Turbulent Transformation: Abrupt societal disruption and climate resilient development

Abstract

COVID-19 has triggered major upheavals to life as we know it in every corner of the planet. The governance response has been deep and far-reaching, albeit variable and contradictory. Disruptions like the pandemic inspire new perspectives on climate resilient development, especially with respect to the role of governance in navigating transformations. We reflect on what reactions and responses to COVID-19 around the world suggest about society's ability to transform – and what types of global development we need to transform away from – in order to support more climate resilient and equitable futures. We identify three key pivot points to stimulate further thinking on governance for climate resilient development: the tension between engendering transformation and returning back to normal; the role of disruption and uncertainty for triggering transformation; and the role of systemic inequality in how people are affected by crises. In particular, we spotlight the turbulent nature of transformation, and challenge the dominant belief that predicted, controlled and desired outcomes can be engineered through rational policy decisions. Climate resilient development navigates the turbulence of transformation through solidarity and socially equitable governance by opening up space for inclusive and even contestatory politics.

1. A turbulent world

Until early 2020, climate change was widely perceived as the most pressing global threat, albeit affecting people in differentiated ways. Social movements around the world were gathering unprecedented momentum, demonstrating rising impatience with political inertia to stem greenhouse gas emissions. Politicians were actually starting to listen; the doors had been cracked open for constructive discussion on shaping a climate resilient future. As defined by the IPCC, climate resilient development combines climate change adaptation and mitigation with sustainable development, and is strongly rooted in equity (IPCC, 2018). To be faithful to this definition, climate resilient development requires governance approaches that create space for inclusive politics and 'leaving no one behind', as laid out in the Sustainable Development Goals. As the world understandably turns its focus to the current COVID-19 pandemic, we observe how national governance responses to this abrupt societal disruption can inform and shape climate resilient development. We reflect on what this pandemic suggests about society's ability to transform – and what types of global development we need to transform away from – in order to support more climate (and COVID-19) resilient and equitable futures. In particular, we

ask how reactions and responses to COVID-19 reflect justice and equity in the governance of turbulent transformation.

Since March 2020, there has been no shortage of blogs, webinars and published perspectives on the confluence between COVID-19 and climate change (eg. Herrero and Thornton, 2020; Selby and Kagawa, 2020; Spratt and Armistead, 2020). Early reflections compared them as two global emergencies (eg. Gemenne and Depoux, 2020; Margolin, 2020; Monbiot, 2020), and others suggested that the current pandemic would change (or has already changed) the world as we know it (Homer-Dixon, 2020). Additional voices lamented that the new crisis has taken the wind out of the sails for those working toward climate resilient development (CNA, 2020), while the UN Secretary-General even admitted that climate change would have to take a backseat while the world dealt with the virus (Spratt and Armistead, 2020). Some pointed out that COVID-19 reveals the underlying instability of global society (Vidal, 2020), and the way that global development creates, exacerbates and distributes socio-environmental risks (Uneven Earth, 2020).

Yet, climate change is a different type of emergency from the public health emergency posed by COVID-19, making comparison uneven (cf. Dolsak and Prakesh, 2020). In particular, climate change risk is not posed on the same timescale as the virus, nor does climate change threaten people's lives directly. Instead of being seen as a competing concern, the pandemic could be viewed as a trigger for the turbulent transformation that is necessary to address climate change; or that might be imposed on humanity if we ignore the 'writing on the wall'. Here, as researchers confounded by the challenge of climate resilient development, we offer our observations of the pandemic and evolving responses in an effort to understand the enabling conditions that lead to short and longer-term abrupt and extensive societal change. We frame our observations around three pivot points central to the governance of climate resilient development in the face of Covid-19: 1) the tension between engendering transformation and returning back to normal; 2) the importance of disruptions and uncertainty in spurring transformation; and 3) the role of systemic inequity in how people are affected by crises. Observing the pandemic from the lens of climate change is enlightening: in both cases, society is compelled to make decisions and take actions (or choose inaction) with long-term consequences. Simultaneously, we also need to be prepared for the unexpected and the unknown, and, importantly, we need to look beyond prevailing science, policy and politics for solutions.

2. Moving forward, or returning back?

We are seeing major upheavals to life as we know it in every corner of the planet in response to COVID-19. The governance response – how we make social choices – has been deep and far-reaching, albeit variable and context-dependent. Governance describes how collective interests are defined, negotiated and pursued – amidst ineluctable conflict; and how the economy and society are steered or governed in interactions between governments, the private sector and civil society (Stoker, 1998; Pierre & Peters, 2000; Kooiman, 2003). In the context of COVID-19, national and sub-national governments have exercised their authority and decision-making powers to implement strict controls on businesses and civil society to contain the spread of the virus, from social distancing measures to literal lockdowns. Further, large sums of money have been made available by many governments around the world to support health-care facilities, workers, local businesses, and myriad other functions and actors who make up our prevailing political, economic and social systems. These measures have been implemented quickly, both in response to the pandemic itself, as well as to avert economic slow-down caused by the response to mitigate the pandemic. The speed and scale of these measures show that in times of crisis, action can ramp up dramatically, and resources can be deployed quickly. By extension, this ability to act – along with the effects of the disruption itself – inspire hope that such widespread action can also be deployed to invest in climate change adaptation (Hererro and Thornton, 2020) and low-carbon energy transition, as well as orienting economies toward climate resilient development (Rosenbloom and Markand, 2020; Gössling et al., 2020; Prideaux et al., 2020). However, many have also noted that the COVID-19 responses stand in stark contrast to national-level decision-makers' much more sluggish and hesitant responses to climate change (eg. Harvey, 2020). Around the world, governments have been accused of inaction in the face of climate change, falling far short of the Paris Agreement targets (UNEP, 2019); not to mention the drastic emissions reductions necessary to limit warming to 1.5 degrees C and avoid the escalation of many critical climate risks (IPCC, 2018).

The COVID-19 responses thus tell a contradictory story. On the one hand, while opportunities for positive changes are emerging from the responses to the virus, many governments are doing everything they can for us to return to business as usual, as soon as possible. The expectation is that the 'engines of economic growth' will be restarted and production maximised the moment the 'coast is clear'. This is exemplified by the large rescue packages that have been pumped into, for example, European Union member state governments (European Commission, 2020), and debates about providing extra subsidies to oil exploitation as a way of restarting the economy (Asheim et al, 2020). Similarly, the United States government is planning to bailout at least 90 fossil fuel companies as part of its rescue package for the pandemic, increasing the risk of lock-in

to long-term carbon-intensive pathways (Harvey, 2020). The urgency to ease lockdowns around the world, while infection rates are still high, is another indicator that a return to normal is the primary goal, even in a world that is no longer 'normal'.

But there are a few notable exceptions to the return to normal mantra, as calls have emerged from civil society actors to 'build back better' and redirect crisis recovery measures towards a climate-compatible, 'green' recovery (eg. Johnson et al, 2020). South Korea announced on 16 March that their Green New Deal will be put in place, and did so in the context of the unfolding pandemic (Ha, 2020). Canada announced a programme to clean up orphaned and abandoned oil and gas wells, thereby supporting both fossil fuel workers and the environment and taking necessary steps to provide worker support and facilitate a just transition (Anderson, 2020). Subsidy reform measures are also being observed, with India and Costa Rica increasing taxes on oil and gas consumption to mobilise funds for the COVID-19 crisis response (IANS, 2020; Rico, 2020).

These different types of responses demonstrate divergent interpretations of what the final goal is: should society transform toward something different, but uncertain, or should it maintain (or return to) business as usual? This is a fundamental governance question. Bringel (2020) and Pastor (2020) both note the divergence of different possible future scenarios, return to business as usual or a 'bottom-up alternative that may arise from social movements aspiring to achieve another possible world' (Pastor, 2020), as well as a possible 'paradigm shift towards a new ecosocial matrix, guided by anti-capitalism, and environmental and social justice' (Bringel, 2020). Not surprisingly, global reactions since COVID-19 suggest contradictory, or confused, visions of the future, indicating disparate views about what the threat(s) and the solution(s) are. Returning to business as usual in the midst of the pandemic puts humanity at risk; yet what of the economic and livelihood consequences of an extended shut-down? Hence, the case for 'returning back'. Business as usual – fuelled by the neoliberalized drive for economic growth – also drives dangerous runaway climate change; and, coupled with the pandemic risk, hence the imperative to transform, in order to reimagine a better world (Latour, 2018; Swyngedouw, 2018).

3. Disruptions and uncertainty drive transformation

The COVID-19 pandemic, the governance reactions to it, and the uncertain direction of future development are a stark illustration of the turbulent and contingent nature of transformation. An important aspect of turbulent transformation is the contested nature of such responses and what futures should look like. Transformation – the altering of the fundamental attributes of

development – is increasingly argued to be essential in the face of climate change (O'Brien, 2018). It includes transforming the systems and structures, economic and socio-political relations; beliefs, worldviews and knowledges; and technologies, practices and behaviours that contribute to climate change and social vulnerability (Denton et al., 2014). Research and policy efforts are increasingly focused on identifying how such transformation can be triggered (Fazey et al., 2015); yet the pandemic illustrates how disruption and the diverse and contradictory governance responses to it – rather than predictable development and planned policy – shape transformation towards inevitably contested and uncertain futures (Bringel, 2020; Pastor, 2020; Rosenbloom and Markand, 2020).

The disruption that the pandemic represents shows that global development is anything but linear and predictable or assured, and that our global social, public health, economic and political systems are interdependent and vulnerable. This vulnerability, some argue, is rooted in the very logic of how we govern global development, a logic that generates problems like climate change and inequity. The trajectory of development has been based on the domination of nature and its exploitation through advances in scientific knowledge and increasing technological capabilities (Merchant, 1990). This domination of nature is based on a framing of nature and society as separate spheres; however, COVID-19 makes it apparent how planetary health is intimately linked to public health in terms of not only emissions, but also vulnerability and connectedness. Climate change shows how the disruptions of physical and biological systems at the hands of humanity are causing large-scale alteration and the demise of critical life support systems, with complex and unpredictable consequences that transcend the reach of scientific knowledge and rational planning (Rittel & Weber, 1973; Levin et al., 2012). Based on growing technological capacity to subjugate nature, humanity has prospered, albeit with gross inequity and, in the process, provoked a global environmental crisis (Pelling, 2011; Leichenko and O'Brien, 2019; Nightingale et al., 2019). In the face of crises like COVID-19 and climate change, the premise that control can be maintained over the problem falters: dominance is constrained and control is illusory. Well-intentioned planning, decision-making and programmes of action may not be a panacea for containing and solving this problématique (Hulme, 2020).

Some of these contestations are increasingly visible at the interface between COVID-19 and climate change concerns. Emerging policy-making and public debates are frustrated by the impossible question of which is the most pressing issue: climate change or COVID-19 – or even racism and inequities made visible in the wake of the socially differentiated effects of the pandemic and measures to mitigate it (Drefal et al., 2020; Holmes Pitner 2020). While people around the world, and their governing authorities, are taking, mostly short-term, action in the

face of COVID-19, similar extreme measures like lockdowns and arrest of travel and consumption in response to climate change would be seen by most as unnecessary and too radical. Disruptions offer some hope for positive change: one could argue that COVID-19 has already transformed the world, as we shut down international travel, engage in 'social distancing' as a new form of socio-cultural practice, and begin slow-life schedules that compel us to prioritise only the most important work tasks, in order to contain this global pandemic. The disruption, some argue, can be harnessed to accelerate transformation of technologies and economies for climate resilient development (Rosenbloom and Markand, 2020). Climate change and COVID-19 alike are accelerating calls for societal development based on the goal of coupled human and ecological well-being, rather than preoccupation with GDP and economic growth (Pineda and Corburn, 2020; Coates et al., 2020 Ayanlade et al., 2020).

Transformation does not imply a 'smooth ride' or a guaranteed positive outcome; quite the contrary, transformation is an outcome of pursuing systemic change in the face of uncertainty. Climate change literature shows that there is a need to engage several ways of knowing beyond the scientific (Kleeman and Oomen, 2019) in order to understand what the changes in climate and ecosystems mean for society, to ultimately inform governance measures and to define what sustainable development might be. In particular, climate change and its future interactions with society can never be fully known – much like pandemics – until they occur. Societal development is contingent on human-nature and human-human relations that are forever changing (Hulme, 2018). Climate resilience is about being able to live with known uncertainties, as well as the unknowable reality of the distant future, rather than making actions dependent only on what is known with certainty. We do not know what tipping points will trigger what crises or transformations. No one could predict just a few months ago that this pandemic would appear and sweep across the globe in the way that it has. But the contingent nature of a changing world demonstrates that consideration of future states can be useful to inform societal and governance choices at critical junctures that lead to alternative development pathways.

What we have so far gained from COVID-19 is a better sense of how far governments, communities and society writ large can be pushed to accommodate diverse perspectives and interests, and achieve solidarity in addressing risks and preparing for the future. Still, even more questions emerge: Can we change the systems that allow inequities to persist, driving vulnerability to climate change and multiple other risks, including pandemics? Do we give space for the reimagining of what good development is beyond business as usual and the 'fetishization' of economic growth, or do we close down the public debate for the multiplicity of actors beyond the policy actors that are now engaging with climate change mitigation and adaptation? Such a

shift of systems, politics and practices would mean placing responsibility for the risks caused by climate change and COVID-19 alike, not on actors faced with the risks, but on the actors who create the risks to begin with, such as businesses and those advocating regulations promoting excessive travel and exploitative working conditions to support high consumption by the rich, and unsustainable resource extraction. Climate resilience is thus about the responsibility to act – not in ways that are self-serving but in solidarity with and for people and the planet.

While we are aware of the necessity to transform in order to address climate change, COVID-19 shows us that transformation is turbulent. Governmental actions to entrench the current global economic system are in fact very likely to be preventing necessary transformations that are just, equitable and ecologically sustainable (Klein, 2020). The inherent contradiction and confusion in the responses suggests that by hindering transformation to protect business as usual, society puts itself at risk of a similar crisis taking place again. This underscores the need to steer a course through the turbulence so that, at the very least, measures can ensure that the most inequitable system attributes are not retained.

4. Systemic inequity at the centre of risk and response

Deep inequity, and associated exposure and vulnerability, is another pivot that both drives and shapes governance responses to this crisis. Preliminary scientific findings suggest that the effects of the pandemic are socially differentiated, as was the case in previous pandemics (Drefahl et al. 2020; Pineda and Corburn, 2020; Økland and Mamelund, 2019; Mamelund, 2017). Indeed, Public Health England's report on disparities in the risk of COVID-19 released in June 2020 finds that, 'the impact of COVID-19 has replicated existing health inequalities and, in some cases, has increased them' (PHE, 2020: 4). For many people, the forces that make them more at risk are often beyond their control: race, gender, age. If recovery packages are used to return to 'life before COVID-19', this paradoxically means entrenching the inequitable, socially unjust capitalist system that has made so many people vulnerable to the virus to begin with, such as through preventing them from accessing health care (Scott, 2020). Where people do not have access even to basic care services, such as in the US and many other countries, they have faced COVID-19 with known and unknown pre-existing medical conditions that put them in higher risk groups, and in many places ineligible for receiving treatment. Those of lower social status often have poorer health, have jobs exposed to the virus (such as cleaners), as well as being at risk for being laid off, such as temporary and low employment security jobs in restaurants or industries hit by the pandemic response measures.

In addition to being affected differentially by the virus, the responses to contain it perpetuate and may even deepen inequity. Working at home, the new normal, is feasible for some jobs only. Others, like couriers, people working in shipping or food manufacturing, are less lucky, and have had to ramp up their activity even more (Sainato, 2020). These normally described as 'low-skill' jobs are now being recognised as critical to maintaining society's integrity. Similarly, working from home brings up questions of safety. For those exposed to daily domestic abuses, working from home translates into a living hell (Driscoll, 2020), with nowhere else to go. Yet, videos making fun of life in quarantine are circulating on social media. In response, a banner was hung from a house in Peru stating that 'Romanticising life in quarantine is a class privilege[1]' (Simón, 2020). Like climate change, the risks are very unequally distributed socially; but so is responsibility for acting in the current response regimes.

Such practical concerns forged by neoliberal practices that structure both crises can be explored from a deeper philosophical perspective, through the lens of *necropolitics* as an example of extreme power displays as a result of contingent emerging disruptions and exacerbated systemic inequity. Drawing on Foucault's notion of biopolitics, as a 'calculated management of life' but also a 'power to expose a whole population to death' (Foucault, 1978), the term necropolitics refers to 'the subjugation of life to the power of death' (Mbembe, 2003). On the one hand, necropolitics becomes manifest in crisis 'micro-decisions', for example, to prioritise the hospital treatment of the youth over the elderly; essentially an arbitrary decision about who lives and who dies in the crisis. On the other hand, necropolitics is manifest in the decision to expose whole populations to death in order to privilege the economy. According to Mbembe, the logic of sacrifice is at the heart of neoliberalism, because the capitalist system is based on the unequal distribution of the opportunity to live and die. In other words, those without value to the economy are expendable (Mbembe, 2020). As such, the lifting of the lockdown in numerous countries to open up the economy while the pandemic continues to rage, privileging the economy over the life of the population exposed to the contagion, is a necropolitical decision. As such, necropolitics can be seen as an extreme example and worrisome possibility of a systemic inequity that emerges over disruptive conditions and exacerbated injustice.

In this manner, there is a systemic inequity at the centre of risk and response that cycles endlessly leading to profoundly unethical and unacceptable exertions of power. Breaking the cycle of systemic inequality necessarily entails transformation. However, institutional structures and provisions may very well be the main obstacle to achieve such a transformation. Even if there is

[1] 'La romantización de la cuarentena es un privilegio de clases'
https://twitter.com/arturoayala_4/status/1239323998963544064

institutional acknowledgement of the injustices inherent in the system, and institutions are working to promote justice or alleviate misery, it is not enough to eliminate it. Even worse, institutions charged with promoting justice can end up exacerbating misery (e.g., Kollers, 2016). Thus, the institutions themselves can be an obstacle to promote equity. Breaking through the systemic inequity in such a way would require, most likely, a turbulent transformation. However, this need not imply violent action, it requires at a minimum confrontation and contestation through empathy and solidarity.

Solidarity, a willingness to answer an ethical call to action to support others in the face of adversity, as demonstrated in many COVID-19 responses, is then a key part in the turbulence of transformation. Solidarity is closely related to questions of empathy, responsibility and overcoming inequity (eg. Brown et al, 2019; Juhola, 2019). Civil society and many in the private sector have shown significant solidarity towards their communities by helping others in practical ways, as well as limiting their own daily activities that might otherwise increase risk. The response to COVID-19 thus demonstrates that individuals, communities, nations, and the world at large, can act creatively in solidarity to change potentially harmful habits, ways of working and livelihoods. Climate change policies, too, are often justified by solidarity with the most vulnerable; at the same time as the need to act urgently sometimes closes down political space for critical interrogation, leading to actions that privilege existing vested interests of an elite, while exacerbating vulnerability (Scoville-Simonds et al. 2020; Taylor and Bhasme, 2020).

Thus, if, on the one hand, institutional responses in the name of solidarity can exacerbate vulnerability and misery, and on the other, a radical transformation is required to break systemic inequity, then this may justify civil resistance and disobedience as non-violent means of transformation through solidarity. There is a direct relation between solidarity and civil disobedience. Allen (2017), considers that the objective itself of civil disobedience is to create a solidaristic community guaranteeing the access to the rule of the law and its protections for all persons and people. Moreover, civil resistance does not imply violence. According to Chenoweth (2019), it is any form of unarmed conflict where people actively confront an opponent without threatening or directly harming them physically. Thus, non-violent civil resistance as a form of solidarity, can contribute better to transformative processes when institutional processes perpetuate the status quo (Dudouet, 2008; Chenoweth, 2019). Therefore, transformation may be turbulent because it requires contestation and confrontation, but it does not necessarily imply violent acts, so civil resistance may be one of the most effective mechanisms for breaking systemic inequity when institutions cannot achieve it, plotting an equitable course amidst the turbulence of transformation through solidarity.

5. Governance for Navigating Turbulent Transformation

Given these turbulent times, what is the scope for charting transformative pathways towards more climate resilient futures? COVID-19 has surfaced the turbulent nature of transformation, particularly the unpredictability of impacts of, and reactions to, abrupt disruptions. The global impact of the virus underscores that prevailing development trajectories discriminate and entrench systemic inequities, and paradoxically intensify turbulence, and therefore require transformative action (itself a turbulent process). It also challenges the misguided belief that rational decisions and policies can be engineered to achieve calculated and desired outcomes in the face of compound crises. For this reason, there is no panacea for achieving a particular development future, including a climate resilient one. Instead, climate resilient development involves navigating turbulent transformation through socially equitable governance practices that open up space for inclusive and even contestatory politics – to enable meaningful dissent and where necessary protest against neoliberalized practices (necropolitics) that privilege global capital (Brown, 2011; Dikeç 2004, 2005, 2006; Moufee, 2000; Rancière, 2004; Ross, 2011; Parvu, 2017).

The COVID-19 epidemic has further opened a Pandora's Box of existential questions, and some of these are frightening. With COVID-19 superimposed on the reality of climate change, we face a situation of concatenated global disruption. Yet many presume it feasible to engineer human development to achieve predictable and controllable outcomes. The pandemic compels us to rethink the premises for governing transformation towards climate resilient development. Climate change and COVID-19, amidst other societal challenges, are not discrete phenomena that can be controlled through seemingly rational policy prescriptions. These are systemically coupled, complex and contested problems; as is the challenge of transformation. The abrupt and disruptive emergence of the pandemic exposes the limitations of human control and human capacity for contingency planning and preparedness; and prevailing politics and policy. Socio-environmental shocks and stresses, like COVID-19 and climate change, are at once the drivers and outcomes of predominant development pathways; characterised by dialectical tensions between 'progress', social-ecological disruptions, social contingencies and emergent contestations.

There is no one 'right' climate resilient development pathway. Who should decide? The COVID-19 crisis demonstrates that we need to reflect carefully on how decisions have been and will be made, and the role of justice and equity in these processes (Steven and Evans, 2020). Who will

be sacrificed? Who will be kept alive? Similarly, with the focus on possible 'bail-outs' like in the 2008-9 financial crisis (Farrer, 2020), which services and functions do we think need to be preserved, and which can be forfeited? Climate change and COVID-19 are entwined through the development pathways we choose, or are subjected to, through decisions made by governments, businesses, civil society and ultimately each one of us as citizens. These decisions are based implicitly or explicitly on ethical and political considerations. Importantly, how we frame development pathways is inherently political and value-laden. An implication of the global support for the sustainable development goals, including the principle of 'leave no one behind', is that development pathways that are climate resilient are those that foster well-being – even in the face of COVID-19 – for people and the planet, by means of solidarity.

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