



**T20** **Brasil 2024**  
Let's rethink the world

# T20 Policy Brief

Task Force 06

## **STRENGTHENING MULTILATERALISM AND GLOBAL GOVERNANCE**

# **Toward a New Global Security Paradigm**

Luis Gomez Echeverri, Emeritus Research Scholar and Senior Advisor to the Program, International Institute for Applied Systems Analysis – IIASA (Austria)

Maja Groff, International lawyer and Convenor, Climate Governance Commission (Switzerland)

Heide Hackmann, Chair in Science Futures, Centre for Research on Evaluation, Science and Technology, University of Stellenbosch (South Africa)

Mauricio Antonio Lopes, Senior Scientist, Brazilian Agricultural Research Corporation – Embrapa (Brazil)

Pradeep Monga, Emeritus Research Scholar and Senior Advisor to the Program, International Institute for Applied Systems Analysis – IIASA (Austria)

Pratik Patil, Researcher, International Institute for Applied Systems Analysis – IIASA (Austria)

Elena Rovenskaya, Program Director and Principal Research Scholar, International Institute for Applied Systems Analysis – IIASA (Austria)

Samir Saran, President, Observer Research Foundation – ORF (India)



# **TF06**



## Abstract

Amidst increasing global connectivity and accelerating global change, the global security framework has become insufficient, contributing to a crippling dysfunctionality in international cooperation. The current security framework, focused almost exclusively on a narrow notion of military security, is insufficient to address escalating ‘threats without enemy,’ such as climate change, biodiversity loss, and pollution, which increasingly endanger the lives and dignity of all populations. This policy brief recommends a global social-ecological security framework, rooted in the science-informed understanding of social and biophysical realities, to address the evolving needs and challenges of the 21st century.

Our recommendations to operationalise this paradigm include: a reinvigorated commitment to multilateralism and peace as a pre-requisite; public participation in shaping the new inclusive international governance framework; development aid and green finance as key levers; a focus on building resilience (especially food security); and, strengthening anticipation of and response to interconnected global shocks. We propose a G20-initiated formation of a high-level working group to catalyse the creation of this new framework. Such a process must involve relevant stakeholders, leveraging new possibilities afforded by technological tools (such as AI).

Implementing this ambitious agenda will be challenging, but continuing on a business-as-usual trajectory is a ‘lose-lose’ spiral likely to trigger social and ecological crises. Bold leadership from the G20 is needed more than ever to reinvent multilateralism and thus ensure sustainable well-being for all.

**Keywords:** Multilateralism, global governance, human security, Polycrisis



## Diagnosis of the Issue

As global environmental change accelerates, its consequences amplify societal vulnerabilities, and it is likely to escalate domestic and international conflicts. This, in turn, hinders our capacity to address ecological crises and exacerbates other challenges such as water and food insecurity. Science has identified Earth system tipping points (such as the die-off of coral reefs or a widespread abrupt permafrost thaw), which may lead to self-perpetuating feedbacks culminating in runaway climate change and ecosystem collapse (Armstrong McKay et al. 2022). Crossing these tipping points may trigger negative social tipping points toward societal collapse (Steel et al. 2024). Vulnerable countries and regions including members of the V20 (the ‘Vulnerable 20’) will be affected most severely in the near term while adaptation limits may be exceeded for the rest in the longer term (Richards, Gauch, and Allwood 2023).

Addressing these complex and cascading systemic risks demands integrated solutions building on vigorous and effective international collaboration. However, multilateralism is currently facing a profound crisis. A growing lack of mutual understanding and trust, sometimes manifesting into violent conflicts, aggravates geopolitical fragmentation and consolidates military security as the predominant paradigm in our understanding of global security. With its focus on identifying external enemies as a source of threats, military security framework renders as invisible other existential threats to humanity, particularly our inability to safeguard essential ecosystems services. Climate change has already fuelled violent conflicts (e.g. in Mali and Sahel (Pacillo et al. 2022)) and is likely to cause millions of premature deaths and trillions in economic losses worldwide by 2050 (WEF 2024). In contrast, successful conservation and development programs are correlated with post-conflict pacification (UNEP 2004).



With ongoing geopolitical developments, we risk finding ourselves in the so-called Thucydides trap with military build-up, complemented by technological advances, threatening a catastrophic escalation.

While this observation is not new, its significance is amplified in a context where, because of human activity, six out of nine Planetary Boundaries have been crossed (Armstrong McKay et al. 2022; Richardson et al. 2023), putting our civilizations at grave risk. As resources are diverted from human development to the military sector, geopolitical entrenchment of global militarism has been diagnosed as one of the most crucial impediments to securing safe and sustainable well-being for all (Stoddard et al. 2021). Global military spending continues to grow, reaching an all-time high of \$2.1 trillion in 2021 (SIPRI 2022), which is equivalent to the estimated amount needed to finance the achievement of the United Nations' Agenda 2030 and its Sustainable Development Goals (SDGs) (Sachs 2023).

This context of Polycrisis (Lawrence et al. 2023) calls for transformative action understood as profound system change to secure safe, equitable and sustainable futures for all. Global governance constraints have been identified as key barriers to achieving such transformations (Saha et al. 2024). Multilateral institutions, which are supposed to facilitate global collaboration to put humankind on a sustainable development path, are now facing major challenges to their legitimacy and effectiveness. The 1945 UN Charter was a pivotal achievement, addressing the post-World War II context. However, today multilateral institutions and initiatives struggle to mobilize effective global responses to interconnected challenges, including those of the Anthropocene, as evident in stalled progress towards achieving the SDGs and halting the trajectory towards catastrophic climate change.

There have been numerous calls for reinventing multilateral institutions, including the

UN system, alongside various proposals outlining specific reforms. Most notably, the 2023 G20 Leaders' Declaration acknowledged that reinvigorated multilateralism is essential to addressing global challenges, meeting the 2030 Agenda, and mitigating climate change. Global peace and security are an integral part of these challenges.

We propose that the onset of the Anthropocene represents an existential juncture for a radical and urgent rethink of the global security paradigm to one that acknowledges and fully integrates the security implications of today's socio-ecological dynamics. This requires internalization of the principle of "interdependence across all people and between people and the planet" (UNDP 2022). We recommend and elaborate below a new "socio-ecological security paradigm" facilitated by rejuvenated multilateral collaboration, complemented by major institutional reforms and underpinned by the internalisation of biophysical and social realities. This paradigm shift entails an inclusive and constructive global security narrative and framework to reset societal priorities, including public spending, from destructive "lose-lose" competition towards a "win-win" collaboration aimed at securing safe and sustainable well-being for all.



## Recommendations

### Foundational recommendations for a paradigm shift

Given the gravity and urgency of the predicament of a world in the Polycrisis mode, nothing less than a transformation in our global security mindset and associated institutions is needed to navigate the Anthropocene towards a future with safe and sustainable well-being for all. A positive security framework would enable sustainable well-being for all (UNDP 2022) as opposed to negative security from the external enemy. In alignment with the UN Secretary General's call for a collective security system guided by principles of trust, solidarity, and universality (UN 2023b), we propose and define a new social-ecological security paradigm based on the following foundations:

1. *Human survival depends on the health of ecosystems*, currently under increasing strain of anthropic exploitation of nature. We propose that socio-ecological security includes flourishing ecosystems and consistent climate as its ecological pillar. Hence, tackling a triple planetary crisis of global warming, biodiversity loss, and pollution should be an imperative of our collective global security rather than a voluntary act of conservation.

2. *Societies where everyone's basic needs and rights are met, are less prone to conflicts* (both internal and external). We propose that socio-ecological security includes the fulfilment of basic needs for survival and access to basic human rights as its social pillar. Ensuring guaranteed access to food, shelter, education, and primary healthcare should be foundational and integral to our conception of global security rather than a matter of humanitarian crisis management.



## **Recommendations to operationalize a socio-ecological security paradigm**

### *1. Reinventing Commitment to Multilateralism and Peace-*

We urge G20 countries to promote and lead the adoption of a socio-ecological security paradigm. Reinventing multilateralism amidst changing geopolitical realities and commitment to peaceful settlement of conflicts are pre-requisites for redirecting our focus toward socio-ecological security. Insights from scientific research vis-à-vis collective global challenges must form the basis of such efforts.

### *2. Institutional Reform-*

The G20 must call for and support institutional reforms in the UN system and other multilateral institutions (e.g. the World Bank and International Monetary Fund) by taking active leadership in facilitating successful outcomes of the upcoming ‘Summit of the Future’, initiated by the UN Secretary-General to reform global institutions.

These reforms should give priority to the identification of an effective institutional framework for operationalizing a socio-ecological security paradigm and supporting countries in prioritising this within their national policymaking agendas. A unified institutional framework will foster holistic and coherent action, currently lacking, with many aspects related to our collective socio-ecological security and emerging threats being addressed by various UN institutions (UNEP, UNDP, UNFCCC, UNDRR, and others). The emphasis must be on breaking silos, reducing fragmentation, removing redundancies, enhancing complementarities, and leveraging technologies as appropriate, for agile governance.

As a first step, we suggest the establishment of a high-level working group to make recommendations on the modalities of such a new institutional framework. A transdisciplinary science-informed process would underpin the activity of this working



group and involve a diversity of relevant stakeholders. The capacity of existing initiatives such as the new UN Futures Lab may facilitate this co-design process.

### 3. *Public Participation in Shaping Global Security Priorities-*

It is important to raise awareness among the general public about the indispensability of global collaboration to mitigate global challenges related to ‘threats without enemies’ and provide channels for people to make their opinions count (e.g. via deliberative democracy, enhancing tools for digital democracy). A recent survey of public opinion in the G7, Brazil, India, South Africa, and China overwhelmingly favours prioritization of ecological security (see Appendix A). This supports the premise that democratically mandated prioritization of socio-ecological security is likely to foster public support and will be a “win-win” solution that may generate a virtuous cycle toward safe and sustainable well-being for all. The high-level working group that we proposed may accordingly function with active inputs from the general public.

### 4. *Development Aid and Green Finance as Key Levers of Socio-ecological Security-*

Contrary to some perceptions, it is possible to simultaneously stay within ecological limits and fulfil basic needs but this requires global equality in consumption patterns (Wilkinson and Pickett 2024). The G20 leaders must fulfil their commitments to financing the SDGs and meet their climate finance obligations as a matter of global security. Efforts should prioritize harnessing synergies between development and sustainability and acknowledge the security implications. Over a longer term, this requires:

- Aligning global financial flows with socially necessary economic activities (rather than purely profit-driven financial speculation and excessive/wasteful consumption patterns).





- Reform of global financial architecture to avert unequal exchange and drain of resources (both natural and human) from the ‘Global South’ to the ‘Global North’ (Brand 2022).

The aforementioned working group’s mandate should therefore include recommendations for post-Bretton Woods’ global financial system.

Furthermore, to facilitate alignment of the global financial system with social and biophysical realities, the G20 should initiate a process to formulate a working and legal definition of global commons to include essential ecosystem services and natural resources (Rockström et al. 2024). This will enable revising the mandate of the relevant international institutions to protect the global commons.

#### *5. Building Resilience without Burning Bridges-*

It is no longer tenable to ignore the systemic nature of major risks we confront collectively and how complex interconnections among different systems may lead to cascading risks and, ultimately, systems collapse. One of the lessons of the COVID-19 global pandemic was the importance of resilient supply chains for essential commodities. This lesson has been reinforced by subsequent flare-ups of violent conflicts, especially when it comes to food security. Climate-induced disruptions will undoubtedly create further vulnerabilities (Richards, Gauch, and Allwood 2023). This requires a strategy of fostering food sovereignty in vulnerable low-income communities to buffer against global instabilities and boost sustainable development by securing livelihoods. Simultaneously, regional trade agreements, backed up by public-private partnerships may foster resilient supply chains and act as peacebuilding measures in volatile regions. Food security must be a foundational principle in trade agreements.



6. *Strengthening Anticipation of and Multilateral Response to Complex Global Shocks-*

We recommend strengthening and updating UN statistical systems to harness the possibilities afforded by the digital revolution for robust measurement of trends relevant to socio-ecological security. This should serve as a data-sharing hub and perform other ancillary functions such as setting up and maintaining data standards to ensure interoperability.

As a preventive measure to guard against an escalation of Polycrisis, UNDRR’s Global Risk Assessment reports to translate data and the latest scientific research findings into policy recommendations could be further strengthened.

We recommend implementation of the UN Secretary General’s proposal to work out “a set of protocols” that can be activated to enable a coordinated response to global shocks (UN 2023a). The G20 should show strong leadership in spearheading these transformations.

## Scenario Of Outcomes

### Business-as-usual

Our proposal for a socio-ecological security paradigm is aimed at reinventing multilateralism vis-à-vis the current gridlock. Amidst changing social, technological, and biophysical realities, paradigmatic shifts are required away from old narratives about threats and reliance on military security framework as a primary response require. Adhering to this approach may hinder our ability to counteract a dangerous spiral of negative social and ecological tipping points, potentially leading to a catastrophic outcome for the world as we know it (see Fig. 1).

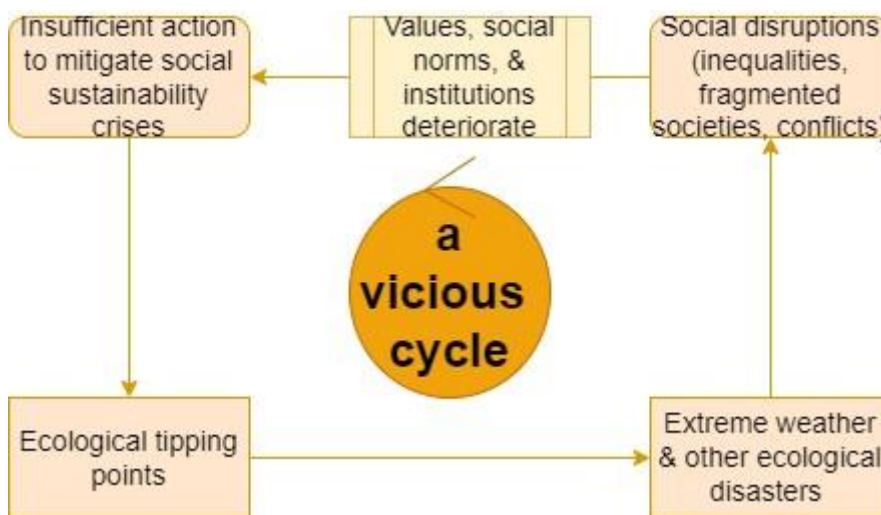


FIGURE 1. A vicious cycle of business-as-usual.

Source: Patil et al. 2022.

### The alternative socio-ecological security framework

We have provided the foundational recommendations for a paradigm shift in the global security narrative and framework based on the cogent diagnosis that concludes the inherent insecurity of the business-as-usual trajectory. A detailed blueprint would need to be developed, as we recommended, by a to-be-established high-level working group



under the auspices of the G20. Adopting the socio-ecological security paradigm will break the vicious cycle depicted in Fig. 1 and facilitate safe and sustainable well-being for all within planetary boundaries. Leveraging technological advances for institutional reform may make or break the coming transformation. Pilot projects may be helpful for the institutional reform and design process.

### **Making it possible**

We underscore that we advocate for securitization based on scientific insights into social and ecological realities. While we acknowledge concerns that securitization may justify coercive measures that may not be legitimised otherwise (Warner and Boas 2019), our approach represents a paradigm shift away from a military security framework which includes a shift in the mindset away from coercive enforcement.

Our proposals are ambitious, but they are in alignment with state-of-the-art scientific research insights about our biophysical, social, and technological realities as well as governance research. In implementation, we anticipate typical challenges in change management including overcoming institutional inertia and resistance to change, complexities in planning such as guarding against unintended consequences, and misconceptions (e.g. need to foster public trust). Overcoming these challenges will require bold and visionary leadership to mobilize the necessary momentum. The heads of G20 nation-states are best positioned to offer such leadership. The recent inclusion of the African Union has increased the G20's legitimacy to initiate multilateral reforms. G20 New Delhi Leaders' Declaration (2023) has demonstrated G20's capability to collaborate despite ongoing geopolitical tensions. Making socio-ecological security a key piece of the post-2030 agenda for sustainable development is another crucial lever for the transformations proposed.

## References

- Armstrong McKay, David I., Arie Staal, Jesse F. Abrams, Ricarda Winkelmann, Boris Sakschewski, Sina Loriani, Ingo Fetzer, Sarah E. Cornell, Johan Rockström, and Timothy M. Lenton. 2022. 'Exceeding 1.5°C Global Warming Could Trigger Multiple Climate Tipping Points'. *Science* 377 (6611): eabn7950.  
<https://doi.org/10.1126/science.abn7950>.
- Brand, Ulrich. 2022. 'The Global Political Economy of the Imperial Mode of Living'. *Global Political Economy* 1 (1): 26–37. <https://doi.org/10.1332/PEIR2693>.
- Bunde, Tobias, Sophie Eisentraut, and Leonard Schütte. 2024. 'Lose-Lose? — Munich Security Report'. Munich. <https://doi.org/10.47342/BMQK9457>.
- Lawrence, Michael, Thomas Homer-Dixon, Scott Janzwood, Johan Rockstrom, Ortwin Renn, and Jonathan F. Donges. 2023. 'Global Polycrisis: The Causal Mechanisms of Crisis Entanglement'. SSRN Scholarly Paper. Rochester, NY.  
<https://doi.org/10.2139/ssrn.4483556>.
- Pacillo, Grazia, Daniel Kangogo, Ignacio Madurga-Lopez, Victor Villa, Anna Belli, and Peter Läderach. 2022. 'Is Climate Exacerbating the Root Causes of Conflict in Mali? A Climate Security Analysis through a Structural Equation Modeling Approach'. *Frontiers in Climate* 4. <https://www.frontiersin.org/articles/10.3389/fclim.2022.849757>.
- Patil, P., E. Rovenskaya, L. Srivastava, L. Gomez Echeverri, and B. Fath. 2022. 'First Background Paper for Transformations within Reach (Phase-2). Framework for Catalyzing Societal Transformations'. Background Paper. Laxenburg: IIASA.  
<https://pure.iiasa.ac.at/id/eprint/18462/>.
- Richards, C. E., H. L. Gauch, and J. M. Allwood. 2023. 'International Risk of Food Insecurity and Mass Mortality in a Runaway Global Warming Scenario'. *Futures*, April, 103173. <https://doi.org/10.1016/j.futures.2023.103173>.
- Richardson, Katherine, Will Steffen, Wolfgang Lucht, Jørgen Bendtsen, Sarah E.

Cornell, Jonathan F. Donges, Markus Drüke, et al. 2023. 'Earth beyond Six of Nine Planetary Boundaries'. *Science Advances* 9 (37): eadh2458.

<https://doi.org/10.1126/sciadv.adh2458>.

Rockström, Johan, Louis Kotzé, Svetlana Milutinović, Frank Biermann, Victor Brovkin, Jonathan Donges, Jonas Ebbesson, et al. 2024. 'The Planetary Commons: A New Paradigm for Safeguarding Earth-Regulating Systems in the Anthropocene'.

*Proceedings of the National Academy of Sciences* 121 (5): e2301531121.

<https://doi.org/10.1073/pnas.2301531121>.

Sachs, Jeffrey. 2023. 'Money Makes the World Go Round — and Development Succeed'. *Jordan Times*. 6 May 2023. <https://jordantimes.com/opinion/jeffrey-sachs/money-makes-world-go-round-%E2%80%94-and-development-succeed>.

Saha, Sending, Szulecki, and Zuleeg. 2024. 'The Political Economy of Global Climate Action: Where Does the West Go Next After COP28?'

[https://www.nupi.no/content/pdf\\_preview/28245/file/NUPI\\_Report\\_3\\_2024\\_Saha\\_Sending\\_Szulecki\\_Zuleeg.pdf](https://www.nupi.no/content/pdf_preview/28245/file/NUPI_Report_3_2024_Saha_Sending_Szulecki_Zuleeg.pdf).

SIPRI. 2022. 'SIPRI Annual Review'. 2022. <https://sipri.org/news/2023/sipri-releases-its-annual-review-2022>.

Steel, Daniel, Charly Phillips, Amanda Giang, and Kian Mintz-Woo. 2024. 'A Forward-Looking Approach to Climate Change and the Risk of Societal Collapse'. *Futures*, March, 103361. <https://doi.org/10.1016/j.futures.2024.103361>.

Stoddard, Isak, Kevin Anderson, Stuart Capstick, Wim Carton, Joanna Depledge, Keri Facer, Clair Gough, et al. 2021. 'Three Decades of Climate Mitigation: Why Haven't We Bent the Global Emissions Curve?' *Annual Review of Environment and Resources* 46 (1): 653–89. <https://doi.org/10.1146/annurev-environ-012220-011104>.

UN. 2023a. 'Our Common Agenda Policy Brief 2'.

<https://www.un.org/sites/un2.un.org/files/our-common-agenda-policy-brief-emergency-platform-en.pdf>.

———. 2023b. ‘Our Common Agenda Policy Brief 9 : A New Agenda for Peace’.

<https://www.un.org/sites/un2.un.org/files/our-common-agenda-policy-brief-new-agenda-for-peace-en.pdf>.

UNDP. 2022. ‘2022 Special Report on Human Security’. *UNDP (United Nations Development Programme)*. <https://hs.hdr.undp.org/>.

UNEP. 2004. ‘Understanding Environment: Conflict and Cooperation’. UNEP - UN Environment Programme. 2004. <http://www.unep.org/resources/report/understanding-environment-conflict-and-cooperation>.

Warner, Jeroen, and Ingrid Boas. 2019. ‘Securitization of Climate Change: How Invoking Global Dangers for Instrumental Ends Can Backfire’. *Environment and Planning C: Politics and Space* 37 (8): 1471–88.

<https://doi.org/10.1177/2399654419834018>.

WEF. 2024. ‘Climate Crisis May Cause 14.5 Million Deaths by 2050’. World Economic Forum. 2024. <https://www.weforum.org/press/2024/01/wef24-climate-crisis-health/>.

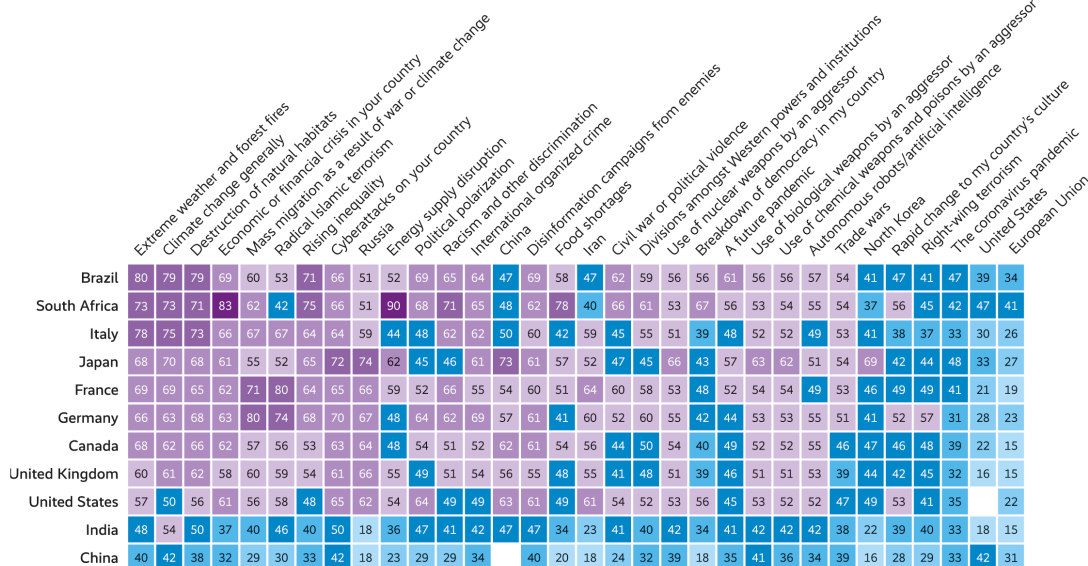
Wilkinson, Richard G., and Kate E. Pickett. 2024. ‘Why the World Cannot Afford the Rich’. *Nature* 627 (8003): 268–70. <https://doi.org/10.1038/d41586-024-00723-3>.



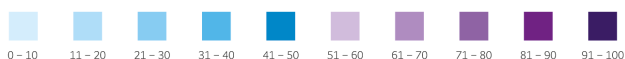
# Appendices

## Appendix A

Figure 1.5  
The risk heatmap, October–November 2023, score



In the United States and China, citizens were not asked to assess the risk from their own country.



Data and illustration: Kekst CNC, commissioned by the Munich Security Conference



Source: Bunde, Eisentraut, and Schütte 2024.

[\*] The authors wish to thank Irene Thomas, Future Africa, South Africa and Promit Mookherjee, Observer Research Foundation (ORF), India for their helpful feedback on this policy brief.





# Let's **rethink** the world

