



CENS Distinguished Visitors Programme – Seminar Series

Mr. Kenneth L. Knight, Jr.

- * Anticipating Shocks in the Emerging Global Security Environment
(17 September 2010)**
- * Developing the Next Generation of Strategic Analyst – Some Personal
Musings
(20 September 2010)**
- * Overcoming Common Organizational and Analytical Pitfalls
(21 September 2010)**
- * Estimating Risk: Art and Science
(22 September 2010)**

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About Kenneth Knight

Kenneth Knight retired from the US intelligence community in March 2010 after a 30-year career as a senior executive, leader, and analyst at the national, departmental, and theater echelons. He is now Analytic Director at CENTRA Technology in Arlington Virginia where he advises corporate and government clients on strategic intelligence, warning, and risk assessment. Mr. Knight's career includes more than 15 years experiencing deciphering complex over-the-horizon global developments, anticipating emerging threats and opportunities, and delivering strategic insights and warning to the most senior US and US-Allied leaders. He holds a BA in History from James Madison University, an MA in Security Policy Studies from George Washington University, and is a graduate of the US National War College. Key assignments include: National Intelligence Officer for Warning, National Intelligence Council (NIC); Chief of the Defense Warning Office, Defense Intelligence Agency (DIA); Defense Intelligence Officer for Global Trends, (DIA); Deputy Director for Foreign Intelligence, US Army; Deputy National Intelligence Officer for Military Issues, NIC; and Chief European Warning Center, US Army.

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Anticipating Shocks in the Emerging Global Security Environment¹

**17 September 2010 (Friday)
RSIS Seminar Room 2&3**

Based on his 30-year career in an intelligence community, Kenneth Knight focused on emerging global security environment for his first presentation. As part of his career, Knight has tracked global developments and strategic changes at the beginning of each year and provided the US administration with a forecast of events that might happen in the following twelve months. Based on his personal experiences, he highlighted events that could happen in the next twelve months at the current stage and indicated that these events would not necessarily be a positive sign for global security. While he did admit the risks and events presented are primarily based on the US perspective, Knight indicated that perception could differ depending on one's background and environment.

Knight first gave 'terrorism' as the most significant risk among all other risks. He foresaw that there will be a repeat of large-scale attacks such as that of 9/11 and the primary target would be shifted from human or economic damage to infrastructure casualties. He also added that terrorists might shift their strategies to low-level strategies by using individuals because it is easier to execute than large-scale attacks. The second risk that Knight mentioned was 'ongoing conflicts in Iraq and Afghanistan'. Although US troops are gradually withdrawing from Iraq, Knight said that violence and numerous attempts to disrupt the Iraqi government still exist, and these may gradually evolve into a major threat. In the case of Afghanistan, he mentioned looming large-scale terrorist attacks on western nations. 'Cyber attack' was another significant risk, especially with cyber criminals seeking to launch an infrastructure attack on the large scale. Next risk was 'escalating regional conflict' in the following regions: i) Iran and Israel because the impact can spread all throughout the Middle-East region; and ii) India and Pakistan, especially due to their geographical proximity. 'Economic crisis' was also selected as the significant risk due to the economic recession that US has been going through since 2007. Knight gave 'resources and energy security' as the next risk factor because they have the potential to pose a threat to critical infrastructures such as telecommunications, water, oil, transportation, and so on. 'Proliferation' was given as another significant risk, especially with regard to rogue nations which secure weapons of mass destruction. Lastly, 'international criminal activity' was included in the list and Knight said there is a growing trend of global criminal activities such as drug, weapon, and human trafficking.

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Knight then moved on to present the potential new areas of global security which are worth paying attention to in line with the aforementioned trend of risks and threats. First, he said that China, India, and Brazil are undeniably becoming the new rising global power and it is important to study its implications on global security. Second, he said that it is also crucial to study stability and governance issues in the following areas: i) urbanization and resource management; ii) identity politics (social, religious, and ethnic); iii) challenges to democratic states; and iv) war crimes and mass killing. Knight gave 'technology as military power' and 'using technology as means of managing utilities' as other areas which are worth paying attention to.

In closing, Knight opined that the factors which have an impact on the global security environment are constantly changing and evolving. Thus, he said that it is difficult to set a reference point for the analysis today due to this dynamic characteristic. Global power is changing, and areas that used to be considered separately such as economy, trade, information and disease have now evolved into transnational security issues.

Discussion

One participant asked what the 'major shocks' among the 'emerging threats' from the presentation would be. Knight answered that global events should be considered as 'surprises' and the reactions they provoke are decisive factors that cause 'shocks'. To illustrate his point, he gave the following examples. An 'attack on Iran nuclear program' would be a significant event that might cause the following shocks: i) Iran's retaliation to Israel with its chemical weapons; and ii) Israel's counter-attack with its own nuclear weapon. Another example was the 'instability in Pakistan' (event) that might cause the 'loss of control over nuclear weapon' (shock). Lastly, Knight gave the 'situation in North Korea' (event) as another threat that might cause 'the United States and China to go into North Korea during a military coup' (shock).

Based on the list of emerging risks at the beginning of the presentation, another participant asked how the US would react to its economic crisis. Knight answered that management of economic crisis would be a long-term process which would cause constraints on military spending. He also foresaw that it would be increasingly difficult for US to act alone with economic crisis and therefore, would try to focus on building coalition with other countries.

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Developing the Next Generation of Strategic Analyst – Some Personal Musings²

**20 September 2010 (Monday)
RSIS Seminar Room 2&3**

Through this presentation, Kenneth Knight highlighted the characteristics that he would look for when hiring future strategic analysts. He said that the challenge of strategic analyst is to look into the future and say something meaningful, and provide a tangible insight to senior policy makers. In addition, it is important for an analyst to identify potential opportunities from the major 'surprises' for policy makers to make better decisions.

Knight listed mainly six essential elements that he would look for in a successful strategic analyst. The first element was the 'capacity for a strategic analysis' and more specifically, he said that an analyst must: i) have a well-developed analytic framework; ii) know various sources of information and how to access them; iii) have expertise in diverse areas; iv) possess skills in creative thinking and training in problem-solving; and v) have been engaged in rotational assignments in external organisations. The second element of a good analyst was whether he has a good understanding of the analysis-policy nexus. More specifically, the analyst should know when and where he must participate within the decision-making process of a policy maker and therefore, it is preferable that he has some experience in interacting directly with customers. In addition, he must be able to evaluate the specific needs and position of a customer and tailor the assessments accordingly. The third element of a good analyst was whether he possesses a sense of leadership and communication skills. He said that a successful analyst must be able to lead the team to the right direction to get the job done, which also requires a high level of written and verbal communications with teammates. Therefore, it is preferable to recruit analysts who possess wide experience in carrying out teamwork under intense pressure. The fourth element of a successful analyst was whether an analyst has gained great wisdom from his previous experiences. Knight said that the most important thing is that an analyst learn from the failures rather than successes and use it as a reference to become a better analyst. The fifth element of a good analyst was whether he has experience in a wide range of analytic methodologies and is adept at a variety of strategic, risk warning, and foresight analytic methodologies. Lastly, Knight said that knowing how to match the right methodology to a given issue was another crucial element of a successful analyst. He said that it

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is important to assess the nature of the analytic problem and use appropriate set of methodologies and analytic approaches.

In closing, Knight said that at the initial stage, an analyst would normally possess one or two of the abovementioned essential elements and gradually acquire the rest through experience in the form of training programs and daily mentoring with senior strategic analysts. He opined that these elements could be used as a template for those who may be serious about being involved in warning business and encouraged them to do a self-evaluation of what skills they already have and what they would need to develop.

Discussion

One participant asked whether an 'intuition' can also play an important role in the process of strategic analysis. Knight answered that good intuition would indeed be a positive factor under the condition that the person possesses it. However, he cautioned that it is very difficult to build an analytic process framework based on intuition. Reflecting his fifteen-year career in warning business, Knight said that he has not seen a single time when an intuition was used as a decisive factor in an analytical approach. Although analysts tend to have an intuition about a particular issue, it also has the possibility of creating a false alarm, thus obstructing rational analytical thinking.

Mentioning the part where Knight emphasised the importance of developing expertise in the broader field of global security, another participant asked his opinion towards 'area specialization'. While Knight acknowledged that there is indeed no substitution for area specialization, he said that concerns still remain about specializing in a limited field. Area specialization would be wonderful under the condition that an analyst would not suffer any strategic failure throughout his career. As a matter of fact, area specialization would be highly beneficial if the global security environment stays constant because analysts might have developed a specific framework that enables quick information processing. However, they would be in the weakest position when crisis that is not related to their expertise occurs and would not be able to evaluate the situation within a given time frame. Therefore, Knight implied that in a turbulent global environment today with ever-evolving threats and risks, it would be wiser to develop expertise in diverse fields.

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Overcoming Common Organizational and Analytical Pitfalls³

**22 September 2010 (Tuesday)
Seminar Room 1**

Kenneth Knight delivered a presentation on common mistakes that analysts and intelligence organisations make and suggested a few methods to avoid these pitfalls as much as possible.

First, he began by stating the main factors that causes the failure of analysis: i) inaction; ii) conveyance; iii) data; iv) processing; and v) mindset. In terms of 'data', Knight said that analysts might not always have the critical information which they need for analysis. Although there are a number of issues that analysts in the intelligence agencies are especially concerned about, this does not necessarily mean that critical information and data regarding these issues are accessible. Knight added that poor information sharing between organisations and analysts also often results in analytical failures, such as that of the thwarted Christmas Day bombing incident. However, even if an analyst puts together the right information and produces a sound analysis, it may be poorly conveyed to the policy maker, thus failing to persuade him. Knight mentioned 'inaction' as another factor that causes analytic pitfalls because even after the conveyance has been successfully done, the policy maker might not take necessary actions for certain reasons. However, the most significant factor is the 'mindset' and Knight opined that this might account for 55 to 65 percent of analytic pitfalls. He said that although an analyst might have the right information and understanding of a certain issue, he might not have put the data together in a proper context because of his own mindset.

Knight then listed ten common analytical pitfalls committed by organisations and individuals. The four common organisational analytical pitfalls committed by organisations were: i) consensus culture; ii) functional specialization (analysts vs. experts); iii) integration (old and new, regional and functional, etc.); and iv) imagination. Common individual analytic pitfalls were: i) mirror imaging (thinking that 'they' are just like 'us'); ii) perception bias; iii) pattern matching (seeing what one expects to see); iv) inappropriate analogies/assumptions; iv) overvaluing the information at hand; and v) ego (undervaluing the information because it is not 'surprising' to an individual).

Knight suggested several methods that can be employed within the intelligence community to overcome the abovementioned analytical pitfalls and started by

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introducing three forms of individual and organisational training. First method was to learn through case studies, second method was to learn from best practices, and the third method was to learn through practical exercises, which is basically giving an analyst an imaginary situation and making him figure out the actions he should take. Knight added that it is also possible to go through institutional checks through the following forms: i) contrarian analytic cells; ii) creating diverse analytic teams; and iii) regular rotations. Knight said that it is also possible to make analysts go through mandatory analytic practices. He said some of the best examples of these practices are asking oneself some of the key questions, going through mandatory peer reviews, and utilizing 'murder boards', which is basically defending your product in front of well-established experts in a related field.

Knight concluded his presentation by elaborating on a few concepts that he has introduced as methods to overcome the analytic pitfalls. He began with Contrarian Analytic Cells, which aims to regularly challenge the consensus view by spotting invalid data, hidden assumptions, and presenting plausible alternatives. Contrarian Analytic Cells stimulate analysts to think 'out of the box' so as not to assume that their information is always true. For example, one can make a request to a Red Cell to write a speculative think piece in order to prevent complacency about a certain issue. 'Challenging conclusion' has the benefit of being able to be done both in the form of both group and individual exercises. 'Structured exercises' can be done in the form of workshops, surveys, and brainstorming and it enables analysts to evaluate ideas in a structured way. 'Analysis of Competing Hypothesis' consists of finding and assessing all possible hypotheses but the weakness of this exercise is that it is extremely time consuming. Lastly, 'Deception Check' prevents over-reliance on a single-streamed information, thus enabling the analyst to think from a broader perspective.

Discussion

One participant asked how it is possible to access as much information as possible for a sound analysis. Knight acknowledged that it is extremely difficult to have complete access to information but he also added that an analyst should normally have most of the necessary information. He suggested that it is also possible to begin with a couple of scenarios or hypothesis and track back the relevant information. Another method was to use brainstorming sessions and gather feedbacks from other experts and analysts which would enable you to build a more logical and balanced argument.

Another participant inquired whether it is more preferable to have 'dedicated' red teams or 'rotated' red teams within an analysis process. Knight responded that rather than dividing Red Teams into two groups, it is better to distinguish between Red

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Team and Red Cell. He said that Red Team works on a temporary basis when there is a need to reinvestigate the evidence of a certain issue. Thus, they do not have a long-term commitment to a certain organisation. On the other hand, Red Cell has a permanent function within an intelligence community and their purpose is to stimulate an “out-of-the-box” perspective.

Regarding the method of Analysis of Competing Hypothesis (ACH), another participant asked whether there is any technological support to alleviate the tediousness of having to go through all the alternative hypotheses. Knight answered that it would indeed be very helpful if there is a technology that groups all possible hypotheses and carry out an automated analysis, although he was not sure whether such technology exists. Without technological support, he opined that the biggest challenge of ACH is to know exactly what hypotheses and evidences you should gather and narrow them down to a set of sound hypotheses.

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Estimating Risk: Art and Science⁴

**22 September 2010 (Wednesday)
Seminar Room 2&3**

Through his last seminar, Kenneth Knight talked about how a strategic analyst could advise the U.S. administration regarding their foreign policies and the global security environment in the next twelve months.

Knight started by reiterating the top near-term risks which were mentioned at the first seminar, i.e. the ongoing conflicts in Iraq and Afghanistan and stability issues in rogue states such as Iran and North Korea. He also added stability issues in countries like Pakistan and Yemen and large-scale humanitarian emergencies coming from these instabilities as other near-term risks to pay attention to. Knight talked about how he would approach these events through the process of monitoring and warning of strategic events, focusing on causes and drivers, and trying to anticipate a number of possible results by conducting scenario planning using various analytic tools.

In today's complex security environment, good strategic analysis is especially crucial to assess the near-term risks and threats. As 'preventing surprises' was one of the major purposes of warning business, it has mainly focused on the maintenance of status-quo in global security environment and detection of any deviation that could escalate into a large-scale confrontation between states. The mission of preventing strategic surprises depended on a set of analytic approaches that were developed over a period of time. These analytic approaches were based on persistent surveillance, strategic reconnaissance, and looking for change or new patterns of behaviour to detect signals which might lead to triggering of major events.

For any risk or warning tools to be effective, senior policy endorsement of analysis on a daily basis, partnership with senior policy makers, as well as robust and modern tradecraft were suggested as essential factors. A strategic analyst must be able to play his role beyond the warning and intelligence communities' boundaries and work well with external government agencies as well.

Traditionally, having a career in warning business simply meant delivering the report to the president and developing strategic reporting. However, in today's globalised world with so many events taking place below the level of the president, every actor has its own strategic imports; a low level actor could eventually trigger a change in

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the environment on a large scale. The interconnected nature of different information has changed the hierarchical structure of strategic decision-making. Knight said that it is important for strategic reporting to enable policy makers to make strategic decisions or changes no matter what level or echelon they belong to.

Knight opined that failure in warning business in the past did not come from confining specialists to work within restricted areas but from the misinterpretation of certain analytic issues, which he referred to as 'analytic pitfalls'. Some common pitfalls he mentioned were biased perception, inappropriate assumptions, and self-ego. In conclusion, a high-quality warning product came from a conscientious analytic approach using various analytic techniques, producing the analysis at the right time of the event to help make good strategic judgement, and most importantly, producing an analytic product in a comprehensive and accurate manner.

Discussion

A participant referred back to a Knight's opinion that warning business is a labour-intensive industry because analysts cannot be easily replaced with technology. Regarding this view, she asked how warning industry deals with this high cost of labour in contrast to other industries that manage to cut down on labour costs by substituting with technological means. Knight agreed with her and said that warning business has had to deal with overload of human resources especially after 9/11. In order to use these resources productively and efficiently, Knight said that he first begins by contemplating the priority of different missions and issues at hand. He would then think about how many discretionary analytic resources are available and where he wants to allocate these resources.

Another participant opined that most of the strategic reconnaissances have actually been weak signals and asked Knight how those with strategic importance could be identified. Based on his experience, Knight said that having regular meetings with his analysts, tapping into their analytic thoughts, and discussing about issues that analysts were not comfortable with during their analytic process helped identify information that had strategic importance.

Lastly, another participant asked whether there is a systematic way of approaching policy makers when producing a timely and pressing warning report. The speaker answered that it would be a good idea to engage with the policy makers by beginning from the initial assessment of the strategic event, keep monitoring the event, and come back to the policy makers to provide further advice when necessary.

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