



# Looking Ahead: Foresight for Crisis Prevention

**Sarah Bressan and Philipp Rotmann**

 **EU-LISTCO**

Europe's External Action and the Dual Challenges  
of Limited Statehood and Contested Orders

**POLICY  
PAPERS  
SERIES**

**No. 03. July 2019**

This publication has been funded by the European Union under  
the Horizon 2020 research and innovation programme under grant  
agreement no. 769886.



## ABSTRACT

As part of their efforts to professionalize crisis and conflict prevention, foreign policy-makers are investing more in foresight, early warning or prediction. Different approaches and their products are suited for different purposes, based on distinct strengths and weaknesses. This policy paper provides an overview of the most common methods used in the context of preventing violent conflict and governance breakdown, and offers guidance on what to look out for when thinking about and planning for the future of crisis prevention.

**KEYWORDS:** strategic foresight, foreign policy, policy planning, forecasting, conflict prevention, crisis prevention

**Sarah Bressan** is a research associate at the Global Public Policy Institute (GPPi) in Berlin. Within EU-LISTCO, she works on anticipating conflict risk in Europe's neighborhood, including conflict forecasting and strategic foresight in policy processes. Her research and advisory projects focus on political violence, conflict prevention and security governance.

**Philipp Rotmann** is associate director of the Global Public Policy Institute (GPPi) in Berlin, where he works on global security governance in a changing world. He co-leads EU-LISTCO's work on anticipating risks and threats to European security, along with research and advisory projects on conflict prevention, stabilization and arms control as well as the PeaceLab blog ([www.peacelab.blog](http://www.peacelab.blog)).

## WE CANNOT KNOW THE FUTURE, BUT WE NEED TO PLAN FOR IT

In the past few years, European foreign policy institutions have seen a new wave of experiments with foresight – a more systematic consideration of *the future* in its broadest sense. Closer relations with their own country's defence and intelligence establishments as well as major companies and think tanks have exposed diplomats to different approaches for better understanding the future. Diplomatic services are adapting these approaches to their own needs, particularly to better anticipate and, ideally, prevent crises related to governance breakdown and violent conflict.

In so doing, foreign policy-makers can build on a wealth of experience in other sectors, but they also expose themselves to a field that is far from mature conceptually. Due to the inconsistent use of key terms like *scenario*, almost every concept used in the realm of systematically assessing the future means different things to different people. Because of this lack of conceptual clarity, every serious attempt to appraise the content of a particular foresight analysis must start with a critical glance at its methodology section. This policy paper provides a skeletal overview of the strengths and weaknesses of the most common approaches to foresight based on their distinct purposes. It aims to help policy planners make foresight an effective part of their efforts to better anticipate and prevent governance breakdown and violent conflict.

## FORECASTING: EXTRAPOLATING THE PAST TO MONITOR THE NEAR-TERM FUTURE

The easiest way to prepare for the future would be to actually foresee it. Supported by the growing availability of data, the simplest approach to foresight is to focus on the extent to which it is likely that tomorrow will be a continuation of today. Well-known quantified indicators like future **economic growth**, **population growth** or levels of **employment** are all extrapolations into the future based on past and present data. The resulting projection over time is not always a linear continuation, which is why extrapolation can trigger warnings about developments with an increasing rate of change, like global warming or technological innovation.

To prevent crises, it would be even better to be able to predict specific events. Conflict researchers use structural data on factors known to be statistically associated with past conflicts (including a history of conflict, poverty levels and population size) to simulate the outbreak of violent conflict up to 40 years into the future (Hegre et al. 2013). For the more near-term future of several months ahead, so-called dynamic approaches forecast **violent events** or **famines** (see Cederman and Weidmann 2017; Funk et al. 2010; Guo et al. 2018; Hegre et al. 2018), using more precisely geo-coded locations. Visualizations such as **heat maps** help users make sense of the larger patterns that emerge from these predicted violent events.

All these estimates of the future are based on patterns drawn from the past. Their predictive accuracy is highest in the very short term (for dynamic approaches that usually means days or weeks and a few months at most). For policy-makers, they can be useful early warning tools, particularly for existing situations of concern where quick reaction instruments could be employed or scaled up in response to a near-term warning. After all, most Western governments and international organizations need six months to a year to launch any kind of comprehensive prevention effort.

## TRENDS: PRIORITIZING

A trend, as proclaimed by authors of [top foreign policy trends](#), [trend reports](#) or [top conflicts to watch](#), is a fuzzy concept. Like predictions, those reports and lists generally follow the logic that tomorrow will largely be a continuation of today, but they tend to put more weight on the developments of the present or a very recent past. Some of them, like the *key trends* described in the United States National Intelligence Council's [Global Trends](#) report, are based on a combination of data, qualitative information and expert assessments. The latter help capture new phenomena like the role of artificial intelligence for job markets or the use of autonomous weapons in wars. Other outputs just collect the intuitive expectations of journalists, expert commentators or even advocacy groups that repackage their priorities as trends to place them on policy-makers' agendas. Some of this is essentially "pop futurism": the politicized expression of unscientific predictions that suit the authors' existing preferences or agenda (Rejeski and Olson 2006).

In foreign services, in-house trend analyses can play a role in short-term horizon scanning (for several months ahead) or the monitoring of situations where there is a risk of conflict (e.g., European Commission 2017). Together with quantitative analyses and more long-term strategic foresight, they can help adjust existing policies and inform political prioritization.

## SCENARIOS: GETTING PREPARED FOR A RANGE OF FUTURES

Scenarios are thought experiments about what is unknown but possible.<sup>1</sup> They can be useful to illustrate how the future could unfold under different conditions (Mietzner and Reger 2005; Freedman 2017). Following Gabriel (2013; 2014), a scenario describes a possible and plausible future, that is, a comprehensive snapshot of a future moment (*picture of the future*) and the plausible course of events leading up to it (*history of the future*). As such, scenarios do not make probabilistic claims to reduce uncertainty. Compared to forecasts, scenarios are better suited to inform efforts to prepare for uncertain long-term developments, particularly if the purpose is to find possibilities that are commonly overlooked or discounted (Gabriel 2014).

The easiest and most common way to build a scenario is for a single expert or a small team to write or project data into a *picture of the future* and its *history from the present* (e.g., Perthes and Lippert 2012, 2013; Brozus 2015, 2018; Gaub 2019). The main limitation of such scenarios is that they risk reflecting or even reinforcing their authors' cognitive biases. The results are attractively packaged visions or warnings that, in terms of their methodology, do not greatly differ from the implicitly sketched micro-futures that we use in any kind of argument about the consequences of potential policy options or read about in internal memos, newspaper commentaries, or policy briefs. While useful to illustrate what might happen and how complex interactions between different factors could play out, single-author scenarios are prone to revolve around the common sense of their authors' community and therefore be less useful to question conventional thinking and prevent surprises.

---

1. The authors' understanding of foresight and strategic foresight is mainly informed by the ideas put forth in Johannes Gabriel's scientific works (see Gabriel 2013; Gabriel 2014), non-public presentations and trainings, as well as based on collaborative work with Gabriel's consultancy [Foresight Intelligence](#) in the context of EU-LISTCO.

An alternative is to develop multiple plausible scenarios for the same question about the future, based on different perspectives and different types of expertise. This requires a larger group of participants with diverse backgrounds as well as targeted facilitation to limit common cognitive biases (e.g., in favour of linear extrapolation from recent experience) and adverse social dynamics like groupthink (Janis 1982). Such a process helps expand the realm of plausible futures and thus intends to enable decision-makers to manage uncertainty and complexity across a range of possibilities. One specific application of this approach is the one EU-LISTCO uses to identify and analyze threats of governance breakdown and violent conflict (see Bressan et al. 2019).

## WHAT TO DO ABOUT IT? FROM FORESIGHT TO STRATEGIC FORESIGHT

Policy-makers are confronted with a growing number of scenarios, projections, predictions, and warnings about the future. While foresight and forecasting help us understand possible futures, *strategic* foresight enables prioritization and the design of more targeted policies and tools for dealing with an uncertain future across multiple potential challenges and opportunities.

EU-LISTCO's *strategic policy design* methodology is one such approach designed to bridge the gap between early warning and early action by inviting experts and policy-makers to develop concrete goals, instruments and measures that help them formulate coherent strategies to prevent risks from turning into actual security threats and foster resilience in the EU's neighbourhood. Going beyond simply deriving policy options from best- and worst-case scenarios, the goal is to identify policy options that are *robust* (i.e., effective or at least not harmful across different futures) and *adaptable* to changes in the future environment.

## SURROUNDED BY PROPHECIES: WHAT TO LOOK OUT FOR

Foreign policy faces a lot of uncertainty and risk. As much as our own cognitive biases would make us want to believe that: we cannot know the future. No matter how much we invest in foresight, the future will remain uncertain and no course of action will be without risk. Extrapolation can give us a sense of how certain indicators might develop *if no major shock occurs*. Data analysis can help us establish a baseline risk for violent conflict and monitoring the present can help us quickly react to changes. None of this, however, eradicates even a small part of the uncertainty that is typical for the foreign policy environment. Violent conflicts, governance breakdown and imminent security threats are the result of highly complex chains of interactions, which social science is currently not even close to predicting with a level of confidence that is useful and practical for foreign policy.

What we *can* achieve by systematically thinking about the future is to improve the quality of decision-making by counteracting some of the individual (cognitive) and collective (social) biases that tend to trap our decision-making processes in wishful thinking, linear thinking, groupthink, and the many other tricks our minds are playing on us to deal with complexity and uncertainty. The world is full of events that many would have dismissed as crazy or impossible until they happened – just

think of ISIL's sudden conquest of territory in Iraq and Syria or current developments in Algeria, Libya or Sudan. In hindsight, we tend to think we saw it coming, but that is often just what our brains have us believe so we can make sense of the world. Effective foresight can help us overcome these biases enough to improve preparedness, increase the range of policy options available to respond to warning signs and escalations and, ultimately, to better achieve our strategic objectives.

Using foresight and strategic foresight effectively, however, requires some care and investments:

### **1. Foresight needs clarity about sources and methods**

To assess their analytical utility and limitations, users of a foresight product need to understand at least the basics of what range of data or knowledge went into a particular product (sources) and how it was processed (method). Is it purely based on extrapolation or does it include a creative element? Was it created by a single author or team, or by a larger range of contributors with diverse perspectives? Producers of foresight analysis need to be transparent about these basics, and users need to become *critical consumers* who demand such transparency and are able to use different products for different purposes.

For policy institutions that invest their own resources into foresight, training methods can enable people to make the right investment choices for their organizations' needs. In light of the increasing importance of data collection, processing and analysis, basic training in probability and statistics will be critical to make informed and responsible foreign policy decisions far beyond early warning units alone.

### **2. To add value to decision-making, foresight requires the time to *think slow***

Human and institutional decision-making about the future are subject to many cognitive and social biases that are related to the *fast-thinking* functions of our brains (Kahneman 2011; Tversky and Kahneman 1974). Creating and consuming foresight products is best done in a deliberate way that focuses on conscious analysis rather than the intuitive heuristics that enable quick decisions shaped by unconscious biases. At the institutional level, organizations can design processes in ways that enable or even force conscious, analytical engagement with the future simply by setting aside time for it and shaping the purpose or incentives accordingly. Early-warning or prevention processes often are already good examples of this: regular meetings to discuss priorities enable participants to prepare and develop their reasoning behind proposed decisions or policies. In the same way, the quality of foresight products such as scenarios massively depends on the time invested in their creation.

### **3. There is no single foresight solution to all policy problems.**

Different methods can help answer specific questions or be implemented directly in a bureaucracy's risk assessment and policy planning routine. Extrapolations of data and statistical prediction can give us one idea of a possible future – mostly one that is not very different from today – and help us understand a narrow part of the future with a margin of error, *all other things being equal*. In contrast, some foresight methods help us explore a wider range of possible futures to overcome blind spots and better prepare for surprises. Others serve to narrow down and prioritize, such as quantitative and qualitative warning, horizon scanning and strategic foresight. Being aware of the comparative strengths and weaknesses of different approaches helps matching them to specific organizational needs.

## CONCLUSION: STRATEGIC ACTION COMES WITH CONSCIOUS RISK-TAKING

In the end, to prepare for the future always requires consciously accepting uncertainty and risk. While we like to think we are in control, a lot of our judgement is clouded by our tendency to selectively choose information and our habit of ex-post rationalization. When clearer, structured thinking about the future helps us accept how little we (can) actually know and that every prediction comes with a margin of error, we have an easier time accepting that every decision we make for an uncertain future is risky. Reality requires us to manage risk. Using foresight methodologies to think about multiple plausible futures helps us do so better than simply letting our mental autopilot extrapolate from the most vividly remembered elements of the past, which leaves us standing backwards to the future. Using foresight helps us turn around and add an analytical dimension to our intuitive ways of looking ahead.

## REFERENCES

- Bressan, S., Nygård, H.M., & Seefeldt D. (2019). Forecasting and Foresight: Methods for Anticipating Governance Breakdown and Violent Conflict. EU-LISTCO Working Paper.
- Brozus, L. (2015). Unexpected, Unforeseen, Unplanned. Scenarios of International Foreign and Security Policy. Foresight Contributions 2015. SWP Research Paper 2016/RP 01. <https://www.swp-berlin.org/en/publication/foresight-contributions-2015/>
- Brozus, L. (2018). Während wir planten. Unerwartete Entwicklungen in der internationalen Politik. Foresight-Beiträge 2019. SWP-Studie 2018/S 05. <https://www.swp-berlin.org/publikation/unerwartete-entwicklungen-in-der-internationalen-politik/>
- Cederman, L. E. & Weidmann, N. B. (2017). Predicting armed conflict: Time to adjust our expectations?. *Science*, 355(6324), pp.474-476.
- European Commission. (2017). 2017 Joint Communication to the EUROPEAN PARLIAMENT AND THE COUNCIL - A Strategic Approach to Resilience in the EU's external action. [https://ec.europa.eu/europeaid/2017-joint-communication-strategic-approach-resilience-eus-external-action\\_en](https://ec.europa.eu/europeaid/2017-joint-communication-strategic-approach-resilience-eus-external-action_en)
- Freedman, L. (2017). *The future of war: a history*. Public Affairs.
- Funk, C. C. & Verdin, J. P. (2010). Real-time decision support systems: the famine early warning system network. In *Satellite rainfall applications for surface hydrology* (pp. 295-320). Springer, Dordrecht.
- Gabriel, J. (2013). *Der Wissenschaftliche Umgang mit Zukunft*. Wiesbaden: Springer VS.
- Gabriel, J. (2014). A scientific enquiry into the future. *European Journal of Futures Research*, 2(1), 31.

Gaub, F. (2019). What if...? Scanning the horizon: 12 scenarios for 2021. European Union Institute for Security Studies, Chaillot Paper 150. <https://www.iss.europa.eu/content/what-if-scanning-horizon-12-scenarios-2021>

Guo, W., Gleditsch, S.K. & Wilson, A.. (2019) "Retool AI to forecast and limit wars." *Nature* 562, 331-333. <https://www.nature.com/articles/d41586-018-07026-4>

Hegre, H., Allansson, M., Chadeaux, T., Colaresi, M., Croicu, M., Fjelde, H., Hoyles, F., Hultman, L., Höglbladh, S., Muhammad, S.A., Nilsson, D., Nygård, H. M., Olafsdottir, G., Petrova, K., Randahl, D., Rød, E.G., von Uexkull, N., Vestby, J. (2018). ViEWS: A political Violence Early Warning System, Uppsala University: Typescript.

Hegre, H., Karlsen, J., Nygård, H. M., Strand, H. & Urdal, H. (2013) Predicting Armed Conflict, 2010–2050, *International Studies Quarterly* 57 (2): 250–270.

Janis, I.L. and Janis, I.L., 1982. *Groupthink: Psychological studies of policy decisions and fiascoes* (Vol. 349). Boston: Houghton Mifflin.

Kahneman, D. (2011). Thinking, fast and slow. New York: Farrar, Straus and Giroux.

Mietzner, D. & Reger, G. (2005). Advantages and disadvantages of scenario approaches for strategic foresight. *International Journal Technology Intelligence and Planning*, 1(2): 220-239.

Perthes, V. & Lippert, B. (2012). Expect the Unexpected: Ten Situations to Keep an Eye On. SWP Research Paper 2012/RP 01, January 2012. [https://www.swp-berlin.org/fileadmin/contents/products/studien/2011\\_S32\\_lpt\\_prt\\_ks.pdf](https://www.swp-berlin.org/fileadmin/contents/products/studien/2011_S32_lpt_prt_ks.pdf)

Perthes, V. & Lippert, B. (2013). Ungeplant bleibt der Normalfall. Acht Situationen, die

politische Aufmerksamkeit verdienen. SWP Studie 16, September 2013. [https://www.swp-berlin.org/fileadmin/contents/products/studien/2013\\_S16\\_prt\\_lpt.pdf](https://www.swp-berlin.org/fileadmin/contents/products/studien/2013_S16_prt_lpt.pdf)

Rejeski, D. & Olson, R. L. (2006). Has futurism failed? *The Wilson Quarterly*, 30(1), 14-21.

Tversky, A. & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases. *Science*, 185(4157), 1124-1131.

# ABOUT EU-LISTCO RESEARCH

EU-LISTCO investigates the challenges posed to European foreign policy by identifying risks connected to areas of limited statehood and contested orders. Through the analysis of the EU Global Strategy and Europe's foreign policy instruments, the project assesses how the preparedness of the EU and its member states can be strengthened to better anticipate, prevent and respond to threats of governance breakdown and to foster resilience in Europe's neighbourhoods. Continuous knowledge exchange between researchers and foreign policy practitioners is at the cornerstone of EU-LISTCO. Since the project's inception, a consortium of fourteen leading universities and think tanks have been working together to develop policy recommendations for the EU's external action toolbox, in close coordination with European decision-makers. The EU-LISTCO Policy Papers are peer-reviewed research papers based on findings from the project.

## EU-LISTCO POLICY PAPER SERIES

© 2019 EU-LISTCO

This publication is part of a project that has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement no. 769866. It reflects only the authors' view and the European Commission is not responsible for any use that may be made of the information it contains.

This paper is reusable under a creative commons license ShareAlike under attribution (CC BY-NC-SA 3.0) details of which can be found at <https://creativecommons.org/licenses/by-nc-sa/3.0/>.

**ISSN:** 2604-6237

**DOI:** [doi.org/10.24241/listcopp.2019.1.1](https://doi.org/10.24241/listcopp.2019.1.1)

**Edited by the Project:** Europe's External Action and the Dual Challenges of Limited Statehood and Contested Orders (EU-LISTCO)

EU-LISTCO Policy Papers are available on the EU-LISTCO website: <https://www.eu-listco.net/>

EU-LISTCO Policy Papers are also available at <https://refubium.fu-berlin.de/handle/fub188/24657>

**Editorial coordination:** Barcelona Centre for International Affairs (CIDOB)

CIDOB

BARCELONA  
CENTRE FOR  
INTERNATIONAL  
AFFAIRS

CIDOB

Elisabets 12,  
08001 Barcelona

This publication has been funded by the European Union under the Horizon 2020 research and innovation programme under grant agreement no. 769886.

 **EU-LISTCO**

