



Envisioning Security for a More-Than-Human World

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ABSTRACT

This paper considers a key securitization challenge that the world faces in the aftermath of the COVID-19 pandemic. It is a challenge that centres on discursively envisioning the kind of security required in tackling a wider set of human-environmental crises unfolding on the planet. In seeking to reimagine, reframe and re-resource strategies of security, the paper conceptualizes a conjoined sense of human-environmental security, which extends the human security concept to address more holistically the overlapping precarities of our human and non-human worlds. The paper sets out the task of moving beyond a concern for *human precarity* to a concern for a broader sense of *planetary precarity*, which in turn prompts the need to strategize for a 'more-than-human' sense of security for the future of the planet.

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Introduction

Caught up in a mass of abstractions, our attention hypnotized by a host of human-made technologies that only reflect us back to ourselves, it is all too easy for us to forget our carnal inherence in a more-than-human matrix.

—David Abram (1996, p. 22)

In the wake of COVID-19, have we reached an inflection point in thinking critically about our interconnected sense of planetary precarity? Has the global pandemic elicited enough reflection on the wider set of overlapping human-environmental crises to have an impact on the way in which we define and frame security for our overarching human and non-human worlds? Can we strategize anew for a sense of conjoined human-environmental security that is essential in sustaining the future of the planet? The answers to all these questions pivot on how we envision security—for whom, from what, by what means, and, ultimately, in whose interests. In seeking to build consensus on more progressive visions of security for the future, we need to convincingly set out how a sense of global human-environmental security is about shared interests, and can only be attained by acting collectively and responsibly. In this endeavour, transcending anthropocentric conceptualizations of security is key and necessitates carefully documenting the planet’s intersecting human and environmental precarities, and detailing why and how we must address them holistically. This is the challenge that this paper sets out: the task of envisioning and enacting security for a more-than-human world.

Extending the human security concept

COVID-19 has illuminated the urgent need for framing a sense of holistic security for our interconnected human-environmental world. Although the origins of the pandemic continue to be disputed, its likely zoonotic emergence and speed of transmission underline “our very precarious coexistence within the biosphere” (Relman 2020, p. 29248). In the aftermath of COVID-19, we have surely reached a point, as Lee and Piper have argued, where we require a “fundamental reimagining of global health” in which security is focally centred on “building societies’ resilience across a full range of threats, including climate change, pandemic diseases, and economic crises” (2020, pp. 530-531). Towards this end, a key conceptual task that international organizations such as UNDP and the World Health Organization (WHO) face is *framing* securitization for a more holistically understood planet.

In communicating a people-centred sense of global security, UNDP’s concept of human security is indispensable (UNDP 1994; Nef 1999; Goucha and Crowley, eds. 2008; Martin and Owen, eds. 2014; Gómez

and others 2020).¹ Yet in its discursive focus on *human* security, the concept runs the danger of becoming anthropocentric and not fully conveying the planet's intertwined human-environmental vulnerabilities. Post-COVID-19, we must project a sense of security for a more-than-human planet and thereby frame a picture of interconnected human-environmental precarity.² In this reframing of securitization, we refute spurious distinctions between human and non-human worlds, and reaffirm and extend UNDP's original conception of linked human and environmental precarities in its strategizing for global security (UNDP 1994).

UNDP's 1994 *Human Development Report* outlined seven components of human security (community, economic, environmental, food, health, personal and political) and positioned them as intersecting and requiring holistic responses (ibid.). In the United Nations extended statement on human security in 2003, *Human Security Now*, the Commission on Human Security set out the compound human and environmental risks that cut across communities and thus require overlapping security measures. The Commission stressed how the goal of human security was to support integrated human-environmental systems (Commission on Human Security 2003; see also Brauch 2005). This vision forms the basis from which an integrated human security strategy can be resourced and enacted at local, national and transnational scales.³

Advancing a human security strategy in practice, however, has typically involved compartmentalized engagements with artificially separate human and environmental concerns. Confronting climate change via an exclusive concern for 'environmental security', for instance, will ultimately be ineffective if it ignores other human security elements such as 'food security', 'health security' and 'community security'. These separations were highlighted in UNDP's 2020 *Human Development Report* (UNDP 2020a). Siloed security strategies on the environment have "become increasingly divorced" from their "heterodox and critical roots in human security"

¹ The concept is not without its shortcomings, of course, and has been critiqued in important ways. Critical evaluations have highlighted, for example, how it tends to allow for policy incoherencies, and have questioned if its objectives are underpinned by core facets of neoliberalism. They have also considered whether its interventionist vision adds substantially to other humanitarian and human rights discourses, and have shown how the concept has been more activated in practice in the Global South than in the Global North where traditional militaristic understandings of security have persisted. See, for instance: Acharya 2001, Paris 2001, Liotta 2002, Bilgin 2002, Duffield 2007, Hyndman 2008, Elliott 2012, Mason and Zeitoun 2013, Morrissey 2015, and Gasper and Sinatti 2016.

² O'Brien and others have envisaged human-environmental precarity thus in adopting a human security approach to addressing climate change in particular (O'Brien, St. Clair and Kristoffersen, eds. 2010; see also O'Brien and Barnett 2013). Lautensach (2006) includes 'environmental security' as one of four core overlapping pillars of human security, alongside military security, economic security and health security. Experts at the United Nations University Institute for Environment and Human Security have been researching the intertwined human and environmental security dimensions of environmental hazards, global climate change and human vulnerabilities since the institute's founding in 2003 (see: <http://ehs.unu.edu/about/about-ehs>). See, for example, Oliver-Smith and Shen, eds. 2009.

³ This integrated strategy was further delineated by the United Nations Trust Fund for Human Security's 2009 publication, *Human Security in Theory and Practice*.

(Elliott 2015, p. 11), and occlude how security threats arise “out of the interconnections between different aspects and forces in particular situations” (Gasper and Gómez 2015, p. 100).

In responding to the COVID-19 pandemic and wider human-environmental crises across the globe today, a key challenge lies in articulating a sense of *planetary precarity* that recognizes what Wilson, Dwivedi and Gámez-Fernández call the “biocentric interconnectedness of the human and more-than-human world” (2020, p. 444). Human and non-human precarities are intertwined. The goals of *human* development remain integral to a more just and equitable world; the recent UNDP *COVID-19 and Human Development* report, for example, takes an instructive ‘capabilities approach’ in setting out how to enable the ‘enhanced capabilities’ of people throughout the globe in responding to our current and future crises (UNDP 2020b). But if a “human development approach places protecting and enhancing human capabilities as the central anchor guiding analysis and policy” (ibid., p. 13), it is missing a vital envisioning of more-than-human concerns, which can be usefully incorporated in setting out a longer-term strategy to secure the intersecting human and environmental precarities of our planet.⁴

Environmental themes have increasingly featured in discourses of security from the end of the Cold War, as Dalby (2002) has helpfully historicized. But in their midst loomed anthropocentric ideas such as ‘the control of nature’, ‘resource scarcity’, and ‘the environment as geopolitical threat’. In envisaging human and environmental security in a more conjoined and holistically conceived manner, more critical perspectives have critiqued how humans position themselves outside nature (Cronon, ed. 1995; Keller, ed. 2010). The deontological tradition of environmental ethics, for example, challenges anthropocentrism by defining the environment beyond something that simply holds a ‘value function’ *for* humans. Taylor (1986), for instance, sets out why a biocentric conceptualization of nature, in which humans are but one part, is vital in considering questions of how to safeguard the planet. The Earth, as Abram reasons, is “an intertwined matrix” of human and non-human worlds, despite our social conditioning to think of ourselves as somehow “separate, autonomous, independent” of “bodily nature” (1996, pp. 39, 260). And now more than ever, we must rethink humanity as part of “Earth’s cycles of regeneration” (Wallace and others 2020).

The Anthropocene’s more-than-human world

Every metric of planetary well-being alerts us to the extent of the anthropogenic emergency we face: temperature rise, carbon dioxide emissions, nitrous oxide emissions, methane emissions, ozone depletion,

⁴ The report importantly acknowledges this towards the end in asserting that “the crisis is a stark reminder that humanity is unlikely to stay healthy in a sickening planet” and that “we ignore our disruption of nature at our peril” (UNDP 2020b, p. 24).

deforestation, over-farming, over-fishing, biodiversity loss, land degradation, species loss and more (IPBES 2019, IPCC 2021).⁵ In 2009, Johan Rockström at the Stockholm Resilience Centre of Stockholm University led a group of international colleagues to identify the core environmental processes that regulate the stability and resilience of the planet. They proposed nine quantitative ‘planetary boundaries’ or ‘fences’ within which human enterprise can operate safely (Rockström and others 2009). The boundaries include the large-scale regulatory systems of stratospheric ozone and ocean acidification, and slower regulatory systems such as land use and biodiversity loss. All are under intense pressure from the overpowered industrial vehicle of late modern capitalism (Steffen and others 2015). For Rockström, promising success stories of responsive socio-environmental transformation in recent years include: the expansion of zero till farming and increase in sequestered carbon in South America, a more integrated governance management of the Great Barrier Reef off the coast of north-eastern Australia (although this remains highly endangered and under repeated threat from industrialist pressures), and an extension of sustainable urban planning efforts globally (Rockström 2010). But broader transformation demands a shift in mindset to act cooperatively, simultaneously and at multiple scales from the local to the global. Fragmented, incremental change will not elicit meaningful transformation of global socio-environmental systems; a planetary-level reboot is required. Can such a reboot be the best legacy we can glean from the harrowing detritus of the global pandemic of COVID-19? As the *2020 Human Development Report* concludes, “[n]othing short of a wholesale shift in mindsets,” manifested “into reality by policy,” is needed to “ensure that all people flourish while easing planetary pressures” (UNDP 2020a, p. 398).

Our interconnected planetary precarity may have become more visible because of the pandemic, but it predates it to the beginning of an era of intense ecological pressure on the planet that Crutzen and Stoermer (2000) termed the ‘Anthropocene’.⁶ Also conceptualized as the ‘Capitalocene’, this is the era of human history since the Industrial Revolution in which, for the first time, large-scale human practices are causing changing geological processes and sweeping ecological impacts.⁷ At the turn of the twenty-first century, Crutzen and Stoermer argued that a “strategy leading to sustainability of ecosystems against human induced stresses will be one of the great future tasks” (ibid., p. 18). Over 20 years later, that task endures. As Antje Bruns reasons,

⁵ The Sixth Assessment Report of the Intergovernmental Panel on Climate Change asserts with renewed urgency that “it is unequivocal that human influence has warmed the atmosphere, ocean and land” and confirms how “the main human influence on the climate is via atmospheric CO₂ and other combustion of fossil fuels and land use-change-related CO₂ emissions, the principal causes of increased CO₂ increased concentrations since the pre-industrial period” (IPCC 2021, pp. SPM-5, 1-21).

⁶ The *2020 Human Development Report* focuses in particular on advancing human development in the context of the Anthropocene. In acknowledging how we are “destabilizing the planetary systems we rely on for survival,” a core contribution of the report is to make the case for a “just transformation in the way we live, work and cooperate” (UNDP 2020a, p. 2).

⁷ See, for example: Castree 2015, Moore 2015, Moore, ed. 2016, and Dalby 2017.

“socio-ecological burdens” continue to be the “defining characteristic of the Anthropocene,” and the COVID-19 pandemic has simply brought the already existing planetary pressures more into view (2020, p. 5).

Warnings of the dangers of overstepping planetary boundaries through both excessive capitalist and large-scale socialist economic production are not new. The idea of global warming has been present in the scientific community since the 1930s, and the WHO has persistently warned of the connections between climate change, habitat degradation and human health: “the spread and increased lability of various infectious diseases, new and old, reflects the impacts of demographic, environmental, technological and other rapid changes in human ecology” (McMichael and others, eds. 1996, p. 104). A generation later, the task of documenting the scalar connections of human-induced environmental stress on the planet remains, and, in this endeavour, political economy critiques of late modern capitalism, the dominant mode of economic production globally, are essential (Quammen 2012, 2020). As the long-awaited *Dasgupta Review* made clear, we need to urgently alter ecologically destructive forms of economic production if we are to safeguard biodiversity and respond responsibly to human-induced climate change, because the evidence is indisputable: “more frequent and more extreme weather events (intense storms and prolonged droughts), demonstrable harm to marine life from an accumulation of plastics in the oceans, photographs of dead zones in what were once thriving estuaries, televised evidence of melting glaciers, recorded rises in species extinction, and most recently the global pandemic that is COVID-19 have brought home the fact that various parts of the biosphere are now overstretched” (Dasgupta 2021, p. 156).⁸

Exposing the destructive planetary effects of deregulated capitalism, along with the ecologically unsustainable idea of endless economic growth, gets us closer to joining the dots on how to advance an alternative vision for human-environmental health and well-being. Sell and Williams have outlined the manifold “underlying structural effects of capitalism on health,” for instance, which are a consequence of an obdurately ascendant neoliberal “market fundamentalism” that prioritizes profit before people, pushes back on the supports of the welfare state, and works consistently towards deregulation (2020, p. 1). Recognizing the environmental and societal structural violence effected by unregulated capitalism is the first step in conceiving more responsible and regulated economic production.

One of the most important economic-ecological connections in the Anthropocene to illuminate relates to ‘Big Farm’ agribusiness, which sits at the nexus of food security, ecological disruption and infectious disease. Mass meat production and industrial metabolic intensification has resulted in extensive biodiversity damage and ammonia emissions, and detrimental human health impacts on communities across the globe (Wallace 2016, Barua, White and Nally 2020). In its encroachment on wild habitats, the exotic food sector, along with urban spread, likely played a pivotal role in the emergence of COVID-19, and indeed in many other deadly pathogen

⁸ For commentary on the *Dasgupta Review*, see Lewsey 2021.

outbreaks of recent decades, such as Ebola, SARS and MERS, as Brulliard (2020) has historicized. She underlines the backdrop of a “global wildlife trade worth billions of dollars, agricultural intensification, deforestation and urbanization,” which collectively are “bringing people closer to animals, giving their viruses more of what they need to infect us: opportunity.” And the United Nations Environment Programme (UNEP 2020) has alerted us to the urgency of tackling this worrying global picture of human-environmental insecurity in which “diseases passed from animals to humans are on the rise” due to “multiple and often interacting threats to ecosystems.”

Regulation, resolutely enacted, is essential in tackling human-environmental insecurity. We need to be especially attentive and responsive to how agribusiness, backed by powerful political elites and vested interests, has unremittingly worked to deflect regulation on a global scale. Wallace and others (2020) have detailed how the major corporations in the agribusiness sector have long been proactive in ensuring “fewer government inspections of farms and processing plants, legislation *against* government surveillance and activist exposé, and legislation against even reporting on the specifics of deadly outbreaks in media outlets.” As they pointedly observe, the ecological and pathological consequences of unregulated agribusiness show how the origins of COVID-19 are not just in “its clinical course” but rather in “the field of ecosystemic relations that capital and other structural causes have pinned back to their own advantage” (ibid.).

Transitioning to a planetary sense of health and well-being

Historically, pandemics have forced humans to break with the past and imagine their world anew.

This one is no different. It is a portal, a gateway between one world and the next.

—Arundhati Roy (2020)

Writer and political activist Arundhati Roy places emerging from COVID-19 in a longer history of human transition. Imagining a transitional post-COVID-19 world must involve not only documenting the dysfunctions of the past but also creatively envisioning a new sense of security for the present and future. For the latter task, there are key questions to ponder in thinking through how we transition towards a more responsible living and governing of the planet. Questions of justice—social, economic and environmental—are central. Drawing on the example of recent climate action initiatives in Indonesia, Elliott and Setyowati highlight the “distributive, procedural and recognition aspects of social justice” that are imperative in “transitioning to a green, low carbon economy” (2020, p. 875). And certainly we need to be attentive to the political economy of just transitions and how to make ‘justice’ principles more rigorous (Setyowati 2021).

Arguably, the core challenge of transitioning to a more sustainable planet relates to what Wallace and others (2020) call a “disalienation” from capitalism’s excesses and a “navigating out” of capitalism’s global circuits of ecological destruction. They encouragingly point to immediate actions that can be taken:

Protect the forest complexity that keeps deadly pathogens from lining up hosts for a straight shot onto the world's travel network [...] reintroduce livestock and crop diversities, and reintegrate animal and crop farming at scales that keep pathogens from ramping up in virulence and geographic extent [...] allow our food animals to reproduce onsite, restarting the natural selection that allows immune evolution to track pathogens in real time (ibid.).

These are just some of the ways in which we can regulate how we interact with the planet more environmentally, and not simply in a manner prioritizing profit in an unrestrained economy (Kearns 1991, Kearns and Reid-Henry 2009, Nally 2011). If we do this, the evidence points to a range of health and well-being corollaries. During the less frenetic economic production of our various lockdowns, for instance, the improvement in air quality was a noted upshot (Watts 2020). Shifting to cleaner modes of transport and energy production would have further human and environmental health benefits.

Hopes for a more sustainable planet to emerge in the aftermath of COVID-19 were heard at the major nodes of global governance as the pandemic unfolded. United Nations Secretary-General António Guterres, for instance, avowed that COVID-19 reminds us of “the price we pay for weaknesses in health systems, social protections and public services” and that now is the time to “redouble our efforts to build more inclusive and sustainable economies and societies” (Guterres 2020). For Guterres, the recovery must map out and produce a different economy that mirrors the United Nations 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs). Leadership declarations are important, of course, but they dissolve into rhetoric if they are not activated in real and meaningful ways. How to do this? Certainly, it must involve the galvanization and further triggering of existing legally binding conventions on a range of human-environmental issues. It must also involve a more concerted resourcing of key global governance architectures such as the WHO.

The WHO urgently requires a greater ability to oversee States and corporations in terms of complying with global health conventions (Hanrieder and Kreuder-Sonnen 2014, Kamradt-Scott 2015). Much of the challenge lies in activating existing regulations. The International Health Regulations (IHR) is a case in point. Originally dating from the WHO's World Health Assembly in Boston in 1969, the objective of attaining ‘global health security’ via the IHR was rejuvenated after the first SARS coronavirus outbreak in 2002, culminating in the revision of the regulations in 2005. The IHR is a legally binding instrument of international law that aims for international collaboration in combatting the global spread of disease. It empowers the WHO as the main global surveillance system. While the IHR was designed to oversee cooperation among States, “there has been widespread contravention,” and the “WHO lacks enforcement power,” as Ferhani and Rushton lament (2020, p. 472). COVID-19 has further exposed the WHO's weaknesses in terms of regulatory power, with much debate on the necessary reform of WHO governance (Herten-Crabb and Davies 2020, Lee and Piper 2020).

One health for people, animals and our environment

Global health governance must involve a global-scale securitization strategy that recognizes the world's transnational interconnections of threat and risk (McInnes and Lee, eds. 2015, Rushton 2019). As Ferhani and Rushton have shown, however, despite the “internationalist rhetoric governments engage in,” in the “face of a crisis” this commonly evaporates and governments instead “prioritize the safety of their own citizens, their economic interests, and their own political popularity” (2020, p. 466). We have witnessed this in the Global North with the ‘vaccine nationalism’ surrounding COVID-19 in particular.

So how do we avoid ‘domestic first’ responses, the default *national* security position that occludes the interconnectivity of global health systems and the necessity of international cooperation? And how do we avoid the exclusivity of *human* health planning? The emergence of the ‘eco-health’ concept in the early 2000s was an important development in advancing an ecosystem approach to health (Charron 2012).⁹ The concept’s focus on intersecting human and environmental issues facilitates the holistic study of epidemiological dynamics through an envisioning of the interconnected ecological and political-economic contexts of human and animal populations (Parkes and Horwitz 2016).

Overlapping with the ‘eco-health’ concept, the ‘one health’ concept was put forward in 2008 by the One Health Initiative Task Force of the American Veterinary Medical Association.¹⁰ With a sense of urgency for planetary well-being, the task force declared that the “convergence of people, animals, and our environment has created a new dynamic in which the health of each group is inextricably interconnected” and called for a ‘one health’ “collaborative approach” to conjoined human-environmental domains (One Health Initiative Task Force 2008, p. 3). For the task force, the requirement to see human and environmental health as inextricably linked was clear long before COVID-19:

We now stand at the precipice of health care transformation where disease prevention and health promotion in people, animals, and our environment have become a critical strategic need. The most pressing need for a transformation of this magnitude is almost always vision and leadership (ibid., p. 5).

The One Health Commission was subsequently set up in Washington, DC in 2009. It has overseen the establishment of global and national ‘one health’ commissions and panels, the initiation of ‘one health’

⁹ The journal *EcoHealth* was launched in 2004 by the EcoHealth Alliance NGO (EcoHealth 2021).

¹⁰ On the conceptual convergences and institutional distinctions of both concepts, see Harrison and others 2019.

governmental advisory teams and the inauguration of an International One Health Day on 3 November. It has also been instrumental in the framing of ‘one health’ research agendas and funding streams.¹¹

In the United States, the work of the One Health Commission has made important inroads into government, propelling, for example, a recent codification in law that requires more integrated and holistic federal planning for pandemic preparedness. In June and July 2019, bipartisan ‘one health’ congressional bills were introduced in the United States Senate and House of Representatives. The bills require the Department of Health and Human Services, the Department of Agriculture and other agencies and departments to “develop, publish, and submit to Congress a national One Health Framework for coordinated federal activities under the One Health Program, which encourages collaborative efforts to help better prevent, prepare for, and respond to zoonotic disease outbreaks” (United States Congress 2019).¹²

Academically, the ‘one health’ discourse tends to be dominated by the sciences. We need to ensure a level of reflexivity that allows arts, humanities and social science contributions to inform more instructively ideas like ‘resilience’. Such concepts often become mobilized uncritically for new fields of economic production in which the exit vehicle from crisis is still continued economic growth. The persuasive idea of ‘renewables’ can also be hugely destructive environmentally, and we must be attentive to how brown-to-green transitions are regularly orientated for corporate profit. We need to avoid falling into the trap of ‘technological fixes’, in other words, by illustrating what is wrong with accepted and seemingly immovable ideas like endless ‘economic growth’, which are incompatible with any meaningful sense of ‘ecological sustainability’ or ‘economic production within planetary boundaries’ (UNU-EHS 2021).

Human-environmental security and local contextualization

In renewing human security’s sense of intertwined human-environmental precarity, local contextualization of grand strategy is crucial (Elliott 2015). However, the history of international development efforts has shown how locally scaled human security initiatives meet a range of obstacles. Arguably the most significant and enduring obstacle is the ontological ascendancy of traditional statist conceptualizations of security (Altman and others 2012, Kaldor 2018, Morrissey 2018). As Patrick (2007) observes, the approach to security in the United States, for instance, has long been centred on military national security concerns. Such a focus has also been seen in Europe in recent years as the ‘Mediterranean Crisis’ unfolded and triggered hard statist security

¹¹ See, for example, One Health UCD: <http://www.ucd.ie/onehealth>.

¹² Subsequent developments are detailed on the One Health Commission website: <http://www.onehealthcommission.org>.

responses from European governments via a range of border and biopolitical population management techniques (Morrissey, ed. 2020).

Statist security is commonly activated in a top-down manner and centrally involves a reductive and technocratic understanding of security. This framing of security is mirrored in practice in all kinds of ways, and not just in the prevailing governmentalities of nation-states. Such security visions predominate, for example, in the majority of state and pan-state research funding calls; European Commission grants, for instance, are frequently instrumental, habitually calling for overly simplified security solutions and almost always adopting short-term horizons. The absence of calls for careful contextualization renders the resultant technocratic understanding of security impoverished in terms of any self-reflexivity on securitization as a discourse. And this serves to negate perspectives that could productively be drawn upon to orient more progressive and transformative visions of security that seek to enact more nuanced, locally scaled practices in tandem with a more holistic human-environmental grand strategy.

It is the consistent invisibility of marginalized human and environmental precarities that makes insisting upon both local and integrated dimensions of security so difficult in prevailing discourses of securitization (Nixon 2013). In some ways, this is partially an old postcolonial concern of knowledge production, and the challenge is not confined to facilitating subaltern voices from the Global South to inform policy, but also from perspectives at the margins in the Global North.¹³ The urgency of hearing and responding to voices from the margins became even more acute during COVID-19, which exposed the multiple social hierarchies and inequalities in the midst of the communities in which we live. As the *2020 Human Development Report* notes, COVID-19 thrived especially in “the cracks in societies, exploiting and exacerbating myriad inequalities in human development” (UNDP 2020a, p. 3). This is why it is imperative to insist upon contextualization in applying normative interventionist medical models and practices in deeply unequal societies that experience precarities differently (Morrissey 2021). Communities have been socially, politically and economically determined in profoundly different ways. The conceptual and policy space for advancing a more nuanced and scaled health securitization strategy must be informed by geographical variability and a long history of uneven development (Smith 2008).

Security strategies that are locally attuned and informed by human-environmental perspectives will likewise benefit States (Caballero-Anthony 2015, Tang 2015). Attending to the local is the starting point in achieving an integrated and globally conceived sense of security. To this end, we can learn from the Global South, where scaled human security initiatives have been activated more systematically over the last 25 years, however

¹³ Perspectives from the Global South can also constructively inform our Anglocentric academy. As Dorothy Estrada-Tanck observes, the 1995 Framework Convention on Democratic Security in Central America—“one of the only international treaties specifically including State positive obligations attached to ‘human security’”—is referenced in “none of the English language literature on human security” (2016, p. 14).

imperfectly and partially. Elliott (2012) has documented the transnational cooperation efforts, albeit limited in significant ways, of the Association of Southeast Asian Nations in human security approaches to overlapping dimensions of climate change and migration in South-East Asia.

An even more illustrative transnational human security initiative can be found in the Caribbean, where the extension of Cuba's Risk Reduction Management Centres¹⁴ across the region from 2011 via the Caribbean Risk Management Initiative was effective in mitigating extreme weather insecurities. The initiative activated many of the core components of UNDP's 1994 human security vision, including the cross-fertilization of locally attuned and holistic human-environmental knowledge and practices. It encompassed preparedness plans that integrated local forms of governance and knowledge into scalable systems at the regional, national and transnational levels, with each Risk Reduction Management Centre collecting, analysing and coordinating risk and disaster information to feed into decision-making by government authorities.¹⁵ Between 2011 and 2014, the initiative successfully expanded Cuba's model to the British Virgin Islands, the Dominican Republic, Guyana, Jamaica, and Trinidad and Tobago.¹⁶ Its success illustrates the possibility of facilitating bottom-up climate resilience by scaling participatory knowledge into an organized system of environmental custodianship. It is a heartening example of a functioning and resourced human-environmental security framework, and it also underscores the value of conceptualizing security beyond the confines of the State (Jerez Columbié and Morrissey 2023). The framework, moreover, can be productively operationalized elsewhere in tackling interconnected human-environmental precarities (Isayama and Ono 2015).

Locally attuned and holistically integrated security is at the heart of the United Nations' SDGs and wider vision for human development in the twenty-first century. In declaring the 17 SDGs in September 2015, United Nations Member States underlined the need for a greater focus on local vulnerabilities and interconnected global precarities, a significant departure from the previous Millennium Development Goals. Furthermore, the SDGs are evaluated collectively. This vision of international development echoes much of the conceptual

¹⁴ Between 2005 and 2014, Cuba established 92 Risk Reduction Management Centres—8 provincial and 84 municipal centres—linked to 310 communities. During this period, Cuba was hit by 15 tropical cyclones, 11 of which were classified as hurricanes. The centres protected over 8 million people and helped to evacuate more than 47,000 tourists and relocate several residential settlements (UNDP 2015).

¹⁵ Cuba's Risk Reduction Management Centres involve seven core components: (i) *early warning points*, or individuals or teams located in vulnerable settlements; (ii) a *multidisciplinary group* providing technical and scientific information to local authorities; (iii) *risk and vulnerability studies* furnishing qualitative and quantitative assessments of vulnerabilities and risks; (iv) *databases* on population, settlements, infrastructure, institutions, natural resources, public health, historical events and other indicators; (v) a *GIS* with visualized data for decision-making; (vi) *communications technology* to reach remote communities; and (vii) *public awareness and communications preparation* to reduce the impacts of hazards through information distribution, community outreach and training (UNDP 2016).

¹⁶ For a detailed examination of all five case studies, see Jerez Columbié and Morrissey 2023.

thinking of human security and reinforces the imperative of holistically addressing overlapping human-environmental concerns.¹⁷

Building consensus for a more-than-human world

Why has human security as a discourse of progressive interventionism not had more of any impact? Why has it not discursively won out in informing countries' foreign and domestic policies on security and conceptions of international cooperation and solidarity? To begin with, we must not forget the long history of an interstate version of foreign policy in which influential military actors and national security concerns have set the agenda. This has resulted in a prevailing militaristic, gendered and statist conception of security advanced by powerful vested interests such as the arms industry. States across the world have invested in the political economy of conflict for a very long time, and therefore the task of envisioning security differently and more progressively should not be underestimated.

An additional core reason why human and environmental security concerns have been so decidedly absent in both foreign and domestic 'development' policy has been the economic questions and agendas that came to dominate the academy and governments in the Global North, especially in the post-World War II era. These worked to exclude 'nature' from the predominant modelling paradigms of economic development that emerged. As Dasgupta recently notes, the disciplinary dominance of economics and its "exclusion of nature" from macroeconomic models of growth and development have brought us to a key juncture where we need to rethink economic production with a new sensibility of the interconnected human and non-human worlds in which we live, in order to "break the cycle and revise the conception we hold of humanity's place in the biosphere" (2021, p. 3).

In effectively communicating humanity's place in our precarious biosphere, we need to strategize the 'indicators' of security we elevate and measure. In particular, we must challenge the primacy given to economic development and the fact that gross domestic product remains our principal measure of calculating how well countries are performing. To this end, the *2020 Human Development Report* is encouraging in its consideration of how to move towards a "new generation of human development metrics for the Anthropocene" (UNDP 2020a, p. 226). The report incorporates a conjoined human-environmental vision in setting out how to make 'planetary pressure adjustments' to its annual human development index (HDI). What it terms a "planetary pressures-adjusted HDI" is a revised index that more appropriately frames the "possibilities for achieving high

¹⁷ The SDG agenda suffers from significant internal contradictions, of course, as helpfully detailed by Spady and Lautensach (2020). They point out that perhaps the biggest reason for the "limited success" of the SDGs to date is "an insufficient commitment to incur the necessary sacrifices that a globally effective transition to sustainability would entail" (2020, p. 63).

HDI values with lower emissions and resource use” (ibid., p. 227). The idea of a planetary pressures-adjusted HDI is perhaps the key contribution of the report, aimed at “reimagining the human development journey as one in which the expanding human freedoms also ease planetary pressures” (ibid., p. 229).¹⁸

In the task of adjusting metrics, Indigenous rights perspectives and the locally-led generation and mapping of data are also crucial (Sealey-Huggins 2017, Robinson and Shine 2018, Scobie 2019). As Wheeler and Root-Bernstein note, widening the role of local agency in “knowledge gathering, knowledge synthesis and decision-making” can enable our ability to tackle critical human-environmental insecurities such as “biological conservation issues,” “sustainable livelihoods,” and the long-term “governance of economic development” (2020, p. 1634). In conservation efforts, for example, it is important that ‘environmental’ initiatives are not detached from the communities in which they must be embedded. We have seen too often, for instance, how the delineation of conservation areas, wilderness reserves and national parks tends to ignore local histories and displace local communities. We need to be locally sensitive in addressing environmental insecurities in a manner that does not produce greater insecurities for people. Human-environmental relationships are intersectional, a nexus whose securitization should not comprise an either/or means and ends. And we also need to avoid seeing local voices as the parsed out way forward, divorced from overlapping initiatives that scale upwards and outwards in strategies of securitization. In this task, knowledge exchange and co-production are critical in avoiding both the ‘saviour’ and ‘victim’ complexes of interventionism (Elliott 2012, Norström and others 2020).

Finally, academic and policy experts must be instrumental in offering concrete, illustrative examples of successful collaborative practices and activations of conventions in the work of governments, social movements and civil society in confronting the consequences of overstepping our planetary boundaries. Germany’s Future of Agriculture commission, for example, recently issued a report showing how change is possible if a widely based, informed consensus coalesces around regulating human-environmental health, sustainability and security. The report builds on a long campaign, involving a range of stakeholders, from farmers and food retailers to academics and environment groups, and represents a heartening example of “a far-reaching reform plan to end ruinous economic and environmental practices in the country’s agrifood sector” (Scally 2021).

¹⁸ See also the inspiring work of the United Nations University Institute for Environment and Human Security WiSE (Well-being, Sustainability and Equity) project, which produces “holistic data and policy models to weigh all dimensions of well-being, sustainability and equity for decision makers.” WiSE seeks to transcend how “politics, media and economists traditionally focus on economic growth to gauge economic success” by devising a “globally inclusive narrative” for an alternative “holistic framework” that “values human well-being, environmental protection and equity for all” (UNU-EHS 2021).

The communications challenge: enabling collective solidarity

Building global consensus on overlapping human-environmental vulnerabilities across the planet is first and foremost a securitization challenge. We need to think a lot more about how to bring a concern for non-humans and the environment more broadly into framings of security, and we need to strategize much more effectively in enabling collective solidarity (Solnit 2004). Adopting an anti-elite position could be effectual, as it was in garnering support for the Organisation for Economic Co-operation and Development's global minimum tax plans (OECD 2021). We could also usefully capitalize and act upon the sense of global urgency in responding to COVID-19 in the context of the longer-term human-environmental crises. An Ipsos global poll for Earth Day 2020, for instance, highlighted an encouraging picture of how people feel the future of the planet should be secured:

Seven in ten consider climate change as serious a crisis as Covid-19, and a similar proportion feel their government will be failing them if it doesn't act on climate change now. Two thirds globally support a green economic recovery from the crisis (Ipsos, 2020, p. 2).

In securing the future of the planet, nurturing collective solidarity is vital. And it is possible if we can somehow allow ourselves to see and be affected by the world—its injustices, precarities and suffering. The unified response of the North Atlantic Treaty Organization and the European Union to the Russian Federation's invasion of Ukraine shows us what can be achieved when there is concerted agreement that addressing human suffering is a critical security need. Yes, there has been a racialization in the Western response, and there is no doubt that we need similarly empathetic and committed responses to crises everywhere on the planet. But we should still look at this example as demonstrating what activated human empathy and solidarity can achieve. Reaching a critical mass consensus on necessary climate action seems more possible now than many have previously concluded pessimistically.

In all of this, communicating persuasively is increasingly pivotal at a moment when selective, prioritized knowledge is so consequential. We need to be especially conscious of the requirement to reductively and creatively communicate in a populist social media world where soundbites count. Such strategic essentialism is important to engender support for progressive visions of how we live and govern. Direct, straightforward communications underscored with hope resonate, as Ukrainian President Volodymyr Zelensky has shown since the Russian invasion began. As the war was just beginning, and while Ukrainian forces were defending Kyiv in nearby streets, President Zelensky walked outside his complex and engaged his fellow citizens with a simple

message. “We’re all here,” he said, with his closest government colleagues at his side.¹⁹ It was an iconic moment of courage and hope. It lifted Ukraine and elicited support from a watching world.

Influencing the global response to the insecurities of climate change is first and foremost a communications challenge. From national governments to international NGOs, from intergovernmental organizations to local advocacy groups, envisioning necessary climate action necessitates successful communications strategies. Much can be learned from political messaging that works, which is why President Zelensky’s communications strategy is instructive. He typically limits the length of his communications to prioritized information, employs good visual images and calls out specific actions from partners in pleas for support. This is what we need to do increasingly in winning the communications war on climate action. We need to make the environmental threats and human insecurities real enough to all, from citizens to politicians, and then find a way to target clear demands for necessary action from our leaders on multiple scales, from the local to the global. We need no less than a global collective of concerted advocacy to do this. The stakes could not be higher as we sit on the precipice of human and environmental precarity on a planetary scale.

As a final point, I want to reflect briefly on the import of ‘futurescaping’ in the formulation of security discourse.²⁰ In the late 1970s, the French philosopher Michel Foucault presciently underlined the importance for modern governments of mobilizing power based on the fear of securing an uncertain future, what he called the “aleatory” (2007, p. 11). For Foucault, managing the aleatory required a commitment to govern by contingency in a “milieu” in which “uncertain elements unfold” and wherein effectual government requires planning around anticipated insecurities (ibid., p. 20). Governments everywhere today are occupied in multiple ways in managing volatility, risk and uncertainty. Futurescaping is a key discursive tactic in the formulation of security grand strategy. In securitizing the world’s pressing human-environmental precarities, it is vital that we script the aleatory with compelling visions of a more cooperative and sustainable future. We need to link crystal-clear delineations of future insecurities with necessary action now.

More-than-human security: responsibility, accountability,

¹⁹ Zelensky subsequently noted the importance of convincingly communicating solidarity and shared concerns: “you understand that they’re watching,” “you’re a symbol” and “you need to act” (Shuster 2022).

²⁰ Futurescaping, or the setting out of visions of future worlds, has featured for years in the fields of military and economic security. In the United States, the military’s global grand strategy has long adeptly referenced the risk of dystopian futures to justify pre-emptive action (Morrissey 2017). And Klein (2007) has shown the powerfully instrumental logics of ‘disaster capitalism’ that profit from fears of future catastrophic events. See also Adam 2006, 2008.

activation

In strategizing necessary action to secure the future, questions of governing responsibility and accountability are centrally important.²¹ Such questions have not, however, been given enough attention. Lisk, Šehović and Sekalala noted prior to the outbreak of COVID-19 how “little attention is being paid to accountability for health and human security,” citing the limitations of the WHO in implementing “rules on member state adoption of pandemic preparedness guidelines” (2015, p. 33). A similar level of incongruence in the global governance of climate security can be seen in greenhouse gas emission targets and bans on microplastics (Dalby 2020). And so an urgent question is how best to activate binding frameworks of responsibility and accountability in successfully advancing policies of human-environmental security?

Marshalling existing elements of the law and activating anew agreed global conventions are arguably the first steps.²² Since 1994, human security grand strategy at the United Nations has been made active by a range of legal measures in policy adoption. In aiming to further operationalize the legally binding delivery of human security goals, Estrada-Tanck proposes a “human security-human rights synergy” in which specific “existing legal international obligations” can be revived (2016, pp. 3, 9). Renewing the legal buttressing of human security is key to its policy operation in tackling “structural vulnerability in an interrelated and contextualised manner” (ibid., p. 251). Activated thus, the concept has the potential to be a powerful tool for States and transnational institutions alike in holistically confronting human-environmental insecurities.

Foucault identified the law as the focal “mechanism of security” in late modern society (2007, p. 4). Activating it in the service of human-environmental security has never been more important. In January 2019, the European Union published a draft legal proposal for restricting the use of microplastics based on their multiple human and environmental risks. It proposed limits on their usage that “could see emissions of microplastics reduced by about 400 thousand tonnes over 20 years” (European Commission 2019). The regulatory proposals were built on the back of a long campaign identifying the overlapping human and environmental threats. In this conjoined human-environmental security vision, two challenges remain. The first is the inevitable political-economic opposition from vested manufacturing interests. The second challenge is the effective administration of the governing law. The plans require a robust legal architecture with necessary regulatory and punitive measures in place that will politically and economically persuade corporations and states that compliance is in their interests.

²¹ UNDP has long argued for this, recently reaffirming that “there must be transparency and accountability in human development terms in people’s capabilities to lead the lives they value in harmony with the environment” (2020b, p. 23).

²² As Dikau and Volz note, “[i]nternational goals such as limiting global warming to two degrees, will require powerful policy initiatives, such as the introduction of carbon taxes or extensive environmental regulation” (2020, p. 11).

In addition to the law, ‘financial incentivization’ can also be mobilized as a key tool in addressing the “planetary and social imbalances” of the Anthropocene” (UNDP 2020a, p. 159).²³ In strategizing to “reward investments that reduce planetary pressures and to penalize or restrict investments that increase those pressures,” the *2020 Human Development Report* identifies a vital question: “[w]hat is the role of public entities that oversee financial markets and of monetary authorities?” (ibid., p. 159). Dikau and Volz take up this question, incisively laying out the role of the banking sector and central banks in particular:

Central banks and other financial regulatory authorities can influence investment decisions and the allocation of resources and credit through a number of different policy implementation instruments. Their regulatory oversight over money, credit, and the financial system puts central banks in a uniquely powerful position that enables them to incentivize or direct resources away from carbon-intensive sectors and towards green investment (Dikau and Volz 2020, p. 14).

And they point to examples where this has worked. Bank Indonesia, for instance, introduced regulation in 1998 to require all banks in the country to conduct environmental impact assessments for large and high-risk loans (Dikau and Volz 2020, p. 24).

Activating financial incentivization and regulatory tools at a global level is another challenge, of course, but as noted in the *2020 Human Development Report*, the possibilities for collective action are within reach. The report instructively signposts a range of tangible ‘mechanisms of change’ that can more holistically manage the health and wealth-being of the planet. These include: “integrating sustainability into accounting and financial practices and pricing carbon,” instigating “green supporting and brown penalizing factors” in capital investment requirements, ensuring “minimum amounts of green assets should be held on financial institutions’ balance sheets,” administering incentives to “protect biodiversity through a range of market mechanisms,” supporting “collective financing mechanisms to scale up nature-based solutions,” initiating “collective action” on “transparency and accountability mechanisms,” and adhering to key global “regulatory frameworks” such as the Paris Agreement and Sendai Framework (UNDP 2020a, pp. 159-160, 165, 173, 180, 188, 191, 206).²⁴

²³ The *2020 Human Development Report* also sets out how regulating pricing can have an impact by making it financially unviable to persist with brown-economy industry. As noted, “current market prices do not reflect the social costs of planetary pressures” leading to “overuse of resources and excessive environmental degradation relative to what would occur if prices reflected those costs,” and government subsidies “compound the distortions” and serve only to “encourage behaviour that impedes the transition to renewable energy sources” (UNDP 2020a, p. 159). The potential environmental and human payoff of a more progressive pricing regime is compelling: “[e]liminating [fossil fuel] subsidies in 2015 would have reduced global carbon emissions by 28 percent and fossil fuel air pollution deaths by 46 percent” (ibid., p. 10).

²⁴ In setting out these mechanisms of change to catalyse action, the *2020 Human Development Report* also makes the important argument that they can be differentially drawn upon to involve the widest range of actors across society, from “individuals, communities, governments, civil society and businesses,” in an overarching strategy that

The *2020 Human Development Report* solidifies the central vision in the United Nations' initial framework response to COVID-19 in March 2020 in identifying the “structural challenges” of strengthening “normative frameworks to deal with transboundary risks”:

Robust and comprehensive environmental policies addressing priority transboundary issues may prevent and mitigate future pandemics, simultaneously banning trade of wildlife (which can contribute to health risks), harmonizing sanitary standards and addressing the interacting threats due to illegal trade, habitat loss, climate change, and different sources of pollution by developing collaborative policy frameworks (United Nations 2020, p. 16).

In dealing with ‘transboundary risk’, it is important to reflect on how securitization strategy is not just about interventionist practices that are external and deferential of responsibility. It is also about subjectivity and how to live with a global concern for a progressive sense of security for the future. We need to get away from seeing international development and security as always requiring external interventionism and instead seek ways to support locally attuned governmentalities. For this crucial goal, UNDP and other international organizations can play a decisive role in the discursive challenge of building a conjoined vision of global human-environmental security—revising, in essence, how we conceive humanity’s place in the biosphere.²⁵

Conclusion

In the aftermath of the COVID-19 pandemic, have we reached a tipping point in thinking productively and responsibly about planetary precarity? The core argument in this paper is that convincingly framing a globally interconnected and more-than-human sense of security is vital to establishing a path towards a healthier and more sustainable planet. Now, more than ever, it is “essential to do away with stark distinctions between people and planet” and envisage a wider vision of human-environmental security (UNDP 2020a, p. 8). In this critical securitization task, we need to insist upon the overlapping human-environmental insecurities we face, and renew the ambition of human security in holistically addressing human-environmental precarity. Human health was understandably a major focus as governments struggled to deal with COVID-19. But the health of people is intrinsically linked to wider ecosystem health across the planet. This is why a more-than-human securitization strategy is imperative.

sees the Anthropocene as “a predicament to be navigated, not a policy problem to be solved” (UNDP 2020a, p. 129).

²⁵ The *2020 Human Development Report* signals the inspiring ambition of “a just transformation in the way we live, work and cooperate” that “expands human freedoms while easing planetary pressures” (UNDP 2020a, pp. 2, 9).

Security is ultimately about prioritizing and diverting governmental resources to particular kinds of insecurity (Breslin and Christou 2015). In this discursive loop, coherently articulating an intertwined and multi-scalar sense of human-environmental precarity is crucial. We must continue to agitate for the most vulnerable in society to feature in securitization strategies, we must compellingly script the big-picture planetary uncertainty, and we must be attendant to the indices of success upon which security is measured and resourced (Dillon 2007). It then becomes a question of activating designated legal and regulatory mechanisms in policy, and this pivots on persuading governments to change course and take brave decisions in altering the ecologically destructive path of the political economy of late modern capitalism.

In the urgent task of envisioning human-environmental security for the future of the planet, effective, strategic communication is a prerequisite to building knowledge consensus and enabling global solidarity. To this end, mobilizing the persuasive and indeed therapeutic logics of futurescaping in formulating security discourse is critical. As educators, writers and potential government experts and advisers, we need to link informed predictions of our uncertain future with the generation of policy for the here and now, whether that be in relation to microplastics, carbon emissions, biodiversity or the regulation of agribusiness (Raskin 2021). We need to “work on the future” as Foucault once declared, and recognize how it will be governed via discourses of security that “fabricate, organize and plan” the milieu of a planet we all share (2007, pp. 20, 21). The Earth is an interconnected matrix of human and non-human worlds; for its sustainable future, envisioning a global sense of more-than-human security is vital.

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