


Jonatan von Moltke

Foresight Analysis for Policymaking in International Relations

Cutting-Edge Anticipatory Governance or
Crystal Ball Pseudo-Science?

About the Article

Can policymakers really anticipate the future? As uncertainty defines today's global politics, Jonatan von Moltke explores the rise of foresight analysis as a tool for strategic governance. He examines how methods like horizon scanning, scenario mapping, and megatrend analysis can help governments prepare for disruptive change—and weighs their promise against the risks of overconfidence, methodological limits, and political short-termism.

About the Author

Jonatan von Moltke has a BSc in Philosophy, Politics and Economics and an MA in International Affairs from the Hertie School. Academically, his focus lied on EU foreign policy, international law, and crisis management. Professionally, he has worked on stabilisation in conflict regions for the Stabilisation Platform and interned at the German Federal Foreign Office's Permanent Representation in New York. He also co-founded the futurEU Club on EU Affairs at the Hertie School, and wrote his MA thesis interviewing EU diplomats on CFSP majority voting. He aims to foster a sustainable, just, and peaceful multilateral future by contributing to evidence- and consultation-based policy.

1. Introduction

Foresight analysis as a tool of international relations scholarship has gained visibility and traction over the last decade (Sus & Hadeed, 2020). As a practicable method for scholars and policymakers, it can provide guidance and critical reflection on policy options and underlying assumptions. However, thinking in scenarios to anticipate the future is not new; it has been commonplace in the business world, where adopting “the long view” can be seen as a requirement for success (e.g. Schwartz, 1996). This trend coincides with, and can be seen to some extent as a response to, an ever-more volatile, uncertain, complex, and ambiguous (VUCA) world, marked by heightened threats to the security of states their peoples and prompting institutions to think more strategically in identifying threats and potential pathways (see e.g. National Intelligence Council, 2021). At the same time, social sciences have been confronted with the need to study and comprehend these massive changes in the global ordering on the macro, meso and micro levels – and methodologies have had to adapt accordingly (Bernstein, 2000). From a policymaking view, this begs the question: What is the added value of foresight analysis methods to policymakers in the VUCA world?

2. Foresight Analysis: Options in Volatility, Uncertainty, Complexity and Ambiguity

It is important to recognize two things to refine the scope of foresight. Firstly, it is not equivalent to forecasting a sin-

gle trajectory, nor is it a “guessing game”. Secondly, there is no single correct way to go about foresight analysis, but several tools can lead to foresight. Generally speaking, foresight analysis is a strategic process to explore multiple plausible futures and prepare for uncertainty. This approach can be precious in international relations, where challenges are becoming more intertwined and where the simultaneous occurrence of geopolitical shifts, technological disruptions, and transnational crises demand anticipatory governance. In the face of imperfect information, amplified by information warfare and the increasing mis-

**Horizon scanning:
A systematic exploration of
emerging issues and weak signals.**



and disinformation threats, adapting to uncertainty is necessary, and foresight can contribute to such a

shift. A common puzzle in policymaking is how governments can prepare for crises that are by definition unpredictable. Consider the onset of the COVID-19 pandemic: while epidemiologists and EU foresight reports had flagged pandemics as a structural risk, institutions were still caught unprepared in early 2020. This example illustrates what foresight aims to address: not to predict a single future, but to expand the range of possibilities for which policymakers can prepare. As Van Woensel (2020) notes for the European Parliamentary Research Service, foresight acts as a “sense-making” device in contexts where policymakers face information overload and interpretative uncertainty. The perspective of comprehending today’s global politics as VUCA provides a useful framework to assess the specific value of foresight analysis. Indeed, each dimension creates challenges for international relations and can be mapped onto foresight contributions:

VUCA Dimension	Policy Change	Foresight contribution
Volatility	Sudden shocks, rapid change (e.g. energy crisis 2022)	Horizon scanning to detect weak signals, wild cards
Uncertainty	Limited knowledge of future developments	Scenario planning to build multiple plausible pathways
Complexity	Interdependence across systems (e.g. climate–security nexus)	Megatrends analysis to identify structural drivers
Ambiguity	Conflicting interpretations of the same signal (e.g. AI risks)	Serious games to test competing assumptions

3. Four Forms of Foresight Analysis in Practice

Foresight analysis can encompass a range of methods and procedural steps. Building on the broad overview of methods given earlier, this section engages more concretely with four prominent forms of foresight analysis. Following Störmer et al. (2019), it outlines the distinct methods of horizon scanning, scenario mapping, megatrends, and serious games, each with their own strengths and limitations and illustrative applications in international organizations or institutions.

Horizon Scanning

Firstly, if done right, horizon scanning identifies weak signals and can provide early warnings of potential disruptions. Its starting point is acknowledging the possibility of wildcard development. For example, the European Commission’s Joint Research Centre conducts horizon scans to anticipate changes affecting EU policy (European Commission, 2024). Horizon scanning is a systematic exploration of emerging issues and weak signals. It seeks to identify potential “wild cards” before they become pressing crises. A strength of this method is its breadth: it casts a wide net across domains, often using expert panels, literature reviews, and digital tools. However, its drawback lies in interpretation – distinguishing meaningful signals from background noise requires institutional expertise and continuity (OECD, 2020). For instance, the UK’s Ho-

Figure 1: Mapping VUCA dimensions to foresight contributions

zizon Scanning Programme (established in the Cabinet Office in the 2010s) provided structured inputs into national security strategies, influencing how risks like cyber threats and pandemics were integrated into planning. In the EU, the Joint Research Centre’s horizon scans (European Commission, 2024) aim to detect developments such as disruptive biotechnologies or new patterns of resource scarcity that could affect Union policies.

Scenario Mapping

Scenario mapping constructs multiple plausible future narratives by combining key uncertainties and trends. Unlike forecasts, scenarios deliberately diverge to explore a range of outcomes. Their main advantage is to stimulate strategic reflection and stress-test existing policies (Barma et al., 2016). The challenge is resource intensity: high-quality scenario exercises require expertise, workshops, and iteration. The US National Intelligence Council’s Global Trends reports (NIC, 2021) are among the most visible applications of scenario analysis in IR. They provide four to five distinct futures every four years, structured around major drivers such as demography, technology, and governance. These scenarios do not claim predictive accuracy but serve as inputs for long-term strategic planning across the US security establishment. Scenario mapping

deep dives and visualizes the interconnections between drivers of change and can reveal previously concealed patterns (Kjaer, 2014). It begins by identifying assumptions around the development of a particular region or policy field subject to change. Next, it creates distinct, plausible future narratives depending on the development of key identified variables. This can enable policymakers to proof-test strategies and create “policy-relevant research programs” (Barma et al., 2016) to increase preparedness, as previous examples such as the New Era Foreign Policy Conference have shown (ibid).

Megatrends

Megatrends are long-term structural drivers of change, such as climate change, digitalisation, demographic shifts, or shifting geopolitical power balances. The strength of megatrend analysis is its ability to contextualize short-term developments within enduring dynamics. Yet megatrends risk becoming too abstract or deterministic if not linked to policy decisions (Störmer et al., 2019). To identify megatrends, the Delphi method engages diverse experts through iterative surveys on a specific topic to build an understanding of the state of consensus and critical uncertainties among experts, which can inform decision-making on complex or “wicked problems” with unavoidable dilemmas (Peters, 2017). The OECD, for instance, has systematised megatrend analysis across governments, providing a toolkit (OECD, 2020) that helps ministries integrate long-term drivers into budgetary and regulatory planning. Within the EU, the annual Strategic Foresight Reports (since 2020) organize analysis explicitly around megatrends, such as the “twin green and digital transitions” (European Commission, 2022). These reports aim

For international relations, foresight matters because global challenges are increasingly interconnected: pandemics overlap with geopolitical rivalries, climate change amplifies security dilemmas.

to embed forward-looking considerations into the Better Regulation agenda.

Serious Games

Serious games include wargames and simulations and allow decision-makers to role-play alternative scenarios, revealing assumptions and decision logics under stress. Their key strength is experiential learning: by immersing policymakers in a simulated environment, they surface biases and encourage adaptive thinking. This kind of foresight has of course existed for centuries, as anticipating

potential movements in war has always involved foresight under certain assumptions. Unsurprisingly, NATO has used cyber conflict simulations to train officials in crisis response, enabling

them to explore escalation dynamics in hybrid warfare scenarios. Similarly, climate policy games have been deployed in EU research projects to test stakeholder responses to carbon pricing or adaptation policies (Matti, 2025). These cases show how games can transform abstract foresight into embodied practice. However, full-on simulation games as played nowadays are costly, time-intensive, and dependent on participant buy-in (Fuerth & Faber, 2012).

4. Recommendation: Matching Methods to Policy Situations

The diversity of foresight methods suggests that their value depends on context. Rather than seeking a single “best” method, policymakers should view foresight as a toolkit. Table 2 summarizes which approaches may be most appropriate under different policy situations.

Policy situation	Suitable foresight tool(s)	Rationale
Early warning of emerging risks	Horizon scanning	Broad signal detection of volatility and weak signals
Long-term strategic planning	Megatrend analysis; Scenario mapping	Linking structural drivers to alternative futures
Crisis preparedness, Stress-testing	Scenario mapping; Serious games	Explore plausible crisis dynamics, test resilience of policies
Stakeholder engagement	Serious games; Scenario mapping	Involve diverse actors, reveal biases, generate shared understanding
Policy mainstreaming	Megatrends; Horizon scanning	Embed foresight into regulatory and budgetary frameworks

Figure 2: Matching foresight methods to policy situations

The benefits of using the array of foresight analysis methods can be very substantial for policymakers. In times of uncertainty and constraints on the availability of resources (time, financial, information and attention resources), foresight analysis can first encourage systemic thinking and prepare policymakers for various pathways. Be it related to exogenous shocks like COVID-19, the war in Ukraine, or incremental factors of change, preparing for the future with foresight analysis through different scenarios can highlight interdependencies between factors and foster a more comprehensive understanding of potential outcomes. Foresight can thus help comprehend potential future pathways and reduce what has been called “strategic surprise” in risk management studies (Bracken, 2008). Indeed, where risks become less predictable, it can become crucial to envision and model alternative scenarios based on the assumptions of trends in key variables. In this vein, it can also promote adaptive decision-making, rather than reactive decision-making, allowing policymakers to act flexibly when uncertainties unfold. This applies in particular in the international sphere, where states are dependent on decisions and actions of others and are less able to mitigate potential risks to the own foreign po-

licy actions. Lastly, foresight analysis can help overcome cognitive biases by engaging with diverse perspectives and coherently thinking through potential outcomes, even if they are deemed unlikely. Taking on a creative and out-of-the-box perspective, as is possible in foresight analysis, can greatly enhance the ability of policymakers to contribute to improve decision-making. This can reduce an overreliance on past experiences and create a more forward-looking approach to foreign policymaking. Despite its growing prominence, foresight analysis faces several substantive criticisms. Firstly, it has come under scrutiny and criticism due to the lack of falsifiability, among others. In the paradigm of scientific inquiry coined by Karl Popper, only falsifiable hypotheses can be regarded as scientifically sound. First, as scenarios cannot be empirically tested or disproven, its lack of falsifiability challenges its scientific legitimacy. Second, foresight is often only loosely integrated into policymaking, and foresight recommendations end up being “more easily said than done”, with institutional barriers and organizational silos limiting its practical impact. Overpromising the benefits of foresight can lead to disappointment, especially when exercises do not translate into concrete policy action.

Methodologically, foresight can be resource-intensive and subject to bias, relying heavily on expert judgment. Finally, the dominance of short-termism in policy cycles often undermines the long-term, systemic perspective that foresight seeks to promote. Nonetheless, strategic foresight methods have been assessed as adding significant value both to social sciences and to policymakers; albeit not being falsifiable, they meet other relevant factors of scientific inquiry and have the ability to broaden the scope of what is thought to be possible and likely (Sus & Hadeed, 2020). However, it is not up for discussion that foresight analysis cannot replace political decision-making, but rather how it can inform it and improve systemic resilience (Burrows & Gnad, 2018). What is more, policymakers are not expected to implement only what constitutes scientific consensus. Instead, they should be guided by scientific expertise but consider various other factors such as societal and economic acceptability of policy measures. This may warrant a more central role of foresight methods in policymaking than in political science journals. The more relevant question regards its complexity and time requirements for policymakers; it is highly contingent on contexts and systemic factors whether policymakers have the adequate resources and methodological understanding of foresight analysis in order to step out of “everyday processes”, to have the courage within the organizational normative environment to devote resources to foresight analysis and thereby think more strategically ahead. Indeed, for strategic nodes in the policymaking systems, such as in-house think tanks or policy guidance units, foresight analysis can significantly add value to foster resilience and preparedness in a VUCA world.

5. Conclusion

A recent illustrative example of foresight analysis in practice is NATO’s Strategic Foresight Analysis (SFA23) (NATO Allied Command Transformation, 2023). The SFA23 process was a collaborative and methodologically rigorous foresight process, engaging over 800 experts from NATO member states, partner nations, academia, industry, and international organizations through 10 intensive work-

shops. The analysis employed a suite of foresight tools: horizon scanning was used to identify weak signals and emerging disruptions, megatrends analysis contextualized these within broader, long-term drivers such as climate change and technological innovation, and scenario planning developed multiple plausible “Four Worlds” futures to stress-test NATO’s assumptions and explore the implications for the Alliance’s security environment. Rather than simply describing possible futures, SFA23 focused on identifying risks and “strategic shocks” that could disrupt NATO’s mission, ensuring that the insights generated would be directly relevant for policy and planning. The results of SFA23 have had a tangible impact on NATO’s policies and capacities. Its findings now underpin the NATO Defence Planning Process, shaping capability priorities and national defense plans across the Alliance. Foresight analysis is not crystal-ball prediction but structured imagination. By addressing volatility, uncertainty, complexity, and ambiguity, it enhances policymakers’ ability to prepare for disruptive futures. The examples of horizon scanning, scenario mapping, megatrends, and serious games demonstrate both the diversity of tools available and their complementarity. For international relations, foresight matters because global challenges are increasingly interconnected: pandemics overlap with geopolitical rivalries, climate change amplifies security dilemmas, and AI reshapes economic and political orders. In this context, foresight enables more adaptive decision-making, helps overcome cognitive biases, and builds systemic resilience. Still, foresight’s impact depends on institutional uptake. As the European Commission’s recent efforts illustrate, foresight reports and megatrend analyses must be embedded into policy cycles rather than remaining on the margins. International organizations, from the OECD to NATO and the UNDP, have demonstrated that foresight can guide crisis preparedness and long-term strategy — but only if decision-makers are willing to engage with it. The policy lesson is therefore not to treat foresight as optional or decorative but as an integral component of strategic governance in a VUCA world, albeit without ignoring its drawbacks.

References

- Barma, N. et al. (2016). "Imagine a world in which": Using scenarios in political science. *International Studies Perspectives*, 17(2), 117–135, available at: <https://doi.org/10.1093/isp/ekv005>
- Bernstein, S. et al. (2000). God gave Physics the easy problems: Adapting social science to an unpredictable world. *European Journal of International Relations*, 6(1), 43–76, available at: <https://doi-org.eui.idm.oclc.org/10.1177/1354066100006001003>
- Bracken, P. et al. (2008). *Managing Strategic Surprise: Lessons from Risk Management and Risk Assessment*, available at: <https://www.cambridge.org/core/books/managing-strategic-surprise/7DCE67447E6FBFCDB97AA2E85F97D784>
- Burrows, M. & Gnad, O (2018). 'Between 'muddling through' and 'grand design': Regaining political initiative – The role of strategic foresight', *Futures* 97, 6-17, available at: <https://doi.org/10.1016/j.futures.2017.06.002>
- European Commission (2022). *2022 Strategic Foresight Report – Twinning the green and digital transitions*, available at https://commission.europa.eu/strategy-and-policy/strategic-foresight/2022-strategic-foresight-report_en
- European Commission (2024). *Peering into the Future: How Horizon Scanning can help shape EU Policy*, EU Joint Research Center Website, available at: https://policy-lab.ec.europa.eu/news/spotting-future-how-horizon-scanning-can-help-shape-eu-policy-2024-01-19_en
- Fuerth, L. & Faber, E. (2012). *Anticipatory Governance: Practical Upgrades*, available at: <https://www.files.ethz.ch/isn/174495/Book-025.pdf>
- Kjaer, A.L. (2014). *Trend mapping: past, present and future*, In: *The Trend Management Toolkit*. Palgrave Macmillan, London. <https://doi.org/10.1057/9781137370099>
- Matti, C. et al. (2025). Strategic foresight framework for addressing agency in sustainability transitions: a co-creation approach. *Front. Sustain.* 6:1507708. doi:10.3389/frsus.2025.1507708.
- National Intelligence Council (2021). *Global Trends 2040 – A More Contested World*, available at: https://www.dni.gov/files/ODNI/documents/assessments/GlobalTrends_2040.pdf.
- NATO Allied Command Transformation (2023). *Strategic Foresight Analysis 2023*. Norfolk, VA: NATO ACT, available at: https://www.act.nato.int/wp-content/uploads/2024/05/SFA2023_rev2.pdf
- OECD (2019). *Strategic Foresight for Better Policies: Building effective governance in the face of uncertain futures*, available at <https://doi.org/10.1787/9789264311816-en>
- OECD (2020). *Government Foresight Community – OECD Strategic Foresight Toolkit*, available at <https://www.oecd.org/strategic-foresight/>
- Peters, B. (2017), *What is so wicked about wicked problems? A conceptual analysis and a research program*, *Policy and Society*, Volume 36, Issue 3, Pages 385–396, available at <https://doi.org/10.1080/14494035.2017.1361633>
- Schwartz, P. (1996). „The Art of the Long View“, Penguin Random House, New York City.
- Störmer, E. et al. (2019). *Foresight as a Strategic Long-Term Planning Tool for European Governance*. In: Vecchiato, R., Perlitz, M. & Rizzo, F. (eds.), *Futures Thinking and Organizational Policy*. Elsevier, pp. 213–234, available at: <https://doi.org/10.1016/B978-0-12-822596-7.00012-7>
- Sus, M. & Hadeed, M. (2020). Theory-infused and policy-relevant: On the usefulness of scenario analysis for international relations, *Contemporary Security Policy*, 41:3, 432-455, available at: <https://doi-org.eui.idm.oclc.org/10.1080/13523260.2020.1730055>
- Van Woensel, L. (2021). *Guidelines for foresight-based policy analysis*, European Parliamentary Research Service, available at [https://www.europarl.europa.eu/RegData/etudes/STUD/2021/690031/EPRS_STU\(2021\)690031_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2021/690031/EPRS_STU(2021)690031_EN.pdf)

International Politics Shaped By **You**

EPIS Thinktank



Who We Are

EPIS is a young think tank on foreign affairs and security policy. We publish scientific articles, send members to international conferences, and maintain a network of: students & young professionals.

The deal:

- You professionalize yourself in your field
- We help you start your career

What We Do



EPIS Magazine

- In-Depth Analyses of Political Issues of Your Choice
- 80 Pages
- 3x/Year



EPIS Working Groups

- Monthly Briefings on Political Developments in Eight World Regions



EPIS Talks

- Deep Dive into the Articles of our Magazine with the Authors



EPIS Blog

- Short Analyses of Political Issues of Your Choice
- Weekly Release