Using the future

Embracing uncertainty, improving decision-making and democratising tomorrow

PICTET 1805 Asset Management

COPENHAGEN INSTITUTE FOR FUTURES STUDIES

Our futures are shaped by the decisions we make in the present. By becoming more conscious of how our understanding of the future guides these decisions, both in a professional and personal setting, we can make choices that are better informed and less clouded by biases and misguided assumptions. This report is an exploration of how to enable future-ready decision-making in organisations, through strategic foresight, and more future-conscious decisions on an individual level, through fostering futures literacy and broader inclusion of the public in futures work in general.

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SCENARIO reports

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FOREWORD

Pictet Asset Management has been working with the Copenhagen Institute for Futures Studies (CIFS) for over a decade to establish a deeper understanding of megatrends – the powerful secular forces that are changing the environment, society, politics, technology and the economy.

CIFS is a leading global think tank and consultancy. CIFS uses a wide range of research methods, developed over the last 40 years, which include megatrend analysis, scenario planning, risk management, innovation initiatives and strategy development.

Through our partnership with CIFS, we have devised an investment framework that incorporates CIFS' 14 megatrends. The framework – which includes trends such as Demographic Development, the Network Economy, Focus on Health, Sustainability and Technology Development – enhances our thematic equity capabilities and informs the construction and development of our thematic equities strategies such as Water, Robotics or SmartCity.

As CIFS' partner, Pictet Asset Management has access to research into areas not normally covered by the investment analyst community such as changes in societal attitudes and beliefs, the impact this has on the environment and the business sector, and the acceleration of technological development. We are proud to be associated with CIFS and would like to share some of their research with you. We have sponsored this publication and hope you find it as insightful as we do.

HANS PETER PORTNER
Head of Thematic Equities
Pictet Asset Management

Content

Introduction If you read the title of this report and thought it was odd, read on – your scepticism is understandable. After all, the future is a time and a place, not a tool, so how can it be 'used'? Hopefully, once you finish reading, we will have you convinced that yes, the future can be used in many ways and for many different purposes. In fact, we all use it every day. When we make choices that will impact our lives, weigh the pros and cons of different potential outcomes, or consider alternative scenarios, we are effectively using the future to make decisions in the present.

What we aim to show in this report is that by becoming more conscious of how we make these decisions, both in a professional and personal setting, our actions will be better informed and less clouded by biases and misguided assumptions. The first step in this process is understanding how the future can be used as a tool, and that this tool can be honed, sharpened, and shaped in different ways depending on the need.

When futures thinking is applied in an organisational context, it is often as a way for management, working in collaboration with professional futurists, to improve (or 'futureproof') organisational strategy. The term for that is 'strategic foresight'. In Part 1 of this report, we explore the necessity of strategic foresight in organisational decision-making, which becomes especially clear in times of uncertainty. We go into depth with how and why strategy and foresight go hand in hand, which common biases to be mindful of when doing any kind of strategic futures work, and how factoring in unforeseen 'wild card' events can help organisations stress test their game plan and expose blind spots. We also explore where the field of strategic foresight may be headed by looking into how new technologies

can improve and augment both the practice of doing foresight work and the 'end user' experience of the output.

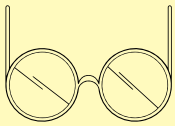
In Part 2 of the report, we look at the evolution of futures thinking beyond the corporate world, specifically the efforts being made to democratise and disseminate it more widely and make it work to different ends than to improve organisational strategy. If we are indeed living in the 'age of mass protests' as one US-based think tank has recently claimed, then perhaps it is high time we think about how we can make the tools and capabilities needed to engage with the future more readily available to the public. Doing so won't fix all our problems, but it can help individuals better understand their own agency in shaping the future that they desire. One of the newest developments in this regard is the concept of futures literacy, which UNESCO has deemed to be one of the most important individual capabilities for the 21st century. Fostering futures literacy means improving people's capabilities to use and imagine multiple futures for different purposes and in different contexts. We will discuss how and why this is done in the first two articles of Part 2.

A common theme throughout the second part of the report is the importance of deconstructing dominant images of the future built on outdated structures inherited from the past, so that new narratives can be created. One expression of this is the decolonising futures movement, which means engaging critically with the past and making space for marginalised world views. We round off the report with a closer look at this phenomenon, as well as how individuals can become more aware of how to use the future through education and broader participation in futures thinking in general.

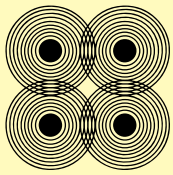
We hope you enjoy reading.

Vocabulary of the future

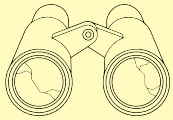
This report references a variety of terms used by futurists to describe the work they do. At first glance, some can seem confusing. What, for instance, is the difference between forecasting and foresight? What does it mean to be futures literate? When does a trend become a megatrend? To answer questions such as these, we have collected a glossary of terms often used in futures thinking.



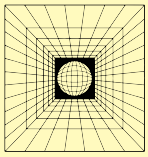
Futures Studies: The systematic and interdisciplinary exploration of possible, probable, and preferred futures as well as the myths and worldviews that underlie them. The identification of these alternative futures has been described by futurist Sohail Inayatullah as a fluid dance of structure (the weights of history) and agency (the capacity to influence the world).



Scenarios: Snapshots of plausible, alternative futures. Most often, scenarios are constructed through the identification of critical uncertainties that are combined in a 2x2 grid. The resulting four spaces, each combining two polarities of the uncertainties, represent the scenarios, which are then expanded in a process that involves both analysis and storytelling. Integral to the process is that there are always multiple competing scenarios. As such, scenarios can never be predictions for the future. Their function is rather to provoke us to think about the future in new ways and plan for multiple potentialities.



Strategic foresight: A planning-oriented discipline related to futures studies and focused on informing and shaping strategic decision-making, guiding policy, or exploring new markets, products, and services. Strategic foresight combines methods from futures studies with those used in strategic management.



Anticipation: A broad concept that covers all efforts to know, think about, and utilise the future and which works both implicitly and explicitly. Becoming aware of and recognising our anticipatory assumptions is the start of becoming futures literate.

Futures literacy: The capability to imagine and use alternative futures in different contexts, including the ability to identify the assumptions that play a part in this process. Like reading, futures literacy can be trained and acquired on many different levels. UNESCO defines a futures literate person as someone who has acquired the skills needed to decide why and how to consciously use their imagination to introduce the non-existent future into the present.

Sources

Richard Slaughter: Futures for the Third Millennium: Enabling the Forward View (1999).
Sohail Inayatullah: "Futures Studies. Theories and Methods" (2013).
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N. Larsen, J. K. Mortensen, & R. Miller: "What Is 'Futures Literacy' and Why Is It Important?" (2019).
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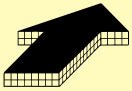
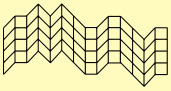


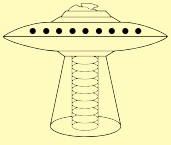
Forecasting: The process of making probabilistic statements about the future based on past and present data. Common applications for forecasting are weather forecasts and economic forecasts. Forecasting is related to (but should not be confused with) other similar terms such as extrapolation, retrodiction, simulation, and projection.

Backcasting: A planning method that starts with defining a desirable future and then working backwards to identify trends, developments, policies, and other changes that connect that specific future to the present in a plausible way.

Megatrends: Long-term trajectories that, for the most part, stay their course even in turbulent times. We can use megatrends to see the long-term picture through the short-term fog of uncertainty and rapid change. A rule of thumb is that a megatrend must be global in scope and unfold with relative certainty over a long period of time. Examples include globalisation and economic growth, which have both been relatively stable in recent history.



Trends: Directions of change over time that are either increasing or decreasing in strength or frequency. Futurists typically study patterns of change in the STEEP categories (Social, Technological, Economic, Environmental, and Political) to determine 'normal trends' or 'baselines' which are then probed and examined, often using scenarios to challenge them and imagine alternative outcomes. Often, countertrends emerge in response or opposition to the dominant trend.



Wild cards: The 'jokers' of futures studies. A wild card is an event or development with small probability but with a high impact if it occurs. Wild card analysis means identifying these events and developments and assessing their potential implications. Pandemics and financial crises are two classic wild cards in that they are constantly looming and well-known threats; we do not know when they will come but we know their implications are massive and unpredictable.

PART 1

Improving organisational decision-making

The combination of futures thinking and strategic management is often referred to under the name ‘strategic foresight’. So, what is strategic foresight, and why do we need it? The short answer is that it is a set of techniques designed to improve organisational future-readiness and inform decision-making. It is not a way to predict the future, but a way to uncover the perspectives of many different futures in order to facilitate decisions based on that knowledge today. In the first article of this report, we discuss how the accelerating changes involving globalisation, the Earth’s climate, and technology – not to mention our current health crisis – has made practicing strategic foresight more important than ever.

Making decisions about the future is something we all do all the time, both as individuals and on an organisational level. But we are rarely very conscious about what hidden psychological mechanisms impact our choices. On page 16, we take a closer look at what decision-makers can learn from behavioural economics and research into biases and heuristics. As we aim to show, awareness of the biases that cloud our thinking is a necessity in good decision-making.

The current pandemic has shown the importance of planning for the unforeseen. Understandably, this is often easier said than done. There are a great number of unexpected ‘wild cards’ looming on the horizon, each with the potential to drastically change the course of history, so how do we choose which ones to prepare for – and how much to prepare for them? In fact, prediction is not the use of wild cards. Rather, they should be used to test the robustness of strategies: could your organisation survive such scenarios – or even thrive in them? Read about wild cards and their cousins – the animal kingdom of unexpected events – on page 24.

Futures studies and strategic foresight have been around for decades. So how are the disciplines adapting to new technological opportunities and making those opportunities useful to the ‘end user’ of futures work? On page 32, we look into how combining human cognition and sense-making with the raw analytical power of artificial intelligence can improve efficiency and make deeper levels of intelligence-gathering possible. Second, we explore how technology can also power new ways of conveying the future in more compelling and impactful ways that create more relevance for strategic decision-making.

In the closing article on page 36, guest writer Dr Adam Vigdor Gordon, Faculty of Management, Aarhus University, discusses the relationship between futures thinking and strategy, including how these elements combine to create future-prepared decision-making.

What is strategic foresight, and why do you need it?

Pulitzer prize winner and New York Times columnist Thomas Friedman argues that we are in the middle of three giant accelerations – changes involving globalisation, the Earth's climate, and technology. These changes are reshaping social and economic life in powerful ways and putting a premium on 'learning faster and governing and operating smarter'. These transformative forces in markets, climate, and technology are 'melding into one giant change'.[1]

The expansion of global commerce and global communication means that we are no longer just interconnected, but also increasingly interdependent. The pace, spread, and reach of the coronavirus and subsequent global lockdown illustrates this better than anything. Globalisation has rendered the world a small village, where people can interact with minimal barriers. This free movement of people, goods, and services, which has been the stimulus to social-economic development, has also been instrumental in spreading the virus. The super-spreaders of the goods of globalisation, such as airport hubs and harbours also facilitated the spread of COVID-19. Looking further back, the 2008 global financial crisis is also an example of how crises are no longer contained to one region or nation; If a crisis is big enough, the ripple effects show up everywhere. The volcanic eruption in Iceland in April 2010 not only disrupted air travel across Europe for about a week but had an effect that extended all the way to Africa and Japan. Kenyan flower farm employees were out of work because their crop could not reach Europe, and Nissan was forced to halt production of some models in Japan because certain parts were not available.[2]

Change is accelerating and the world is more interconnected, which means that your next big opportunity and threat will probably not be one you see coming. If organisations and governments are not actively looking to the horizon for early warning signs and budding opportunities, they will probably be missed and grabbed by someone else. This is where strategic foresight can be of use.

The goal of strategic foresight is not to predict the future, but to discover the perspectives of many different futures and use those perspectives to make decisions today. Strategic foresight is therefore based on two premises: that there is not one future but many possible futures; and that it is possible today to make choices that influence future developments. At the same time, the process and decision-making includes relevant actors who can lead developments in the desired direction.[3]

By rejecting the notion of a predictable future, strategic foresight seeks to include many different plausible and possible outcomes, drawing attention to assumptions and potential blind spots. Though strategic foresight works with exploring the future, the goal is to expand the assumptions and alternative futures that form the basis of discussion and present day decision-making.[4]

1 Peter Dizikes: "Thomas Friedman examines impact of global 'accelerations'", MIT News (2018), bit.ly/2KuNLwh.

2 Michael Hotchkiss: "A Risky Proposition: Has global interdependence made us vulnerable?" Princeton University (2014), bit.ly/3kStcGx.

3 Per Andersen & Birgitte Rasmussen: "Introduction to foresight and foresight processes in practise" Technical University of Denmark (2014).

4 Adam Gordon, et al.: "Escaping the faster horses trap: Bridging strategic foresight and design-based innovation", Technology Innovation Management Review (2019).

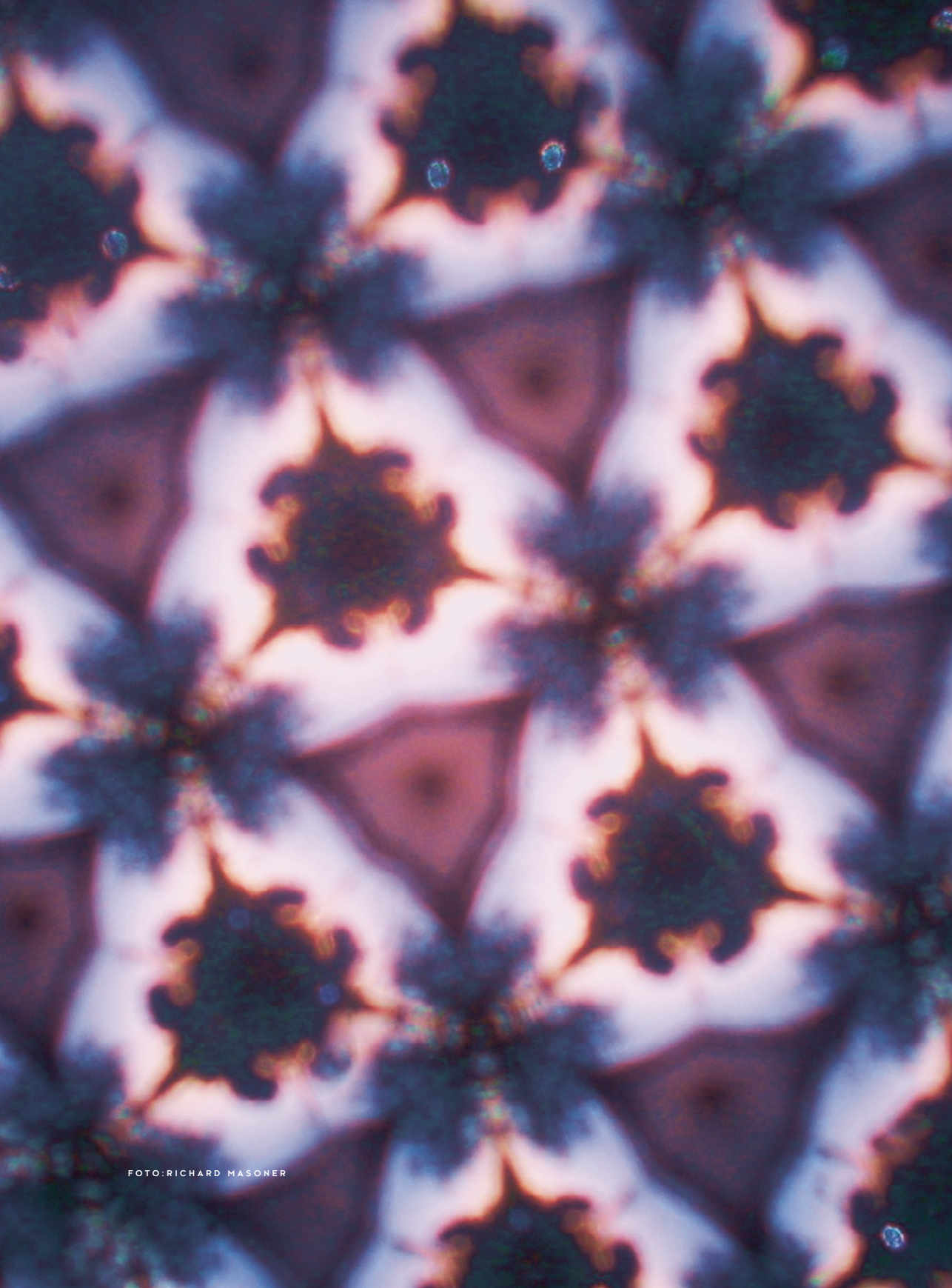


FOTO:RICHARD MASONER

In the 1970s and 1980s, strategic foresight was often used in connection with preparing the enterprise for unforeseeable future developments, whereas the discipline's use today is often more active, aiming to influence and shape future developments and internal strategy. A key strength of using foresight tools is that they improve organisations' and governments' long-term planning, early warning recognition, learning and innovation processes, and the general ability to react to changes in the strategic surroundings.[5] Strategic foresight processes are also used to involve broader actor groups (customers, suppliers, researchers, competitors, NGOs, etc.) in joint strategy development and innovation.

WHY IS STRATEGIC FORESIGHT IMPORTANT?

Strategic foresight prevents organisations from being blindsided. While organisations understand their sector and the short-term trends shaping their environment and industry, many organisations are caught unaware of the long-term trends and developments in other sectors and industries. Think – Kodak, Blockbuster, horse-drawn carriages.

For organisations to survive and thrive, and for governments to meet the needs of their present and future constituents, there are two key ingredients: resilience and propulsion. As Friedman puts it, to survive in the face of rapid change, '…you want resilience. You need to be able to take a blow, because you do not know when the disruption is going to come, but there will be disruptions. At the same time, you want propulsion. You want to be able to move ahead'.[6]

Strategic foresight provides practical tools and the possibility to experiment, explore, and create preferred futures. This exploration and experimentation is essential to dealing successfully with volatility and unpredictability. Classical planning techniques and strategy place emphasis on predictability and efficiency.[7] These techniques are inadequate to deal with the inevitable changes, disruptions, and shocks that are taking place currently and which will continue in the coming decade.

Traditional modelling techniques are vulnerable to small shifts in underlying assumptions and are not sufficient to deal with volatile and unpredictable environments. The field of strategic foresight on the other hand utilises qualitative, exploratory, and narrative tools to aid decision-makers in expanding their worldview and recognising a range of possible and plausible outcomes, which can be further tested and developed to suit a certain strategic environment.[8]

Imagine a future with fleets of autonomous buses and cars that navigate through city streets. Ridesharing services utilise sophisticated data to dispatch autonomous vehicles to pick up multiple passengers who are travelling a similar route. In this future, the way we understand public and private transport and the definition of commuting is upended.[9] This future is, however, incomplete without simultaneously imagining the supporting infrastructure, physical and digital tools, as well as the skills required to make this future a reality. What role will the public sector play, and what will the private sector bring to the table? What behavioural changes will be required to share a vehicle with strangers? There are many factors to

5 C. Daheim & G. Urs "Corporate foresight in Europe: from trend based logics to open foresight", Technology Analysis & Strategic Management (2008).

6 Adam Wernick: "A new book explores how to survive the 'Age of Accelerations'", The World (2016), bit.ly/2UTd51a.

7 Martin Reeves et al.: "Your Strategy Needs a Strategy", Harvard Business Review (2012), bit.ly/2USQgKS.

8 Adam Gordon, et al.: "Escaping the faster horses trap: Bridging strategic foresight and design-based innovation", Technology Innovation Management Review (2019).

9 Tyler Duvall et al.: "A new look at autonomous-vehicle infrastructure", McKinsey (2020), mck.co/35WypsF.

consider and even more unknown factors that will emerge as the transition to autonomous vehicles takes place.

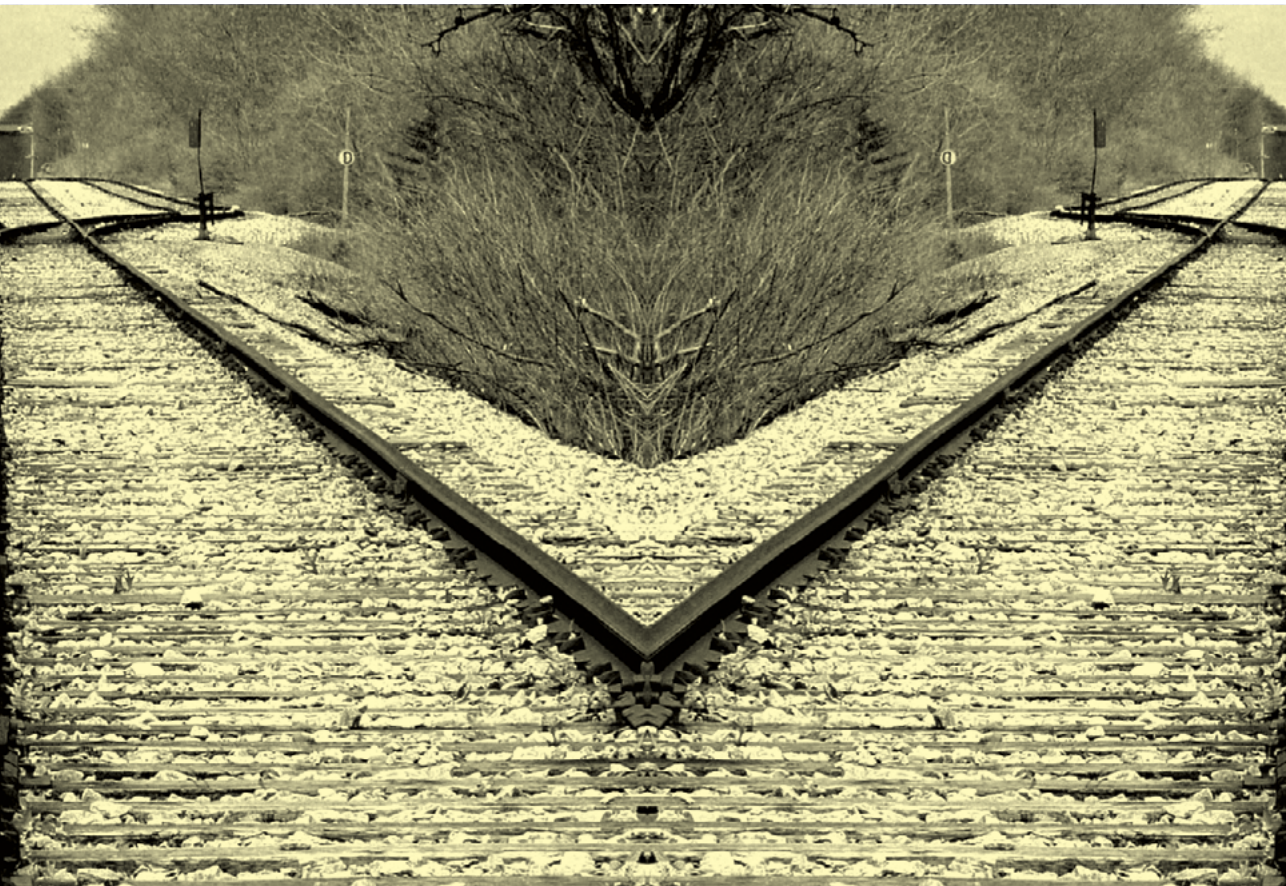
When dealing with 'unpredictable problems of the future', there are two possible routes:

1. Pretend the problem does not exist and suppose the future will look like the past.

2. Acknowledge uncertainty as a fundamental premise of life and develop scenarios to inform decision-making, not to predict, but to learn what actions you might need to take to prepare for a future that is different than today.

Which will you choose? ■

FOTO: JIMFLIX



The five waves of futures

Human beings have always imagined alternative futures and attempted to anticipate what's to come. In her paper "A Brief History of Futures", Dr. Wendy L. Schultz divides the history of futures thinking into five waves of development, starting with oral storytelling & extending to present day futures theory.

1st Wave
Oral Tradition

Shamans, mystics, and priests read signs in nature and the divine to anticipate the future.

2nd Wave
Early Written Age

Early macrohistorians start looking for patterns in the past to anticipate cycles of repetition.

Sources
Wendy L. Schultz: "A Brief History of Futures" (2015). Modified by CIFS.

3rd Wave
Enlightenment & Extraction

The idea of progress through science is born.

4th Wave
Systems & Cybernetics

Industrialised total war accelerates experiments in technical forecasting and systems operations – to either rebuild or plan for future wars. Futures studies emerges as a discipline.

5th Wave
Complexity & Emergence

Futures theory is being integrated in institutions across the world, melding with other disciplines, and moving beyond its historically Westernised framing.

Don't let your biases guide your decision-making

What behavioural economics can teach us about planning for the future

An icon within future studies, Pierre Wack, once said that the best and most difficult task of a futurist is to make people think of the world in a new way. He used the term 'reperception' to describe how people awaken to the possibility of the future being different from the past or from how you expect it to be. Wack believed that the greatest accomplishment, but also the most difficult for people working with foresight and scenarios, is to facilitate this transformation.

But why is it so difficult for us to think of alternatives to the way things are? Why are we predisposed to think in certain ways? This question has been on the mind of psychologist Daniel Kahneman for years. His writings contain clues not just to why we think the way we do in general, but more specifically how we think and make decisions about the future.

What makes Kahneman's work interesting from a futurist's perspective is his focus on human errors in decision-making that arise from heuristics and biases. He thereby challenges the assumption held by economists for decades, that of the rational human acting based on objective self-interest. In so doing, he has provided strong arguments for looking at economics from a psychological angle, an area known as behavioural economics.

Let's take a closer look at some of the biases drawn from the work of Kahneman that specifically relate to the challenge of imagining alternative futures – as well as some of the red flags to look for when these biases are applied to decision-making.

'CHANGE IS BAD FOR BUSINESS' – The status quo bias

Pierre Wack saw the act of reperceiving as crucial to opening the minds of executives and making them understand either the risks of disruption to their business or the possibilities that exist for them in alternative futures. Fundamentally, Wack was talking about how to overcome the so-called 'status quo bias'. The fundamental problem with this kind of bias is that it does not permit change to be positive. Change will, for a number of reasons, be interpreted as a threat, especially for incumbent businesses that have lowered costs on core processes substantially to increase competitiveness. Businesses in this situation have invested a lot of money in organising their offerings to be efficient, and they are the kings of low cost in what is typically a red ocean market.

For many such businesses, no change is preferred to constant change, simply because the status quo (where the incumbent business is on top) is preferred to the available alternatives. When doing strategic foresight however, you sometimes find yourself in a situation where an executive, from a logical point of view, agrees to all the driving forces causing a specific scenario, yet chooses to ignore the scenario presented to them, close their eyes, and hope for the best. This can

FOTO:BRAD_Y11

be especially perplexing to a futurist because it is no longer a question of having the right arguments or the right data. Rather, it becomes a question of feelings. Some people simply choose to ignore the facts because they hope things will turn out differently in the future than what the most likely scenario suggests.

This problem is confounded by the fact that especially big corporations often need a sizeable revenue stream to replace their cash cow, and new business very often fails to deliver enough revenue right away to be of interest. Forecasts of future revenue are rarely very reliable, primarily because new products or new technologies create new markets, the size of which are naturally hard to predict. No wonder hoping for the best, even in the face of radical change, sometimes seems to be the best approach.

At its worst, the status quo bias can lead to what is known as 'persistence of discredited beliefs'. In a now-famous study undertaken in the 1950s and described in the book *When Prophecy Fails*, psychologists studied a UFO cult that was convinced that the world would end on December 21, 1954. When in fact it did not, many of the members of the cult still clung to their beliefs, settling on alternative explanations for why the world had not ended yet. One might not be so surprised that this happens in a cult, but the fact of the matter is that something similar also often happens in large corporations, behind the walls in the boardrooms, and in governments as well.

This is a reason why it is one of the most important tasks of futurists to look for where opinions diverge between people within organisations and experts outside the organisation. When external experts have radically differing opinions about the state of the world than those inside the organisation, it is often a case of status quo bias, and that should raise a red flag.

'WHEN IN DOUBT, GO WITH WHAT YOU KNOW' – The confirmation bias

In many cases, the tendency to search for, interpret, and recall information that supports one's own beliefs actively stands in the way of choosing a better path forward. The 'confirmation bias' has been known for years, and rules to mitigate it are integrated into the scientific method and teachings of good scientific practice. However, it is very much a part of everyday media and politics, and it affects decision-making in many areas of society and business.

As Kahneman points out in his book *Thinking Fast and Slow*, confirmation bias tends to be strongest with emotionally charged issues and entrenched beliefs. The current media reality, increasingly defined by online echo chambers, tends to feed our confirmation biases by creating spaces where we can easily have our existing beliefs confirmed by likeminded individuals. The largest study ever done on the spread of falsehoods on Twitter was published in Science in 2018, and the results confirmed that the confirmation bias thrives in our fast-paced social media reality. The study, which was conducted by MIT researchers, tracked how news circulates and found that hoaxes, rumours, and falsehoods consistently dominated the conversation on Twitter. In fact, stories containing false information tended to reach people six times quicker than stories containing factually correct information.[1]

1 Soroush Vosoughi, Deb Roy, & Sinan Aral: "The spread of true and false news online", Science (2018).

For executives, the confirmation bias manifests itself most often when they choose to only listen to people who share their own opinions. This impulse can be so strong that it ends up being a defining trait of an organisational culture. This can lead to information contradicting the established truth not being circulated or taken seriously. In other words, a self-imposed censorship can take hold, which means that disruptive business models or technologies that are around the corner may be ignored at the detriment of the organisation. Other times, decision-makers will have put in so much effort into committing to a specific strategy that there is a sunk cost connected to switching lanes, and so, an executive may do their best to continuously seek out arguments that confirm that the chosen strategy is the right one. This can blind one to the possibility that other directions may be more beneficial in the long term.

'THIS IDEA IS SO GOOD IT COULDN'T POSSIBLY FAIL' – The optimism bias

One of the most commonly observed biases is called the 'optimism bias'. In our 2017 report *Evaluating the Hype*, we explored how this kind of bias often affects the assessment of what the impact of new technologies will be, and how fast they will reach maturity. Almost without exception, experts and media commentators alike tend to believe that things move faster than they actually do. For this reason, when assessing the prospects for a technology's future breakthrough, it may be necessary to add two, five, ten, or even twenty years to that assessment (depending of course on the technology) if you think you may be suffering from optimism bias yourself. There are several reasons for this delay that may not immediately come to mind. For example, new technologies are often hemmed by standardisation issues, regulations impeding uptake, or high prices creating a tough transition between innovators and early adopters.

Optimism bias often makes an appearance whenever people try to envision how things may look in the future, both in regard to their personal outlook and when assessing more general developments. Kahneman argues that there are several reasons for this, chief among which is that our judgment is affected by the goals or end-states that we aim for or desire. That is a fancy way of saying wishful thinking.

Optimism bias is often found going hand in hand with confirmation bias. The sense that one's own business is superior to the competitor is what happened to Martell, the producer of Barbie dolls, who found that despite having been able to fend off all the prior attacks on their core product, Bratz still managed to take a big market share to the big surprise of Martell's management.

Optimism bias is often present when new technology sees the light of day. Some readers may remember the hydrogen bubble in the early 2000s, during which President George W. Bush said fuel cell cars would be competitive with internal combustion engines by 2010 and would eliminate over 11 million barrels of oil demand per day in the US by 2040. Today, there are fewer than 20,000 heavily subsidised hydrogen fuel cell vehicles on the roads globally, nowhere close to the target.[2] Research has shown that this kind of bias is clo-

2 Michael Liebreich: "Separating Hype from Hydrogen – Part Two: The Demand Side", BloombergNEF (2020), bit.ly/399VOJf.

sely tied to mental well-being, with individuals suffering from depression showing less signs of optimism bias. The same study also made clear that even experts aren't free from optimism bias: 'Divorce lawyers underestimate the negative consequences of divorce, financial analysts expect improbably high profits, and medical doctors overestimate the effectiveness of their treatment', the researchers write.[3]

AWARENESS IS THE FIRST STEP

The work of establishing what kind of biases are at play when we envision the future is of vital importance for how we plan for it. There are many other biases than the ones discussed here, and the work with identifying the ones that are specific to the field of futures studies and foresight is ongoing. The fundamental problem is that if we do not know what guides our decisions, we are not well equipped to make the right choices. This is especially true because more than ever, the problems we face in the future, be it climate change, loss of biodiversity, or pandemics, are shaped by the decisions we make today.

For some of these problems, we don't have the luxury of making the wrong decision. When it comes to climate change, time is running out. A big part of the explanation of why we have even gotten to this point is that we lack the imagination to see the future clearly because we have little or no past references to draw on.

In order to get this point across, let us recall 9/11, a wild card event that permanently changed the global geopolitical landscape. It's not that no one could have seen it coming. Al-Qaeda's plans were known in advance by US intelligence since they had been disclosed in an interrogation with captured members of the terror network, but still the information was never acted on. Why? One explanation, the one that was put forward in the 9/11 commission report, has to do with something known as 'availability heuristics'. This term explains how bits of information can be retrieved, generated, and combined from memory. In the case of the terrorists' plans, there weren't many similar historical instances of giant skyscrapers being hit by airplanes to draw from. The fact that this information did not exist in the minds of the individuals in possession of the relevant intelligence was taken as evidence that it would not happen. As the report concluded, it was fundamentally 'a failure of imagination'.

Availability heuristics, as well as our active biases, are of huge importance whenever we try to assess the likelihood of wild cards or black swan events. The Fukushima nuclear reactor disaster and the depth of the housing market crash in the US in 2008 leading to the financial crisis, are other examples of how wrong things can go if we are not mindful of this.

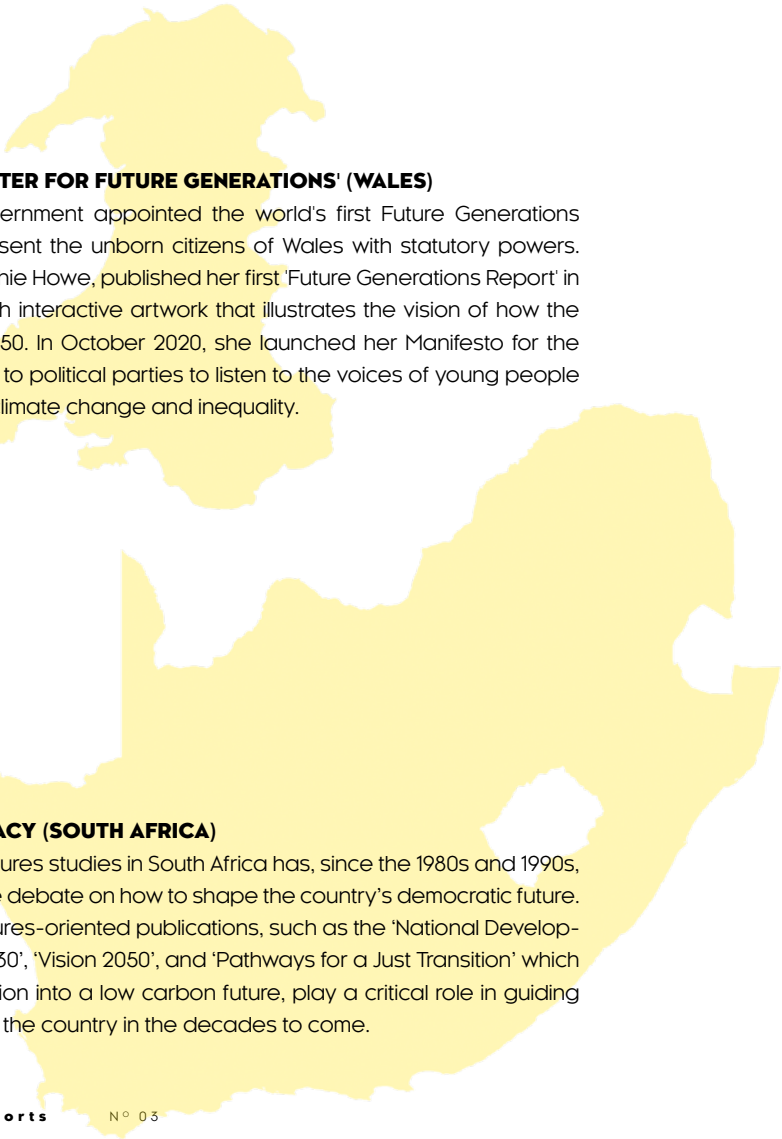
Needless to say, not being able to foresee disasters or radical change has, in retrospect, often proven to be a case of biases rather than not being able to prepare for alternative futures. For governments and businesses to make better decisions, we need to understand what drives this decision-making in the first place. Equipped with this knowledge, one of the main goals of futurists, that of facilitating reperception as Wack pointed out, should become easier. ■

3 Tai Sharot: "The Optimism Bias", Current Biology (2011).

FOTO:BRAD_Y11

Spotlight on future-oriented policy-making

Stepping out of the here-and-now and actively engaging with possible futures is a vital but difficult step in good policy-making. The strategies pursued by governments can be tested against plausible scenarios, and this process can generate a range of options that can challenge current paradigms and help develop regulatory tools and political initiatives that are better able to meet the needs of the future. For this reason, governments are increasingly beginning to use strategic foresight to take on the challenges and harness the opportunities ahead.



WORLD'S FIRST 'MINISTER FOR FUTURE GENERATIONS' (WALES)

In 2019, the Welsh government appointed the world's first Future Generations Commissioner to represent the unborn citizens of Wales with statutory powers. The commissioner, Sophie Howe, published her first 'Future Generations Report' in 2020 accompanied with interactive artwork that illustrates the vision of how the nation could look in 2050. In October 2020, she launched her Manifesto for the Future – making a plea to political parties to listen to the voices of young people demanding action on climate change and inequality.

RESHAPING DEMOCRACY (SOUTH AFRICA)

The development of futures studies in South Africa has, since the 1980s and 1990s, had the aim to stimulate debate on how to shape the country's democratic future. Today, a number of futures-oriented publications, such as the 'National Development Plan: Vision for 2030', 'Vision 2050', and 'Pathways for a Just Transition' which advocates for a transition into a low carbon future, play a critical role in guiding policy and planning for the country in the decades to come.

GOVERNMENT REPORT ON THE FUTURE (FINLAND)

In 2015, Finland launched the Government Foresight Group under the Prime Minister's Office, with the purpose of coordinating national foresight activities and to forge a connection with decision-making. Examples of such activities include the 'Government Report on the Future' prepared once every electoral term under supervision of the Parliament with the aim to encourage broad debate about the future of Finnish society.

A BETTER CULTURE OF ANTICIPATION (BRUSSELS)

In September 2020, the European Commission released its first-ever *Strategic Foresight Report* identifying emerging challenges and opportunities to better steer the European Union's strategic choices. Strategic foresight has been informing major policy initiatives in the EU Commission for years and serves both the current needs and longer-term aspirations of European citizens. In 2018, during the sixth edition of the Future-oriented Technology Analysis (FTA) international conference, the European Commission established The Competence Centre on Foresight (CC on Foresight) with the primary objective of fostering more anticipatory culture in the EU policy-making process.

FUTURE-PROOFING SINCE 1971 (SINGAPORE)

Already in 1971, Singapore's first urban development concept plan was developed to prepare for the city's economic development and population boom in the next 40 to 50 years. The main features of the plan are still intact and evolving. Today, the Centre for Strategic Futures (CSF) covers research into international megatrends and emerging issues, but the biennial Singapore Foresight Week is the real flagship event for the foresight community in Singapore, and the Foresight Conference (FC) is held as part of the week's events to expose the Singapore government to fresh perspectives.

WILD CARDS: Expect the unexpected

In futures studies, the term 'wild card' (or wildcard) is used to denote a future event of low predictability, but of large consequence in the short (and possibly long) term. To be a wild card, an event must happen fairly quickly and with little warning, making it difficult to anticipate except in the broadest sense. Unlikely things happen all the time, so you should always expect the unexpected – or, at least, that something unexpected is going to happen. In this article, we examine wild cards and related topics like black swans, disruptive innovation, and blind spots.

The Copenhagen Institute for Futures Studies (CIFS) has worked with wild card identification and analysis since at least 1990 and introduced the method to the futurist world in 1992 in *Wild Cards: A Multinational Perspective*,[1] a joint publication by CIFS, BIPE Conseil, and Institute for the Future. It is also described in CIFS' 1996 members' report *Managing the Future*. The term was more widely popularised by John Petersen in his book *Out of The Blue – How to Anticipate Big Future Surprises* (1996).[2] As such, wild cards are not a new thing in futures studies and foresight, but given the high level of unpredictability facing our world today and the rapid pace of change certain in the coming decades, they have gained new importance.

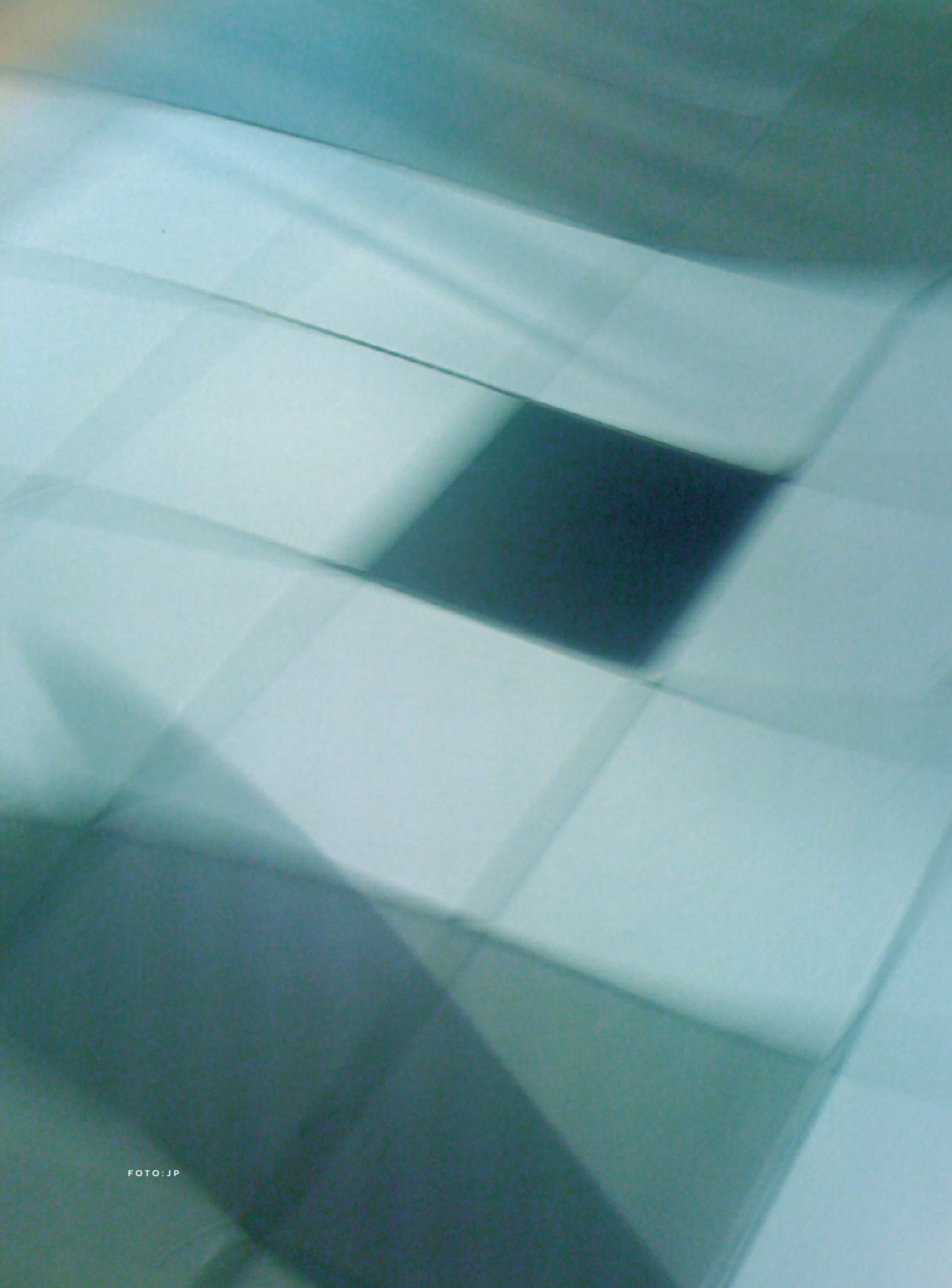
Wild cards are improbable but possible events that have the potential to drastically change the course of history, at least in the short to medium term, but sometimes even the long term if the event turns out to be a trigger event. Some wild cards will almost certainly happen eventually, but it is impossible to predict exactly when. Global pandemics, financial meltdowns, and asteroid impacts are examples of such events: They have happened in the past and will almost certainly happen again in the future, but could equally likely happen next year, next decade, or next century, with little or no advance warning.

Wild cards are an addition to forecasting and scenario planning (See page 6 for explanation of these terms). The extreme unpredictability of the times we live in, with an ongoing pandemic, a volatile geopolitical situation, and rapid technological advances, increases the importance of foresight analysis but weakens the anticipatory power of foresight, making wild card analysis, where scenarios are explored that are based on various wild card events, a more important tool than ever in foresight and when developing scenarios.

Wild card scenarios can be used to challenge the increasingly unlikely idea of the future as a direct continuation of past events, and organisations can use wild card scenarios to test how robust their strategies are: could we survive such scenarios – or even thrive in them? While a given wild card event is unlikely to occur within a specific time frame (for example 10 years), it is very likely that some wild card event (or several) will happen every decade, and it may be a very good idea to fashion strategies that are resilient to such drastic changes, even at the cost of potential short-term profits.

1 Copenhagen Institute for Futures Studies, BIPE Conseil & Institute for the Future: Wild Cards: A Multinational Perspective, Institute for the Future (1992).

2 John L. Petersen: Out of the Blue: How to Anticipate Big Future Surprises, Madison Books (1999).



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Wild cards can be used in scenario processes when describing the paths that lead to scenarios (backcasting - see page 6). One wild card event may set developments on a path leading to a certain scenario, while another event could le-ad to a different scenario. Even though wild card events are not necessarily needed to make a scenario plausible, they can help make scenarios plausible that are very different from today.

Selected examples of past wild card events:

- The 1918 H1N1 influenza epidemic
- The discovery of penicillin
- The Wall Street crash of 1929
- The oil crises of the 1970s
- The collapse of the Soviet Union
- The 1997 Asian Financial Crisis
- The terrorist attacks of 9/11/2001
- The financial crisis of 2007-08
- The current COVID-19 pandemic

Examples of possible future wild cards:

- A digital pandemic; a computer virus destroys all internet-connected data
- Breakthrough in fusion power
- Global hyperinflation
- A sudden unexpected release of methane hydrate increasing global warming
- Scientific breakthrough allowing dramatic extension of human lifespan
- Global stock market collapse
- Superhuman AI develops consciousness
- Crop disease pandemic causes global starvation

TRIGGER EVENTS

Sometimes wild card events may trigger larger events or long-term shifts that would probably happen anyway at a later time, triggered by another event. Certain stresses have built up over time, and the wild card event is simply the straw that breaks the camel's back. The 1914 assassination of Archduke Franz Ferdinand is an example of such a trigger event. Given the geopolitical situation of the time, it was very likely that a major armed conflict would soon erupt in Europe, but the assassination determined where and when it happened (and to some extent, how it played out). Similarly, the 9/11 terrorist attacks triggered the US-led invasion of Iraq and Afghanistan, both of which would likely have happened at some time anyway given the geopolitical priorities of the US administration at the time. Hence, in some cases, the wild card trigger event itself may be unpredictable, but what follows is not.

The current COVID-19 pandemic may well turn out to be a trigger event for one or more shifts. For one thing, the pandemic has forced a lot of people to work from home and to exchange physical meetings for video meetings. Organisations for which this shift has been a positive one may turn to operating via entirely virtual offices. The pandemic may also trigger an end to the slow erosion of public healthcare that we have seen in much of the world over the last half century or so, since countries with strong public healthcare (and welfare in general) overall have handled the pandemic far better than countries with more privatised healthcare.

Whenever an event occurs that can be categorised as a wild card, it can be helpful to consider if it may trigger some nascent shift and what that shift could be – as well as what it would

mean for your market. Likewise, if you feel that a certain radical shift is on the horizon, it can be useful to analyse what events could trigger this shift and then be prepared when it comes. However, it should be noted that, due to political or social inertia, a wild card event may not necessarily trigger a nascent shift, even when such a shift seems needed. The financial crisis of 2007-08 revealed a lot of instabilities and weaknesses in the financial sector, and while some measures against a repeat event have been introduced, critics warn that more comprehensive changes are needed to prevent a new financial crisis within the next decade or two.[3]

THE ANIMAL KINGDOM OF UNEXPECTED EVENTS

Wild cards are closely related to the 'black swan' theory developed by Nassim Nicholas Taleb in his 2001 book *Fooled By Randomness* and later expanded upon in his 2007 book *The Black Swan*.[4] The term 'black swan' was used in Europe for something impossible until actual black swans were discovered in 1697 by explorers in Australia. Wild cards and black swans share many characteristics, but there are also differences between the two. Wild cards are scenarios we can imagine (although we may be poorly prepare for dealing with them), while black swans seem unimaginable before they occur. Taleb observes how unexpected events of large magnitude have had major consequences in the past and posits that they collectively play vastly larger roles in history than regular occurrences. Taleb sees almost all major scientific discoveries, historical events, and artistic accomplishments as undirected and unpredicted black swans – perhaps ignoring how much planning and effort was put into many of these events.

Some of what Taleb calls black swans are rather directed but radical innovations that create new markets and value networks, eventually disrupting existing markets and value networks – something that Clayton Christensen in 1995 termed *disruptive innovation* (or simply *disruptors*).[5] The rise of internet shopping is an example of such disruptive innovation; it grew organically from the invention of the internet (which in itself wasn't very disruptive in its first decades) and rapidly and radically disrupted the global retail market. A future true self-driving car will also be a disruptive innovation rather than a wild card.

The success of Taleb's black swan theory has triggered several other related forecasting terms named for animals. 'White leopards' are hidden or camouflaged risks that can have large impacts, 'grey rhinos' are obvious risks that are ignored, 'black jellyfish' are known and normal risks that unexpectedly escalate out of control due to positive feedback, and 'black elephants' are widely predicted events that are rejected as unlikely until they actually occur, after which they are dismissed as unpredictable black swans. As these kinds of events can all be understood and prepared for with better foresight as well as research into and awareness of risks, they can be categorised as *blind spots* (or *blindspots*). Even though blind spots aren't wild cards, the fact that they catch decision-makers unprepared means that they are worth discussing in this context.

Blind spots, according to Michael Porter, are items of conventional wisdom which no longer hold true but still guide

3 Victor Li (Villanova School of Business): "The next financial crisis: Why it is looking like history may repeat itself", CNBC (2018), cnb.cx/2HjGWwe.

4 Nassim Nicholas Taleb: Fooled By Randomness, Random House 2001; The Black Swan: The Impact of the Highly Improbable, Random House (2007).

5 Clayton M. Christensen, Michael E. Raynor, & Rory McDonald: "What is Disruptive Innovation?", Harvard Business Review 2015, bit.ly/35KaH2Y.

business strategy.[6] They are incomplete, obsolete, or incorrect assumptions in a decision-maker's understanding of the environment, and blind spot analysis can be used to uncover such erroneous assumptions. In his 1993 book *Business Blindspots*,[7] Benjamin Gilad introduced a three-step model for uncovering blind spots:

Step One: Conduct an analysis of Michael Porter's *five-force industry structure*,[8] augmented with identification of possible change drivers: trends with the potential to profoundly affect the balance of power between the five forces.

Step Two: Collect competitive intelligence on the target company's top executives' assumptions regarding the above industry structure, using available sources such as interviews, talks, and annual reports, or through *strategy reverse engineering*, which looks for the underlying assumptions that could rationalise existing strategy.

Step Three: Compare the results of Step Two with the analysis in Step One. Any contradiction between the two is a potential blind spot.

Whether we call unforeseen risks or future events wild cards, black swans, or blind spots, it is certain that they will characterise the coming decades, perhaps even more so than past decades given the many fields of great impact that show sign of great unpredictability: geopolitics, economy, AI and robotics, genetic technology, climate change, the current pandemic and possible future ones. This makes exploration of wild cards and their implications a very important part of any strategy process . ■

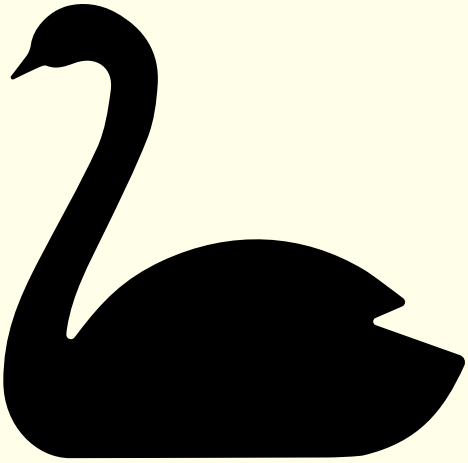
6 Michael Porter: Competitive Strategy, Free Press (1980).

7 Benjamin Gilad: Business Blindspots: Replacing Your Company's Entrenched and Outdated Myths, Beliefs and Assumptions With the Realities of Today's Markets, Probus Professional Pub (1993).

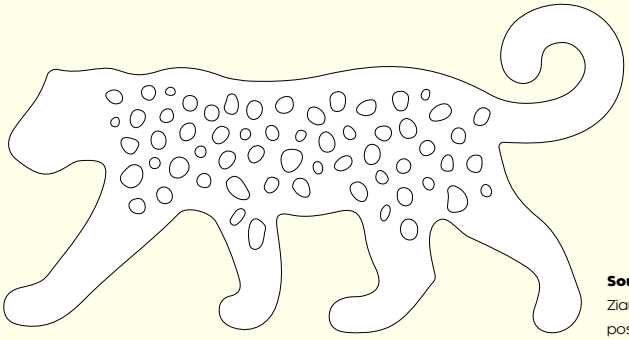
8 "Porter's Five Forces: Understanding Competitive Forces to Maximize Profitability", MindTools.com, bit.ly/3dOENVg.

The animal kingdom of unexpected events

Black swans
Unexpected events of large magnitude that seem impossible until they occur.



White leopards
Hidden or camouflaged risks that can have large impacts.



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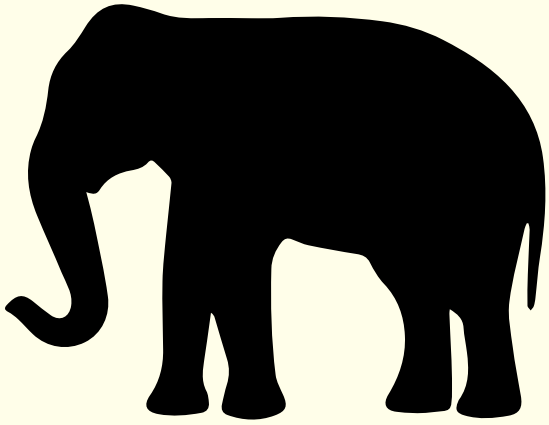
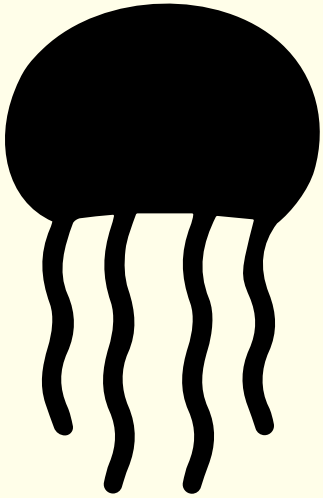


Black elephants
widely predicted events that are rejected as unlikely until they actually occur, after which they are dismissed as unpredictable black swans.

Grey rhinos
Obvious risks that are ignored.



Black jellyfish
Known and normal risks that unexpectedly escalate out of control due to positive feedback.

The augmented futurist

Digital transformation of strategic foresight

Despite futures studies being heavily associated with technology, futurists have rarely used digital tools as a central part of their work until recent years. If we look at how strategic foresight (as a field of futures studies) has evolved, it has not really departed very far from its origins. Many of the same methods that were developed in the early days of strategic foresight, such as scenario planning, horizon scanning, and the Delphi survey method, are still used today in largely the same fashion they were back then.

The rationale for using foresight as part of strategy and planning processes has not changed over the years. In fact, the capability to explore and develop insights into future alternatives to guide strategic thinking, identify opportunities, and build resilience in the face of (compounded) uncertainty and complexity has arguably never been more important.

However, the basis for the practice of strategic foresight is changing. While the human cognition and the fine art of understanding, perception, and sense-making remains at the very core, technology is increasingly applied to augment traditional strategic foresight and make it more efficient, while also enhancing its quality and relevance.

Arguably, the lines between human decision-making and machine intelligence will continue to blur. So, if humans and machines will make decisions together, why shouldn't we expect that humans and machines will explore the future together? Developments within two elements of strategic foresight are especially being transformed by technology:

1) Combining human cognition and sense-making with the raw analytical power of artificial intelligence for enhanced efficiency and deeper levels of intelligence gathering.

2) New, technology-powered ways of conveying the future in more compelling ways that create more relevance for strategic decision-making.

FUTURIST + AI

AI is getting more advanced each day, and the dominating model in the digital economy will arguably have human and artificial intelligence working together and joining forces as 'hybrid intelligence' to collectively achieve superior results that were not possible before.[1] While this is something that many futurists are engrossed in every day, not many have really taken an inward look at how this will transform and augment their own strategic foresight profession.

Probably the most cumbersome component in strategic foresight is the research and intelligence gathering phase, often referred to as horizon scanning. This is the phase where futurists systematically scan the horizon for intel about emerging trends and developments that could impact any given strategic environment in the future. This includes scanning for novel and unexpected issues, persistent problems, and trends as well as discontinuities, including matters at the margins of cur-

1 James Wilson and Paul R. Daugherty: "Collaborative Intelligence: Humans and AI Are Joining Forces", Harvard Business Review (2018), bit.ly/3nNPRpp.

rent thinking that challenge current assumptions.[2] A significant chunk of horizon scanning involves searching and mining vast amounts of information, such as scientific publications, published articles and opinions, and social media listening. In theory, in our information-saturated world, futurists have almost unlimited sources of signals, insights, sentiments, and ideas available to them. This can be incredibly complex and seemingly impossible to handle.

The good news is that specialised AI tools are highly capable of doing the heavy lifting in this vital foresight phase by using natural language processing and machine learning. The obvious advantages here are, of course, that an AI assistant can read much faster, scrape much broader, dig much deeper, analyse trends much more efficiently, and visualise changes much more clearly, than ordinary humans will ever be able to – nearly all in real-time, as things tend to change faster than we expect. The only thing you would have to provide is a context and specific criteria – the rest is up to the AI. But maybe even more important, the AI assistant can also spot novel relationships between drivers that humans are simply incapable of foreseeing, potentially unveiling blind spots and wild card events! A very recent example is how BlueDot, a Canadian AI start-up, detected the COVID-19 outbreak nine days before WHO released its first statement. They did that by constantly sifting through local information (100,000 online articles each day spanning 65 languages) from journalists and healthcare workers, statements from official public health organisations, global airline ticketing data, livestock health reports and population demographics, and climate data from satellites.[3]

AI is already widely used for prediction and forecasting in different business settings. But talking about AI doing actual foresight still makes little sense. While strong forecasts are clearly very useful when trying to create insights about the future, even when embracing this data-driven path to foresight, prediction can never be the end goal of strategic foresight. It will never be a futurist's job to predict or attempt to offer definitive answers about the future. The value of strategic foresight really lies in broadening people's views and challenging beliefs and assumptions in relation to the future, to enhance their preparedness and build resilience. Ultimately, a future in which we have AI with proper human-level foresight capabilities would be a future where we have artificial general intelligence. But again, this might arrive faster than we would imagine.

Overall, the positive practical implications are tremendous as such AI tools are becoming more and more accessible. Harnessing the power of AI to automate and augment the research and intelligence gathering can decrease resources spent by up to 75%, while increasing the quality by up to 40%.[4] This essentially frees up time for the futurist to do what he/she does best – exploring, understanding, and making sense of uncertainty and the potential impacts of the many variables at play, while engaging decision-makers in thinking about the future and becoming comfortable with change.

LEVERAGING NEW TECH TO CONVEY THE IMPORTANCE OF THE FUTURE TO THE PRESENT

Doing strategic foresight means working with people who all have their own

2 "Overview of Methodologies", OECD, bit.ly/2J0uRNv.

3 Cory Stieg: "How this Canadian start-up spotted coronavirus before everyone else knew about it", CNBC (2020), cnb.cx/3IYIomO.

4 Andreas Schühly, Frank Becker, & Florian Klein: Real Time Strategy: When Strategic Foresight Meets Artificial Intelligence, Emerald Group Publishing (2020).

beliefs and assumptions about what the future holds – both consciously and subconsciously. These assumptions will influence planning, decisions, and actions. 'We see the world, not as it is, but as who we are', as formulated by the late author and leadership guru Stephen Covey. The same can be said in relation to the future!

One important lesson is that in strategic foresight, the process is at least as important as the findings. What matters is the fact that it inspires insight and, in turn, facilitates transformative action. Hence, probably the most prominent, yet most difficult tasks of a futurist is to make people think of the world in new ways (described as the challenge of 'reperception' on page 16) and facilitate a diverse conversation, yet maintain a shared understanding about the future. In very generalised terms, the strategic foresight 'user experience' has been rather one-dimensional and dull, often culminating in a nice scenario report – sometimes glossy – with a set of recommendations that can feed into strategic decision-making. That's it, job done!

While the recommendations seen in isolation might be very relevant and robust for decision-making, this arguably offers limited potential for reperception.

Consequently, a push for more engaging and immersive foresight approaches happens on two fronts. In brief, an integration of traditional strategic foresight and techniques from design disciplines have been happening for some time now. And frameworks that combine the two have been proven to work well in transformative processes.[5]

At the same time, new tech – especially the immersive ones like AR and VR – offer new methods of interacting with the future and conveying it in more impactful ways, by applying much more effective data visualisation and storytelling techniques. Connecting strategic foresight with more impactful, tech-enabled experiences can help bypass people's inherent defence mechanisms and support people in coping with complexity by connecting the future with the present, thus making the future more comprehensible.[6] Using new tech to connect with an audience in different ways is nothing new, and it has essentially become the cornerstone of brand communication in the world of business. So, needless to say, the opportunity to provide much more immersive strategic foresight processes – maybe even in AI-powered personalised formats – will be a game changer in providing more impactful and relevant experiences that engage stakeholders in envisioning their futures from a strategic decision-making point of view.

Moving forward, the digital reality will change how strategic foresight engages with technology, by making it more efficient while also enhancing its quality and 'clout' for inspiring futures-oriented decision-making. But when all is said and done, this tech-augmentation is only worth so much without the subtle capabilities of understanding and sense-making that a good futurist brings to the table ■.

5 Adam Vigdor Gordon, René Rorhbeck, & Jan Oliver Schwarz: "Escaping the 'Faster Horses' Trap: Bridging Strategic Foresight and Design-Based Innovation", Technology Innovation Management Review Vol. 9 Issue 8, (2019); Stuart Candy and Kelly Kornet: "Turning Foresight Inside Out: An Introduction to Ethnographic Experiential Futures", Journal of Futures Studies Vol. 3, (2019).

6 Stephen Denning: "Using Stories to Spark Organizational Change", Systems Thinker, bit.ly/35X6WXU.

'One important lesson is that in strategic foresight, the process is at least as important as the findings. What matters is the fact that it inspires insight and, in turn, facilitates transformative action.'

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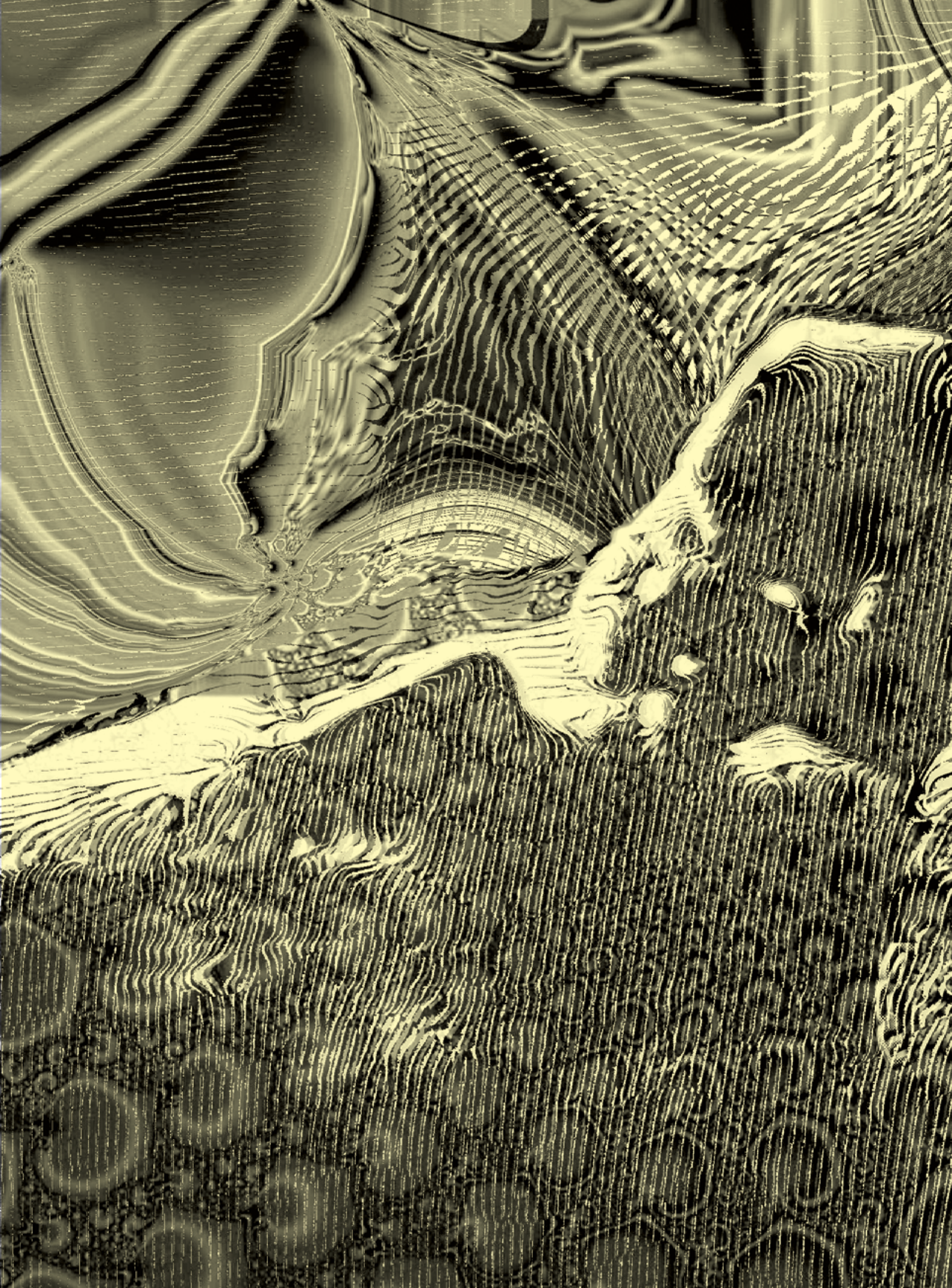


Strategic foresight is not just for inspiration

By Dr Adam Vigdor Gordon, Faculty of Management, Aarhus University.

One of the ground rules of futures thinking is the scalability of its basic principles. This means that while what we do as individuals versus as organisations, multinationals, or governments differs in scale, it remains fundamentally the same in purpose and process. When we wake up in the morning and glance at the weather forecast, we are looking at a picture of the future. And like all future anticipations, the weather seeks to provide a reliable view of what's upcoming which will hold through the period it is anticipating, in order to be useful in helping us make decisions that align with that view. It exists to be used in making future-fit decisions. If rain is forecast, we take an umbrella, and so on.

Strategic foresight for companies and institutions is conceptually similar. Decision-makers anticipate the external 'weather conditions' that the entity will be subject to, so as to make decisions now to be in a better position when it happens. But there is one significant difference: while the real weather cannot be meaningfully influenced, external or industry conditions may, to greater or lesser extent, be shapable by powerful incumbents. In other words, they can influence as well as adapt to external future conditions, and where any level of influence is a valid expectation, any such attempt becomes part of the organisation's set of future-defining choices, that is, part of its strategy.

Either way, the format remains the same. The external future view exists to inform and improve internal decisions and actions. Foresight improves strategy, and, moreover, it has no other purpose. To put this another way, foresight and strategy are two halves of one process in pursuit of success at a future time. Absent foresight, strategy is blind to contextual change, therefore a recipe for failure when change occurs. Absent strategy, foresight is speculation and conjecture disconnected from purpose.

This coupling of foresight and strategy isn't always an obvious or popular position in futures studies, and there are two reasons for this. The first is the notion that yoking futures thinking too closely to 'usefulness' dampens inspiration or erodes creativity. The second is a flabby understanding of strategy which commingles it with vision and aspiration.

To address the first: this perspective commonly arises in situations where consultants and advisors bind themselves to a narrow set of client-industry concerns as proxy for 'applicability' of a futures study. In contrast, often the most useful thing is for the client to see the potential impact of external discontinuities which almost by definition arise beyond current concerns. Breadth of view, depth of provocation, and richness of plausible imagination are not incompatible with strategic utility. They are essential to it.

The second problem is solved by a tight and clear formulation of strategy, understanding it as the coordination of actions, policies, and resources to achie-

ve a goal[1] or 'how to win'[2] where winning is understood as achieving whatever the agent is trying to achieve. In other words, strategy is not a future vision, or a purpose, or ambition, nor the pursuit of excellence, nor setting performance measures or exhortation towards them, nor any kind of budget planning thereto. It is not what a future goal should be, or even whether it should be. It is only the particular choices that address *how* any future goal is to be achieved. It is the game plan.

As an aside, it is worth noticing how strategic foresight differs from classic strategy, where the strategic context is taken as static. For example, in chess, the board, the 32 pieces, and the rules remain the same from the first move to the last. How-to-win choices can assume stasis in these contextual elements. But in the world of humans and society, the actors and operating conditions and rules of engagement are in flux, often wildly so. In chess terms, we are 'Through The Looking Glass'. And where the board and its elements are likely to change during the game, foresight helps decision-makers anticipate where and how this may happen, and therefore where and how their how-to-win choices also need to change.

To take a practical example, consider the future strategy of an automobile company, say Daimler AG, in the European market going forward. The game plan that worked in the past is only going to work in part (at best) in the future. The contextual elements are shifting as new forms of energy and energy storage come onstream and societal attitudes to energy use change, with legislation reflecting this, all while apps and networks expand 'mobility as a service', and cities promote bicycles but also retrofit smart navigation systems for augmented-reality 'spatial web' assisted driving, and self-driving vehicle systems that are almost here. Any strategy on this board must account for the future of the board itself. And this is true not just of corporate situations; If one is making future-success decisions for, say, a Danish hospital, the situation is similarly one where sources of funding, evolution of medical therapies, issues of on-site vs. telemedicine, and AI-enabled medical diagnosis, etc., all make for a changing game board.

So, if strategy is necessary to constitute purpose in futures thinking, and foresight is necessary for strategy success in environments that change, how do they come together to achieve future-successful decisions?

There are three ways this works. The first is a strategy-forward approach, where foresight is applied to existing strategy to test it. Here, decision-makers evaluate their current how-to-win choices or success recipes in the light of one or more future views. These function as 'wind-tunnels',[3] testing how well a set of choices 'flies' in that future. The analogy of stress-testing, i.e. how a product is pummelled in a safety-standards test, is sometimes used to express the same idea. Either way, the future perspective is brought to test the current game plan.

1 Richard P. Rumelt: Good Strategy, Bad Strategy: The Difference and Why It Matters, Crown (2011).

2 A. G. Lafley and Roger L. Martin: Playing to Win: How Strategy Really Works, Harvard University Press (2013).

3 Kees Van der Heijden: Scenarios: The Art of Strategic Conversation, Wiley (1996).

In conditions different to today, does it still provide a path to success? If and where it holds up, the strategy is robust – at least to the futures it was tested in. If and where it does not, avenues of strategic redress are indicated.

In this arrangement of foresight and strategy, an existing set of how-to-win choices pre-exists the foresight. The second way foresight and strategy combine reverses this. Here, the process starts with constructing a future view or views and works backwards. Who or what will be needed in the future viewed? What problems will users or institutions or society face, and how may these be resolved? How will incumbents survive, or thrive? What new opportunities appear, and how might these be provided, sourced, or built? Who 'wins' in this future? Why and how will they do it?

Futures studies are always a zone where the strictures of 'what's possible' are relaxed (the more so the further into the future) and what we have here is a likewise relaxation of the strictures of 'acceptable' or 'sensible' strategic solutions. The future-back approach puts existing strategies to one side and starts with a blank slate. The picture of tomorrow is used as a resource for stimulating inspiration and imagination. It stokes bridge-thinking. What solutions does this future indicate to us? What different or altogether new strategies are suggested here?

In practice, these two strategy-forward and future-back architectures are often blended, as organisations use both modes in figuring out what to do next. Building on and extending this hybrid practice, a foresight-strategy conceptualisation known as 'probing'[4] is gaining currency. Probing refers to practical discovery experiments in trial markets to evaluate and refine the future-fitness of new solutions, while also refining the future view. A probe sharpens strategy by testing it in the direction that foresight suggests, while also returning that learning to the foresight process.

Strategic probing is built on techniques that have become established in design thinking, particularly rapid prototyping to stimulate and gauge user feedback and create a learning cycle in product or service refinement; and on the theory of 'experimental' search in contrast to standard 'cognitive' search, in other words, search designed to trigger strategic insight or develop trial ideas.[5] Experimental search takes decision-makers past merely identifying a future view and its strategic response and into real-world experiments on a future path by which an organisation 'learns' its way forward.

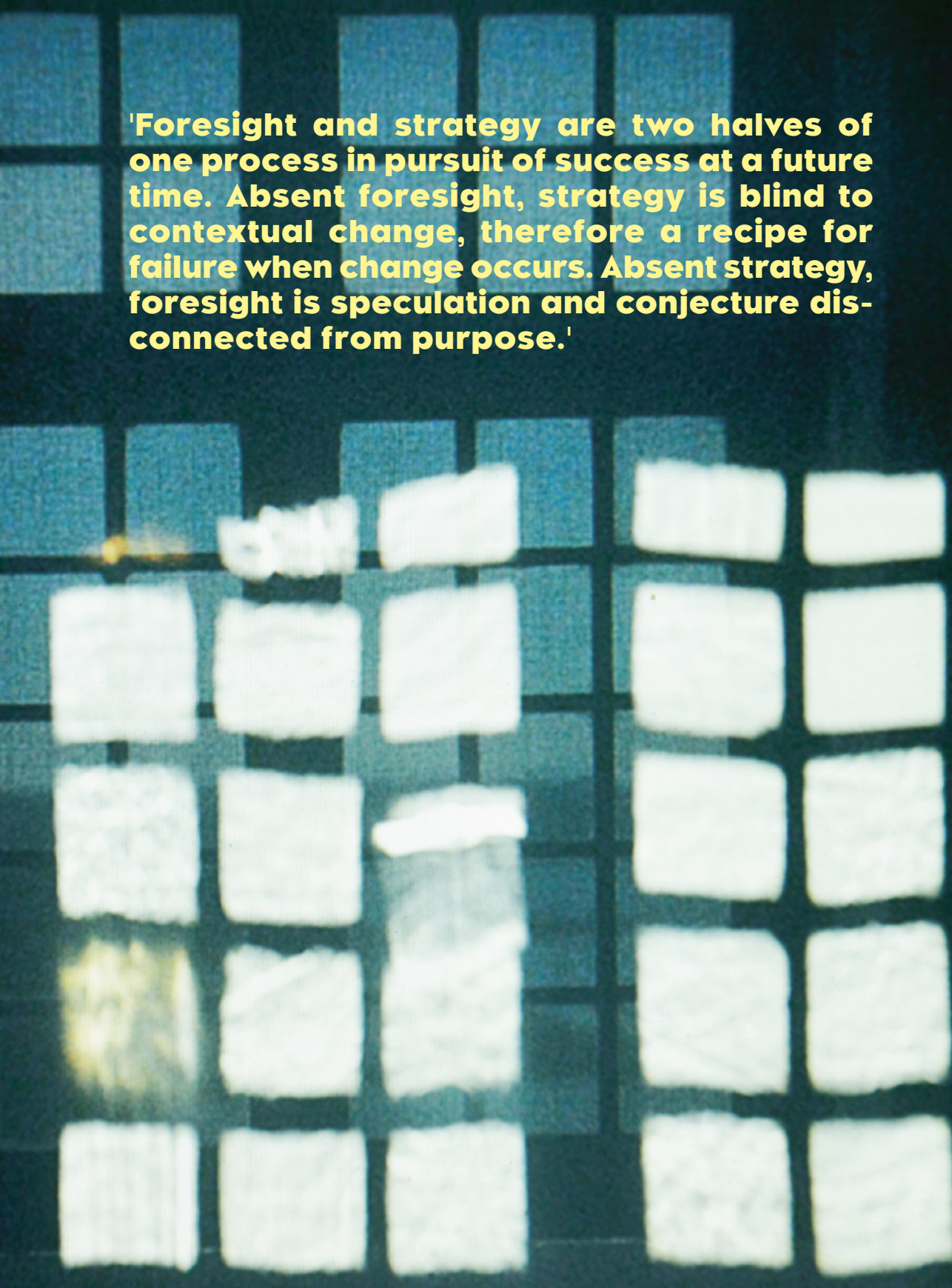
In the actions and evaluations of probing, decision-makers test foresight-derived ideas in mini-experiments, while at the same time remaining open to learning the contextual imperatives and rules of the evolving game in future industries via the feedback they get. In the example mentioned above, Daimler might do this by constructing a probe solution in regard to driving in the spatial web, li-

4 René Rohrbeck and Menes Etingue Kum: "Corporate foresight and its impact on firm performance: A longitudinal analysis", Technological Forecasting and Social Change Vol. 129 (2018).

5 Giovanni Gavetti and Daniel Levinthal: "Looking Forward and Looking Backward: Cognitive and Experiential Search", Administrative Science Quarterly Vol. 45 Issue 1 (2000); Giovanni Gavetti and Jan W. Rivkin: "On the Origin of Strategy: Action and Cognition Over Time", Organizational Science Vol. 18 Issue 3 (2007).

miting the experiment to a particular locality or a specific vehicle type, possibly also sharing costs and benefits with a partner, for example Bosch which is researching the eyewear required. Over time, such a probe will bring the future of vehicle navigation in the spatial web more clearly into view and also the (product or service or business model) strategy most appropriate to it. A failed probe will provide back-to-the-drawing-board learning. A successful probe will provide experimental proof of future-winning solutions and an argument for scaling up. In either case, the gap between anticipated future situations and winning strategies for it is narrowed and ultimately resolved. ■

FOTO: JEF SAFI



'Foresight and strategy are two halves of one process in pursuit of success at a future time. Absent foresight, strategy is blind to contextual change, therefore a recipe for failure when change occurs. Absent strategy, foresight is speculation and conjecture disconnected from purpose.'

HELPING YOU NAVIGATE THE FUTURE FOR OVER HALF A CENTURY

The Copenhagen Institute for Futures Studies is an independent, non-profit futures think tank – founded in 1969. We equip and inspire individuals and organisations, decision-makers, and the public, to act on the future, today.

We advise public and private organisations on strategic matters to ensure that they can thrive in an uncertain future. We work in direct collaboration with clients, members and global expert panels in a systematised co-creation process that ensures the results are relevant and easy to turn into practical action plans.

Our process facilitates stakeholder engagement and collective sense-making. We strive towards shared future visions to support strategic resilience and decision-making, and to strengthen awareness across the organisation and its external stakeholders and customers.

Our recent initiatives and collaborations include:

The Personalised Health Index and Hub

Since 2019, we have contributed to the development of the Personalised Health Index, a collaborative online platform for driving cross-industry and –ecosystem discussions about personalised healthcare solutions. The Index, which is continuously being expanded, features a global overview of national healthcare systems in the area of personalised health, with a focus on forward-looking indicators selected through a rigorous process with multiple rounds of review by regional health experts representing a broad swath of stakeholders.

The Personalised Health Index aims to reinforce and drive four key activities by opening and improving access to data about personalised health: 1) moving decisions from emotions to facts, 2) making data and insights accessible, 3) building a broad coalition for change, and 4) enabling leadership for change.

The insights in the Index will be packaged into multiple publications and assets that will be fully and freely available to the public in a centralised information hub. The hub will be regularly updated with the latest developments in personalised health and healthcare as well as white papers from various stakeholder groups and organisations.

COPENHAGEN INSTITUTE FOR FUTURES STUDIES

Future of Thematic Investing 2030

The history of pandemics shows that their economic, societal and geo-political effects tend to be long-lasting, often unfolding over years or decades. In collaboration with Pictet Asset Management we developed a report that presents four scenarios for the post-pandemic world, focusing on how COVID-19 will impact the investment landscape. Each scenario has its own distinct economic, societal and geopolitical features, and each has its own set of implications for investors – industries that thrive in certain conditions might struggle for their very survival in others.

The purpose of the scenarios is to heighten investors' understanding of how the investment landscape might evolve in the next five to ten years and to serve as a starting point for long-term planning and strategic asset allocation.

The report Going Viral: Scenarios for a Post-pandemic World is freely available: bit.ly/39E24tc.

The Future of Physical Retail 2030

The COVID-19 pandemic is supercharging ongoing developments in physical retail. Combined with continuous digitalisation and other consumer trends, the pandemic will contribute to altering the physical retail space decisively towards 2030. In collaboration with Gangsted Advokater, a specialist law firm for the real estate and construction industry, we performed an analysis of the key trends shaping the next decade in the physical retail landscape. This analysis was combined with our ongoing work to develop scenarios for the duration and consequences of the coronavirus pandemic.

The resulting report outlines the key developments shaping the future of physical retail. Its purpose is to give property owners in retail a nuanced understanding of the potential changes their market will face in the coming decade to help them take adequate measures today.

Access the full report Fremtidens retail 2030 i et udlejningsperspektiv (Danish): bit.ly/37Bp4GC.

Want to learn more about how we can work together?
Reach out to us at cifs@cifs.dk

PART 2

Futures for the people

Humans have always anticipated futures ahead of them. From ancient mysticism, divination, prophecy, poetry, art, philosophy, and through fiction to modern times' more sophisticated and strategic efforts as explored in the previous part of this report. Yet, the power to influence our perspectives of which futures are (and aren't) possible has traditionally been held by the few – whether they be politicians, professional futurists, fiction creators, or leading technology companies. In this second part of the report, we explore how the future can be democratised and how doing futures work can be taken out of its primarily corporate setting and be applied in the civil service and humanitarian sectors, as well as how individuals can become more aware of how to use the future through education, the process of futures decolonisation, and broader participation in futures thinking in general.

The first step in this democratisation is to foster futures literacy in more areas of society. 'Literacy' originally referred simply to the ability to read and write, but today, the term covers a much broader range of both competencies and knowledge in specific contexts such as 'financial literacy' and 'digital literacy'. UNESCO has declared futures literacy an essential capability for the 21st century. As you can read more about on page 46, futures literacy means training our ways of thinking about the future and our familiarity with the unknown, the uncertain, and the complex long term.

In many ways, our educational systems are stuck in ways of teaching derived from the industrial era that do not prepare us adequately for a rapidly evolving world. Our school systems have yet to widely recognise the value of teaching how to engage with the future. What academic and pedagogical programs do exist are often more concerned with taming uncertainty than with embracing complexity and emerging novelties. On page 50, our guest writer Loes Damhof, UNESCO Chair Futures Literacy in Higher Education, Hanze University of Applied Sciences, explains how to teach futures literacy in higher education and what the benefits of being futures literate are.

Like history, the future is always contested, but the power to define it is unevenly distributed. In this context, decolonising futures means the dismantlement of dominant views of how the future will (or is supposed to) be in favour of a more pluralistic approach that includes marginalised voices. It is an important and powerful idea because it forces us to consider who gets (and does not get) to do the defining – and to whose benefit these definitions are reproduced. To learn more about how decolonising futures can challenge the reproduction of past value systems and create spaces for non-Western worldviews, practices, and knowledge production, we interviewed Pupul Bisht, Founder of the Decolonizing Futures Initiative. Read the interview on page 64.

We round off this part by discussing how to better harness the energy of our current age of mass protests in more participatory futures processes. On page 72, we ask how to reimagine the 'public square' in the 21st century and what role public institutions can take in decentralising the creation of images of the future, transforming citizens into participants in challenging boundaries, identifying seeds of change, and imagining new tomorrows.

Futures Literacy – A capability for the 21st century

How do we learn to take advantage of change, to appreciate uncertainty, and embrace complexity? We can actively train our imagination like a muscle in a way that helps us challenge the underlying assumptions and biases that define our worldview and guide our actions. 'Futures literacy' is defined by UNESCO as the capability to use and imagine multiple futures for different purposes in different contexts.[1] The Copenhagen Institute for Futures Studies collaborates with UNESCO and the Global Futures Literacy Network to disseminate and democratise the capability of futures literacy, which is closely related to the methods used in futures studies and foresight. But while these methods tend to have a more deterministic orientation towards organisational risk mitigation and innovation, futures literacy stresses the importance of approaching the future exploratively. The objective of fostering futures literacy is to learn how to think about and imagine the future in more creative and critical ways, so that individuals can become more conscious of the diversity of possible futures and their own agency in influencing them. As highlighted by Finland's Futures Research Centre, 'futures literacy is a substantial meta-skill in the 21st century world helping individuals not only to think critically and creatively for solutions to our existing global and local problems – but also to build up personal resilience in the rapidly changing world'.[2]

There are three anticipatory systems to use when imagining the future:

1. **Planning for optimisation** means developing or improving existing systems or practices, whether it be your wedding, working from-home setup, life during lockdown, or your company's COVID-19 strategy.
2. **Preparing for contingency** means readying yourself for something that might happen. The goal here is not to optimise but to be more prepared when emerging phenomena occur.
3. **Open to emerging novelty** means engaging with futures that we cannot necessarily make sense of today. This includes exploring new systems and needs that we have not imagined yet.

All three of these ways to respond are equally important. In the context of COVID-19, we are already planning for optimisation through adjustment to new lifestyles and preparing for contingencies for new waves or mutation, but while we are doing so, we ought to also take a step back and look for emerging phenomena that do not make sense yet. This is what UNESCO describes as being able to walk on two legs. If we let go, examine, or deconstruct certain assumptions about the future, we may become aware of biases or strongly held beliefs we were taking for granted, and we may open for spontaneity and other unforeseen possibilities.

By imagining different futures, individuals can become aware of their ca-

1 Riel Miller: Transforming the Future: Anticipation in the 21st Century (2018).

2 University of Turku: "Futures Literacy", bit.ly/2Jkg8gk.

pacity to shape and invent new anticipatory assumptions, and shifting this ability to anticipate from a subconscious to a conscious state is the first step in becoming futures literate.

We need three building blocks to practice how to become futures literate:

Narrative capacity: We need to be able to tell stories to convey messages and make sense of the future.

Collective intelligence: As the future does not exist yet, we need to draw on the intelligence, creativity, and knowledge of others in order to map out the many potential avenues of change.

The capacity to reframe: The lenses and filters we can use to make sense of different future scenarios greatly affect how we imagine and can make us aware of our potential blind spots and see new things.

FUTURES LITERACY LABORATORIES

Anticipatory exercises designed to train futures literacy are often called Futures Literacy Laboratories. These learning-by-doing workshops use the future to look more critically at the values and beliefs behind our anticipations. They stimulate futures literacy as a capability by taking participants through a three-phased learning curve. The first phase **REVEALs** the implicit preferences and expectations that participants have about the future. The second phase **REFRAMEs** the participants' assumptions by confronting an imaginary future scenario, so that in the third phase, they can **RETHINK** and formulate new perspectives and ask new questions about the future. By training this, we can improve our ability to imagine without constraints and emancipate the imagination from fear to enable innovation towards hope.[3] ■

3 Hanze University of Applied Sciences, Futures Literacy Faculty.

REVEAL
assumptions & biases

RETHINK
to ask new questions

REFRAME
scenarios

Can we teach futures like we teach history?

By Loes Damhof, UNESCO Chair Futures Literacy in Higher Education, Hanze University of Applied Sciences.

Can we teach futures? A first response could be: of course not, how can we teach something that doesn't exist? Teaching futures bears some resemblance to teaching history, in the sense that *both* past and future do not exist. When teaching history, we do not teach the past; We teach our *remembrance* of the past: the memories we want to keep based on artefacts, traditions, and stories that were handed down from generation to generation. The stories that remain are written down in history books, curated, colonised, and have become part of our historic identities. When it comes to our images of the future, we often rely on curated stories as well. These are narratives fuelled for instance by religion, a colonial past, scenarios from Hollywood, predictions from the corporate world, or narratives in the media. These 'used' images of the future[1] have a profound impact on what we see and do in the present.[2] So exploring and examining the origins of our images of the future should be an important element in any educational programme. As history is often said to have been written by the victors, the question arises: do we want our futures to be written by the victors as well, or do we prefer to write futures that belong to all?

1 Sohail Inayatullah: Six pillars: futures thinking for transforming, Institute of Futures Studies (2008).

2 Riel Miller: Transforming the Future. Anticipation in the 21st Century, (2018).

3 teachthefuture.org.

This question invites us to explore the value of teaching *Futures literacy* (FL): a capability that helps us understand why and how we use, imagine, and diversify futures in different contexts. FL, developed by Riel Miller, Head of Futures Literacy at UNESCO, is a relatively new addition to the field of futures studies. While teaching futures-related subjects in schools is still a novelty in most parts of the world, important pioneering work has been done by Teach the Future, a US-based organisation founded by Peter Bishop that researches, develops, and designs futures teaching material for primary and secondary education.[3] The UNESCO Chair in Learning Society and Futures of Education at the University of Turku in Finland, in collaboration with the longstanding Finland Futures Research Centre, has also played a part in pioneering futures teaching by developing foundations of futures pedagogies as well as practical tools and guidebooks for upper secondary education – just to name a few.

As the world finds itself struggling to cope with feelings of uncertainty provoked by the current crises, institutions of higher education are looking for ways to educate the next generation of professionals to be able to respond to those grand societal challenges. The problem is that higher education is designed 'by the supposition that what needs to be learned is knowable in advance' in the sense that we prepare our students for a fluctuating job market, new industries, or a career they seem to fit. Most programmes are developed with the aim of eliminating uncertainty, to make sure that students are *ready* for the future. Those designs often do not involve nurturing mindsets that explore the relationship with uncertainty itself, and they rarely encourage students to appreciate

complexity. Therefore we need a new approach to teaching futures that moves beyond only exploring or designing scenarios or learning how to predict or anticipate. We need to also teach students to embrace different ways of doing, being, and knowing.[4] As much as we need to engage with the future through planning and preparation, we need to learn to anticipate for emergence and novelty as well.

4 Loes Damhof, et al.: Anticipation for emergence: Defining, designing and refining futures literacy in higher education, Humanistic Futures of Education, UNESCO (2019).

Teaching Futures Literacy at Hanze UAS

Since 2016, FL as a capability has increasingly found its way into curricula at Hanze University of Applied Sciences (HUAS) in The Netherlands. In 2018, HUAS received a UNESCO Chair for its work on researching the impact of FL as a capability and the design principles of all FL activities, ranging from short workshops and labs to intensive training programmes.

HUAS has developed several intensive training programmes, workshops, and modules that are taught throughout the university, society, and professional practices. The implementation of FL learning activities often starts with students or faculty participating in FL Labs. These are learning-by-doing, experimental workshops that last anywhere between a few hours and a few days. Through these labs, participants gain insight into the process of using and diversifying futures through anticipatory systems, based on the FL framework designed by Miller. Although different in heuristics and methods, all of these processes follow the same basic mechanics: in collective intelligence, knowledge-creation processes, participants make their underlying assumptions explicit by exploring probable and desirable futures. Those assumptions are being challenged through a provocative phase called 'the reframe', in which an alternative scenario that is neither probable nor desirable is explored, allowing participants to use the future in a different way. This reframe is often the steepest part of the learning curve, and it confronts participants with a world that can feel alien and slightly uncomfortable. In a lab focused on the future of learning, we might, for example, use a scenario set in 2060 in which new-borns have all the capabilities and knowledge they need but slowly lose them as they age. This may evoke new questions. What does learning and unlearning mean in this scenario? Through imagining diverse futures and identifying assumptions, we can open ourselves up to spontaneity and emergence. As a result, uncertainty and complexity become friends instead of foes.

Pioneering the field of teaching FL has provided the Chair at HUAS with several insights and remaining questions. First, the realisation that, while they can initiate a powerful mind shift for some, FL Labs are merely the beginning of a long and transformative learning journey. As with all capabilities, FL needs

nurturing and practice, and after an initial workshop, participants are often left wondering what 'it' is they have experienced and how to apply this to their own context, job, or internship. To support the sustaining of FL capability, intensive training of faculty is necessary. Through the essential building blocks of experience, theory, and design practice, faculty in higher education are introduced to FL through a lab, in order to gain deeper insight into the theoretical framework and apply their acquired skills in designing and developing FL Labs independently. By building the capacity to design and facilitate FL learning activities, they foster faculty's FL capability as well.

A second insight is the importance of addressing the applicability of FL to one's own context, or avoiding the so-called 'bubble trap'. If FL as a capability is not made applicable in our daily lives, the experience might remain just that: an experience. Although we see a momentum and a rise in interest in teaching FL, it is still in its pioneering phase. There is much to learn about FL as a capability: the different levels of FL and the learning paths of each individual versus the learning that takes place in relationship to others. As educational systems are designed to plan and prepare for the future, embracing uncertainty and emergence as a result of acquiring the FL capability can pose an additional challenge. As a capability, FL allows a person to identify and challenge one's own assumptions about the educational system itself. A dilemma then arises: can or should we teach learners to question the systems that they are a part of at the same time? Participating in a FL intervention is potentially transformative; once stepping over a threshold, one cannot go back. Due to its transformative nature, it requires appropriate learning spaces and suitable pedagogies.[5] This requires a certain level of responsibility as well. Teaching FL as any other course within an existing, rigid system simply won't do the trick. Threads to a context outside the same learning environment are needed as well.

A last element to consider is the importance of inclusion and making sure a broad diversity of perspectives are represented within any FL learning environment. These perspectives are not only needed to stretch the individual imagination, but also to expand the boundaries of the learning environment as a whole. This is why FL can never be a singular subject within a closed system, a semester, or curricula. Since FL as a capability builds on the collective intelligence of a diverse group, we need other voices that might challenge that system from the outside. Expanding the learning space with different perspectives supports a new way of learning that stimulates open dialogues free of prejudice. Within these Collective Intelligence Knowledge Creation processes, where the narrative capacity is an essential element,[6] it remains equally challenging and important to include minority voices.

5 E. Kazemier, L. Damhof, J. Gulmans, & P. Cremers: Mastering Futures Literacy. Building Capability in Higher Education. For review 2020.

6 Riel Miller: Transforming the Future. Anticipation in the 21st Century, (2018).

Becoming Futures Literate – And Now What?

How do we know someone is futures literate? And how do we measure or assess the impact of FL on both an individual and societal level?

In most conventional educational settings, teaching involves testing, and although the nature of FL does not particularly require a set of learning outcomes, it does merit a closer look at the added value of becoming futures literate. Miller often compares becoming futures literate to learning how to read and write. One can start by learning the alphabet, move on to reading the newspaper, and some might even become poets. At the same time, once we learn how to read or write, it is hard for us to assess its impact since we simply cannot imagine *not* having this capability. The UNESCO Chair at HUAS explores the impact FL programmes have on students and faculty, and although we are still in the early stages of our research, several initiatives are worth noting here. Using traditional tools like surveys and interviews, but also experimenting with reflections, narratives, and artistic methods have proven to be good ways to capture potentially transformative learning processes.

Although these methods can provide valuable insights into the potential impact of FL, they are limited to a certain moment in time. They capture the insights and questions in the moments after a course or experience, but we know that these experiences are *only the beginning*. What is the impact months or years later? How do we keep track of students, their actions, and behaviours? Their learning might be captured in ways that are supportive of their journeys as they unfold or contribute to our knowledge of the outcomes in retrospect. Having said that, not knowing how learning has impacted students' lives is the curse and the blessing of being an educator.

Besides the challenge relating to how to measure the long-term impact of FL, there is a larger narrative unfolding: the (un)intended impact that FL has on our institutions and systems. By simply trying to apply a FL mindset to our own decision-making and context as educators, the educational context itself is expanding and shifting as well. This is what Miller refers to as 'change in the conditions of change'.[7] At HUAS, this has become apparent during the pandemic, where we see the first cautious signs of new ways of thinking about education. Insights and imagined futures from previous Futures Literacy Labs now make their way back into the conversation about the university's strategy. In a previous lab focused on the Future of Assessment, managers, teachers, and students explored what education would look like if all diplomas were based on trust and trust alone. Now, in times of COVID-19 when higher education needs to rethink digital assessment, these questions on trust in education have become important topics in discussions.

7 Riel Miller: Transforming the Future. Anticipation in the 21st Century (2018).

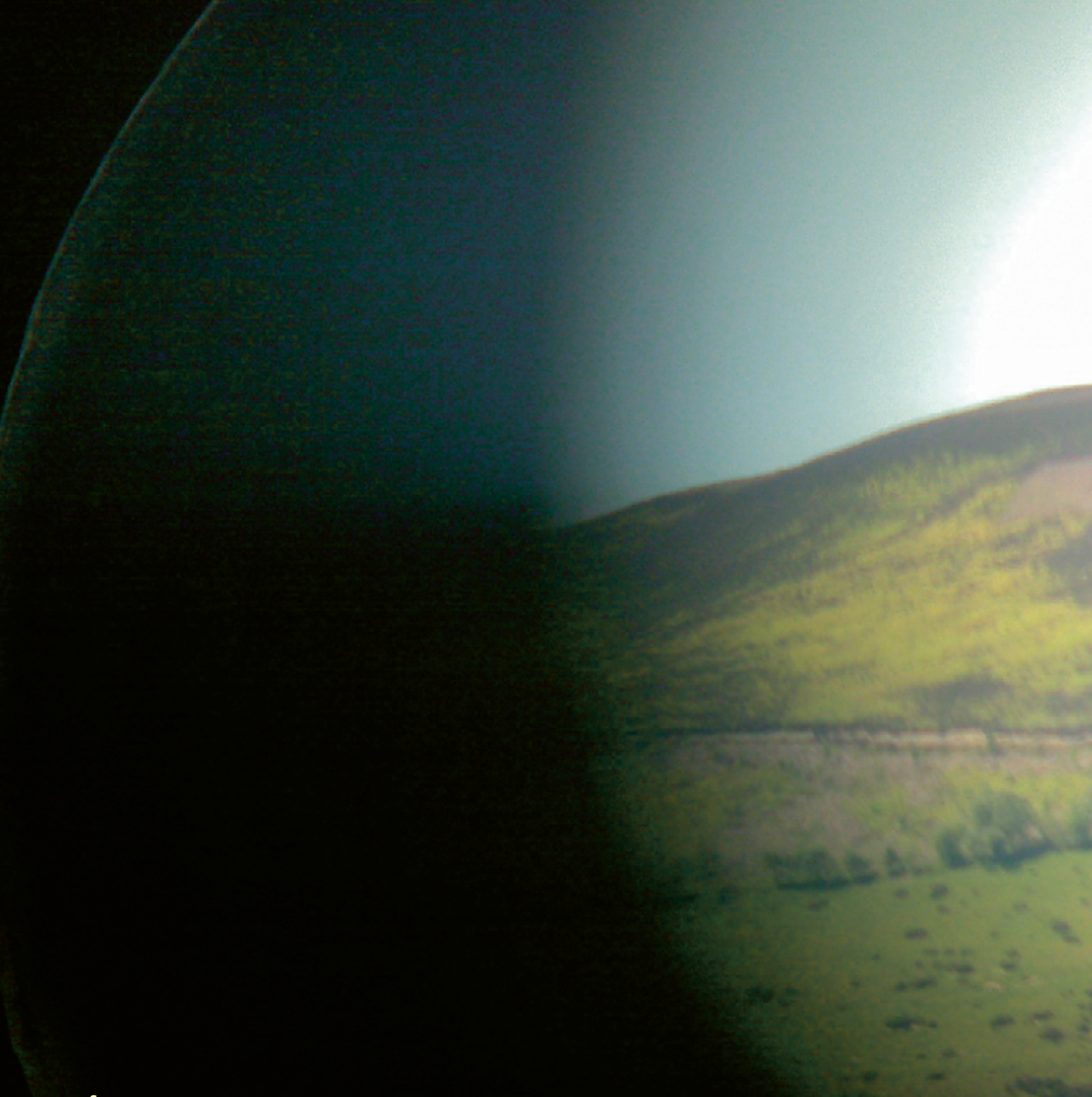
The Future of Teaching Futures

So what do these insights and remaining questions tell us about teaching futures? As with all future endeavours, it is hard to predict. And as we come to understand more about teaching futures and its impact, we must remain open to novelty and emergence as well, a fact that is affirmed by the current crises. The pandemic has not only shaken the educational system, it has also made space for the carefully planted seeds sprouting, often only visible for those paying attention. At HUAS, we see this demonstrated through feedback of 'old' FL participants, a year or two years later. What seemed like a silly future scenario then *(What does education look like when we have no physical place to go?)*, has now suddenly become a reality. This has not only sped up the adaptation process, but also made it easier to start the conversation on how to change a system on a more fundamental level.

Some of these developments have started before COVID-19, but have come to the forefront since the pandemic has made us aware of our assumptions about what it means to learn when we are not in each other's physical presence. This increased awareness of assumptions not only prompts new questions related to transforming education but also to professional development. Which capabilities and endeavours are still relevant? What defines me as a professional, and how can I strengthen my professional identity right now? Our carefully planned futures in higher education (from the long-term design of curricula to the concrete of campus buildings) have come under scrutiny and can no longer hold. Educational institutes must start asking questions that embrace emotional and intellectual risk-taking, since these risks will ultimately only benefit education itself[8].

8 Lewis, T.E. (2014), Gert J. J. Biesta, The Beautiful Risk of Education. Educ Theory, 64: 303-309. doi.org/10.1111/edth.12063

So can we teach futures? Yes, but it involves more than making space for a subject in a curriculum. It involves teaching the capability of FL that fosters awareness of how and why we use the future. And since the future belongs to no one, it also requires a new and more open, experimental learning environment; a safe space where students can be explorers. It should be an even playing field where we debate and negotiate shared meaning, enhance our perception, and relocate our sense of agency – where we are able to question our belief systems and our historic sense of truth. We need to move beyond the existing narratives that are dominant in our memories and imaginations and make space for the stories of others. By discovering, uncovering, and recovering imaginary findings, old and new, students can become the archaeologists of the future. ■



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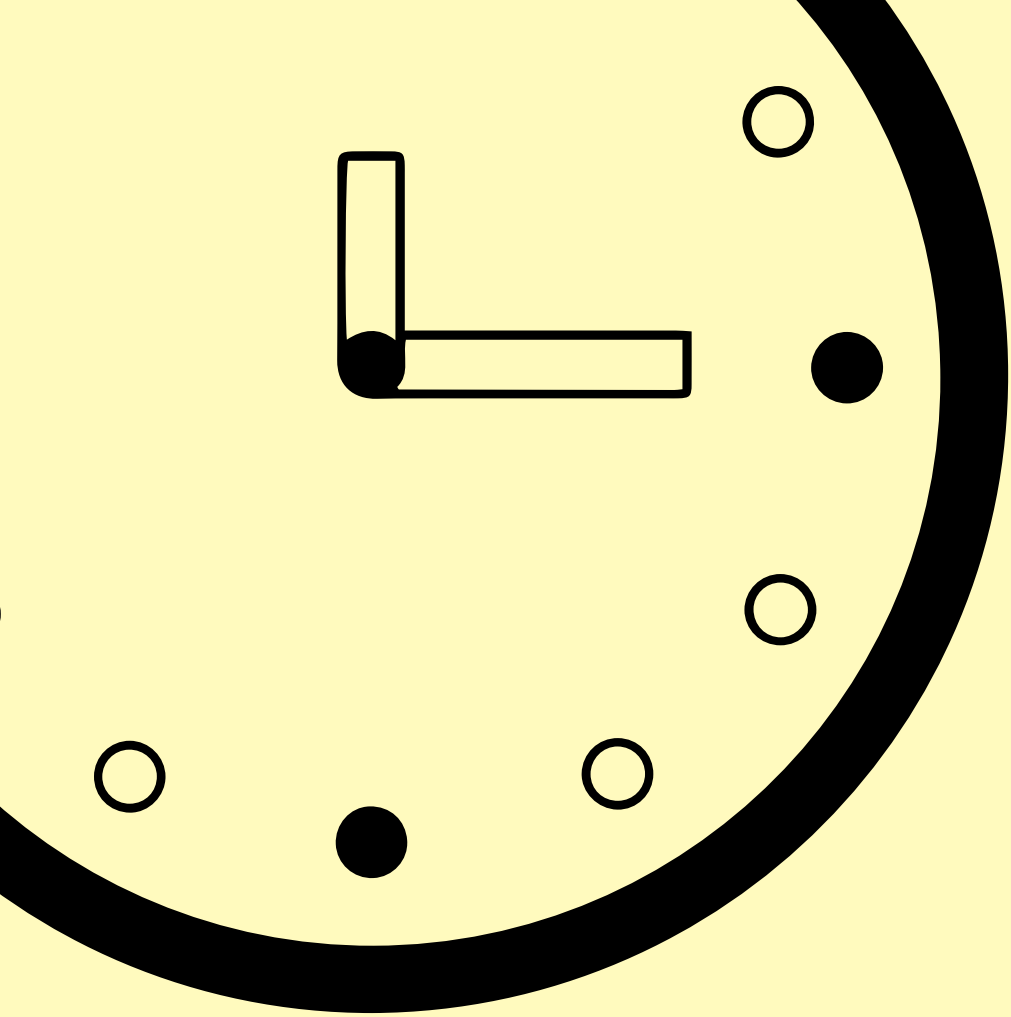

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TIME PERCEPTION
The silent language that guides our lives

If you have ever had the feeling that time passes faster the older you get or that time passes slowly when you are anxiously waiting for something, you are not alone. How we experience time, and what role our time perception plays in our decision-making about the future, is both highly contextual and subjective. A time horizon of 20 years will likely mean something different to you if you are 20 years old compared to if you are 60. Of course, it is also something that depends on your circumstances. As futurist Öystein Sande points out, a person with a high degree of confidence in how their future will unfold has a far better capacity for planning for it than a person living in perpetual uncertainty.

There are other structures guiding our subconscious understanding of past, present, and future as well. The anthropologist Edward T. Hall did extensive cross-cultural research in Europe, Asia, and the Middle East, where he found that time perceptions – which he called a 'silent language' – varied from region to region. Hall found that some cultures, including Western Europe, were monochronic: people there prefer doing one thing at a time, concentrate on the job at hand, put the job first (before relationships), think about when things must be achieved, value time management, and emphasise promptness. To people in monochronic cultures, work time is clearly separable from personal time, and time is inflexible and tangible. Time is seen as a resource, something can (or can't) be 'worth our time', and the phrase 'time is money' is in the common vernacular. Within this construct, the sanctity of a deadline is held in high regard, as is being 'on time' because anything else is a 'waste of time' – a squandering of precious resources and seen as disrespectful or exhibiting poor work ethic.

Other cultures, including much of the Mediterranean and Arab world, lean more towards a polychronic time perception. Hall found that in these regions, people are comfortable doing many things at once, tend to put relationships first (before the job), measure tasks not on their individual basis but as part of overall organisational goals, and think about what will be achieved (rather than when it

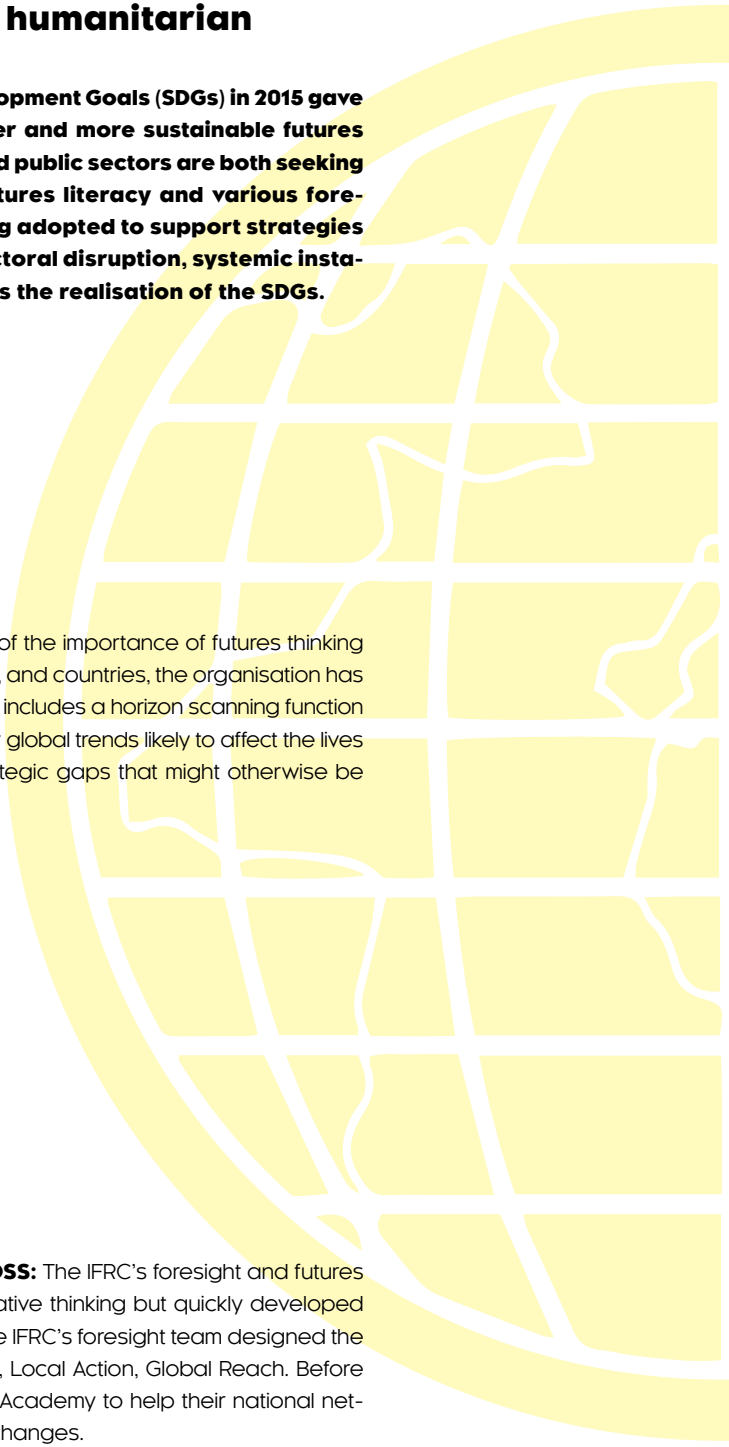
will be achieved). To people in polychronic cultures, time is flexible and fluid, and more emphasis is placed on doing things right than getting things done 'on time'. Because time for a polychronic is more fluid and less linear, time is rarely experienced as 'wasted'. They prefer switching from one activity to another, which they find both stimulating and productive.

Naturally, there are inter-regional differences to Hall's framework, and variations can exist on the personal level as well. You may be born into a strong monochronic culture like Germany or Scandinavia but feel more comfortable with a polychronic approach to life and work. There are also many other factors that come into play that affect your individual time perception. Are you accustomed to seeing time in a cyclical or in a linear way? Are you past- present- or future-oriented? Do you live life at a fast pace or a slow pace?

Viewed in combination, factors such as these make it important to take both cultural and individual time perceptions into account when doing any kind of cross-regional collaboration. This is especially true for futures work, the premise of which may be affected by the participants' understanding of what past, present and future means (and what they are in connection to each other), whether the future is considered a fluid concept or block of time to be populated with plans and strategy, and whether it is viewed as a threat or a place of opportunity.

Futures on the rise in the humanitarian & civil service sectors

The creation of the UN Sustainable Development Goals (SDGs) in 2015 gave the world a common blueprint for better and more sustainable futures for all. To help meet the goals, private and public sectors are both seeking and applying new ways of working. Futures literacy and various foresight approaches are increasingly being adopted to support strategies and organisational tools to address sectoral disruption, systemic instability, and the long-term targets towards the realisation of the SDGs.



SAVE THE CHILDREN: In acknowledgement of the importance of futures thinking in serving the needs of children, communities, and countries, the organisation has integrated a future-proofing workstream. This includes a horizon scanning function and strategic foresight toolkit, focusing on key global trends likely to affect the lives of children in the decades ahead to fill strategic gaps that might otherwise be missed in a changing environment.

INTERNATIONAL FEDERATION OF RED CROSS: The IFRC's foresight and futures work started as a means to stimulate innovative thinking but quickly developed into a strategic organisational tool. In 2019, the IFRC's foresight team designed the new Strategy 2030 — A Platform for Change, Local Action, Global Reach. Before that, the IFRC had established the Solferino Academy to help their national networks thrive through complex and dynamic changes.

UNDP: Since 2014, the UNDP's Innovation Facility, supported by the Danish government, has invested in both innovation and rapid experimentation with a focus on helping governments rethink decision-making in times of uncertainty. In March 2020, the UNDP presented 'A Way Forward', a paper which argues the need for new statecraft in the age of emergence by seeing uncertainty as a feature rather than a bug.

UNICEF: By conceptualising many possible futures and understanding their implications for children's rights and well-being, UNICEF develops policies designed to improve their progress towards the Sustainable Development Goals. As an example, UNICEF Cameroon explores futures for children in the country by drawing on the Adolescents Shaping Their Future: A Foresight Toolkit designed to engage adolescents in foresight.

WHO: The World Health Organisation has intensified its work with member states in developing forward-looking planning programs and strategy development initiatives to help countries project social, disease, and environmental trends, synchronise them with national health and development goals and sketch comprehensive scenarios for the future. As stated in the 'For the Future' vision paper, the rationale is that if the long-term vision is clear, short-term planning is more effective in preparing health systems and population health for the future.

UNESCO: The development of futures literacy builds upon UNESCO's decades of experience in fostering futures studies and its role as a global laboratory of ideas. UNESCO is co-creating futures literacy globally with local actors in more than 20 countries and has a proven track record in developing this capability. A diverse set of nodes in the growing Global Futures Literacy Network is championing innovative learning methods by working closely with partners in civil society, governments, and the private sector.

INTERVIEW

Decolonising futures

What does it mean to decolonise futures, and how can it contribute to creating new narratives that avoid reproducing the problems of the past? To get answers to these questions we spoke to Pupul Bisht, founder of the Decolonizing Futures Initiative and Creative Lead & Network Weaver at the Next Generation Foresight Practice at School of International Futures.

Pupul is a multi-disciplinary futurist and the winner of the Joseph Jaworski Next Generation Foresight Practitioners Award 2018. She founded the Decolonizing Futures Initiative in 2018 — a global project that aims to engage marginalised communities in imagining their preferred futures to inform and inspire inclusive policymaking and innovation. Through this initiative, Pupul is pioneering the use of her novel foresight method inspired by the Kaavad folk-storytelling tradition of Rajasthan, India — one of the first and only foresight methods directly derived from a non-Western tradition.

Pupul, what put you on this path?
As a young and aspiring designer, I was absolutely confused about what Indian design was, where I could find it, and why it was so difficult for me to identify it. This made me question the dominance of Western philosophy and understanding of the world in design methodology and contemporary practice. Since then, I moved to Canada to study strategic foresight, and while we were always talking about futures in plural and made many different scenarios, we were somehow subconsciously almost committed to building quite singular images of this time that is yet to come.

How does that connect to where you are today?
As a millennial, I grew up in a very globalised world consuming North American content, so the part of my identity that speaks and thinks in English, that has been trained in Western ways of doing, was very comfortable participating in foresight processes. Conversely, the Indian side of my identity, shaped by my upbringing in New Delhi, could not authentically engage with most of the conversations or the methods. I was not able to meaningfully bring my worldview to the table, and I saw that as a very problematic gap in foresight.

In what ways did you then address that gap?
I realised that we, as foresight practitioners, can often reproduce the same dominant ideas and value systems through our work, sometimes even unintentionally. We might not even know that it is happening. That was really what led me to explore if there were different ways of practising foresight that opens the room for other ways of thinking through the *Decolonizing Futures Initiative*. As I was educating myself, I came to better understand how the methods are limited in the worldviews that they can support. If we want to build better futures, leaving no one behind, then it means that we are totally dedicated to accepting that futures for all cannot be imagined by a few! It is not just about inclusion; it is about recognising where power is held when we do foresight work, because at the end

of the day, decolonising futures means to make room for marginalised world-views and historically marginalised cultural identities in futures work.

How was the future colonised in the first place?
I see a very strong connection between the past and the future, and to me, history and future really are two sides of the same coin. We all know that the past is where all the colonisation happens, so when those systems, realities, and stories continue to grow and scale without being challenged, that is when the future gets colonised. Simply put: the constant colonisation of futures is basically an unquestioned and unchallenged continuation of our pasts and our present.

So how do we decolonise our futures?
To decolonise the way we practice foresight and the way we engage with futures is a very intentional decentring of Anglo- and Eurocentric ways of knowing, which tend to be dominant in the discourse so that we can create space for non-Anglo- and Eurocentric ways of knowing, being, and doing. It is not a mere abstract concept. It is a very powerful call to action in response to a long history of domination that we all share from different vantage points. Therefore, I do not think there can be a singular definition of how to decolonise our futures. Visions of preferred futures can be a great tool for individuals and societies to imagine beyond the current systems of oppression and the dominant views of reality.

Can you please explain?
If you look at the very different experiences of colonisation in different parts of the world, it is characterised by the extraction of resources and culture and the forceful removal of structures that facilitated and supported local self-organisation. Decolonisation futures is then about undoing those dependencies and creating alternatives that can support agency and local self-actualisation, and it begins with challenging and disrupting the dominance of one perspective, one voice that limits our imagination of possible worlds.

What are the dominant images of the future to be challenged?
Basically, anything that is full of assumptions about how the world is meant to be, such as the fatal images of the anthropocentric narratives, which tend to put humanity at the centre of the universe with the planet at our disposal and us being the central and superior species. The way time and space are conceptualised linearly, with anything that is in the past considered outdated, tends to foreclose the future too. Then there are the implicit concepts of growth and progress in

futures thinking, every image of the future that singularly foregrounds technology as the centrepiece of a narrative or a story. Think Black Mirror, or fantasies about conquering outer space, where we reproduce colonial tropes. Think about who the default future is designed for. These are classic examples of very dominant images of colonised futures. We simply tend to repeat the same stories as it is actually very difficult for us to think of alternatives.

To what extent is futures work and futures thinking a privilege?
This is a good question which tends to be missing from a lot of discourse that claims to be critical. The question speaks to an assumption built into foresight as a practice that says we ought to be able to think about the future and we must engage with it. Yet, it does not necessarily align universally with all cultural worldviews around the world. The minute I came to India and I started piloting my initiative with local communities, I realised that if I am serious and honest about making room for alternate ways of looking at the world, then there has to be room for not seeing the exercise of 'using' futures as an inherently good act.

How so?
I remember reading a research paper on the use of participatory futures workshops in the Arab world and a majority of participants carried a strong concept of fate and did not necessarily see the value of assuming total and complete control and agency when talking about the future, because for them, fate was a really big factor in how things unfold. In India, we have the concept of kal-chakra which denotes cyclical time. It ties back to the Indian worldview of rebirth with how everything begins to end, and everything ends to begin. There is this continuity that is built into the way people think about the little and grand scheme of things. Sometimes the often-linear premise of foresight and the way it says we need to engage with the future absolutely find no currency in those spaces. At this point in my work, I am beginning to explore these tensions, and while I have not arrived at a resolution, I am very much in the thick of it and keep asking: *at what point does foresight in and of itself become an act of neo-colonialism?*

'It is not just about inclusion; it is about recognising where power is held when we do foresight work, because at the end of the day, decolonising futures means to make room for marginalised worldviews and historically marginalised cultural identities in futures work.'

Tell us how you use storytelling to answer those questions.
When I am facilitating, I use storytelling as a tool. Instead of being the story-creator, storyteller, or the writer, I completely remove myself and assume the role of a humble listener. Another important aspect of decolonising for me is the revival of cultures and languages. English cannot always be the default language of facilitation, and written words cannot be the default mode of expression. Therefore, I work a lot with visual and oral storytelling because many of the cultural spaces that I am working in, storytelling is an organic method of communication, sense-making, and knowledge transmission. We need to give prominence to stories as a legitimate way of knowledge production and communication, which then in itself can become an act of decolonisation.

As a foresight practitioner, how do you integrate decolonisation in your work?
As a foresight practitioner, important questions for you to ask yourself is: *how am I doing my research and how is knowledge being constructed?* Often, you will find that different communities and cultures have different ways of doing both. When holding space for decolonising futures, one of the most important steps is to make room for other worldviews, cultures, and histories to participate and find ways of expression, as a lot of history has been misappropriated. What we are aiming for is not just representation. You must go beyond asking who is in the room. Once people are in the room, are they able to bring their worldview? If they are bringing their worldview, is that perspective even being acknowledged and included in the work being done?

For me, that means removing myself from the seat of an expert to listen with humility. One must understand that it is probably going to be uncomfortable – especially if you have had privilege historically. Decolonising is about learning to sit with that discomfort because it is about shifting the way we organise reality in our heads, as well as in our surroundings.

If we look towards exhibitions of images and artefacts of the future, to what extent are they colonisers of our collective futures?
We need to continually ask in any exhibit, in any show, in any collection, 'who is in the room' and 'who is getting to talk' and 'who is being rendered invisible in the future', when we are telling the stories of the future through objects or other things. When someone is not represented, it is not as simple as them being missing from the imagination. There is an implied assumption that they are being rendered invisible. Are they going to be alive in that future? Is that culture going to survive/thrive in that future? Often, it is people who already have representation that tend to appropriate marginalised stories. So, who gets to populate

the imaginations about the future is important to address, and if there isn't a commitment to repatriation, then every single history continues to be colonised, and every single future will be colonised.

How can we learn from indigenous, native, and tribal practices when engaging with the future?

There is so much that we can learn and so much wisdom there. With regards to climate change, some communities know how to live in harmony with the forest, for example, and they are the ones we often do not include in our narratives. They are the ones who are the most disenfranchised, and they are the ones who probably know how to achieve better harmony with nature. However, our desire to challenge the dominance of Anglo- and Eurocentric cultures can be a double-edged sword in that we can end up taking a very exotic view on everything that is non-Western. That rabbit hole is a very dangerous place as it can be another manifestation of colonisation that indigenous cultures or tribal cultures are not unfamiliar with. There have been many extractive practices intellectually and resource-wise that come from that exotic perspective. It is crucial to recognise that these cultures and these communities are not stuck at some point in the past existing in some pristine form. They have evolved too. So, whatever culture you are engaging with, it is the contemporary state of that culture. If we do not understand this, I am afraid that any interaction we have with historically marginalised or currently marginalised cultures is going to tread on dangerous territory.

What happens when the future is decolonised?

At a very fundamental day-to-day tangible level, what happens is that we make better decisions in the present by making the world better for a larger number of people. And I say this because I believe that the images of the future that drive, inform, and inspire us directly get manifested and expressed through the way our institutions are designed, in the way our systems are arranged. When it is the dreams, desires, and nightmares of local communities that guide and inform these systems – that is when we will begin seeing the effect of decolonised futures. Imagine a world where many worlds can co-exist – that is really what we are working towards.

What would be your advice to your future self?

I would say: Pupul, live in the moment. Be inspired and informed by the past, care for the future but live in the present. And when it comes to living with yourself, living on this planet – live gently and live humbly. ■


FEVICOL
MR

Public imagination & participatory futures

We live in the 'Age of Mass Protests'. That is the conclusion of a report published in March 2020 by the US-based think tank Center for Strategic and International Studies. The researchers at the centre point out that we are in the midst of a decade-long trend of public uprising that is ongoing and escalating, and which affects every major populated region of the world, from the Arab Spring to the Anti-Extradition Law Amendment Bill protests in Hong Kong. Not even the social distancing measures imposed during the COVID-19 pandemic have been able to halt the outburst of activism, as evidenced by the recent and massive Black Lives Matter protests that took place in the US and in many other countries. The researchers point out that the frequency in mass political protest has increased by an annual average of 11.5% between 2009 and 2019, and that the underlying catalysts like increasing global literacy, education, and urbanisation suggest the trend will persist. The people want a seat at the table. They increasingly claim a stake in creating the future they desire. So how do we make participation in creating alternative futures more available to the public?

IMAGINARY DECLINE, DYSTOPIAS IN DEMAND

Our current time has been described as both a great pause and a time of great urgency. Either way, we have been given an opportunity to imagine different alternatives when thinking about life in the wake of the pandemic. Yet, it appears that we are facing another crisis too – a decline in imagination. We seem to be drawn to imagined destinations that are worst-case scenarios of our current trajectories, which explains why dystopian fiction has become so popular in recent years, particularly amongst the youth.[1] A large American publisher experienced a 9,500% resurgence in sales of George Orwell's *1984* after the 2016 US election as readers were trying to make sense of the world around them,[2] and dystopian movie sets have become big-budget affairs.[3] In 2019, the Washington Post investigated the rise of dystopias in popular culture and the media and found only five annual mentions of 'dystopia' or 'dystopian' across surveyed news sources in 1985 — and by 2018, it had blown up to 25,078.[4]

If the images of the future that dominate mainstream culture come from dystopian fiction, do we run the risk of colonising our minds with negative images of our collective futures? When we focus on projecting disastrous and apocalyptic scenarios onto the future, do we miss the opportunity to imagine how we could improve life for future generations, and how we can positively reimagine our approach to health, welfare, education, work, and democracy? Signs of pessimism about our common future are not confined to the world of fiction. The Pew Research Center's 2018 *Global Attitudes Survey* concludes that widespread pessimism about children's futures exists in most countries.[5] A similar conclusion is arrived at by Geoff Mulgan,

1 Yvonne Shiau: "The Rise of Dystopian Fiction: From Soviet Dissidents to 70's Paranoia to Murakami", Electric Lit (2017), bit.ly/2KC3TfL.

2 Charley Locke: "The Real Reason Dystopian Fiction Is Roaring Back", Wired (2017), bit.ly/3fo0HQ5.

3 Robin Burks: "Looking Back At Hollywood's Recent Dystopias And Post-Apocalyptic Futures", Tech Times (2015), bit.ly/335HqxO.

4 Calvert Jones and Celia Paris: "Dystopian fiction makes people more willing to justify political violence. Should you worry?" The Washington Post (2019), wapo.st/3foL0rP.

5 Bruce Stokes: "2. Expectations for the Future", Pew Research Center (2018), pewrsr.ch/36W18NE.

Founder of the think tank Demos, in the report *The Imaginary Crisis* from April 2020. Mulgan argues that institutions that in the past supported public and social imagination are leaving that role behind. In education, social sciences frown upon futurism. In politics, Mulgan argues, we lack focus on articulating imaginary futures that shape the policy of parties. Furthermore, many think tanks today feed the present news-cycle, rather than look ahead.[6]

It's not that the crises facing us today aren't real, but what about the challenges and opportunities of tomorrow? We need wide-ranging visions, options, and a new attitude towards complexity to be able to adapt and make sense of something new.[7] We need to make desirable futures more, not less, available. So how do we do that?

FROM IDEOLOGY AND FICTION TO PUBLIC ENGAGEMENT

When seeking to answer how the public can actively engage in the futures they claim a stake in – beyond the worlds of fiction, protests, and voting – we can first look to past attempts to open up the futures field towards the public. In the post-WWII years, the term 'futurology' was introduced by German political scientist Ossip Flechtheim to suggest that to move beyond ideology and fiction, the future should be taught as any other scientific discipline. Later, the American futurist Alvin Toffler suggested expanding the field beyond education by fostering the habit of anticipating the future across all levels of society in order to overcome what he saw as the detrimental consequences of technocratic elitism in futures work. In other words, Toffler called for a more widespread nurturing of anticipatory and participatory democratic processes.[8] Fast forward to today, and it is questionable if we have advanced much further with public future engagements. Arguably, most examples of more public inclusion in high-level decision-making processes about the future today concern planning and preparation rather than exploration of complexity and emergence.

Today, 'participatory budgeting' is recommended by the World Bank and the UN as good practice,[9] concerned with involving citizens in the allocation of public budgets for public good to bridge the distance to government decisions and ensure representation. In all its variants, more participation of citizens in political decision-making could be seen as a sign of more engagement with the future, yet within an often narrow or predefined spectrum of agency and selection that limits rich collective imagination, and thus, development of democracy itself. More participatory politics is a good first step, but can we do more?

PUBLIC ENGAGEMENT + FUTURES STUDIES = PARTICIPATORY FUTURES

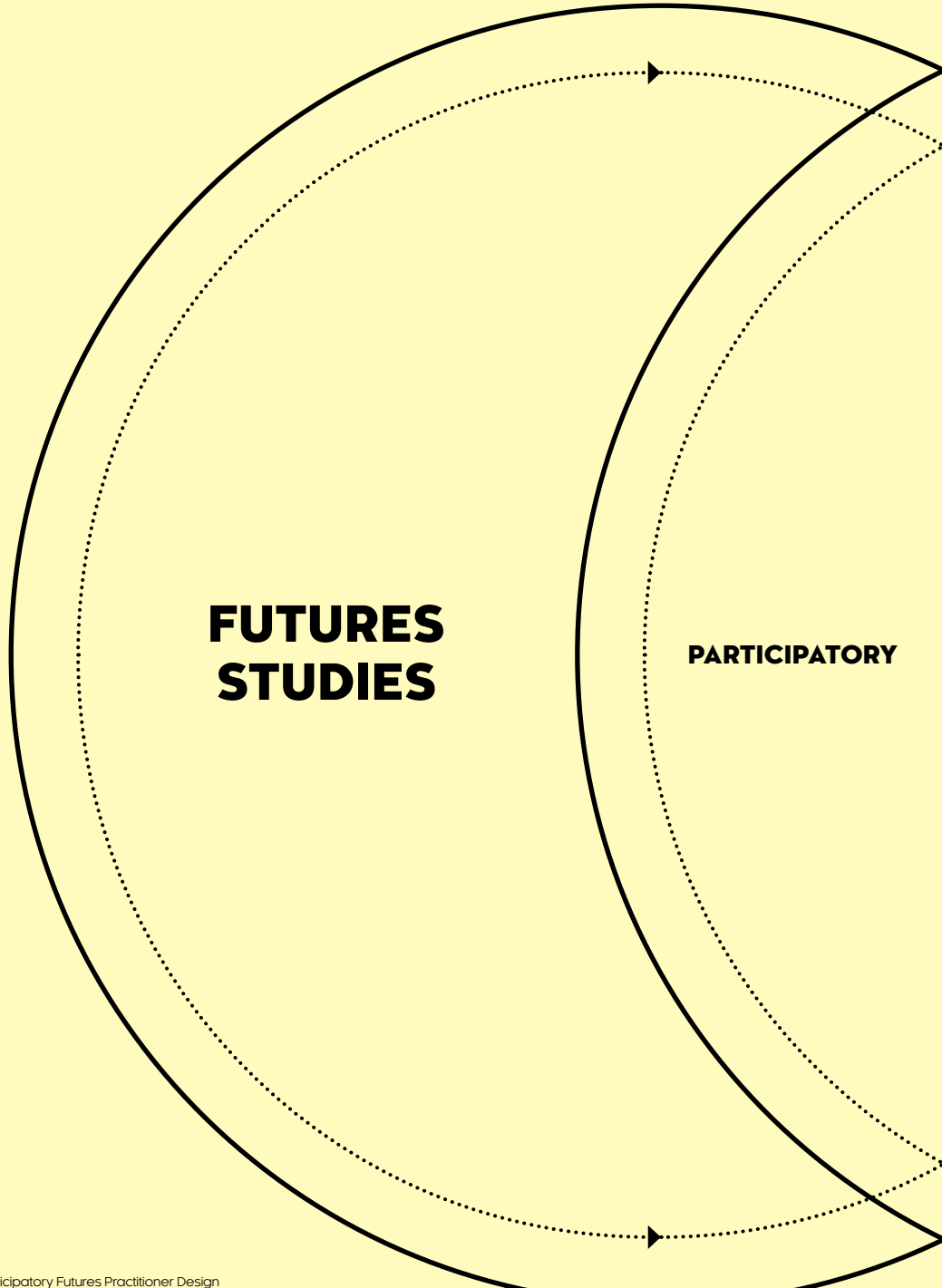
While futures studies and foresight have traditionally been confined to practicing futurists and the commissioning bodies that hire them, the strides and tides of democratisation are catching up with the fields. The broader inclusion of diverse agents and their perspectives is now being considered as means to expand the visibility of the future and to promote stronger engagement with it. Participatory futures projects, which combine public engagement and futures work, can enable new ways to galvanise public imagination and foster

6 Geoff Mulgan: "The Imaginary Crisis (and how we might quicken social and public imagination", UCL, Demos Helsinki & Untitled (2020), bit.ly/2UTikhe.

7 Ibid.

8 Blagovesta Nikolova: "The rise and promise of participatory foresight", European Journal of Futures Research Vol. 2 (2014).

9 Mhairi Campbell: "The impact of participatory budgeting on health and wellbeing: a scoping review of evaluations", BMC Public Health Vol. 18 (2018).



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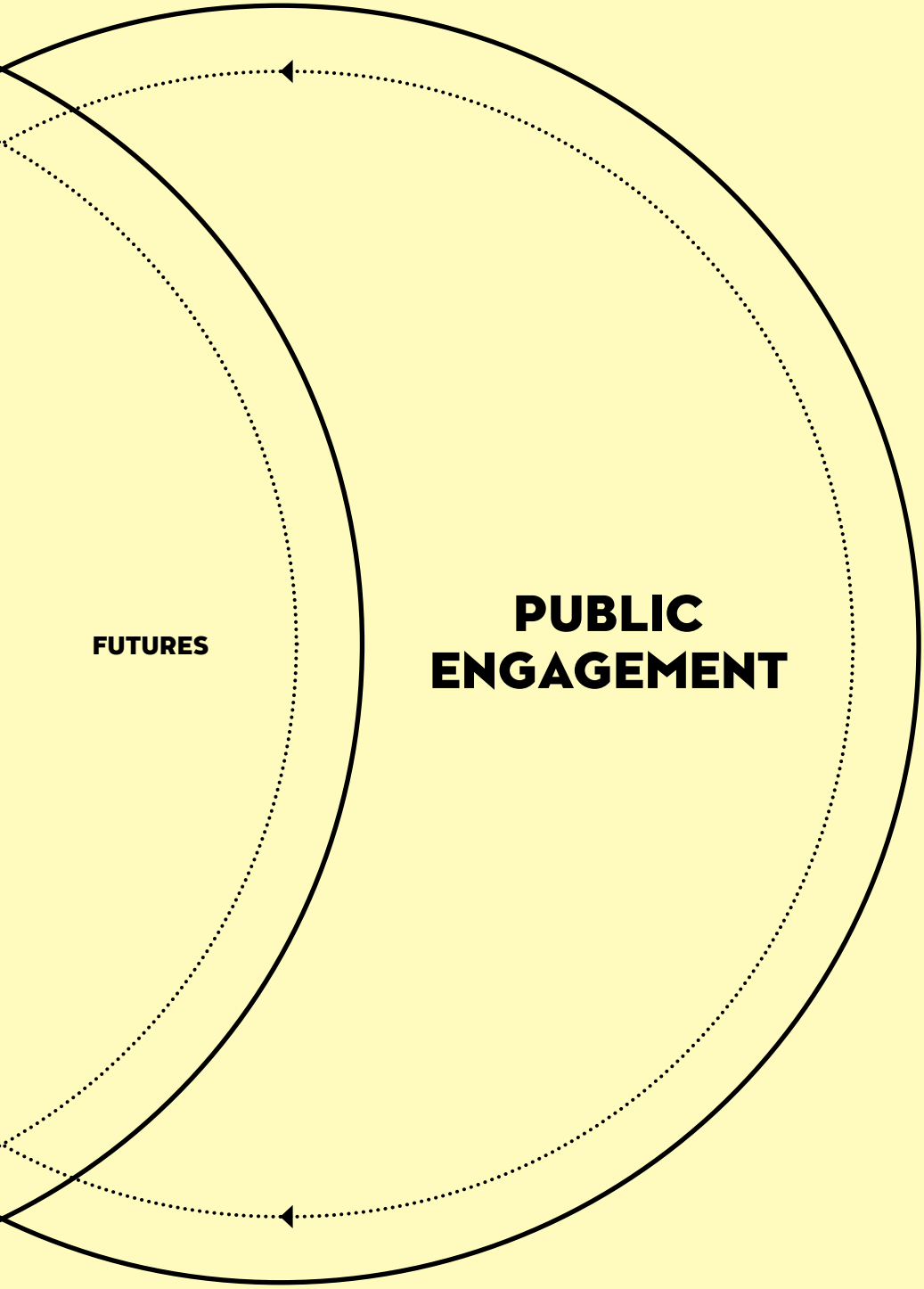

FUTURES
PUBLIC
ENGAGEMENT

agency and collective action towards aspired public futures.

One of the first well documented examples of a participatory futures process dates back to Hawaii in the 1970s, where a yearlong project involving over 2,000 residents aimed at soliciting public opinion on what the island state should be like in the year 2000. The numerous outcomes of the project count the creation of future-oriented commissions, a similar participatory futures project on 'Alternative Economic Futures', and the establishment of the Hawaii Research Center for Futures Studies (HRCFS) which was created in 1971 and has made Hawaii an acknowledged hub for futures studies today.[10] A newer participatory example from Hawaii featured immersive 2060-scenarios focused on shifting policy for the island state, and as a result, encouraged collaboration in combatting global warming and protection against the 'loss of life, land, and property of future generations' was signed into law in 2012.[11]

While this kind of futures-oriented and participatory policy work has not yet reached mainstream adoption as it is a complicated and lengthy process that breaks with traditional governing, there are promising signs that this may change. A recent report *Our Futures: By The People, For The People* commissioned by Nesta, explores the need for the creation of hope to 'enable people to co-diagnose the issues and opportunities, build common ground, and collectively imagine preferred futures' and then argues how such findings can inform new governance structures, enhance policymaking, and strengthen collective action to deliver on shared aspirations for the future.[12]

The more recent 2018 'Citizen Visions for European Future' project explores how this type of involvement of citizens can complement the work of experts and provide more accountability for citizens. A report developed as part of the project lays out how the European Union has invited citizens to articulate 298 visions of desirable and sustainable futures, which scholars have used to identify citizen values, sentiments, and agendas concerning societal development that relates strongly to education to then inform future European research and innovation.[13]

Another example is the 2018 research project 'Back from the Future' by the think tank Ouishare aiming to curb citizen passivity and to transform fear about the future into hope. The project was a two-year mission set to enable citizens of Munich to create a range of future scenarios for living together, assessing which aspects are desirable (or not) for the future of their Munich through speculative design processes.[14]

A final example comes from the municipality of Suita in Japan, where citizens were involved with 'energy-visioning' workshops based on future design approaches that concern the involvement of future generations' rights through, for example, role play. The method has proven effective for developing future visions and deriving policy implications. One key takeaway was that the scenarios developed by 'future generations' were more proactive in terms of policy options incurring costs to the current generation. Post assessments found that the participatory futures design approaches were effective in handling uncertainty and fostering holistic long-term thinking as the currently living generations were supportive of the outcomes.[15]

10 Jim Dator, et al.: "Hawaii 2000: Past, Present and Future", University of Hawaii 1999.

11 Executive Chambers, Honolulu, bit.ly/35XpTcQ.

12 Nesta: "Towards more participatory futures" (2019), bit.ly/33qWlh1.

13 Petteri Repo and Kaisa Matschoss: "Citizen visions for European futures – methodological considerations and implications", European Journal of Futures Research Vol. 6 (2018).

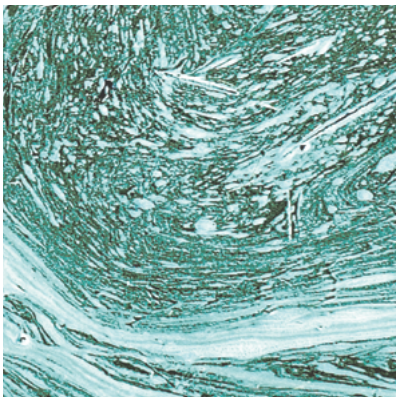
14 "Case Study: Back From The Future", Speculativeedu (2020), bit.ly/3IW57Ad.

15 Michinori Uwasu, et al.: "Citizen-Participatory Scenario Design Methodology with Future Design Approach: A Case Study of Visioning of a Low-Carbon Society in Suita City, Japan", Sustainability (2020), bit.ly/3IW58Eh.

THE PUBLIC SQUARE REIMAGINED

For desirable futures to be democratised, we need to introduce new platforms for public debate, imagination, and participation. The pioneering Museum of Tomorrow in Rio de Janiero, Futurium in Berlin, and the soon-to-open Museum of The Future in Dubai (and more underway) all hold immense potential to establish public familiarity with the long term. Yet, future-dedicated museums and exhibitions also run the risk of colonising our idea of the future based on top-down selective curations and what is being put on display.

If we are indeed living in the age of mass protest, participatory futures processes need to welcome the individual to challenge boundaries and identify seeds of change and other tomorrows by harnessing the alternative collective images of futures brought forward by the current and future protest movements. As such, public institutions have an opportunity to provide new meeting places, to become community platforms that amplify public opinion and transform their audiences into co-creating participants challenging the inadequate imaginary of what it means to be human in the 21st century and beyond. ■



Seeing uncertainty as a resource

Hopefully, this report will have given you an understanding of how developing tools, capabilities, and terminologies can be used to advance organisational, institutional, and individual use of the future. This is not to determine how the future could look as a destination or as in scenarios, but to use the awareness of it to improve decision-making in the present.

Futures thinking is a strategic imperative for responsible and sustainable decision-making, including how we design, innovate, educate, conduct business, and form policies. It is about reimagining traditional stuck-in-the-present governance and leadership styles and taking advantage of long-term oriented anticipatory models to learn how to thrive during times of turbulence and endure sudden shocks to the status quo. By training how to use futures, we can learn to better appreciate complexity and embrace uncertainty as a resource rather than an enemy of planning, with the goal of building greater organisational and individual resilience. The pandemic, for example, is not only a tragedy, but can also be a chance to end outlived structures and plant new seeds, as well as an opportunity for positive adaptation and benefit. That all depends on our decisions in the present.

Since the inception of futures studies in the post-WWII period, futurists have primarily been concerned with advising governing bodies, businesses, and organisations and helping them develop or improve their strategy by using tools like megatrend analysis and scenario planning. While this approach has not lost any of its merit in the decades since – to the contrary, its merits are arguably strengthened in times of uncertainty – several voices and institutions are now calling for a greater dissemination of futures thinking that brings it out of the closed loop that exists between futurists and the people who hire them – what we have chosen to call the 'democratisation of futures'. These initiatives come in many different shapes and sizes and include the development of futures literacy, which aims to spread conscious futures thinking beyond the traditional context that futures studies and strategic foresight operate in. Although it is still in its early stage of development, futures literacy is already cementing itself as an important part of the futures thinking ecosystem, and it holds great promise for further democratisation of the field. Another example is the decolonising futures movement, which highlights how homogenous and unchallenged futures tend to perpetuate structural problems of the past and risks making us victims of our subconscious assumptions. The aim with many of these initiatives is to empower the individual by helping to broaden the understanding of what is deemed possible, probable, or desirable, to ensure that we are not prisoners of fixed worldviews or mental models that reinforce biases, create blind spots, and fail to challenge the simple framings.

It is important to remember that we can use the future as an open space with room for different values and belief systems, where we can address dilemmas, and equip people in all walks of life with capabilities to establish familiarity with the long term, whether this is done through educational programmes or other kinds of participatory initiatives. If we wish to democratise futures thinking, it is about doing more than involving and listening. We must empower people with the relevant capabilities to make better informed decisions across the areas of business, policy, development, education, and in our individual lives.

SCENARIO reports

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