

Imagining the Possible

NEW RESPONSES TO SYSTEMIC RISKS: AN EXPLORATION 2025–2045

At a time when the world faces a polycrisis—the convergence of systemic risks that threaten people, ecosystems, and institutions, leading to global shocks—we must radically rethink how we assess and respond to these interconnected threats.

Shaped by the long arc of history and rooted in shared drivers and structural injustices, systemic risks bring with them compounding and cascading impacts that are increasingly difficult to predict. Yet they also offer a rare opportunity to reimagine our systems, our institutions, and ourselves. This moment therefore calls on us to audaciously imagine future responses that intentionally seek to mitigate, prepare for, adapt to, and transform away from the harms of systemic risks.

What follows is an account of a collective exercise to do just that: to journey into the future and imagine novel responses unfolding between 2025 and 2045, while navigating the ever-evolving dynamics of this polycrisis with honest hope.

Overview

ASRA (the Accelerator for Systemic Risk Assessment) aims to mainstream systemic risk assessment in policy- and decision-making in response to current and future challenges. Home to a global network of transdisciplinary risk experts and thought-leaders, ASRA works to advance the field and practice of systemic risk while advocating for transformative action for the prosperity of all people, societies, species, and ecosystems.

In 2024, ASRA's Working Group on Systemic Risk Response (SRR) embarked on an experiment to explore what bold, transformative action might be possible in the face of escalating systemic risks. Seeking to map not just plausible but new, inspiring, and actionable responses to future challenges, this transdisciplinary group of thinkers and doers came together to imagine how we might rethink and reconfigure our systems in the face of emerging global systemic risks. The goal: to surface novel responses, test possibilities, and provoke new thinking on how humanity might adapt to, or even avert, catastrophic futures—and find a way for people and nature to thrive.

In a world saturated with narratives of existential despair, this effort sought to fill a crucial gap: to imagine the transformations that could lead us somewhere radically better while also grappling with the realities of this polycrisis. This was a journey of collaborative exploration and co-creation in a diversity of futures. To reach for "The Possible," the group turned to ParEvo¹ to undertake a mini-futures exercise, a collaborative process to explore alternative futures and new types of systemic risk responses that could emerge between 2025–2045, born from the fusion of both dystopian and utopian perspectives.

Context

When considering new and novel responses, the use of futures and foresight methods and practices can support enhanced and transformational SRRs. Foresight (the ability to foresee what could happen and what might be needed in the future) equips SRRs to better deal with uncertainty, including over extended time horizons. Futures (the deliberate study and practice of imagining, envisioning, and exploring alternative future states) helps ensure SRRs do not inadvertently reinforce the status quo by using structured approaches to increase imagination and diversity of thinking. ParEvo is one method to explore alternative futures, using a participatory evolutionary process. Decision-making is strengthened by integrating and linking to both futures and foresight practices in order to effectively anticipate and respond to systemic risk.

Methodology

Members of the ASRA Systemic Risk Response Working Group agreed to use the ParEvo web app to undertake this futures exercise, together with the support of Rick Davies, ParEvo designer and evaluation consultant based in Cambridge, UK. Over the course of 3 months, the group worked in a transdisciplinary manner, anonymously: One group of members were *the writers*, tasked with creating stories that build over time, covering a 20-year time frame. The second group were *the evaluators*, tasked with sharing their observations or questions with each contributor. At each iteration, writers read each other's work and selected one storyline (their own or someone else's) to build on and contribute to.

The journey began with a seed story, written by Sarah Hendel-Blackford, Director of Systemic Risk Policy and Response at ASRA, who also facilitated the exercise. This story set the scene against the polycrisis we face today—climate emergency, biodiversity collapse, political polarization, increased conflict, civil unrest, and so on—from which participants drafted their own narratives. Each member's story began in January 2025, and the goal was to reach January 2045 over the course of eight rounds. Midway through the development of storylines, without the participants' prior knowledge, the facilitator introduced a "stress test" to evaluate the strength of the emerging responses. For this, we turned to the UNDRR report *Hazards with Escalation Potential*,² which identifies ten geological, biological, technological, and social hazards that have the potential to lead to global and existential catastrophe. The stress test was a global catastrophic risk (GCR) event: a super-colossal volcanic eruption. The size and some of the impacts from the eruption were taken directly from the eruption of Mount Tambora,

¹See <u>https://parevo.org/</u>.

² M. Stauffer, J. Kirsch-Wood, A. Stevance, L. Mani, L. Sundaram, S. Dryhurst, and K. Seifert, *Hazards with Escalation Potential: Governing the Drivers of Global and Existential Catastrophes* (Geneva, Switzerland: United Nations Office for Disaster Risk Reduction, 2023).

Indonesia, in 1815, which produced the largest volcanic eruption ever recorded.³ This event was superimposed onto the imaginings of a world in 2032, forcing the group to grapple with the first-, second-, and third-order impacts unfolding in the immediate and longer terms.

At the end of the 3-month process, a collection of 30 storylines had been co-created by writers and reviewed at each iteration by evaluators. Not every storyline was further developed; some became "extinct" when no-one chose to build upon them. By the end of the exercise, 12 storylines "survived" and continued to evolve through each iteration.

Analysis

ASRA is interested in the process of applying futures and foresight methods. These are valuable exercises for strengthening the muscle of the imagination, enabling the creation of untried beginnings and the conception of new responses to systemic risks. While individual storylines are not covered here—nor has ASRA taken a position on any storyline produced—this paper surfaces key insights, patterns, and surprises that emerged from Working Group discussions, both about the process and the surviving storylines, for our own learning and to share more broadly with the field. Note that this analysis was undertaken by a human, not AI.

Viewing the surviving storylines as a complete set, six key lessons emerged, including four interconnected pathways, through which writers imagined new responses to systemic risk: 1) citizens-focused pathways; 2) multilateral-focused pathways; 3) economy-focused pathways, and 4) nature-focused pathways. These pathways are not separate or distinct from each other; they are interwoven across multiple storylines:

1. Citizens-led pathways

As societal systems began to collapse, it was much more apparent that communities either worked together or faced catastrophe together...⁴

The citizen-led pathways that emerged from this exercise outlined how futures could be shaped by people and communities as the agency for change. These futures ranged from those activities that are enabled and supported by national governments (e.g., through supporting civil society preparedness for acute and chronic crises, skilling up the unemployed, building National Resilience services) to grassroots movements, stemming from a stronger drive to localism as a response to dysfunctional governments that appear powerless to build resilience in the face of systemic risk impacts. Responses in all these futures were grounded in deeper levels of *democratic local input because diverse citizen input was needed for the local whole to function and have a level of security.*

In contrast to deeper localism, some citizens-led pathways worked across multiple scales and geographies, facilitated through the connection and interaction of cultural and social movements across the globe, enabled by technology, in order to respond to systemic risks. In some futures, the global connection between like-minded communities was preceded by a focus on personal inner

³ See "This Day in History: Mount Tambora Explosively Erupts in 1815": <u>https://www.nesdis.noaa.gov/news/day-history-mount-tambora-explosively-erupts-1815</u>.

⁴ All italicized text are quotes from an individual storyline.

development, *the relationship with the self, caring for others in the world, and collaboration* rather than simply depending on governments, regulations, or policies to steer humanity out of harm's way.

Types of responses envisaged across citizens-led pathways included, for example, the development of a National Resilience Agency coupled with resilient and preparedness civil leadership policies, compulsory leadership duty, and repurposing the army toward civil resilience. The storylines hinted at the range of roles that citizen-led networks played, e.g., civil resilience networks and hubs carried people through trauma, recognizing the loss of all that is past, while trying to prepare better for the present and future through dynamic systemic risk assessment dashboards. In these futures, the democratization of risk knowledge was evident, e.g., through information being delivered in real-time on peoples' phones, with systemic risk assessment dashboards providing local resilience scores. Informed by this knowledge, the range of potential responses was discussed in civil assemblies and participatory processes:

Resilience Movement is now understood as a self-organized network of nodes that function independently but are aligned to the rules (and) principles ... People and organizations committed to the Resilience Movement are recognized for putting the collective good before their own, largely through collaborations and solving conflicts through principles.

2. Multilateralism-led pathways

The previous two decades of quasi-continuous crises, many of which could have been prevented or mitigated through better international cooperation, allowed countries to understand the dangers of playing zero-sum games.

The consideration of multilateralism, its failures and possible rebirth, was identified by the writers as both desirable and undesirable types of futures, e.g., multilateral institutions that subsequently collapsed, the formation of new alliances, and a supranational global governance system. Across this group of futures is an acknowledgement by writers that deep transformation of the multilateral system is required to prevent blocs. This was explored, e.g., through consideration of a global agenda set by rotating country representatives as well as a partial dismantling of multilateral governance of the past toward a new equitable and just UN, which only materialized in the far future, during the 2040s. In one storyline, a new UN is developed, including a restructuring of the Security Council and a separation of national and public debt from development aid and support.

In these futures, the GCR event provided the necessary shock that led to the collapse of old governance systems. A new, sharpened systemic risk focus informed multilateral debate and led to new actions, e.g., International Financial Institutions (IFIs) undertaking systemic risk assessments as standard. Multilateralism and all of the *exciting motions toward better preparing for and responding to systemic risk* that were UN- or government-backed failed when they neglected to represent the needs of communities on the ground.

Types of responses imagined within multilateralism-led pathways included: multilateral organizations supporting the introduction of new global carbon taxes; implementation of scoring systems that prioritize human and ecosystem recovery and resilience as a prerequisite for funding; central bank-issued credit as the only financing option; and the introduction of wealth taxes and universal basic

income funded by corporate taxes. Other measures included the development of survival zones backed up with international discussions and agreements on the legal status of ecological and climate refugees.

Alongside the (re-)structuring of the UN Security Council was a commitment to ... recognizing the ongoing pressure to enhance eco-stewardship ... an overhaul of the pre-2030 SDG framework financing mechanisms was agreed ... ecosystem and human benefits were "scored" ahead of economic benefits ... initiatives without a strong environmental and social element were un-fundable.

3. Economy-led pathways

The chance of a new international order 3.0: Strangely enough, with the veneer of cooperation gone, it helped to motivate action: there was a growth in mini-lateral and sector-specific cooperation, and increasingly informal structures that included a wider range of non-state actors ... The greening of economies had advanced rapidly ... Energy was cheaper and greener, carbon capture technologies had matured quicker than expected.

Storylines that focused on the economy included the formation of economic-based allegiances through sector-specific cooperation. Others considered radical economic transformation driven by grassroots divestment toward new economic alternative financial systems focusing on a type of distributive capitalism born through the failure of multilateral institutions of the past. In this group of storylines, economy-focused allegiances were born following the collapse of anachronistic governance structures. One storyline envisioned that the UN formally ends in 2038 after blocs of countries withdraw following the GCR event.

Within these economy-led pathways, the imagined responses ranged from a decoupling of economic powers amassed through land and food production to concerted investment in decentralized, distributed green technologies, coupled with conditional funding and leadership positions based on enviro-social missions, spurring a green banking revolution.

This has been a contest of systems: The human tendency toward accumulation of wealth long precedes capitalism. Princes and paupers. Those with power and those without. Those who control the lives of others to extract surplus productive capacity. This is normally done by controlling access to food and shelter using land and property rights. With concerted investments ... we dismantled that mechanism.

4. Nature-led pathways

The design and making of our planetary commons governing systems (included): democratic local Earth councils at its core; curating the archive of the past for critical education on eco-ethics; co-creating the Multi-species Planetary Council; a planetary systemic risk framework anchored in local Earth councils ... with local knowledge, lived experience and experts (came) the development of the planetary observatory for systemic risk.

Within nature-led pathways, future scenarios integrated a range of different types of knowledge and a multiplicity of perspectives. These included traditional knowledge, conservation ecology, resilience science, and climate science, all guided by eco-ethics. The sharing and generation of knowledge and values were the result of deep collaboration between a diverse range of actors, including Indigenous Peoples, youth, and non-human representation in governance decision-making processes. Nature-led

pathways were all dependent upon deeper shifts in mental models and mindsets, with many responses focusing on transformative processes, principles-based leadership, and leading with active compassion and agency toward both human and non-human life. Throughout the storylines, this paved the way for a new eco-ethical cooperation—bottom-up, grass roots—led distributed power, with a return to oral histories to pass on knowledge and understanding of Earth relations, environmental philosophy, and acting with compassion toward all living things and ecosystems.

Responses in this group of storylines explored the creation of new governance structures that place nature at the centre of all decision-making, e.g., All People All Species Assemblies founded on the shared identity of members as global citizens representing all life on Earth, where people no longer represent specific regions. The storylines surfaced the notion of The Planetary Commons as *the* new currency for systems in all domains with more time spent on education, knowledge-sharing, and training, e.g., in Commons Care and Earth Relations. Behaviours and decisions were guided by a biocentric focus on life-enabling commons, informed by systemic risk early warning systems alerting people to the relentless impacts of climate change, foregrounding the practice of agro-ecology, and prioritizing securing and protecting food systems through environmental stewardship. Safe havens and survival zones were identified for both human and non-human life to seek sanctuary, survive, recover, and—hopefully—thrive.

5. The stress test was pivotal in shaping systemic responses

Severe disruption was ever-present in all surviving storylines: before, during, and after the stress test GCR event. All futures identified certain aspects as being "desirable": e.g., the rise of localism, which took many forms from radical protectionism and activism to groupings based on values or protecting assets that gave rise to alternative economies; e.g., resilience achieved through the foregrounding of nature and the enabling role of technology to better understand systemic risks and vulnerabilities. "Undesirable" aspects of the futures identified took the form of unrest, migration, navigating trade-offs, and increased human mortality and morbidity.

The GCR event acted as a catalyst, playing out both in positive (increased community-led grassroots cooperation) and negative (increased protectionism, violence) senses. The GCR event led to the complete collapse of existing global systems across multiple domains: political, economic, and more: *Effectively now, there were only three types of states in the world: functioning, flailing, and failing ... ideas of global coordination currently seem laughable.* But from this chaotic state, the process surfaced a diversity of approaches and leaders, with many futures focusing on food security: *the volcanic cataclysm opened a new chapter in the journey of life and (some) were prepared.* To avoid the worst impacts of disruption, writers imagined more inclusive, equitable, flexible, localized governance systems through, for example, increased citizen assemblies and alternative governance structures that represent people and nature.

6. The seeds of novel systemic risk responses are already present in today's world

How can we dare to feel hopeful in the midst of this polycrisis while acknowledging the potential of a worse future if a GCR event is realized? Because across all of these different storylines, we see the seeds of imagined systemic risk responses in the form of activities already present in today's world. Some glimpses of imagined regenerative responses are already present in <u>existing examples of systemic risk responses</u>, a series of responses identified by ASRA through the application of a set of 14

SRR criteria that we expect to be present in any systemic risk response. Rooted in <u>ASRA's Principles</u> to help us navigate systemic risks, examples include:

- Seed banks (see South Africa Climate Justice Charter case study)
- Regenerative farming practices (see Community Action Collab and Community Managed Natural Farming case studies)
- Eco-ethical decision-making (see Doughnut Model case study)

In addition to these existing systemic risk responses, we see hints of future responses elsewhere in today's world: national preparedness plans (see <u>EU Preparedness Strategy</u>); the representation of nature in decision-making (see <u>more-than-human perspective in policy development; eco</u> <u>jurisprudence</u>); hyper-local public dynamic risk communications (see COVID Wastewater testing dashboards across the world, e.g., <u>Bangalore</u>); training and applied learning from nature (see <u>Biomimicry Institute</u>).

What this exercise elucidated is that both in today's world and tomorrow's collective imaginings, there is a need to build our individual and collective skills and capacities, regardless of how the polycrisis manifests over time. What skills do we need to grow, nurture, and develop to realize "The Possible"? Across the surviving storylines it is clear that we need to develop patience, build in sufficient time to deal with trauma, and engage in genuine, deep participatory decision-making requiring lengthy, nuanced debates where all humans and non-humans are represented. The storylines suggest the need to act with deep compassion and clear-eyed honesty to this planetary emergency in order to regain our agency, energy, and stamina.

A difficult and unique journey

The limitations and uncertainties that writers came up against during this co-creation process mirror the dilemma decision-makers face today. It is hard to deeply imagine beyond the current systems we have—political, economic, social, educational—even though we know they don't often serve us well. This was one of the greatest challenges in situating this exercise in today's polycrisis: It is not an easy lift to imagine and forge utopian outcomes while wrestling with a dystopian present and the coexistence of these two states. The unexpected stress test triggered by a GCR event and the uncertainty of how far into the future each iteration would extend added layers of ambiguity that weighed heavily on the writers and evaluators, and threatened to cloud participants' imagination.

Imagining a flourishing future while wrestling with the challenges we face today is a difficult, tiring, and complex undertaking. And in this world of escalating shocks, the ability to plan and act through uncertainty isn't just useful, it's essential. How can we harness the muscle of the imagination to carve out transformational futures while moving and acting in deep uncertainty? Like any muscle, it must be exercised regularly to remain effective. Applying futures and foresight approaches can help us imagine and explore a range of possible futures and responses. It is in this spirit that we now have to wrestle with the deeper questions this analysis sparks:

- Do we need novel systemic risk responses or new governance mechanisms, or both?
- How can we bring about the conditions to imagine, ideate, and implement these at scale?
- How can we use existing systems and responses as a springboard into deep transformation?
- Can change happen without a deep, existential shock?
- Who is responsible for assessing and responding to systemic risks?

A contribution toward further investigation into "The Possible"

This collective, co-created journey marked only the beginning for us. ASRA will continue to imagine, discuss, test, and experiment with the conception of novel systemic risk responses that take us away from the harms of systemic risk toward abundance and flourishing for human and natural systems. To deepen and broaden our collective understanding of how to respond to systemic risks, we need a diversity of voices, experiences, and expertise working together in a transdisciplinary manner to build the field of systemic risk assessment and response.

Contact Sarah Hendel-Blackford, Director, Systemic Risk Policy & Response

Authorship and Acknowledgements

This report was led by a dedicated ASRA working group consisting of the following:

- Sarah Hendel-Blackford, working group lead and ParEvo exercise lead, with support from ASRA's core team: Ajay Gambhir, Hanna Asipovich, Kasia Murphy, Phil Tovey, Ruth Richardson, and Zabrina Kjeldsen
- Systemic Risk Response Working Group members who discussed and/or participated in ParEvo: Alice Ruhweza; Ayan Mahamoud (IGAD Center for Pastoral Areas and Livestock Development, ICPALD); Beth Gibbons (Washtenaw County's Resilience Office); Christine Parthemore (Council on Strategic Risks); Christopher Hobson (Australian National University); Daniel Hoyer (Sheshat: Global History Databank); David Korowicz (Korowicz Human Systems); Julie Calkins (Generation Investment Management); Ivana Pavkova (TMP); Jenty Kirsch-Wood (UNDRR); Justin Pita (Central & West African Virus Epidemiology, WAVE); Karl Mallon (Climate Valuation); Lara Mani (CSER); Lorenzo Benini (EEA); Michael Albert (University of Edinburgh); Nadim Farajalla (American University of Beirut); Ortwin Renn (Research Institute for Sustainability – Helmholtz Centre Potsdam); Paul Larcey (Princeton); Pia-Johanna Schweizer (Research Institute for Sustainability – Helmholtz Centre Potsdam); Scott Janzwood (Cascade Institute); Shama Karkal (Swasti; Community Action Collab); Tom Oliver (University of Reading); Vishwas Satgar (University of the Witwatersrand).

About ASRA

ASRA (the Accelerator for Systemic Risk Assessment) aims to mainstream systemic risk assessment in policy and decision-making in response to current and future challenges. Hosted by the <u>United Nations</u> Foundation, this independent non-profit initiative advances the field and practice of systemic risk, and advocates for transformative action for the prosperity of all people, societies, species, and ecosystems. Learn more at: <u>www.asranetwork.org</u>