

Global  
Challenges  
Foundation

Global cooperation in dangerous times:  
**learning from the past  
to inform the future**

*Global Challenges Quarterly Report*



**GLOBAL CHALLENGES QUARTERLY REPORT  
- GLOBAL COOPERATION IN DANGEROUS TIMES:  
LEARNING FROM THE PAST TO INFORM THE FUTURE**

The views expressed in this report are those of the authors. Their statements are not necessarily endorsed by the affiliated organisations or the Global Challenges Foundation.

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**THE GLOBAL CHALLENGES FOUNDATION** works to incite deeper understanding of the global risks that threaten humanity and catalyse ideas to tackle them. Rooted in a scientific analysis of risk, the Foundation brings together the brightest minds from academia, politics, business and civil society to forge transformative approaches to secure a better future for all.

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# Preface

**T**he world has changed dramatically since the last Quarterly Report was released in November 2016.

In the three months since the US elections, we've seen an urgent and impassioned global conversation about the future of multilateral cooperation. Many have questioned whether this marks the end of the 'liberal world order'.

Against this backdrop, the Global Challenges Foundation's New Shape Prize is seeking ideas for new frameworks of cooperation capable of uniting the world to tackle today's greatest global threats. In the course of publicizing the prize, we've so far had the privilege of discussing its call to action with expert audiences in Sweden, Jordan, the United Kingdom, India, China, Colombia and Brazil.

**Time and again**, our conversations have coalesced around many of the same key questions. How will it be possible to re-shape global cooperation quickly enough in order to deal with climate change, nuclear weapons and the other grave threats we face today? How could the current system be reformed to better address these threats? What are the implications of the Trump administration for efforts to enhance



global cooperation? Building on these conversations and others, this report brings together perspectives from academia, politics, law and social psychology.

We also examine the history of global cooperation in the belief that it can help inform a new kind of stewardship for our planet and its people. Throughout history, new forms of cooperation have been born out of the ashes of great upheavals. We need to use the lessons

learned from the failings in the current system to inform innovative new ways to safeguard the future. We cannot afford to wait for the next catastrophe to strike.

A handwritten signature in black ink, appearing to read 'Mats Andersson'. The signature is stylized and fluid.

**Mats Andersson**

Vice-chairman,  
Global Challenges Foundation  
Former CEO, Fourth Swedish National Pension Fund,  
co-founder Portfolio Decarbonization Coalition

# Executive summary

Julien Leyre, Global Challenges Foundation.

**T**his report brings together a set of diverse perspectives from independent thinkers on implementing changes to global governance. This Quarterly Report is also designed for those who have answered the Global Challenges Foundation call to explore and articulate new models for governing those risks. It provides background on ideas and reflections about some of the key challenges encountered when re-thinking global cooperation – whether cognitively, rationally, historically or otherwise. The report in no way seeks to lay out a prescriptive path on what reforms should be prioritized, nor prescribe how decision-making systems should work. Rather, this issue of our Quarterly Report invites its readers to consider looking back over elements of our collective wisdom that may help us re-imagine our future.

**The report opens** with two pieces reflecting on our current historical moment and the dangers that it holds. In “From ashes to ashes? Learning from the past to protect the future”, David Held & Kyle McNally from Durham University take us back to the birth of the United Nations. After the terrible destructions of the Second World War, the nations of the world came together and developed a new global governance system designed to provide lasting peace. Recent political developments, however, show signs of a return to the tremors of the past: ineffective institutions, growing xenophobia, and the rise of authoritarianism. Our individual fate may be no more than ashes to ashes, but societies can and must learn from the lessons of history – their future depends on it.

**The second contribution**, by Professor Yang Yao from Beijing University, focuses more directly on a major recent geopolitical shift: the simultaneous retreat of the United States from global governance leadership and the rise of China as champion of the globalized world. Growing protectionism in the US, withdrawal from trade agreements, and appointment of anti-China figures in key cabinet positions signal danger for the bilateral relationship, and beyond, for our entire international economic system. Further degradation of the relationship between those two

powers is one of the major risks facing the world in the coming years.

**The second part of the report** looks into more details at the challenges and opportunities of implementing change in global governance, under three main angles: the role of the United Nations, practical tactics for systemic change, and new governance models called for by new technologies.

**The Honorable Kevin Rudd**, 26th Prime Minister of Australia and current President of the Asia Society Policy Institute, opens this section of the report. His piece, “Multilateralism in the age of uncertainty”, directly draws on his experience as chair of the Independent Commission on Multilateralism, which conducted a wide consultation of UN members over 2014-2016 to develop a practical reform agenda. On the basis of this consultation, ten core principles were identified to lead the reform of the United Nations. These include greater importance given to prevention and delivery, simplification of senior management, better partnership between government and non-government entities, and priority for women and young people. Renewed commitment from member States, along the lines proposed above, should then be cemented at a new San Francisco conference commemorating the 75 years of the UN.

**The second piece in this section**, “Institutional innovation: what alternatives to top down design?”, invites us to look at the question from the angle of institutional theory. Reflecting on lessons learned from the reforms of the former socialist world, Katharina Pistor, Professor of Law with Columbia University, articulates potential alternatives to top down design in reforms of global governance. Institutions have been defined as the ‘rules of the game’ that we choose to play by. Institutional change by design typically fails to deliver on its promises: institutions taken from one context rarely work when transplanted to another. However, there are alternative solutions. Existing sources of authority, whose actions already serve as coordinating devices, can become leading agents of change. In addition, change institutions, developed on the model of existing parallel decision-making structures, can

bring about transformation by modifying access and participation rules.

**In “Overcoming our tribalistic nature”,** Daniel L. Shapiro, Founder and Director of the Harvard International Negotiation Program, considers the question of global collaboration from the angle of social psychology. What are the psychological obstacles to global collaboration? Competition for scarce resources can easily trigger tribalism, resulting in a mindset that pits one group against the other. To resist this, we must find ways of developing a ‘communal mindset’ on a global scale: a mindset that embraces diverse perspectives and favors collaborative problem-solving.

**Howon Jeong,** Professor of Conflict Analysis and Resolution at George Mason University, explores the implications of game theory for the design of international agreements in “Collective actions for global public good: toward self-enforcing agreements”. In the absence of efficient external enforcement structures, treaties protecting global public goods may not result in any significant change unless they become self-enforcing. If we want individual agents to make decisions resulting in the best possible outcome, the right incentive structures

are required. The mechanisms that govern decision-making should be designed to make compliance attractive and dissuade evasion, thus ensuring positive outcomes for all.

**What happens when** new technologies lead to new global risks, but no governance systems or structures are in place to address those? Janos Pasztor, Executive Director of the Carnegie Climate Geoengineering Governance Initiative, explores this question in the final piece, “Toward governance frameworks for climate geoengineering”. Climate geoengineering, or the use of large scale methods to control the temperature of the atmosphere, could give humanity much needed breathing space to face the dangers of climate change. But the deployment of geoengineering interventions raises many questions – including what criteria to use when balancing local and global impacts, how to mitigate the risks of unilateral interventions, or how to account for the possibility of major geopolitical changes in the future. To avoid the potentially dreadful consequences of poorly-made decisions, new frameworks must be developed. In turn, the development of these new models opens a space to more broadly rethink the shape of global frameworks for climate governance – and aligns closely with the goals of the Global Challenges New Shape competition.

# 1.1. From ashes to ashes? Learning from the past to protect the future

David Held, Professor of Politics and International Relations, Durham University.  
Kyle McNally, Research Fellow, Global Policy Institute, Durham University.

What can we learn by returning to the beginnings of the United Nations? After the atrocities of the Second World War, nations came together to create a new global governance system designed to provide lasting peace. As signs of growing fragmentation increase today, it is time to reconsider the founding moments and inspiration of our contemporary world order, so that the lessons of history will not be forgotten.

**T**he 1930's saw the rise of xenophobia and nationalism in the context of a prolonged and protracted economic downturn, the lingering impact of World War I, weak international institutions and a desperate search for scapegoats. The 2010's has notable parallels: the protracted fallout of the global financial crisis, ineffective regional and international institutions, and a growing xenophobic discourse that places virtually all blame for every problem on some form of Other. The path to authoritarianism can be set by a dangerous drift in world order, the perception that the world is spinning out of control, and a search for decisive solutions from 'strong man' leaders offering to build protective walls and to retreat to the familiar. We see such trends across many different kinds of countries today, from Brexit Britain to Trump's America, Duterte's Philippines, Putin's Russia, Modi's India, and Erdogan's Turkey. Are we forgetting all the lessons of the 1930's and early 1940's?

The rise of fascism and Nazism that swept across Europe in the 1930's brought with it multiple new forms of discrimination and hatred, and a horrific new form of industrial killing focused on Jews, political dissidents, and many minority groups. The war, when it came, was calamitous not just

for Europe, but for the world at large. The death and destruction was of a scale nearly impossible to comprehend, leaving Europe devastated and much of East Asia traumatised. The Japanese invasions of China and Southeast Asia were marked by a trail of brutality, as was the march of Stalin's armies through the "bloodlands" between Moscow and Berlin. Allied forces also pushed, if not burst, the boundaries of violence; for example, in the fire-bombing of Dresden and Tokyo, and in the first use of nuclear weapons in Hiroshima and Nagasaki. In these cities, men and women were going to work, children were playing and, as Barbara Kingsolver wrote, "more human beings died at once than anyone thought possible". World War II brought humanity to the edge of the abyss, but not for the first time in twentieth-century history.

**The politicians** who gathered from 45 countries in San Francisco in 1945 were faced with the choice of either allowing the world to drift in the aftermath of the shock of the war, or to begin a process of rebuilding the foundations of the international community. Addressing the gathering of leaders, US President Harry Truman warned that the world was at a crossroads:

“You members of this Conference are to be the architects of a better world. In your hands rests our future. By your labors at this Conference, we shall know if suffering humanity is to achieve a just and lasting peace... With ever increasing brutality and destruction, modern warfare, if unchecked, would ultimately crush all civilization. We still have a choice between the alternatives: the continuation of international chaos, or the establishment of a world organization for the enforcement of peace.” (Address to the United Nations Conference in San Francisco, 25 April 1945)

**At the heart** of the post-war security arrangements was, of course, the newly formed United Nations and along with it the development of a new legal and institutional framework for the maintenance of peace and security. Article I of the UN Charter explicitly states that the purpose of the UN is to “maintain international peace and security and to that end: to take effective collective measures for the prevention and removal of threats to peace”. Moreover, Article I goes on to stress that peace would be sought and protected through principles of international law. It concludes with the position that the UN is to be “a centre for harmonizing the actions of nations in the attainment of these common ends”.

The titanic struggles of World War I and World War II led to a growing acknowledgment that the nature and process of global governance would have to change if the most extreme forms of violence against humanity were to be outlawed, and the growing interconnectedness and interdependence of all nations recognised. Slowly, the subject, scope and very sources of international law were all called into question. The image of international regulation projected by the UN Charter and related documents was one of “states still jealously sovereign” but now linked together in a “myriad of relations”. States would be under pressure to resolve disagreements by peaceful means and according to legal criteria, subject in principle to tight restrictions on the resort to force, and constrained to observe “certain standards” with regard to the treatment of all persons in their territory, including their own citizens.

**The creation of the UN** was a watershed in the institutionalisation of world order. However, it would be wrong to ascribe a big bang theory of development to the creation of the UN system. It did not grow in a vacuum or without precedent. Indeed, there is a long and rich history of institutionalised relations between states. This tradition stretches at least as far

back as the Treaty of Westphalia, in the European context, and includes the Concert of Europe, the Hague Conferences and the League of Nations, which, despite all its weaknesses, had set out to create a community of like-minded nations, cooperating fully with each other and settling their differences under law. The fatal flaw of the League was its lack of enforcement capability and buy-in from world powers. In this, there are notable similarities with the UN, as the latter was compromised, almost from its inception, by the Cold War – the ideological and geopolitical tensions that would shape the world for almost fifty years.

These tensions stemmed from the political, economic, and military rivalry between the Soviet Union and the United States, each bolstered by their respective allies. However, this standoff facilitated, somewhat paradoxically, a deepening of interdependence among world powers. It is difficult to imagine a more immediate form of interdependence than Mutually Assured Destruction (MAD). Once the world reached a point at which a small group of decision-makers could release weapons that could, literally, obliterate the rest of the world, it created a new recognition of shared vulnerability. This awareness demanded greater coordination among world powers. Thus, the nuclear standoff of the Cold War drew world powers closer together as a way to mitigate the threat and ensure that military posturing did not escalate into all-out nuclear confrontation.

Thus, despite all its complexities and risks, and in contrast to the past failures of the League of Nations, the post-Second World War UN system, including weapons of mass destruction and the threat of MAD, facilitated a new form of governed globalisation that contributed to relative peace and prosperity across the world over several decades. The importance of this should not be underestimated. The period was marked by peace between the great powers, although there were, of course, many proxy wars fought out in the Global South. This relative stability created the conditions for what now can be regarded as an unprecedented period of prosperity that characterised the 1950’s onward. While the economic record of the post-war years varies by country and by region, many experienced significant economic growth and living standards rose rapidly across several parts of the world. By the late 1980’s a variety of East Asian countries were beginning to grow at an unprecedented speed, and by the late 1990’s countries such as China, India and Brazil had gained significant economic momentum, a process that continues to

this day (although Brazil is faltering now).

**But what has worked so well** for a long time is working less well now. The economic and political shifts in large part attributable to the successes of the post-war multilateral order are now among the factors grinding that system into deadlock. As a result of the huge gains from global cooperation in the post-war order, human interconnectedness weighs much more heavily on politics than it did in 1945. What happens in one corner of the globe can quickly ricochet across borders and boundaries to affect many others, thousands of miles away. Accordingly, we live in a world of overlapping communities of fate where the need for international cooperation has never been higher. Yet, the ‘supply’ side of the equation, effective institutionalised multilateral cooperation, has stalled. From issues such as nuclear disarmament, to the containment of small arms, prevention of terrorism, global economic imbalances and instability, and climate change, effective global cooperation is now in short supply. Among the threats facing the world today are some that are existential in nature: climate change risks the very future of humanity, sustained wars in some countries have erased and displaced entire generations of people, while the rapid rise of migration, in the hands of those that stress only its negative effects, is destabilising many societies.

To many, globalisation is not only unmanaged today, but out of control. It is against this background that we see shades of the 1930’s and pre-World War II political dilemmas. Great powers are retreating from the multilateral order, and replacing principles of cooperation with isolationism and wall-building. Protectionism is on the rise, as is xenophobia across large swathes of the West. A populist brand of national politics has taken hold and feeds a resurgence of authoritarianism, which all too easily breaches fundamental aspects of the rule of law – from Hungary to the United States. A new generation of demagogues appears to be in the making and have risen to power in several countries. In the US, Trump is openly hostile to all of the institutional structures established after World War II, as are all of his surrogates and appointees. In Britain, Farage and others have championed Brexit while Prime Minister May walks (quite literally) hand in hand with Trump and celebrates the UK’s independence from Europe. Many other political leaders across the world echo these sentiments.

**The UN and the EU** were built on the ashes of the first half of the 20th century. Turning our back on these

institutions and the lessons of Nazism, Fascism and Stalinism brings us back to the risks of that period. It is only too easy to imagine that humankind will meet with calamity again in the years ahead. Hence, it is no longer business as usual. We have to struggle to protect what is important in our institutional heritage and fight to deepen the hold of its core principles on our everyday lives, from our local communities to our great international institutions. Of course, any alternative approach will not be easy to follow. Every element of this project needs further articulation and a new generation of activists and champions.

While individual lives follow the trajectory of ashes to ashes, communities and institutions do not. Each generation has learnt from the past in order to further nurture and protect its own achievements. If we no longer learn from the past, or openly threaten it, we weaken our hold on the future.

## DAVID HELD

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## KYLE MCNALLY

Kyle McNally is a Research Fellow in the Global Policy Institute at Durham University. He writes regularly for a number of online outlets including openDemocracy, Social Europe, Global Policy Journal, and Duck of Minerva. Kyle also works as an independent consultant for a number of international organizations. Prior to his academic career he was a Congressional Aide in the U.S. House of Representatives.

# 1.2. Sino-American relations under the Trump administration and implications for global governance

Yang Yao, Dean, National School of Development, Beijing University & Director, China Center for Economic Research.

As the US retreats from global governance under President Trump, will China be able to peacefully take its place as the leading champion of a globalized world? Rising protectionism in the US, withdrawal from trade agreements, and appointment of anti-China figures in key cabinet positions signal danger for the bilateral relationship, and beyond, for the entire international economic system.

**T**he victory of Donald Trump in the recent American election has sent shockwaves to the world as well as within the United States. While many Americans still need time to digest his victory, the world has already felt the impact of his moves to achieve his dream of “America First”. Unlike many of his predecessors who often forgot about their campaign promises, President Trump is very serious about them: he is turning his anti-globalization campaign rhetoric into concrete policies. This turn in the United States will not only slow down the process of global economic integration, but also affect global governance systems that have already become more tenuous as a multi-polar world emerges.

**President Trump** is determined to avert President Obama’s attempts to enhance American leadership in global governance. By far, his most audacious

move is to withdraw from the Trans-Pacific Partnership (TPP), a treaty that President Obama spearheaded to conclude with eleven other countries along the Pacific Rim. The TPP is not just a trade agreement. Indeed, most studies have found that its impacts on American trade will be minimal. It is closer to a pact aiming to unify the regulatory frameworks of member countries according to American standards. From this perspective, it is a one-sided agreement benefiting American companies. President Trump’s withdrawal can be interpreted as a gesture signifying the rejection of multilateral mechanisms as a way to advance American interests – unless it was based on a false reading of the TPP and its meaning. For the same reason, President Trump will not invest any effort to progress trade negotiations within the framework of the World Trade Organization. He is definitely not a pro-environment president, and there is no hope

that he will push forward the Paris Agreement.

It just so happens that President Trump's retreat from global governance is met by China's ambition to move to the central stage of world affairs. The clash between the two countries is likely to happen not on the stage of global governance, but rather on the bilateral front.

**Some analysts believe** that the United States' withdrawal from the TPP is good news for China because, after all, the TPP was widely believed to be part of America's "Pivot to Asia" strategy – a strategic geopolitical shift of attention and resources towards Asia, with an implicit goal to hedge on China. However, this belief is premature. President Trump has been determined to promote "America First" using bilateral frameworks. China is a clear target in this plan. Of America's 500+ billion dollars trade deficit, more than 40 percent is from trade with China. Despite a vivid debate as to whether knowledge-based technological progress is responsible for job reductions in the United States, recent studies by economists demonstrate that American job losses have been more severe in sectors where the country receives more imports from China. President Trump firmly believes that those lost jobs could come back to the United States if imports from China are reduced. In particular, he has repeatedly accused China of overtaking the United States by deliberately manipulating the value of its currency. Despite his reassuring words about the status of Taiwan in a belated phone call with the Chinese president, President Trump still vowed to "level the playfield" between the United States and China in a recent press conference with the Japanese prime minister. Indeed, the US Department of Commerce has already announced a 75 percent anti-dumping tariff on certain Chinese steel products.

**Looking at some** of the key appointments in President Trump's cabinet, one has reasons to worry that this is just the beginning of a trade war between the two countries. The appointment of Peter Navarro as head of the newly created National Trade Council and Robert Lighthizer as the US trade representative should particularly worry the Chinese. Famous for his book *Death by China*, Navarro firmly believes that American trade with China hurts Americans. Lighthizer is a veteran lawyer representing the American steel industry and vehemently opposed China's accession to the World Trade Organization. With those two gentlemen in the two most important positions handling American trade policy, it would

be a blessing if the Sino-American trade relations did not deteriorate.

China has geared up its effort to build new multilateral mechanisms for global governance. The Asian Infrastructure Investment Bank is one of the examples. Will the retreat of the United States under the Trump administration accelerate this process? The Chinese president Xi Jinping sent a strong signal to the world in his 2017 Davos speech that China firmly defends economic globalization. His pledge reflected the fact that China has been the largest beneficiary of globalization in the last two decades.

The question is, amidst strong anti-globalization sentiments in the United States and Europe, is China able to defend globalization by its own efforts? The answer is probably negative, not just because China does not have the right amount of capacity, but also because the current global governing institutions still heavily rely on the support of the United States and Europe. Now, the prospect that the United States and China might be starting a tit-for-tat trade war will make things even worse. China may invest more into new multilateral mechanisms, partly as a response to America's aggression to punish China, partly as a move to fill the vacuum left by America's retreat from global governance. The worst scenario is one where two parallel systems are created, one of them dominated by the United States and the other dominated by China. The two countries have already become geo-political rivals in the Pacific; the world cannot afford to see the two largest economies entering a race to dominate global economic governance. This is one of the biggest global risks that the world has to watch out for in the next four years.

## YANG YAO

Yang Yao is a Cheung-Kong Scholar Chair Professor at the National School of Development (NSD), Beijing University. He is currently the dean of NSD and the director of the China Center for Economic Research. He is a member of the China Finance 40 Forum. His research interests include economic transition and development in China. He has published widely in domestic and international academic journals as well as several books on institutional economics and economic development in China. He is also a prolific writer for magazines and newspapers, including the Financial Times and Project Syndicate.

# 2.1. Multilateralism in the age of uncertainty: ten practical steps to reform the UN

The Hon. Kevin Rudd, President, Asia Society Policy Institute; 26th Prime Minister of Australia.

In a period of large-scale international transformation, is the United Nations able to help resolve the current and emerging challenges of the twenty-first century? Ten core principles should guide practical reform of the UN to ensure it remains relevant and a core part of the global order.

**W**e are living through a period of great and rapid change in international relations. Underpinning this change is a deep feeling of uncertainty and pessimism. The world as we knew it at the beginning of 2016 is completely different to where we find ourselves in 2017.

Many ask whether the global institutions that were formed after the carnage of the Second World War are ‘fit for purpose’, and indeed whether they will survive at all. And is the United Nations, at the core of these post-war multilateral institutions, able to help resolve the current and emerging challenges of the twenty-first century? The answer must be yes – but not without practical reform, beginning now.

The reform of such a vital institution is easier said than done. The United Nations is an enormously complex organization with obvious flaws. And Secretary-General Guterres has many urgent challenges ahead of him, the most immediate being how to retain US engagement and funding of the UN under the Trump Administration. But those of us who care about the future of the UN must remain firmly focused on making sure it remains an integral part of modern global life, not an artefact of a distant age.

In order to achieve this we must undertake a comprehensive reform program. The Independent

Commission on Multilateralism, which I chaired, consulted member states widely from 2014-16 to develop a practical reform agenda that could be accepted, rejected, or modified by the Secretary-General and member states as they chose. The report proposes ten principles to guide practical reform of the UN. A further 55 specific recommendations can be found in the ICM’s full report. The core ten principles follow.

**First, the UN should introduce** a comprehensive doctrine of prevention across the entire system. This echoes the agenda of Secretary-General Guterres, who has stated that his top three priorities in office are “prevention, prevention, prevention.” The UN can’t simply be a reactive organisation; prevention must be embedded in the organization’s leadership structure, culture and resources.

**Second, the UN needs** a new, comprehensive doctrine of delivery. There is a real danger that reports, high-level panels and even reform commissions become a substitute for practical, measurable, accountable on-the-ground action. UN staff must be rewarded for results delivered, not by the number of reports authored or panels convened.

**Third, the UN needs** to produce a new ‘Agenda for Sustainable Peace, Security and Development’ that integrates all of the UN’s work into an agenda that recognizes the profound inter-connections between the three pillars of the UN’s mission: peace and security, sustainable development, and humanitarian support. This would help align the UN’s peace and security functions with its sustainable development and climate change agendas, and go some way to break down institutional silos.

**Fourth, UN field operations** need to be prioritised over activity at headquarters. There should also be an integrated ‘Team UN’ in the field. Under Secretary-General Ban, the UN made inroads in this area. But there is more to do. The UN should move to fully-integrated, multi-disciplinary teams in the field, guided by common mandates and under the leadership of an empowered Director of UN Operations in each country.

**Fifth, the UN needs** a senior management team with a maximum of ten individuals. At the moment, the Secretary-General has 43 direct reports from across the UN Secretariat, funds, programs and specialized agencies. This balloons to nearly 100 if Special Envoys are included. Reducing this number to 10 would allow much more focused lines of reporting, and in turn, a more effective and efficient management structure.

**Sixth, a single UN official** must be responsible for the delivery of the Sustainable Development Goals (SDGs) within the UN system. The 17 SDGs and 169 targets within them won’t be met without specific institutional changes. And an integral part of this must involve harnessing private sector investment. We know that global public finance is not a realistic way to meet the multi-trillion-dollar price tag of the SDGs.

**Seventh, given the UN** has limits on what it can do, we need a more formal global compact between the government and non-government sectors, so that joint assessments can be made and practical efforts coordinated. There also need to be agreed measures of success for periodic evaluation. These partnerships should be joined-up across the highest levels of UN management, cutting across traditional silos.

**Eighth, women must be** at the center of the totality of the UN agenda, not just in discrete parts of it.

Women make up half the world, but receive far less than half the world’s resources and opportunities. This must change, and a first step is to mainstream gender equality across the UN system.

**Ninth, a new formal platform** for global youth is needed within the UN system, recognizing the explosion of structural youth unemployment across many parts of the world. The three billion people under 25 can’t be an afterthought; they should be heard in the corridors of power.

**Finally, UN member states** should reaffirm their commitment to multilateralism at a Second San Francisco Conference in 2020, celebrating the 75th anniversary of the UN. This would help underscore the advantages the multilateral system delivers to its member states. It is not simply a burden to be borne.

**Having outlined these practical steps**, there is the question of how rapidly they can be implemented. The answer to this lies not only with the UN itself, but with its constituent member states. Change can happen. It is another matter entirely whether it will. It must also be noted that these reform proposals aren’t static. They should be part of an active process of the UN’s continual reinvention. This is the only way the UN can keep up with the pace of global change.

If we do not reform the UN as a matter of urgency, we risk the established liberal order slipping even further into disorder and possibly conflict. That tragic end is one that we must all work to avoid.

### KEVIN RUDD

The Honorable Kevin Rudd served as Australia’s 26th Prime Minister (2007-2010, 2013) and as Foreign Minister (2010-2012). Mr Rudd joined the Asia Society Policy Institute as its inaugural President in January 2015. From 2014-16 he was Chair of the Independent Commission on Multilateralism, where he led a major review of the United Nations system.

## 2.2. Institutional innovation: what alternatives to top down design?

Katharina Pistor, Michael I. Sovern Professor of Law, Columbia Law School.

What are possible alternatives to top down reform that may result in lasting positive change of our global governance institutions? Grand design projects rarely deliver on their promises, but there are other options. Existing authorities could act as change agents, and selected change institutions, by offering different rules for participation in decision making, could open pathways to a better future.

Institutions have been called the ‘rules of the game’ that humans give themselves to coordinate and constrain their actions. They come in different flavors, formal and informal, private and public, highly specific and scalable. This descriptive account of institutions does not explain where they come from and how institutional change can be instigated. Yet, these are the critical questions for anyone attempting major reforms with the purpose of changing collective behavior. The bigger the quest for change, the greater the temptation to resort to grand design. Unfortunately, grand designs have rarely delivered what they promised.

The debate about the pros and cons of sweeping top down reforms vs. incremental bottom up change went viral during the early stages of transition in the former socialist world. Radical reformers urged for speed and the wholesale adoption of institutions that were compatible with a market economy. Gradualists warned that such reforms would remain at the surface and not result in lasting change. Students of comparative history argued that the combination of pre-existing conditions and the choice of strategy would invariably produce outcomes different from the ideals pursued, possibly caricatures, even mutants.

**In the field of comparative law**, a similar debate has been waged under the headline of “legal

transplants”. The same formal laws that work in one country often have little effect when transplanted into foreign countries. Sometimes they bring about minor irritations before being absorbed into existing practices; at others, they are resented and circumvented wherever possible. Not infrequently, well meant reforms are captured by existing power wielders who subvert them to serve their own interests.

The legal transplant effect can be observed in common law and civil law jurisdictions alike. There is, however, an important difference between the two regimes: the codified civil law system creates the appearance that it is easily transplantable simply by enacting an identical code elsewhere. And yet, the civil codes are codifications of existing practices and well-known legal principles in their countries of origin. When transplanted to another setting, they fail as a guide of behavior for populations or groups with different values, customs and habits. The common law travels even less well. It has to be codified prior to transplant, thereby altering its very nature, or courts and judges trained in the common law have to be transplanted along with the law.

Historical and comparative evidence seems to indicate that grand design has only rarely brought about lasting change. There is a simple reason for this difficulty: when it comes to human behavior, it is impossible to start from a blank slate. Humans are

social creatures that follow the rules of the game they know. They are reluctant to give up what works for them in light of the conditions they face (and likely sanctions for deviant behavior), especially if the new rules are untested. After all, institutions are meant to coordinate the expectations of the many, not the few, and unless first-movers can be assured that others will follow, they will not make the leap.

**Is change therefore impossible?** Will humans necessarily stick to a given institutional path even if, as in the case of climate change, they collectively and knowingly approach the abyss? Not necessarily. Change can be brought about by ‘change agents’ or by ‘change institutions’.

The most important change agents are existing authorities whose actions already serve as a coordination device. The legitimacy of an authority, however, cannot be commandeered: it must be earned and can be lost. Today’s faith in a given authority (the leader of a country, a political party, a religion, or judges of the highest courts) may dissipate tomorrow. Not even the most powerful state can hold an entire people at gun point for too long, and no legal system has resources sufficient to ensure that law breaking on a massive scale will be effectively sanctioned. The fear of losing followers thus ties the hands of incumbent authorities. Revolutionaries often employ violence to affect regime change. They often have to rely on brute force for extended periods, lest anarchy takes precedence over regime change or the system regresses into its previous self.

**Like other institutions,** ‘change institutions’ establish the rules of the game, but they do so with a twist. They do not seek to determine behavioral outcomes, but are process oriented. They set forth who should participate, what counts as a decision, and the procedures that shall be followed for implementing the decisions that have been taken. Change institutions are most effective within existing rules of the game. They do not openly challenge existing norms and they piggy back on available enforcement mechanisms. By changing access and participation rules, they can change (or subvert) the system from within.

**Two examples may help** illustrate the power of change institutions: the English courts of Chancery, and arbitral tribunals. Both are parallel systems for resolving similar disputes within a given legal order, but under different adjudicators and with different decision making rules. Both institutions openly

compete with state courts by offering special rewards (equitable outcome, speed, secrecy, expertise) to those who opt into their regime, and their rulings are enforceable on the same terms as court rulings. In fact, rulings by foreign and international arbitral tribunals are more likely to be enforced than foreign court rulings, if only because there is an international convention that compels countries to do so, and there is not comparable convention for courts.

Powerful global actors, also dubbed the ‘new global rulers’, have used similar strategies for altering the rules of the game in countries where they wish to do business. They have created parallel decision making processes and dispute resolution mechanisms that insert themselves at critical junctures into existing institutional practices, whether legislative and regulatory processes, or law enforcement. Similar strategies could and arguably should be pursued for protecting global public goods, such as our climate. The trick is to infiltrate the existing rules of the game, not to invent a new scheme from scratch.

## KATHARINA PISTOR

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## 2.3. Collective actions for global public good: toward self-enforcing agreements

Howon Jeong, Professor of Conflict Analysis and Resolution, George Mason University, & Senior Editor, *International Journal of Peace Studies*.

What kind of incentive structure will increase the chances that individual agents make decisions resulting in the best possible outcome for all? In the absence of efficient external enforcement structures, future treaties protecting global public goods will need to be self-enforcing: the mechanisms that govern decision-making should be designed to make compliance attractive and dissuade evasion.

**A**s unregulated human activities accelerate environmental exploitation and pollution, our global ecosystem is rapidly degrading. This could continue until exploitation leads to complete environmental collapse, and virtually no benefit can be produced any more. The fate of humanity depends on collective choices about our environment, from the control of air pollution to the preservation of the rainforests. Cooperation is necessary to avoid the overexploitation of our ecological system as well as ensure climate control.

Unfortunately, collaborative action towards collective benefits can often come into conflict with personal interest: the most profitable choice for an individual does not always produce the best outcome for a community.

**Fisheries provide a clear example.** Many experts warn that global fish stocks will collapse soon if every commercial fishing boat works continuously at maximum capacity in international waters. Yet although it is in the collective interest that everyone

reduces the amount that they fish, in the absence of certainty regarding the behavior of others, it is in an individual agent's best interest to overfish.

The expression 'tragedy of the commons' describes such a situation, where the pursuit of self-interest by each agent produces an inferior outcome for all. This type of situation challenges a major tenant of neoclassical economics that links independent pursuit of self-interests to economically efficient outcomes, and presents a bleak prospect for the future of humanity.

We would all be better off cooperating to preserve the health of the global commons, particularly our global environment. If we want this to happen, the mechanisms that determine how individual choices are made in collective settings are of the greatest importance.

**Reducing global carbon emissions** is optimal for collective good. The Paris Climate Agreement ratified by major polluters last year presents future action plans, but their effectiveness hinges on voluntary

control of carbon pollution. Commitment to carbon emission reduction from states remains to be proven, and no mechanism in the current agreements guarantees serious participation. The treaty lacks any enforceable measures for emission control and includes no specific time frame. From the start, there is no mechanism for setting a mandatory target, and if a set target is not met, there is no penalty or fiscal sanctions, whether a carbon tax or other disadvantages.

In the absence of any binding mechanism to measure and control emission gases, the effectiveness of the Paris treaty is in doubt. It is especially so given the potential costs involved to support actions for emission reductions, such as subsidies for transition to a fossil fuel free economy.

The choices of individual actors will affect whether the Paris Climate Treaty succeeds or fails. What is required to increase the chances of a positive outcome? Part of the answer can be provided by game theory, which helps understand the conditions for the production of a collective good that benefits all.

**The situation we describe** is one where collective benefit occurs only when a sufficient number of participants commit to certain actions. Participants have to voluntarily pay a certain cost in order to produce a benefit that will be shared by all, regardless of individual efforts. In this case, the effectiveness of the Paris agreement depends on the number of actors seriously committed to climate control, but the benefit of a stable climate will not be denied to those who do not share in any of the costs.

This situation creates an incentive for some to simply evade their share of contribution – what economists call a free ride option. The possibility of such a free ride encourages non-cooperative behavior that produces a less desirable outcome for all.

This is especially true when the number of free riders begins to grow. In terms of individual cost-benefit analysis, ‘rational’ players will prefer to benefit at no cost from a collective good created by others who bear the associated costs. However, that public good is available only when a sufficient number of actors choose to contribute efforts. Those who prefer to commit therefore face the following dilemma: when fewer actors than required contribute efforts, no one gets anything. The contributors only bear costs, since the overall level of collective efforts is too low for a benefit to be created.

As long as the number of committed actors is below a certain threshold, it is economically rational to contribute nothing. When everyone pollutes, a few

committed actors have no impact on the outcome. But as we approach a tipping point, the choices of non-contributors make a huge difference. Near the tipping point, the switch of just one actor towards contribution can lead to the production of a collective good that benefits all. By no longer evading their responsibilities, additional contributors improve their own welfare as well as others’. However, the reverse is true: if a contributor chooses to shirk their responsibility near the tipping point, the increase in the number of defectors can gradually quicken gravitation towards universal defection.

**The future welfare of humanity** on the planet thus depends on the existence of an adequate number of actors seriously committed to the control of emission gas production.

In a collective decision-making setting, such as we the one that characterizes current climate negotiations, the way that individual actions add up to produce a particular outcome is of crucial importance. This outcome is determined by the number of participants who take the same action, whether they choose cooperation towards a collective good to be shared with others, or defection for their own selfish gain. To that end, future negotiations on climate change must include discussions on effective incentive mechanisms as well as penalties to violators, so that agreements can become self-enforcing.

The major premise of many international agreements is that they cannot be easily enforced. They are built on consensus, allowing a participating state to reject any part of the negotiated outcomes that is unfavorable to them. Moreover, there is no assurance that these agreements will be respected, even after each country signs them. In the absence of any enforcement mechanism, it is therefore important to design self-enforcing agreements in the first place.

An international agreement becomes self-enforcing when incentives exist to adhere to it. The future success of global climate control depends on an effective strategy to move a sufficient number of non-committers towards anti-pollution measures through adequate incentive structures. No effective global strategy can emerge as long as a large number of non-committers believe that the cost of acting to protect the environment outweighs expected benefit.

A first step is to provide direct benefits to some of the participants. For instance, contribution to the creation of a collective good can be linked to something of value to that actor. This could be

transfer of resources and new cleaner technologies to the developing world, or a trading mechanism that allows developing countries to sell their emission rights to industries in developed countries, with income redistribution effects.

In addition, support for an agreement may be contingent upon special compensation for those who have to share a larger burden. Preserving rainforests represents a case of ‘voluntary dilemma’. Some countries with large areas of rainforest have to be willing to sacrifice their economic interests for the benefit of others on the planet. The types and levels of compensation for their actions have to be negotiated at a multilateral level. Debt relief, technology assistance or other forms of aid are often offered as part of positive redistribution measures or cost mitigation for reluctant actors in such scenarios.

In order to make cooperation become a reasonable choice, the payoffs for a free rider should become unprofitable. One way of altering the status quo is to preclude free riders from benefit. Though free riders cannot be excluded from the general benefits of a stable climate, non-cooperators could be excluded from other benefits such as the transfer of technology and financial aid as well as access to international markets. This has been a major feature of multilateral

treaties on the protection of endangered species and the protection of the ozone layer.

**In current climate change negotiations**, there are two main opposing positions represented by pro-agreement states and veto states. Their opposition spans across cost sharing and control methods. To move out of an asymmetric deadlock, it is essential that the coalition against environmental pollution is able to successfully manipulate the preferences of veto states. For this, the pro-agreement coalition may have to offer something attractive to a member of the veto coalition, or it should have an ability to sanction non-cooperators. Failing this, it will be difficult to establish a strict climate control agreement, due to the limited ability of the pro-agreement side to lower the payoffs of the anti-agreement coalition.

In the end, the possibility to find a mutually acceptable solution will depend not only on the recognition of converging interests, but also on the development of a formula to bridge the gap between opposing interests. Developing incentive structures that increase the rationality of collectively beneficial choices and embedding them in all international agreements on climate preservation is an effort that should be given the highest priority today.

### HOWON JEONG

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# 2.4. Overcoming our tribalistic nature

Daniel L. Shapiro, Founder and Director, Harvard International Negotiation Program, Harvard University.

What are the psychological obstacles to global collaboration? Competition for scarce resources can easily trigger tribalism, resulting in a mindset that pits one group against the other. To resist this, we must find ways of developing a ‘communal mindset’ instead on a global scale, a mindset that embraces diverse perspectives and favors collaborative problem-solving.

**H**umanity is facing unprecedented risks to its very survival, ranging from climate change to nuclear terrorism. Such problems require global cooperation: if everyone works together, these issues can be effectively tackled. Yet there are inherent challenges to global cooperation, and every lost day of joint work results in increased risk of catastrophe.

Why is it so difficult for nation-states and other stakeholders to work together on global problems of mutual concern? On a rational level, there is a shared interest in collaborating to improve the environment, enhance security, and promote physical and mental well-being. But competition for resources, prestige, power, and information can pit stakeholders against one another, producing a dangerous mindset that I call the *tribes effect*. The moment a group feels threatened, they enter into this mindset and start to see the conflict in adversarial terms: it becomes us versus them, and innovative solutions for mutual gain are replaced by myopic policies that satisfy one tribe over another. Each group argues that their perspective is right and legitimate – and closes their ears to the other’s perspective as they rally their own troops for battle.

**A powerful set** of emotional dynamics tend to lure us deeper and deeper into this tribal mindset. First, we get consumed in the vertigo-like frenzy of the conflict and lose sight of our broader purpose: is our

goal to win the debate or improve human welfare? Then, as the lines of division solidify, we reenact longstanding, counterproductive patterns of behavior to deal with the situation. This compulsion to repeat the past takes a familiar form: we dredge up historical grievances, interpret the other’s intentions as devious, and commit to the belief that their position will never change. Consequently, we execute an adversarial strategy and create the very enemy we feared.

To make matters worse, once this dynamics is at play, it becomes taboo for us to engage in constructive problem solving with the other side. Any such act is viewed as a betrayal of our tribe – and the punishment for such a breach can be severe.

The deepest forces of tribalism arise as we view the other’s rhetoric as an assault on what we hold as sacred. Nothing more intensely roils the fury of passion than a threat to our deepest beliefs and values. In fact, the savvy leader may intentionally invoke longstanding grievances into the contemporary political narrative to turn loose followers into tribal loyalists.

### **What would a potential way out**

look like? Whereas the tribes effect turns the nuances of conflict into a binary divide, a communal mindset opens up space for mutual understanding and creative problem solving. In this mindset, we aim to appreciate each other’s perspectives through an

intense process of listening, mutual learning, and interaction. There is no need to come to agreement on the “right” viewpoint. The goal is to find merit in each other’s perspective and thus establish a foundation for moving forward together.

This process is easier said than done, however. Consider the challenges inherent in creating an expanded system of global cooperation. While a federal government may cede some control to local units, what psychological factor would ever entice a nation-state to cede power to a system of global governance? The federal and local governments are likely to see each other as part of the same tribe – a sense of mutual loyalty pervades their relationship. But the nation-state may distrust the political intentions of non-citizens on a global governing body.

Social psychology offers a crucial insight to address this problem. We can emotionally attach to a global identity with as much fervor as to a national one. The core principle of identity formation remains the same: we imbue emotional significance to our membership in the group and commit loyalty to that

entity. In fact, there is no inherent tension in having every person on our planet identify as a citizen of the world, because the category of inclusion is so broad. Problems tend to emerge as more localized identities clash, whether between nations or neighborhoods. Mitigating such tension requires that our systems of global cooperation build a strong institutional sense of camaraderie while simultaneously ensuring that members feel sufficiently free to determine fundamental aspects of their provincial identity.

To enhance international cooperation around global challenges, we must remember that nothing holds greater meaning than human connection. A threat to our tribe can lure us toward adversarial behavior that may not serve our long-term, rational interests. The development of a strong global identity – one that does not threaten the local one – can stack the cards in favor of increased cooperation around the most perilous threats of our time.

## DANIEL L. SHAPIRO

Daniel L. Shapiro is a renowned expert on the psychology of conflict resolution. Named one of Harvard’s top 15 professors, he is founder and director of the Harvard International Negotiation Program and regularly advises everyone from hostage negotiators to families in crisis, disputing CEOs to clashing heads of state. He has launched successful conflict resolution initiatives in the Middle East, Europe, and East Asia, and developed a conflict management program that now reaches one million youth across more than twenty countries. He has contributed to a wide array of scholarly and popular publications, and is author of the bestselling book “Negotiating the Nonnegotiable: How to Resolve Your Most Emotionally Charged Conflicts.”

# 2.5. Toward governance frameworks for climate geoengineering

Janos Pasztor, Executive Director, Carnegie Climate Geoengineering Governance Initiative (C2G2).

What are the governance frameworks required to deploy geoengineering interventions in a fair manner? Climate geoengineering techniques could give humanity much needed breathing space to face the dangers of climate change, but their implementation raises many questions, and will require the development of new global governance mechanisms.

**C**limate geoengineering – large-scale, deliberate interventions in the Earth system to counteract climate change – has been the object of debate within the scientific community, but is still a new object of consideration within policy circles and in the public sphere. The potential deployment of climate geoengineering interventions raises many questions, including uncertainty regarding their effectiveness and indirect effects, as well as questions regarding the ethics of their use and their governance.

**Achieving the ambitious goals** of the Paris Agreement would require rates of mitigation far in excess of what has been achieved to date. A growing number of scientists and policymakers believe that actions beyond mitigation may be necessary to keep temperatures between 1.5-2°C above pre-industrial levels.

It is in this context that attention is turning towards a wide range of proposed geoengineering techniques to cool the planet. Such techniques are usually grouped into two categories: carbon dioxide removal techniques involve (as the name suggests) the removal of carbon dioxide from the atmosphere, while solar radiation management techniques involve reflecting a proportion of the sun's radiation back into space.

While the former techniques might act to directly address the cause of climate change, the latter could potentially provide a temporary solution to rising temperatures – a breathing space to undertake a radical decarbonization of the global economy. Ultimately, in order to achieve a stable climate, it will be necessary to achieve zero net emissions – reducing emissions significantly and counteracting any remaining emissions through carbon dioxide removal. Until we reach this point, policymakers may consider a combination of both sets of techniques as a means to avoid the worst effects of climate change.

**However, governance issues** arising out of the broad range of proposed geoengineering techniques, in particular solar radiation management, pose a range of challenges. There is currently no systematic, coherent set of global governance frameworks in place to guide further research, facilitate decision making and guide potential deployment. Governance, in this instance, goes beyond control and decision making, and includes the effective participation of those who would be affected and impacted, as well as their access to prior, relevant information.

Both carbon dioxide removal and solar radiation

techniques would have environmental and socio-economic impacts. A growing number of scientists believe that the aggregate risks of side-effects from climate geoengineering would be small in comparison to the reduction of climate risks. However, the distribution and severity of impacts would often be unequal, and often affect the most vulnerable. In addition, current scientific knowledge leaves a significant margin of uncertainty regarding the exact effects of climate engineering interventions, including their nature, scale and/or location. Deployment therefore raises issues regarding the criteria and, most importantly, the mechanisms used to make decisions about ways of balancing possible positive global impacts and negative regional or local impacts, including the need for potential compensation to affected populations.

**Another set of issues** relate to the dangers of unilateral interventions. There are plausible scenarios where a country or a group of countries unilaterally decide to move toward deployment of solar radiation management – with or without agreement from the international community.

In the absence of multilateral agreements there is a possibility that a small group of countries, a single country, a large company or indeed a wealthy individual might take unilateral action on climate geoengineering. This raises the possibility that those who do not like these actions and their impacts could engage in counter-climate-geoengineering. Clearly, it would be best to avoid such a chaotic and dangerous future. Climate geoengineering would require global governance frameworks, of which, at best, only some elements exist today. These frameworks would have to be developed in parallel to the technologies themselves.

**Within the current** global governance architecture, it would seem that, given its global impacts, only the UN General Assembly could give legitimacy to any governance framework guiding the potential deployment of climate geoengineering. Actual work, however, could be made more efficient by other measures. One option could be to undertake it within a professional international authority with a mandate from the UN General Assembly, similar to the way the international community addresses peacekeeping or nuclear proliferation. There is scope for the development of other and possibly better approaches involving all relevant stakeholders.

**The following questions** would need to be addressed in order to develop robust governance frameworks for geoengineering. Who would control the “global thermostat”? How would decisions be made to balance the need to reduce the global temperature with unequal regional and local impacts across the globe? How would trans-border and transgenerational ethical issues be addressed? How would decisions be made to balance the costs and benefits of traditional mitigation methods versus climate geoengineering? What would be the impacts in terms of local and global justice, and in terms of human rights, and how could those be addressed? How would the required governance frameworks withstand potentially substantial geopolitical changes over the decades and possibly centuries that they need to be deployed? How might such techniques be deployed in a manner that does not undermine the will to cut emissions? How would decisions relating to the profile of deployment – the rate of starting, continuing and stopping such techniques – be governed? This last issue is of particular concern with respect to proposed solar radiation management techniques, as a sudden cessation of deployment would result in a rapid rise in temperatures. The research community has addressed many of these issues, but the global policy community has not.

**To address this gap**, the recently initiated Carnegie Climate Geoengineering Governance Initiative (C2G2) aims to shift the debate from academia to policy, with the ultimate aim to encourage and catalyze intergovernmental action on the governance of climate geoengineering. C2G2 does not promote climate geoengineering, nor is it intrinsically against it. It assumes a plausible future where some combination of geoengineering techniques could well be used – and given current geopolitical developments, considers this might happen sooner rather than later. The initiative recognizes a huge gap in understanding among various actors regarding these technologies and impacts, as well as related governance requirements – requirements that would take considerable time to develop.

C2G2 will systematically work with intergovernmental organizations, international non-governmental organizations and other non-state actors, such as the private sector, think tanks and, of course, the scientific research community, as well as informally with government officials, to encourage and catalyze action related to the

## 2.5. TOWARD GOVERNANCE FRAMEWORKS FOR CLIMATE GEOENGINEERING

governance of climate geoengineering. While C2G2 will inevitably focus on geoengineering-specific governance options based on existing global governance frameworks, it will also be considering other governance frameworks, including governance

by non-state actors. In that context, it is looking forward to new ideas emerging from the Global Challenges Foundation competition, which would then help in better formulating the frameworks needed for these emerging technologies.

# Continuing the conversation

**W**e hope the conversation will continue. You can help us by simply sharing this report with a friend or colleague.  
We're looking for partners around the world to join future publications, organise events, workshops and talks, or more generally support our engagement effort.

For more information, visit our website:  
[www.globalchallenges.org](http://www.globalchallenges.org)

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