

Thinking the Unthinkable

The role of foresight in US National Security

By Sheila Ronis

In December 2005, the United States Congress mandated and began funding an effort to put in place a national security system fit for the 21st century. Called the Project on National Security Reform (PNSR), it had a vision working group, which I chaired, to recommend ways to improve US national security.

Our group used foresight tools to test assumptions and our project recommendations. My friends at the Pentagon say the really important part of foresight is opening our eyes and minds to things that we ordinarily would not consider—to think the unthinkable.

Such thinking is the ultimate learning and planning tool, but many organisations today still do not use foresight tools because they do not value learning or the knowledge it brings. If leaders do, however, want to learn, foresight tools can help them. First of all, they would need to acknowledge that they don't have all the answers and that there is a need for new knowledge. Government leaders sometimes find that attitude difficult to accept, as did the Pentagon right after World War II, when America believed it knew all the answers—before it lost its first war, in Korea.

The foresight processes I work with evolved at the end of World War II, when the US Congress asked Herman Kahn of the RAND Corporation in California to help sort through the myriad issues surrounding nuclear warfare. He developed a process to force decision-makers into thinking the unthinkable: What would really happen if nuclear war was a reality? Kahn's process led to the understanding that nuclear war meant there could be no winners.

Building on a Cold War legacy

As Kahn developed his thinking process, scientists were beginning to view the world differently. They used synthesis as well as analysis, tools to understand how pieces of a system fit to make it work. Over time, this line of inquiry evolved into systems science. Scientists also began to see that general systems theory applied to all natural systems.

Kahn's legacy was in helping create the crucial lessons for the world to emerge from the Cold War without nuclear warfare. We need to repeat his thinking process continuously because if national security is at risk and society is unprepared for that, the outcomes can be catastrophic.

The US needs to develop long-term, whole-of-government (WOG) thinking and planning as its core capability, as have places such as Israel, Finland, Britain and Singapore. More than 25 years ago, I did some work with the US Army War College. When I read the US' national security strategy for the first time, I assumed it was a subset of a larger national strategy. I was wrong. The closest thing the US has to a national security strategy is a document published by the White House, which is neither sufficiently long-term nor a true strategy that links ends, ways and means over time. At best, it is a list of aspirational goals. That summer, I realised for the first time that the US does not develop long-term WOG grand strategies.

Our group is building on Kahn's legacy by recommending that complexity thinking anchors the White House. We have determined that the President of the US (POTUS) needs a place in which he and his administration can use thinking processes and capabilities to develop and test grand strategy and policy decisions in the near, mid- and long-term.

We call that place the Centre for Complex and Strategic Decisions, which is being prototyped to anticipate potential futures by applying advanced systems approaches to ameliorate complex problems and improve policy- and strategy-making through the systems-

level integration of foresight and strategic leadership models with complexity science and decision-making technologies.

To support such integration, the White House needs to be a learning organisation. As our group noted in our July 2010 report to Congress, the US government needs to develop anticipatory governance, structures and processes to remain resilient. Our group's research on this was reinforced and validated by Professor Leon Fuerth of George Washington University.

Breaking down the stovepipes

Unlike the private sector, the US government has rarely, if ever, used management tools such as forecasting, scenario-based planning and risk analyses. These tools enable everyone to navigate the complexities of an interdependent world better, making everyone more resilient which, in turn, would make the US as a nation stronger.

From December 2008, we took a systems approach to national security. We examined systems similar to that of the US government to look at the interdependence and interactions of all their elements. This helped us understand better how they held together and behaved.

We found that the US government needed to create WOG solution sets for complex systems problems, and the only way to do that successfully was to learn about the systems' issues. We also found that it needed to apply systems thinking to improve its decision-making and create WOG mechanisms to break down the stovepipes of government so that these could work together effectively.

In proposing an apparatus to serve the US' needs well into the 21st century, we asked: What is the basis for rethinking the national security system? And how will its success in future be characterised? If questions such as these were to be artificially or prematurely narrowed, situations might be misread, which could affect the nation negatively. National security is rooted in the integration of national power elements, including economic, diplomatic and military might. When these are integrated correctly, a nation's vitality is assured and its ability to encourage positive change globally enhanced.

Vitality and viability

Not too long ago, America's national security challenges related to sub-prime mortgages, diseased birds and automobile emissions. Pilot training rosters were not typically the focus of national security; today, it is clear that they might well have been.

But there are tools to help us think about both the threats and opportunities that a country faces. Threats can be assessed and prioritised based on considerations such as urgency, impact and mitigation options. Opportunities can be assessed on considerations of probabilities of success, long term sustainability and proportionality. With this approach, national security can be considered any situation, condition or entity that has the potential to enhance or degrade the viability and vitality of the nation. So a national security system would be responsible for, and measured by, the viability and vitality of the nation; the peaceful, positive development of, and collaborations among, all countries.

Such a system needs to be within a complex, adaptive and learning organisation that can anticipate, adapt and address most threats and opportunities. Its people would share information and collaborate horizontally, accommodate unanticipated needs and partnerships, ensure agility amid uncertainty, incorporate ad hoc structures and processes and maintain a long-term view.

In such a system, it is tough to separate geopolitical, social, technological and economic phenomena; all these interact as a system of systems. I would argue that, in most instances, it is a complex system of complex systems—and that is a challenge for everyone because there are limits to what we can learn or know with any precision. I find it troubling that, although scientists may understand these ideas, many of the bureaucracies we serve are not populated

with knowledgeable leaders on this subject. They want and expect us to predict and control the real-world complex systems we work in. But the physicist, sociologist, management professor and policy-maker in me knows we cannot do so.

The real world of policy-making is a complex system, necessitating learning and planning because although such a system cannot be controlled, if you understand it well enough, you can influence it. As the ancient philosopher Sun Tzu said in *The Art Of War*: “If you know your enemy and you know yourself, you need not fear the result of a hundred battles. If you know yourself but not the enemy, for every victory gained, you will suffer a defeat. But if you know neither yourself nor the enemy, you will succumb in every battle.”

Today, no one is big or wealthy enough to cover the world in terms of knowledge or capabilities, so if success is to be expected, nations must actively be learning, planning, anticipating and, most importantly, collaborating with other nations. That is a huge lesson for the US.

Stress testing the system

In the next 50 years, everyone will face extraordinary changes, at an accelerated rate so rapid that it will be difficult to imagine. Yet, today’s world is one in which many in the West are playing chess while those in the East are playing *weiqi* or go. Their mental models are so vastly different that they do not know each other in the Sun Tzu sense. And yet managing risk in a world of increasing complexity requires an understanding not only of each individual risk, but also of how different risks interact with one another across all system variables.

With such risks in mind, Congress asked our group to create scenarios that would mainly provoke discussion and hopefully lead to more resilient systems. We created nine scenarios and three timeframes—2020, 2040 and 2060—and also developed a questionnaire. Then, with input from the national academies, we got 1,500 of the US’ best minds in diverse disciplines, to respond to it. We hoped to get 20 people to participate in the two-hour-long questionnaire, but were pleasantly surprised when 133 people from a whole spectrum of disciplines responded.

Our group then crunched these experts’ responses and wove the results into our scenarios, which were intentionally inconsistent and often bleak to provoke greater learning. We also got input on the results from faculty who taught the national security curriculum in three major US military colleges.

We then finalised our scenarios and used these to stress-test our five major sets of solutions from lots of different angles, asking questions such as: “How well was the system able to anticipate scenario problems?”, “How well was the system able to recover and react?”, “Are there problems or solutions identified that we haven’t addressed?” and, most importantly, “If this future isn’t desirable, what choices should we be making today to avoid it?” The result was that our group’s major findings significantly improved the performance of national security systems.

Lessons from Singapore

Complementing our research-based perspective was my personal experience in Singapore as a Fulbright Scholar in 2012. While studying the Strategic Policy Office of the Prime Minister’s Office, I learnt how the White House’s executive capabilities, including those related to national security, could be enhanced further.

Peter Ho, the architect of Singapore’s foresight system and process, told me that complexity thinking had four major roles in Singapore’s government: Firstly, to challenge conformist thinking by building ties with international think-tanks and global thought leaders through conferences and projects; secondly, to identify emerging risks by creating risk maps and sharing such risks with decision-makers; thirdly, to calibrate strategic systems thinking to

develop new policies and capabilities; and lastly to cultivate capabilities, instincts and habits through systems thinking to deal with disruptive shocks. These roles would enhance the executive capabilities within the office of POTUS—if we could adopt them.

The US needs to be far more proactive in using foresight tools to shape a future of increasing liberty, prosperity, justice and peace because that is a world our future generations deserve. We hope the Centre for Complex and Strategic Decisions will help shape a freer, kinder and universally wealthier world, by informing the policy and strategy that emerges from POTUS' executive office—no matter who the occupant of that office may be.

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