IPS Institute of
Policy Studies

Viewing Our Future with a "New Lens": Public Lecture on the Shell Global Scenarios
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The IPS-Shell Public Lecture on Shell's Global Scenarios 2013 was held at the Pan Pacific Hotel on 7 June 2013, and attended by more than 300 participants.

The lecture was delivered by Dr Cho-Oon Khong, Royal Dutch Shell's Chief Political Analyst. That was followed by commentaries by Ms Tan Li San, Director of the Strategic Policy Office, Public Service Division of the Singapore Public Service; Dr David Skilling, Director of Landfall Strategy Group; and, Professor James Tang, Dean of the School of Social Sciences, Singapore Management University.

Chairperson, Dr Gillian Koh of IPS opened the event with a brief primer on scenario planning methodology and urged the audience to let the speakers challenge their mental models about the future.

Lecture on the Shell Global Scenarios – Dr Cho-Oon Khong
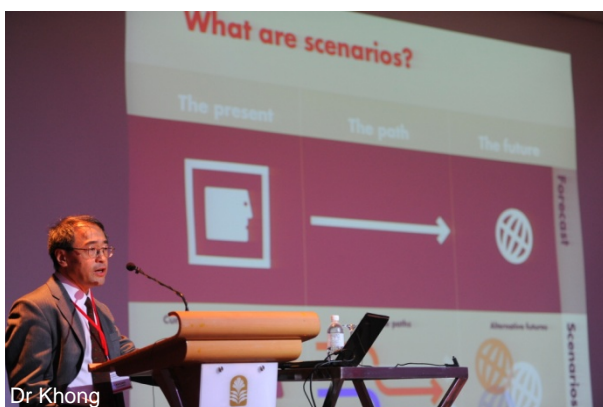
Dr Khong

Dr Khong began by reminding the audience that scenarios are not predictions of what *will* happen, but plausible narratives of what *could* happen.

They take into account a range of views in their formulation so as to be able to set out various possible ways forward into the future. These views would include viewpoints that challenge assumptions as to how the future could evolve.

The global context for the Shell New Lens Scenarios 2013 is a world still reeling from the Global Financial Crisis and an inexorable shift in geopolitical and economic power from the West to the East, leading to an era of volatile transitions.

The Shell Scenarios set out three major global tensions or 'paradoxes': the prosperity tension, the connectivity tension, and the leadership tension, which will drive change through this era of transition.

On the prosperity tension, Dr Khong shared data from the World Bank, as analysed by researchers at the Brookings Institution in Washington DC, to illustrate how rising global prosperity and the narrowing of income gaps between developed and developing countries means that some people are much better off from globalisation, while others have not benefited to the same extent. The general trends is that there is an "emerging middle classes" comprising people from the 30th to 50th percentiles on the global income scale whose incomes are rising, while there is another group in "traditional middle classes", comprising people from the 60th to 80th percentiles whose incomes are falling in relative terms, though not in absolute terms. The latter worry about falling behind in their standing globally and within their countries.

On the connectivity tension, while the proliferation of information technology is improving connectivity and networking, this is a double-edged sword – the same technology can be used for non-liberal purposes of surveillance and control. Dr Khong noted that Google, an example of communications technology that is hugely empowering for individuals, also tailors its search engine to set out what it believes are the preferences of those using it.

On the leadership tension, Dr Khong noted that while world leaders still wield a significant amount of power, they nonetheless find themselves pulled in different directions as they try to respond to demands from diverse sets of stakeholders.

These three tensions give way to two archetypal pathways or patterns of behaviour in addressing reform or change – "Trapped Transition" and "Room to Manoeuvre". The former would see the old guard resisting change. The latter would be bold in their reform movements akin to those Deng Xiaoping undertook after his Southern Tour in China in 1992.

These tensions or paradoxes, and pathways are the key elements that shape Shell's two global scenarios of 2030.

Scenario 1: Mountains

The first scenario, *Mountains*, is a story of change driven from the top. Elites in charge first duck the challenge of reform, and global economic growth slows as many countries move into a "trapped transition" phase. Countries, wherever they are on the development curve, from developing to developed, face problems moving out of this trapped transition.

Eventually, though, ruling elites recognise that if they do not change, they will have change forced on them. At this point, reformist elements within government seize the initiative to find "room to manoeuvre" using their control of the levers of state to implement policies for the long term. Globalisation carries on, but it slows as people, in seeking protection from its deleterious effects, turn to the government. Global politics sees the competing nationalisms of different states give rise to a pragmatic accommodation of interests, in which states recognise that they have to co-exist with each other, even while continuing to safeguard their own interests. Eventually, though, countries recognise that they will need to actively cooperate with each other in order to deal with the big problems of the 21st century such as climate change and resource stresses. A "concert" of leading powers arises to lead common action on this front.

The energy implications of *Mountains* follow on from this world of state-guided policy, pushing investment in energy supply and modest global growth that tempers the demand side of the equation. Energy prices moderate. Gas squeezes out oil sometime in the 2030s to become the world's leading primary energy source. Renewable energy, however, proves slow to develop in a world of low energy prices, but it does grow. As governments start to work actively to deal with the climate challenge, carbon capture and sequestration (CCS) becomes increasingly important in reducing CO_2 emissions. Nuclear energy is also promoted.

Dr Khong showed how in a world of state planners, urban planning can be decisive in dealing with the serious urban pollution that China experiences today, just as high levels of urban pollution in London were dealt with, after the Clean Air Act was passed in 1956. This is the potential of a world of active state policy.

Scenario 2: Oceans

In contrast to *Mountains*, *Oceans* is a story of people power forcing change. To illustrate the point, Dr Khong shared a study conducted in Malaysia in the 1970s by a prominent anthropologist, Professor James Scott who observed the actions of rural villagers in resisting perceived unfairness in government policy, and noted the way in which the push for freedom rose from below. Dr Khong also quoted data from the Pew Research Centre in the United States that indicated that trust in government in the United States had fallen from 76% in 1964 to 19% today.

In *Oceans*, people are less trusting of traditional authority and more trusting of friends and peers. People are emboldened to challenge vested interests and push for reform. Successful exemplars, in whatever area of human activity, are quickly copied. There is no one model of globalisation, whether of governance, growth or innovation. The old paradigm of TINA ('There is no alternative') gives way to the new paradigm of TARA ('There are real alternatives'). In *Oceans*, the state disaggregates into its constituent parts, but it still plays an important role – leading, however, from behind.

In this scenario, the winners are not necessarily the big players. The winners will be the fast-moving, flexible and nimble players, whether big or small. Those who are inflexible or resistant to change will fail. Asian countries will be able to flourish so long as they are able to keep up with the rest of the world.

Oceans, in energy terms, is a world where revitalised economic growth pushes up energy demand, while supply struggles to keep pace resulting in high energy prices. This leads to a relentless drive for efficiency gains and also opens the window for renewable energy to grow. Solar energy, in particular, takes off, becoming the world's largest primary energy source sometime in the 2060s. It is widely available in developing countries, where the growth in energy demand will occur, and can be implemented through small scale decentralised co-operative projects, very much in the spirit of the *Oceans* world.

Ending the session, Dr Khong warned of the imminent possibility of climate shocks. Although the scenarios expect that the world will reach a carbon-neutral state by 2100, the amount of

carbon that will be released into the atmosphere between now and 2100 will result in unsustainable climate change. This will be a consequence of economic growth, growth in global population, and inadequate and belated efforts to deal with the climate challenge. In the short-term, it is difficult to delineate a plausible pathway that gets the world onto a long-term sustainable climate trend. However, long-term sustainability demands that emissions are curbed as soon as possible. Dr Khong noted that the more immediate concerns that the world will face will result from climate variability, rather than absolute rises in global temperatures. Climate variability will impact on food production, and cause increasing drought and flooding in different parts of the world. This should give everyone pause for thought, and action should be taken before further damage is done.

Remarks – Ms Tan Li San

Ms Tan kicked-off her remarks by highlighting the Singapore Public Service's long-standing practice of scenario planning. She noted how the tensions Dr Khong cited do have resonances in Singapore.

She said that the government is trying to address the prosperity tension because widening income disparities can damage social cohesion and undermine belief in Singapore's system of meritocracy.

Dr Khong (L) with Ms Tan (M) and Dr Skilling (R)

This effort is evident in plans to ensure that children of disadvantaged families have access to good education so that they will enjoy social mobility rather than see their social status becoming entrenched over time.

With respect to the connectivity tension, Ms Tan said that increased connectivity makes it easier for people to listen only to those that they want to listen to – people like themselves. This could deepen fault lines and result in social and political tension. Also, she recalled Prime Minister Lee Hsien Loong saying at the inaugural Singapore Summit 2012 that governments find it difficult to keep pace with the change in the media landscape where they are under a 24/7 referendum; it makes it difficult to think long-term and is a challenge for governance.

On the leadership tension, Ms Tan noted that reaching a consensus for policy-making is now a more difficult task. Governments need to tap on the expertise and resources of stakeholders to establish policy networks and find policy solutions with them. As an example, the National Parks Board of Singapore has created a network between itself and local nature lovers to address concerns about biodiversity and conservation. It is a challenge for governments around the world to put such frameworks in place effectively.

Ms Tan said that up to recently, scenario planning lay in the realm of specialists but the practice is moving into a process of engaging the public in developing and discussing scenarios. She raised the examples of the ongoing Our Singapore Conversation and IPS' Prism Scenarios as proof that members of the public are keen to engage in such discussions, and noted how invaluable it is that both exercises have brought up important issues that need to be dealt with.

Remarks – Dr David Skilling

Dr Skilling viewed the Shell scenarios through the lens of a small, developed country. He began by observing that small countries are benefiting from a world that is increasingly fragmented – over the last century, the number of independent nations have swelled from 70 to nearly 200, a trend he argued, that shows no signs of abating. Dr Skilling observed that small countries have benefited from globalisation both economically and in terms of human capital development, using Singapore and his home country, New Zealand, as examples.

Prof James Tang (L) and Dr Khong (M)

Nonetheless, Dr Skilling acknowledged that the world is moving in structural, disruptive ways and becoming more turbulent and fast-paced. He argued that from the perspective of small countries, the *Oceans* scenario would be more beneficial and better suited to them. In *Oceans*, small countries have, arguably, better social cohesion and therefore the strategic agility to perform better. This would give them the edge against larger countries. With power being more widely distributed, small countries possess the nimbleness to navigate various challenges better.

In the *Mountains* scenario, on the other hand, logistics, infrastructure and decision-making would be biased toward larger countries. Here, Dr Skilling cited the example of the Group of Twenty (G20), comprising large and powerful nations. Small countries would thus have to work around the decisions of larger ones, making it more difficult to do well.

Dr Skilling concluded by noting that large countries have not always had things their way. While undoubtedly prosperous and militarily powerful, they have struggled with competitiveness and consensus-building due to their large, heterogeneous populations. He shared his belief that the hundred-year process of fragmentation and distribution of power will continue, and the future is bright for small countries – provided they stay on their toes and continue to adapt as they have.

Remarks – Professor James Tang

Prof Tang applied the scenario narratives to broader geopolitical challenges that Asia is facing. He wondered if the scenarios could provide answers to various disputes such as the North Korean regime and its desire to possess nuclear weapons; the East China Sea dispute between China and Japan over the Senkaku/Diaoyu islands which is driven not only by resource needs but also by historical rivalry and nationalism and the South China Sea dispute between multiple claimants over the Spratly Islands. In each case, the countries appear to face an intractable situation, unable to make any headway towards a sensible solution.

Given such a context, Prof Tang elaborated on his belief that scenario thinking helps to identify ways to move forward. He argued that the *Mountains* narrative seemed more favourable in addressing such issues because governments and state institutions wield more power to presumably provide leadership and decisive action. They can bring their respective domestic populations to accept major changes.

The *Oceans* scenario, meanwhile, might create situations in which domestic sentiment is were more critical, leading to political leaders having trouble reaching compromises on sensitive issues such as territorial integrity and sovereignty.

Prof Tang further noted that while the problems could appear political on the surface, broader social and economic policies could also shape how compromise would eventually be reached. He cited a book written by political scientist Dr Etel Solingen, who eschewed the traditional argument of deterrence and security when examining why states wanted to possess nuclear weapons. She argued instead that regimes sought nuclear weapons when they were inward-looking and wrestle with the problem of regime survival, while others that were outward-looking were more likely to want to internationalise and be peaceable.

Finally, Prof Tang shared a Chinese painting genre called *Shan Shui* Style (山水画; literally mountain-water drawing) to the audience in which mountains were frequently drawn alongside rivers or waterfalls. He used this to illustrate the possibility of finding another narrative that offered solutions – perhaps *Mountains* and *Oceans* could co-exist in that the governing elites might continue to take the lead in dictating policy alongside a framework that allows them to listen hard to public opinion.

Audience Discussion

Addressing Climate Change

A participant noted that the Shell scenarios suggest that the world is headed down a path that is environmentally unsustainable. How then could the scenarios be 'plausible'? Dr Khong said that climate scientists had clear proof that current levels of carbon emissions were unsustainable. This meant that people need to start thinking globally regardless of the scenario, and not as disparate, individual countries. Broad overarching strategies such as turning to renewable and clean energies, or introducing carbon trading would be needed to redress the situation.

Following up on the previous question, another participant asked if the energy scenarios envisioned by Shell were too optimistic in their projections given the strongly negative impact of climate change and current slow rate of adoption of alternative energy.

Dr Khong explained that the energy implications of each scenario were based on a complex and detailed energy model that Shell built in the mid-2000s as the basis of the 2008 energy scenarios, and were constantly updated to reflect new technologies and ideas. Many different possibilities were taken into account, such as futuristic energy technologies, as such rates were higher than historically seen for certain sources of power.

Regarding economic growth, Dr Khong acknowledged that economic growth was indeed assumed in both scenarios; however, while the projected rate of growth could be seen as optimistic by some, these rates were already significantly lower than what had been seen in the first decade of the 2000s. He also noted that questions were still being asked regarding current measures – about the extent to which they truly measured well-being. People are still grappling with such issues and widespread adoption of clean energy would perhaps come about only after serious climate shocks cause a change in public opinion.

Another participant asked what the Singapore government is doing to address climate change. Ms Tan responded by stating that climate change is indeed a great concern for the Singapore government as extreme weather events have serious implications for fundamental things such as food, water and energy. She highlighted also that civil society in Singapore too is very active in promoting awareness and recognition of such issues, and a Shell survey on Singaporeans showed that climate change came after bread-and-butter issues for Singaporeans as one of the paramount concerns related to the country's future energy use. She mentioned that there had been a recent effort by the National Environment Agency to engage the public in tackling this issue.

When Dr Skilling was asked whether he thought an *Oceans* world actually meant that small island states would suffer because a global issue like climate change would require global consensus and governance to tackle, he agreed that the supply of global public goods may be compromised in that scenario. However, he argued that while smaller units would be unlikely to dictate the terms of a global solution, they could still take the lead in smaller scale experiments, exercises or ideas. Here, he cited the example of the mayors of 40 major cities around the world (the C40 group) banding together against climate change through direct assistance, peer-to-peer exchange, and joint research.

The role of value systems

Dr Khong was asked if he considered the role of religion in shaping the future. He explained that the Shell scenarios covered many issues, and not all potential driving forces were discussed during the lecture due to the time constraint. He acknowledged that belief systems – including religions – are highly important drivers of day-to-day issues, and scenarios of change could involve the emergence of a new religion or the reinterpretations of existing ones.

The Shan Shui Metaphor

Finally, a participant asked Prof Tang about the aptness of *Shan Shui* style in talking about the narratives, given that the water in such paintings was typically contained within mountains and less dynamic than in oceans. Prof Tang stressed that the metaphor was merely to convey that other narratives apart from the two Shell scenarios might be considered, and was not necessarily to suggest that there could be a pure combination of the two scenarios.

Final Remarks

Rounding-up the discussion, Dr Koh shared that she was most struck by the pessimistic projections on climate change. She felt that on that issue, it is tempting to think that the world might be better served if it morphed towards the *Mountains* scenario. She expressed her hope that the session had provoked the audience to think about how Singapore could organise perhaps with other small and island states to find an effective response to that threat for our country. She asked the audience to consider how they too might bring change in their respective spheres of influence. In a way, that would be the case of the 'Oceans' shaping the 'Mountains' like the *Shan Shui* metaphor that Prof Tang had spoken of earlier.

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If you have comments or feedback, please email ips.enews@nus.edu.sg

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