FORESIGHT AND PUBLIC POLICY

Centre for Strategic Futures, Singapore
Foresight Conference 2013

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ABOUT THE CENTRE FOR STRATEGIC FUTURES

The Centre for Strategic Futures was established in early 2009 as part of the Strategic Policy Office in the Public Service Division of the Prime Minister's Office. It serves as a focal point for futures thinking within the Singapore government, and seeks to support a Public Service that operates in a complex and fast-changing environment.

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FORESIGHT CONFERENCE 2013

"Foresight and Public Policy"

The Centre for Strategic Futures, Singapore organised its second Foresight Conference from 18 to 19 July 2013. The Foresight Conference is intended to gather insights from futures experts and international thinkers on emerging strategic issues, and possible responses to emerging challenges and opportunities.

This is a record of the discussions at the Conference, which was held in accordance with the Chatham House rule. As such, the record is only of the views articulated, but does not indicate the speaker or their organisation.

The broad theme for Foresight Conference 2013 was *"Foresight and Public Policy"*. The Conference consisted primarily of plenary sessions on the first day, and break-out sessions on the second. In the plenary sessions, the Conference explored the future of growth, the future of the middle class, the future of cities, and the future of relationships between citizens, corporations and governments. The break-out sessions were focused on the future of trust, power, and well-being.

Foresight Conference 2013 was part of Singapore Foresight Week. It was held alongside the Workshop on Complexity and Governance organised by Nanyang Technological University. Many of our participants also attended the 5th International Risk Assessment and Horizon Scanning (RAHS) Symposium and the RAHS 4.0 visioning workshop, both organised by the National Security Coordination Secretariat, held in the same week.

THOUGHTS ON THE FUTURES ENDEAVOUR

The Conference opened with a segment on past scenario exercises, and the assumptions and biases that they revealed.

▶ **Scenarios with a Certain Sameness:** Looking back at the scenarios by Shell, the US National Intelligence Council (NIC), and others, there is a remarkable degree of consensus on the range of possible scenarios. In many cases, the scenarios were written up in a dialectical manner – as a contrast between the "Official Pessimists' Future" and the "Official Optimists' Future". Even the list of "black swans" of the NIC sounds very familiar. Why?

▶ **How to Ensure a Diversity of Opinions?** People who think about the future tend to congregate with others who do the same. Failure in foresight is usually because of insufficient diversity; hence, the importance of having intellectual diversity within the room.

Reflecting on the Conference, we had a certain level of diversity, and that meant we had moments of tension, which generated some of the most interesting insights.

Plenary Session 1:

THE FUTURE OF GROWTH

The first plenary focused on the questions, "what is quality growth", "where will it come from" and "what are the jobs of the future?"

Where Will Growth Come From?
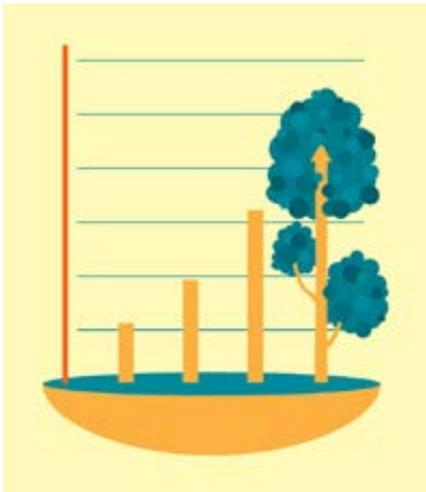
▶ **Technology-Driven Growth:** Is technological progress slowing down, as we have exhausted the possibilities of 19th century physics, or do fields such as biology and solid-state physics open new horizons for growth?

▶ **Emerging Markets:** Emerging markets, especially in our Southeast Asian region, will likely continue to drive growth. Firms must be willing to enter chaotic markets with a high degree of corruption, extractive bureaucracies, and poor infrastructure, and "cannot wait for these countries to get better".

▶ **Reindustrialisation of the US:** The US has seen manufacturing as a share of GDP decline for over 20 years, but this figure has ticked upwards in recent quarters. Plummeting costs of energy due to shale gas, rising costs in China and new technologies like low-cost robotics are driving this trend. How will Asian manufacturers compete against a revived US?

▶ **Reform in Europe and Japan:** In Europe, labour costs in countries like Spain and Greece have decreased dramatically, while the cost of manufacturing in China has increased. The decrease in cost differential has led to some major new investments in Europe. In Japan, Prime Minister Shinzo Abe will begin structural reforms. These will be in the usual timid, consensus-building way of Japan; however, slow, incremental change can be very powerful over time.

▶ **Social Enterprise:** There is tremendous potential in the social enterprise sector, to meet needs that governments and NGOs have been unable to provide. We need this type of growth, even if it may not feature significantly in the way that we measure growth.

What are the Jobs of the Future?

▶ **Automation and Labour Markets:** Knowledge workers are being displaced by algorithms. "Robots are moving further and further up the value chain." In future, productivity growth may not lead to wage growth or the possibility of more leisure time. Instead, it is leading to much higher returns to the owners of capital. Even in emerging markets like India, firms are choosing to invest in industrial robots rather than tap on local labour, because it is faster and cheaper to get a robot than to train workers. Furthermore, a class of global elite is able to access the global labour market and its corresponding high wages, leading to greater inequality.

▶ **Jobs Associated with Care:** We will need jobs associated with care, especially care for the elderly. There are a lot of extremely meaningful jobs that could come from this sector, but we would have to address how we value these jobs. These jobs have traditionally been carried out by women and migrant labour, and so have not been regarded as valuable jobs.

Rethinking the Notion of "Growth"

▶ **Definitions of Growth other than GDP:** The definition of "quality growth" is important. Is GDP growth important for the individual? Countries like Finland have defined quality growth as equitable growth that is environmentally sustainable. Bhutan has defined quality growth as growth that preserves cultural heritage and the traditional way of life. The idea behind "sacred economics" is that there is a lot that has deep worth but might not have quantifiable value. When we talk about quality growth, some of these non-tangible factors, such as identity, must figure.

▶ **Multiple Definitions of the Good Life:** What are sustainable forms not just of growth, but of living? The current economic model is premised upon certain American or European ideals of middle class affluence. Can we not consider some other ideals, given environmental realities? Technocratic elites appear committed to a certain kind of growth, which severely constrains policy-making. We must diversify our notions of the good life.

On Singapore

▶ **Education and Future Skills:** Is there sufficient diversity in our educational landscape, in terms of the type of skills taught? It is impossible to predict the future skills needed, so we must teach as broad a range of skills as possible. Today, productivity is determined by the competency of the average worker. We must move away from a hierarchical, elite-oriented system of education and consider smaller class sizes. Also, too much effort focused on standardised tests means that students do not develop the skills to work in an open-ended, team-oriented environment.

▶ **Benefiting from the ASEAN Growth Story:** ASEAN is likely to do extremely well in the coming years, as laggard economies like Myanmar and the Philippines improve and cross-border trade increases. However, for Singapore, we will need to develop new skill sets to take advantage of the ASEAN growth story – greater empathy for our neighbours, language skills, and an acceptance of the "messiness" of operating in the region.

▶ **Abandoning the Entitlement Mentality:** Have Singaporean young people developed a sense of entitlement, because they have been "cocooned in this beautiful place"? We should set up something like the Peace Corps, and send our young people out to the region to work in rural, impoverished areas. As one participant commented, "I served in the Peace Corps. I don't know if I changed anyone else's life, but it changed my life."

Plenary Session 2:

THE FUTURE OF THE MIDDLE CLASS

This segment focused on the future of the middle class, what the middle class desired, and how this could be achieved.

▶ **The Rise of Populism:** Populism is on the rise globally – political beliefs marked by low trust in institutions and experts, and resentment against immigration. In Europe, right-wing populist parties fundamentally question the capacity of the elite to deliver, and they accuse the elite of betraying the democratic promise and only looking after themselves. These parties offer nostalgia, a fantasy version of cultural cohesion, and a return to a predictable and immutable order that is lost forever. The majority of voters for these parties are "totally ordinary". They are "reluctant radicals" who voted for these parties with a measure of "shame", but found themselves "compelled to do so". Additionally, there were another 35% of voters who shared the same views, but were not (yet) voting for these parties, though they may do so in future.

▶ **Radical Uncertainty:** Behind this growth in populism lay a feeling of "radical uncertainty" and growing levels of anxiety. In the past, this anxiety was managed by "narratives of conviction", such as the American Dream, but these narratives have broken down. We have a middle class that feels betrayed by its institutions and experts. This is not the product of crisis, but of affluence, because in Europe, this pattern of voting emerged 20 years ago, long before the Eurozone crisis. Affluence creates more choice, volatility, and impatience – those very things that undermine our ability to manage affluence.

▶ **Creating Stability through Micro-Institutions:** What can we possibly do? Firstly, to take emotions seriously. We must put aside the idea that there is rationality on one hand and emotion on the other. Emotions are a component of reason. Secondly, we must create institutions that cater to some of our most basic needs, by providing a measure of predictability, or some patterns that are familiar. We can create institutions that put relationships and a form of emotional security at their heart – emphasising neighbourhoods, friendships, and relationships in policy-making. These "micro-institutions" can provide a measure of stability for the individual, even as the operating environment is volatile. It is not about *more* investment, but a *different* kind of investment.
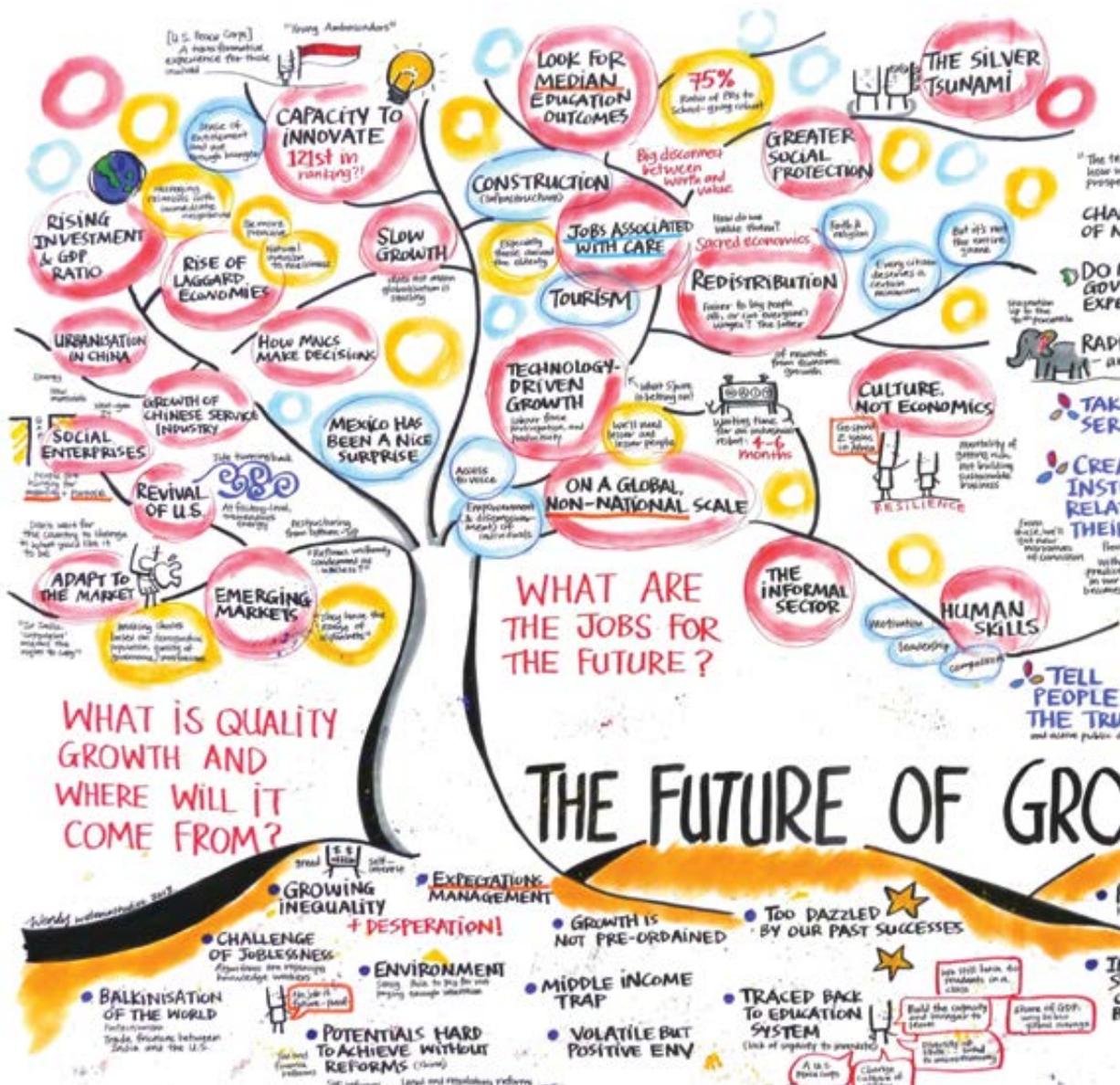
On Singapore

There was a debate on whether the challenges facing the middle class in Singapore are primarily material, or whether they are at the emotional or psychological level.

▶ **Wage Stagnation and Social Protections:** One participant highlighted the stagnation or decline in real wages for certain segments of workers, and said that this could lead to the politics of envy. The view was shared that Singapore had affordable public housing, universal healthcare, and an education system that generated great social mobility until the 1970s, but that these were increasingly a challenge to preserve today.

▶ **Beyond the Redistribution Narrative:** In response to this perspective, another participant emphasised that addressing material concerns is important, but not enough. Both Finland and Sweden have problems with right-wing parties, despite extraordinary levels of social protection and redistribution. To some extent, we need to deal with the material issues, but the narrative of conviction must be more fundamentally new. The social democratic narrative is "not going to cut it".

Plenary Session 3:

THE FUTURE OF CITIES

This discussion focused on the new roles and challenges for cities and other "sub-state" entities.

New Roles for Cities

▶ **Cities as Units of Diplomacy:** The vast majority of what constitutes "diplomacy" today is conducted between countries, though historically, the prerequisite for participation in diplomacy was not sovereignty, but authority. It was thus not a novel concept for cities to participate in diplomacy, and it was only since the passing of the Vienna Convention that diplomacy was considered the sole domain of states. Cities are becoming increasingly important actors in a polycentric world.

▶ **Rise of the "Sub-State":** The increasing importance of cities might be an example of the rise of the "sub-state", because of devolution – i.e. not just cities, but also provinces, or mega-regions (e.g. the Bay Area). These entities are trying to build an autonomous policy apparatus and control a larger share of the tax base.

▶ **Cross-Border Urban Fusions:** There is also an urban fusion occurring. Many cities are beginning to merge with their neighbours into inter-city clusters or megacities. For example, Istanbul is "effectively the capital of the Balkans". The entire country of Bulgaria with a population of 7 million is like a "suburb" of Istanbul, which has a population of 20 million – one participant termed this mega-region as "Istan-Bulgaria".

▶ **The Limits of Cities:** In response to the idea of cities taking on a larger mandate, another participant countered that we are almost thinking of cities as sovereigns. But we must recognise the limits of cities. Not all cities can be like "city-states". The C40 climate leadership group provided an example of how mayors could take pragmatic action together. However, it was one thing for mayors to share best practices, and another for them to organise themselves to form a "global parliament of mayors", as urban studies theorist Richard Florida had proposed.

Success Factors for Cities

▶ **Networked for Success:** The more networked a city is, the more it can attract investments, wealth and power. The number of connections – and the density and diversity of those connections – determines the success and resilience of a city. There is a power law at play. The more connections a city has, the more it attracts connections.

▶ **Must Successful Cities be "Global"?** Must a successful city be a global city? Must you be a financial hub, like New York? Must you be a cultural capital, like Los Angeles? For example, Germany has many very successful cities that are not global, because of their decentralised political model.

New Challenges for Cities

▶ **Cities and Inequality:** Many people are viewing global cities as "cities of the rich". When you talk about designing for the "creative class" it is often about creating a city for the rich. Cities have been "hoarding" foreign investment. In most emerging markets, the capital or financial centre captures over 80% of the foreign investment in the entire country. This becomes a principle source of inequality within countries. The composition of global inequality has moved from international inequality to inequality within countries. Countries cannot continue to be organised in a "medieval way", with economic activity centred at the core at the expense of the periphery, but must become more "uniformly productive".

▶ **The Rights of Non-Citizens in Cities:** For cities that have a large foreign-born population, how do you have policy-making that includes the non-citizens, and does not create in-groups and out-groups? For example, can you include all residents in referendums? Today, many individuals regard themselves as "city-zens" – they view being a resident of a city as core to their identity, regardless of their citizenship.

On Singapore

▶ **Unique Advantages of the City-State:** Singapore is a city, a city-state, and a nation-state. That is a valuable combination. As a city, you can act fast, because you are in touch with your population, and as a state, you are backed by resources and political will. So size for Singapore is not destiny.

▶ **Political Forms Suited to a City-State:** As a city resident, you often do not really care about who is mayor – you just want that the trash is collected. But what happens when a city-state encounters democratisation and people are concerned with more than their trash being collected? Perhaps Singapore is venturing down this path, though not in a straight line. For Singapore, there is a gravity to having a political form that is more suited to the city-state – to translate deliberation into decisiveness.

Plenary Session 4:

THE FUTURE OF RELATIONSHIPS BETWEEN CITIZENS, CORPORATIONS AND GOVERNMENTS

This plenary looked at the rise of participatory democracy, with a focus on developments in India, Indonesia and Singapore. The plenary also discussed new frameworks for understanding the shifting roles of citizens, corporations and governments, and the relationships between them.

The Rise of Participatory Democracy

▶ **Movements for Change:** There is a depth of rage against technocratic elites. You could describe this as "participatory democracy" or "activist democracy", where people are trying to change things on the ground. This binds people in Turkey, Brazil and Israel. Governments are seen as failing to deliver on their promises and being too close to business elites. Governments had propagandised in favour of certain economic models that encourage inequality – by arguing that everyone will benefit from the fruits of economic growth. Yet, even those who have benefited from the system are unhappy.

▶ **Defining New Forms of Collective Good:** We are seeing the emergence of new forms of populism. People are struggling to define new forms of collective good. In Israel, Zionism was about social equity. In India, the Congress platform was about social justice. Those compacts have unravelled. Even nationalism no longer has the same cohesive power. Elites are struggling to find ways to legitimise themselves, in the face of others who have network powers.

▶ **The Mobilisation of the Poor:** Populism and participatory democracy can lead to very different outcomes even within the same country. For example, while a populist lower-caste movement had translated into economic growth and the wide provision of social services in Tamil Nadu, a similar movement in Uttar Pradesh had resulted in new lower-caste leaders plundering state resources, as their upper-caste predecessors had done.

▶ **Renegotiation of the Social Compact:** In many countries, the social compact is being renegotiated. In India, democracy was traditionally synonymous with economic and social justice. However, these compacts have unravelled in recent decades. What we are seeing in many parts of India is a renegotiation of the social compact, with a peaceful characteristic. But in other parts of India, that is not the case, as there are armed insurgencies.

▶ **Decentralisation and Rise of Civil Society:** Decentralisation can provide a way for civil society to have a role in policy-making at the local level. In Indonesia, after decentralisation, civil society could play a larger role and good local leaders emerged. "There are many Jokowis all across Indonesia."

▶ **Defining the Emerging Middle Classes:** The supplier of the middle class is higher education. In Indonesia, we are seeing a growing middle class, of 110–120 million. They are the people who are no longer seeking government services – if you are ill, you go to a private hospital; for your education, you go to a private school. They do not necessarily form a "middle class" – they are the middle-income group; in the role they play in society, they are not yet a "class" with definable interests.

▶ **From Programmatic to Movement-Based Governance:** In future, we may see a shift in how the middle-income group plays its role in society. We may see a shift from solving national challenges via a "programmatic approach", to a "movement-based approach". In the programmatic approach, ownership is in the hands of the government – as a citizen, I pay tax, vote, criticise and praise, and demand the government to deliver. In the movement approach, there is a sense of ownership of problems – these are also "our challenges". Citizens are involved in tackling problems that are not constitutionally their duty to deal with, but which morally are their duty.

▶ **Indonesia *Mengajar:*** For example, when Indonesia *Mengajar* (or the Indonesia Teaching Movement) was established, university graduates were invited to teach in villages with no electricity and no running water. A good salary was offered, but no one wanted to join this programme, even when they doubled the salary. Instead, they reframed the work as being about service to the nation and making a difference in a rural community. Thus, they secured a batch from Indonesia's top university, the Bandung Institute of Technology or ITB, to serve in the programme.

On Singapore

▶ **Participatory Democracy in Singapore:** Singapore's postcolonial history was about imposing rational order onto the anarchic state. The irony of governmental success in Singapore is that its main beneficiaries, being more media-savvy and cosmopolitan, are most critical of the government. When individuals pursue higher-order aspirations, they are transformed from "contented subjects" into "cosmopolitan individuals" with multiple identities, acting on different scales from local, regional, to global.

▶ **Our Singapore Conversation:** The Conversation can be viewed as a response to the rise of participatory democracy in Singapore. It is an attempt to develop the civic space in Singapore, create a civil identity for Singapore citizens, and weave together the "frayed" fabric of the nation. Depending on the lens through which one viewed it, there were different perspectives on the Conversation: first, as a constructive effort at understanding the needs and aspirations of Singaporeans; second, as a state-led effort at narrative and myth-making; and third, as an ideological effort to create a "false consciousness" among Singaporeans by "plastering over inequalities".

▶ **Transnational Civil Society Networks:** Singapore's laws make it difficult for foreigners to get involved in local civil society activity. However, activists have found ways to connect with their ASEAN counterparts, and were learning increasingly diverse "repertoires of expression". Activists were constantly thinking of alternatives to the state-dominated discourse, and were forging "issue-based alliances" as a viable mode of activism.

HOW WILL THE ROLES AND RELATIONSHIPS BETWEEN CITIZENS, GOVERNMENTS AND CORPORATIONS SHIFT?

HOW IS THE SOCIAL + POLITICAL CONTRACT CHANGING!

RAGE & FRUSTRATION AGAINST ELITES
Governments failing to perform
Disaffection
Struggling to define goals of collective good that have been forgotten

'PARTICIPATORY' DEMOCRACY... OR 'ACTIVIST'?
rather than 'monitory'
our personal mytho-logies
Politicisation
Ideas of freedom and identity

Awakening

ALIENATION
loss of community
Singaporeans – strangers to themselves. Selves without narratives
civil religious myth-making?
our co-evolution

FREEDOM IS FRACTAL, AND HAS TEXTURE
We build our future moment by moment
Strategically... but a lot of it is happening individually!
Evolving from triform to quadriform

DECLINE OF STATE'S FUNCTION AS MAIN PROVIDER OF WELFARE
Devolution. More done at sub-national/local level.
Allowing good local leaders to emerge
many good mayors/governors also good businessmen

A movement -based approach
People helping to solve problems that are constitutionally not their duty
Do you want meaning? Do you want to make a difference?
YES!
YES!

False consciousness?
Fabrication of nationhood

MORAL PANIC
and amplification of collective blame

FROM SOCIAL COMPACTS TO NETWORKS OF RESPONSIBILITY
Participating together with new rules we don't fully understand but are creating.
Not all participants are equal.

he's got 87% Don't bother running...
rather than bureaucrat/ political background

Does scale matter?
people
Not being confined to national boundaries

CHANGE TENDS TO WORK BEST WHEN IT STARTS IN SERVICE
Emergence, not imposition

The sector of activity that emerges

Design for emergence + resilience

ROLE OF PRIVATE SECTOR

When expectations are low, satisfaction is easy!

"MIDDLE CLASS"
middle-income group. When you don't need/ use state services

The virtual middle class
Not have the financial levels, but have the networks
Such aspirations belong to the poor too... but don't romanticise the poor

SUSTAINABLE LIFESTYLES
Asking different questions, looking to different, small communities models

Radical transparency and GENEROSITY
creates coherence and legitimacy for action

COMMUNITIES

GOVERNANCE

WHAT DO WE WANT THE FUTURE TO BE?

FORESIGHT CONFERENCE 2013 CSF
Centre for Strategic Futures, Singapore
18-19 July 2013 @ Raffles City Convention Centre

From Social Compacts to Networks of Responsibility

► **Building the Future Moment-by-Moment:** One participant said that there were three ways to regard the future: the first way was to approach the future as inevitable and uncontrollable, and simply "wait for the train to hit"; the second was to consider scenarios of the future and mitigate their effects; the third was to treat the future as something that was inherently within our control and build the future "moment by moment", strategically at the leadership level and "fractally" at the individual level. People should play a part in shaping the future, instead of waiting for it to happen.

► **Networks of Responsibility:** One participant asked if we can think of governance change as a "design problem" – can we move from "social compacts" to "networks of responsibility"? We are moving from a "Tribes + Institutions + Markets" form to a "Tribes + Institutions + Markets + Networks" form. This is a monumental change, because networks are not associated with entities. "Networks are available to all, they are massive, and they can re-form rapidly. Networks are resilient and redundant."

► **New Roles of Government and Citizens:** It is not about government responding differently to citizens, or citizens making demands on their government. Rather than talking about government and citizens as occupying separate roles – we can see them as participants in a network that interact with each other according to new rules that "none of us fully understand but which we are building ourselves". However, we should bear in mind that not all participants in a network are equal – leadership still matters. Leaders can have a louder voice, but must build the legitimacy to exercise it. From a network perspective, popular protests are part of a process in which citizens assimilate changes in their relationships with the state through their personal mythologies.

► **Governing Complex Systems:** Emergence rather than imposition is what complex systems are about, so you cannot simply set up a narrative and propagate or socialise it. Instead, the narrative should emerge naturally and develop into a "culture of acceptance", before it took on a certain level of authority, and could be formalised. Rather than "responding", governments should talk about "what do we want the future to be". "The cities that will be most successful are those that remake themselves around an idea, not a response."

► **Organisational Design and Complexity:** One participant articulated that "radical transparency" and "generosity" are two values that are needed in designing organisations to recognise complexity. For example, every employee might be invited to see what happens at the company retreat – to hear all the discussions on budgets, organisation, strategy and tactics. They can discuss these points in real-time in online forums. This allows not just the elite in the company but every single employee to contribute, and creates the legitimacy for action. We see a relatively complex system emerging that enables legitimacy on the part of the system, because everyone has the chance to comment and participate via technology.

Framing Segment

COOPERATION, COMPETITION AND CONFLICT

This segment introduced the "3Cs" framework for viewing network relationships, and addressed the question of how to achieve honour and trust in a world of anonymity.

From Linear to Quantum Views of "The Other"

▶ **Abandoning the Peace-Crisis-War Framework:** During the Cold War era, military planners followed a framework based on linear transitions from peace to crisis to war. Almost all relationships between the Americans and the Soviets were mediated through institutions; it was a Westphalian view of a world driven by nation-states. Today, there is no "peace-crisis-war" transition. Instead, we see multiple parallel, continuous transitions, rather like in the world of quantum mechanics. Every individual or state is entangled in networks that provide a series of constraints and limitations.

► **Counter-Parties instead of Adversaries:** Deterrence required definition of "The Other" – "I deter *you*." The Soviet Union we always treated as an adversary, even when cooperative strategies were pursued. Today, there is a very different situation. Rather than adversary, we can think of the other entity as a "counter-party". In finance, the "counter-party" in a transaction can be a vendor, a buyer, or a partner. It is a much more neutral term.

► **3Cs Framework Applied to US-China Relations:** Each of the 3C situations can be put into a more formal form. The "cooperative" mode refers to pareto optimal conditions. The "competitive" mode refers to non-pareto optimal conditions. And "conflict" refers to zero-sum conditions. For example, the US is in all three states simultaneously with China. The set of relationships with China is nothing like with the Soviet Union – there is a huge trading relationship and many non-governmentally-mediated relationships. The US and Chinese leaderships cannot say, "Okay, we are now moving from peace to crisis," because there are many individual and institutional interests at play.

► **Trust under Network Conditions:** Drawing from the work of political economist Eleanor Orstrom on common pool resources in the absence of a Leviathan, it was highlighted that networks of parties with divergent interests could reach good outcomes on the allocation of resources without the intervention of outside forces. Over the long-term, to maintain network relationships, the network must achieve fair outcomes for all, and so parties in the network tend their relationships with a relatively high degree of trust and care.

Break-Out Sessions

THE FUTURE OF TRUST, POWER AND WELL-BEING

The Future of Trust

▶ **The Components of Trust:** A framework was proposed of viewing trust as based upon the formula: *Trust = Competence + Integrity + Intimacy – Self-Interest.* In Singapore, in the past decade, there was less "intimacy" as politicians' connection to the ground weakened. There are also perceptions of "self-interest" as evidenced by the debates over ministerial salaries. Another way of viewing trust is as something that emerges from a pattern of interaction; it is not a rational decision, but based upon emotion.

▶ **The Importance of Scale:** "Scale is fundamentally destructive to trust." In the past, politicians had the ability to interact directly with voters to build trust. There was a "physical intimacy" to the interactions, but there were also structures such as smaller constituencies that made such interactions possible. Large bureaucracies tend to develop multiple filtration mechanisms that render the information from the ground "useless" by the time it reaches a decision-maker. Another point raised was that beyond a population of 5 million, social cohesion decreases, so how will Singapore maintain trust as its population increases?

▶ **Building Trust at the Micro-Level:** Relationships are diluted through large-scale communication. Trust needs to be rebuilt at the micro-level. Instead of striving for a "final narrative", the focus should be on the collective, continuous telling of micro-narratives. This is unlike Singapore's current approach of relying on "administrative rationality", which tends to exclude the citizen.

▶ **Individuals and Institutions in Relation to Trust:** If trust is located in an institution, then whoever enters the institution is vested with that trust. People may trust in the institution even if they do not trust the individual within the institution (e.g. the US Presidency), but if over time, successive people within the institution prove to lack competence or integrity, then trust in the institution becomes eroded.

The Future of Power

▶ **Monitoring Mechanisms and Power:** In the past, there was asymmetric access to information in favour of the state. However, individuals have used tools like WikiLeaks to shift the balance in their favour. On the other hand, the governments have increasing access to the private data of individuals, enabling them to increase their surveillance of individuals beyond security purposes, and can apply big data tools to analyse the behaviours of citizens. Who is really monitoring whom?
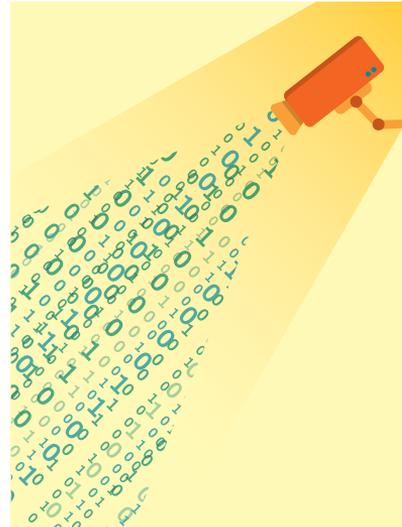
▶ **Quantum Computing and Power:** Quantum computing will be online in 2030, and due to its cost, the power of quantum computing will be held by large corporations and states. Individuals will not enjoy the same degree of computing power for a while. Quantum computing algorithms could bring surveillance to new heights; inputs by individuals to Internet tools could be harvested for patterns, after which outputs could be churned that inform decision-making. On the other hand, individuals could also use algorithms to mobilise politically, as we saw with the Obama campaign's use of big data.

▶ **Wealth as a Means to Power:** Firms are not just profit-making entities, because they are owned by individuals with their own motives that may not be profit-driven, e.g. political views, religious views. Well-resourced individuals can give huge amounts of aid to the developing world, set up influential think tanks, or donate massively to political campaigns. Bill Gates can change foreign policy. That is wonderful if he wants to fight malaria, but what if he wants to oppose birth control? "Billionaire power is the new phenomenon, not people power."

The Future of Well-being

▶ **The Importance of Purpose:** Well-being requires proper healthcare, education, material comforts, but meaning and spiritual well-being are also important. A sense of purpose is important to improve peoples' well-being, and having it can improve a person's physical health. Employment is one way to create purpose for an individual. Religion can also fulfil this need. The desire for purpose can also be extended to cities; for example, Detroit is a city that has lost its purpose as a manufacturing hub.

▶ **Impact of Uncertainty on Well-being:** Uncertainty, due to economic volatility or major changes in the structure or lifestyle of a family, erodes well-being. The high degree of uncertainty in Singapore due to our interconnectedness could explain the value that Singaporeans place on remembering the good things of the past, rather than those of the present or future. Nostalgia for "kampung days" – or the rural life – is not a negative state in itself, but may be a necessary stage for individuals to assimilate change, before moving forward in life.

▶ **Governing for Well-being:** The group raised the proposal by political scientist Anne-Marie Slaughter for government not as "control tower" directing and regulating us, nor as "vending machine" where we pay taxes and get services in return, but as "platform" – providing the basic hardware and software to enable citizen participation and self-organisation.

Closing Roundtable

FORESIGHT AND COMPLEXITY
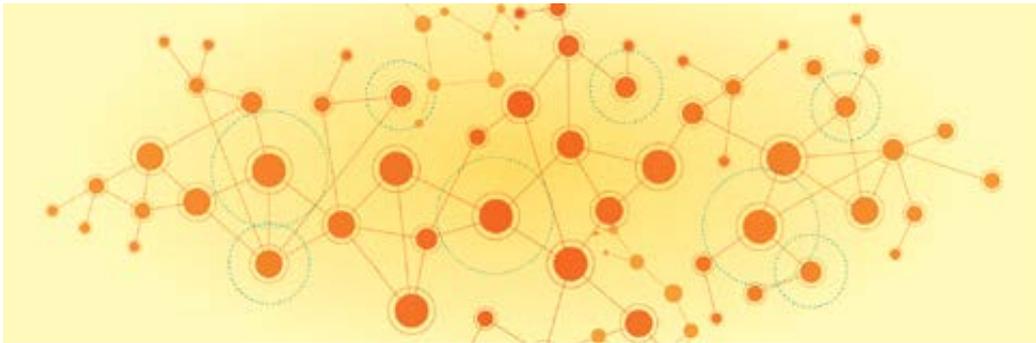
The closing roundtable provided an opportunity for participants in both the Foresight Conference and NTU's Workshop on Complexity and Governance to reflect on the discussions of the past two days.

- ▶ **"The Point is Not to Interpret the Future, but Change It":** How do we act upon the world, manipulate social and political environments, when there are many more players, and masses of people who have entered politics for the first time, with very specific claims? The task of shaping the future becomes more complex, even impossible. We are still dealing with the detritus of 19th century notions of how the world is ordered – aggregated and reductionist categories.

- ▶ **Reducing Complexity via War / Revolution:** This is not the first period of complex problems that we cannot solve. In the past, these have been solved by war or revolution, which "cleans up" the problem. "It is a primitive but quite effective way to deal with complex problems." (Of course, this is the outcome we should avoid!)

- ▶ **Governing with Compassionate Humanism:** The world is far too rational – we need to recognise the value of ambiguity. This could be a role for the humanities, such as literature and anthropology. Aesthetic sensibilities might actually be fundamental. Modern institutions have failed to put at the centre of governance a sense of "compassionate humanism". They need to orient themselves around the needs of the humans they serve, and make an effort to design policies on a human scale. In our private lives, we deal with ambiguity, but perhaps at the level of governments and organisations, this is something that we can be more aware of.

▶ **Complexity Science and Policy-Making:** The best role that complexity science can play is widening the policy options and allowing the policy-maker to act more like a scientist, where there is no expectation to provide a clear path, but to nudge the system to recognise the "texture" of the environment. Complexity science can provide a level of comfort to policy-makers to step away from the desire to provide "solutions". But we must be careful of complexity science providing yet another "orthodoxy".

▶ **Futures Work and the Politician:** One participant noted that we, as civil servants and members of academia and civil society, may be able to apply the tools of foresight, but how do we "sell" this to the politicians? Governments do not start on an empty slate. How do we, as futures practitioners, make what we say politically relevant? And how do we communicate complexity to the political decision-maker?

▶ **Governing amidst Messiness:** We live in not just a complex world, but an environment of messiness. Governments that cannot deal with messiness will fail. "We must not let perfect become the enemy of good." Governments that are prepared to try things out without aiming for ultimate order will succeed. We must move away from the traditional hierarchical structures that characterise modern government towards something more organic.

▶ **Focus on the Present, Not the Future:** There is a danger of being over-focused on the future. If we invest too much in thinking about the future, this can raise expectations to the point where we cannot meet them. Instead, we should focus on understanding the present, and managing in the present.

The Centre for Strategic Futures would like to thank all participants who gave so freely of their time and thoughts, and for making the Conference a memorable occasion. We welcome comments on the views in this report.

Annex 1:

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