## 10. Changing the conditions of change by learning to use the future differently

by Riel Miller

The world's current problems call for better thinking about the future. While model-based and data-driven scenarios have their place, there is scope for people and organisations to use a freer anticipatory approach – the emerging discipline of anticipation – or futures literacy, which can help reduce fear of the unknown, and is a more systematic and accurate way of using the future to understand the present.

Consciously or not, humans are always using their capacity to anticipate and make choices in the present. In our anticipatory universe (Miller and Poli, 2010) the processes and systems required to use the inherently imaginary future are abundant. Yet it is not common to consider in explicit terms what kind of future is being anticipated, or how anticipation occurs.

There are many reasons for this. One of the most powerful is the success story in which winners are usually depicted as good anticipators, lauded for their visionary grasp of the future. Stories of effective planning take a similar perspective. In all of these tales, the point of evoking the future is to predict it – to try to know it in advance.

In many ways this approach is not surprising. From earliest infancy, humans grasp two out of three basic categories or models of the future: contingent futures, when something happens due to an external force; and optimisation futures, when something planned comes to pass. In both cases the future is treated as if it exists and just needs to be uncovered. Consequently, the third basic category of the future is given little attention: it is the novel future (Bergson, 1946), one that is unknowable today. In part, it is ignored because it seems pointless. If the aim is to know the future and novel futures are unknowable, why bother?

The trouble is that the unknowable future cannot be grasped from the point of view of the search for probable futures. This is because the probable depends on the already known whereas the novel arises from the previously unimaginable. The power of imagining non-probablistic futures is that it enlarges our understanding of the present by providing access to novelty – the emergent new (different). Taking on the challenge of inventing nonprobabilistic futures, outside the constraints of seeking what is likely or desirable, opens up the boundaries of our imagination. Imagining such novel futures makes it easier to understand the present in new, more precise ways that are not circumscribed by yesterday's idea of the future or the search for what is probable, general or durable. The aim is to expand humanity's conscious anticipatory systems in order to more fully embrace the constant and highly specific (time-space) creativity of our universe.

There are now powerful incentives for humanity to address the problem of unsophisticated anticipatory systems. Indeed, this is a topic of critical interest to UNESCO, which is why UNESCO is engaged in a global exercise to assess anticipatory capacities.

The first incentive is that such systems make it easier to reduce the cost for people and organisations of taking into account the novelty that surrounds us. The goal here is to reduce the fear, disappointment and confusion created by novelty. When people are unable or unwilling to incorporate novelty into the way they imagine the future, or to find a place for the emergence of the rich potential of the unknowable, then the lived experience of change becomes disorienting, promoting defensive and nostalgic reactions (Beck, 1992).

The second incentive for developing and diffusing more sophisticated conscious anticipatory systems is to take greater advantage of the otherwise invisible novelties that surround us. Here the greatest gain may come from overcoming the danger of "poverty of the imagination," a risk flagged by Karl Popper in the mid-20th century. The goal is to improve humanity's capacity to take into consideration "changes in the conditions of change." This would let people move beyond deterministic futures that obscure the hope that novelty offers in the present. A better understanding and appreciation of the promise of changes in the conditions of change as identifiable novelties in the present could help to stave off the appeal of totalitarian methods and colonial approaches that promise to deliver a specific future.

The challenge today is to incorporate "unknowability" into the way we anticipate and, on this basis, to engage in ongoing processes of discovery and invention in the present. This is an approach to the future that has been relatively absent from humanity's conscious anticipatory systems (Poli, 2010; Rossel, 2010; Tuomi, 2012). This is partially because questions about what the future is and how best to think about it have been peripheral to the social sciences, but also because it challenges well-established anticipatory concepts and practices (Poli, 2012). Any approach that welcomes unknowability and uncertainty as a source of novelty, and as a stimulus for creativity and improvisation, runs contrary to most people's desire for certainty and continuity, and their wish to know the future in advance. An insistence on using the unknowable future also runs foul of the established faith that experts can take the guesswork out of decision-making.

Why welcome and use the unknowable, open future? Why not just improve the models that use the past to think about the future, uncover even more data that can only come from the past, and generate ever more detailed, all-encompassing plans on how to colonise tomorrow more fully? In particular, when uncertainty "threatens", as with today's talk of "global transformations", why not succumb to the temptation to seek reassurance by only making "evidence-based" choices that depend on knowing what worked in the past and what will happen in the future?

The answer is the poverty of these limited ways of using the future. Such approaches to anticipation are all too easily stripped of novelty and drained of uncertainty. As a result, it is hard to use them to make sense of the novelty-infused repetitions and differences that make up the present, or to appreciate uncertainty as a resource for changing the nature of current problems and nourishing our freedom. Being locked into narrow ways of thinking about the future restricts the ability of the human imagination to invent futures that change the way we see and act in the present.

Is there an alternative? Yes, to develop and deploy the emerging discipline of anticipation (DoA) (Miller, 2012). This provides a more systematic and accurate way of using the future to understand the present. It provides guidance and techniques (for instance Inayatullah, 1998) for applying collective intelligence processes using different kinds of future, including the unknowable future (Fuller and Loogma, 2009). It also provides ways to expose anticipatory assumptions, quickly and accurately revealing the social processes and systems used to invent and describe imaginary futures (O'Brien et al., 2013). It helps detail the differences between futures that are imagined on the basis of established anticipatory assumptions, and those that rest on the invention of novel models, systems and processes. By doing so, it offers the social sciences effective ways to research "changes in the conditions of change".

Across a wide range of fields, including economics, sociology, political science, anthropology and policy-making, there is considerable experience of using models to "explain" past data and then using the results to conduct "what if" extrapolations. This offers insights into different paths based on the model's fixed set of goals, rules and resources. As a result, the anticipatory systems used by many social scientists and policymakers are confined to a deterministic approach that makes it difficult to recognise and then suspend the conventional or currently popular anticipatory assumptions that underlie and shape imagined futures. This restricts the set of phenomena identified in the present as possible, important and actionable (Ogilvy, 2011). Inventing changes in the conditions of change is hard precisely because our existing frames either hide or cannot make sense of novelty.

The situation humanity finds itself in today is far from being the result of conscious choices or prescience-based planning. But it is fair to say that up until now, many of humanity's efforts to exercise its volition, to act now to realise aspirations in the future, have been based on efforts to impose the "best guesses" of the present on the future. Although no one intended to create a world where human activity alters the planet's climate, the collective outcome of our "best-laid plans" helped to make it happen. The question is: can we redress the situation by ramping up the methods and attitudes of the past, or do we need to seek a radically different anticipatory framework for thinking about how to make a difference? Can we and should we find a way to combine open and closed ways of using the imaginary future to understand the present, to reinforce the human capacity to imagine discontinuity, and to put more effort into inventing futures that help to reveal more of the novelty that surrounds us?

This is where developing futures literacy comes into the picture. Futures literacy rests on the knowledge created by deploying the nascent discipline of anticipation more effectively. Its use helps researchers and decision-makers to identify existing anticipatory assumptions. It equips them to invent discontinuous or even novel frames for imagining the future, to integrate fundamental complexity into their thinking and on that basis, to reassess the present. A scientific consensus that we live in a non-deterministic universe is not enough to tell us how to put this understanding into practice. Nor does the acceptance of potential danger and the need for prudence necessarily change behaviour. But perhaps developing a greater capacity to take advantage of the spectacular nature of the emergent present, rich with novelty and serendipity, might enable us, as the French philosopher Edgar Morin put it, to become civilised by integrating complexity into our thinking.

A small thought exercise might illustrate the point. Imagine that the world becomes futures literate. This would be a radical change in the conditions of change, on a par with the once unimaginable idea that most people would be able to read and write. Could a futures literate world better integrate the richness of novelty and creativity into human agency, fostering agility and improvisation at the service of our values? Could the generalisation of a futures literate way of using the future make fuller use of the previously unknowable emergent novelty that surrounds us? Has the time come to rethink our anticipatory systems, to take on the pragmatic scientific challenge of making sense of the experiments the universe sends us in a profusion of unique space and time phenomena?

We do not know whether augmenting humanity's conscious anticipatory capacities will create a better future. There is no way to know if by being futures literate we will manage to modify what we consider harmful human-induced consequences in the world around us. But at least if we fail, it will not be because we refused to find ways to embrace the wonder of unknowability, or remained stubbornly insistent on taking an exclusively probabilistic and arrogantly colonising view of the future. Maybe this time we can decide to make a difference differently?

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**Riel Miller** is head of foresight at UNESCO in Paris, and designs processes that use the imaginary future to understand the present.

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