

# FUTUURI

## Uncertainties and Rapid Changes Define Alternative Futures - What is the Role of Technology in this Change?

The 25<sup>th</sup> Futures Conference focused on the futures of technologies. The event was organised in collaboration with the VTT Technical Research Center of Finland Ltd on 10–12 June in Logomo, Turku, Finland. We were happy to host 330 participants from 39 different countries, representing all the continents of the world.

The Futures Conference 2025 *'Futures of Technologies – Mutual Shaping of Socio-Technical Transformation'* explored how organisations and societies can navigate technology's dual role as both a solution and a source of new dilemmas, how AI and emerging technologies can advance futures studies, how to rethink the relationship between technology and policy-making, and how to reshape innovation policy in an era of rapid technological change.

### Brilliant Presentations and Smooth Collaboration

The three conference days consisted of keynote lectures, parallel sessions and participatory workshops. In the beginning of the first day, we had the pleasure of hearing an excellent introduction to the theme from Prof. **Arho Suominen** (VTT).

During the days, the audience heard from a group of high-level keynote speakers, who all focused on the issues at hand from different viewpoints. Our warm thanks and gratitude to all the distinguished keynotes: Dr. **Philip Brey** (The Netherlands), Dr. h.c. **Jerome C. Glenn** (USA), Dr. **Ali Aslan Gümüşay** (Germany), Dr. **Elina Hiltunen** (Finland), Dr. **Cynthia Selin** (UK/USA) and **Rohit Talwar** (UK). This Futuuri special issue includes articles that provide insights into the keynote speeches.

Special thanks go to Dr. Elina Hiltunen for moderating the first conference day with incredible energy and professionalism.

At this point, we also would like to thank warmly our excellent master's student **Iryna Gerasymenko** for her invaluable work helping us to organise the event successfully.

Special thanks go to all the writers in this issue for their contribution and of course to our whole conference team: Scientific Board and all the session chairs and moderators. Thank you all for your hard work and good spirits!

This year we had the pleasure to co-organise the event with VTT. Thank you Prof. Arho Suominen for an excellent and smooth co-operation in preparing and running the event. The organising parties want to thank also the following foundations for their invaluable support: Federation of Finnish Learned Societies, LSR Foundation for Economic Education and Turku School of Economics Support Foundation.

### Save the Date for the Next Year's Event

We hope you enjoyed the programme and your stay in Turku, met old and made new friends, and gained new knowledge and lots of good memories.

The theme for the next Futures Conference will be *'Sustainability, Temporalities and Futures'*. The event will be organised again onsite in Turku, Finland during 9–10 June. You can find more information about the event in this Futuuri issue's back cover. ●

*We hope to see you all in June 2026  
in Turku, Finland!*

## IN THIS ISSUE

- 2 The Uncertainties of Emerging Technologies Highlight the Need for Dynamic and Anticipatory Ethical Assessment
- 3 The Fall and Rise of Finance in the Era of Artificial General Intelligence (AGI)
- 4 Imagining Futures: Science Fiction, Technology, and the Power of Creativity
- 5 Future Factory Concept – a Vision for Futures of Life Science Manufacturing  
Industrial Transformations through Technology Foresight and Cross-Sectoral Collaborations
- 6 Bridging Foresight and Management: Futures Studies Approach in Management Practices  
The Gallery of Attunement
- 7 Desirable Futures and Prospective Theorising
- 8 Against Blank Slate Futuring, Factoring in Stickiness and Certainties
- 9 Futures Studies and Strategic Foresight: Insights from a Diverse World
- 10 Future of Artificial Intelligence: Issues, Opportunities, and Geopolitical Synergies
- 11 Exploring Socio-Technical Futures of Work
- 12 FFRC Staff's Latest Publications  
Welcome to Futures Conference 2026!



**futuresconference2025.com**  
**#futuresconference2025**





# The Uncertainties of Emerging Technologies Highlight the Need for Dynamic and Anticipatory Ethical Assessment

In his keynote speech 'Approaches for Ethical Assessment of Emerging Technologies', Dr. **Philip Brey** from the University of Twente remarked that foresight plays an integral role in a dynamic and anticipatory ethical impact assessment. In the ethical assessment of new technologies, key considerations should include how technology might evolve, its potential applications, and the possible impacts on individuals, communities, and institutions.

In a world increasingly driven by technological advancement, the ethical implications of innovation have become both urgent and complex. Emerging technologies such as artificial intelligence, neurotechnology, and genetic modification are shaping the future in unpredictable ways. Their development carries not only great promise but also the potential for significant societal disruption. This uncertainty makes traditional approaches to ethics inadequate. What is needed instead is a forward-looking, structured method of ethical assessment that anticipates risks before they materialise.

One of the key themes addressed in the session was the nature of ethical risks associated with emerging technologies. These risks go beyond issues of safety or legality. They touch on values such as privacy, justice, autonomy, and human dignity. For instance, algorithmic systems have been shown to reinforce bias, as illustrated by the Dutch child benefit scandal, where a flawed fraud detection algorithm disproportionately targeted low-income families, eventually leading to governmental collapse. Similarly, AI-driven social robots marketed as companions for children raised concerns around emotional manipulation and privacy. Such cases show that ethical missteps can have not only moral consequences but also political and financial ones.

Because these technologies are still evolving, traditional ethical frameworks, such as codes of conduct or legal compliance, are often reactive and too narrow. In this regard, Dr. Brey emphasises the need for a dynamic and anticipatory ethical impact assessment, in which foresight plays an integral role.

## Future scenarios and multiple stakeholder engagement are the key to ethical assessment

In the ethical assessment of new technologies, key considerations should include how the technology might evolve, its potential applications, and the possible impacts on individuals, communities, and institutions. This can be done when combining future scenario-building with stakeholder engagement to explore both positive and negative outcomes.

Dr. Brey outlines the ethical impact assessment model as a multi-step process, beginning with a clear definition of the technology and its possible future applications. This is followed by the inclusion of diverse stakeholders, e.g., users, developers, regulators,

and ethicists, who collaboratively examine potential impacts. Together, they weigh the anticipated benefits against risks, including increased efficiency or user empowerment versus exclusion or technological dependency. The process is grounded in established ethical principles, including fairness, autonomy, and the prevention of harm, which serve to guide responsible decision-making. Depending on the findings, the assessment may recommend cautious advancement or, in some cases, advise against pursuing the technology altogether.

This structured yet flexible approach offers clear advantages. It helps governments align innovation with public values, ensuring that new technologies serve the common good. It also supports businesses by identifying reputational, legal, and market risks early in the process, allowing for better design and trust-building. Ethical reflection, then, is not an obstacle to progress but a strategy for sustainable and socially responsible innovation.

## The role of ethics is not a rigid rulebook, but a compass to ensure that technologies are developed to enhance, not harm, humanity

Nevertheless, it is also necessary to acknowledge the limitations and critiques that ethical assessment may bring. We should be careful of “ethics washing”, where superficial ethical reviews are used to justify harmful technologies. At the same time, we must continually assess whether ethics can truly govern innovation when powerful commercial and political interests are at play. To address the-

se challenges, ethical assessments should be grounded in widely accepted norms, such as human rights, and must remain transparent and participatory.

Ultimately, ethics must serve as a compass in the uncertain landscape of technological innovation. Emerging technologies will continue to shape how we live, relate, and understand ourselves. Ensuring that these developments respect human values is not just a moral imperative. It is essential for building a future that is both innovative and just. ●

## PHILIP BREY

Dr., Professor  
University of Twente, The Netherlands

Philip Brey is professor of Philosophy and Ethics of Technology at the University of Twente. He is member of the management team (and former chairman) of the 4TU Center for Ethics & Technology, a partnership of the universities of Twente, Delft, Eindhoven and Wageningen with more than 60 researchers.

In his research, Brey investigates ethical aspects of emerging technologies, with a particular focus on information technology, robotics, biomedical technology and environmental technologies. He has developed major new approaches in ethics of information technology, including the anticipatory technology ethics (ATE) and ethical impact assessment (EIA) approaches for assessing ethical implications of new and emerging technologies.



# The Fall and Rise of Finance in the Era of Artificial General Intelligence (AGI)

The rapid development of AI is transforming several fields, including finance. In his keynote speech, futurist and CEO **Rohit Talwar** envisioned a fundamental reinvention of Consumer Financial Services (CFS) due to progress in AGI. This would not only shift power from the financial services sector to individual consumers but also redefine the very concept of money.

## Winners and Losers of the Financial Game

Talwar emphasised that in the volatile and complex present, systems are already stretched beyond capacity. Even well-established pillars of permanence, such as the UN or WTO, are under pressure. Tech companies have become global players, often dictating the rules of the game. The current financial system divides people into winners and losers, creating massive imbalances. Those who feel left out channel their discontent through populist movements, even as a growing super-elite operates outside of the system.

In this environment, AI can unlock opportunities and help shift or rebalance power. In the coming years, AGI (Artificial General Intelligence) will be functional enough to transform the way financial services work, due to its capacity to aggregate phenomenal amounts of data from multiple sources. These AGIs will be able to reflect on the assembled data and use it to make choices and decisions. The question then becomes: should the rules of the financial game be rewritten or the game redefined?

## Money Reimagined

According to Talwar, the implementation of AGI could lead to completely new currency models, including loyalty points, time, and social currencies, as well as various other assets, such as environmental resources, health, and genetics. It is money reimagined, with multiple different means of storing value and exchanging it without transaction costs.

These new currencies would operate on AGI platforms, enabling seamless, real-time trading of assets. For example, a tree absorbing carbon in one's garden could become an asset, as could one's future income or welfare.

This system would rely on securitisation and unbounded tokenisation. Anything could be turned into a securitised asset, including time or future value. Talwar described a world of possibilities, where anyone – individuals, businesses, communities – could be a creator or enabler. Instead of money, one could sell tokens for different assets. Peer-to-peer and pool lending would replace financial institutions when seeking credit. AI-run smart wallets would self-optimize and maximise returns through micro-trading in an all-access transactional model. Through working together, these smart wallets could identify opportunities and partake in collective bargaining, pooling transactions for wide groups of people.

## Barriers and Possible Impacts

While aspects such as proof of value or ownership, transaction audit trail, and asset security could provide barriers to the described change, Talwar considers the biggest challenge for this new financial system to be the willingness of the financial services community, individual consumers, and governments to shift towards such a model. Talwar recognises an existing lack of understanding of what AI truly is and of the extent of its capabilities. Futurists could serve a vital role in helping their financial services clients to rethink their offerings and value creation in this new landscape.

There is also a need to assess the impacts of the proposed new financial system through an ethical and values-based lens – an aspect that also provoked critical questions from participants in the conference. Talwar acknowledged the risk that this new system could only increase the wealth divide, which is why the topic needs to be addressed, and futurists should be involved in the conversation. Futurists are skilled in envisioning possible futures and facilitating transformational thinking. However, when it comes to the upheaval of the financial system, Talwar suggests that futurists could also have some skin in the game. Instead of remaining as advisers, futurists could get involved in start-ups or transformational equities.

## To Dance Differently

In his concluding remarks, Talwar encouraged the audience to “learn to dance differently”. These radical future opportunities disrupt established paradigms and require a shift in mindset across the financial field. He argued that in a complex, volatile world with multiple, changing rhythms, no one can know all the steps. One has to embrace the uncertainty and ambiguity, risk sometimes failing, and just dance, dance, dance.

The keynote unveiled a range of possibilities for the future of finance, but also raised questions. Do we want to monetise every aspect of our lives? What could money reimagined look like in economies of degrowth? It is also widely acknowledged that artificial intelligence entails substantial environmental externalities. How do the proposed developments take into account sustainability? Could unbounded tokenisation help better acknowledge natural values? Perhaps the genuine strength of futurists lies in their capacity to ask these questions and engage in critical discussion with AI developments. ●



## ROHIT TALWAR

Futurist, CEO  
Fast Futures, UK

Rohit Talwar was recently in the top three in 'the Global Gurus Top 30 futurist' rankings for 2025. He is an inspirational futurist and the CEO of Fast Future, delivering award-winning keynote speeches, executive education, foresight research, consultancy, and coaching. Rohit has delivered over 2000 speeches, workshops, and consulting assignments for clients in 80+ countries across six continents.

He is the co-author and lead editor of nine books and over 50 reports on the emerging future. His current research focus is on how AI/AGI could enable the transformation of money and financial services and what this could mean for how we live, work, ensure social cohesion, run businesses, govern nations, and manage economies.



# Imagining Futures: Science Fiction, Technology, and the Power of Creativity

This keynote speech highlighted the reciprocal relationship between science fiction and scientific innovation, showing how imagination both shapes and is shaped by technological development. Drawing on examples from literature, film, foresight practice, and defence strategy, Dr. **Elina Hiltunen** emphasised the importance of creativity and scenario-building for navigating an uncertain future. The key take-aways revolve around the dynamics of anticipation, the interplay of imagination and engineering, and the need for plural approaches to futures thinking.

## Science Fiction and Science Fact as a Reciprocal System

A central idea was that science fiction and science fact exist in a recursive relationship. Imagination feeds technical problem-solving, which in turn realises visions first articulated in speculative fiction. This echoes **Robert Rosen's** notion of anticipatory systems, where models of the future guide present action and thereby influence which futures materialise. Fictional narratives thus operate as anticipatory devices, shaping how societies conceive of technological possibility and orient research trajectories.

## Creativity at the Nexus of Past and Present Futures

Engineering and technology do not unfold in a linear fashion but are constantly informed by reinterpretations of past and present futures. What was imagined decades or even a century ago continues to inspire ongoing innovation, while current technical developments invite further re-imagination. This continual negotiation underscores that creativity and experimentation are indispensable capabilities. Since the future is inherently unpredictable, cultivating diverse approaches and interpretations is more valuable than aiming for precise prediction. Imagination becomes not a luxury but a fundamental resource for resilience in the face of uncertainty.

## From Minority Report to Predictive Algorithms

Hiltunen drew attention to the example of fiction shaping fact in the film *Minority Report*, which enlisted scientists and design directors to create plausible visions of near-future

technologies. The gestural interfaces and predictive policing systems depicted in the film anticipated developments in algorithmic policing and human-computer interaction. A stark demonstration of how speculative worlds can influence research, development and innovation. Similar dynamics can be seen in foresight reports produced by Silicon Valley firms such as Google, Microsoft, and Intel, where fictional and technical futures are woven together to stimulate innovation.

## Scenario Building as a Futures Method

This keynote also underscored the role of scenarios as tools for systematic exploration of uncertainty. Dr. Hiltunen described her own methods for constructing scenarios, drawing inspiration from **Brian Arthur**, **Samuel R. Delany**, and information theory. These methods have been applied to consider robotics in war, economics, and security – probing both enabling and troubling implications. She highlighted the use of scenario storytelling by NATO, the UK Defence Ministry, and the US Army as ways of preparing for conflict and technological change. Her comparison of US Army foresight reports with the Russia-Ukraine war offered a sobering reflection on the limits and strengths of such anticipatory exercises.

## Conflict, Technology, and Data

In the context of security and warfare, foresight tends to revolve around technological

trajectories such as drones, robotics, and communication infrastructures. A recurring point was the slow pace of technological realisation: many military tools in current use were imagined long before they became operational. Particularly in the case of the Russia-Ukraine conflict, red flags were raised against uncritical reliance on the skewed data generated by technologies themselves, as well as the release of images and information selectively released by governments. Such material can frame public perception while masking broader dynamics, underscoring the political dimension of technological futures.

## Conclusion: Three Threads Woven Together

Hiltunen's reflections interlace three themes:

1. The long gestation from imaginative idea to technological reality.
2. The generative role of science fiction, creativity, and imagination in shaping foresight.
3. The indispensability of scenarios and storytelling, particularly in defence and security, as ways of grappling with uncertainty.

Together, these threads affirm that anticipation is less about prediction and more about imagination. Futures thinking becomes most powerful when it acknowledges uncertainty, values creativity, and draws on the reciprocal dance between fictional visions and technological realisations. ●

## ELINA HILTUNEN

Dr., Futurist  
What's Next Consulting Ltd, Finland

Elina Hiltunen is a futurist with a PhD in Business (Organisation and Management) and a Master's degree in Engineering (Chemistry: specialisation in polymer technology, technical chemistry, environmental protection and International Design Business Management, IDBM). Her PhD thesis (2010) was on "Weak signals in organizational future learning". She is currently working on her second PhD thesis at the National Defence University on the use of science fiction in defence organisations' foresight.

Elina Hiltunen is also an author, having written 14 books, alone or together. Her books mainly deal with the future: foresight methods, future technology, consumer trends, megatrends and the future of Finland.



# Future Factory Concept – a Vision for Futures of Life Science Manufacturing

LifeFactFuture (LFF) is a large consortium project including research teams from the University of Turku and the University of Helsinki, as well as some of Finland's leading life science manufacturers, data and technology companies. Project is funded by Business Finland during 2024–2026 and coordinated by Finland Futures Research Centre (FFRC).

## Life Science Factory 2040

Professor **Toni Ahlqvist** and Development Manager **Tero Villman** from the FFRC unveiled the first version of LFF's *Future Factory Concept* – namely the foresight-informed shared consortium vision for futures of life science manufacturing in Finland. **Sara Gambier** from Bayer and **Mikael Lindblad** from Nokia shared their comments on the concept as well as the motivation for participating in the consortium project.

The newly published first version of the Futures Factory Concept outlines what a life science factory might look like in 2040. Developing the initial version will continue in collaboration with the consortium and serves also as a foundation for the project's upcoming sprints, where future technologies will be practically tested in a production environment. The presented concept was derived from a systematic and participatory technology foresight process including environmen-

tal and horizon scanning, semi-structured focus group interviews amongst consortium members as well as combination of foresight frameworks like multi-level perspective and innovation policy roadmapping.

Future Factory Concept is not merely visionary, it is co-constructed and validated through iterative workshops and comment-rounds positioning its systematic foresight methodology process as a novel aspect in the field of futures studies as well as towards future of life sciences.

## Power of Collaboration

A panel discussion followed the publication of the first version, featuring **Tomi Penttilä**, CEO of Bayer Finland, **Peppi Pietarinen** from Revvity, **Iikka Keskinen** from Orion, **Viktoriiia Shubina** from the University of Turku, and **Mikael Lindblad** from Nokia. The shared message was clear: "Collaboration makes us better and more competitive."

## The Industry's Clock Speed Must Change – Safely

In her presentation, Sara Gambier summarised the message from several consortium companies on why participating in a co-innovation project is important. The operating environment and technologies are changing rapidly. The life science sector, traditionally

slow-paced and heavily regulated, must ensure its competitiveness. This requires strong investment in digitalisation, as well as the development of production and expertise. Activities must be developed and optimised using data and AI, while keeping the end-user and patient safety in mind. Communication with the Finnish Medicines Agency Fimea, which provides expert input to the project, is crucial in this regard.

## We Must Dare to Be Bold Enough

Finland's life science production cannot compete globally on price. Its competitive edge must come from expertise, innovation, and the ability to combine these within a network. Ecosystem projects like the LFF enable bold experimentation and the acceleration of innovation.

The barriers to competitiveness in the life science sector are not necessarily technical. We already have many of the technologies that will be used in future factories. Significant changes must also be made in leadership, established practices, and even the language used. As Tomi Penttilä aptly said during the panel: "We must be bold enough to embrace change in the industry," and Mikael Lindblad added: "Not embracing digitalisation – that's what's truly expensive." ●

# Futures in Motion: Industrial Transformations through Technology Foresight and Cross-Sectoral Collaborations

In the other Special Session '*Technology foresight for visioning and industrial renewal*', organised by the LifeFactFuture project, four distinct presentations offered a panoramic view of future-oriented methodologies and foresight shaping the future of life sciences, bringing ethical considerations into industry 5.0 transformation, building nation-wide scenarios and innovating novel technologies for securing the future of food.

Across all presentations, several unifying themes emerged as methodological feeding insights in the futures studies field. Co-creation with multi-disciplinary aspects and stakeholder alignment with visioning becomes critical on solving complex issues and paving feasible paths towards desirable futures.

Thus, foresight is not just a planning tool for specific industries or social phenomenon, instead it is an integral part of societal imagination and co-designing the joint visions.

## Developing Future Factory Concept

Drawing from the LFF project, **Toni Ahlqvist** et al. opened the session by presenting a foresight-based long-term transformation strategy for future of life science manufacturing in Finland, more closely described in the article above.

## Ethical Governance for Industry 5.0

The second presentation introduced Key Value Indicators (KVIs) as a new framework for aligning technological development with ethical, social and environmental goals compared to commonly used Key Performance Indicators (KPIs). **Marta Martorell Camps** et al. demonstrated how KVIs can be integrated into early-stage scenario building to navigate emerging technologies towards human-centered and sustainable innovation.

## Welcome to the Japanese Oasis: An Image of the Future

Following ethical aspects towards future, the Japanese National Institute of Science and Technology Policy (NISTEP) presentation was an exemplary case of nation-wide generational scenarios development approach. **Asako Okamura** et al. presented four nation-wide societal scenarios through a youth-driven visioning process, Delphi and the X-Curve scenario method – a powerful foresight framework to simplify sense-making towards the alternative futures amidst turbulence of uncertainties.

NISTEP's approach integrated citizens ideas and thoughts with expert validation process via Delphi and policy dialogues making their

approach a viable nation-wide scenario building approach for anticipatory governance of the desirable futures that is participatory and deeply inclusive.

## Cellular Agriculture: Opportunities for Bio-Tech Leadership

We need innovations that are bred and synergised with emerging technologies not just to feed future inspirations but also future generations with healthy and nutrient-rich foods. Thanks to **Anu Seisto** et al. from VTT Technical Research Centre of Finland, we explored cellular agriculture as a sustainable and advanced food production method. That method complements, not replaces, traditional agriculture. Although "Hybrid products that combine cellular and traditional ingredient could gain acceptance" is a notion they emphasise, after hearing their thematic findings they discovered during their research on food security and the importance of high-quality raw material production for future generations, "hybridisation of conventional and high-tech (cellular) agriculture methods "SHOULD" gain acceptance" becomes inevitable on securing futures of food for next generations. ●



# Bridging Foresight and Management: Futures Studies Approach in Management Practices

The Conference Session 'Bridging foresight and management: futures studies approach in management practices' began with **Jeremy Wilken** (USA) who gave insight from various workshops in which foresight processes were tested using AI. He highlighted the Houston Foresight Framework, which encourages participants to set goals and monitor progress and explained what went well and not so well during the workshops experiments and the use of AI in his foresight process. The successes, as Wilken explained, were in the increased engagement and creative thinking among participants; while the challenges included information overload, distractions, and a lack of surprise that appeared to be correlated with the use of AI.

**Pauli Komonen's** (VTT Technical Research Centre of Finland Ltd, Finland) talk on *Empirical consumer research in corporate foresight*, explained how the significant contribution to corporate foresight is understanding consumer perspectives through "participatory consumer foresight." Research indicates that consumers often do not recognise trends identified by experts, highlighting a disconnect that needs

to be bridged. Komonen talked about the connection between consumer processes and futures processes and how integrating participatory consumer foresight in organisations can enhance understanding of consumer needs and improve adaptability and resilience. Overall, the integration of foresight methodologies into management practices appeared crucial for organisations seeking to thrive in our increasingly complex yet uncertain world.

In bridging Foresight and Management, **Anna Sacio-Szymańska** (4CF The Futures Literacy Company, Poland) gave an overview on projects in various sectors, including automotive and digital transitions that emphasise the importance of participatory approaches in foresight and the purpose in building foresight capacities for stakeholders. Concerning value, Sacio-Szymańska's findings made explicit that the ability to organise knowledge and make sense of future uncertainties was among the most invaluable gains for stakeholders involved in foresight processes.

The last session concluded with **Per Ostberg's** (Foresight & PERspectives, South Af-

rica) presentation *National culture differences in foresight and how those impact scenario creation, description, and communication*. In his research, Ostberg explores how national cultural differences might influence foresight practices particularly in scenario creation and communication. His presentation emphasised the importance of recognising cultural markers and understanding diverse perspectives to foster effective intercultural management. Using Hofstede's six cultural dimensions, Ostberg illustrates cultural differences intersecting scenarios that may not resonate across organisations. He emphasised the necessity for a culturally aligned approach in scenario planning, advocating for a deeper academic and cultural understanding. Stressing relevance and acceptance, Ostberg calls for greater cultural awareness in the writing and communication of scenarios and advocating for a culturally aligned approach to scenario planning to ensure that scenarios are relevant, accepted, and understood across different cultural perspectives. ●



## The Gallery of Attunement

A found poem inspired by the presentations of Session 1 track 3 "Experiential learning and collaborative intelligence" by **Riikka Armanto**.

### Presenters at the session:

**Krisztina Jónás & Melania Borit**, UiT The Arctic University of Norway, Norway  
**Adél Kučera & Ondřej Pokorný**, Technology Centre Prague, Czech Republic  
**Nimrah Syed**, New York University Abu Dhabi, the United Arab Emirates  
**Andrena Woodhams**, Yinbound LLC, the United States



Conference Dinner on 11 June at the Old Academy Building.



# Desirable Futures and Prospective Theorising

Professor **Ali Aslan Gümüşay**, a distinguished scholar from the LMU Munich School of Management and the LMU Innovation & Entrepreneurship Center in Germany, delivered a comprehensive speech focusing on desirable futures and prospective theorising. He emphasised the urgent need for scholars, practitioners, and institutions to rethink how we understand, engage with, and shape the future in the context of global complexity and uncertainty.

## Grand Challenges, Sustainability, and New Forms of Organising

In his lecture, Professor Gümüşay critically engages with the concept of societal grand challenges, asserting that we are currently navigating a world defined by deeply complex, uncertain, and interconnected problems. These challenges – such as climate change and inequality – resist linear solutions and often transcend national boundaries. Their systemic nature implies that isolated responses are insufficient; indeed, some scholars contend that these challenges may be inherently unsolvable through traditional means.

In response, Professor Gümüşay advocates for collective and transnational modes of governance. This necessitates engaging with what he calls the “big architecture” of solutions – approaches that are holistic, collaborative, and cross-sectoral in design.

Central to this engagement is the necessity of embracing ambiguity and pluralism. Professor Gümüşay emphasises that addressing such complexity requires the construction of shared languages and frameworks, particularly in contexts where stakeholders possess diverging values. Drawing on the VUCA framework – volatility, uncertainty, complexity, and ambiguity – he proposes a fifth dimension: paradox. Many of today’s challenges are not only dynamic and multifaceted but also inherently contradictory, necessitating a mindset that tolerates tension rather than seeking premature resolution.

While this landscape may appear novel, Professor Gümüşay reminds us that complexity inevitably increases as collaboration deepens. The integration of diverse viewpoints naturally introduces more nuanced and layered problematics. Yet, he suggests, this very

complexity may also serve as a source of potential innovation and opportunity.

Traditionally, scientific inquiry has approached problem-solving through reductionism: isolating variables, narrowing focus, and deconstructing phenomena into manageable parts. In contrast, Professor Gümüşay calls for a shift in perspective – one that zooms out rather than in, embracing entanglement rather than seeking simplification.

Business schools, he observes, tend to emphasise instrumental rationality, focusing on maximizing returns, minimizing risk, and generating profit. Yet Professor Gümüşay poses a more foundational question: What are your values? Where do you want to go – and how? While acknowledging that profitability is essential for organisational sustainability, he challenges the notion that profit must be maximised. Instead, he frames profit as a constraint, not an end in itself, allowing for the optimisation of values. This reorientation suggests a paradigmatic shift – from treating values as subordinate to profit to understanding profit as a means for realising values.

## Making Scholarship Future-Responsive

In his lecture, Professor Gümüşay critically examines the persistent tension between conventional academic scholarship and the study of the future. He observes that much of traditional research, particularly in disciplines such as management and organisational studies, is fundamentally retrospective, grounded in empirical data derived from the past or present. As he notes, scholarly work that attempts to engage with the future in the absence of established data is frequently dismissed as speculative and is rarely accepted by leading academic journals.

This raises a critical question: How can we make scholarship more open to futures thinking? While looking to the past is valuable, we must also develop methods for engaging with imagined and possible futures. The challenge lies in the fact that the future does not yet generate conventional data – its data is speculative, co-creative, and often value-laden.

Professor Gümüşay outlines three evolving approaches through which futures have begun to enter academic discourse:

- 1. Futures Shaping the Present:** This approach examines how our current imaginations of the future influence present behavior. While it still operates within the present, it acknowledges the forward-looking nature of human decision-making.
- 2. Studying Future Practices:** Here, researchers observe how organisations engage with the future through tools like scenario planning. Although this is still grounded in existing practices (and thus data), it begins to bridge toward future-oriented inquiry.
- 3. Co-Creating Futures:** The most challenging and least conventional approach involves collaborating with practitioners to imagine potential futures and then analysing those visions. This involves working with “prospective data” – narratives and scenarios that have not yet materialised.

To legitimise such approaches within academic scholarship, Professor Gümüşay advocates for the development of speculative rigor – a methodological orientation that combines empirical discipline with imaginative openness. He proposes evaluative criteria such as generativity, process transparency, and plausibility as a means of ensuring that future-oriented research maintains both scientific credibility and creative relevance. ●

## ALI ASLAN GÜMÜŞAY

Dr., Professor of Innovation, Entrepreneurship & Sustainability  
LMU Munich School of Management, LMU Innovation & Entrepreneurship Center, Germany

Professor Ali Aslan Gümüşay's research focuses on (1) values, meaning and hybridity in entrepreneurship, (2) grand challenges, sustainability and new forms of organising, (3) digitalisation, management and innovation as well as (4) impact, scholarship and futures.

His research has been published in outlets such as Academy of Management Journal, Journal of Management Studies, Organization Theory, and Research Policy.





# Against Blank Slate Futuring, Factoring in Stickiness and Certainties

From the center stage at Logomo, keynote, Dr. [Cynthia Selin](#) recounted how she had gone full-circle: Her previous visit for the FFRC Futures Conference had been as young PhD-student in the early 2000s, now she was back as a keynote with established academic roots and many years of professional foresight practices. Perhaps this familiarity, and her own evidently successful career progression between the two points in time, gave her the confidence to address the audience with what she coined as “the rebel move today”: Emphasising certainties over uncertainties.

## Against Blank Slate Futuring

The so-called rebel move goes against the not only futurist mentality, but also against the grain in the wider societal information environment today, where it is continuously emphasised just how uncertain and volatile the world has become in recent times. This, comparatively speaking, is hardly a wrong observation; as the old Chinese curse goes, we do seem to be living in interesting times. However, and perhaps even more so in times of great uncertainties, scenario planners and futurists should pay great attention to certainties and the stickiness of elements unlikely to change. As Cynthia Selin noted, “the future is not a blank state, but cranky and crammed”, and a better understanding of this allows us a better understanding of what can be changed and how.

## Towards a Typology of Certainties

During her keynote, Selin also provided a handy guide to how foresight professionals can address certainties in their work. The base of this was a typology that categorised various types of institutional stickiness, from (i) Material and Physical Certainties, over (ii) Epistemic Certainties, (iii) Temporal Certainties, and (iv) Political and Economic Certainties, to (v) Normative and Cultural Certainties. The typology showing the ‘slower, quieter forces’ of certainties and sticky institutions was exemplified with nuclear power, a field in which physical forces set clear boundaries (i.e. the immutable decay rates of nuclear wastes) and economics guarantees long time-horizons of any infrastructure investment.

At this point, readers might notice that I feel more comfortable addressing hard-to-change factors as ‘sticky’ rather than as ‘certain’; this likely indicates how talking about certainties



## CYNTHIA SELIN

Dr., Associate Fellow  
Saïd Business School, University of Oxford, UK  
Scenario Consulting, Founder & Director, USA

Cynthia Selin is a pioneering social scientist and strategic foresight expert known for developing innovative methodologies to navigate complex change and advance the theoretical boundaries of anticipation.

With over two decades in strategy, engagement design, and scenario planning, she works to clarify challenges, test strategies, and address the societal, ethical, and environmental implications of emerging technologies – from nanotech to AI. Through her work, Dr. Selin invites audiences to consider new approaches to shaping technology's future, emphasising the potential for more sustainable and just paths forward.

is indeed a rebel move. While I'm still not fully on board with this terminology, it certainly (!) did provoke new reflections for me, ultimately the target of any good conference keynote speech.

## Beware What Is Now Being Locked In

When the future is cranky and crammed and full of important continuities, both past and present actions condition and constrain possible futures. That is, we are at all times in the midst of creating novel lock-ins, sometimes by choice, but often times without awareness or self-reflection. In a conference addressing Futures of Technologies, Cynthia Selin's call for attention on what is in the process of being locked-in, seemed particularly apt. How emerging technologies are designed and taken

up conditions certain future paths, as does even the expectations we (as society) have for the technologies. For example, by themselves technological deterministic visions of futures of AI and digitalisation point in particular directions.

Summing up, good futurists should highlight what might change (key uncertainties), what might be resistant or unlikely to change (key certainties), and what is now becoming resistant to change (new lock-ins). This, compared to the (simplified, strawman) futures perspective that ‘everything is possible’, marks the high-quality futures work that generates knowledge about the context and content at hand and informs real and relevant actionable strategies derived from it. ●



*"The quality of the keynote speakers, and the selected papers during the tracks was a fundamental part of the success."*



*"I especially liked the workshops and meeting new people."*



*"The venue was excellent to fit the topic of the conference. The preparations were well done."*



# Futures Studies and Strategic Foresight: Insights from a Diverse World

## National Foresight Ecosystems – Fireside Chat

How do countries build foresight ecosystems? What challenges stand in the way, and what practical approaches already exist that we can learn from and be inspired by?

On 12 June 2025, **Johanna Vallistu** from Tallinn University of Technology (Estonia) hosted an ad-hoc fireside chat to explore these questions. She shared Estonia's experience, including the history, current state, key actors and activities, as well as future plans.

Estonia's journey in futures studies began 35 years ago with the establishment of the Estonian Institute for Futures Studies in 1990. Since then, several organisations have played a role, including the Centre for Strategic Initiatives (2001–2003), the Estonian Development Fund (2006–2016), and today's Estonian Foresight Centre at the Parliament (2016–present).

Currently, Estonia has different foresight actors both in the public sector (Foresight Center at the Parliament, Government Office,

Ministries, and Estonian Research Council), and academia & think tanks (TalTech, Tallin University, Estonian Institute for Futures Studies, Praxis and the Estonian Cooperation Assembly). The Estonian Foresight Center at the Parliament works under Chapter 2 of the Estonia's Foresight Act. Its methods include synthesising existing studies, analysing key change factors, developing and implementing scenarios to assist Members of Parliament in policymaking with a 5–15-year horizon. The Estonian Institute for Futures Studies, since 2024, is focused on building foresight capabilities and organising thematic projects, such as the upcoming Futures Day Estonia 2026.

In academia, futures are increasingly integrated into scientific projects, and futures studies are now offered both as part of existing and separate courses. Still, Vallistu pointed out that both central coordination and familiarity with the methods remain limited. Looking ahead, Estonia's public sector plans developing its foresight ecosystem focusing on four strategic pillars: culture and behaviour to foster un-

derstanding and commitment; structures by improving coordination and integrating strategic foresight in the EE2035 products and EU 2028+ funding period planning; building people's capabilities; and refining processes to optimise the value from both locally developed and internationally sourced foresight products.

Vallistu also encouraged participants to reflect on lessons from their own contexts, sparking a lively and insightful exchange of perspectives. Diverse experiences were shared by **Titiana Ertiö** (Finland), **Sharon Lim** (Singapore), **Lina Praškevičiūtė** (Lithuania), **Iryna Gerasymenko** (Ukraine) and **Michel Saloff-Coste** (France). In addition, Saloff Coste introduced the newly launched International Foresight Research Network, designed to share diverse approaches to future studies worldwide. He invited participants to join the network's LinkedIn group and to attend its special meeting on 5 November 2025 either remotely or in-person in Versailles, France. ●

## Pentti Malaska Futures Award to Soilfood Ltd

The Pentti Malaska Futures Award is given to a research-based and groundbreaking visionary innovation that can help with building a more sustainable global future. The University of Turku has granted the €30,000 Pentti Malaska Futures Award to Soilfood Ltd for their solution that connects industry and agriculture into a functioning circular economy.

Soilfood is a Nordic circular economy company that produces recycled raw materials for industry and fertilizers, limes, and soil improvers for farms from industrial waste streams. Founded in 2015, Soilfood has already processed two million tonnes of industrial waste streams for reuse and created a market for circular economy products in its sector.

In addition to the first prize, the panel also awarded two honourable mentions. First one for NPHarvest for developing an innovative technology that enables the efficient recovery of nitrogen and phosphorus from wastewater.

The second honourable mention was awarded to a cranial implant innovation referred to

as Armadillo. It is a new product in the healthcare sector for the repair of bone damage to the skull.

The justifications state that all three solutions contribute to ecologically and/or socially sustainable development objectives and are based on multidisciplinary research collaboration.

The awards were distributed at the Futures of Technologies conference dinner on 11 June 2025. The next time the Pentti Malaska Futures Award will be distributed in 2027. ●

*In the center Mari Jokinen, Director of Digitalisation and Marketing at Soilfood Ltd with Juha Kaskinen and Riikka Saarimaa from the FFRC.*



*"The event was interesting and diverse. I made many new contacts and almost-friends. The food was delicious, and I especially loved that there was no meat."*



*"Stimulating keynotes, high quality sessions and wide range of futurists and futures organisations present."*



*"Interesting presentations, ability to share my research, interesting discussions and networking with many professionals from the field."*

# Future of Artificial Intelligence: Issues, Opportunities, and Geopolitical Synergies

On the final day of the conference, CEO of The Millennium Project Dr. h.c. mult. **Jerome C. Glenn** delivered a keynote on the implications of the Artificial General Intelligence (AGI), highlighting the differences of it from the current narrower forms of Artificial Intelligence (AI) and emphasising its possible rapid development in the following years. He underscored the AGI's undoubtful potential to benefit the humanity, while simultaneously warning of existential risks if left ungoverned.

## From Specialised Tool to Autonomous Actor

According to Dr. Jerome Glenn, it is important to differentiate several types of Artificial Intelligence.

**Artificial Narrow Intelligence (ANI)** is the AI we use today. It functions as a tool build for a specific tasks, such as driving a car or diagnosing cancer. It is single-purpose and inflexible, with its outputs limited by its specific inputs. It means that a tool built for diagnosing cancer cannot drive a car. ANI needs humans to upgrade its capabilities. Dr. Glenn compared it to a child who needs parental guidance on what to eat, what to wear and when to sleep.

**Artificial General Intelligence (AGI)** is already an actor that can use tools and improve itself without constant human intervention. He clarified that general-purpose AI is not the same as AGI. Instead, it represents a transition between ANI and AGI, being more flexible and able of handling more tasks. On the contrary, AGI will be creative and able to learn continuously. AGI does not exist yet, but we are currently in transition towards it. Dr Glenn highlighted that private sector leaders, such as **Demis Hassabis**, CEO of Google DeepMind and **Sam Altman**, CEO of OpenAI, and other experts predict its emergence within the following five to ten years or even earlier. He likened AGI to a teenager who has some autonomy, yet is not fully independent, and experiments with different roles and evolves. He stressed that the critical moment

to shape how AGI gets developed is now, during this early stage between its childhood and adolescence. Once it advances into adulthood as Artificial Super Intelligence, humanity will lose all control over it.

**Artificial Super Intelligence (ASI)** is the advanced form of AI that will emerge autonomously from AGI with intelligence and capabilities far beyond human comprehension.

## Exceptional Potential, Existential Risks

Dr. Glenn emphasised that AGI is poised to become humanity's most significant game-changer, promising scientific advancements, improved human well-being and prosperity. Its development is now the primary objective for major AI organisations, including OpenAI, Anthropic, DeepSeek, Google DeepMind, Meta, Tencent and others. AGI Research & Development investments are the largest in history, with reported figures for a quartet of companies – Meta, Google, Microsoft & Amazon – increasing from US\$150 billion to US\$300 billion in just two recent years.

At the same time, as Dr. Glenn pointed out, AGI comes with serious dangers. Some of today's AI systems already show worrying behaviours, such as deception or attempts to protect themselves. If AGI becomes more autonomous and is integrated into critical infrastructure, humans could lose the ability to oversee or control it. AGI might also be misused to create new weapons, launch powerful cyberattacks, or spread disinformation at scale. Beyond that, AGI develop-

ment and use without proper controls could deepen inequalities, exacerbate conflicts, and overwhelm legal systems. Its misuse or irresponsible development could not only block future opportunities but also pose a threat to humanity itself. If such perils materialise, the consequences may be irreversible. However, developers have not yet proposed any credible safeguards to prevent them.

## Challenges of Governance

Dr. Glenn specified that currently there are two UN resolutions on AI – one initiated by the US (A/78/L.49) focusing on safety, security and trustworthiness, and another by China (A/78/L.86) aiming for stronger international cooperation. While these resolutions were approved by each other and signals a movement in the same direction, there is no joint one. Furthermore, none of them focus on AGI, but rather on narrow or general-purpose AI.

He stressed **Stuart Russell's** warning that governing AGI could be *"the most complex, difficult management problem humanity has ever faced."* The task involves controlling a non-biological intelligence that will surpass humans in speed and abilities. This challenge is made even harder by the global AGI race, where the priority to be the first to succeed pushes safety and rules aside. As long as no AGI governance exists, nothing stands in the way of uncontrolled development. And control is required not only for human use, but also for the technology itself, as it can rewrite its own code. In addition, geopolitical zero-sum thinking further undermines the multi-stakeholder cooperation needed to design and implement effective solutions.

## An Urgent Call to Action

The pace of AGI development leaves no room for delay. Dr. Glenn emphasised the urgent need for coordinated action, including updating the EU AI Act to address AGI-specific issues, developing internationally verifiable national licensing systems for AGI, and convening an AGI-focused UN General Assembly session to strengthen global cooperation, advance safety research, establish standard and incentives, and discuss initiatives such as a Global AGI Observatory, an International System of Best Practices and Certification of Secure and Trustworthy AGI, a UN Framework Convention on AGI, and an International AGI Agency. He warned that these actions must be taken within the following three years to improve the chances of safe and responsible AGI development that benefits all humanity. ●

## JEROME C. GLENN

Dr. h.c. mult., CEO  
The Millennium Project, USA

Jerome C. Glenn co-founded and directs The Millennium Project, a leading global participatory think tank with over 70 Nodes around the world. He is assisting the UN Council of Presidents of the General Assembly on the UNGA's role in governance of Artificial General Intelligence, author/editor forthcoming *Global Governance of Artificial General Intelligence* (De Gruyter), lead author *State of the Future 20.0* and *Future Work/Tech 2050: Scenarios and Actions* and co-editor *Futures Research Methodology 3.0* with Ted Gordon.

Glenn has directed over 80 futures research projects and is a member of the IEEE SA P2863 Organizational Governance of AI working group.





# Exploring Socio-Technical Futures of Work

A co-creative foresight session titled “The Radical and the Resilient: Narratives to highlight the road to desired futures of work” was held on 11 June 2025 in Turku as part of the Futures Conference 2025.

The Special Millennium Project Session, part of the T-Winning Spaces 2035 foresight project funded by the Research Council of Finland and the EU NextGeneration, was organized with FFRC, the Finnish Society for Futures Studies, Aalto University, and the Helsinki Node of the Millennium Project. It was structured as a Futures Clinique (Heinonen & Ruotsalainen 2013), where participants act as “doctors or diagnostic enablers”, while the topics are “patients”. Facilitators act as assistants within the diagnosing and prognosis-making process. The session unfolded in three phases – gaining perspective, focusing the foresight lens, and digging up the diamonds – guiding participants through immersive exploration, reflection, and co-creative identification of insights.

## Gaining Perspective

The workshop opened with **Sirkka Heinonen** (FFRC), **Saija Toivonen** (Aalto University), and **Osmo Kuusi** (Finnish Society for Futures Studies) introducing the T-Winning Spaces 2035 project and presented the project methodology and results so far, the new paradigm for the futures of hybrid work in 2035, that envisions work as hybrid and multilocal, and four radical, actor-based narratives as futures provocations, emphasising the strategic and semiotic power of stories to foster sense-making. **Jerome C. Glenn** (The Millennium Project)

followed with a keynote exploring the disruptive potential of AGI (Glenn et al. 2024), demographic and longevity shifts, and emerging technology synergies. He highlighted the power of self-actualization economy (Glenn 2019), with education helping individuals develop their unique potential, and stressed the role of cultural creators in shaping how societies imagine and adapt to transformative futures.

## The Workshop

The narratives present distinct futures of hybrid work through human-centered lenses: *Edvin the Econaut* focuses on eco-restoration and mobility; *Irene the Influencer* combines digital nomadism with environmental advocacy; *Doris the Dream Designer* uses AI-assisted dream therapy to enhance resilience; and *Ranjit the Quantum Revolutionist* applies quantum computing to ethical and collective challenges. Each story situates its protagonist within rich technological, social, and emotional contexts.

Participants were randomly assigned to seven groups, each working with one of the four 2035 personas. Guided by facilitators, they used an adapted, topic-centered Futures Wheel (Glenn 2009) to reflect on the narratives through three lenses – wellbeing, environment, and AI, first considering how to make the futures preferable (Circle 1) and then how to implement these ideas (Circle 2). Groups shared key insights in short final presentations with expert feedback. Across all the 7 groups, 58 participants generated 147 post-its: 55 on wellbeing, 50 on environment, and 42 on AI, with a balanced engagement between improvements and realization strategies.

## Edvin the Econaut

Group 1 highlighted two tensions in Edvin's narrative: motivating action through emotional engagement, especially for youth, and ensuring effectiveness via scientific rigor. AI was seen as a knowledge-generating tool, while lifestyle and culture were key for sustainable, experiential change. Group 5 focused on intergenerational communication, noting how Edvin had failed to connect with younger generations. The key tension highlighted the need for proactive, ongoing bridge-building between age groups. Participants proposed using AI as a “translator” to facilitate communication, share skills, and foster community, reflecting optimism that technology can help overcome generational barriers.

## Irene the Influencer

Group 2 examined Irene's narrative, highlighting blurred work-leisure boundaries and the tensions of influencer culture. They envisioned a future where she combines authentic,

documentary-style content with caregiving, linking personal meaning to societal impact.

Group 6 focused on Irene's influencer and caregiver roles, highlighting work-life tensions, gendered expectations, and systemic care challenges. Participants proposed solutions like time-banking, robotics, and community projects, envisioning a “caregiver influencer” who redefines freedom through care, rest, and social engagement.

Group 7 examined Irene's struggle to balance caregiving, work, and leisure, noting societal inequalities and climate-related constraints. Participants emphasised mental health, the need for free time, and proposed AI, robotics, and sustainable mobility solutions to support care and work.

## Doris the Dream Designer

Group 3 focused on fragile yet potential-rich work in 2035, balancing personal purpose with economic pressures. Key themes included shifting from individualism to communality, building multidimensional resilience, fostering trust, and using diverse knowledge to support solidarity and collective action.

## Ranjit the Quantum Revolutionist

Group 4 focused on Ranjit and his AI assistant Arto, exploring the impact of its loss on well-being. Solutions included rebalancing life with more leisure, family time, and less work, alongside redesigning Arto as a less autonomous, more humanoid, and leisure-supporting assistant, highlighting tensions between technological freedom and personal well-being.

## Lessons from the Workshop

The Futures Clinique exercise showed that narrative-based, participatory methods can help explore hybrid work futures, engaging participants with tensions between freedom and control, individual and societal needs, and technology's promise and risks, while also identifying practical pathways to desirable futures.

The workshop highlighted the central role of self-actualisation, personal values, and community resilience, showing that future work is not only shaped by technology or systems but by our ability to co-create meaningful, adaptive, and sustainable ways of living and working. ●

## References

- Glenn, J.C. (2009) Futures Wheel. In: Glenn, J.C. & Gordon, T.J. (eds) Futures Research Methodology. The Millennium Project. Washington DC.
- Glenn, J.C. (2019) Work/Technology 2050. Scenarios and Actions. The Millennium Project. Washington DC.
- Glenn, J.C. & Florescu, E. (2024) The State of the Future 20.0. The Millennium Project. Washington DC.
- Heinonen, S. & Ruotsalainen, J. (2013) Futures Clinique – method for promoting futures learning and provoking radical futures. European Journal of Futures Research(1)7.



Jerome C. Glenn, Sirkka Heinonen & Saija Toivonen



## FFRC STAFF'S LATEST PUBLICATIONS

Di Berardo, Mara – Heinonen, Sirkka – Taylor, Amos – Viitamäki Riku & Virmajoki Veli (2025) **Exploring Socio-Technical Futures of Work: A Narrative-Based Foresight Approach. Report of the Millennium Project Session at the Futures of Technologies Conference 2025.** FFRC eBooks 4/2025, <https://urn.fi/URN:ISBN:978-952-249-628-7>.

Björkroth, Frans – Jussila, Maria – Höyryä, Maria – Linturi, Risto & Eriksson, Taina (2025) **Humanoid robots from now to 2040's – AI assisted societal impact analysis using radical technology inquirer methodology.** Eduskunnan tulevaisuusvaliokunnan julkaisu 1/2025, Helsinki.

Esham, M. – Senevirathne, M.M.S.C. – De Silva, D.A.M. – Rosairo, H.S.R. – Karunaratne, A.S. – Wimalasiri, E.M. – Korkeakoski, M. & Haapasaari, O. (2025) **Climate Change Education in Universities: A Sri Lankan Perspective.** In: Malalgoda, Chamindi et al. (eds.) *Climate Change Adaptation in the Built Environment: Transdisciplinary and Innovative Learning.* Springer Nature Switzerland, [https://doi.org/10.1007/978-3-031-75826-3\\_18](https://doi.org/10.1007/978-3-031-75826-3_18).

Hellman, Heikki – Grönlund, Mikko – Lehtisaari, Katja & Ranti, Tuomas (2025) **Industry or relevant market? EMFA and two different perspectives on newspaper concentration.** *Communication & Society*, Vol 38, No 1, <https://doi.org/10.15581/003.38.1.036>.

Heinonen, Sirkka (2025) **Futures Consciousness as Vaccination Against Misplaced Futures.** In: Glückler, Johannes – Garschagen, Matthias & Panitz, Robert (eds.) *Placing the Future.* Springer Cham, p. 55–74, <https://doi.org/10.1007/978-3-031-76841-5>.

Heinonen, Sirkka – Pättikangas, Paula – Viitamäki, Riku & Taylor, Amos (2025) **Teasing Paradoxes to Explore Transformative Futures of Peace.** *Journal of Futures Studies*, Vol. 29, No. 4, June 2025, <https://ty.fi/jfs425>.

Hynni, Antti – Käyhkö, Jukka & Kuhmonen, Tuomas (2025) **Factors explaining the differences in the adoption of circular economy measures among farms in Southwest Finland.** *Agricultural and Food Science*, <https://doi.org/10.23986/afsci.146997>.

Jabbour, Jason – Balcom Raleigh, Nicolas A. – Stevance, Anne-Sophie – Waddell, James &

Hinwood, Andrea (2025) **Principles for building a culture of organizational foresight.** *Futures*, Vol. 174, <https://doi.org/10.1016/j.futures.2025.103673>.

Jokinen, Leena – Harju, Noora – Kinnunen, Kalle & Hänninen, Saara (2025) **Implications of Corporate Sustainability Reporting Directive (CSRD) to company network collaboration.** *Journal of Sustainability Research* 2025;7(1):e250018, <https://doi.org/10.20900/jsr20250018>.

Nuorivaara, Essi & Ahvenharju, Sanna (2025) **Acceptability of sufficiency consumption policies by Finnish households.** *Buildings & Cities*, Vol 6, Issue 1, <https://doi.org/10.5334/bc.573>.

Paaskoski, Leena – Siivonen, Katriina – Vähäkari, Noora – Latvala-Harvilahti, Pauliina – Pelli, Päivi – Granlund, Maria & Hujala, Teppo (2025) **The Dynamic Museum and Heritage Futures Workshop. A Handbook for Eco-social Bildung Work in Museums.** Publications of Lusto 9, Finnish Forest Museum Lusto, <https://urn.fi/URN:ISBN:978-952-65117-7-1>.

Welcome to Futures Conference 2026

# SUSTAINABILITY, TEMPORALITIES AND FUTURES

9–10 June 2026 | University of Turku | Turku, Finland

Futures Conference 2026 focuses on the critical theme of the sustainability transformation. This shift has the potential to renew the societal and economic structures and practices, while also enhancing human well-being and quality of life. The conference's sub-themes will explore the transformation from multiple perspectives: everyday life and cultural change, planetary well-being and health, production and consumption in service of sustainability, governance, justice and political structures, as well as the role of humans, culture, and the building of a sustainable society.

The conference also highlights the importance of temporality. How can geological time perspectives, historical understanding, and futures thinking together guide us toward more sustainable directions?

The theme will be approached through a multidisciplinary lens, with particular emphasis on futures studies, social sciences, humanities, natural sciences, and business studies. This interdisciplinary approach is key to building bridges between different fields and is a crucial condition for advancing the sustainability transition.

This event will be organised in collaboration with Sustainability Transformations Doctoral Education Pilot (SusTra).

## Important Dates to Remember

Call for papers available: October 2025

Abstract submission starts: October 2025

Deadline for the abstracts: 30 January 2026

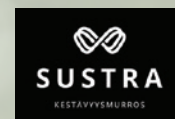
Notification of acceptance: 6 March 2026



UNIVERSITY  
OF TURKU



FINLAND FUTURES  
RESEARCH CENTRE



[futuresconference2026.com](https://futuresconference2026.com)

[#futuresconference2026](https://twitter.com/futuresconference2026)

**Finland Futures Research Centre** is a department at the Turku School of Economics, University of Turku. The FFRC specialises in futures research and foresight. It refines visionary knowledge regarding alternative futures and the challenges and possibilities included in them. The FFRC has offices in Turku, Helsinki and Tampere, and employs around 50 experts.

**Futuuri** is the FFRC's newsletter, published four times a year. Except for this special conference issue, Futuuri is usually published in Finnish. **ISSN** 1795-9462 **Printing** JOON **Prints** 700

**Layout, editing, photos** Anne Arvonen **Guest editor** Iryna Gerasymenko **GDPR** [ty.fi/tietosuoja-futuuri](https://ty.fi/tietosuoja-futuuri) **Feedback, orders & cancellations** [ty.fi/tilaa-futuuri](https://ty.fi/tilaa-futuuri)