperobject, has become a postnormal burst.

Depths of Uncertainty

Continuing to unravel the effects on the manufactured normalcy field, postnormal time theory describes layers of uncertainty from shallow to deep. Challenging this normalcy are the underlying driving forces of change in the 21st century, the tsunamis of change (see Dator 2009)

including demographics, economics, globalization, technology, and the environment/climate change. These tsunamis are the underlying dynamics accelerating global change. What propels any major force into postnormal space is the accelerating speed, scope, scale, and simultaneity of changes to those forces and the concomitant complexity, chaos, and contradictions that follow. The driving forces and postnormal dynamics demonstrate a consistent pattern of creep. How creep leads to burst is best understood through the interplay and combination of growing degrees of ignorance and uncertainty.

Uncertainty in postnormal theory and analysis is a measure of our capacity to realize what is going on, both quantitatively and qualitatively. Uncertainty also builds, following the trajectory of the postnormal creep. In the case of SARS-CoV-2, researchers knew very little at the beginning, but pundits and some political leaders seemed to assume it would be like any other coronavirus and did not express concern about it. At this point, leaders and individuals faced *surface uncertainty* and most people assumed that our accumulated knowledge would carry us through the outbreak. Public leaders could use what was learned in the flu pandemic of 1912, or perhaps the polio epidemic. Very soon though, the novel coronavirus was understood to be far more aggressive and more lethal than had been thought.

SARS-CoV-2 behaved in unfamiliar ways and it took time for researchers to uncover the mysteries and quirks of the coronavirus, as a pathogen: by then the progressive postnormal creep moved into deeper territory: *shallow uncertainty*. Some observers wondered if the pandemic and the resulting economic crisis might shake the very foundations of modern institutions or question collective assumptions about globalization, capitalism,[22] of institutions like the EU,[23] and the idea of materialistic growth itself.

As human societies plunge deeper into the pandemic, we may need to ponder if humanity will sink even further into a state of *deep uncertainty*. Because the pandemic has occurred in the midst of already emergent postnormal phenomenon, the creep contributes to the existing depth of uncertainty about accelerated global warming, growing wealth and equity imbalances, and a host of other hyperobjects and wicked problems that threaten civilization or human survival. Social justice movements (e.g. Black Lives Matter) and the growing power of women (e.g. #Me Too) have similar transformative potential and could be accelerated or dampened by the pandemic. Other uncertainties abound: discoveries about the ubiquity of microplastics in the environment and plastic pollution were serious before 2020, but the demands for PPE and safe food handling have resulted in a dramatic growth in plastic uses.[24] The consequences of this development and myriad others create ever greater uncertainty about the health of the planet and environment. Some of the concerns are existential (see Ord 2020). Assessing the kind of uncertainty humanity faces is just part of the equation: postnormal times theory posits that individuals and organizations should evaluate how that uncertainty is measured and processed and then plan how/work to compensate.

Ignorance

Also important are the depths of ignorance that result from growing uncertainty. In postnormal times theory, the layers and depth of uncertainty are mirrored by the depth of our individual and collective ignorance. Ignorance is not only what it is that we do not know but also what we ignore. It is the cognitive side of postnormal creep and it grows to/corresponds with each degree of uncertainty. Each level of uncertainty aligns naturally with a level of ignorance. The levels of ignorance are as follows: plain, vincible, and invincible ignorance. Take surface uncertainty: although future outcomes may be unclear, decision makers should have a fairly a good idea of the direction outcomes may take and what kind of impacts are likely. In a state of surface uncertainty, previous experience really does help us to anticipate what might come next. Research indicating widespread coronary damage, even in nonhospitalized COVID-19 survivors, should

lead us to expect to see greater incidence of heart problems and healthcare costs downstream. Researchers have learned from past pandemics and earlier crises and can gather relevant data, process useful information, and distill the knowledge to get society through the current crisis. This top level is *plain ignorance* and it is the cognitive approach humans are best at: mechanisms like linear thinking, dichotomy, induction, and specialization work beautifully here and give reassurance that knowledge can serve to reduce uncertainty. The pandemic cannot be really managed by business as usual or by "standard operating procedures." Many Western cities had no contingency plans for a pandemic simply because they had no memory of one. At the beginning of the pandemic, cities and provincial governments may have believed they suffered from surface uncertainty but in fact were in shallow uncertainty territory.

Growing uncertainty, shallow uncertainty, required recognition of the deeper state of ignorance: *vincible ignorance*. New Orleans Mayor LaToya Cantrell never considered canceling or curtailing Mardi Gras[25] in late February nor did US federal agencies raise concerns. The mayor knew how to respond to hurricane threats but not to COVID-19 spreading across the planet. Mardi Gras seeded Louisiana's first wave of COVID-19. Plain ignorance was overwhelmed by uncertainty, and the mayor was facing vincible ignorance. The state of vincible ignorance demanded that policy makers address what was unknown. In strategic decision-making, nothing should be taken for granted. Accepting the assumption that COVID-19 was like a mild flu likely cost tens of thousands of lives.[26] At the level of vincible ignorance, individuals and groups are forced to both acknowledge cognitive shortcomings and expand awareness by integrating all accessible and available knowledge. To respond to a pandemic, governmental responses cannot rely upon medicine alone but need to integrate epidemiology with health systems management, logistics, psychology, network management, and engineering. Response needs in the longer term may include resources or capabilities not even being considered currently. Because the lag in

determining longer-term needs is central characteristic of vincible ignorance, leaders and public health officials have to accept that they lack the perspective of sufficient time to properly address the current situation. This appears to be where we stand with COVID-19 at this writing.

As humanity leans deeper into the pandemic, it seems increasingly likely that many lifestyle changes will be permanent, as the SARS impact in many parts of Southeast Asia and the acceptance of mask wearing. Some changes could go far deeper as economic disruptions continue to worsen as hunger and famine grow. The deep uncertainty component of the COVID-19 phenomena will require us to engage in addressing the last kind of ignorance, *invincible ignorance*. Invincible ignorance requires that we turn to our own epistemological structures, paradigms, narratives, and worldviews and ask if they are hindering our comprehension of the situation. Invincible ignorance is a kind of ignorance that requires that individuals examine the foundations of their worldviews to consider whether they are hindering our ability to grasp the Big Picture—the scope of the crisis and its consequences. COVID-19 seems, again, to be a perfect example of a postnormal phenomenon. If globalization dynamics boosted the spread of the virus, can/should we collectively or individually (boycott Amazon?!) try to change the dynamics? If present supranational structures have failed, we need to collectively develop new ones; if national governments cannot cope, they must be reformed or replaced.

At this deepest level of ignorance, it is not what can be learned from the pandemic experience but what we have to unlearn to better respond to the next pandemic (or: pick your environmental catastrophe). If current capitalist logic compels us to choose between saving people or saving the economy, then perhaps it is time to take a hard look at the extent to which the old ways (the old "normal") were not sustainable or humane. As the imperfections of the system are laid bare, it may require our species to take a good hard look at our invincible ignorance deficits and not only imagine better futures but continue to work on

realize wiser futures (see Sardar 2017). This level of ignorance also suggests that we need to anticipate and engage with unthought futures to explore the unknown unknowns, to consider wildcards and even catastrophe. Resilience will require thinking "outside the box."

Returning to Normal?

As researchers, we argue for a multilayered analysis of the levels of uncertainty in and ignorance about postnormal phenomenon and to apply the right kind of ignorance depending on the phenomenon being explored or scenario being built (see: 3 Tomorrows, particularly, this issue). The challenge is identifying which level of uncertainty to address and then apply the right depth of ignorance for analysis. This is a demanding challenge. The postnormal literature has dedicated considerable attention to what constitutes "normal"; it seems increasingly clear that when trying to sharpen our individual and organizational anticipatory capabilities, "normal" can be a big liability. Normalcy resists the consideration, and the wider use, of alternative future approaches; it even restricts what is acceptable in the present. A point made in a number of blogs and posts in the spring peak in COVID-19: "We will not return to normal because normal was the problem.[27]"

Maintaining a business-as-usual approach, in the face of accelerating change, is *postnormal lag*, when individuals and organizations persist in applying old recipes to new situations, while pretending that they work in spite of mounting evidence to the contrary (think: climate change denial). COVID-19 has shown several examples of this: every time a government has declared that there was nothing to worry about; or when they said that their health system was more than ready to face SARS-CoV-2; when they declared that the measure that worked in one place "would not work in our country;" when they kept stating that the country had already reached the peak (for days and days); and when they promised that their measures will keep the economy ready to go as soon as the confinement is over. Lag is one of the more dangerous aspects of

the manufactured normalcy field, when individuals and organizations "bury their heads in the sand," when the accumulation of anomalies in the Kuhnian (1970) sense push the paradigm toward collapse.

The continuation of postnormal lag can potentially lead to burst, to collapse, or transformation—a phase change. But before that, there is another possibility, an intermediate postnormal phase change: *postnormal tilt*. Postnormal lag may result from failed corporate and government leadership—not entirely new—but it appears that some leaders really do believe that decisions they make and directions they give are best in the absence of scientific and public health evidence. Moving beyond plain ignorance to acknowledge even deeper deficits and challenges to our knowledge, postnormal science is required to expand the boundaries of what we do not know and to expand our epistemological universe. Culture and governance differences provide different outcomes. China's domestic COVID-19 strategy suggests that the postnormal lag can be beaten. Hong Kong, Taiwan, South Korea, Denmark, Germany, and Andorra took approaches to the early pandemic in effective ways, both in terms of public health and their economies. Either they had the capacity to see the real potential impact of the pandemic or realized that business-as-usual approach would not do.

The effect of a correction to the manufactured normalcy field is the postnormal tilt. It is modeled on the effect one feels when a modern bus stops at a curb and lowers hydraulically. The idea is that when the manufactured normalcy field can be altered in ways that we may actually experience the emerging postnormal nature of a rapidly developing event or issue. No matter how compelling or pervasive the manufactured normalcy field, humans do have the capacity to go beyond ontological and epistemological constructs and see phenomena for what they really are. (Or not: see the comments on object-oriented ontology and postnormal epistemology in this issue). The growing body count of the COVID-19 pandemic makes it painfully clear that adjusting

the manufactured normalcy field is a very difficult thing to do.

Postnormal creep processes come to an end. According to Sardar and Sweeney (2017), this is *postnormal burst*, "when the system goes totally postnormal and there is no place to hide" (5). We have argued that the postnormal creep is expanding and extending and that tilt may have normalized the manufactured normalcy field somewhat. For example, working remotely and homeschooling are increasingly seen as the new normal. Larger systems are still behaving within the expected parameters of corporate capitalism and nation-state power appears to be reasserting itself (see Sardar in this issue). Although lifestyles have clearly changed, some of them likely to be permanent, there are still places to hide from postnormal times. Some organizations, and presumably systems, are adapting and thriving: high technology and space development growth continue relatively unrestrained.

When it fully arrives, the postnormal burst should both signal the end of postnormal creep and force the manufactured normalcy field to reset as the accumulated uncertainty is resolved, one way or another. The things researchers do not presently know will be discovered and resolved: the true SARS-CoV-2 infectiousness, including its incidence and virulence; its lethality; the COVID-19 pandemic's total effect on the economy; and the actual impact of the pandemic on our lifestyles and our "normal," ordinary activity. All these questions, so uncertain now, will become facts that we will be able to gather, measure, and process with plain ignorance. Even the remaining peripheral unknowns will fall under surface uncertainty. Right now, a burst might seem to be a bad thing. But it may also mean that individuals and organizations will become fully conscious of the situation, with little or no lag in the face of the new evidence, and we will gain experience and capacity to respond to future coronaviruses or other zoonotic outbreaks. Ebola, Zika, MERS, and SARS are reminders this is unlikely to be either the last or worst zoonotic pandemic. We may need to learn relatively fast, collectively, institutionally, and individually to respond to the next outbreak.

Conclusion

The uncertainties, the ignorances, and the postnormal conditions driven by accelerating change have set the stage for unfolding postnormal phenomena. The COVID-19 pandemic has been a postnormal perfect storm because the pandemic has illustrated all of the key features and functions of postnormal times, and the creep and tilt that lead to eventual postnormal burst. The extent of socioeconomic and political changes in the future is addressed elsewhere (see: in this Special Issue) on three tomorrows of COVID-19. The pandemic has legitimized addressing taboo subjects and brought serious social justice and equity issues to the surface. The basic assumptions about liberal democracy, the rule of law, what constitutes truth and facts—all are under scrutiny.

For postnormal times analysis to have significance, the work will need to engage more fully and deeply with scenario building and planning, as we discuss in this issue with the three tomorrows approach. Organizations need to more fully engage in imagination, creativity, and envisioning preferred futures, such as the transmodern and now transnormal aspirations championed by Sardar in this special edition. We also need to more fully engage in the metaphysical and spiritual dimensions of postnormal times in order to come to grips with the meaning of these transformations (see Sardar this issue). The pandemic has caused great losses, to lives and livelihoods, and we need to come to terms with our grief and pain, to honor the people and activities we no longer have with us, but also celebrate the opportunity and gifts that have arrived unexpectedly.

Our intention here was to not only discuss the pandemic as a postnormal phenomenon but also to lay the groundwork for understanding the future monkeys of chaos, black swans, and elephants in the room, and proliferating jellyfish events that have been driving our social and technological systems to postnormal burst, prior to the current pandemic. Improving our

collective understanding of postnormal times and the forces at work will be required to survive and even thrive in postnormal times. The challenges we are likely to face due to global warming may make zoonotic pandemics feel like one of the least of our problems. That could not be illustrated more graphically than the massive forest fires in the US Pacific Northwest at this writing. Multiple catastrophes are a likely harbinger of the future. The drivers of postnormal change are inexorably compounding complexity, chaos, and contradictions, further accelerating our ignorance and the uncertainty of it all. However, we now have tools to better understand and challenge the assumptions of the old normal, navigate emerging postnormal times, and chart a course to a more resilient, equitable, and wise transnormal civilization.

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Postnormal Praxis Putting Postnormal Concepts to Work

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Abstract

This article provides an overview of how the authors have brought together the three tomorrows of postnormal times, as an approach to thinking about the future, and scenario planning, a widespread futures method, in a way that has garnered interesting and insightful outcomes. Here, we reflect on years of workshop facilitation with the Centre for Postnormal Policy and Futures Studies, amongst other places, where we have been working with communities and organisations to develop postnormal times theoretically.

Since the introduction of Sardar's (2010) neologism, *postnormal times*, futurists have both critiqued and considered its implications for futures studies. Jay Gary (2011), for instance, pondered "How should futurists evaluate Sardar's declaration of 'postnormal' times?" (p. 48). Gary was motivated to continue Sardar's instigation by applying postnormal times to Holling's model of adaptive cycles within panarchies in a microhistory framework. However, Gary's notion of postnormal-infused, macrohistorical cycles appears to be at odds with the notion that postnormal times are transitionary: 'an in-between period where old orthodoxies are dying, new ones have yet to be born, and very few things seem to make sense' (Sardar 2010, 2015). Yet, Gary's larger point was valid: what are we, as futurists, to do with Sardar's provocations? *Welcome to Postnormal Times* (Sardar 2010) proposed a new conceptual approach to better understand the specificity of change in the present. Chaos, complexity and contradiction, Sardar argued, may no longer be ignored, as the effectiveness of modern traditions proves increasingly ill-equipped to provide certainty though the speed, scope, scale and simultaneity of postnormal change. Later, Sardar and Sweeney (2016) presented the *Three Tomorrows of Postnormal Times* as a novel method to address the challenges presented by postnormal change. This work extended the postnormal analysis of the present even further into futures studies territory, reminding us that the future arrives in a non-linear fashion.

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Our offering here is to provide an overview of how the authors have brought together the three tomorrows of postnormal times (3Ts) as a new approach to thinking about the future and scenario planning – a widespread futures method – in a way that has garnered interesting and insightful outcomes. This work is grounded in years of workshop facilitation with the Centre for Postnormal Policy and Futures Studies (CPPFS), amongst other places, where we have been working with communities and organisations to develop postnormal times theoretically. In this article, we posit, as Mayo (2020) argued, that postnormal times theory is a theory of change 'that provides utility both as a diagnostic tool at the surface level and a conceptual framework to interrogate the fracturing worldviews experienced during significant change' (p. 61). The COVID-19 pandemic has been a perfect example of a postnormal phenomenon and moreover afforded us the opportunity to demonstrate some of our experimentations with postnormal times as a theory and the practical learnings we have garnered through this process. Here we will further explore approaches to scenario planning using the 3Ts approach. We expect that this may be a significant contribution to the exploration of future terrains in postnormal times.

3Ts as an Approach to Scenario Planning

Bussey argued that the scenario workshop is a safe space for experimentation (2017). In a similar vein, we argue, scenario workshops are akin to what Foucault calls *heterotopic spaces* (2016) and are thus spaces where participants may put their creative energy to explore the social, cultural and ecological processes that perpetuate our state of 'postnormal paralysis' (Bussey 2017, 91). Our workshops are approached as a process of what Stevenson (2002) refers to as 'anticipatory and collective learning', with an objective to create new and practical knowledge, where participants engage with a willingness to emerge as a slightly different person.

We commence the workshops by contextualising the contemporary epoch as postnormal. We posit that the complex hyper-interconnectedness of the systems through which the world operates means that the slightest incident in any geographical corner of the globe has the possibility of triggering a tectonic social, political, economic and environmental shift in any number of other places; if not universally. At this point in workshops we introduce the forces of postnormal times: complexity, chaos and contradiction (Sardar 2010), and the features of postnormal change: speed, scope, scale and simultaneity (Sardar and Sweeney 2016). With these, we propose that traditional approaches to planning for the future are increasingly ineffectual.

To demonstrate this, I point to an emergent litany of events that share the characteristic of being 'not normal': environmentally extreme weather events, BREXIT, the escalations of the Catalan independence movement, the Russian annexure of Crimea and the shift from the United States' unipolar global power (Sardar and Sweeney 2016; Serra 2014; Sweeney 2015). Yet, I argue, calling on my colleague Jordi Serra's observation that, the term 'post-normal' connects two pertinent notions: it indicates that what we are experiencing is not normal or (at least, what we expect as normal), and the term also signifies that what we are experiencing is not exactly abnormal. Serra adds (2014), 'we are transcending the usual meaning of normalcy and entering uncharted territory, the domain of postnormal' (p. 1). Further, in contextualising the workshop space, we call on the media of the day, inviting those in the room to explore, analyse and discuss the postnormality of current events. For example, at a workshop in Kuala Lumpur, Malaysia, in January 2020, news of the spread of a new SARS virus had begun to gain currency, and participants in the workshop were eager to share the news they had heard about the mysterious virus online through social media on their way to the workshop. Thus, the opening session/segment of the workshop is dedicated to discussion about the perceptual and visceral sense of uncertainty synonymous

with what Mayo (2020) elucidates as the 'postnormal condition'. Then, reflecting on futures studies as a discipline that enables us to rethink the future as a means to recreate the present, we moved to introduce the 3Ts as an approach to scenario planning.

Scenario Building and Scenario Planning

Bezold (2010) argued that scenarios are parallel stories about how the future will unfold. Schwartz (1996) defined scenarios as 'a tool for ordering one's perceptions about alternative future environments in which one's decisions might be played out… as set of organized ways for us to dream effectively about our own future' (p. 4). Scenarios may take many forms, depending on the objective for the scenarios, resources available, the culture and planning style of the scenario builders, and, the psychological preferences of the audience (Bezold 2010). However, the principal objective of scenarios is to question assumptions and challenge dominant views of the future as a means to provide alternatives (Inayatullah 2009). Our scenario workshops encourage participants to question their own personal and cultural assumptions.

There are several ways by which scenarios have been created. Schwartz and the Global Business Network developed the '2X2 matrix' – or double uncertainty – method that utilises the four-quadrant model to categorise drivers and target key uncertainties as a way to organise scenario building (Schwartz and Ogilvy 1998). Dator's (2019) four futures archetypes are also an established method for organising scenario building. Dator's model organises scenarios into four distinct classifications based on futures images: 'continued growth', 'limits and discipline', 'decline and collapse', and 'transformation'. Bezold (2010) argued that scenario sets should include three or four scenarios; the first, the best-estimate future – the expectable future – following a gathering and assessment of available intelligence, trend and forecasts; the second is the challenging scenario; whilst the third and fourth scenarios should identify differing paths

to visionary outcomes. Acknowledging the diversity of ways of achieving scenarios, we argue that the commonality across scenarios produced is that they all must be coherent, consistent, credible and questioning the present.

Bell (1997) acknowledged that 'the 'scenario' gives methodological unity to futures studies. It is used by all futurists in some form or another and is, thus, by far the most widely shared methodological tool of the futures field' (p. 317). Inayatullah (2009) asserted that, regardless of the method used to build them, scenarios are but one method in the futures tool-kit; with the ability to distance us from the dominant views of the future, they challenge the weight of structure on individual agency. Inayatullah uses scenarios for creating preferred futures, encouraging those building scenarios to reflect on the inner process; meaning scenarios need to not only 'account for the changing meaning of individuals changing external world, but as well the inner landscape of the inner maps held by selves' (p. 79). Saliba (2009) agreed, stating 'When facilitated with the intent to shape and challenge mental models, scenario planning is a powerful methodology for generating new ideas and insights that enhance decision-making' (p. 125). In this way, scenarios have utility in their ability to break through bounded rationality, communicate a vast amount of information in a story, and because of this, are highly memorable, conversational, and narrative in nature (Chermack 2004).

The distinction to make here, as Chermack (2004) reminds us, is between scenario building and scenario planning. Scenario building is the process of constructing the stories themselves, as a component of the larger scenario planning process, whilst scenario planning is an overarching process of 'positing several informed, plausible and imagined alternative future environments in which decisions about the future may be played out, for the purpose of changing current thinking, improving decision making, enhancing human and organisation learning and improving performance' (Chermack and Lynham 2002, 16).

We propose that the 3Ts provide an approach to scenario planning that acknowledges post-normal contextualities, stimulates the imagination in a creative way and, most importantly, reinforces individual agency towards futures thinking. Let us now map the way in which the 3Ts provide this overarching process.

The 3Ts

The 3T process assumes that the present is complex, pluralistic and partly postnormal, and describes three distinctly different futures (Sardar and Sweeney 2016). The *first tomorrow* is the beginning of the initial analysis and anticipation of future possibilities. The first tomorrow begins in the present moment and extends a short distance into the future. The first tomorrow reflects our default mode in conceptualising the future and is based on our experience that informs how we perceive the future. In the 3Ts framework, the first tomorrow is called the 'Extended Present' because it refers to anticipations or scenarios that are constructed on the basis of past and present experience. The Extended Present is linear in nature and is solidly entangled in the current global crises and conjunctures. The first tomorrow may be understood as our mental projection of the present onto the future. The first tomorrow is the most widespread image of the future in foresight analysis: Schwartz (1996) famously coined it as the *official* future. The first tomorrow is a tomorrow based on empirical evidence and requires us to carefully and critically select the key variables, as well as gather all relevant information. As such, re-searching the manner with which an issue or topic has developed in the past provides insight into how it may evolve in the future. Provocative questions are asked: 'What do you know about this issue/topic?'; 'Where is it going?', 'How much has it changed to date?'; 'How much of this understanding can we use to project change into the future?'.

With workshop participants and students, we emphasise the appeal of the Extended Present, and speak to the allure of dominant ways of knowing the future; that there is

something comforting about the notion that we can learn about the future by using our past experiences. Here, participants are encouraged to access the data and information about the issue they are exploring:

> What does the media say about this issue?
>
> How do one's friends and family talk about it?
>
> What is the popular opinion of how things are going to emerge?

Participants are encouraged to reflect on technological developments, historical progressions in technology and commonly referred to stories of human triumph against adversity (the moon landing of 1969 for example). In building their scenarios, participants are invited to use any one of the methods for scenario building (2 × 2 matrix or other scenario building techniques); the focus here for the futures practitioner is to stimulate open conversation that is driven by enquiry. The use of mobile phones is encouraged, for example, with participants invited to Google-search facts about the phenomenon or issue. The Extended Present is the tomorrow participants cannot miss; the future that everyone is expecting to happen; that is readily available; that can be formulated through trends.

Participants are also encouraged to list the indicators by which they measure their issue/topic, the qualitative or quantitative measures by which they can demonstrate a history of change, and what they will be looking to measure as indicators of change into the future. In this way, participants are provoked to reflect, not only on what they know about their issue/topic, but what they do *not* know about it. The objective here is to highlight the voids – the gaps in knowledge – for participants to articulate for themselves what it is that they need to learn about their issue/topic.

In self-reflection, what participants often reveal to themselves is that, despite the immediate appeal of the Extended Present, an assumption that the overall contours of change are stable and that they will maintain the pace and direction that they followed in the past is

problematic. However, in postnormal times, this simply does not happen. Even the most familiar and 'dependable' trends accelerate, slow down, or change suddenly. While we can assume a certain degree of continuity, especially in the short term, the further we move away from the present, the more we need to factor in discontinuities and disruptive changes with respect to anticipations and, indeed, expectations.

At our workshop in Kuala Lumpur, where COVID-19 was a hot topic of discussion, one group investigated health futures in Malaysia. In the Extended Present, they explored how the spread of diseases and viruses may become more challenging to track and trace. Indeed, one scenario developed in this future spoke of the COVID-19 virus becoming a pandemic that affected all nations. Indicators and measures for this group remained traditional and empirical (numbers of cases, infection rates and so on). Other scenarios addressed widespread public testing, technology that enabled prevention methods and posited a strengthened World Health Organization.

With their scenarios from the Extended Present, participants are invited to re-examine their work with a postnormal lens:

Do the scenarios reflect present complexity well enough?

How many connections between indicators have been made within the scenarios?

What would chaotic behaviour look like in these scenarios?

What are the contradictions that exist in the scenarios?

Can one identify contradictions in the scenarios?

Do the scenarios generated reflect the speed, scope, scale and simultaneity of postnormal change?

The objective in this component of the workshop is to highlight that, whilst scenarios created in the Extended Present are valuable in the traditional sense of planning, they may no longer be as relevant in postnormal times.

Traditional approaches to scenario building highlight the key variables. The implication here, we suggest, is that non-key variables may be overlooked or ignored. This of course reduces complexity – but is this reflective of postnormal contexts? Here, we are seeking to uncover the complexity of our postnormal epoch, those systems that have multiple components, that interact in multiple ways, exhibiting a variety of behaviors as causality. In another article in this special issue, we articulate that the properties complex systems feature include self-organization, non-linearity, emergence, feedback cycles and adaptation (see Jones, del Pino and Mayo in this issue).

So, with the *second tomorrow*, we want to bring these non-key variables to light, consider them, and enhance complexity. Thus, the scenarios of the Extended Present provide both the context and the foundation to build upon as we move into the second tomorrow.

The second tomorrow, the 'Familiar Futures', resonates with Inayatullah's 'used future' (2008), and seeks to challenge and overcome the appeal of the dominant view of the future that lies within the Extended Present. Science fiction literature and film have generated a rich and diverse body of alternative possibilities for our collective imagination. It is important to recognise that painters, poets, philosophers, writers and artists have often been among the first to identify the emerging issues of change precisely because of the ways they see reality in variance with the 'mainstream'. The use of, and scholarship around, counterfactual histories and alternative histories demonstrate the heuristic value of exploring alternative pasts, presents and futures to better understand the basic assumptions and ontologies of postnormal times (Sardar and Sweeney 2016).

Put more simply, participants need to be open to new sources of inspiration and to spot change or innovation in places that may seem unconventional in traditional approaches to planning. We encourage participants not to dwell on notions of likelihood or probability of transformation, rather, to focus in on the impact that change may cause the issue/topic.

Taleb (2007) argued that 'black swan' events have shown that small probability events may have a big impact; it just does not make any sense to analyse them according to their likelihood. Thus, more scenarios may be fostered using different futures methods, or existing scenarios may be further interrogated and developed. The 'Health Futures' in the Malaysia group looked towards Hollywood for inspiration here and spoke of mining other planets as a means to sustain the health outcomes of humanity on this planet. Through exercising this type of imagining, workshop participants are then primed to move into the *third tomorrow*, 'Unthought Futures'.

To build new scenarios for Unthought Futures, we need to question what alternative futures we are ignoring, either consciously or unconsciously. This is typically the most uncomfortable and challenging part of the workshop process for participants. The 'unthought' refers to what is outside the assumptions and axioms of our worldview. It is not that it is truly unthinkable, rather it is difficult for us to grasp, precisely because it is beyond the scope of what we consider imaginable. This is because imagination is culturally bound, nested in time and space, and as such, we are unable to imagine that of which we have no experience (Bussey, Song, and Hsieh 2017). Fisher (2009), for example, wondered why it is harder for us to imagine the end of capitalism than it is to picture the end of the world. Our Malaysian workshop pondered similar questions in the Unthought Future:

> What would a world without doctors, nurses, pharmacists—indeed, health care systems—look like?

> What does a world without a notion of health look like?

Working in Unthought Futures, the futures practitioner needs to reinforce the agency of participants. This endeavour acknowledges the notion, so aptly demonstrated by Polak (1973), that our imaginations are colonised by dominant visions of the future. This acknowledgement seeks to move approaches to the future beyond the Familiar Futures, dominated by social and cultural imaginations, towards personal, agent-centric imagination as a means to – as Sardar argued (1999) – decolonise futures.

Here, in Unthought Futures, we encourage the participants to embrace anticipation to unlock, what Bussey, Song, and Hsieh (2017) refer to as *anticipatory imagination*: 'to break free from the domination of the present centred imagery that shapes our understanding of the future and to turn our attention from present focused images to future focused ones' (p. 2). Anticipatory imagination moves to reorientate workshop participants towards a future that offers an open set of possibilities and draws attention and awareness towards a yearning for alternatives already embedded in the present data base of imaginaries. This yearning, Bussey (2016) argued, is the compass that focuses energy and gives meaning to futures engagements, deepening the utilitarian thirst for ever-expanding possibilities. As such, by unlocking anticipatory imagination, the Unthought Futures is a space that reinforces agency.

The 3Ts, we argue, effectively constitutes a postnormal framework for scenario planning. Within this framework different methods and techniques be used to challenge the participants assumptions and build scenarios that incorporate the forces of postnormal times: complexity, chaos and contradiction, and the features of postnormal change: speed, scope, scale and simultaneity. By doing so, the 3Ts allow for a more integrated or holistic application of futures thinking. The sophistication of this approach is that it is an open-ended conceptual framework, while still accounting for the influence and impacts of postnormal phenomena on the present and into the future. As a futures studies approach, the 3Ts can accommodate any number of more traditional or cutting-edge futures tools or scenario-building techniques. In other words, different methods can be used to build scenarios from within a postnormal framework and allow for a more integrated, holistic and synergistic application of futures tools during postnormal times.

Furthermore, the nuance of the 3Ts is that each tomorrow is not an isolated entity; rather, as Sardar and Sweeney (2016) point out, they are 'deeply interconnected spatial and temporal zones of actual and perceptual phenomena that have a dramatic effect on the here and now' (p. 7). That is to say, the future does not arrive in a lineal sense; rather the future has arrived and continues to arrive through a milieu of complex, chaotic and contradictory changes that impact our empirical and cognitive ways of being and knowing the world. In this way, the 3T process provides utility to not only diagnose change in the present, but to interrogate the manner with which dominant worldviews are inciting, fracturing and holding responsibility for this change (think global warming). Thus, the scenarios of the 3Ts framework are not to be taken in isolation, nor treated through the prism of preferred, probable, or plausible futures. Instead, the Extended Present, Familiar Futures and Unthought Futures are to be appreciated as interlaced imaginings that make sense of our epoch and seek to counteract the dominant narratives that govern culture and underpin our postnormal condition.

Contextualising: The COVID-19 Pandemic

As we have demonstrated, scenario workshops have provided us opportunities to test and develop the application of the 3Ts as a futures approach, an approach that allows for scenario planning while remaining in a theoretical context of postnormality. Yet, a tension has remained throughout: some workshop participants – as with some within the academy – remain sceptical as to whether we have really entered postnormal times. They ask: 'What makes the current epoch so remarkable – what makes our epoch more remarkable than those that have gone before?'. The emergence of the COVID-19 pandemic allowed us to address these questions.

The remarkability of the COVID-19 pandemic provided me, along with my colleagues Jordi Serra del Pino and Christopher Jones at the CPPFS, an opportunity to demonstrate the

utility of the 3Ts to navigate postnormal times using the same process we have been developing in scenario workshops. The following scenarios were created using the 3Ts framework. As mentioned, these scenarios were originally produced for the CPPFS blog in a three-part post (see Serra et al. 2020[1]). This exercise was undertaken during the early phases of the societal shutdowns of 2020, with a view towards making sense of what was happening globally. However, through this process, we also realised that the 3Ts helped us to understand what was unfolding as it was unfolding.

Extended Present

We started developing our scenarios, facilitated through online meetings, with the first tomorrow: the Extended Present. Our biggest challenge with the Extended Present scenario is that it should be evidence based. However, interrogating an event as it unfolded, gathering empirical data, proved to be difficult, so we looked to history and examined the impacts of previous pandemics. As outlined here, the Extended Present assumes that change will carry on with the same direction and pace that it has had so far. Of course, not everything continues; therefore, it is key to find out which trends seem more robust, and likely to continue, and which ones are declining. In the case of COVID-19, we decided that the principal driver will be the tension between achieving positive health outcomes and mitigating against economic concerns. This was reflective of the emergent lethality of the virus that saw most states implement widespread physical lockdown. However, it was unclear how long-term viability of lockdowns on a global society predicated on open and free movement[2]. The world was not ready, and economies were suffering. Thus, the health/economy dichotomy was the main factor in determining our Extended Present scenario.

The second element we considered pertinent to the Extended Present was the seeming rise of authoritarian leadership, indeed authoritarian approaches to leadership, displayed by many

governments internationally. This accentuation preceded COVID-19, with riots in many different countries (Algeria, France, Hong Kong, Lebanon, Spain, Chile, Perú, Ecuador and many others[3]). This emerging trend may be viewed as both the perceived decline in democratic values and a surge in authoritarian government; however, within the context of the pandemic, this trend seemed likely to escalate.

The final element that we wanted to stress through the Extended Present was localised instability and the emergent narrative for a return to normalcy that seemed to uniformly and globally emerging from states. In the face of a pandemic, an expectation of continuity displayed the cultural crisis characterised by Mayo's (2020) notion of the postnormal condition – the inability to move beyond a manufactured normalcy that perpetuates a familiar sense of present, to de-emphasise change in spite of change – and fundamentally expedites a sense of crisis, whilst nurturing ignorance and uncertainty. Thus, we wanted to extrapolate further on this yearning to 'return to normal'.

The New Old Normal is the scenario produced through the prism of the Extended Present:

The new old normal. The world is trapped in a short-term positive feedback loop. It appears that humanity has lost the capacity to engage in long-term visioning or planning. At best, our anticipatory abilities seem to extend only 5 minutes into the future. The dominant strategy of the post-COVID-19 world could be described as 'focus on today's problems and let tomorrow take care of itself.' This narrow temporal conditioning should come as no surprise. The signs were there, even before the COVID-19 crisis, that many of the underlying assumptions of the international market system/liberal democracies were flawed or ill-suited to the post-industrial era. The pandemic simply created the opportunity for capitalist mythology to dominate the social and political narrative, and resist reform or restructure. The 'growth and jobs' paradigm rooted even deeper into our 'being in' (ontology), and 'ways of

knowing' (epistemology), about the world. Although the official global priority was to deal with the public health crisis, it soon became clear that the real priority was to get the economy going: to get back to business as soon as possible. The trend was led by governments that were more dependent on (or connected to) economic power; particularly fossil fuels and natural resource extraction. The pressure to reopen business was enormous, and some countries opened prematurely, only to experience a second wave of community transmissions after social distancing was relaxed. At that time, we knew too little about the mutation, nature, and behaviour of the SARS-CoV-2 virus. Early COVID-19 testing was not 100% accurate, and some people did not appear to gain immunity after recovering from the illness. All in all, given the number of asymptomatic infections, it remained difficult to accurately estimate the number of people with COVID-19. One of the clear contradictions of global capitalism was the troubling fact that COVID-19 test kits, produced by major biotech and pharmaceutical companies, remained beyond an accessible price point for many governments. Even more problematic for the long haul was the lack of affordable antibody tests and support for contact tracing. Thus, the ability to regularly and effectively test citizens has remained beyond the capacity of governments in much of the developing world. Similarly, even though there was eventual success developing better antiviral treatments and a vaccine, only the top 10–20% of the world's population benefited from the breakthroughs. Costs, corruption and fake news/misinformation prevented universal access to the vaccine. We have had to learn to live with COVID-19 (or as it is now called: the 'global flu'), whilst a patchwork of restrictive and open strategies continue as the bug sporadically exhibits seasonal and cluster infection eruptions. Life has become a series of peaks and troughs. There are times when people are able to move freely in their community, or across the globe when and where borders are open, and there are long periods of forced social isolation. 'Normal' as a concept has lost

any currency, because there is no normal – old or new – that provides any solace.

However, a second, and far more troublesome, trend has emerged: the rise of authoritarianism. Again, this is a trend that started well before the COVID-19 pandemic. There has been no shortage of indicators: the growth of fascist or far-right parties in many countries; the erosion of civil rights almost everywhere; the increasing challenges to representative, liberal democracy and human rights campaigns; and the rampant hypocrisy and fundamental corruption of governments all over the world. Fears of immigrants, job loss, and cultural diffusion were exacerbated by the pandemic. Subsequent economic contraction created fertile ground for demagogues and ultra-right-wing populists to push fear-mongering narratives that encouraged the acceptance of seductive, simple reactionary solutions. Escalating uncertainty became an accelerant to stoke the fire of extremism that burned explosively. People were scared and were eager to give up privacy, freedom of movement and civil rights in order to ease their uncertainty. Who would not make those sacrifices when people's very lives were at stake? Deep public mistrust in virtually all social and political institutions became fertile ground for the rise of strongman leaders whom people turned to during this time of retrenchment. People hoped for visionary leadership but got authoritarian rule instead.

The global situation is bleak, and all indications are that it will get even worse. Climate change alarmists, Greta Thunberg and 'Fridays for Future' have disappeared from news headlines and public discourse. While clearly the biosphere 'catches a break' every time there is limited local or global confinement, CO2 emissions quickly snap back to previous levels or higher. The number of extreme climate events continues to grow, and, in some places, they are extremely destructive. Crippled UN agencies and international institutions are less and less capable of providing either resources or leadership at the global level, as China, the EU and the USA become increasingly isolationist. Contradictions and paradoxes mount:

despite the monumental effort to mitigate global outbreaks, it was more and more evident that global devolution left each country to look out for itself. We now see a pendulum swing back and forth between globalisation and tribalism, between integration and parochialism. The best example of this is the EU. Although the union still exists in treaty and on paper, the reality is that the collapse of the Italian and Spanish economies resulted in a collapse of any semblance to cooperation between central banks and national finance ministries. Subsequently, the EU has been unable to make any binding or effective decisions; member contributions have shrunk drastically, and the European Parliament struggles to stay in session, physically or virtually.

Familiar Futures

The second tomorrow, Familiar Futures, is meant to let us introduce all sorts of departures, disruptive changes or breakings regarding the projected present. In this scenario, we started from a similar situation but with a totally different premise. So, like in The New Old Normal, there will not be an effective treatment for COVID-19, however, unlike the previous, the new situation will trigger a comprehensive set of social and economic measures.

Unlike in the first tomorrow, Familiar Futures do not have to be evidence based. The second tomorrow is not about probability but potential impact. If a future option is possible, even by small odds, then we need to consider what it may provoke. But, when dealing with disruptive events, we may not have a frame from which to reference them. In those cases, we will have to engage in argued speculation and rely on different kinds of sources. Fiction and art have a long tradition of speculative narratives, and it is legitimate to use them if they provide a well-structured conjecture of how things could function in alternative contexts. In this case, we resort to the scenario of *Hunger Games*, that is, a future-oriented version of the old *panem et circenses* ('bread and circuses' or 'food and entertainment'; the

Roman recipe to prevent social discontent). We opted for a non-deeply dystopian version, as some measures of social equity were added to the mix.

In order to enrich the scenario, one technique that has proved to be useful in Familiar Futures is *emerging issues analysis*. In this case we listed a few issues that we believed could play a role in the scenario: 'alternative currencies', 'increased mobile banking' or emergence of 'social economies' (such as Kate Raworth's 2012 concept of the doughnut economy model[4]).

The scenario unfolded thus:

The normal games. The hopes of getting a good (or good enough) vaccine began to fade by the end of 2021. It was not that the first vaccines were ineffective; they were like seasonal flu vaccines; and their effectiveness ranged between 40-65%. But many people, particularly authorities, were counting on the vaccine to return life to normal. It took some time to muddle through. But the scientific facts became clear: anti-viral drugs and vaccines alone would not solve the health crisis: more was needed. By 2022, large sums of money and resources were poured into best practices to combine social distancing and diverse modes of social separation in support of economic activity. Of course, there were many things that could be done remotely using the internet, as we learned during the first peak of the pandemic. Many jobs required people on site, however. And then there are all those human activities where we interact and socialise. It was necessary to find ways for people to physically interact, and to determine the best way to do it. Some people and organisations immediately saw the opportunity to profit from the situation, but fortunately, before greed ran rampant, three combined elements made governments realise that it had to be a coordinated and regulated effort.

The first element was the persistence of large segments of the population who refused to take vaccines. Several large protest movements against confinement measures were instigated by anti-vaccine agitators. Having large groups unable or unwilling to follow a vaccine strategy entirely undercut its effectiveness. The solution to SARS-CoV-2 infection could not be a medical one alone.

Second, it became obvious to many governments that the risks of social unrest needed to be avoided. Central banks and tax refunds were the primary tools governments used to mitigate the social and economic cost of the surges and peaks of the pandemic.

Third, not all developments were negative. Many communities took social and economic recovery into their own hands and used both new and old technology to do so. The pandemic and resulting economic crisis often brought out the best in people, ways to support the elderly and less fortunate, and sparked creativity and innovation across an array of extremely diverse initiatives. The circumstances were different in each place and resulted in unique and distinctly different designs.

The emergence of and widespread use of alternative currencies – whether social credits, crypto or hybrid currencies – represented efforts to escape the framework of traditional currencies and orthodox accounting. People needed cash and it was not available, so many communities decided to generate their own means of exchange for local goods and services. Some communities developed a cooperative contract that pooled risk and debt; others used new currency for the distribution of goods and services to support the poorest. Some communities and regions went so far as to replace official currencies in favour of communitarian exchanges.

Additionally, all these alternative economies encouraged debate about ways to transform the economic paradigm and allow a new one to bloom. One call-to-arms was the manifesto by 170 Dutch economists to use the COVID-19 crisis as a catalyst to fundamentally change economic assumptions. Radical ideas and proposals that had been previously viewed as utopian suddenly seemed sensible and even necessary. The need for basic change was felt more viscerally than ever before. The emergence and success of alternative currencies and

exchanges showed that it was possible to go from communitarian theory to praxis without unleashing havoc.

All these elements, by themselves, were quite small and hard to see in the aggregate, but together, they suggested that another economic paradigm was possible: big businesses and governments got scared. Governments and international institutions conceived a plan to coordinate the transition to the new normal. They called it the International Agreement for the COVID-19 Transition, IACT for short. But very soon everybody began to call it the Normal Games. The agreement was based on four principles:

1. Everyone is entitled to go outdoors provided that they do not risk the health of other people.

Infectivity must be constantly monitored to avoid relapses.

Social activities are only allowed under controlled conditions.

It is the duty of national governments to ensure that every citizen has an equal opportunity to participate in outdoor activities.

To implement these principles, a complex system was enacted:

First, a massive global contact tracing and testing system was deployed. Originally conceived to allow for weekly tests, 70% of the world's population are now tested daily and the remainder are tested every 3–4 days. Testing and monitoring are linked with systems to alert people by phone or other means so that they are isolated or quarantined if they show positive tests or symptoms. Many locales have established hospital isolation wards or housing facilities for self-isolation.

Large gatherings, such as for sporting events and concerts, are still considered too risky, given testing inaccuracies and non-compliant behaviour. Therefore, a second policy was enacted: social downsizing. Using complex algorithms, the optimal number of citizens and their proximity outdoors was determined to balance health and economic activity. Large city dwellers had very few opportunities to

escape their confinement, yet rural people had fewer outdoor activity restrictions. The solution was to promote relocation. Some countries used positive incentives while others resorted to coercion.

To reduce potential conflict, it was obvious that everybody, regardless of their wealth or social status, should have equal access to leisure and outdoors activities. Therefore, a global lottery was established allowing every citizen a rotating system of access to the outdoors and sanctioned social events. A sophisticated AI application allocated a range of different optional activities: from strolling in a neighbourhood park, to a hike in the country side; from a beer in the nearby pub, to a meal in any world-class restaurant; from participating in a town hall meeting, to being a guest speaker in a UN General Assembly session; and from voluntary work in a day care centre or nursing home, to joining a research expedition in Antarctica. The AI application coded every single activity according to different criteria (level of enjoyment, gratification, cost, availability and difficulty). The most simple, accessible and needed have a higher probability, and this probability goes down as the activity is more selective, complex or elitist. But every citizen is guaranteed a minimum number of outside-the-home activities if they stay free of infection. The lottery became a huge hit, not only because of the personal attachment each person has to the outcome, but the top prize awards and 'vacations' were coveted. *The Normal Show* lottery became a 24-h, 365-days-a-year reality show, and the ratings have been phenomenal since the beginning. Profits from the show's advertising have been significant and contribute to the cost of awards for the world's poorest citizens.

How did the rich cope with IACT? All had big houses with yards or large apartments to begin with, so their level of need for outdoor activity was not as high. Given that the lottery gave everyone an equal chance to be outside, many of them invested in virtual, augmented and alternative reality technology, to the extent that some no longer need to leave their homes. Others have joined Elon

Musk's plan to colonise Mars, making huge investments in SpaceX and related companies. The irony is that outdoor activity on Mars is still not likely for many decades, if not centuries.

Unthought Futures

The third tomorrow, Unthought Futures, demands a different kind of exercise. Unlike the previous scenarios, the accent is not so much on looking at the futures in a particular way, but to examine the precedent scenarios under a diverse perspective. Essentially, we need to understand why the preceding scenarios have favoured some future options and cloaked others. The context was extremely relevant, as the pandemic had shown that possibilities that had been discarded before as unlikely (or very unlikely) can happen and struck us to the core. In postnormal times theory, this kind of reflection is the result of trying to identify the unthought.

The unthought refers to what lies beyond the situations or axioms of our worldview. However, the unthought is not unthinkable, rather it is difficult to apprehend because it is beyond the realm of our imagination, which is in turn determined by our worldview. In this case, we listed a few unthoughts: capitalism, heteropatriarchy, communities, the notion of normal and the nation-state. Once identified, it was merely a matter of conceiving a new scenario where these concepts can be reversed or modified. Hence, the idea of *Transnormal*. Originally conceived by Sardar, the prefix 'trans' in transnormal suggests that it is 'over' and 'above' anything we could possibly imagine as 'normal' or the 'new normal' in the dominant paradigms: it is a profoundly new ethical synthesis that is 'beyond' existing paradigms.

As Sardar likes to point out (see Sardar and Sweeney 2016) Unthought Futures is the realm where human agency can be rescued and reinforced, validating the idea that, whatever transnormal may end up being, it had to be as a result of negotiation over some mutually agreed and fundamental values.

Transnormal is the scenario of the Unthought Future:

Transnormal. The sudden application of lockdown and confinement measures made people realise how dependent they had been on the labour of low-wage workers. The backbone of our communities was predominated with people working in often undignified conditions for minimum wages: cleaners, cashiers and clerks, logistic and delivery staff, nurses, farmers and civil defence workers. Less obvious workers provided essentials: weavers produced masks and protection gear; industrial workers produced ventilators, disinfectants, gloves and screens. Front line workers included: medics and ambulance drivers, nurses, warehouse workers, delivery drivers, teachers, psychologists, social workers, journalists, cooks and many others. Many took or accepted very long shifts, some without pay, and many volunteering without hesitation. It has been truly a community effort.

> Confined for long periods of time, but with instant access to news, social media, and all sorts of input, people spent a lot of time checking "the latest." Of course, fake news, alternative facts, misinformation and deception were widespread, but nevertheless, the evidence that some places were doing better became clear and some certainties began to stand out:
>
> Capitalism was not, could not be, the solution. Not only had market logic played a significant role in the spreading of the waves of the pandemic, with its global production chains, but it was making it harder to deal with the post-pandemic recovery crisis.
>
> Heteropatriarchy needed to be transcended. While confinement had caused crime rates to drop, gender violence had risen significantly; that is, the number of men harassing, beating, abusing and making confinement living hell for many women escalated. Additionally, it was a fact that six of the countries doing better were governed by women: Finland, Denmark, Germany, Iceland, Taiwan and New Zealand. Women leaders seem to be better suited to a public health crisis,

with greater empathy, ability to listen, avoidance of dogmatism, and greater honesty about the realities facing women particularly, and the marginalised in general. On the other hand, men generally resorted to an alpha male stance: in order to show confidence. they issued rushed and half-cooked measures; projected resolution by adopting a militaristic language (in a few cases deploying their armies); put other priorities over health (like the economy or "unity"); and looked for political gain at the expense of people's well-being. Examples of what should not be done included: USA, Brazil, Spain, Hungary, and the UK.

Communities had to be rebuilt and strengthened. Even in confinement people reached out and networked in new ways; many that did not have the luxury of being able to confine themselves had to rely in their community networks anyway. The notion of the individual was an essential myth for the modern project. But as modernity expired, it was becoming clear that we had to reconnect because, isolated, we would not survive as a civilisation.

And yet we could not go back to the old normal. For instance, the need to reconsider social space, particularly in cities, was undeniable. The shift in art, architecture and urban planning was almost immediate. The main attractions of urban life were disrupted and the virtual and real were transformed by social distancing technologies, customs, and regulations. What industrial society had previously required—concentration, synchronicity, and uniformity—were all risk factors. The return of diaspora from large urban areas back to villages and rural areas became a global megatrend.

The nation state framework had to be revamped. States were too big to manage their territories adequately, but too small to fight the pandemic effectively. The need to coordinate global responses was more and more urgent. By late April 2020 there were already 115 research projects working on the Covid-19 vaccine. The fiasco with personal protection equipment (PPE)—masks, ventilators, and gowns—showed that the global response could not be left solely to the private sector. If we were to guarantee that the best vaccine (or combination of vaccines) would reach the whole of human population as fast as possible, it would require a public-private partnership of global scale and scope.

All these developments paved the way for a new *Transnormal* model. The question emerged: 'How do we move forward to transnormal futures?' Global visioning efforts, such as SenseMaker[5], called for, collected, catalogued, and analysed thousands of post-COVID-19 scenarios. Combining these stories and scenarios with data analytics, a Consortium of SenseMakers (CSM) offered visions of people's preferred and optimistic futures. Their ongoing follow-up project explores the futures of wisdom and posthuman synthesis with our flora and fauna.

And here we are, engaged in the biggest, most comprehensive, global effort in history to empower humanity to decide collectively what kind of a future we want to create. Thousands of proposals and best practices are being reviewed and tested but, so far, some principles have emerged:

1. Diversity. It is not a question of tolerating or celebrating diversity; it must be actively cherished and promoted at all levels and aspects of life. Moreover, it has transformed as a concept, in the sense that is less about difference and more about inclusion of difference in society.

Critical honesty. While truth can be complex and multifaceted, lies and deception only hurt our chances of successfully transcending the present crisis. The economic transformation encouraged critical assessment of the value of basic assumptions and a postmodern critique of industrial, civilisational and growth assumptions.

Future guardianship. This was the most controversial principle. Seven generational principles (the requirement to think forward and ensure the survival and property of up to seven future generations), were integrated into all decision-making, from basic local decision-making about infrastructure, all the way up to the global level. In practice, this has become an area of great

debate and conflict, but certainly among the least expected outcomes from a pre-COVID-19 perspective.

Conclusion

Over the course of several workshops, we have refined a process for scenario planning using the 3Ts as an approach that allows for an acknowledgement and conceptualisation of the chaos, complexity and contradictions prevalent in postnormal times, and the speed, scope, scale and simultaneity of postnormal change. Here, we have used the COVID-19 pandemic to demonstrate the utility of this approach. Our motivation is to respond to Sardar's provocation through the extension of futures approaches. We argued that the 3Ts effectively constitute a postnormal approach for scenario planning, within which different futures methods and techniques can be used to build scenarios inside a larger planning structure, using a postnormal perspective.

Moreover, through this work we have discovered that, whilst the 3Ts may help us to explore the evolution of postnormal phenomena in retrospect, as a futures approach, the 3Ts also provide utility to understand phenomena as they are unfolding. Through an application of the 3Ts as a scenario-planning approach to COVID-19, we discovered that different parts or aspects of the pandemic may be better understood, made sense of, and/or be addressed using discreetly different tomorrows. For example, the ongoing spread of the pandemic or the development of a vaccine may be articulated using an Extended Present framework, whilst others, like the changes in economy or society, required the perspective of Familiar or Unthought Futures. This means that the 3Ts are not only useful to engage in more comprehensive futures research but also enable workshop participants to attain deeper postnormal analysis of any given issue or topic.

Our case for using this scenario-planning approach will not necessarily resolve debates about postnormal times as a concept. However, this article has attempted to help fill a gap in applying postnormal concepts to the futures studies project. Indeed, although Sardar has offered a framework for us to make sense of change in the present, my work with the CPPFS has sought to emphasise these theoretical posturings through a pragmatic and integrated approach; the challenge now for futurists is to provide the leadership required to shepherd the uncertainty of epochal change. Indeed, transformational leadership will be required to navigate postnormal times.

Declaration of Conflicting Interests

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Notes

1. Blog posts may be found at https://postnormaltim.es/covid-chronicles
2. Approximately 3 billion people travel by airline a year. This can be found at https://www.reference.com/world-view/many-people-travel-year-e644f08d024ae72c
3. See: https://www.theguardian.com/world/2019/oct/25/protests-rage-around-the-world-hong-kong-lebanon-chile-catalonia-iraq
4. See https://doughnuteconomics.org/about-doughnut-economics
5. See: https://sensemaker.cognitive-edge.com/what-is-sensemaker/

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Building Scenarios With the Three Tomorrows

Jordi Serra del Pino[1] ⓘ

Abstract

Postnormal times, as a concept and as a theory, was conceived in a futures studies context by futurists, yet there have some doubts regarding its applicability when engaging in actual futures research. The arrival of Sardar and Sweeney's article "The Three Tomorrows of Postnormal Times" seemed to provide the missing method. Yet, despite the authors' claim, the three tomorrows is not a method, nor does their article explain how to develop the tomorrows. However, it is possible to build future scenario using the three tomorrows not as a method but as an approach. As an approach, the three tomorrows offer a general structure in which it is possible to undertake a futures research. To prove it, this article presents a three-stage process that can help any researcher construct scenarios following the tenets of postnormal times theory.

Keywords

postnormal times, future scenarios, three tomorrows, futures praxis, approach

Introduction

Postnormal times, as a concept and as a theory, was born in a futures studies context. Coined by futurists and first published in Futures, the connection has never been doubted. Yet, it was not always clear how to engage in an actual futures research from a postnormal perspective or, more specifically, how to build postnormal future scenarios. The publication in 2016 of "The Three Tomorrows of Postnormal Times" by Sardar and Sweeney (2016) seemed to deliver a method to do it. Still, and despite the authors' initial claim, the three tomorrows are not really a method; but they can work as an approach. In the following pages, I will present a structured process to use the three tomorrows for building future scenarios. The process is the result of my research and teaching work at the Centre for Postnormal Policy & Futures Studies, at Blanquerna – Universitat Ramon Llull and my own consultancy practice. For more than 4 years, I have used every opportunity to explore and test different ways to engage all sorts of audiences (scholars, professionals and students) in doing postnormal scenarios. All this accumulated experience has let me design a three-stage process for building postnormal future scenarios using the three tomorrows. What the tomorrows do, as an approach, is provide guidance and insight about which method use in every case, or tomorrow, while keeping theoretical and methodological

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consistency with the postnormal tenets. They act as an epistemological structure that offers both orientation and support regarding how to proceed and what technique to use when building scenarios within postnormal times theory.

But before getting into the actual construction of the scenarios, it is necessary to understand that, in postnormal times it is not enough to improve our apprehension of reality if we are not equally and simultaneously capable of upgrading our ability to process this apprehension. Venkatesh Rao's concept of the manufactured normalcy field (MNF) (2012) plays a key role in this process. Rao essentially postulates that our mind is continuously working to normalize any situation we find ourselves in. Even more, the MNF has developed a set of cognitive strategies, developed by humans over many centuries, that have become problematic when we try to understand (and anticipate) change in a postnormal context. In synthesis, what happens in postnormal times is that a particular phenomenon will increase its postnormal potential by raising its complexity, its chaotic behaviour and its contradictions through a development known as postnormal creep. Once the creep is set, there is little chance of avoiding or mitigating it and every chance of accelerating and/or aggravating it. The odds of being able to manage it properly depend on understanding the development and its effects; however, what frequently happens is that the MNF makes it extremely difficult to perceive the scale and implications of what is occurring. Climate change is a good example of this; just consider all the time that has been spent on trying to deny it and discredit it, pretending that what was happening was normal. Claiming that what we were experiencing fell within the bounds of normalcy became the best way to prevent more effective action sooner. Such a response is much harder to maintain when using the three tomorrows as it forces us not only to improve our capacity to perceive reality but our capacity to process and make sense of what we perceive as well. Not only that, it also makes us question the foundation of our conclusions. The key lies

in the fact that the tomorrows is an approach that helps us deepen and sophisticate our scenarios progressively by going from one tomorrow to the next one.

The First Tomorrow

Futures research is like any other kind of investigation. First, we establish a goal: a question to be answered or a hypothesis to verify. In order to attain that objective, we start by identifying the knowledge field that is relevant to the object, and then we compile information and data that are potentially relevant or useful. At this point, we try to gather knowledge that will allow us to reach our objective. In many cases, that will entail resorting to similar cases or analogous situations that could accelerate the process. If you think about it, ultimately, the intention is to extract the necessary knowledge on the basis of experience (whether our own or someone else's). And this means that we are working on the premise that what is going to happen is similar, comparable or equivalent to other cases that have already been experienced. In other words, the past is the source of knowledge about the future.

This has been and remains the standard and most used way in which we generate knowledge. It is also the departing setting for learning, and within postnormal times theory, it is conceptualized as plain ignorance. In the postnormal approach, ignorance is not solely the lack of knowledge; it is also the embodiment of our cognitive structure at any given time, including the relation between what is known and what it is not. And there can be no doubt that plain ignorance has allowed us to come a long way. The problem lies in the way in which Plain Ignorance produces knowledge and the intellectual tools it uses in the process. Let us examine four of the main ones:

1. Linear thinking: linearity was born the day our ancestors discovered that certain events preceded others. In some cases, this was a valuable discovery which gave them a competitive advantage.

Linear thinking led us to the development of causality, and this in turn allowed us to explain and predict. But in a context that becomes ever-more complex, linearity, finding a univariate cause and expecting it to provide us the explanatory keys we seek can be, if nothing else, risky. Additionally, this kind of approach is prone to intellectual rigidity or even arrogance, De Bono (1970) was one of the first ones to pinpoint it. Similar conclusions have been derived in other fields: Hernandez and Prathibha (2008) emphasize the shortcomings of this approach in medicine, while Johns (2008) poses a similar case for management.

2. Induction: the inference of a general category on the basis of a limited observation. Being able to extract a universal principle from the examination of particular cases allowed major advances in science. The problem has arisen when we lost sight of the fact that the observation that is at the root of the induction is limited and as such, open to being rendered false by another improved or more extensive observation. Hume signalled the problems of induction in his 1739 book '*A Treatise of Human Nature*': 'If reason determined us, it would proceed upon that principle that instances, of which we have had no experience, must resemble those, of which we have had experience, and that the course of nature continues always uniformly the same' (2019a, 1501). He makes a more relevant case for Futures in a later work, "An Enquiry Concerning Human Understanding" (written in 1748): 'We have said that all arguments concerning existence are founded on the relation of cause and effect; that our knowledge of that relation is derived entirely from experience; and that all our experimental conclusions proceed upon the supposition, that the future will be conformable to the past' (2019b, 411). In other words, our knowledge

derived by induction is contingent, and all the more so in a world that is ever-more chaotic with seemingly insignificant changes leading to major impacts and turnarounds.

3. Dichotomous thinking: a notion based on two premises: firstly, that our object of analysis is composite of two parts that, jointly, cover all the object's possibilities and secondly, that these two parts are mutually exclusive. Thus, the implication is that when something is true or right, the opposite must be false or wrong. And just because of that, analytical effort is cut in half. Once one part is established, it follows that the other part has to be the opposite. This reasoning worked quite well when our understanding of the world was simpler, Newtonian, and the cosmos worked on the basis of action and reaction. But today we live in a quantum world and things no longer are or are not, as sometimes they can also be both or neither. In fact, evidence for this can be seen in the broad prevalence of contradictions nowadays.

4. Specialization: as the accumulated knowledge was growing, some way to order or classify was required. Not only that, different kinds of people have focused in distinctive intellectual fields and thus, be it by interest, affinity or enforcement, most of us have traded scope for depth. The point here is that this cognitive arrangement made it easier for an analysis approach in which objects are decomposed into its constituting parts. Something that, in turn, lets us examine each of them in great detail but, very frequently, in a rather decontextualized manner. An exercise that could be akin to trying to make sense of a forest by studying each one of its trees discretely. For August Comte, specialization was the sine qua non condition of progress (although it could also endanger the social cohesion). Max Horkheimer, one of the main members

of the "Frankfurt School," articulated a strong criticism to specialization objecting that 'the danger of focusing on technical minutiae is that researchers become insulated from one another, and lose the ability to use one another's resources. The result is a lack of unification and overall direction' (Berendzen 2017, 13). Yet, it cannot be forgotten here that specialization works extremely well within a linear thinking perspective and they reinforce each other making it harder to consider alternative approaches.

In summary, the use of some (or all) of these pillars of plain ignorance may be problematic in a postnormal change context. And despite this, plain ignorance is still the dominant (and often the only) way of researching. But, can we rely on plain ignorance in postnormal times?

This question cannot be answered with a simple yes or no; firstly, we must examine in which situations plain ignorance might be valid. Clearly, if we are faced with a situation that is objectively similar to another that occurred in the past or somewhere else, knowledge obtained in those analogous events may be useful and valuable. In those situations where the evolution of the object under examination is incremental, it may also be useful to analyse previous change. As such, plain ignorance may be a suitable way of tackling those situations in which we know enough to predict the direction and, up to a certain point, the impact of the change we are experiencing. In postnormal times theory, this combination of comprehension and incomprehension is characterized as surface uncertainty. This is the kind of uncertainty that may be experienced upon the imminent launch of a new iPhone or regarding the result of the next election. There will be things we do not know, but the situation and what we know about it will allow us to establish a working hypothesis of what is likely. The only condition in plain ignorance is to rely as much as possible in empirical evidence. Thus, all estimates of future phenomena have to be based on (past and present) data and

information. This, however, makes the first tomorrow prone to produce scenarios that include a great deal of continuity with regard to the present. And this is precisely why this tomorrow has been given the name of the *extended present*.

In order to make the three tomorrows more accessible to students, I started drafting some instructions that, after extensive testing, evolved into the process that I am presenting here. The three stages are meant to help people using the tomorrow by a recurrent procedure: firstly, what are the *key items* we have to focus in every tomorrow; secondly, the *triggering questions* that will indicate how to do it and; thirdly, the *scenarios' steps* to actually build them. In the case of the extended present, we address the key items with the first instructions:

1. What do we know about current change and the present situation?
2. What do we *not* know about them?
3. Therefore, what do we need to *learn* about them?

Extended present dwells in plain ignorance; therefore, learning is the required action here. Still, it is not always easy or evident how to address these items; this is why some triggering questions, the second stage, may help us to get started for extended present:

1. Where is current change heading?
2. What is going to be the impact of this current change?
3. How big is this impact going to be?

In order to address the items and answer the questions, there are several methods that can be used. To keep the extended present logic, we have to focus on those techniques that seek to generate knowledge on the basis of information about the present and the past. The obvious example is trend analysis. The analysis of time series can provide useful information regarding the direction and dimension of change. Despite its apparent simplicity, trend analysis remains as a hugely popular method, doubtlessly because of its deep-rooted compatibility with the

mechanisms of MNF: it is based on a linear approach, and it is consistent with inductive (it is rare to have access to a complete temporal series), specialized and dichotomous approaches. It is a good way of starting a futures research. Trend analysis has a long a wide tradition in futures and that explains why so many authors have included them as one of the reference methods: Bell (1997, 177), Coates (1996, 63), Masini (1993, 76), Sardar (2013, 59), Serra (2014, 47), and van der Heijden (2005, 252). Many others have also added trends in their methods taxonomy like Bishop, Hines, and Collins (2007), Börjeson et al. (2006), and Lindgren and Bandhold (2003). Naturally, cases may arise for which no data are available; then, a qualitative approach will be required. But the aim will be the same: to seek to distil answers for the future on the basis of the lessons of the past and the present. To do this, we will be able to use other methods such as surveys, in-depth interviews, focus groups and even a Delphi. Delphi also has a long and distinguished list of mentions being another core method: Bell (1997, 113), Coates (1996, 59), Garrett (1996, 101), Masini (1996, 107), Sardar (2013, 31) or Serra (2014, 71); although, the best historical view of Delphi is probably the one by Flostrand, Pitt, and Bridson (2020).

In any case, and in the event that there is the need to refine the results obtained by extrapolation, we might contemplate the use of another group of methods. For example, if we are quite certain about what the two most influential trends are, then we can cross them using a 2 × 2 matrix (also named the Schwartz or the Global Business Network (GBN) approach), which will provide us with four possible outcomes (we could also cross the two trends over in which there is the highest uncertainty, but this option would lead us to the following tomorrow, as we shall see next). If we want to combine more variables, other methods can be included that will allow us to pass from a univariate approach to one that is multivariate such as a cross impact analysis (Helmer 1981; Middleton and Wedemeyer 1985), structural analysis (Godet and Durance 2011), morphological analysis (Duczynski 2017; Godet and Durance

2011) or, if we focus on the behaviour of human groups, a set of actors (Godet and Durance 2011). In all of these cases, the selection of variables is crucial, and the estimation of their behaviour is even more important.

The point is that once we have obtained the information, we can face the actual building of the scenario. The process' last stage, scenario's steps, offers a path to build the extended present:

1. Use the trends you have identified to project change.
2. Look for trends' combinations with high-impact potential.
3. Build the future stories that lead to each scenario.

In my experience, extended present scenarios are not a real challenge for students or researchers. The first tomorrow is so connected to standard research procedures that all sorts of scholars can master it pretty fast. It is worth noting though that extended present is the only tomorrow that has a singular name. This is intentional to denote that these kinds of scenarios are rooted in the idea that the future is a projection of the present. But it also signals its main problem: using experienced change in order to anticipate future change entails assuming that the forthcoming change will maintain the direction, speed and momentum of the preceding change. And this simply does not happen. If there is one thing we have learned in Futures, it is that the least likely future is the one in which nothing changes; therefore, we can establish an inversely proportional relationship between continuity and probability of occurrence. But the fact is that we are also in postnormal times, and if we accept that change is accelerated, expansive, incremental and simultaneous, expecting the future to move within the parameters of the extended present is deeply naïve, at least beyond the short-term.

And this is why we must progress towards another tomorrow that is able to include a higher level of change, ergo…

The Second Tomorrow

The main difference between the first and the second tomorrow is its willingness to explore more disruptive situations. We are no longer looking for indicators or any basis for connecting the future to the present. Now, the working assumption is that the future will (in whole or in part) be different and new. This premise will inevitably place us beyond the scope of surface uncertainty, initially at least, because we will no longer be able to be sure about which direction change will take, and still less about what its impact might be. These parameters place us squarely within the territory of shallow uncertainty and require us to change how we work because plain ignorance will be of no use here. If we accept that we are facing something new, to what extent will our past experience of other events be able to help us? At best, partially. Most likely, there will be great doubts regarding which is the relevant field of knowledge or what data or information we should look for. In these cases, trying to rigidly apply a plain ignorance approach to a situation of shallow uncertainty could cause bigger problems or lead us to conclusions that are profoundly wrong. Another approach is required, and that is why we must resort to vincible ignorance. Vincible ignorance, as opposed to plain ignorance, requires us to undergo a prior step: to become aware of our ignorance. In other words, Vincible ignorance cannot be applied unless we are conscious of what we do not know. Therefore, before heading off to find references, information or data, it is necessary to spend time considering what parts of the subject under examination we know, or are known, and what parts we do not know or are unknown. Subsequently, we will need to establish what kind of obliviousness we are dealing with; it may be that a particular behaviour is inexplicable from an economic outlook but perfectly understandable from a psychological or biological viewpoint. In this first case, our cognitive perspective will have to expand so as to incorporate other disciplines, theories, methods or ideas in order to overcome the initial ignorance. But we may also come across situations that are so recent that no perspective whatsoever can be gained in order to appreciate the full extent of the situation. In this case, there will no option but to accept that we lack experience, and we will have to speculate as to how it might evolve and what its impact might be. For example, we do not fully know what the long-term impact of climate change, or of the introduction of self-driving vehicles in cities, will be, but we can produce reasoned speculation about them. We can use insight from other sources, like transition studies, to see how changes have developed in the past on the basis of some comparable criterion. And we can also study how this possibility has been viewed in art, design or science-fiction. We have to take into account that very often the first explorations of new possibilities (whether technological, social or cultural) come from artists, designers or peripheral activists of various kinds. The use of imagination has very bad press when it comes to envisaging the future, probably because it forces the MNF to leave its comfort zone. However, the fact is that we are only just beginning to realize that imagination and intuition are other ways of generating knowledge which, in the case of the future – and possibly because they transcend plain ignorance – can work well. In any event, we must always bear in mind that the MNF constantly tends to move back its comfort zone, its default setting of plain ignorance and surface uncertainty; and this is why we will not be able to operate within the new parameters (shallow uncertainty and vincible ignorance) unless we have completed the preliminary stage of gaining an awareness of our ignorance (or, more to point, of our level of ignorance).

And given that the main objective of this tomorrow is to be able to describe situations of profound change, it is often very useful to resort to references that have been made popular by the media, the arts or science-fiction. Many people may find it difficult to understand intellectually the implications of the interaction between human beings and artificial beings, but they may be able to make a more emotional connection thanks to films such as

Blade Runner (the original and the 2049 version), *Her* or *Robot & Frank*. The fact is that we are subjected to a constant barrage of future images, and there is nothing wrong with taking advantage of them in order to try to offer a more profound understanding of the consequences of certain future options. This is why the second tomorrow is called *familiar futures*; because there is often a certain familiarity with the future that is presented (artificial intelligence, post-human beings, etc.), but it is partial, non-critical, and in most cases, disempowering. Familiar futures seek to use that knowledge base in order to promote a broader and more profound reflection on the possible effects of these changes or situations.

My process will start here, once again, with the first stage by listing the new key items that need to be met:

1. Where does novelty come from?
2. What other perspectives, theories or disciplines do we need to bring in?
3. How can we enhance our *awareness*?

Awareness is the key word in familiar futures; we need to abandon the rigidity of plain ignorance and be open to new inputs and perspectives, and in order to get us in the right mindset, we can proceed to the second level, the next batch of triggering questions:

1. How can we expand our comprehension of change?
2. What new elements or ideas can we or do we need to bring in?
3. Where can we get these new elements or ideas from?

In order to find the answers, we will have to resort to new methodological tools. But – and this is very important – we should not discard or repudiate preceding trends. The results of the first tomorrow may be an excellent basis for developing second tomorrows. We simply have to try to work out where the weak points in the previous scenarios are, or rather, what are the postnormal weak points? For example, do the scenarios of the first tomorrow adequately

reflect the complexity of the analysis' subject? Have we managed to capture the tapestry of relationships or connections between the components of the scenario? Or have we oversimplified the situation? Another point: have the aspects with the highest potential for chaotic behaviour been identified? Has it been possible to determine in what circumstances the system under analysis may experience a chaotic leap? This is something that an extended present finds very hard to do because it takes itself right where it does not want to go. Finally, a relevant point from a postnormal perspective: do the preceding scenarios contain contradictions? This may be more difficult to detect because, in principle, a scenario ought to be consistent and coherent; nevertheless, many extended presents are based on logic that is unsustainable or contradictory in the long run. In other cases, the contradiction will be implicit or simply the result of not taking into account the possibility that the change will accelerate, expand, increase or happen simultaneously to other phenomena. In all of these cases, it will be relatively easy to build a second tomorrow using the first tomorrow as a base.

Fortunately, there is no shortage of methods to introduce novelty or to disrupt trends in futures. Trend analysis may be enriched by trying to identify emerging issues. Dator (2009b, 2018) may be the main promoter of the use of emerging issues analysis, but the work of Carbonell, Antonio, and Belén (2015) provides a more contemporaneous approach to it. Yet, the important question when dealing with new things is to assess its potential impact. And, to estimate this impact, we can use techniques like the futures wheel, originally conceived by Gleen and Gordon (2009), or the middlecasting as proposed by List (2004). In some cases, it may be that what is of greatest interest is none other than pursuing the most uncertain or disruptive aspects. In this case, a 2×2 matrix using the Schwartz (1991) approach or a morphological analysis (Duczynski 2017; Wissema 1976) can also work very well. Still, here we have to understand that the game has changed, instead of trying to ground estimates on empirical evidence; the aim is to

argue for speculations on the basis of any possibility that may occur (no matter how improbable). Evidently, qualitative methods can also function in an optimum manner here: interviews, surveys, Delphi and even in approaches that are openly participatory: future workshops, focus groups, etc. Finally, it may turn out, initially at least, that it is difficult to articulate alternatives to the extended present. In such a case, it may be useful to resort to incasting archetypes, as defined by the Manoa School (see Dator 2009a).

Whatever method we decide to use, it should be able to respond to the triggering questions and, by doing so, provide the elements to build the scenario. In this case, the third stage of my process proposes the following scenario's steps:

1. Look for emerging issues that convey a substantive or relevant impact for previous trends or scenarios.
2. Look for alternative ideas or perspectives from other disciplines or fields.
3. Reassess the relevance or validity of the extended present trends:
   a. Under the impact of those emerging issues.
   b. From the perspective of other disciplines or theories.
4. Generate new scenarios based on greater departures or disruptive impacts.

Familiar futures can be more difficult for people with a more rigid mindset and very easy for imaginative and creative participants. However, they usually denote the boundaries of what we deem as conceivable. Over the years, we futurists have learned that, despite our best efforts, some future options are seldom truly included or considered in our stock of scenarios. Something that Jameson (2003, 76) captured in his famous quote: 'it is easier to imagine the end of the world than to imagine the end of capitalism.' The point is that, in a fairly systematic and implicit way, we tend to prefer or privilege certain future images at the expense of others. It is not unusual to find ourselves in situations that have previously been considered to be unlikely, if not directly impossible, to happen, and despite everything, they occur. How is this possible? Can our futures knowledge be so defective to let us make such blatant mistakes? Or are we so dim-witted that we fail to see what is in front of our eyes? It is precisely to resolve these problems that the next tomorrow exists.

The Third Tomorrow

This tomorrow allows us to deal with certain questions that extended presents and familiar futures cannot resolve:

1. Identifying and then properly dealing with these preference mechanisms, which are implicit and integrated in our cognitive systems and which end up privileging certain future options.
2. Being able to process those situations that go beyond shallow uncertainty and cannot be resolved with vincible ignorance while never overlooking the fact that the MNF always seeks to process any question via its default settings (plain ignorance and surface uncertainty), something which we judged to be risky for the previous tomorrow and which now is nothing short of reckless.

To address the first situation, postnormal times theory has developed the postnormal menagerie, a combination of its own and borrowed concepts, to configure a system that allows cognitive biases to be detected. There are three members in the postnormal menagerie:

1. The first is the black elephant, first cousin of the elephant in the room. According to the CPPFS, this refers to 'events that are highly likely and widely predicted that are usually ignored either by many or by society as a whole'.[1] As such, black elephants are used to recognize those cases where preferences (whether positive or negative) are allowed to prevail over reason. To a

certain extent. they describe those situations where, more or less explicitly, we choose to think in a particular way with regard to the future because it is less contradictory with our future preferences. Once again, the case of climate change is relevant, and another good example was the scarce credibility given to forecasts of the 2008 financial crisis. Despite the fact that both situations were preceded by numerous warnings, some of which were based on extensive empirical evidence, many people preferred to believe that they would never happen, and when they started to occur, many appeared surprised and spoke of black swans. It should be understood that black elephants work because, once again, they fit with our MNF. Ultimately, we believe them because they are consistent with what our field defines as normal.

2. The second member of the postnormal menagerie is the black swan, a concept coined by Taleb (2007) in his book of the same name. Black Swans are *things totally outside and way beyond our observations (...) they are not perceptible or articulated, even by experts; they appear as 'outliers' and come 'out of the blue.'* They are the proverbial exception, except that they no longer serve to prove the rule, but rather signal the shortcomings and cracks in the rule. A little like those extreme values that traditional futures studies schools would advise us to disregard because they were just 'noise'. Now, we know that they may be indicative of deeper or less-visible questions that need to be tackled. What happens is that, as opposed to elephants, with swans, there is little or nothing to be seen, even if we try really hard. We are instead talking about the opposite, voids or gaps, failures or glitches in the system, elements that do not fit, absences or silences that clash with the whole. They are often the direct result of cognitive short-cuts, of

believing that our knowledge is error-proof and of allowing the MNF to convince us that what we have in front of us works according to plan or within the bounds of normality.

3. The third and last member of the postnormal menagerie is the black jellyfish. The animal that alerts us to phenomena and events that have the potential of going postnormal. That is, events which, in certain circumstances, may undergo sudden and exponential escalation like jellyfish themselves (see Sweeney 2017, 141), challenging our knowledge and prior behaviour. Their essence is the appearance of normality, of *things we think we know and understand but which turn out to be more complex and uncertain than we expect.* Jellyfish warn us of the dangers of our intellectual arrogance, of taking things for granted or believing that we have the situation under control. Under this view, jellyfish allow us to identify which elements or situations may be more sensitive to the effects of postnormal change.

Thus, the main feature shared by all members of the postnormal menagerie is their resolute opposition to uncritical acceptance of any notion of normality. Ultimately, what may be deduced is that the idea of normality is, of itself, toxic from a postnormal viewpoint.

In order to tackle the second question – phenomena which fall beyond shallow uncertainty and vincible ignorance – the postnormal times theory establishes the need to conceive of a new kind of uncertainty that allows us to conceptualize those situations or events for which we have no answers and in the face of which we are sometimes not even able to formulate the questions. These are questions such as the emergence of (genuine) artificial intelligence (that which is self-conscious), the collapse of the European Union, the rise of global fascism, a new mass extinction, etc. The common trait running through all these questions is that no sooner do we begin to perceive

them than they split into multiple ramifications and impacts which demonstrate how little we understand them and/or how unreliable the little we think we know about them is. We are facing deep uncertainty, but unlike previous uncertainties, which may be seen as a quantitative gradation with regard to what we do not know about the subject under examination, deep uncertainty is not just simply the fact of knowing very little; it also has a qualitative aspect. In other words, it affects the value or reliability of what we think we know, and this is connected to another postnormal times theory nuclear concept, the unthought. Originally conceived by the philosopher Arkoun (2002), the unthought refers to what lies beyond the situations or axioms of our worldview. Even so, it should be pointed out that it is not unthinkable, but it is difficult to apprehend because it is beyond the realm of our imagination, which is in turn determined by our worldview. For instance (and following the previous example by Jameson), for a convinced capitalist, the end of capitalism is an unthought, not because he cannot conceive of such a possibility, even hypothetically, but because a significant part of the construction of his worldview is based on the principles of capitalism. Likewise, a true believer cannot truthfully consider that God does not exist; it may be an argument in a theoretical debate, but it cannot be something he countenances with all of its implications. If we consider it carefully, we realize that the conclusions of all kinds of futures' works are often conditioned by implicit unthoughts, which by not having been made explicit, become transparent, invisible to criticism. Questions such as the superiority of science over other forms of knowledge, the inevitability of the laws of market forces, the omnipresence of heteropatriarchy, the intrinsic evil of terrorists (and that they are never us), etc. The deep uncertainty associated with these examples often does not derive from what we do not know about them, but precisely from we believe to know about them and, also, from a rigid inability to conceive credible alternatives in the form of future scenarios.

How can we face this uncertainty? Firstly, by accepting that both shallow uncertainty and plain ignorance are not going to be enough, and that a new approach, invincible ignorance, is needed. And as in the case of the uncertainties, this is not just a difference of degree, but once again a qualitative shift. Normally, when we first tackle an issue, we will use a plain ignorance approach (remember, the MNF default mode) and just try to learn whatever we do not know. At a posterior stage, and maybe because we are aware of a postnormal creep, we may find ourselves willing to advance towards the approach of shallow uncertainty; then, we will have to determine the limits of our knowledge, consider alternative sources for the generation of new knowledge and if all this fails, find ways to speculate in a reasoned manner, vincible ignorance. But when we reach invincible ignorance, it is an entirely different game, and it is no longer about being aware of the scope of our understanding, but rather about asking what it is that we truly comprehend. The one thing that we cannot forget is that the MNF will bestow any fact that can be empirically corroborated with huge credibility, making sensorial perception the main criterion for accepting any information. However, when we arrive at the third tomorrow, it is vital to ask oneself this question:

Do we think what we think because of what we see, or do we see what we see because of what we think?

This is not a word game. The more we know about how our mind works, the more we discover about its ability to make us believe things that are not real. This is the basis of prestidigitation, and it works because our brain is always trying to save energy. Thus, if our perception is in line with our MNF, it will be much more difficult to fight that perception, no matter how mistaken it may be. Furthermore, by the mere fact of being social beings, with our culture engrained in a specific social context, many of the implicit axioms and premises of our worldview will be the basis of the unthoughts that affect our futures analysis. And this is why, in invincible ignorance mode, most of the times, the problem is not so much what

we do not comprehend, but rather what we actually think we understand. Therefore, having reached this point, we have no option but to call into question that part of our knowledge that prevents us from making progress. In order to emphasize that this third tomorrow requires a deeply different way of engaging with it, it has been labelled unthought futures.

And how can unthought futures scenarios be developed? As usual, the proposed process will start in its first stage by identifying the key items in this tomorrow:

1. Are we under the effect of a cognitive bias?
2. Could it be that our worldview's implicit assumptions and axioms are limiting our capacity to anticipate the future?
3. Is there a part of our knowledge that we need to *unlearn*?

If we accept that our knowledge is part of the problem, we need to be ready to question and deconstruct it. But this kind of reflection can be hard for some people. Therefore, the triggering questions, the second stage, propose a more circular approximation to unlearning:

1. Are the trends, emerging issues and scenarios we have used so far tuned with this new reality and change?
2. Could it be that our worldview somehow limits our future perspective?
3. Are we, consciously or unconsciously, leaving out any future option?

There is no an easy way to directly answer these questions. But I have found that the application of the postnormal menagerie helps, and it does not really require the use of a particular method. It is more a matter of retracing our steps and seeking to discover if some of the preceding scenarios may contain elephants, swans or jellyfish. If we believe they do, then the question is to focus on establishing in what way the existence of one of these animals alters our previous conclusions; what possibilities they require us to include or to discard. In most cases, the postnormal menagerie

will allow us to enrich or enhance the sophistication of the preceding scenarios and even generate new sub-scenarios that may expand our perspective.

But in order to detect the unthoughts at work in our scenarios, we might need specific techniques. In this regard, the postmodern methods of genealogy and deconstruction may be useful to demonstrate or expose the implicit parts of our worldview, or to put it another way, the sources of our unthoughts. Again, there is no shortage of futurists that have engaged in the application of postmodernism to futures, but Inayatullah (1990) is a quite obvious choice. He not only pioneered in this endeavour but he also later developed on the causal layered analysis (1998), a technique that can be very useful here. This layered analysis allows for a progressively deeper exploration of the roots of our position with regard to the future evolution of any given subject. Having said this, we cannot ignore that most postmodern methods are very effective for critical analysis, but frequently, they are not equally suitable for building scenarios. In other words, these techniques can help us to identify the unthought, but once we have managed to detect it, using other techniques may be more operative. For example, if an unthought is characterized as a 'what if…?', then List's middlecasting (2004) might work very well. In other cases, it may be good to contemplate new alternatives in a morphological analysis. Or, if it helps us to understand how a specific agent might react, our set of actors may be improved. In other words, this is not so much about there being specific methods for exploring the unthought, but rather about incorporating the unthought into our scenarios.

At this stage we may be in disposition to build the scenarios that in my process would be the third stage with the following steps:

1. Identify the unthought in the previous tomorrows.
2. Articulate the unthought as divergent future hypotheses.
3. Use the menagerie to double-check against cognitive bias.

It is not uncommon that the development of a new tomorrow provokes the need to reform or change the previous one. I do not forbid it, but it is not really necessary. The function of the following tomorrow is not to refute the previous one. Each tomorrow allows us to capture a different perspective or shard of the future. It is by having all of them, actually many of each, that we can have a more comprehensive perspective of the future. What is shocking from an extended present viewpoint may be logical from an unthought futures one and vice-versa. At the end of the day, the only real legitimation of the three tomorrows is if they really let us attain a more comprehensive and insightful perspective of what may happen next and how we can best navigate postnormal times.

Conclusion

My teaching and lecturing work prove that despite the three tomorrows not being a method, it works very well as an approach. As such, the tomorrows provide a structure within which it is easier to build each scenario; they define an epistemological framework that allows us to select the most suitable methods in accordance with both the object and each tomorrow's logic. The fact of being an approach also means that the tomorrows are not only useful to tackle the generation of scenarios, it provides a way to analyse how these scenarios have been created as well. In other words, they do not just determine the best way of deciding how to generate the scenarios; they also help us to understand why our scenarios will go in particular directions, and most importantly, how we can acquire a deeper understanding of the future. In a typical postnormal dynamic, the three tomorrows require us to examine both our perception of reality and the cognitive processes we use to apprehend this reality. Finally, the progress from one tomorrow to the next tomorrow is not just a way of increasing the sophistication of our future anticipation; it is also a suitable way of understanding and foreseeing postnormal creeps, and as such, the

tomorrows become a holistic way of studying the evolution of any subject.

The three tomorrows' last function is to aid us transcend or elude the notion of normal in our futures analysis. Normalcy is problematic for two reasons:

First, it tends to obscure and hinder the influence of the MNF and will nudge our conclusions in a particular direction (the one that fits the most with our MNF). And because we will see it as 'normal', it will make it a lot harder to uncover if we are in shallow or deep uncertainty.

Second, because normalcy becomes the Trojan Horse for slowing down, silencing or sidelining the really crucial debates on the future. What better way of avoiding a future option than to denounce it as abnormal? The concept of normal is too influential, too biased, too overvalued (often implicitly) and tends to conceal a particular status quo. And the fact is that a futures analysis that cannot criticize or put forward alternatives to the status quo that does not live up to its name.

The three tomorrows do not preclude the addition of new methods that can be developed in the future or the use of disruptive knowledge. It simply gives a path to engage in futures in these postnormal times. My proposed three-stage process goes a bit further by providing a workable manner to use the three tomorrows in a futures research. By moving from key items to triggering questions and then scenarios' steps, the process offers an accessible way to build scenarios within a postnormal perspective.

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Note

1. This quotation and the next ones are taken from the CCPFS' Postnormal Times website. Specifically the references to postnormal menagerie come from https://postnormaltim.es/essentials/menagerie-postnormal-potentialities.

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Postnormal Religiosity in Pandemic Times: A Polylogue

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Abstract
What constitutes a polylogue? What, in our pandemic times, makes for a meaningful gathering? Of the many and varied things affected by the COVID-19 pandemic, religiosity is one that has certainly garnered attention. How are individuals and communities adapting spiritual practice amidst our truly postnormal times? What challenges and opportunities face spiritual sojourners during a time of global upheaval? Bringing together a diverse array of voices to reflect on some of the many issues related to "postnormal religiosity," this is not an article or essay but rather a polylogue in both approach and form. Authors, some of whom are unknown to the conveners, were asked to answer some questions and reflect on postnormal religiosity. The product, as such, is as much process as it is polylogue, which offers some insights on this under-theorized concept within postnormal times theory.

Introduction: Why Postnormal Religiosity?

If 2020 has taught us anything it is that it is hard to keep faith or trust in what we previously considered to be normal, conventional, or orthodox. The simultaneity[1] of the pandemic and the lockdown showed complex globalized fragility never experienced before. The effects of the COVID-19 lockdown shows us that we are in postnormal times where the "conventions about how society is supposed to function have been undermined. The assumptions that served as the bedrock of the global order have also evaporated. We find ourselves face to face with new and emerging realities that we have yet to grasp" (Sardar 2010, 10). Thus, the conventional and the orthodox do not work anymore, and we enter the domain of the postnormal.

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Nothing describes the postnormal reality of the COVID-19 pandemic lockdown than what has happened within the space of faith and religiosity. When the global lockdown took place last year in the wake of the COVID-19 pandemic breakout, few would have imagined the systemic disruptions to our manufactured normalcy. Even fewer forecasted a transformational change in faith practices and approaches to spirituality and by extension a change in the religiosity of people. The lockdown threatened existing business models for many faith institutions that had hitherto relied on face-to-face engagement to conduct religious worship but more importantly had also democratized the space for spiritual practice. For the first time at a global scale, faith congregations and faith leaders would be challenged to take their practices online and now not only would they be serving their immediate congregations but they would also be at the beck and call of a global audience. Suddenly agency was gained by those who were previously cut off from the places and leaders of worship but equally agency was lost due to the digital divide and the inability to connect online. Postnormal religiosity is an attempt to sense-make the contours of expressing one's religiosity and spirituality during times of radical uncertainty, various states of lockdown, and amidst societies requiring distancing.

We use the concept of postnormal religiosity in an attempt to interrogate the ethical (and spiritual) implications of perpetual technological advancement amidst enforced lockdowns. In order for the article to deal with the diversity of approaches, to listen to multiple voices, and to accommodate a plethora of perspectives, to develop an inclusive way forward, the article deploys the concept of a polylogue. Envisaged as spaces that provide for "multiple logics, perspectives, voices, and existences," polylogues bring people together to generate critical insights (Kristeva 1977; Sardar and Sweeney 2016). In a polylogue, questions are more important than answers. In utilizing the concept of the polylogue, we postulate that it is only through a diverse exchange of ideas that a shared understanding of the impacts of the

pandemic, and its related crises, on religion and spirituality might arise. In designing our polylogue, we reached out to a range of contacts, who were all asked the same four questions:

1. What was the key thing that struck you as different in terms of religious practice and thought during this crisis?
2. How have "postnormal times" shaped and reshaped religious and spiritual thought and practice?
3. What was the most challenging part of religious and spiritual experiences during the pandemic?
4. What would you do differently in hindsight?

The replies received were quite varied, although some common themes are apparent. This itself is quite interesting particularly given the "random" selection of the contributors. Thus, the commonality amidst the diversity points to some interesting lessons from the pandemic.

In addition to our primary aim, it is our hope that this experiment contributes toward a more robust theoretical and methodological foundation for the polylogue concept within the broader context of postnormal times theory. Although Sardar notes that polylogues are "the essential tool for navigating our way out of the pileup that is building on the highway to the future," the concept has not been developed beyond its initial invocation within postnormal times theory (Sardar 2010; Sardar and Sweeney 2016). One aspect that is essential to the topic under investigation as well as polylogues as constructs is trust: how might individuals feel comfortable and confident sharing deeply personal experiences?

To this effect, we are thankful to those individuals who "trusted" us with their personal stories. These views paint a challenge for future expressions of faith and religiosity.

Who Motivates the Motivator?

Amjad Saleem

Who motivates the motivator? Ever since the COVID-19 lockdown in March 2020, I have

struggled as a leader of a team, with trying to keep my team motivated, whilst seeking ways to motivate and inspire me. So I turned to what normally motivates me during times of stress and that is my spirituality. Yet I found a challenge, where I was unable to practice elements of spirituality as I had done before: as a Muslim, going to the mosque for Friday prayers played a huge role in my spiritual motivation. For the first time that I could remember, I would not be able to go to the mosque as usual. Though I had missed Friday prayers before due to travel and illness, this time around, it felt strange, that I had the ability to go but I could not. And when it did start for a bit in between the first and second lockdowns, it was not the same, with the physical distancing and the wearing of masks, making the whole experience very lonesome and not in keeping with the spirit of community.

As the lockdown stretched beyond a couple of weeks, the challenge became very real as the prospect of a Ramadan in lockdown loomed. I did not relish the fact that this would be a difficult Ramadan making it a challenge beyond the usual challenges from an intellectual and spiritual capital perspective. Not only would I be unable to go to the mosque for prayers but I would not be able to engage with others as the spirit and cultures of Ramadan had taught us. So I turned to a friend and a mentor, an Anglican Priest, who in previous years had kept me physical company during Ramadan, choosing to fast in solidarity with me and meeting me to break the fast. Those times that had passed, we had shared some of the ideas of fellowship, understood the commonalities of each other's faith and shared spiritual engagement. This time round, we were reflecting on trying to capture that whilst being physically distant and trying to buck the norm which is in itself a teaching of Ramadan, settling on using Google Meet as a way to connect.[2]

So in an initial way, I wanted to create a virtual space with him primarily to act as a spiritual catalyst and a way to retain some sanity amidst the chaos of not being able to function normally. However, as we discussed with each other, we realized the need to expand our conversations to consider a wider virtual interfaith space. For me, interfaith engagement remains a true space for dialog, respect, and understanding around the common human concepts of compassion. These values in the face of the lockdown and physical distancing are at risk of declining. So the challenge became how do we maintain this spirit whilst going virtual?

As I embarked on these conversations with other faith leaders, I realized that the question of "who motivates the motivators?" becomes more valid for faith leaders. With the services going online, and places of worship becoming virtual, faith leaders were having to not only adapt but to take on more roles and responsibilities. Mainly because as leaders and spiritual guides of their congregation, in a virtual space, they would now have to be "on call" providing solace more than ever, for longer periods than ever. Having to lead congregations on Zoom, taking into account the technical and logistical matters whilst ensuring spiritual solace could take its toll. I had faith leaders telling me that whilst they were conducting sessions of worship, they could not take spiritual relief from it as they were worried about ensuring that congregation members switched their mics and videos off. In addition, with accessibility going virtual, faith leaders were now reaching out to more and different constituents from diverse demographics, geographies, and time zones than ever before, which has tested them in unforeseen ways. So I realized that more than my spiritual sustenance, in fact a space for faith leaders to reflect and be vulnerable was needed as a way to motivate them. This was entirely interesting for me and really unforeseen in terms of realizing the needs for faith leaders during these times of lockdown.

So what are some of the lessons learned over the past 9 months of engagement with these faith leaders? Firstly, there needs to be a recognition that faith and worship has become virtual and so it is not really business as usual or normal. We have to contextualize and think differently of how we engage and who engages. There has been a flattening of the hierarchy of worship. Previously one would

have to go to the mosque or the temple or the church to meet the religious leader and this could be inaccessible for certain genders and age. Yet with services going on line, you now had the faith leader appearing in your front room but more importantly, if you did not like your local faith leader you could pick and choose to attend other services given virtually by other faith leaders. So the "urbanization" of faith services has become the norm and now faith leaders are no longer just for their local community but have become global. As communities increasingly face extended lock-downs, the pastoral and spiritual care afforded by faith leaders has been extended now to mental and psychosocial support alongside tech support. With all the different requirements placed on faith leaders, there is now no space and time for their reflections and downloading. This needs to be considered for their own mental health.

So where does this lead to any consideration regarding the future of faith and the future of faith leaders? Simply now more than ever, it is not simply about leading in worship or services but to have more pastoral care along with mental health support. Faith leaders will need to be more flexible in this virtual age which also includes a need for peer engagement.

What needs to be done differently? We need to recognize that faith practices are now easily followed through online and what is needed is for people to have a space to decompress and share their fears and anxieties. Faith leaders need to evolve in how and what services they can provide and also what support they need to be able to do this properly. As people need to decompress so do faith leaders. We also need to understand that how we look at congregational prayers and community gatherings has to change as does some of the delivery of religious practices which become virtual. As such faith institutions need to adopt and the flexibility of the use of places of worship will need to be reconsidered. A post normal religiosity has to take into account the future of congregational worship services and in very real terms the future of religion.

God's (Wi-Fi) Signal

Wei Ling Low

How would our relationship with the divine be different with virtual churches, temples, and other places of worship? Would our prayers still mean the same when conveyed through bad Wi-Fi and broken microphones? Can our sense of belonging to a religious community stay the same? And how about with our experience of religion itself?

The outbreak of COVID-19 has left us stranded at home, testing our religious self-discipline. With the observation of social distancing (Shukman 2020), for the first time we are forced to pray, fast, and worship without the physical presence of our fellow believers. It has even sparked off a new research topic where researchers are studying whether this physical distancing could impact the audio aspect of spiritual ritual (The Ohio State University 2020).

Religious institutions have been quick to deploy technology in order to engage their followers. Pastors are turning to preach on YouTube (The Vine Church 2020); Imams are conducting live "Ask Me Anything" question-and-answers on Facebook (Ahmadiyya Muslim Community 2020); Monks are now savvy as the new Instagram spiritual influencers (buddhistinsights 2020); and Zoom is now the byword for young and old alike for hosting religious meetings (Bishop 2020). COVID-19 will be history's greatest and most influential actor in creating the postnormal spiritual marketplace (Whitelaw et al. 2020). Believers are now spoiled for choice and no longer limited by geographical proximity, specific service timeslots, or even particular religious personalities.

In addition, talks and seminars that used to take months to organize can now be easily set up within a week (Bigmarker 2017). We have livestreamed webinars to thank for the elimination of obstacles around venue booking, for instance security clearance required for high profile speakers, or upfront financial outlay to host a physical event. Virtual meetings have also integrated tools so sophisticated, that virtual meetings may even be more effective in

engaging their audience (Nanos and James 2013). Instant file sharing, poll systems create a more dynamic two-way environment, even on religious grounds.

In 2020, a new world order is emerging—one that integrates technology with religious participation, transcending geographic boundaries and even language, given voice recognition and simultaneous machine translation (Subotovsky 2020). Now with a higher level of technological adoption by religious institutions, it is possible that post-COVID, dial-in options may become more the norm rather than the exception for attendees with time or geographical constraints.

Back in 2000, Putnam assessed how virtual engagements can lead to the creation of tangible virtual communities with spillover effects in real life (Putnam 2000). This was further explored by McClure (2017) who concluded that "Internet use may fill in the gaps between previously scheduled events." This pandemic may just be the golden ticket for religious institutions to court dispassionate bystanders.

Virtual platforms can be highly efficient engines for the busy follower (Globalia Logistics Network 2020; Nanos and James 2013). For someone with a hectic schedule, taking half the day off may prove impossible (taking into account commuting time and post-event socializing). The embarrassment of walking in late or leaving early may be enough to make some avoid participating altogether. In other instances, if a follower is even slightly unwell, he may decide to err on the side of safety and give religious attendance a miss. People who travel often can now dial in anytime even while abroad. The global deployment of technology also benefits followers with limited religious representations where they live. For example, Shinto followers around the world may now be able to tune in to webinars about Shinto from a university in the United States (CJBS News 2020).

Interestingly, McClure (2017) research has indicated that "Internet use lowers the likelihood of exclusive commitments to any one religious institutions." He touted this as an opportunity for "spiritual tinkering," or to put it simply, an exploration of foreign religious landscapes. The current spurt of online resources encourages us to learn more about other religions as well as question and deepen the understanding of our own. All this can be done at a self-determined level of visibility or anonymity, providing a safe space for curiosity (Edmondson and Daley 2020). This psychological safety encourages the merciful display of vulnerability while participants delve into a higher level of spiritual and emotional connection.

Digital platforms provide low barriers to entry with many companies offering a freemium model to attract early users (Pelter 2020). As the world has gradually got used to a second life on the internet, this is a blue moon season for religious institutions to re-strategize their engagement and evangelism activities. In the past, religious leaders struggled to find ways to engage their younger followers (Dallas 2016), with changes in lifestyle brought by modernization, traditional means of preaching, and worship (Vitisia 2016). However, with this unprecedented pandemic, it is a time for experimentation on how to foster greater engagement and communication with their congregations.

In reality, technology cannot entirely replace the bodily presence that the architecture of physical space and the interaction of living communities provide. However, the integration of technology allows for different opportunities that would not be possible if confined within the walls of traditional religious structures. Centuries of civilization and a myriad of factors have allowed traditions of religious preaching and teaching to evolve. As we now experience this jolt to our traditional evolution processes, perhaps we could leverage on it to consciously explore newer helpful forms of religious belonging and worship.

Experiences from Malaysia

Zarina Nalla

I speak purely from a personal perspective of how the ban of all public congregations during the initial stages of the COVID-19 pandemic affected the Muslim religious community in Malaysia.

This was how it all began: from 27 February to 1 March 2019, close to 16,000 Muslims attended a 4-day gathering at the Sri Petaling Mosque, Negri Sembilan, Malaysia. 14,500 of the attendees were Malaysians, while others came from Singapore and Brunei. The gathering accounted for 36% of the total number of cases several weeks later.

On the 18th of March 2020, the Malaysian Prime Minister Muhyiddin Yassin announced that Malaysia would be under the Movement Control Order (MCO). Much economic activity would come to a standstill and public gatherings would not be allowed.

However, the announcement that Friday congregational salat or prayers will no longer be held did evoke much emotion and reaction,[3] a difficult decision which was handled delicately by the Malaysian authorities. This tough policy directive needed the Mufti himself to make a public announcement on national television to appease the religious community who were in disbelief that for the first time, known to the author, they would be deprived from weekly gatherings of Friday prayers (Salat Jumaat). "All activities at mosques and suraus (prayer houses) including Friday prayers and congregational prayers will be postponed beginning from 17 to 26 March 2020," Datuk Seri Zulkifli Mohamad Al-Bakri said in a statement.

The Friday prayer ban was a game-changer. It paved the way for what was awaiting us. We sat and watched in horror as the MCO got extended from one public announcement to another, robbing us of so many aspects of our religious life. Precious practices that we took for granted were put on hold.

Besides congregational Friday prayers, Muslims gather at mosques or homes for other occasions such as during funeral prayers and burial rites, weddings, talks, the Eid (festive) prayers, and Terawih prayers which take place every evening for the entire month of the Fasting month of Ramadhan.

As a result, many classes are currently being organized via virtual platforms now. Other religious events like Quran recitation or the Maulid when we celebrate the birth of the Prophet Muhammad (peace be upon him) is

being conducted in different ways, such as a live telecast of a few members singing poetry and salutations, while keeping strictly to Standard Operating Principles.

We miss the face-to-face interaction and the whole experience that stimulates the senses, the smell of lamb *beryanis* (rice cooked with spicy lamb) served at almost all weddings, agarwood incense, sweet jasmine, and oud perfume.

I noticed that as the months of lockdown continued and became long drawn, the religious community became more desperate to replace the face-to-face gatherings that they were accustomed to. They were bent to replace as best as possible, the yearned lessons by their teachers. The camaraderie and rapport must not be lost. There was once during the fasting month, when the late night prayers (Tahajjud), as in before sunrise, were organized over a Zoom link. Those who joined in were able to hear voices only and see some faces only. Also, background noises can be very interruptive and most members would have to mute or be muted for the sake of the majority.

Another interesting development that ensued was that the proliferation of virtual platforms also meant that we could enjoy online gatherings at a global level, which was not possible before. No travel is required, no travel, and the cost is also much cheaper. However, I am convinced that the physical presence would have been very different.

Most cameras would be switched off for obvious reasons as everyone is at home where switching the video function would be an infringement of privacy.

In a nutshell, the COVID-19 pandemic and the ongoing MCO are galvanizing the religious community to use virtual platforms as creatively as possible. The list of activities has been quite impressive and many have embraced this new behavior.

A Time to Change

Saeed A. Khan

Timing is everything. In the midst of the early conversations emerging in early February

about a strange virus discovered in Wuhan, China, I continued what was then my usual frenetic pace of academic teaching punctuated by air travel. It was yet another serendipitous trip that took me to Saudi Arabia, where I had the blessing to be able to perform Umrah. Upon my return home to Detroit in the United States, and an immediate turnaround involving a 1 day trip to New York City, I endured a "48 h" flu-like occurrence unlike any previously experienced. Looking back on that now, I realize it was a very mild case of COVID-19.

A month later, the virus from Wuhan had made its way to the West Coast of America and before long, I, along with so many others in Detroit and elsewhere, was plunged into a new reality: a near complete lockdown. We were now in quarantine, from friends, from family, from work, from the rhythm of life that we had taken for granted just days earlier. As days turned into weeks, I adapted to life "online," as the means to continue my teaching responsibilities and also the mode of communication to the world outside my home that seemed to have lurched to a halt. That Ramadan began 2 months after the initial lockdown was no mere coincidence; it came with not only its usual blessings but an opportunity to take stock of the elemental aspects of life and one's needs.

Ramadan 2020 will be remembered for its constriction from the usual social aspects that form its own, unique pace. Gone were the iftar invitations; gone was Taraweeh at the mosque; gone was the prospect of Eid with friends and family; gone was the anticipation—and anxiety for some—of new outfits, cooking, even appearances. But what was lost gained a new and amplified appreciation. Missing those familiar trappings of Ramadan helped evoke the memories of Ramadans past and the longing for the restoration of those wonderful practices. At the same time, Ramadan under COVID-19 was akin to a month-long *itikaaf* (spiritual retreat), where being sequestered at home allowed one to conserve energy and rechannel it toward the spiritual. Islam compels us to avoid the trite question "Why Me?" to instead accept that life under COVID is yet another test and that we are being tested as those before us were as well.

This continuity and connectivity with humanity, both present and past, merges faith and hope in an organic, seamless way. Occurring in the midst of Ramadan allowed for the perfect opportunity to apply the spiritual discipline of the month in real time to cope with this challenge individually and collectively to help friends and family know we are there for one another, even if separated through sequestration.

While some might contend that we are now living in a "postnormal" time, it is unlikely that we will or should return to a completely identical pre-COVID way of life. Just as Ramadan teaches and encourages us to take the lessons and greater spiritual discipline of the month and apply them throughout the year, life under COVID will have a clarifying and cleansing effect. I have found that life under COVID has helped to enhance creativity in "connecting" with the Ummah. "Zoom Islam" has allowed for maintaining existing relationships and even developing new ones. With the entire world coping with this pandemic, I have noticed an unprecedented increase in empathy, which is so essential for our own well-being as well as others known to us or not. As quarantines are lifted, and there are restorations of "normal" interactions, patience (Sabr) is rewarded more vibrantly; gratitude (shukr) is felt more deeply and appreciation for what before seemed ordinary, even tedious, takes on new and fuller meaning.

While life under COVID quarantine certainly allowed for greater self-reflection and focus on the spiritual, it also brought with it spiritual challenges. With the uncertainty of when the lockdown would be lifted, I was struck with the anxiety that I might not be able to be available for my friends and family, especially my parents, in case they were in need or worse, were stricken by the virus. It was a constant, agonizing debate with the self as to making the attempt to visit them, while also realizing that doing so might inadvertently expose them to COVID, and perhaps the best course of action was staying away. Feelings of guilt and helplessness are inevitable, but they become tempered with faith in Allah's mercy that He alone has the power to protect whom

He wants, and our role of reliance on his beneficence is perhaps the highest expression of faith we can perform.

I know many people who were looking forward to the end of 2020 as they found it to be a difficult, if not cursed, time. I beg to differ. The pandemic, though not welcomed, certainly served its role as being one of those tests to gauge one's ability to adapt, to cope, and to apply one's own religious and spiritual training. If there is one thing I would have done differently, it would be to show people how to jettison those aspects of their lives they thought were indispensable and irreplaceable. COVID has served as a wonderful moment to pause, assess, and dispose of the baggage we carry in terms of material excess as well as the baggage we allow to be imposed upon our souls.

Changing Our Approaches

Jean Hon

Navigating post-normative times during the COVID-19 pandemic through the lens of Asian American Buddhists showcases the need for temples to change their administrative approaches to how they treat youth and is highlighting many government policy changes necessary to support our citizens. Asian American Buddhists are a minority group that is rarely remembered or even thought of. COVID-19 has exacerbated pre-existing social problems while fueling an unprecedented rate of anti-Asian racism and hate. These intensified struggles push many Asian American Buddhists to dig deeper into their faith and is leading some youth to question their temple's social structures. I recommend Asian American Buddhist temples to reevaluate what their purpose is for youth groups and for local and federal government to implement policy changes to curb the negative impacts of the pandemic.

If you are unfamiliar with Asian American Buddhist demographics, here is a quick snapshot: Most Buddhists in America are of the "Baby Boomer" generation (Pew Research Center 2020). Additionally, Asian Americans and Asian American Buddhists encounter

challenges like poverty (Tran 2018), language barriers (Luthra 2014), and large cultural gaps (Thao 2018) when engaging with others outside their immediate social and religious circles. Asian Americans and Asian American Buddhists primarily live in large urban cities like New York City and Los Angeles (Hernández 2016). Unfortunately, at this moment, additional or more in depth information is not available on Asian American and Asian American Buddhist communities because we lack fully disaggregated data collection (Ahmad and Weller 2014).

From what we do know, here are some statistics:

1. In 2018, in New York City*, the Asian American poverty rate was quite high at 21.7% (when compared to the non-Hispanic white rate of 13.2% and the non-Hispanic Black rate of 19.2%) (NYC Mayor's Office for Economic Opportunity 2020).
2. 60% of New York Asian Americans are Limited English Proficient (Asian Americans for Equality, Inc. 2011).

These barriers combine to ultimately limit access to job opportunities, quality health care, education, and more (and remember, these problems existed pre-COVID-19).

Asian American Buddhism, like every part of our world, is changing in our post-normative times. Venerables are building their own Instagram profiles (I "heart" posts that unwittingly reveal their own personal likes and preferences, something that Venerables strive to shed themselves of). Larger nationwide Asian American Buddhist temples are restructuring and funding programs to attract more youth, such as building youth groups, creating Buddhist Girl/Boy Scouts of America troops, and making social media platforms. There is now a quiet acceptance of non cis-gendered identities. Premarital sex is no longer shamed, and non-hetero relationships are quietly accepted.

At this moment, Asian American Buddhist temple's changes may seem progressive, but the changes are not meeting the needs of the practitioners and the youth they serve. COVID-

19 is drastically impacting everyone's lives through increased rates of sickness and death, straining government and non-government sources of culturally and linguistically competent resources (resources that are also being eliminated due to a lack of funding), increasing joblessness, and increased at-home tensions leading to a rise in domestic violence. Additionally, there is a rise of COVID-19–related anti-Asian racism. Racists utilize COVID-19 as a "legitimate" reason to engage in slurs, hate, and violence against Asian Americans (Ruiz, Horowitz, and Tamir 2020), including Asian American Buddhists. United States President Trump's racially charged words, like "Kung-flu" or "Chinese virus" used to refer to COVID-19, enable racists to legitimize anti-Asian racism and emboldened racists to act out, speak out, and violently harm Asian Americans (Davis 2020). Asian American Buddhists have experienced COVID-19–related anti-Asian racism, but these data are not readily available. Hate crime reports do not disaggregate data to include religion.

Buddhist practitioners are feeling at a loss. The COVID-19 pandemic forced Buddhist temples to close and critical services have halted, like funeral services, wedding ceremonies, baby blessings, and more. During difficult and emotional times, like experiencing the loss of a loved one, many turn to religion. However, with temples physically closed, many Buddhists are without support. Only the most well-funded and technologically advanced temples transitioned online with a limited array of services, Zoom chanting sessions, virtual meditation programs, and online spaces to provide emotional and mental outlets for sharing and support. The vast majority of Buddhist temples were unable to transition online. Furthermore, practitioners who lack internet access, experience language barriers, or cannot afford online devices are unable to access these few online resources.

Through informal anecdotes, Asian American Buddhist youth who can go online have been sharing their COVID-19–related racism, emotional pain, and need for connection online. They often feel they have nowhere to go and

have inadequate outlets to release their hurt and frustration. Many have turned to Buddhist scriptures, meditation, and chanting to help alleviate their anger and frustration; however, many still feel deep emotional pain. Some youth try to use their temples and religious youth groups as a space for organizing, speaking out against racism, standing in solidarity with other minority groups, and more. Unfortunately, they were deterred from doing so by temple staff, Venerables, and Monks. Most temples steer away from government politics and policy; Venerable administrators who are "in charge" typically do not see temples as the "proper" place to mix with organizing for social change or justice, even if that change would be in line with Buddha's teachings. This has led many Asian American Buddhist youth to question the role temples play in our communities. Many wondered, "Why are we together as a youth group under the teachings of Buddha, but can't actively work on making the world a better place?" Across the United States, we are seeing the incredible power youth possess through organizing and building calls for change; if temples wish to remain relevant to youth, they may need to change their policy of non-participation and inaction.

Government has an important and large role to play in alleviating the impacts caused by the COVID-19 pandemic onto Asian American Buddhists and temples. These policy changes would benefit all Americans and enable temples and practitioners to better weather the negative impacts of COVID-19. Allies, Asian Americans, and Asian American Buddhists must voice their needs to local and federal governments to

1. push for data disaggregation to properly identify the specific needs and communities within the extremely diverse Asian American and Buddhist communities;
2. fight for greater funding in culturally and linguistically competent resources to adequately reach those with Limited English Proficiency and understand cultural differences; and

3. demand the Federal Communications Commission to view the internet as a public utility, so all support systems can be provided and accessed online.

All three policy changes, if implemented, will ultimately benefit all Americans. Better data disaggregation allows for more accurately and efficiently distributed resources and aid, thus eliminating waste and time loss. Providing culturally and linguistically competent resources in all major languages leads to lower strain on the healthcare system (Saha, Beach, and Cooper 2008), crime (Vergara et al. 2016), and more. Finally, treating the internet and internet accessibility as a public utility will enable all Americans to get online and during this pandemic enable them to see doctors, apply for jobs, increase productivity, visit their temples, and more (Reglitz 2020).

These policy actions can serve as a template for other countries. In Western countries, people of Asian descent are often treated with xenophobia, regardless of their actual citizenship. They are racially profiled to be "outsiders," and oftentimes their unique needs are not fully accessed. These policy changes can better gauge the needs of minority groups, support them in ways that can be most accessible, and connect them to our growing online world.

A (Spiritually) Funny Thing Happened on the Way to Belarus, or (Religious) Fear and Loathing on the Flight out of Kazakhstan

John A. Sweeney

On 17 March 2020, I left Kazakhstan. As was customary, this entailed scurrying out of my apartment at 3:30 a.m. to catch the red eye back to Belarus. Calling it "the" red eye is perhaps disingenuous as there is no other flight at any other time—as such, "the" red eye is simply "the" flight from Almaty to Minsk. I cannot remember exactly when the first prayer crossed my lips. Perhaps it was when the taxi driver was turned around at the first roadblock? Perhaps it was when we hastily pulled up to the airport

with minutes to spare before the cutoff to check-in? Perhaps it was when I was safely in my seat on the last flight out (for months)? I honestly cannot recall, but I vividly remember a prayer crossing my lips at some point, and I am pretty sure that there was more than one.

While I have a strong recollection of praying sometime during this sojourn, I have no memory of the content of what I imagine was a request for divine intervention or safe passage or some combination of the two. I certainly do not remember reciting a Hail Mary, although my trip to India the week before should have prepared me for much lengthier prayers. A work trip to Delhi ended up being an 18-h "turn around" as the event at which I was supposed to present was canceled the day before (and after the entire team had arrived on site). As it turned out, some Italian expats, who were thought to be responsible for spreading the virus, had stayed at the event hotel. I do not recall praying during my flight back from Delhi, and I typically do not even make the "sign of the cross" before takeoff, which makes my strong memory of prayer on my trip out of Kazakhstan unique, if not memorable.

Why did I feel the need to pray at this moment? As a lapsed Catholic, I suppose that I have perfected the art of "need-based" prayer, which speaks more to my own privilege than anything else. In my own defense, I typically save such incantations for existential events (family illness, humanitarian crises, etc.) and not mundane things, such as parking spaces and sports team victories, but I digress. That I chose to pray or felt a tinge of religiosity in this moment has stuck with me. Since arriving back in Belarus, I have not visited one of the country's many Catholic churches, which—like many other things here—have remained fully open and operational during the pandemic. My wife and I pray rather sporadically, primarily an "Our Father," which is absolutely baked into my consciousness. I suppose I can say now that this moment of needs-based prayer bothers me. Is my faith merely relative to the degree of inconvenience that I feel? Was it merely my own privilege, or rather the

potentiality of its loss, that sparked my spiritual awakening on the plane?

Reflecting on my own experience has led me back to postnormal times, specifically the constitutive nature of contradictions to my own personal faith, postnormal religiosity, and our historical moment. As Sardar notes in his original treatise, there are two primary contradictions that require careful consideration: (1) contradictions emanating from the rapid pace of change and (2) contradictions relative to the vast increase in knowledge but also ignorance. Indeed, the many and varied conspiracy-theory-fueled events of late (from the anti-vaccine crowd to the mob-driven attack on the US Capital) not only validates Sardar's acute awareness of the dynamics driving life within our all-too-postnormal age but also, in my view, a dynamic that speaks to my own experience of postnormal religiosity.

While many have noted the unsurprising increase in spiritual practices across many faiths and traditions brought about by the pandemic, something about this revival, as with my needs-based prayer on the flight out of Kazakhstan, has stuck with me. Might this moment lead to genuine spiritual awakening? Or, as is the case with my experience, could such moments ignite a deep and existential questioning about the ethical contradictions inherent to life in our all-too-postnormal world or my own, self-described, "withered" faith? Perhaps withered is a bit too strong, but, like many other Catholics, my ritual practice could certainly be described as derelict. Interestingly, it has been through travel that I have "recovered" aspects of my personal faith. The opportunity to travel across Europe has brought many a venturing into churches of various scale and grandeur, which always sparks a feeling of connection to larger forces. But, without this or the comfort of feeling like a church is a safe place to go, what becomes of my faith? What becomes of faith when commensality is not possible?

I certainly only feel comfortable speaking about, and criticizing, myself, but I cannot help but feel like there is a gaping aporia in turning to faith in such moments, which, I truly hope,

says more about the nature of my Catholic upbringing as it does about my Master's Degree in Religion, which provides some insight as to the range of reasons and rationales for why faith, and its related ritual practices, can and might wax and wane.[4] And, my faith has certainly come and gone over the years. Situating my own experience within the context of the postnormal, I have rediscovered a passage in Sardar (2010) article: *Welcome to Postnormal Times*. Although lengthy, it is worth quoting in full as it gives a glimpse into the gravity of my internal "inquisition." Sardar observes:

> Every social, cultural, political, philosophical and religious outlook known to humanity needs to relearn how to engage with its own ethical precepts. And this brings us to the other elephant in the room, in fact more of a monstrous woolly mammoth. Value neutral universals embedded in systems of knowledge, progress, modernisation and bureaucratisation were supposed to enable us to transcend the intractable problems of the diversity of belief. The different formulations of belief, each with their particularities and constraints, each making exclusive claims to possess the only right answers, were seen as barriers to expansive critical inquiry and therefore restraints on human advancement. In one sense the nexus of secular modernity has done its job—it has landed the entire globe in the same dilemma: the postnormal dispensation (Sardar 2010, 443).

Sardar has a notorious way with words, and there is something tragically beautiful about the very concept of "the postnormal dispensation." While typically framed within the context of Christian historical ages, the specific Catholic canonical concept of a dispensation is far more acute, although this is perhaps not what Sardar had in mind.

In short, dispensations within Catholicism refer to an exemption, usually from having to adhere to a certain law or observance. As such, the concept of "the postnormal dispensation" strikes me as precisely what my needs-based prayer was likely aiming to capture: a fleeting

sense of privilege brought about by a rupture of contradictions inherent to our all-too-postnormal age. It would be foolhardy to diminish the problems espoused by anyone anywhere during a global pandemic, but my own struggles are certainly trite in comparison with the millions of displaced peoples around the world or those who had their entire world turned upside down by the many and varied lockdowns initiated last year or those who lost loved ones while maskless masses took to the streets proclaiming freedom. Am I being too hard on myself? If the cathedrals and ritual practice is taken away, what becomes of my faith? How can I reconcile the privilege that now seems inherent to my faith? Can the contradictions of my faith be transcended? Answers seem impossible, at least for now, and I suppose that I should take solace in the questioning itself.

Concluding Reflections: Polylogue in Practice

Amjad Saleem and John A. Sweeney

This was an experiment. Rather, this *is* an experiment. Polylogues have to be experimental, right? Our intended aim was to bring together a collection of voices to reflect on postnormal times and religion, and it has been a journey. In that journey, it was interesting to get some initial reactions from people that we had reached out to contribute. What is a polylogue? And as we explained, it was clear that this was a new concept even in terms of cocreating a paper. However, those that agreed to contribute are contributing authors we know quite well, and others are new friends. Now that we are reaching the end of this journey, we want to reflect not only on content (what came out of this polylogue) but also process (what we learned from taking this journey together).

What has this polylogue told us about postnormal religiosity? Certainly, it has raised more questions than answers, but we believe that this is precisely what polylogues should do. Reflecting on the collective insights raised by all of the contributors, start to emerge:

1. Internet-enabled "spiritual tinkering" (McClure 2017) is now a, if not *the*, norm. McClure effectively argues that the internet and online connectivity enables a more fluid engagement with religious practice and belief. While the nearly all-encompassing digitalization accelerated by the pandemic crisis left many with time and tools to tinker, it remains unclear as to what effects this can and might have on aspects of "belonging" as a critical dimension of religiosity. Will belonging to and with online communities emerge as a dominant form of practice? Are more solitary modes of faith and practice enabled by moments such as ours? Will "tinkerers" always continue to do so? What about the role of faith leaders, the space they occupy and the space they will be expected to occupy in the future? Religions have always been "early adopters" with regard to various communication technologies, but the particularities of our present moment should not be underestimated. Ours is truly a postnormal time, which brings with it a host of challenges unlike those before. In addressing such challenges, could there be a "postnormal dispensation" which will signify an evolution and a transformation of how faith and religiosity can and might be approached?

2. One key aspect of life in postnormal times is the inherently "promiscuous" nature of trends, which connect, collide, and conspire leading to new drivers of change and emerging issues en masse. Critical questions remain as to how postnormal religiosity will continue to encounter and react with a range of other effects of the pandemic, including widening economic inequality, gender-based violence, and mental health challenges, on top of the usual, "You are on Mute" or "Please keep your mic on mute." Given that the virus is affecting communities in vastly different ways and exposing intersectional inequalities,

it seems likely to expect that the lasting effects upon postnormal religiosity will also be highly contextual. How will some traditions mutate and/or evolve in response to the pressures of postnormal religiosity? What aspects of faith and practice can and might be transformed through postnormal religiosity? How can faith, religiosity, and practice rise to the challenge of postnormal times?

3. As a crisis further complicated, if not accelerated, by and perversely affecting climate change and other dynamics related to our collective ethical choices and the systems underlying and sustaining them, the pandemic has laid bare the contradictions inherent in our *all-too-modern* lives. How can and might religious traditions and spiritual practices "meet the moment" on the critical ethical issues of our time and those to come? What opportunities exist for postnormal religiosity to embrace the "age-old virtues: humility, modesty and accountability" (Sardar 2010, 443). How might postnormal religiosity support ongoing calls to confront institutionalized racism, entrenched inequality, and the legacies of colonialism? In an age of "vaccine nationalism" or "vaccine patriotism," what can postnormal religiosity contribute toward greater vaccine equity both within countries and between countries?

4. Our polylogue was intended to be a space where different people could share insights and experiences. While the pandemic has created too many online spaces where people can congregate and gather, few, if any, have an explicit intention to facilitate critical engagement on postnormal religiosity. How might such spaces be hosted and facilitated? What expectations should be set for future polylogues? What affect might further polylogues have on postnormal religiosity? If the real "product is the process," how can and might such spaces of engagement be

driven by a "participatory futures" ethos? (Ramos et al. 2019).

As with spiritual practice, the borders and boundaries of polylogues are elastic, if not entirely plastic, which is to say that who defines what is and is not a polylogue is an open-ended question. As a concept within the lexicon of postnormal times theory, polylogues hold a unique space. Polylogues imply both a theoretical (encompassing premises and principles for how people might engage with one another) and methodological (meant as a replicable framework of practice) comportment that is clearly pre-designed but also emergent. With that said, it is unclear how polylogues differ from more traditional workshop approaches. The initial incredulity that many people that we originally approached to contribute suggests a healthy skepticism of the concept. However, a paradoxical challenge has arisen not only from the pandemic but also from the conversations about decolonization that took agency over the last year. The online space has led to a democratization of the voices providing better diversity and inclusivity (albeit to those who have a solid internet connection). Yet there have been calls to decolonize the thinking away from a "Western" centric model. This in particular has been leveled at the academic space which draws its inspiration from the traditional Western Centric knowledge process where traditional evidence-based papers are written in a certain language to be reviewed by "peers" who are also often from a Western Institute.

The concept of a "polylogue" in that effect changes the dynamics of such contributions, crowdsourcing thought leadership in a way perhaps not fully understood or appreciated. So "polylogues" emerge as an "answer" to needing a more inclusive decolonized process to access thought leadership. However, that itself poses a number of questions. Is a difference in process (specific method, presumably one embedded within postnormal times theory) enough to substantiate or designate something as a polylogue? In short, what constitutes a polylogue? As with the defining of "belief" across religious traditions, perhaps the most

important and useful dimension lies with the question rather than any answer.

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Notes

1. Simultaneity is referred to by Sardar (2010) as things moving at great speed, acquiring global scale, and scope but happening simultaneously.
2. Even Google Meet represented a buck of the trend of using Zoom calls. Engaging on a different platform from the norm during a period which is supposed to help you reflect differently.
3. Adherents of the Islamic faith are required to perform Salat or prayers five times each day. It is the second Pillar of Islam. God ordered Muslims to pray at five set times of day: Salat al-fajr: dawn, before sunrise; Salat al-zuhr: midday, after the sun passes its highest; Salat al-'asr: the late part of the afternoon; Salat al-maghrib: just after sunset; Salat al-'isha: between sunset and midnight.
4. The latter is certainly linked to the former as I felt inclined to seek out learnings from other traditions at a young age but never felt satiated in understanding other traditions. As the Religion department at the University of Hawaii at Manoa has an explicit non-Western religions focus, it certainly felt like a place to indulge my wanton spiritual interests.

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Turtlegoose Sazerac

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Abstract
A short story exploring the unthought futures of public health in America, Turtlegoose Sazerac introduces a young trans protagonist, Cayce, who has arrived at a career crossroads following a deadly massacre of a homeless encampment near their home in Oakland, California. Seeking advice from a past mentor, Victor, Cayce faces an uncertain path filled with digital, physical, and metaphysical challenges on their quest toward a career with impact.

Keywords
fiction, postnormal, futurism, identity narratives, public health

We live in an in-between period where old orthodoxies are dying, new ones have yet to be born, and very few things seem to make sense. Ours is a transitional age, a time without the confidence that we can return to any past we have known and with no confidence in any path to a desirable, attainable or sustainable future.
Ziauddin Sardar

Six weeks after the Merritt massacres, everything had changed and nothing was standing still, so I decided I was ready to start looking for a new job. I had been meaning to pivot out of pharma into something with more impact: the grisly headlines just blocks from my front door had triggered a wake-up call that hit home.

After the news cycle spun past and the dust settled, I reached out to Victor, who, along with his wife Tiida, had become close mentors and friends over the last few years. Tonight, we hadall arranged for drinks at a ritzy hotel downtown, now that the SWAT teams had pulled out and the Oakland mayor had finally lifted curfew.

Being able to walk around outside again seemed like a real liberation. I trembled with the cry of each distant siren, but it felt good to feel anything at all. My phone read 10 past seven as I walked soberly past the high chain-linked lot where a homeless encampment had existed until last month.

The fence, edged with sodden heaps of flowers, candles, and tattered prayers, now marked one of the four ground zeros around Lake Merritt. I continued on quickly. Twenty dusky minutes later, I arrived at the lobby and stepped down into the lounge. He spotted me before I could text.

"Hey, Cayce!"

Victor raised a hand, teeth tilted from the far end of the bar.

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A quiet Tuesday night's worth of folks dawdled around the truck-sized room. I walked over smiling and hugged him hello. He shared Tiida's regrets for not coming and shrugged with a bid smile. As we sat down, he stuffed a thin pile of paper into a black canvas tote just before I could make it out. He capped his pen and slid the menu over to me as he finished his cocktail.

"Whatcha reading?"

"Oh, just nonsense. An old essay I dug up, from maybe ten or eleven years ago. Some light reading about gonzo futurism and postnormal times."

"Well, that seems relevant."

"Right? Part of my gradual unplugging from the real world, I guess. One dystopian headline at a time. But let's not dive straight into all of that. How are you, otherwise? Up for a drink?"

"Definitely! What's good here? I don't know much about cocktails."

"I just had a Sazerac," he licked. "Do you like absinthe?"

"I don't know," I crunched my lip and inspected the menu. It was even sparser than the room. I put it down with a shrug. "I'm not a big drinker. I guess I like whiskey?"

"Great. A little toity in here, but their drinks are delicious. How do you feel about citrus?"

"Love it."

"Alright, I think I've got you covered."

His warm crinkle made me smile too as he flagged down the bartender. A buttoned-up bantam with a molded fauxhawk and bowtie arrived and shot me a polite, knowing look before turning to Victor.

"Howdy, and welcome. So, how'd that Sazerac work out for you?"

"Delicious. I'll have another, let's go with cognac this time. And they'll have a whiskey smash."

The bartender nodded and looked back and forth at us, pomade swaying. "Preference on bourbon or rye?"

"Bourbon," I said confidently, though honestly, I can't really tell the difference. Alone again, I turned to Victor and popped his shoulder lightly. "Hey, good job with the pronoun."

"Well, I'm learning. So, yeah, jeez – let's start there. How *are* you?"

Although I had grown only marginally more comfortable talking about my transition, Victor and his wife Tiida had created a safe place as I had navigated my various appointments and treatments, along with the many ups, downs, and sideways of the last few years.

I had met him through her, at some otherwise forgettable San Francisco panel on diversity and inclusion while I finished my Masters of Public Health degree at Berkeley. I had seized on a breezy anecdote about her husband working in health care and approached her afterward to ask if he might let me pick his brain about jobs in the field.

From that first coffee, Victor had been kind and curious in asking me about my values, interests, and priorities. He had listened carefully, laid down candid advice, and tapped off a generous round of introductions on his phone. One had turned into a friendly interview and soon I had landed a plum position. My firm branded digital executive thought leadership campaigns for large pharmaceutical clients. Read, listen, write, and repeat.

Our drinks arrived in sparkling glasses. We toasted to several occasions, including the reason for Tiida's absence: a recently confirmed pregnancy. It would be their first. I could not put a lid on my grin as I told him they would make wonderful parents, and I really meant it.

As it just so happened, they had begun moving out of their Oakland loft right as I had graduated and begun the daunting process of apartment hunting in the East Bay. Both the beautiful two-story apartment they had set me up with and the new, cool aunt-and-uncle friendship they offered had quickly become

defining anchors in my transition and broader journey toward a real, working-age adult life.

The new job had paid the bills and I learned the ropes of the industry, but just as Victor had forewarned, I had gotten to feeling gunky with cynicism as of late. The blatant profiteering and elite privilege and buzzword bricolage all began to trouble me, gaudy shadows of the country falling apart, like some monster hiding under the bridge.

After grad school, my loose priorities for my mid-20s were to pay off my student loans and complete the phases of my transition. After hitting both milestones late last year, I had slowly begun to imagine a new chapter in my career.

I had always wanted more than just a job. I was looking for new culture and ideally a social setting where I could begin to feel more comfortable coming out of my shell. Through the haze of dysphoria, I had been drawn toward various justice movements and compiled a list of socially motivated non-profits. It stood now at a baker's dozen, scattered up and down the East Bay.

Last month's bizarre tragedy was like a bucket of cold water, I told him now. The world's social evolution needed human support, right here in Oakland. My operative job search keyword for now was *impact*. I used air quotes.

Victor listened patiently and nodded, serious, gentle, and slow. I sipped and nodded back, eyes wandering to his naked jawline. I remembered how his beard had last been, right there, lustrous and black and speckled with silver.

The buzz from the whiskey suddenly hit me. I flushed as he caught me staring. I looked away. About 4 years after that first cup of coffee, here we were again, just the two of us, navigating another one of my career crossroads.

Our drinks were nearly empty now and with my thumbs up Victor ordered us another round, along with a toasted pita point and dip trio. He sipped to the last and smacked his lips. I waited for him to talk, comparing the brown of our skin tones as feathers of minty whiskey tickled me warm.

"Well, first of all, I'm proud of you, kid. You're incredibly brave, and you've got a great head on your shoulders. I'm glad to know you, and Tiida would say the same."

"Thanks, Victor," I said, inspecting the scuff of my Martins.

"Now, ordinarily I'd ask about your vision, and what kind of work you mean when you say 'impact.' But before we get into all of that, the both of us being Masters of Public Health, or whatever," he hooked my eye with air quotes and a brief grin that collapsed into a doleful sigh, "we should probably talk about this thing. The, uh, Massacre."

I finished my drink and slid the empty tumbler next to his. He swiveled inside the oilskin of his trench coat, squinting as his thoughts coalesced in maybe a dozen rapid blinks before his salted stubble came to rest on his knuckles. He cleared his throat.

"Cayce, I know you're still pretty young, twenty…?"

"Seven."

"… and that's why I'm telling you this. This country has changed pretty dramatically since I got my MPH, well over ten years ago. And it's not just the change, but the pace of change that's gotten faster. Things are getting even tougher to predict."

"Mm-hm."

"The field of health care has become so systematically disconnected from the real world, that the people who need the most help aren't within anyone's reach anymore. It's a series of interdependent, systemic failures. Social determinants of health was never more than wishful thinking; worse, it was blindness, or intentional cover-up for the spigot of profit-driven bullshit."

"Exactly."

"So: The Massacre. I'm coming to see it as a *black elephant.* Is anyone in public health really surprised that this happened?"

A black elephant, like the "elephant in the room?" I realized he was talking to me and shook my head no. Obviously.

"Right! Open economic violence against the poor for decades. Where is there left for things to go but down? The possibility was here the whole time, so why has nobody done anything to stop it? See what I'm saying, Cayce? What does 'impact' even mean in this… fucking capitalist circus?" he slurred. "I'd say *that* is worth some critical thinking on your part."

I nodded, matching his expression, which always seemed furrowed. More drinks arrived with our food. I skimmed a pita along the ramekin's edge of orange hummus as he lowered into slurping sip and rambled on.

"I guess what I'm saying is that we've crossed over into new territory. The inflection point has already passed – we're boiling frogs now. I'm talking about severe climate change, resource scarcity, social and economic collapse! I know you've got a good heart in there and you want meaningful work, something with purpose. I'd say, take this moment to really go Big Picture. Bigger than the next job. Take your time, really open up the aperture and think about more than health care, or public policy, philanthropy, or whatever."

Was he trying to talk me into staying at my job, or not? Before I could speak, he jumped in again.

"I mean, I don't want to discourage you or anything. A job is a job, is a job. Ten years ago, I would have told you to explore your ideas, become a nomad and travel, start a company, that sort of thing. But now, I'm telling you: what you have, a nice fat paycheck every two weeks, it may feel scripted or boring or disappointing, but the world has gone to hell, and you've just been through a lot over the last couple years as it is. Maybe, keep things predictable for now?"

"Yeah, but…"

"I just mean – don't quit because of a headline. The nonprofits are begging for table scraps. Things are going to get worse. More poverty. More massacres. If you can, figure out how to stick it out, level up on their dime, study something new, engage in polylogue for those excluded from the conversation. In the meantime, plan your next move more deliberately."

"Isn't that what we're doing here?" I slumped forward. What is it with men telling everyone what to do?

"I know, I'm blabbering, maybe it's the booze talking, but all I'm trying to say here is, don't rush, don't quit without a solid plan, and maybe try not to be too prescriptive on this 'impact' idea in your search. You can always volunteer."

"I agree," I finally said. "I don't want to rush into any job, but I am definitely antsy! I like my paycheck, I really do, but I also know I'm just a cog in a crazy machine. It just feels like I know I want to help people, I want to… make the world a better place, if I can even say that without sounding cliché. I guess it's just that… when I saw the video, it really bothered me, you know? This whole thing really bothers me."

Victor slid his third Sazerac into hand and pounced.

"No, it's not a cliché, it's *great*, and so now *that* is worth exploring. Don't ignore your emotions," he blurted, muscling a fat dollop of hummus and pita down his throat. "Let's focus on it for a second. Talk about that some more."

He caught me mid-slurp. I had not really boozed like this in a while, I realized through a shimmering daze. I blinked fluidly and swallowed.

"Okay. I mean, I guess I feel like I… sorry, what do you mean?"

"The world is burning, Cayce. Literally. It's tough to look at it, but it's worth paying attention to how it makes you feel. Your intuition and your gut instincts are the most valuable thing. Don't

jump into action or ignore it. Have you heard of the OODA loop? Look it up: observe-orient-decide-act." He ticked off four fingers with each verb. "Focus on what your body is responding to, what captures your imagination. Root around in there and it might help you find your calling."

"Okay, yeah. So, I should meditate on it some more?"

"Bingo. 'Impact' is a great starting point. But what kind? Where? Maybe it means you want to work on a certain social issue, like trans violence, I don't know. Be specific. Find your passion. Whatever the issue is, it's really gotta beat you over the head when you see it, you know? Take time to pay attention to all of the signals you're seeing. Ignore social media and do your own research. Connect the dots until it feels solid, if that makes sense. Does that make any sense?"

I nodded cautiously, wondering if it did.

"Have you watched the video?" I asked. He stammered, suddenly quiet, and shook his head slowly.

"Not all of it. I saw some stills. Tiida was pretty upset. I mean, we both were. With the baby and everything we agreed to try and tune out some of the negative stuff."

I sipped my smash and nodded politely.

"But I also agreed not to drink in the house until we can do that together. And here we are," he said impishly, making eyes at my phone. "So…"

I flipped open the dual screen and tapped the app where I'd archived the video. Victor leaned in Faded green lines of characters scrolled vertically up the loading screen behind the stylized logo: *t.s.i.n.o.*

"At the risk of sounding like a fogey: I am *so* out of the loop with the new apps. Does that stand for something?"

"It's an old song lyric: 'this station is non-operational.' I don't know the song, but *t.s.i.n.o.* is the platform where the video was shared."

"I read that they can't seem to keep it offline."

"That's kind of the point of this one. It's a sharing platform that deletes videos and re-uploads them endlessly on the blockchain so they're untraceable."

He bit his lip in one of those nods that revealed he did not quite follow. He really was out of the loop, but I did not rub it in.

"Right. Last question: What's Shellshock? I read something about that too, but I thought it was the name of the app."

"Shellshock is the channel that uploaded the video. They're bad people - this is their logo."

I tapped to a blue, white-spiked turtle's carapace from a Mario game, on which a jagged, angular red *SS* stood boldly. "This whole thing is pretty disturbing, as a heads up. And, that is your trigger warning."
Victor gulped solemnly and I hit play. The screen blipped and flickered to life:

A bearded man in thin orange goggles speaks through a distorted voice filter into the screen of his phone.

"Oakland California: Welcome to your cleansing!" he says with a taut, white lipped grin.

The footage bobs with his steps until he stops. He wears a skintight cowl that comes down to his lips. Behind him sits the blocky silhouette of the county courthouse. He speaks loudly in deliberate rhetoric.

"Your elected officials and corporate leaders have failed you! Your non-profits are corrupt or powerless. Your politics and virtue-signaling are covering up a circle jerk of failed programs, lubricated by the taxpayer's dime. You've accomplished nothing and ignored everything! The society you love so much has been rotting openly, here on the streets, and you do literally nothing!"

A second voice murmurs nearby. He pauses to look up and nod at someone off camera. He walks slowly and resumes, his voice soft with grave intimacy.

"We have become a failed state, beyond the power of policy or programs to fix. We're here to take out your trash and clean up the mess you've created. You'll all complain about what we're going to do, but you'll thank us silently for doing it."

The man reaches for his googles; the video feed switches to a first-person view. The crisper, night view resolution of the smartlens reveals the tarpaulined tangle of a sprawling homeless encampment. The scene swivels jumpily to a half a dozen armed men stationed along the side of the road. Some of them wave or salute.

My first time watching, I had immediately recognized this as the stretch of Lake Merritt Boulevard that curled up past 12th Street. This umpteenth time, I shuddered recalling the fenced off lot I had scurried past to get here. I noticed Victor's face screw up tightly as he watched as the narrator raise a Molotov cocktail. I kept one eye on him.

"It's time to burn, you pieces of shit!"

The camera blurs as he heaves it high over the camp. It crashes in an explosion and is followed by a volley of others. The camera blurs as faint cries grew audible. The stationed men promptly remove rifles from their shoulder straps, lifting and cradling the guns in careful aim.

"Oh, god," he murmured softly. His expression sent my heart's reverb throbbing into my stomach. The entire camp burst into choppy flames, the resolution small and boxy on my phone. The shrieking grew to a tinny static buzz through the speakers. Victor seemed about to cry. "Oh, no."

A squabble of disheveled men and women flee the flames in panic, some holding hands. Then a tinny echo of sudden pop-pop-pops and they all drop to the ground.

Victor flinched and turned his head, periodically looking from the corner of his eye. Inside one intense, bursting minute later, piles of slumped bodies lay scattered. Gunfire popcorned through my speakers as he looked away.

Some of the gunmen continue firing while others sling their rifles around their shoulders, running into a tight pack. A well-trained unit. The camera cuts off and switches back to the leader's face, his phone back in hand, breath heaving as he coordinates the retreat.

"Tune in next time for the next episode," he pants. He climbs into the passenger seat of a pickup that has just pulled up. The other gunmen hop into the bed of the truck. "See you down in Arizona Bay."

The video ended, all of three and a half minutes. Victor pushed his drink away and violently scooted out his stool, putting his forearms on the bar and leaning between them like he was going to be sick. I had watched this footage more times than I could count, and my stomach was still a knot, so I really felt for him. He turned sideways and spoke before I could pat him on the back.

"And they did how many more of those around the lake?"

"Four in total," I said gently. "Different crews, this was the only one they streamed. They're saying this guy's the leader, but they all happened at the same time. Over seventy killed, another twenty-nine hospitalized."

He exhaled slowly and settled back onto the stool. When he reached for his water and drank it half empty, I caught his hand shaking. His voice quavered.

"I wasn't paying attention in the aftermath, but what happened with the Second Amendment guy?"

I explained: The mayor's statement had been widely panned, a non-response rife with excuses about budget cuts and diminished police presence and short on explanation as to why the surge in community reinvestment had coincided with a historic rise in homelessness. The lead health official had resigned after a rash of death threats followed her hand-wringing remarks about public opinion going viral in seconds, while public health investments take years.

And so, 2 days after the attack some well-meaning individual had taken it into his own hands to leave boxes of loaded handguns by several of the remaining encampments. He had then posted a video screed of his own about the need to protect homeless people's Second Amendment rights to defend themselves when their own government could not do so.

He'd been arrested, but not before the crisis had escalated immediately into nearly two dozen shootings of innocent civilians and homeless individuals alike. The governor had declared a state of emergency and sent in the National Guard and SWAT teams to forcibly disarm and close down the encampments that remained. After several weeks of imposing a 24-hour curfew, the mayor had only recently declared it was safe for people to leave their homes.

Victor sounded exasperated as excused himself to the washroom. I finished my drink and pretended not to notice the bartender's playful eyes. I was not in the mood. And besides, I was not sure if I was ready for any of *that* just yet.

I recalled his drunken advice and began trying to put my finger on what the video stirred up in me. I had seen it so many times, but not like tonight. I also had not been buzzed like this in ages. I could only recall my feelings watching Victor watch the Massacre, all of it now at a further distance than before. I felt upset of course, and hopeless, and angry …

"Well," Victor sighed, returning a couple of minutes later. He patted me lightly on my shoulder and sat back down. I opened my eyes and saw on his phone that he had called for a car. "That was intense."

"Yeah."

"I guess there's officially 'no there, there' anymore. Ezra Pound was right. I guess I'm getting old. That really threw me off. Disturbing."

"No, it's okay. It's a lot. We can talk about something else. You've probably gotta be going soon, too."

"Yeah, Tiida doesn't want me out late until this has faded. But let's do this again in a little while. We can see where you're at on the work front in a couple of weeks. Don't quit without talking to me again, alright? I'll think up some ideas and e-mail you later this week?"

"Sure, I'm not in a rush."

We sat for a moment. I picked at a pita point. Victor signaled for the check and slid his Sazerac over to me.

"I'm done with this – feel free to try it if you like."

I sniffed it and took a small sip, wincing at the bitter, gummy tang. It wasn't bad! I flashed him a mischievous smile and took a larger swig. He checked his phone.

"That's the spirit. So, how's the apartment treating you?"

"I love it. Really, it's been so nice to have the loft space. Especially being forced to stay inside for the last couple of months, it's a great place to be cooped up."

"I know! Tiida and I were in the exact same position during the pandemic. I miss that apartment a lot. It's a good fit for you."

Nostalgia twinkled in his smile. The bartender slid over the check and I went for my money clip, but he waved me off and held his phone against the payment node. It beeped and he signed his screen and continued.

"Man, I used to walk down to that little inlet, past Peralta Park, down by the highway behind Chinatown, and go look at those huge geese. You know the ones I'm talking about? Those things would always make me so happy for some reason."

"Yes! I know the exact spot you're talking about, right behind Laney. I haven't been outside much lately, but I walk by sometimes. I looked them up after you mentioned it last time – Canadian Geese. Or domestic geese. They're like a cute

little family, and they're all so… fat and sassy and funny looking."

He snickered gaily and our smiles lingered to silence. He checked his phone and stood up. I did the same and he gave me another big hug.

"Okay – so, I'll be in touch. We'll figure this out. Just take your time – slow and steady wins the race."

"Sounds good. Thanks for seeing me. And congrats again! Tell Tiida I'll text her to catch up this weekend."

"Sure Cayce." His smile faded. "Oh – did you want a ride? My car is here but we can drop you off."

I thought about it. I would normally seize the chance to spend more time with him, but his rambling career advice had given me pause. I needed some alone time.

"No, thanks, I'm okay. Haven't been outside much, I'll probably walk or hop on a scooter."

"You sure? I read they haven't found all of those loose guns yet… He put a hand on my shoulder. Just be careful, okay? Love ya kid. Text me when you get home, okay? Crazy world out there. Anyway: more to come soon!"

"Sure. Thanks again." I watched him leave and matched his final wave from the door. At the bar by myself, the lonelies crashed over me instantly. I had to pee but did not want to deal with gendered bathrooms. I decided to leave before the bartender cornered me into small talk. Another greedy sip of Victor's Sazerac, and I busied myself booking a scooter as I beelined outside.

Overhead, torn streaks of clouds blocked large swaths of the sky. The moon was out, brightly pocked and misshapen. I could not tell if it was getting bigger or smaller. I jammed my hands in my pockets and strolled the three quiet blocks to where my ride was parked. A few folks were strolling about, taking advantage of the lifted curfew, no doubt. Wisps of thought buzzed and swam, waxing and waning as I breathed out big hot boozy fumes.

"Polylogues and boiling frogs and black elephants," I mumbled. Nobody heard me, or maybe they did not want to hear.

The whiff of a cigarette tickled my nose as a couple walked by. I craved one suddenly. I missed being out like this. The last few years of staring at the ceiling, binge eating, spending whole days in bed, the mood swings, the tears and the rage, the fire and the shadow, the boredom, the apathy, and the withdrawal, it all felt suddenly like an old season of a show that I did not have to watch anymore. Maybe this was a turning point. A level up. Maybe Victor was right, and I just needed to find a way to keep busy outside of work.

Did I even care about what I did? About saving the world? Or was I just looking to hit the reset button on my social life?

I reached my scooter and walked it off the sidewalk, accelerating slowly to the bike lane. The streets were mostly empty. I sped up carefully, looking both ways and humming firm-footed through the carless intersections one after another as the crisp air buffeted my dimples.

I flew down the open road carving soft, gentle curves as I neared my cross street. On a whim I cut south a few more blocks to go past Peralta Park. I wanted to see if I could snap a picture of those geese for Victor. Afterward, maybe I would swing by the 7/11 for cigarettes and taquitos. Like college all over again.

A pair of headlights lurched over the bumpy, broken concrete of Seventh Street. I scooted along and moved onto the sidewalk, slowing to a standstill at the far side of the small bridge over the inlet where the geese flocked. I heard a clack, like the sound of plastic snapping. Nobody was on the road in any direction. I dismounted and kicked the stand on my scooter before pausing the ride.

I walked bendy-legged down the grassy embankment, squinting through the dull orange glow of a streetlamp and tiptoeing between dark mounds of geese poop. Again, a loud clacking noise froze me in my tracks. If it had not been for the drinks I would have turned

around. Or probably, I never would have come down this way to begin with.

But emboldened as I was, I took a few cautious steps down the grass to the narrow sidewalk tunnel that led underneath the bridge toward Peralta Park. It loomed almost directly underneath where I had paused my ride. I crept into a squat behind a dark waxy bush and peered over. My bladder sang in urgency. Then, once more, the loud cracking noise splintered the air.

I sidled a bit and nearly cried out at the sight of a person, short, shadowy, hidden inside a jacket several sizes too large. They were muttering something. A halo of white feathers surrounded them on the sidewalk. One more creeping sidestep revealed the source.

A dead goose lay motionless inside a shopping cart, neck twisted, and broken.

A guttural wail nearly escaped as I clamped my mouth shut. They had not seen me yet. I silently poured back behind the bush, retreating gingerly until I saw the figure raise two hands overhead, holding something thin, long, bulbous: a golf club.

I scurried to the side again and saw a turtle, on its back, limbs twitching. I could not stifle a shout this time as the person slammed the golf club down and splintered its shell open.

They jumped and turned to me, and I cried out again in a high sob.

"Stop it!"

They snarled and threw the club at me. It barely hit, glancing off my forearms but I fell as I scrambled backwards. I tried to stand but I slipped on shit and fell onto my back as they scurried over to me. I froze as they pulled something from their coat pocket and pointed it at me, lips still muttering.

It was a handgun. Victor's warning blipped past like a shooting star.

Time slowed. Gaunt, dirt-streaked cheeks. Skin crinkled brown like a grocery bag. Ratty hair spilled out of a hood. I pleaded silently to the dull, beady eyes with no light. My throat strained, dry but hot and heavy and so tight. I could not tell whether it was a man or a woman. Crooked teeth and twitching eyebrows belayed their anger. My heart boomed and I felt their fear. I closed my eyes and tried to turn away like it was happening on a screen, but I could only cry out as they pulled the trigger.

Click. Click. Click.

Empty. I opened my eyes, and they were still trying to shoot. I whimpered and threw up into my mouth. My line of sight got snagged on the shattered entrails of the dying turtle. I scrabbled away and found the golf club all of a sudden in my left hand. Without thinking I picked it up and gripped tight. They looked at me and then back at the gun, then stepped toward me and lunged for the club.

I cried in a rage and stepped to the side as I slammed it into the side of their head. It sent them staggering. Then I brought it straight up and then down on the top of their hooded head, dropping them to the ground. The shockwave reverberated acutely, humming deep into my bones, waking me up somewhere.

The gun skittered onto the sidewalk. I set my feet and felt a steely power grip me as I took aim and raised up the club and slammed it down on their head as hard as I could. Then again, and again, and again, and again, heaving for air now, jaws clenched, tears streaming in hot anguish.

I stumbled back, sniffing, gasping, nose suddenly running, dizzy, and almost blacking out. I nearly fainted as I flung the club over the handrail into the inlet's waters. I steadied myself with a cautious step toward their body, slumped, and motionless. Then I stepped in closer, half-crouching and squinting through the darkness and the stars blinkering in the back of my eyes.

A black pool seeped from their head, shimmering where it caught the grace of some distant streetlight. I reflexively, immediately threw up, splashing the pavement with hot, bitter vomit. I spun in a bad way and a second wave of nausea hit me and I emptied my stomach, splattering their body and the pavement as I staggered, stepping on white feathers and nearly on the turtle, still dying, twitching weakly. I heaved again, all empty now, hollow

coughs, mouth, and nostrils stinging with absinthe and bile.

I felt gush of warmth as I peed in my jeans. I stumbled backward, wiping my mouth and face on my sleeves. I pivoted without thinking, nearly falling again as I scampered up the grassy bank, legs rubbery and head screaming and throat gasping to breathe. I was shaking and shaking as I ran, thinking of nothing but going home, where nothing had changed, and everything was standing still.

Author's Postscript

I first discovered postnormal times (PNT) theory in June 2020, at the beginning of a self-imposed summer sabbatical from my 12-year career as a patient advocate and healthcare analyst. As I watched COVID-19 pull back the curtain on normalcy and wreak havoc on the narratives of policy reform, health equity, and the sacred cow of "innovation," I found myself stuck at the crossroads of the present and future states of my own career. The unpaved middle path I stumbled headlong onto instead was a road to recovery from cynical burnout. It involved a separation from the headline-chasing, buzzword bricolage of my day-to-day work, in favor of deeper philosophical guidance, more outdoor walks through local Oakland neighborhoods, and the creative catharsis of the blank page.

I turned to fiction as a means through which I might offer myself career advice and interrogate the idea of an "impact-oriented career" in public health. Postnormal times immediately offered me, all at once, a contextual explanation for the world's dystopian turn, as well as the vocabulary and framework to build complex characters, imagine weird plot twists, and explore layered narratives involving digital, physical, and metaphysical spaces. Cayce's existential agita arises from ongoing seismic shifts in various states of their becoming and unbecoming: a professional moral crisis, digitally absorbed trauma, prolonged social isolation, and gender nonconformity. Victor, the wise mentor of yesteryear, has become haplessly outmatched by the acceleration of the postnormal era, prescribing pragmatism and self-preservation in lieu of idealism or leadership as he finds himself trying to catch up, even as he is badly outpaced by new technology and social media, and continued unraveling of the social compact.

Writing this story was not an act of cynical prognostication, but rather, a deeply personal exploration of the unthought futures of "public health" eschewed by my erstwhile mentors and professional network of thought leaders, knowledge workers, and other useful idiots of industry, unable to or uninterested in exploring PNT's 3C's: complexity, contradictions, and chaos. Presumably, Cayce's climactic encounter will leave them further fragmented, left to reassemble their worldview without sage counsel or handholding. Like me, they will just have to figure out the best path forward. A more desirable future—a happy ending—has not manifested here by design; as PNT proffers, such a feat will require our communal wisdom to imagine and discover ways to navigate and transcend the emergent inevitabilities of the future, without retreating, inside our shells, into the smog of ignorance.

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Eros Navigations: Adventures in Building Love in Postnormal Times

C Scott Jordan[1]

Abstract

Love has literally been debated to death by thinkers since time immemorial. This article seeks to reframe the discourse on love to restore life and appreciation for its complex beauty and free it from the hopeless utopian project contemporary times have made it into. Likewise, the over-categorization of Western thought has doomed the concepts of sex and gender. By exploring our increasingly postnormal world, and in light of the recent pandemic, this article seeks to reopen the discussion of love, sex, and gender in our precarious times so that we can better understand our identities and pre-empt future conflicts and plot navigations for other impasses occurring beside and simultaneous to the quest for love. By analyzing the concepts of the Manufactured Normalcy Field and the postnormal tilt, we can open up new opportunities to challenge the conventional definitions and structures that hold back society from attaining more accepting, understanding, and preferred futures.

Introduction

To begin, a trigger warning of uncertainty is in order. Since the pandemic began, and noting that Omaha, Nebraska's poor management of the virus' spread has been devastating to its restaurant business, I have been unable to confirm, personally, whether or not the Sullivanesque building at 4524 Farnam Street is still standing. In its latest iteration, the brick and concrete beauty was converted into a "German style Bier Haus," or the closest idea of what those words combined mean to the millennial perpetrators of this most recent gentrified horror.

When I last was a regular to this two-story building, it was a coffee shop notable for being opened until midnight in a city that did sleep, preferring to be in bed by nine bells, much to the lament of the town's night owls. The name of the building's architect is lost to history, but the style is textbook inspiration from the American architect Louis Sullivan, the "father of skyscrapers" and mentor of Frank Llyod Wright. Modernism in all its hubris. Whether or not in intension, this building would be built for constant change, its existence for the last 40 years constantly threatened by Omaha's

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penchant for erasing its historical bits for the newer and better with each new stylistic epoch.

It had been known as a café at the edge of the universe for standing alone in a field of concrete at war with flora's revenge in its nooks and crannies. The historical building was slender with a northward patio garden with that sort of elegance that can only be attained on accident, contained by a weathered wooden fence. Inside it was a beautiful contradiction of historical, Midwestern nostalgia and the retro and indy style of hipsters and late environmentalist vegans. The armchair revolutionaries that ran the establishment, their eclectic musical selections, and the quality of espresso were more than enough for those needing a late-night plug-in to serendipity.

Enough coffee always promised a visit to the facilities. As male restrooms go, this one was of a decent quality for sanitation and spaciousness, but it was renowned for its wall space turned canvas for the casual vandal. The collage of solicitous phone numbers, grotesque animations, riddles, quotes, and bathroom wisdoms was a polylogue of often hypermasculine depravity, but remarkable enough to keep one's attention for several moments after the business at hand was finished.

I remember when the sign on the door had changed from the typical "Men's" to a series of symbols, the iconic male figure/female figure/a gray alien head with the inscription below the figures reading "Whatever, just wash your hands when you're finished." When push comes to shove, what better than apathy than try and conceive of the complexity of such categorizations.

Upon entering the toilet's room, a progressive quantum leap had been undertaken. By this, I mean a lightbulb that had been burnt out for years had been replaced and the walls had been freshly painted, the graffiti years in the making, white-washed, literally.

But life finds a way. And the dialog must go on. New scribbles erupted around the toilet. My eyes fell to one quote in particular. At first glance, it was something an undergraduate with a modicum of progressive cleverness might make after being shaken awake from some

prudish slumber. "Everyone is bisexual, gender is a construct." We make such grandiose statements for a variety of reasons, most of which have something to do with a personal need for solidity or making sense in our increasingly complex and uncertain world. Unfortunately, after making such statements we stick to them, guns at the ready to defend our little plot of stability. There is a danger in this practice, often an oversimplification and even more so often, a perceived nugget of sexual wisdom that is actually unrefined within the fragile and often contradictory structures we use to categorize and control the world around us. Recall the debacle of the restroom's label on the door.

This conditioned categorizing calls to mind the fingers of Robert Mitchum in stark black and white. John, one of the duo child-protagonists in the 1955 film *The Night of the Hunter*, gazes with utter suspicion at the simple letters tattooed on the proximal phalanges of Mitchum's character, the Reverend Harry Powell. Catching the boy's stare, Powell proceeds to tell all around the story of right-hand/left-hand, the story of good and evil. H-A-T-E presents on the left hand, the hand which Cain struck dead Abel with. L-O-V-E on the hand that is right, the fingers' veins that run straight to the soul. His two hands grapple, struggling back and forth for dominance. "Oh, brother left hand, left hand hate's a fighting and it looks like a love's a goner!" Powell's monolog describing the Manichaean cosmic battle between love and hate rings with a chilling poignancy today. Lovers versus fighters or Desire versus Self-Control resonate at a similar frequency. These simplistic dichotomies, lights versus darks, play out well in the melodies on the silver screen, but when placed upon reality, things are not so distinct or easily put in one category or another. While love and hate are essential to understanding contemporary events, more gray matters like despair or alienation need due consideration as well as in the context of these other characteristics.

Such dichotomies could make good headway in the 1950s, but as the world grew more complex, titanic extremes failed to capture the entirety of the reality behind circumstances one

finds themselves in. Rather, as per the dynamics of complexity, it is not just that the picture is incomplete, but in its simplicity, the whole picture itself changes. Failure to understand the depth of our concepts alongside a lack of appreciation for complexity invites violent disruptions through greater instances of chaos. While the system itself may not completely implode, it will adjust and self-correct. The result could be something far from expectation and in certain respects lead to some embedded issues that will not easily be transcended. This is the condition of postnormal times (PNT) (Sardar 2017). And if the proper investigations are not taken seriously during the window of this transitional epoch, what comes next is dangerously left to chance and the unthought, perhaps less than preferred, potentialities.

Previously, I have discussed how religion and faith had not only accumulated greater power in PNT, but how its power through meaning, that is derived from important characters that make up our identities, has elevated religious sentiments to a position long held by rational processes in motivating individuals toward certain actions (Jordan 2017). Here, I began a discussion of how PNT shapes and is shaped by identity. Of course, religious identity is just one aspect of such a complex multiplicity and since finishing that piece my intention had been to tackle the identity found in sexuality, gender, and the pursuit of love, yet since then another major thing had occurred that, if not kicking it all into overdrive, has most definitely highlighted the problem at hand.

While the jury appears to still be out on what the final historical analysis of the COVID-19 pandemic will be, it has no doubt brought discussion of PNT and its various elements into the spotlight of futures discourse (Serra del Pino, Jones, and Mayo 2020). The Earth, for all intents and purposes, stood still and for more than just a day! And while it is definitely premature to say "this changes everything," the greater fear is that it may not. Serra del Pino et al. insightfully point out that COVID-19 was a "full blown postnormal event," and in its spread and our responses (personally, nationally, and globally) to it, revealed our own ineptitude in handling global crises, especially the ones occurring simultaneously. In their work, the authors point to examples of the numerous instances of graffiti, memes, and other displays that cued in on the same conclusion—that the problem at hand was what we considered normal all along, so that, if nothing else, the COVID experience may be at least a great revelation of the problematic normal, let us look into where things went postnormal, and tread lightly into what comes next. May it be something more preferable than a "new normal" and perhaps give us further insight into navigating our postnormal world.

As the clock continued to tick in 2020, and the virus continued its rampage, finding ourselves locked up at home (or wherever we were for the time), we developed an intimate relationship with the normal. We longed for a return to normalcy as we adopted strange new standard operating procedures (SOPs) and for lack of another way, handed over tremendous amounts of power to authorities and to technology. We nervously quipped about the "new normal" part making fun of the absurdity of the global situation, part holding back tears with prayers that this would be temporary. Before the virus, we never had an incentive, let alone an opportunity to question the normal of reality. At least not on the scale we are now. And the supposed "new normal" is not so much new as it is an amplification of the old normal in all its horrid glory. In its growing and coalescing complexity, chaos, and contradictions. Steeped in confounding ignorance and the depths of uncertainty as PNT has been describing for the last decade.

But as we stand face to face with the problem of the normal, let us look deep into the eyes of the normal. After all, a pandemic, normally, is a ripe context for culturing our problems and fears. A mix of existential dread and incomplete understanding of the progress of events allows for a mongering of the worst human nature has to offer. Fear of the unknown on steroids extended to its most nightmare lengths. Compounded ignorances delivered the Black Death to 14th Century Europe. Angry that they could not break the walls of Caffa, the

Mongol army flung bodies into the city in one of history's greatest displays of bad sportsmanship which would unwittingly become one of history's earliest examples of biological warfare (Wheelis 2002). The Bubonic plague gave enough justification for further Othering of the mysterious and unknown Eastern world and, from this, built various stereotypes, many that were blatantly untrue, but hate never needed much justification to hold power. Just shy of seven hundred years later, an outbreak of Typhus Fever on the US–Mexican border forged that border as we see it today. By 1917, fear of German invasions via Mexico and the fad of bad science propagated by eugenics swirled together with a bow of justification in the fear of spreading of this new sickness. Xenophobia and stereotypes aggregated, so much so, that they continue into the contemporary period. The cleaning necessary for Mexican workers to enter the US each day, which included a kerosine bath and fumigation with Zyklon B, led to tighter, more racist policies used by US Border Patrol and also inspired the death chamber designs used in concentration camps in Nazi Germany less than two decades later (Chakraborty 2019). But history is filled with cruelty. So, in our more enlightened age, surely, we had learned our lesson.

But it did not take long for the former US president Donald Trump to promote the nicknames of "Wuhan flu" and "China virus" for COVID-19. To be tacked up, another element of the rivalry turned cold/trade war between the two countries. And yet a clear origin for the disease remains to be determined, doubts abound (Mallapaty 2021). In UK, Malaysia, and India, early super-spreader events tied back to gatherings at mosques have led to a feeding of the fire of islamophobia (Chib 2020; Sarkar 2020; Vetticad 2020). The power of justification claimed by such a global event has also tripped up many delicate balances held by the fracturing support beams of various institutions.

Democracy is a prime example of this. The political bedlam could be contained no longer. While the crisis of democracy had been a long time coming, the flood gates were opened by the coronavirus. Political anger that had been building up in Thailand, Hong Kong, Nigeria,

the US, and many other places had reached a boiling point, but the fire was suddenly cut as populist authoritarianism found a dastardly friend in a world turned upside down. It would be easier to list the countries here that did not have people ready to take to the streets for one particular issue (specific to a national context or even international issues like global warming) or another. And the only way we knew how to cope with #COVID-19 in the early days was to #WearADamnMask, #StayHome, #SocialDistancing, #FlattenTheCurve, by being #TogetherAtHome, and not playing the role of the #Covidiot (Stewart 2020).

And while some severe accounting needs to be done, detailing the credits and debits given to executive power across the world—recalling that power given is rarely ever returned voluntarily—a keen eye ought to be kept on the smaller events that in PNT tend to have graver consequences and speak to a wider effect. While the above was happening, I draw your attention to the lesser seen headlines with the title card "Meanwhile…." In the beginning, there seemed to be a ray of hope. Everyone was forced to slow down and even do a bit of introspection.

As the New Year dawned on 2020, many complained of how social life itself had completely gone digital. There was an initial fear of the loss of the random beauty of chance encounters (Badiou and Truong 2012), but it was easier and seemed to be really matching people nicely, saving time and cutting out the guess work and potential detriment of a toxic relationship. And as we went into lockdown, any trepidations we had of the digitalization of our social lives could take a bit of a break. Dating apps took a major hit, but in all honesty, was that such a bad thing? After all, had not dating apps just turned into virtual masturbation? Dating apps really went two ways: A mode for casual sex on one hand and on the other an honest place for people to try to feel a little less alone (though this was usually attained through casual sex, it could also just result in conversation otherwise not available to the busy or the cripplingly introverted). And research was showing the developers of these apps that the

shallowness of swiping and the superficiality of it all was actually making us feel even lonelier (CNBC 2020).

Humans, the social creatures we are, while in the West we love to categorize everything *ad infinitum*, do no better when we are trapped in boxes ourselves. Escape by any means necessary was top priority. It may have been no surprise that social media usage, streaming, and screentime would hit all-time highs; dating apps or the apps originally designed to make people live in the more physical world found a rebound of their own. Pornography websites might be the only ones to challenge Amazon, a company with perhaps darker ethical quandaries on its desk, for internet dominance. The ready-or-not push into the deep end of digital life opened a new, possibly quite bright, future in a world where a random sneeze could indict you as a biological terrorist and a handshake carried the insult of a prominently displayed middle finger.

Yet for every bright future, perhaps we should look to see if there is a darker underbelly. Indeed, a meanwhile… within a meanwhile… continued. Business as usual. Forced to stay at home was also an order to stay with all the problems that already exist within homes around the world. The UN labeled this the "shadow pandemic" as domestic abuse experienced a 20% increase during the spring of lockdown. Spousal abuse first comes to mind as we put a face to this statistic. Women banged together pots and pans in the Westbank to signal solidarity and took to social media to organize safe spaces to lockdown in during confinement orders. Brazil bore some of the worst numbers, with an estimated domestic violence act occurring every 2 min (Mohan 2020). The UN was wise to use vague labels in this circumstance for the abused, and the abusers took all race, sex, gender, national, and cultural labels. And the abuse is not just amongst adults. Child abuse remains a problem in our world; would we expect it to also take a holiday for COVID? And of course, there are the closeted children, queer, trans, or otherwise who find themselves far lonelier amongst their bigoted families than if they had found themselves in solitary confinement. While the world could begin to look more

and more postnormal from one angle, the good ole normal finds a way to persist.

One could be forgiven for laughing or crying at what the US reported in 2020, it had experienced its first March without a school shooting since 2002 (Lewis 2020). It helped that most schools had been closed by this point. And despite the new SOPs, violence persisted. Much of this violence is targeted at members of the LGBT+ community. While minorities, the youth, and political dissidents have shared the conspiracy theorists' blame for much of the ongoing ravage of the coronavirus, the gay community has also been hit. When an infected individual in South Korea had been traced back to various gay clubs in Seoul's Itaewon District, an all too familiar game was a foot again (Kim 2020). Just as the AIDS epidemic was tied to the LGBT+ community, again they found themselves Othered before a new global threat (Straube 2020; World Bank 2020). Once again, a pathogen became the justification for normal hate that an angry world appeared to be chomping at the bit for. Violence shifts from rhetoric to action as homicide against trans individuals continued its upward trend over the last decade. Thirty-seven trans individuals so far have been killed in the US, that number taking a drastic increase as the COVID-19 pandemic went into full swing. In Puerto Rico, the trans community finds itself particularly vulnerable to a string of gruesome murders than kicked off only in April (Avery 2020). And while the US having just concluded its recent presidential election showed itself as a hotbed of division, this speaks to a wider trend of hate and division across the globe. Sex, gender, and love appear to be tragically pigeonholed to this fracturing.

A sliver of hope lies in the fact that the discussion is opened, even if only every so often. So here I hope to really kick the door open and see if more discussions and, heaven forbid, a nice constructive polylogue may result. In response to the state of sex, a flurry of decisions are coming to the fore. France appears to be having a most interesting debate about the allowance of pornographic content online (Braun and Kayali 2020). France, a country whose rich history of art has international renown for not

just crossing, but obliterating, the line on issues of nudity, sexuality, and freedom, where a popular political front, FEMEN, has held a number of top-less protests for various issues concerning women's rights. In the UK, the Mother of all Parliaments found itself debating, in the Palace of Westminster, what sex would be allowed under their COVID-19 regulations (Steafel and Hall 2020). A love sick man was sent to jail for breaking quarantine on the Isle of Man via a rogue-amateur, jet ski flight to mainland Scotland to see his girlfriend (Gross 2020). Courts in the US need to juggle sentencing for lovers who break quarantine in the worst take of *Romeo and Juliet* since Baz Luhrmann when they already have the problem of overcrowded prisons due to minor offences such as drug possession and unpaid parking tickets (Gross and Eligon 2020). Who is looking out for legitimate sex workers (and an interesting debate examines their place as "essential workers") with all of the aid being provided by various governments to compensate the dips brought on by the coronavirus (Furlong 2020)? The absurdity of the headlines we have seen during this pandemic reveals a deeper conversation that needs to be taking place and not brushed under the rug as we tend to be all-too-good at doing.

We make up labels like "new normal" without facing the fact that there are issues with normality itself that we need to be confronting. Certainly, getting things opened again and saving the global economies are essential, but we must not let these titanic efforts sink the other crises we need to be working on, as PNT forces us to face these simultaneously. In really grappling with normality, certain global tendencies to normalize and categorize and build up the grand and confounding mouse traps, I invite us to take a step back and let us talk about sex.

A World Tilted

If we return to the café at the edge of the universe in Omaha, an analysis of some observations can give us insight into a few key concepts of PNT. The proclamation that "everyone exists on the spectrum of pansexuality"

or that "gender is a construct" to some readers may be bold, while to others, quaint— borderline adorable. A certain worldview was needed to allow for the arrival of such a revelation. And with a bit of background, a few assumptions can be addressed. These assumptions do not stand to judge or even make claims on the noble vandal in question, but instead provide us a jump board onto higher concepts.

Consider briefly the city of Omaha. As the economic hub of the state of Nebraska, it lives up to the standard definition for what is a city, yet through its Midwestern, American sentiment and a large percentage of its population's dedication to conservative, albeit open, yet Christian-derived political views, it retains a bit of the sociological feel of a small town or village. Because of this borderline existence, various contradictions make it a peculiar place. The city itself served as the birthplace of the billionaire tycoon Warren Buffett, the Muslim human rights activist Malcolm X, the former Republican President of the United States, Gerald Ford, and the academy award winning actor Marlon Brando. Since the American Civil War, Omaha has been a very segregated city by design, even if not strictly stated overtly. Certain demographics then were confined to certain geographical locations of the city and through malicious busing and highway routing, mixing of various ethnic groups was minimalized in that good ole American way of never talking about it, but respecting the way of things.

While it would be disingenuous to describe the clientele of the café on Farnam Street as not being diverse, by nature of Omaha, the diversity we speak of seems quite limited. A high percentage of those who passed through were white, taking a notable privilege from this despite the socioeconomic disparity (which it should be noted is not insignificant), and of some university level education. This commonality, although not ensuring fraternity, allows for certain commonalities in worldview. An example of this is found in how individuals who subscribe to a numbering system of attraction apply this to their worldview.

There is a certain sociological fascination born in those fanatically adherent to a one-to-ten numbering system of attractiveness for members of the opposite sex. Interestingly, this numbering system differs ever so slightly between the Midwest and say bigger cities on either the East or West coast as apparently attractiveness has a direct proportionality to city population density or geographic location. And if one were to touchdown in an international city say Paris or São Paulo, the calibration of this numbering system was completely cast to the wind. So, beautiful are the "exotic" Parisians or Brazilians that the Midwestern mind could be thrown into existential crisis over it. While this is all superbly subjective as the numerous studies of general populations' attractions to other populations around the world have demonstrated, this experience keys us into a major concept in PNT thought.

The potential naivety of the phenomenological epiphany scribbled on the bathroom wall gives us a deeper awareness of the process of postnormal burst. In devising a methodology for analyzing trends and emerging issues, so as to build futures scenarios in PNT, Sardar and Sweeney gave us an account of the postnormal creep. The creep carried a particular situation (which could be a person, community, or circumstance) along a metaphorical journey into a thickening of uncertainty and ignorance, a greater overlap or occurrence of the 3Cs (complexity, chaos, and contradictions), and through each of the Three Tomorrows of PNT (Extended Present, Familiar Futures, and Unthought Futures) until arriving at the postnormal burst, an event of definitive postnormality.

As the situation continued along this progression, a Manufactured Normalcy Field (MNF) would help the traveler cope with the change it was experiencing. The MNF built on the ideas of Herman and Chomsky (1988) Manufactured Consent and Rao (2012) Manufactured Normalcy to represent bias in our worldview and perspective (Sardar and Sweeney 2016). Various PNT thinkers have debated whether the MNF is more of a field or filter, but generally agree it is the comforting blanket, shielding a situation and its agent(s)

from the rapid change that occurs as things get postnormal. This rough sketch generally remains intact through the various debates, but an interesting adage helps us get a deeper picture of our tumultuous times.

The tilt is a new concept that is continually being fleshed out in its relationship to the MNF and the postnormal creep. The concept was created when I found myself traveling on a train somewhere between Brussels and London with Ziauddin Sardar. We had been discussing with other members of the Centre for Postnormal Policy and Futures Studies (CPPFS) further details of the MNF. A popular metaphor for the MNF was well put by Christopher B. Jones, …a MNF is created by a relatively small, aerodynamic aluminum tube, or commercial airliner, that travels in the stratosphere at 600 miles an hour, at 35,000 feet above the planet surface. That is not normal, but our culture, our travel patterns and behavior, and our short but rapid evolution as a species now consider that unremarkable (Jones 2020).

A similar phenomenon was happening to us on the train; as the world around us flew by, we could peacefully read the newspaper as if sitting stationary on the couch at home. Essentially, the MNF is a mode of normalization.

Our discussions had also asked what is the role of the MNF to the agent, or, dare we put it in economic terms, the MNF's owner/possessor? I myself am partial to a metaphor from the field of medicine. The MNF acts as a sort of immune system when confronted with change. I like this metaphor because while the immune system is always working to defend the body, sometimes, when faced with a paradox, it may only be able to fulfill its job by killing the body. For example, a heart attack results when, for any myriad reason, tissue of the heart dies and this sets off a chain reaction between the nervous and circulatory systems that activates similar pathways that would be triggered in the event of a major opened wound. A key indicator is a drop in blood pressure. The body's normal response is to make the heart work faster to increase the blood pressure and transport more platelets via the blood to the wound and seal it up with a scab. So, the paradox comes when it is the heart tissue that

is damaged, the brain still signals the heart to work harder, and I will leave it to your imagination as to what happens when a broken heart is asked to work harder.

All of this plays about in my head as Sardar and I continue talking or reading as if we could have easily been at a nice café as on a high-speed train. Yet, whenever the train would approach a station for a stop, I would notice another phenomenon. To match the upcoming platform, not all of them being uniform as they were constructed at different times between different standards and different countries, the train would rotate ever so slightly. *Tilt*, if you will. As I looked around at the other passengers, it was hard to tell if anyone else had noticed what I had noticed. The tilt was subtle. If you are not looking for it, or quickly moving to the exit so as to not miss your stop, you might not even notice it. So, the tilt represents those subtle perturbations or disruptions in the MNF. We may notice them, if our MNF is weak or on trial (as many of ours should be during this pandemic!), but with a robust, foolish or otherwise, MNF, we carry on, not a worry in the world. Yet, if you do notice the flame that makes the shadows on the cave wall, then you are faced with a choice. Ride the tilt, let whatever it is and your MNF duel or dance (whichever metaphor you prefer) toward a more change-tolerating being or double down and resist. Based on the tilt, a plurality awaits which ever door you decide to look behind. Mayo (2020) adds, "The tilt leads us to assess the multidimensionality of change and comprehend our place and role as part of that change."

There is a rich debate underway as to what elements of the contemporary moment are MNFs or tilts, creeps, or even bursts. And the answers to these are not always going to be readily clear, and to make sure our accounting is kept honest, they may change readily either from context to context or moment to moment. The COVID-19 pandemic itself to one person could well be a burst (and many of us are hoping it will be), but to others may be a tilt, or something just in the periphery depending on the focus of one's lens.

Mayo's discussion of the postnormal condition has us focus in on the ongoing digitalization of our world. And social media is definitely doing a number to our MNFs (Mayo 2020). I would argue it is, through its algorithms preventing more tilts and potentially taking us into postnormal lag, the space of denial which often results in quite a mess of weirdness and postnormality (Sardar and Sweeney 2016). A point is made in the recent *Netflix* documentary, *The Social Dilemma*, where an early Facebook investor Roger McNamee notes, "the way to think about it is 2.7 million Truman Shows. Each person has their own reality, with their own…*facts*…." This calls to the famous quote by the director, portrayed by Ed Harris, of the television series within the 1998 film, *The Truman Show*, "we accept the reality of the world with which we are presented. It is as simple as that." McNamee goes on to talk about how the recent changes in social media algorithms, aimed at getting you to give more and more of your time, a precious commodity indeed, to the network, reinforces what it determines that you like (Orlowski 2020). It builds this artificial MNF for you. It almost seems like a double MNF that shields your normalcy from any interference from such pesky nuisances as reality.

In a way, the algorithms of various social networks are set to search-and-destroying any sorts of potential tilts out there that may get you to change your mind, let alone think, at least about anything beyond what advertisers would prefer you to think. It only shows you the feeds of those you agree with, or floats images that will make you happy, and prevents anything from prompting an emotional response, beyond what the shakers and movers want you to feel (Turk 2019). So, protected from the reality of a world of difference, we are left to grow fat on the comfort food of our naïve, unchallenged worldviews. And we wonder why the world is so divided. And this is how social media brings us together, to tear us apart. Aided by this dilemma, or crisis, of social networks, we see a crisis of love and sex that stands to have a profound effect on all our futures that will ripple up to the very structures of society as we

know them. This clashes elegantly with the problems of the old normal left unfaced. As we untangle the mess we find ourselves in, maybe we can actually make for a happy, at least hopeful, ending to this love story.

What Is Love?

I believe the most challenging, yet also the most rewarding, opportunity we have when engaging with PNT is to tinker with our MNFs. As one who has grown to never be content with my MNF, I would argue, destroying the MNF, at least so that it could have a phoenix's rebirth, is the way to go. As a child without a strong tie to tradition or historical culture, nostalgia has never been that addictive to me (beyond 1980s pop culture I suppose). But, I appreciate others' need for and the beauty of proper tradition, religious and cultural practices, and historical context. Being a child whose parents did not impose such an identity-bestowing characteristic, they do not have the same prominence in my identity, but I recognize their importance and their place as pillars of identity. So, I am left in a bit of a bind concerning the MNF. I would rather do battle with my own until kingdom come, but I love others and I believe it is important to respect the choices we make with our MNFs. And when we speak of love, sex, and gender, this appreciation of the Other's MNF is key, especially if we want people to change or grow.

Love is a subject of debate as old as any religion or philosophy and, if I were a betting man, I would say as old as language itself, perhaps even forming it. Therefore, love is an essential element of sociality. Sex and gender I will address later as these terms have been unjustly tied up in flawed and crumbling structures that we will deal with after we get an understanding of love in PNT. To spare you a long, long discussion that you can get elsewhere, I will not chop up or compartmentalize love. What I have to say here, I believe, can be applied to all forms of love and you may feel free to do so, if you are so compelled. For the love I speak to does not differ greatly whether it is love of a being by or for the divine, love of a

familial/blood-tied flavor, or more sexually motivated love for a companion. Aside from the dissection to the point of removing the life from love, that has resulted from philosophical treatises on it, love has been put through the ringer conforming it to various epochs. Like Mitchum's fingers, love had been thrown into dichotomous thinking. Love has been degenerated from a higher form into a diametric opponent of a variety of notions such as hate, anger, fear, or for Elie Wiesel, indifference, to name a few. This robs love of its ability to exist upon a colorful spectrum, let alone be a diplomatic, navigational notion. After all, Aphrodite to the Spartans could be both a god of sexual love and war without needing a dueling Gemini-like personification, but this interpretation is not as easy swallowed as later Hellenistic portrayals. As love was being defined into diminished notion of goodness, it was tainted, like just about everything else, in terms of capitalism, a millennium later. Commodified, love itself took on an exchange-like nature which the digitalization of social life has taken to a whole new, destructive level.

Unfortunately, these problems mean we have a great deal of work to do to shift the trajectory of thought on love for most of history. Love is one of the oldest circles humanity has been trying to square and it mucked things up quite thoroughly. This is both discussed and demonstrated in Zygmunt Bauman's treatment in *Liquid Love*. In continuing the development of his theory of liquid times, which is a taking on of the similar occurrences that lead to the development of PNT in the first place (Sardar 2017), the disjointed nature of the subjects and the difficulty in elucidating his feelings on love's instability highlights the crisis love finds itself in (Bauman 2003). And with such a sloppy mess, it is tempting to give into the postmodern malaise of relativity, chalking it all up to chemical impulses to get you to procreate which of course gels well with exchanges and purchasing power. But what are you to expect after it has been commodified to death?

The Enlightenment thinkers through to the present did give us two notions, a good and a bad. The good was to see love as an encounter.

A wonderful set up followed by a terrible crash landing as they placed love within a dialectic. Love plays a role in Hegel's master/slave dialectic and rolls through to de Beauvoir's man/woman dialectic of patriarchy. This reinforced love as an instrument of power, while also putting it on a dangerous dichotomy then needs to be tossed out, because it has intoxicated love-based definitions ever sense. And so, a history of love as two coming together to be one, opposites attracted, etc., writes itself. The ultimate consequences are the legal definitions we find across the globe that cannot be outdated per say but are dreadfully inadequate at capturing the subject at hand. Though I wish to underline a couple philosophers who have played the hand, we have all been dealt with love and can help us get it into a context for PNT discourse.

The French-Lithuanian philosopher, Emmanuel Levinas, built on the phenomenology of Edmund Husserl to give us the encounter of the face of the Other. Three key concepts that give a beautiful elegance that both acknowledges without giving power to dialectic thinking or notions of humans in the state of nature. In the face of Others, we find similarity, and thus the capacity for empathy (dare I say intimacy), and difference which can be negotiated through classic love (Levinas 1989). French philosopher Alain Badiou picks up with Levinas in a conversation with French journalist, Nicolas Truong. Where love for Levinas, according to Badiou, is an experience, for Badiou it is an event, a true experience that carries forward into reality. Love is "an existential project: to construct a world from a decentralised point of view other than that from mere impulse to survive or re-affirm my own identity" (Badiou and Truong 2012, 25). For Badiou and Truong (2012), "love is a re-invention of life. To re-invent love it to re-invent that re-invention" (p. 32). To go the extra mile, Badiou and Truong (2012) also untethers love from power and politics, giving it all a sort of collective humanism. "In love, it is about two people being able to handle difference and make it creative. In politics, it is about finding out whether a group of people, a mass of people in fact, can create equality." (p. 54).

Badiou and Truong's short conversation has its limits. For one, love is two and this definition is quite popular and deemed necessary for a lot of contemporary and particularly legal thought. And PNT is about challenging convention and daring to think the unthought. By disregarding the numbers, romantic love between two really is not that much different from politics. They are projects of creation, undertaken by the many. Key, I think, is the idea of love as difference. Love must be difference and returning to that, we can take a new approach to the postnormal predicament of love.

In PNT, we are individuals engaging the world with our own MNFs. Some of us creep onward, others lagging, others bursting our way from epoch to epoch, maybe occasionally fortunate enough to learn something along the way. In our trajectories, we experience tilts of various shapes and frequencies, yet occasionally, we have a full-on collision. A tilt that truly turns the world upside down. This is love. And based on the strength of the relationship, or the lasting impact after the tilt (for the ones that get away), our MNFs are forever set on a new course, a reinvention toward something different. The challenge posed by the clashing of two MNFs begins a longer construction. I leave it vague and neutral like this because the story continues beyond this point. The tilt can be a prayer or a miracle for the Godly forms love takes, a random act of kindness or the bonds that seal a friendship, and the signing of a contract or proclaiming of a constitution. It could be the birth of a child. Sex could even be a physical manifestation of the tilt. Depending of course how you do it

In accordance to this, love is the answer and should find us a way out of our predicament. Well, I call to mind American president James Madison's famed quote "if men were angels, no government would be necessary." Yes, love should help us form better societies, but it has been entrenched in broken systems and demented through cumbersome convention. And a new normal is not something humans long for.

Breaking the Wheel

Postnormal times requires us to transcend the issues arising from the 3Cs which often requires a very difficult feat in line with keeping up multiple chainsaw juggling acts simultaneously. We have to have one foot in history, one in the present, and multiple feet for a variety of alternative futures. We must be theoretical and practical. While there is right and wrong, there is also being partially right. We have to think for the short term and the long term while respecting complexity and chaos and minding our contradictions. And then we have to help others do the same. And this gets problematic really quickly when we are talking about sex and love.

A good place to begin with is the present as they say, there's no time like it. The current problem with love and sex is multifaceted. First, conversation about it has been rendered almost entirely taboo both in terms of literal regulated speech and the mental blocks of collective consciousnesses. And it can be quite difficult to have a conversation on a topic that you are not supposed to talk about. Second, history has really set the table incorrectly for the dinner party one would like to have to sort out this polylogue. And finally, particularly the Western necessity which has translated into a sort of global necessity to categorize everything into its own label, thanks to globalization, has proven a bulky handicap. And much like the twisted horror behind Vonnegut's *Harrison Bergeron*, the human spirit of endurance has led to a strengthening in relation to the restrictions placed upon it, resulting in the match only needing to be struck to light the touch paper on various identity wars. And always looming in the periphery is the fact that issues in one field, rarely stay isolated, and in the grand complexity of issues that face human beings what is done in love and sex, has effects on other concepts and ripples into the existential questions of what it is to be human.

Having defined love in the previous section, now we can look at our conventional definitions of sex and gender, with the proper caveats and proceed from there. Sex is, in its simplest form, the biological designation concerning sexual identity, usually linked to genitalia or genetic difference. Gender is more difficult to pin, but it is the role developed. Often sex and gender are differentiated between the physical manifestation and the mental understanding, but this is loaded with pitfalls. Both sex and gender have physical and mental consequences and both exist on spectrums. The flaw that threatens to derail the whole train before we leave the station is well underlined in the extensive analysis of Sedgwick (2018). In *Epistemology of the Closet*, Sedgwick notes the disastrous consequences of our binary understanding of sexuality. This "either or" or dichotomous mechanism *Others* a great percent of persons from the conversation and has indoctrinated the masses as to what is normal or abnormal (yet again, why are there only two).

The worst manifestation of this epistemic failure is in the terms we use. Despite your opinions of the labels, everyone is suddenly either heterosexual or homosexual. You can try to correct this by putting in a few new prefixes, but beyond the dichotomy, the prefixes fall into the pit of absurdity confounding the minds of many, unable to keep up on the minutiae, which is indeed essential, that differentiates pansexual from bisexual from polysexual from queer. This tendency to want to categorize goes deep. Even to say Gay often presupposes a male and more likely than not, a white male, because Lesbians must be some other race or something. It is utterly ridiculous, but we need to build a capacity to be smarter than our language and its games.

Hardy and Easton (2017) promote a retaking of language, such as the term *slut*, but their very undiplomatic approach that is perhaps a bit too in your face for the average, lay person kills the conversation on inception. Likewise, sex is not so easily flagged. Male, female, and… We make ourselves feel better by putting "I prefer not to answer" as a box to tick, but why be coy, we might as well just put Other there, so that all of the trans persons or people who are split between their sex and gender are condemned to be Othered or worst, left undefined, and unworthy, apparently, of a social designation or dignity. Because of this conundrum, we have young

people growing up lost, aimless, alienated, and this is beyond failure. This is a social crime against humanity and we are all guilty of it.

A great revision needs badly to get underway. It will be a hell of a project. The Netflix documentary, *Disclosure*, runs down the history of cinema over the last one hundred years as an almost systematic failure to fairly represent trans people in popular media, but it holds out a candle of hope. In watching the difference between how news and television personalities used to ask questions of trans people between today and 30 years ago, things have changed and people are willing to learn. Cringeworthy questions about how trans masculine individuals hide their penis or questions that essentially boil down to "why not just conform" have been replaced by questions that seek understanding, explanation, and learning on the part of the interviewer (Feder 2020). How novel for a journalist to seek truth through understanding as opposed to provocative exposé.

The way we do medicine has been long overdue for a proper revamping both in terms of the endemic racism in the systems popular around the world, but this needs to carry forward for sex and gender. We need to make big waves socially, politically, and legally about how we work in these realms. We have to break dichotomies and snuff out the fear of the unthought. And then we need to see about what will amount to the greatest work for our future, diving into our education systems, working to build more inquisitive minds so that the next generation can do better than us and not resign themselves to the cyclical failure of history on a mobius strip devoid of tolerance and acceptance, devoid of love.

Many argue for unlearning, but that feels a bit too closely like an erasure. Tearing down statues in passion fueled destructive creation has been going on for millennia, but have we learned any lessons? Is that not the point of the act? Instead, we need to transcend the failures. And this requires looking backward and forward. And we are capable.

Ryan and Jethá have done a tremendous study of sexuality and relationships through a historical anthropology in *Sex at Dawn*. They elegantly expose the logical holes in science and sociology that have left us with the unfulfillable and nigh impossible project of love as it stands conventionally defined clashing with the acceleration of modernity and the contradictory prudish devotion to the old normal, pretending to be tradition. They begin with the problem of evolution. Where conventionally one would say we have evolved from apes, they challenge not by refuting evolution, but refuting what evolution means in society. No, says Ryan and Jethá, we are not evolved from apes, we are the apes (Ryan and Jethá 2010). Are humans lovers or fighters? Bonobos or chimps? Or does this dichotomy cut out a great spectrum that makes the *Homo sapiens* species an elegant complexity?

Sex at Dawn goes on to critique contemporary notions of families and tribes and the roles we take therein. This sentiment is argued in Cordelia Fine's *Testosterone Rex* where the blue/pink divide colors our world where everything from clothes to toys, our language, and our social order are all defined by these exclusionary and mostly incorrect dichotomies which open political projects, hoping for equality, to dementing by power, domination, and capitalism. It is no wonder university students buckle under it all thinking they have discovered fire with proclamations that we are all a little bisexual (Fine 2018).

But might it be about more than just sex? And might we try to teach our youth to seek out being human and what possibilities that can open up? It might be nice one day to live in a world where we are all just a bunch of *Homos*. And with the rapidly accelerating digitalization of our world, the introduction of robots, and some tough ethical debates concerning our role with technology, having a grasp of humanity will be paramount (Mar 2017). Because when that future comes, ready or not you may not get to decide whether you are a top, a bottom, active, passive, or a verse for that debate, as if those limiting simple ideas will have any bearing in the future of getting fucked.

The criticism raised by Ryan and Jethá echoes a whole subgenre of books on the problems of racial science. Among the finest of

them include Angela Saini's *Superior* and Jennifer Eberhardt's *Bias*, where the history of Western science has been hijacked by eugenicists and racists that used the pure name of science to justify horrifying worldviews. It is important for us to expand our horizons on sexual and gender identities and appreciate them without Othering them and at least be open to learning if the prospect is confounding. Just as we should resist the temptation to call all people from Africa simply Africans, as if the rich history of an entire continent can be dulled down to a simplistic identity, kudos for Europeans, Americans, or Arabs. While generalizations may be necessary from time to time, it is important to be aware of what we say so that we do not lose out on the beauty of the small things. Of difference which is after all the vehicle of love.

And it is too bad because even democracy is infected by these problems. The majority has a freedom to diversity while minorities are confined to coalitions as this appears to be the only way to raise up a voice loud enough so that it may be heard. Feminism is a prime example of this. Just consider the diversity of individuals who would consider themselves a feminist, often by their definition disqualifying others that the majority places in this group. This is the problem with the LGBT+. First off, the + is effectively Othering. Second, throwing all these folks into one community pits individuals who existentially threaten each other into a box and forcing them to rise up against a powerful majority. I have no intension to compare tragedies or intensities here, but the act of pigeonholing the LGBT+ community is on par with how Western powers have carved up the rest of the world, drawing borders around warring societies and calling them savage when civil war results. Of course, this is not to discredit the work the LGBT+ communities around the world have been able to accomplish via the magic of empathy, but it should not be over looked that a great deal of homophobia and transphobia comes from within the other minority communities that these groups are forced to take up the banner with. The Netflix documentary, *The Death and Life of Marsha P. Johnson* (2017), tells the harrowing tale of the inequalities of the trans community within the LGBT+ movements which is only made exponentially worse being a trans feminine individual and being one of color (France 2017). This also highlights that this needs to be a polylogue effort, both within and outside of each community. And democracy is slow and messy and so are people.

At this point then, we must root our language and really tackle the problems it presents for us and learn to appreciate difference and love. Take the tilts as they come, learn, and grow. So, this gets us to the Free Love movement, but I am not calling for a revival of the Free Love movement, which is as problematic as any other movement, but briefly, first, do not drink the Kool-Aid of postmodernism, but more importantly, in taking on tomorrow, this needs to be done with an ethical creativity that has been lacking in the past. Movements are standing on a horizon of change. Movements themselves have become quite postnormal, particularly in their complexity and ability to work without a head and operate without or in resistance to other patriarchal vestiges. The Free Love movement and the Occupy Wall Street movement show the worst case of headless movements, but with the aid of technology, which should still be accepted with certain hesitations, global change seems a lot closer as environmental movements and the Black Lives Matter movements have demonstrated. And like democracy, they will also not win it all in one go, but there is a beautiful opportunity for finding new unthought futures in how these organizations act. Sex, gender, family, community, tribe, society, and civilization need a revision with a more open and plural terrain.

For the thoughts coming out of thinking on PNT to work, you need a proper environment for it to take root. Otherwise, the aware are chased off as kooks and become the victims of this strange hurricane of conspiracy theories and fake news that is pummeling the globe at the moment. Again, this is a hell of a project, and maybe we can creep along using the Overton Window, but we need to really

hammer out ethical frameworks and foster a society that discusses morality. There are rights and wrongs, goods and evils, and they need to be quarried through discourse and debate. This goes especially for love and sex. If you throw the rules out, you might as well throw out the baby as well. It was the fear of or blatant disregard for the complexity of sex and gender (which occurs when you generalize an entire human characteristic or identity as sin), that fed the creation and persistence of silly taboos. And this is why the taboo around sex needs to really be put to rest as we firm up our understanding of the limits. And we need to use this transitional period of PNT to get it right. And, as is the case in PNT, the clock keeps kicking and our world is rapidly digitalizing, we are going to have everything flipped upside down really soon and we need to have the basic groundwork prepared. We need to both understand and work to improve social media and online lives so that the reality of humans and love are challenged, so that tilts are not avoided and so that MNFs can be challenged so that we can take on Baidou's request and see what a collective of people can manage to build.

In the 1989 film, *Do The Right Thing*, Spike Lee pays homage to *The Night of the Hunter*. Mookie, the main character, in route to make a delivery, runs into Radio Raheem, whose boombox is blaring Public Enemy's *Fight the Power*. During a handshake, Mookie takes note of Raheem's new brass knuckles, one reading love and the other hate. Radio Raheem then breaks into a slightly updated monolog of right-hand/left-hand. Always fighting, the diametrically opposed hands struggle. Raheem ends with a "If I love you, I love you, but if I hate you…" he stares off into space, perhaps growing aware of the absurdity of it all. Mookie responds with a tone that almost parodies this, "there it is, love and hate." Raheem gives a "I love you, bro" and they embrace in peace. By the film's end, it is difficult to tell if Raheem came to see out his realization, but interestingly, Lee ends the film with diametrically opposed speeches on violence from Martin Luther King, Jr. and Malcolm X, only to have the final frame of the film be a photo of the two

men shaking hands, a sign of peace in the presence of difference. Love. Whether this is to be fantasy or reality remains to be seen.

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Zombie Disciplines: Knowledge, Anticipatory Imagination, and Becoming in Postnormal Times

Liam Mayo[1] ⓘ and Shamim Miah[2]

Abstract

This article does three things: first, it explores the erosions of traditional forms of knowledge and how this is impacting the way change is approached and understood; second, it expands on Ziauddin Sardar's notion that imagination is central to unlocking new ways of being and knowing the world—and in particular, explores Marcus Bussey's anticipatory imagination further; and third, we address notions of agency and suggest how, through a reimagining, an ontological shift from Enlightenment notions of Being to new notions of Becoming is available to us, which we believe is worth consideration given our postnormal context.

Introduction

Ours is an age defined by significant change. In these postnormal times (Sardar 2010), we are suspended between the no-longer and the not-quite-yet. Those things we have held to be true are increasingly irrelevant, ways of knowing and being in the world are rapidly transforming, and the tools that we once used to navigate change have become all but obsolete (Beck 2002; Sardar 2010, 2015). With the loss of faith in science, technology, and politics to lead the West into the future, with the traditional touchstones questioned, it seems there is uncertainty not just about the future, but about how to even begin thinking about the future (Montuori 2011). In these postnormal times, humans de-emphasize change and cling to traditional notions of stability and certainty: a product of our perception of what is and what is not normal. As a consequence, our postnormal condition nurtures ignorance and fosters uncertainty (Mayo 2020b), characteristics which, we argue here, are systemically promoted through zombie disciplines.

In an interview with the *Journal of Consumer Culture*, the noted German sociologist Beck (2002) reflected on the challenge of theorizing about a society whose system of

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coordinates is changing significantly. Throughout his career, Beck (2002) had repeatedly rejected "zombie categories" which he attributed to the sociological classics and claimed embodied aspects of experience were no longer relevant in the 21st century. Zombie categories, such as "social class" or the "nation state," Beck contended, are merely kept alive today artificially by scholars (Gross 2016). Going further, in the wake of the terrorist attacks of 9/11, Beck (2003) argued that state-based concepts of war, peace, friend, foe, enemy, crime, and peace should also be rendered obsolete. With these concepts, he built the general foundations for the assertion that sociology, as a discipline, should liberate itself from the intellectual blockages that it had inherited from the classical tradition. "How can one," Beck (2002, 263) queries, "make reasonable decisions about the future under such conditions of uncertainty?"

Indeed, these sentiments mirror those of futurist Sardar, who argued that postnormal times provides a lens through which futures studies may interpret and understand the present period and develop a language to describe the ruptures that are occurring across disciplines and canons. Traditional futures approaches deal with the plurality of alternative futures by distinguishing between plausible, probable, possible, and preferable. Now, Sardar contends that a postnormal landscape challenges empiricist futures and makes conventional strategic planning and foresight work problematic (Sardar and Sweeney 2016). This is not the death nail for futures studies; rather, it is a redoubling of importance of futures approaches and a signal toward the importance of the imagination in navigating the change of our age (Montuori 2011; Sardar 2010) and indeed, the importance of imagination in dealing with zombie disciplines.

This article aims to do three things. First, it explores the erosion in traditional forms of knowledge and how this is impacting the way change is approached and understood. Expanding on Beck's notion of "zombie categories," we argue that it is indeed "zombie disciplines," concomitant with the erosion of knowledge, that leave us ill-equipped to

effectively navigate current epochal changes. To demonstrate this, we use the example of sociology, unpacking the characteristics that render it as a zombie disciple. Second, we take Sardar's (2015, 38) contention and expand further on the notion of imagination as a means "to produce new definitions of everything from art to architecture, politics to policy, science to spirituality and what it means to be human in postnormal times." Anticipatory imagination (Bussey, Song, and Hsieh 2017) is offered here as a useful process for questioning and formulating that is linked to pedagogies of possibility (Bussey et al. 2012) and for opening spaces for alternate forms of knowledge creation. We make the case that, in light of zombie disciplines, fostering anticipatory imagination within curriculums and institutions invites change and transformation at the personal and cognitive levels while fostering new values and new strategies that can creatively manage uncertainty and complexity (Bussey, Song, and Hsieh 2017). Third, we address notions of agency and suggest how, through a reimagining, an ontological shift from Enlightenment notions of Being to new notion of Becoming is available to us, which is worth considering given our postnormal context.

Zombies and the Living Dead

The zombie, as a metaphor, provides a deeper critique of knowledge in postnormal times: occupying the space of both the living and the dead, they embody the paradox of our transitional age. By nature, the zombie is "human and non-human, living and not living, cultural and non-cultural, natural and supernatural, suspended between fundamental binaries that most definitions presuppose" (Vervaeke, Mastropietro, and Miscevic 2017, 27). The zombie has its origins in Haitian Vodou via African spirituality; it represents the embodiment of the fear of slavery, economic, political, or spiritual (Moreman 2010). Appropriated by modernity, the outbreak of zombieism is a 20th century phenomenon rooted in the Western imagination, that has exploded and become part of the cultural zeitgeist, and transformed

into the flesh-eating ghoul of modern cinema. To date, over one thousand zombie movies have been made since 1920 and over half of them produced in the last 10 years. The zombie phenomena commercialized by Romero's *Night of the Living Dead* (1968), considered to be the movie to popularize the zombie genre and to establish it as a cultural phenomenon, replaced the earlier alien villain introduced by H. G. Wells in his 1898 classical novel *War of the Worlds*, which was a source of inspiration for many film directors. Now the threat to Western humanity was not the fear of the alien, the Other, rather, the threat existed within us, amongst us, an imminent viral threat.

While there has been much academic discussion of the zombie of the cinema, there has been little examination of the zombie itself, prompting several scholars to "analyze the zombie as a symbol in itself" (Moreman 2010, 264), representative of the "anxieties growing from the anomie resulting from a monolithic authority structure weakened by secularism, pluralism, and cultural relativity" (Moreman 2010, 265), quintessentially the slave without master, subject to their vilest desires, and without hope of divine salvation (Moreman 2010). As Deleuze and Guattari (1984, 33) put it, "the only modern myth is the myth of the zombie."

The primary feature of the zombie is that they inhabit a diseased world: by embodying a diseased body, they exist without cure. In this sense, the zombie lacks the essential feature of any living organism; rather, they straddle the divide between the living and dead. Unintelligibly, they are communal in that they vaguely share proximity despite the absence of any accord between them (Webb and Byrnand 2008). They shuffle from place to place, seemingly unattached; they do not talk, rather communicate their incommunicability; they are heedless, fierce, and threatening but give no thought to defending themselves against harm; and are not evil, rather merely scrabbling to satisfy a base instinct of their own craving (Vervaeke, Mastropietro, and Miscevic 2017). Indeed, zombies are us. Their premise is based on their self-reflected image of humanity. But

zombies are an ugly us. They lack dignity, and in pursuit of their consumption, they will destroy themselves (Webb and Byrnand 2008). Thus, more than a symbolic representation, the zombie is an abstraction by which we may explore the erosion of knowledge in postnormal times.

The zombie metaphor has indeed provided utility for the topic of critical assessment within sociology and, in particular, cultural studies. The zombie as a metaphor has been used to describe how disciplines, such as sociology, anthropology, and economics, are based upon ideas which are dead, but paradoxically continue to walk amongst us. As Quiggin noted:

> Some ideas live on because they are useful. Others die and are forgotten. But even when they have proved themselves wrong and dangerous, ideas are very hard to kill. Even after the evidence seems to have killed them, they keep coming back. These ideas are neither alive nor dead… they are undead, or zombie ideas (Quiggin 2012, 1).

An examination of zombie disciplines is crucial in postnormal times, especially given that the entire *raison d'etre* of higher education based upon critique, contestation, and developing new knowledge has given rise to "post-truth" (postmodernism), "deep-fake" (not possible without computer algorithms), and "fake-news" (made popular largely due to uncritical masses). Universities, together with some of the disciplines that are taught, are like the living dead: an uncritical movement of scholarship, bounded and restricted by its methodological constraints, which continues to exist and to teach next generation of students, thus allowing the system to self-perpetuate (Apple 2016).

A discipline, rooted in traditional forms of knowledge production and dissemination, in these postnormal times, characterized by chaos, complexity, and contradiction, rather than leading to wisdom, instead produces an epistemological veil, a "smog of ignorance" (Sardar 2020): an obnoxious projection of the existence of knowledge that masks a lack of knowledge within the neo-liberal educational

system which benefits only those within the power structure rather than the students (Apple 2016). This diseased reasoning is a helpful way of describing people's inability to provide authentic explanations to complex issues because the capacity of organizations to make judgments has become infected with zombie ideas (Smyth 2018).

Disciplines and Knowledge

The current disciplinary ordering and structuring of knowledge is largely a product of the Enlightenment in general and modernity in particular. During the pre-modern period, most Western higher education institutions of learning included four distinct faculties of study: theology, canon law, medicine, and the arts otherwise known as the liberal arts (which mainly taught the trivium: grammar, rhetoric, and logic). The rise of modernity witnessed the evolution and expansion of a range of knowledge systems by new and emerging scholarly communities. During the 19th century, disciplines became a helpful medium through which most universities in the West were able to catalog and archive new emerging forms of knowledge, ranging from the natural sciences, to social sciences, and to humanities. Throughout the early 20th century, new disciplines were added to the growing list; with psychology, the late 20th century witnessed the growth of media studies, gender studies, and queer studies.

It is clear that the rise of disciplines was closely associated with knowledge production and dissemination, but as Skúlason (2015) in *A Critique of Universities* has pointed out, the purpose, function, and objective of higher education establishments and their relationship with discipline and knowledge served different purposes. The French tradition, as seen with the I'Universite de France, which was founded by Napoleon in 1806, viewed discipline and knowledge as serving the interest of the state. Similarly, the British tradition considered the function of universities to train the administrators, soldiers, and leaders to run the empire. Conversely, the German tradition as developed

by the Prussian philosopher and linguist Wilhelm von Humboldt (d. 1835) via the Humboldt University of Berlin considered the importance of advancing science, scholarship, and research as the purpose of higher education.

A number of critiques of academic disciplines have demonstrated how disciplines have strong connections with knowledge and not with ethics or wisdom. In an early critique of discipline, Foucault (1972), in *Archaeology of Knowledge*, argued how academic disciplines are simply a set of "ideas" that have been historically grounded in power structures and have actively re-produced existing power politics. Furthermore, modern knowledge production translates to power, control, and exploitation. According to Guhin and Wyrtzen (2013), knowledge production is a political act, which they term as "violence of knowledge." They question the liberal assertion that "true" knowledge is apolitical by locating the deeply political circumstances through which knowledge is produced. They go on to elucidate the point, drawing upon postcolonial theorists to describe how the "Other," subjected to "violence of essentialization," based upon the principles of Orientalism, is largely an academic pursuit for dominating, restructuring, having the authority over the Orient (Said 1979, 3), and "epistemic violence," which according to Spivak (1988) refers to the process by which Western forms of epistemology preclude or destroy local forms of knowledge. For Sardar (2020, 2), "wisdom integrates and unifies the knowledge and values of a person, it cannot be abused, and a wise person cannot be immoral." For the subaltern, knowledge, when linked to disciplines, is not the pursuit of the greater good, neither is it linked with wisdom; knowledge is the obliteration of the cultural codings that enable agency.

It has now been established that contemporary knowledge production is linked to neoliberalism. The cultural theorist Amin (2014) illustrates how paradigms within the social and economic sciences tend to shift with times and schools of thoughts, often in opposition to one another. This critical analysis reveals that the dominant paradigm becomes the "single

thought" of the moment when it "responds best to the demands posed by the particular phase of capitalist development" (Amin 2014, 20)—what best suits those with power and influence in society (Husain and Osswald 2016). Similarly, the social philosopher Polanyi (1944) argued that instead of historically normal patterns of subordinating the economy to society, the system of self-regulating markets required subordinating society to the logic of the market. As a result, the "developed world" runs society "as an adjunct (accessory) to the market; instead of the economy being embedded in social relations, social relations are embedded in the economic system" (Polanyi 1944, 24). More recently, most universities have developed a tradition which embodies the market and the business model of neo-liberalism; as Sardar noted, "the underlying argument of most of the early literature on the crisis of education is that thanks to confluence of the rise of neoliberalism, increasing globalization and advancing communication technology, universities have become big businesses" (Sardar and Henzell-Thomas 2017, 5). These arguments, centered on discourses of productivity and activity, paradoxically create feelings of compliance and passivity, including inability to think, loss of individual control, and contagion (Husain and Osswald 2016). Additionally, the emphasis on creating a labor force results in the student as the consumer rather than the learner. These consumers become what Husain calls "zombie graduates," who are entitled to be happy yet lack critical understanding and suffer acute philosophical poverty (Husain and Osswald 2016).

Sociology as a Zombie Discipline

Disciplines disseminate ideas and concepts that are no longer representative of reality but continue to shape minds and outlooks, education and policies, and outlooks and futures (Husain and Osswald 2016). Zombie disciplines range from anthropology to economics, political science to development studies, cultural studies to media studies, all varieties of "area studies," certain types of history and philosophy,

particular perspectives on biology, and many other "subjects" in between. For illustrative purposes, we will focus on sociology.

It is clear that sociology is a product of modernity whilst concurrently maintaining the objective to make sense of modernity. Modernity had fundamentally transformed Western societies through industrialization, urbanization, and decline of religion, and introduction of sociology made it possible to reflect upon the nature of these socio-cultural transformations. In short, "sociological conceptualizations of capitalism, modernity, and economic development as western European phenomena emerged due only to factors endogenous to the region, such as the French Revolution, the Enlightenment, and the industrial revolution" (Boatcă 2013, 56). However, it is important to challenge some of the many claims underpinned by the literature related to ideas of modernity and liberalism, especially related to the socio-political transformation of France and advances of liberty, equality, and fraternity. In fact, as James (2001) has pointed out, it was the slave resistance in Haiti that was instrumental in shaping these ideas of universal rights in the minds of French thinkers. Thus, sociology is an outcome of socio-historical factors of European modernity. Its rise coincided with positivist epistemology, which developed from the decaying roots of Western religious certainty. Auguste Comte (d. 1857), the author of *Plan of the Scientific Works Necessary for the Re-Organisation of Society* (1822), proposed sociological positivism as a way of solving social problems through rational planning. Comte maintained that positivist or scientific methods of approaching society would lead to a linear, orderly, and progressive view of history, starting with theological stage, through a metaphysical phase, and gradually leading to a positive or scientific stage.

Whilst the origins of sociology can be traced back to Plato's *Republic* (375 BC), Ibn Khaldun's *Muqaddimah* (1377), or even Baron Montesquieu's work *The Spirit of the Law* (1748), it was in the fourth volume of Comte's *Cours de Philosophie Positive* (1838) that the

actual term sociology was first used. As a result, he is considered to be the father of modern sociology and his ideas enjoy the same legitimacy as the natural sciences. The second key figure within sociology was Herbert Spenser who combined scientific metaphors with sociological theories. Spencer's *The Study of Sociobiology* (1873) advocated evolutionary theory of Social Darwinism to "explain" the intellectual superiority of Europeans over non-Europeans. His idea was used to justify Western superiority via anthropology and colonialism abroad whilst justifying the status quo of the ruling classes in England by resisting social reforms made by the oppressed working classes. Whilst socio-biology has had a complex and controversial history, some of the ideas of race science continue to shape popular and scientific debates.

Given its historical context, it is important to note that the rise of sociology was materially connected with its Eurocentric formations. As Alatas (1977, 13) has noted, the "vigorous outburst of colonialism in the 19th century was accompanied by intellectual trends which sought to justify the phenomenon [of colonialism].". In light of the current questioning of sociology's heteronormative standpoint by feminism, critical race theory, and others, Go (2013) has pointed out that sociology, and by extension any discipline, needs to take stock of issues related to knowledge, power, and standpoint. So, whilst the discipline is the product of history—it is the product of only one history of the victor.

Zombie disciplines do not only have their foundations firmly anchored in imperialist and racist histories, but also have "Great Men" associated with them who are required to be cited within the literature. Sociology revolves around three thinkers: Marx, Durkheim, and Weber. Karl Marx's ideas have been well documented especially those related to capitalism, economy, class struggle, and ideology. Perhaps what is less frequently debated is his idea related to non-European societies. In his analysis of the empires that existed before industrialization, Marx viewed pre-capitalist "Asiatic Empires," such as the Ottoman,

Chinese, Indian, and Persian empires, as going through political change without any social transformation. In his analysis of India, he argued how despite centuries of political change, the village-centered social order was unaltered. The British Empire destroyed India's village-centered order by connecting India's local economy with the global economy. For Marx, colonialism was crucial to create the conditions of a world capitalist order (Marx, Engels, and Adoratskiĭ 1942). Max Weber's writings and interests were diverse and covered a range of topics, ideas, and concerns. His key writings on modernity were to establish the claim that while scientific knowledge existed, especially throughout worlds, such as China, India, and the Islamic world, systematic rational science was unique to the West and could be traced back to the Hellenic mind, that is, ancient Greece (Kalberg 2008). Emile Durkheim's views on imperialism were slightly different from those of Marx and Weber, especially given that he did not publicly advocate nor hold a critical position on the French Imperialism (Seidman 2013). Nevertheless, these three classical sociologists failed to "incorporate the dynamics of Empire into their historical sociology of contemporary society" (Seidman 2013, 39).

To spread ideas and concepts, zombie disciplines use canonical texts and, in the case of sociology, canonical sociological classics. As McLennan (2013, 122) pointed out, these texts "were largely couched as grand ethnographies of social progress, however complicated, featuring a common scenario in which non-Western societies are positioned as backward and modern capitalist ones as advanced.". There are many epistemic shortcomings that gave rise to sociology as a zombie discipline, perhaps one of the most important of these is based upon the claims of metrocentrism; that is to say, epistemological ideas underpinned within sociology, rooted within a specific understanding of Europe and rest of the world, are made universal through the writings of Weber, Marx, and Durkheim (Go 2013).

It is important to note that the key to understanding any zombie discipline lies neither in the uncritical acceptance, nor its rejection,

but rather in acknowledging its ontological standpoint, its limitations, and its ability (or more pointedly, inability) to navigate postnormal times. In postnormal times, the mask slips from sociology and its related disciples to expose its zombie nature, and in doing so, it demonstrates how it leads to the logical conclusion of postmodernism, the death of knowledge, and the triumph of interpretation.

Is sociology dead? It can be argued that as a discipline, it is indeed dead, but it continuous to give the illusion that it exists. Sociology is dead, especially given the rejection of any grand theory or set of theories to explain the nature of society. This raises several broad ontological questions, most pertinently stated by cultural theorist and philosopher Baudrillard (d. 2007). In a number of transformative articles, especially *Simulcra and Simulation* (Baudrillard 1994) and *The Gulf War Did Not Take Place* (Baudrillard 1995), he argued that society did not exist; if it does, it is entirely composed of signs. His argument is based upon the notion that televisual communication and by extension social media and its signs are so ubiquitous in its "realty" that people struggle in deciding what is real. By the same logical conclusion, if the boundary between real and the hyper-real is blurred, then how can sociologists develop a theory explaining the nature of society? Indeed, this speaks to the quandary posed by Beck (2002, 203) as he reflected on the challenge of theorizing significant societal change: "if the fundamental distinction and criteria that we have always identified with modern society no longer apply, where can one begin?"

Perhaps what is most striking is that contemporary society—given its complexity, chaos, and contradiction together with its speed and spontaneity—is moving faster than sociology, so it is difficult for it, or indeed any discipline, to keep up with. The desire to play down change in spite of change is symptomatic of a humanity attempting to navigate postnormal times without the adequate know how to do so (Mayo 2020c). Zombie disciplines create zombie people, who continue to make decisions that are informed by toxic knowledge (Sardar 2020), and these further exacerbate the impacts of postnormal change (Serra 2014).

Culture and Imagination

The root of this predicament is human culture. The psychologists Vervaeke, Mastropietro, and Miscevic (2017) locate the epistemological crisis in Western culture, a result of the collapse in the worldviews of modernity; and as a result, we are now bereft of the wherewithal to respond to emergent challenges. He takes an esthetic reading of Western culture, reflecting on the collective sense of alienation, disconnection, and disenchantment that appears apparent in a society devoid of a spiritual mythology to compel action. As Vervaeke, Mastropietro, and Miscevic (2017) put it, "it is one thing for a culture to run its course and give rise to the next stage in its development, or even to be conquered by another culture – a death and rebirth, if you will. It is another for it to trip over itself and expedite its own demise – a waking death the walking death epitomize" (p. 42).

Indeed, ours is a cultural crisis owed to humanity's inability to move beyond a manufactured normalcy that perpetuates a familiar sense of the present (Mayo 2020b). The sociologist Clammer asserts, "if Bauman is correct in his argument that the outcome of modernity was the Holocaust (Bauman 2000) then it is indeed our very civilization that has brought us to the brink of catastrophe, but perhaps this time to an ecological Holocaust. If this is the case than ... it is our very culture and the values that constitute it that is the root of our problems" (Clammer 2014, 41). Culture, as Clammer (2014, 12–13) reminds us, is premised on constellations of values, assumptions, and drivers that are constantly in flux. Within culture lies imagination, which, according to Sardar (2010, 443), is a key ingredient for coping with postnormal times: "while imagination is intangible, it creates and shapes our reality; while a mental tool, it affects our behaviour and expectations.". With imagination, the construction of myths and stories becomes the vehicle for communicating and negotiating meaning about our world (Brockmeier 2009). And

these acts of meaning making link us to culture (Bruner 1990). As such, "given that our imagination is embedded and limited to our culture, we will have to unleash a broad spectrum of imaginations from the rich diversity of human cultures and multiple ways of imagining alternatives to conventional, orthodox ways of being and doing" (Sardar 2010, 443).

Futurists have a role to play here. Futures thinking, as an approach to problem solving, understands the world as a complex system and draws on a wide range of tools to access understanding, capacity building, and strategic potentialities concerning possible, plausible, and preferred futures (Bussey, Song, and Hsieh 2017; Glenn and Gordon 2003; Slaughter 1996). The primary focus of futurists is images of the future (Dator 2019; Polak 1973), and as it is culture that provides us with such images, imagination is the domain of the futurist.

However, the imagination is contextual; we cannot imagine beyond our experiential, spatial, or temporal contexts. Indeed, contexts often seem hegemonic and diminish agency (Bussey 2014), and our futures are colonized (Sardar 1998). Responding to this, futures work locates agency within the past–present–future nexus of culture. In this way, the role of the futurist is to break free from dominant (extended) present-centered imagery of the future and facilitate creation of and/or the presentation of alternative images of the future. This requires us to, as Bussey suggested, "claim – or reclaim – our right to cultural agency… to offer alternative narratives, images and visions ... to hack into the cultural coding that determines how we think, relate, remember, act, love, fear and hope" (Bussey 2017b, 89). Here, the futurist is responsible for generating new possibilities within the cultural genome, exploring new pathways by reconfiguring old elements, inserting new code, and bringing out creative work generating alternative futures (Bussey 2017b, 89). To achieve this, what is required is an appreciation of anticipation as a human faculty and anticipatory imagination, the pedagogical device, as tools for thinking beyond current utilitarian approaches to the future, emancipating those invested in—even complicit

in—a dominant reading of the present (Bussey 2014, 2016, 2017b; Bussey, Song, and Hsieh 2017). Thus, the role of the futurist is to unlock anticipatory imagination. This requires a framework for praxis.

Anticipatory Learning, Imagination, and Agency

As a pedagogical device, anticipatory action learning is a well-established framework in the futures research tool bag. Effective anticipatory action learning processes link individuals to social transformation, integrate different kinds and levels of appreciation of futures, create open-ended and continually evolving conditions, and contribute to intelligent action rather than formal knowledge (Sardar 2013). Felder and Brent (2003) suggest that working in the space between knowledge and problem is where learning is truly fostered. Within this framework, "socially robust knowledge ... capable of dealing with unknown and unforeseeable contexts" is fostered and tested (Nowotny, Scott, and Gibbons 2013, 167). This points toward the request of postnormal sciences to engage extended peer communities in the work of science; however, we argue, anticipatory action learning goes much further.

Postnormal science, where postnormal times finds its foundations, was conceived as a means to question values and make them explicit in scientific research (Funtowicz and Ravetz 1993). Funtowicz and Ravetz (1993) were advocating for the inclusion of non-expert audiences and stakeholders, those groups whose concerns and values are usually considered external to the scientific process, as a means to democratize research inputs and outputs. Known as extended peer communities, these groups can and might lead toward the integration and absorption of localized knowledge, which can shape areas of study and bring about more collaborative and responsive modes of research.

Anticipatory action learning is different and more relevant in postnormal times, in that it incites active participation, is future focused in

its application of anticipatory decision making, and embeds a reflective practice—or double loop learning—in which participants identify a problem, posit a solution, apply this solution, assess the outcome, and reflect on the questions: what happened, did it work, and where next (Bussey, Song, and Hsieh 2017; Inayatullah 2006; Stevenson 2002). In this way, teacher and student, researcher and subject, all become creators and purveyors of new—practical—knowledge and are involved in positive action toward the future. Indeed, the anticipatory action learning model has successfully been integrated into curriculums for the development of students' anticipatory reasoning and questioning as well as into community engagement projects deployed by city planners to bolster participatory decision-making processes (Gould 2008). Conceptually, this future-orientated attention essentially draws an awareness of and yearning for alternatives already embedded in the present database of images and practices.

However, positive action, nested in constructive optimism (Stevenson 2008, 917), requires a healthy imagination that is "critically aware of the diminished futures that appear hegemonic in the dominant culture" (Bussey, Song, and Hsieh 2017). Bussey, Song, and Hsieh (2017) have offered a model for anticipatory imagination that brings in the personal and transformational as domains that point to the capacity to lead from conditioned reality to a point beyond it—something new, perhaps even surprising. Indeed, the inclusion of the personal and transformational domains acknowledges that there is a connection between our sense of identity and our relationship with the future, and the process of transformation can have personal, social, and cultural outcomes. Thus, personal imagination is dependent on an individual's social and cultural capital and makes sense of deep existential questions of identity, potentially, and taboos; social imagination speaks to the assumptions, values, rationalities, and institutional conditions that set contexts; and cultural imagination exposes the historical and epistemological troots of context. Anticipatory imagination

traverses all three plains of imagination to, in the case of Bussey et al., empower engineering students to regard the interdependence of systems, embrace risk taking and open-ended questioning, and adopt a proactive stance toward their future in reconstructive and creative ways.

We propose that this pedagogical model for building anticipatory imagination should be deployed and embraced across disciplines. Unlocking anticipatory imagination, it is suggested, builds confidence around one's capacity to actively reframe contexts, deploy skills and materials in the quest to solve problems. That is to say, that the futurist becomes the hacker, who exercises individual and collective agency within the cultural domain, to put one's creative energy in the service of social, cultural, and ecological processes that keep gridlocking, in a state of postnormal paralysis (Bussey 2017b).

Fundamentally, this is all about agency: the capacity of individuals and communities to make decisions concerning all main aspects of their lives in ways that are neither completely constrained nor completely without reference to social, economic, and family circumstances (Evans and Strauss 2010). In particular, agency refers to the agentive dimension of human subjectivity, the human-specific capacity to actively influence and change their living conditions (Brockmeier 2009). This capacity for action, Brockmeier (2009) tells us, is mediated through the particular social character of human life. In Brockmeier's (2009) view, this implies that the conduct of action is under the sway of intentional states, such as beliefs, desires, emotions, and moral commitments, states which in turn are interwoven with culture, society, and history. Indeed, we are reminded of Karl Marx who reflected, in his *Theses on Feuerbach* (1888/1969), that the "human essence is no abstraction inherent in each single individual ... but the ensemble of the social relations" (Marx and Engels 1968, 14).

A particular futures method provides the opportunity to unpack and analyze the particular contextualities that are seen to govern and/or affect images of the future: causal layered

analysis (CLA) (Inayatullah 1998). This post-structuralist method opens up a greater understanding of one's complicity in any context and how, through the logic of causality, through either active or passive behavior, one can rework the world around them. Causal layered analysis encompasses four vertical layers within which horizontal discourses may be entered:

Layer	Agency
Litany	I have the ability to influence the direction of my life
Systems	Set and rigid, institutional and paternalistic
Worldviews	Grand narratives
Myth/ metaphor	If you imagine it, you can make it so

The basic insight here is that agency, however constrained by force of circumstance, always lies where the stakeholder stands and, in the context, what they determine.

Postnormal times is a transitory period. What comes after postnormal times, Sardar (2015, 27) tells us, "can be consciously shaped to be better, saner, more globally and ecologically relevant, more pluralistic, more humane and more peaceful alternative." While the emphasis here is on agency, Sardar is implicit in his invitation for a diversity of voices in shaping what comes next. Indeed, Sardar's project has long been to simultaneously resist and disengage from the defining power of the West and create an intellectual and cultural space for the non-West by encouraging non-Western cultures and societies to describe themselves with their own categories and concepts and anticipate their own futures (Boxwell 2002). Further, agency is not an exclusive property of humans or even the biosphere (Smith 2013). Surely in our post-normal times, as autonomous machines become smarter and more ubiquitous, bound to make life-or-death decisions, their agency ought to be addressed too (Braidotti 2013).

Braidotti (2013) advocates for a post-anthropocentric configuration for knowledge that grants the earth the same agency as the human subjects that inhabit it. This will require a reimagining of what is meant by agency. For Braidotti, this reimagining cannot be drawn from the immediate context or the current state of terrain, rather:

> They have to be generated affirmatively and creatively by efforts geared to creating possible futures, by mobilizing resources and visions that have been left untapped and by actualizing them in daily practices of interconnection with others. This project requires more visionary power or prophetic energy, qualities which are neither especially in fashion in academic circles, nor highly valued scientifically in these times of coercive pursuit of globalized 'excellence' (Braidotti 2013, 191).

Untapped visions may be explored through anticipatory imagination. What makes narrative such a flexible vehicle of imagination is its capacity to tap into multiple frameworks of meaning that draw on both real and fictive scenarios of agency. As Brockmeier (2009, 227) points out, the imagination and its use of narrative seamlessly mingles the factual with the fictitious, the real with the possible; "in fact, it fuses the real and possible with the impossible." Agency, then, in postnormal times exists everywhere, is open and fluid, is not linked to a dominant world view, but rather invites us to reimagine everything we thought we already knew.

Layer	Agency in normal times	Agency in postnormal times
Litany	I have the ability to influence the direction of my life	Everything has agency
Systems	Set and rigid, institutional and paternalistic	Open, fluid, and dynamic
Worldviews	Grand narratives	Eroding, new, yet to emerge
Myth/ Metaphor	If you imagine it, you can make it so	Reimagine everything that you thought you knew

Inayatullah (2003) proposes that while all four layers of CLA are important in the process

of unpacking the contextualities, a higher order is placed on the value of the mythic/metaphoric layer as it is the layer that informs all other layers. Indeed, mythology has the ability to transcend paradigms (Meadows 2008). Thus, a change in the mythology that drives us, a re-imagining of how we are in the world, whilst enabled by the imagination and facilitated through the epistemological realm, has implicated effects on the ontological realm. Let us address this in a return to our zombie metaphor.

Anticipation and Becoming

Our relationship to the zombie has been one based on fear: fear of the Other, fear of the imminent existential threat, and fear of that which exists amongst us waiting to ravish us and strip us of our very souls. It is no mistake that the West has appropriated the zombie into the zeitgeist from the Haitian Vodou tradition; Said's *Orientalism* remains entrenched in the cultural artifacts of today. Others, like Deleuze and Guattari (1984), viewed the zombie from a Freudian-Marxist view, in which capitalism is the root of the so-called death drive; as people become de-humanized by commodification, they can increasingly look forward only to death (Moreman 2010). It is a relationship rooted in fear. This fear, it is argued, stems from the fact that zombies, at first glance, look like us; they are our undead doppelgangers, familiar yet unfamiliar, intimate, and strange, all at the same time. Here, we enter the realm of the uncanny.

Freud's (2003) conceptualization of the uncanny indicates the divergence of the realm of the real and the realm of the fantastic. Freud's project, whilst denoting the very real emotion—the uncanny experience—is nevertheless a response to the objective world, a response that remained ungraspable for Freud by anything available to him in the clinical terms. Freud's acknowledgment of other forms of knowing and being outside empirical constructs hints at a disownment of the Enlightenment constructs of reason, rationalism, and secularism that otherwise framed the clinical case studies of Freud's work (Mayo 2020c).

Freud's notion of the uncanny has become a point of reflection for many thinkers investigating our relationship with the world. The philosopher Morton (2010) argued strongly for the importance of uncanniness and for allowing space for strangeness in intimacy, in which other beings can be their strange selves, "strange strangers." For Morton, these beings are everywhere and everything: people, animals, trees, chairs, desks, sports cars, skyscrapers, microbes, and laptops. His goal is to, philosophically, make the inanimate, animate. This is an open and co-evolving space, where objects share relationships with one another in a manner that is reciprocal (Bussey 2017a). This approach moves beyond Enlightenment, subject–object relations, instead seeking to conceptualize an ecology of objects, flattened and without hierarchy. Ontologically, this is a proposition toward Becoming, rather than Being. This process of Becoming is more closely aligned to what Coole (2013) calls new materialist ontology "a process of materialisation in which matter literally matters itself … this is not, then, the dead, inert, passive matter of the mechanist, which relied on an external agent – human or divine – to set it in motion. Rather, it is a materialisation that contains its own energies and forces of transformation. It is self-organising, sui generis. Matter is lively, vibrant, dynamic" (p. 453). This approach seeks to expand our sense of agency so as to involve the interplay of human–non-human in co-creative works of materialization. If new materialism is moving to a process of Becoming, then our notion of subjectivity too becomes a process; fluid, porous, open, and coexistent (Mayo 2020c).

Giri (2013, 102) calls this weak ontology "which urges us to realise that ontological cultivation is not only a cultivation of mastery of the self, but also cultivation of its humility, fragilities, weakness, and servanthood facilitating blossoming of non-sovereignty and shared sovereignties… Weak ontology helps us realise that both identities and differences have inbuilt limitations and they ought to realise their own weakness as a starting point

for communication and sharing through cultivation of weak identities and weak differences." This is resonant with object-orientated ontology, an anti-anthropocentric philosophy that removes humans from the center of the cosmos and asserts the agency of non-living forms. With object-orientated ontology, Morton (2010) offered the notion of the "mesh"—the interdependence and interconnectedness of all living and non-living things in a way which gives equal value to the holes in the network and the threading between actors within that network. In doing so, Morton keeps open a space for the uncanniness of our intimacy with the world and with other beings (Mayo 2020c). Thus, according to Morton (2010), through the embrace of object-orientated ontology, we open ways of being together in the world—subject and object—that go beyond Modernist constructs of the self and self-interest.

Conclusion

Should we reimagine our relationship with the zombie? The zombie as a symbol, as an abstracted concept, fills us with fear as it reminds us of our fundamental deficits as a human. The zombie disciplines as the force that perpetuates these deficits are proving obsolete to meet the emergent challenges presented in these postnormal times. Our proposition has been that, rather than ward off the zombie apocalypse as we are taught to do in Hollywood movies and popular culture, we should embrace the Otherness of the zombie, uncover and embrace the intimacy that underlies our uncanny relationship with the flesh-eating undead and seek to navigate the future together. By examining images of the future and uncovering cultural assumptions, with a view toward transformation, futures approaches provide the tool kit we need to shape a "better, saner, more globally and ecologically relevant, more pluralistic, more humane and more peaceful alternative" (Sardar 2015, 27). In particular, anticipatory imagination, nested within the anticipatory action learning framework, provides a

process that brings in the personal and transformational as domains of knowledge creation. As we have postured here, anticipatory imagination, when injected into the curricular that buoys zombie disciplines, unlocks agency, fosters confidence around one's capacity to actively reframe contexts, and deploys skills and materials in the quest to solve problems. We aspire to create transformation from the inside out. Zombie disciplines, like the zombie itself, are not the enemy, but rather are relics from modernity (Mayo 2020a) that require excavation, revamping. and reframing to help us transition toward that which is to come after postnormal times. After all, the zombie is fundamentally and metaphorically transformational.

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